

Oracle® Banking Virtual Account Management Troubleshooting Guide



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The Oracle logo, consisting of a solid red square with the word "ORACLE" in white, uppercase, sans-serif font centered within it.

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Purpose

This guide provides the guidance to users for the issues within the application. It describes the various methods to figure out the error and then troubleshoot it.

Audience

This guide is intended for the software developers and software testers.

Acronyms and Abbreviations

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

Table 1 Acronyms and Abbreviations

Abbreviation	Description
SMS	Security Management System
CMC	Common Core
MOC	Mid office Common Core
ELK	Elasticsearch Logstash Kibana

List of Topics

This guide is organized as follows:

Table 2 List of Topics

Topics	Description
Troubleshooting Technical Flows	This topic provides the information about the platform-wide troubleshooting of technical flows. It includes UI side checking, Service side logs, tracing using Zipkin, debugging using ELK stack, and some environmental issues of Weblogic.
Troubleshooting Kafka	This topic provides the information on the troubleshooting kafka.
Health Checks	This topic provides the information about the health check measures and observability required.
Troubleshooting Functional Workflows	This topic provides the information about the Oracle Banking Virtual Account Management specific troubleshooting flows and specific data stores that can be checked for issues. It includes Oracle Banking Virtual Account Management sub-domain (wars) and high-level flow of Cash Deposit transaction and key Process Log table to be checked to troubleshoot transaction flow.
Troubleshooting OutOfMemory issues	This topic provides the information on troubleshooting OutOfMemory issues.
Troubleshooting Deployment Errors/ Exceptions	This topic provides the troubleshooting information for Errors/ Exceptions that can occur due to flyway while deployment.

Prerequisites

Prerequisites

The prerequisites are as follows:

- Basic understanding of Eventing platform
- Basic understanding application log analysis using tools
- Basic understanding DB changes

Pre-installed Softwares

The following softwares should be pre-installed:

- Zipkin
- Kafka
- ELK
- Any SQL Database like SQLDEVELOPER
- WinSCP

General Prevention

Do not make any changes to Flyway scripts manually.

Best Practices

The best practices are as follows:

- It is ideal to have ELK stack installed on a separate VM outside the product VMs to ensure the flow of logs in case of an app crash.
- Log levels can be adjusted to INFO and above to enable relevant logs to flow in.

Related Documents

The related documents are as follows:

- *Oracle Banking Common Core User Guide*
- *Oracle Banking Getting Started User Guide*
- *Oracle Banking Security Management System User Guide*
- *Overview User Guide*
- *Charges User Guide*
- *Configuration User Guide*
- *Customer and Accounts User Guide*
- *Identifier User Guide*
- *Transactions User Guide*

1

Troubleshooting Technical Flows

This topic describes about various programming issues, possible causes, and solutions to resolve the issues.

This topic contains the following subtopics:

- [Where is the Problem](#)
This topic describes about troubleshooting the problem in the distributed system.
- [Preliminary Checks from UI](#)
This topic provides systematic instructions to launch the application and check for the basic errors.
- [Troubleshooting Environmental Issues](#)
This topic describes about the troubleshooting environmental issues.

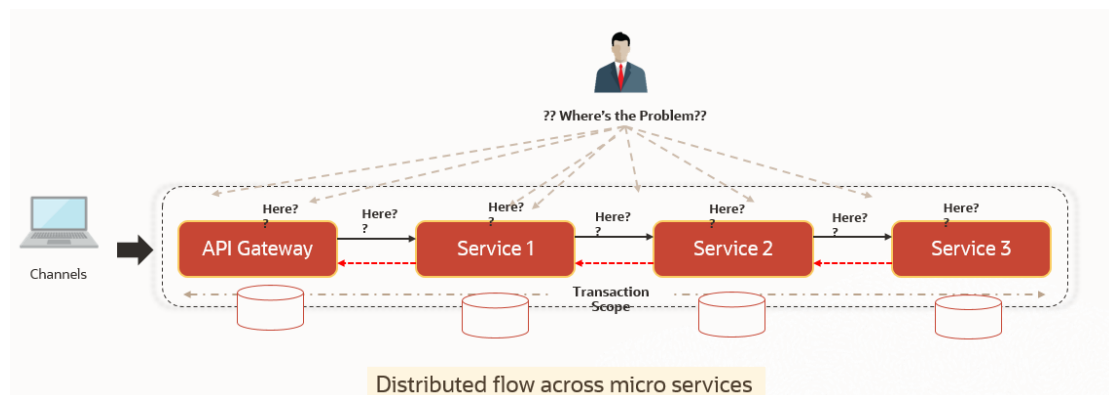
1.1 Where is the Problem

This topic describes about troubleshooting the problem in the distributed system.

Troubleshooting the problem in the distributed system can be challenging, if not understood fully. Each product has UI application components and service side application components. Each side requires different troubleshooting techniques and various logs that can be used to corroborate the problem.

It is important to establish the area of the problem on the service side. It can be achieved by a complete understanding of UI and service side flows along with the data architecture of an application.

Figure 1-1 Distributed Flow Across Micro Services

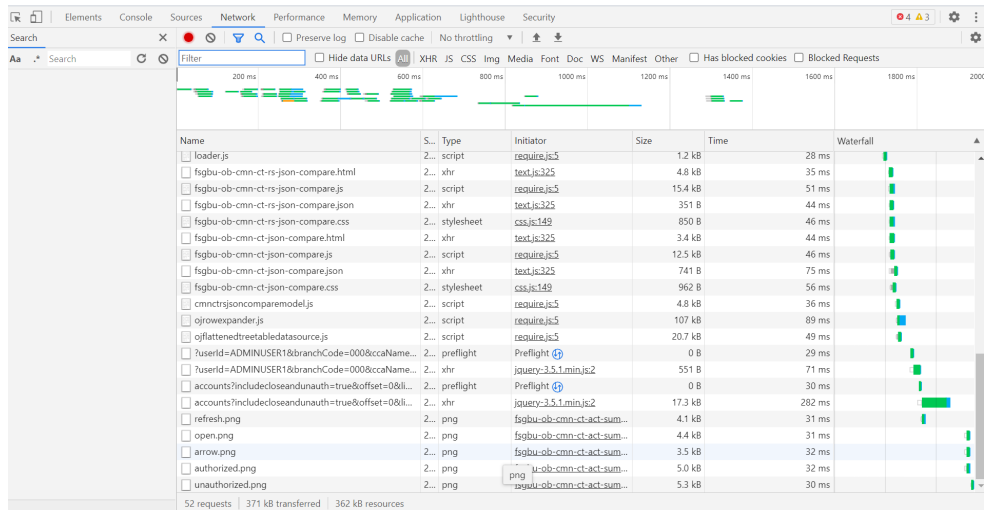


1.2 Preliminary Checks from UI

This topic provides systematic instructions to launch the application and check for the basic errors.

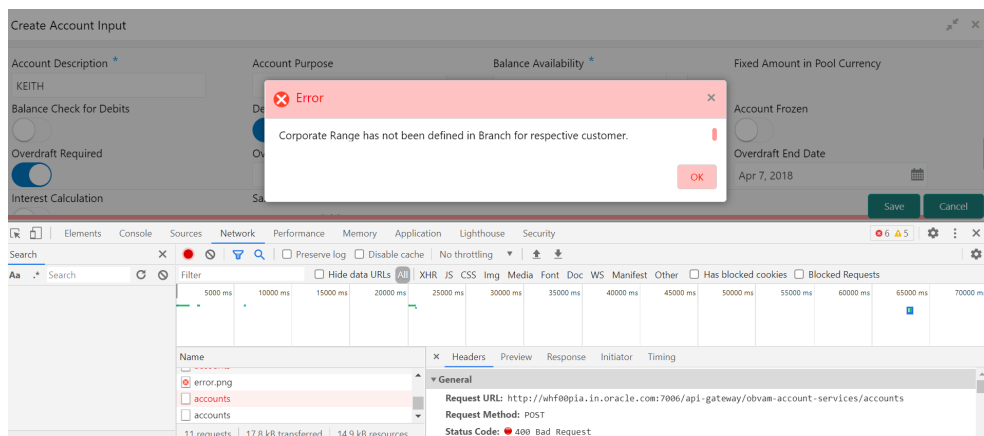
1. Launch the application with delegated URL.
2. Press **F12** key and select **Inspect and See network**.
3. Verify that all the call responses are successful.

Figure 1-2 Call Responses



Note:
Usually Red color indicates non 2xx HTTP response.

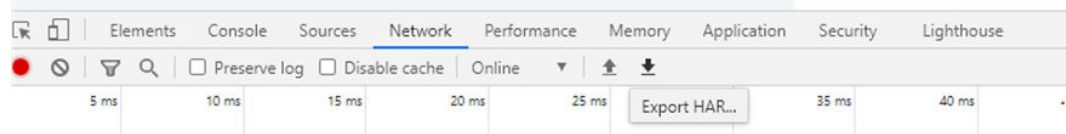
Figure 1-3 Non 2xx Response



4. Export the trace using the **Export** in browsers.

Example: The user can see the export option as shown below in Chrome.

Figure 1-4 Export Option



 **Note:**

The tools such as **Fiddler** and **Wireshark** can be used to get the browser to API gateway web traffic. This helps to investigate the exact request and response payloads exchanged between UI and API Gateway.

1.3 Troubleshooting Environmental Issues

This topic describes about the troubleshooting environmental issues.

This topic contains the following subtopics:

- [Possible Issues While Deploying Services](#)
This topic describes about the possible issues while deploying services
- [Possible Issues in Login and Screen Launch](#)
This topic describes the possible issues that may occur while logging in and launching the screens.

1.3.1 Possible Issues While Deploying Services

This topic describes about the possible issues while deploying services

Service Deployment is failing due to Flyway

If the service deployment is failing due to flyway, verify that the object or record is already present and make changes in the flyway scripts accordingly.

You may check **flyway_schema_history** table of the respective schema for finding the flyway script entries.

Other Possible Issues

The other possible issue while deploying services could be multiple versions of dependency jars present in the war file.

Example: `weblogic.application.naming.EnvironmentException: duplicate persistence units with name PLATO in scope cmc-customer-services-{version}.war.`

1.3.2 Possible Issues in Login and Screen Launch

This topic describes the possible issues that may occur while logging in and launching the screens.

Login Page is not Launching

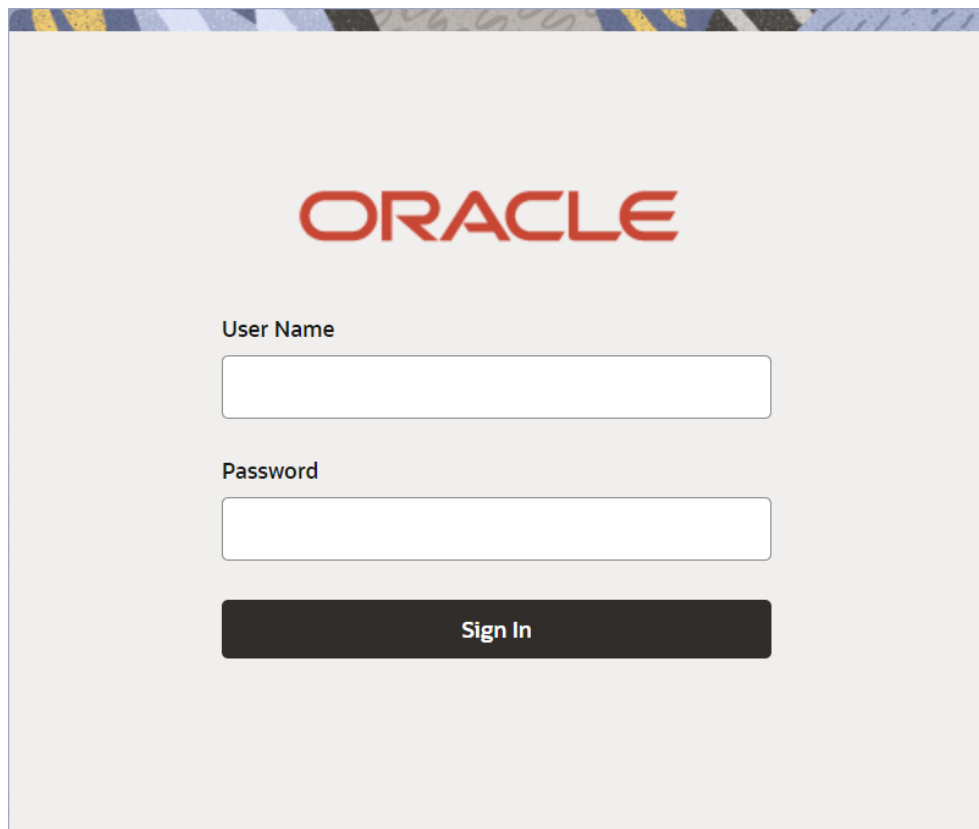
Perform the following checks if the login page is not launching.

1. Check whether the `app-shell` war file is deployed.
2. Make sure that the war file is up and running in the deployed managed server and try to login again.
3. Check whether the user has logged in with the appshell URL according to the war file deployed.
4. Check whether the required component-server wars like `cmc-component-server`, `obvam-component-server` etc are also deployed along with the `app-shell`.

Example: `http://<ip-address>:<Port>/app-shell/index.jsp` will load the login page of the application.

In the above URL, the name `app-shell` is dynamic which depends on the name of war file deployed.

Figure 1-5 Sign In



The image shows a screenshot of the Oracle Sign In page. At the top center, the Oracle logo is displayed in red. Below the logo, there are two input fields: 'User Name' and 'Password'. At the bottom, there is a black 'Sign In' button.

Unable to login after launching the application

Perform the following check if you are not able to login after the application is launched.

- Make sure that the plato-api-gateway service, plato-ui-config service, sms-core-service, and common core services are up and running.

Figure 1-6 Services

PLATO-API-GATEWAY	n/a (1) (1)	UP (1) - fsgbu-phx-54.snphxprshared1.gbucdsint02phx.oraclevcn.com:plato-api-gateway:5012
PLATO-DISCOVERY-SERVICE	n/a (1) (1)	UP (1) - fsgbu-phx-54.snphxprshared1.gbucdsint02phx.oraclevcn.com:plato-discovery-service:5012
PLATO-UI-CONFIG-SERVICES	n/a (1) (1)	UP (1) - fsgbu-phx-54.snphxprshared1.gbucdsint02phx.oraclevcn.com:plato-ui-config-services:5012
SMS-CORE-SERVICES	n/a (1) (1)	UP (1) - fsgbu-phx-54.snphxprshared1.gbucdsint02phx.oraclevcn.com:sms-core-services:5012

Unable to login after restarting the services

Perform the following check if you are not able to login after restarting the services.

- Make sure that the LDAP server is up and running, and check if the entered credentials are correct.

Menus are not displayed after logging in

Perform the following checks if the menus are not displayed after logging in.

1. Map the functional activity codes in the table **SMS_TM_ROLE_ACTIVITY**.
2. Once it is mapped, check if the corresponding role is assigned to your user id.

Screens are not launching after logging in

Perform the following check if you are not able to launch the screens after logging in.

- Make sure that the respective services are up and running.

 **Note:**

Verify the VPN connection while trying to troubleshoot the issues related to page launching, etc.

2

Troubleshooting Kafka

This topic describes about the troubleshooting Kafka.

This topic contains the following subtopics:

- [Consumer Services](#)
This topic describes about the Consumer Services provided in Oracle Banking Virtual Account Management.
- [Producer Services](#)
This topic describes about the Producer Services on Oracle Banking Virtual Account Management.
- [Debugging Consumer/Producer health and troubleshooting](#)
This topic describes about the Debugging Consumer/Producer health and troubleshooting.
- [Configurations](#)
This topic describes about the various configurations for the kafka and integration services.

2.1 Consumer Services

This topic describes about the Consumer Services provided in Oracle Banking Virtual Account Management.

Oracle Banking Virtual Account Management consumer service can be referred at **Async API**

2.2 Producer Services

This topic describes about the Producer Services on Oracle Banking Virtual Account Management.

Oracle Banking Virtual Account Management Producer service can be referred at **Async API**

2.3 Debugging Consumer/Producer health and troubleshooting

This topic describes about the Debugging Consumer/Producer health and troubleshooting.

Logs to analyze

- Under the domain folder of Weblogic - Logs related to any issue in Kafka connection and authentication can be found here.
- On a user defined log path - if we are facing issues in produce/consume operation of event.

Tables to analyze

The below table provides the values to be verified to confirm accurate functioning of the consumer/producer service.

Table 2-1 Tables to analyze

Table Name	Column Name	Possible Values
plato_eventhub_in_log	-	-
plato_eventhub_out_log	status	SENT -> Published successfully

2.4 Configurations

This topic describes about the various configurations for the kafka and integration services.

Refer to *Oracle Banking Microservices Platform Foundation Installation Guide* for kafka setup and all the properties are declared in the yaml file of integration services for the application-level setup.

3

Health Checks

This topic describes about Health Checks.

This topic contains the following subtopics:

- [Eureka Dashboard](#)
This topic describes about Eureka Dashboard.
- [Application Services](#)
This topic describes about application services.
- [Database](#)
This topic describes about the data source configuration in Weblogic and Day0 scripts on Database.

3.1 Eureka Dashboard

This topic describes about Eureka Dashboard.

Until the health check API's implemented, the health must be monitored using WebLogic JVM managed server status and Eureka instance.

Figure 3-1 Eureka Dashboard

OBVAM-ACCOUNT-SERVICES	n/a (1) (1)	UP (1) - whf00pia.in.oracle.com:obvam-account-services:8731
OBVAM-CORE-SERVICES	n/a (1) (1)	UP (1) - whf00pia.in.oracle.com:obvam-core-services:8731
OBVAM-ECA-SERVICES	n/a (1) (1)	UP (1) - whf00pia.in.oracle.com:obvam-eca-services:8731
OBVAM-ENTITY-SERVICES	n/a (1) (1)	UP (1) - whf00pia.in.oracle.com:obvam-entity-services:8731
OBVAM-EXTERNAL-DDA-SERVICES	n/a (1) (1)	UP (1) - whf00pia.in.oracle.com:obvam-external-dda-services:8731
OBVAM-IC-BOD-BATCH-SERVICES	n/a (1) (1)	UP (1) - mum00bxj.in.oracle.com:obvam-ic-bod-batch-services:8505
OBVAM-IC-CHARGE-CALC-SERVICES	n/a (1) (1)	UP (1) - mum00bxj.in.oracle.com:obvam-ic-charge-calc-services:8604
OBVAM-IC-EXTERNAL-ADAPTER-SERVICES	n/a (1) (1)	UP (1) - mum00bxj.in.oracle.com:obvam-ic-external-adapter-services:8604

3.2 Application Services

This topic describes about application services.

Catalog of services required for Oracle Banking Virtual Account Management are as follows:

Table 3-1 Services List

Group	Service List	Required for SRV	Usage
OBVAM	obvam-core-services	Y	Used to create facility.

Table 3-1 (Cont.) Services List

Group	Service List	Required for SRV	Usage
OBVAM	obvam-account-services	Y	Used to create Virtual Account and Structure.
OBVAM	obvam-entity-services	Y	Used to create entity.
OBVAM	obvam-eca-services	Y	Used to block the amount on VA.
OBVAM	obvam-internal-transfer-services	Y	Used to transfer balance from one VA to another.
OBVAM	obvam-transaction-journal-services	Y	Used to post transaction on VA.
OBVAM	obvam-identifier-services	Y	Used to create Identifiers.
OBVAM	obvam-statement-services	Y	Used to generate statements.
OBVAM	obvam-external-dda-services	Y	Used to connect with external system.
OBVAM	external-liquidity-management-service	Y	Used to liquidate.
OBVAM	external-interest-engine-service	Y	Used to calculate interest.
OBVAM	obvam-projection-services	Y	Used to project the obvam dashboards.
PLATO	plato-batch-server	N	-
PLATO	plato-feed-services	N	-
PLATO	plato-alerts-management-services	Y	Required for PLATO framework.
PLATO	plato-api-gateway	Y	Required for PLATO framework.
PLATO	plato-config-service	Y	Required for PLATO framework.
PLATO	plato-discovery-service	Y	Required for PLATO framework.
PLATO	plato-orch-service	Y	Required for PLATO framework.
PLATO	plato-o	Y	Required for PLATO framework.
PLATO	plato-ui-config-services	Y	Required for PLATO framework.
SMS	sms-core-services-{version}.war	Y	SMS services
SMS	sms-component-server-{version}.war	Y	UI
CMC	cmc-obrh-service	Y	Used for routing via OBRH.
CMC	cmc-report-service	Y	Used for Advices.
CMC	cmc-resource-segment-orchestrator-service	Y	Used in screens using gcs like maintenance screens.

Table 3-1 (Cont.) Services List

Group	Service List	Required for SRV	Usage
CMC	cmc-screenclass-services	Y	Used for screen handling.
CMC	cmc-settlements-services	N	
CMC	cmc-settlements-services	Y	Used in screens using gcs like maintenance screens.
CMC	cmc-txn-code-services	Y	Common Core Services
CMC	cmc-account-services	Y	Common Core Services
CMC	cmc-advice-services	Y	Used for Advices.
CMC	cmc-base-services	Y	Common Core Services
CMC	cmc-batch-services	N	
CMC	cmc-branch-services	Y	Common Core Services
CMC	cmc-businessoverrides-services	N	
CMC	cmc-corebanking-adapter-service	N	
CMC	cmc-currency-services	Y	Common Core Services
CMC	cmc-customer-services	Y	Common Core Services
CMC	cmc-datasegment-services	Y	Common Core Services
CMC	cmc-external-chart-account	Y	Common Core Services
CMC	cmc-external-system-services	Y	Common Core Services
CMC	cmc-external-virtual-account-services	Y	VAM services
CMC	cmc-obrh-services	Y	Common Core Services
CMC	cmc-resource-segment-orchestrator-service	Y	Common Core Services
CMC	cmc-screenclass-services	Y	Common Core Services
CMC	cmc-settlements-services	Y	Common Core Services
CMC	cmc-transactioncontroller-services	Y	Common Core Services

Table 3-1 (Cont.) Services List

Group	Service List	Required for SRV	Usage
CMC	cmc-component-server- {version}.war	Y	UI
CMC	app-shell- {version}.war	Y	UI

**Note:**

Refer to OSDC zip for the exact version number for each service.

3.3 Database

This topic describes about the data source configuration in Weblogic and Day0 scripts on Database.

This topic contains the following subtopics:

- [Configure Data Sources](#)
This topic provides the systematic instructions to configure the data sources in WebLogic.
- [Day0 Scripts](#)
This topic describes about the Day0 Scripts.

3.3.1 Configure Data Sources

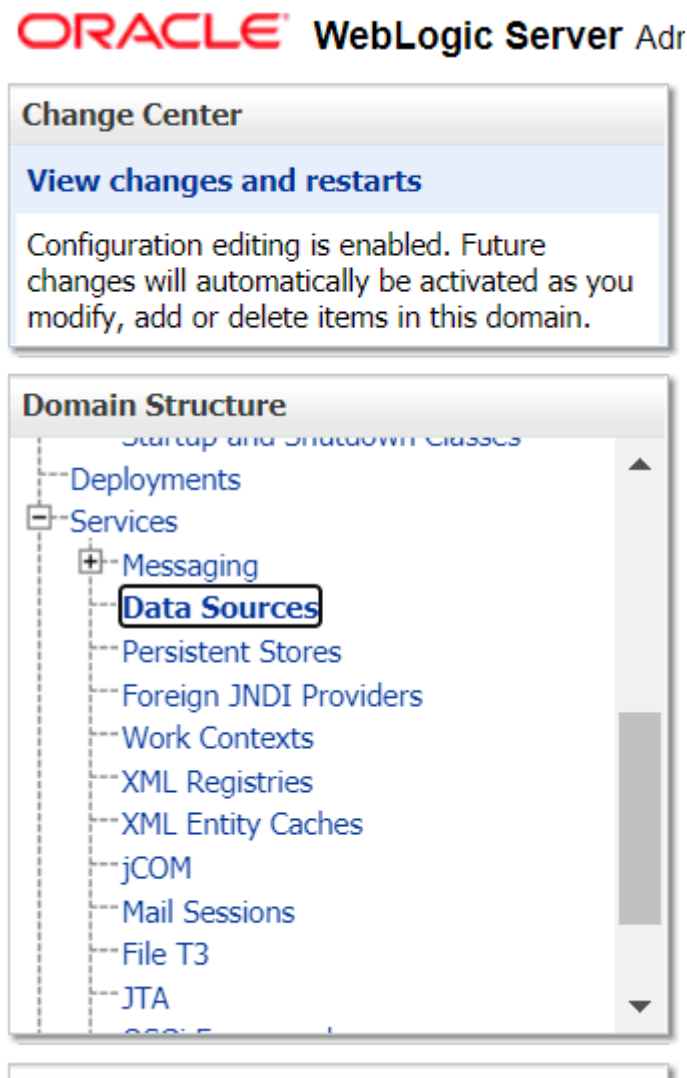
This topic provides the systematic instructions to configure the data sources in WebLogic.

To add the Data Sources, follow the below steps:

Specify **User ID** and **Password**, and login to **Oracle WebLogic Administration Console**.

1. On **Domain Structure**, click **Services**.
The **Domain Structure** screen displays.

Figure 3-2 Domain Structure



2. Under **Services**, click **Data Sources**.
The **Summary of JDBC Data Sources** screen displays.

Figure 3-3 Summary of JDBC Data Sources

Home Log Out Preferences Record Help

Home > Summary of Servers > Summary of JDBC Data Sources > PLATO > Summary of JDBC Data Sources

Summary of JDBC Data Sources

Configuration Monitoring

A JDBC data source is an object bound to the JNDI tree that provides database connectivity through a pool of JDBC connections. Applications can look up a data source on the JNDI tree and then borrow a database connection from the pool.

This page summarizes the JDBC data source objects that have been created in this domain.

Customize this table

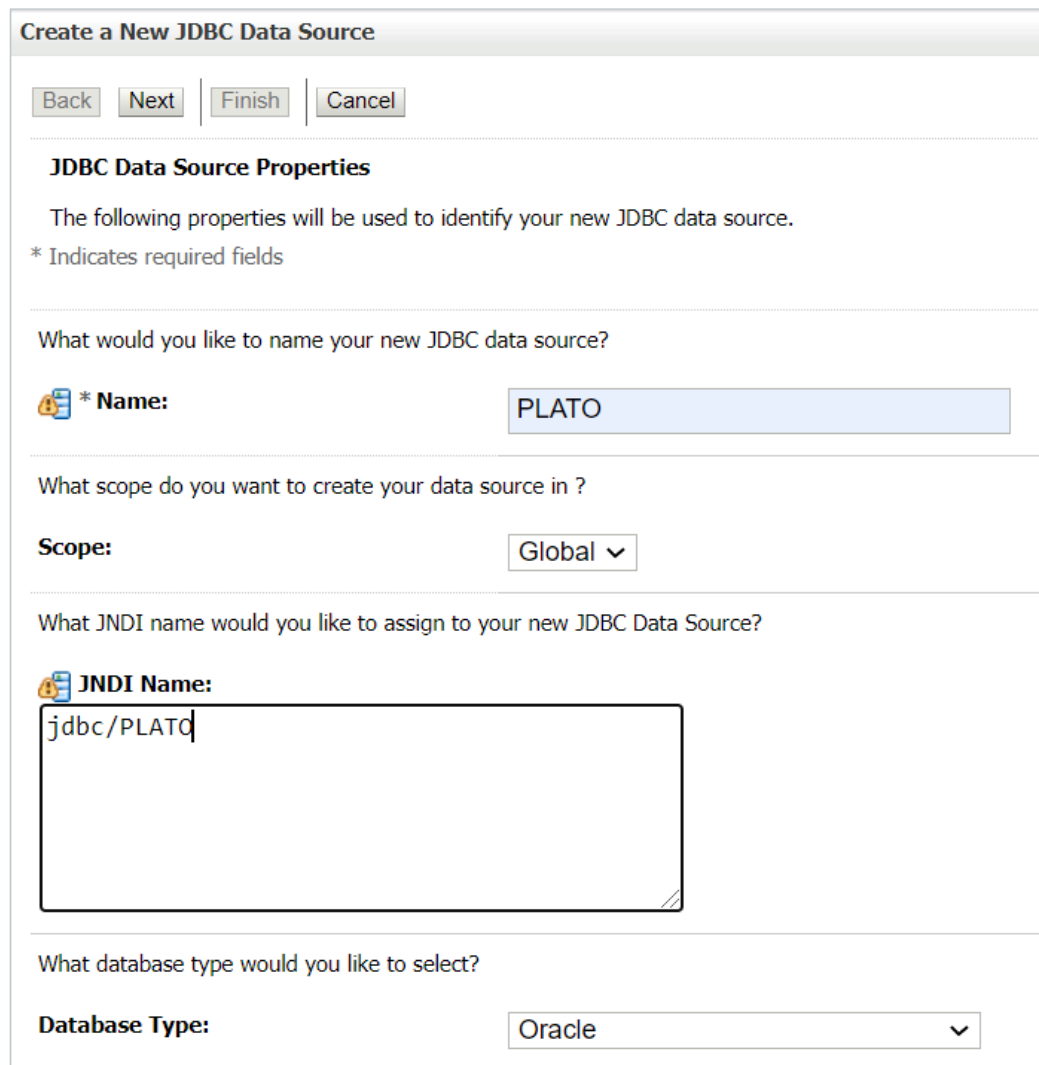
Data Sources (Filtered - More Columns Exist)

	Type	JNDI Name	Targets
<input type="checkbox"/> Generic Data Source	Generic	jdbc/JCL	managed_server1, managed_server2, managed_server3, managed_server4, managed_server5, managed_server6
<input type="checkbox"/> GridLink Data Source	Generic	jdbc/LMB	managed_server1, managed_server2, managed_server3, managed_server4, managed_server5
<input type="checkbox"/> Multi Data Source	Generic	jdbc/LMC	managed_server1, managed_server2, managed_server3, managed_server4, managed_server5
<input type="checkbox"/> Proxy Data Source	Generic	jdbc/LMD	managed_server1, managed_server2, managed_server3, managed_server4, managed_server5
<input type="checkbox"/> UCP Data Source	Generic	jdbc/LMR	managed_server1, managed_server2, managed_server3, managed_server4, managed_server5, managed_server6
<input type="checkbox"/> LMR	Generic	jdbc/LMX	managed_server1, managed_server2, managed_server3, managed_server4, managed_server5
<input type="checkbox"/> LMX	Generic	jdbc/LRT	managed_server1, managed_server2, managed_server3, managed_server4, managed_server5
<input type="checkbox"/> LRT	Generic	jdbc/PLATO	managed_server1, managed_server2, managed_server3, managed_server4, managed_server5, managed_server6
<input type="checkbox"/> PLATO	Generic	jdbc/PLATOBATCH	managed_server1, managed_server2, managed_server3, managed_server4, managed_server5, managed_server6
<input type="checkbox"/> PLATOBATCH	Generic	jdbc/PLATO_UI_CONFIG	managed_server1, managed_server2, managed_server3, managed_server4, managed_server5, managed_server6
<input type="checkbox"/> PLATO_UI_CONFIG	Generic	jdbc/sms	managed_server1, managed_server2, managed_server3, managed_server4, managed_server5, managed_server6
<input type="checkbox"/> SMS	Generic		

New Delete

3. Click **New** and add the data source providing the required details.
The **Create New JDBC Data Source - Properties** screen displays.

Figure 3-4 Create New JDBC Data Source - Properties




Create a New JDBC Data Source

Back | Next | Finish | Cancel

JDBC Data Source Properties

The following properties will be used to identify your new JDBC data source.
* Indicates required fields


What would you like to name your new JDBC data source?

 * Name:

What scope do you want to create your data source in ?

Scope:

What JNDI name would you like to assign to your new JDBC Data Source?

 JNDI Name:

What database type would you like to select?

Database Type:

Figure 3-5 Create New JDBC Data Source - Connection Properties

Home > Summary of Servers > Summary of JDBC Data Sources > PLATO > Summary of JDBC Data Sources

Create a New JDBC Data Source

Connection Properties
Define Connection Properties.

What is the name of the database you would like to connect to?

Database Name:

What is the name or IP address of the database server?

Host Name:

What is the port on the database server used to connect to the database?

Port:

What database account user name do you want to use to create database connections?

Database User Name:

What is the database account password to use to create database connections?

Password:

Confirm Password:

Additional Connection Properties:

oracle.jdbc.DRCPConnectionClass:

3.3.2 Day0 Scripts

This topic describes about the Day0 Scripts.

Make sure that all the Day0 scripts available in the product package are run successfully.

4

Troubleshooting Application Workflows

This topic describes the troubleshooting functional workflows applicable to Oracle Banking Virtual Account Management.

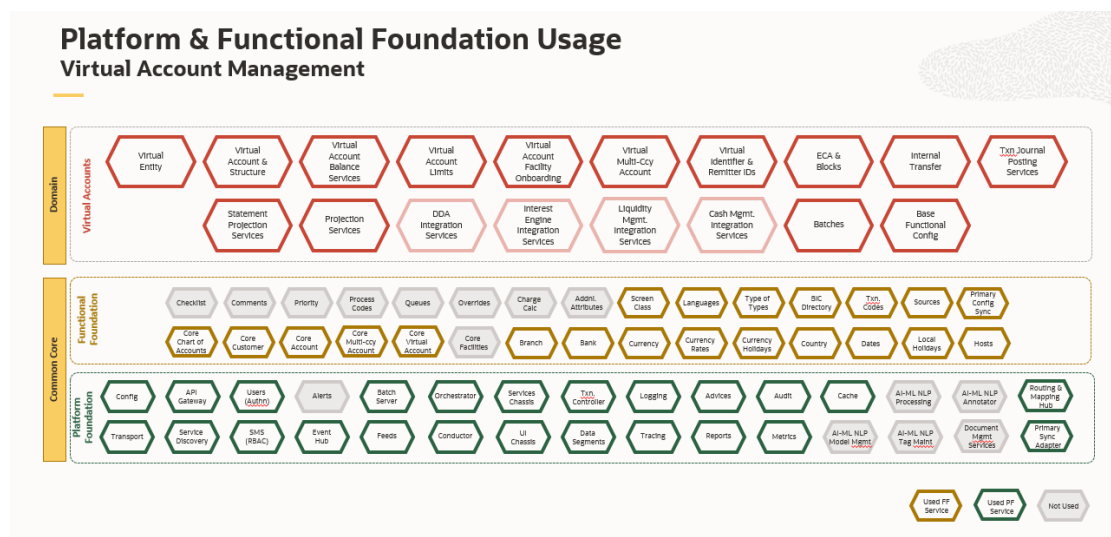
This topic contains the following subtopics:

- [Oracle Banking Virtual Account Management – Subdomains List](#)
This topic describes about the Oracle Banking Virtual Account Management Subdomains List.
- [Troubleshooting SMS Errors](#)
This topic describes about Troubleshooting SMS Errors.
- [Oracle Banking Routing Hub Configuration](#)
This topic describes about Oracle Banking Routing Hub configuration.

4.1 Oracle Banking Virtual Account Management – Subdomains List

This topic describes about the Oracle Banking Virtual Account Management Subdomains List.

Figure 4-1 Composition of Oracle Banking Virtual Account Services Management



On successful login, the Oracle Banking Virtual Account Management dashboard screen appears depending on the user privileges.

Figure 4-2 Oracle Banking Virtual Account Management Dashboard

User Role Issues

Role Profile includes access rights to the functional activities that are common to a group of users. A user can be linked to a Role Profile by which you give the user access rights to all the functional activities in the Role Profile.

1. On **Home screen**, click **Security Management**. Under **Security Management**, click **Role**.

The **Role Maintenance** Screen displays.

Figure 4-3 Role Maintenance

Only authorized users can access the system with the help of a unique User Login ID and password. The user profile of a user contains the details of the user in four sections - User details, Status, Other details and User role branches.

1. From **Home screen**, click **Security Management**. Under **Security Management**, click **User**.

The **User Maintenance** Screen displays.

Figure 4-4 User Maintenance

Users Maintenance
⌵ ⌵ ×

User Details

Name	Login ID	Home Branch
ESPUUSER	ESPUUSER	000

Status

User Status	Status Changed On	Is Supervisor	Manager ID
Enable	April 7, 2018	On	ADMINUSER1
Start Date	End Date	System User	ADMINUSER1
April 7, 2018	April 7, 2024	Off	

Other Details

Access to PII	Staff Customer Restriction Required	Customer ID	Email ID
On	Off		oracle.oracle@oracle.com
Telephone Number	Home Phone Number	Mobile Number	Fax
Language Code			
ESP			

User Role Branches

Branch Code	Role Code	Role Description
000	ADMIN_ROLE	Default role for initial login
000	ENTITY_ADMIN_ROLE	Default role for initial login
000	VAM_ALL_ROLE	Role contains all functional activity for VAM

Page 1 of 1 (1-3 of 3 items) |< < 1 > >|

User Applications

Application Name	Application Description
VAP	VAP
VAB	VAB
VAE	VAE
VAS	VAS
VAI	VAI

Page 1 of 4 (1-5 of 16 items) |< < 1 2 3 4 > >|

Customer Access Groups

Customer Access Group	Customer Access Description
No data to display.	

Page 1 (0 of 0 items) |< < 1 > >|

Audit

Note:
Make sure that the required Role and User Applications are mapped to the user.

This topic contains the following subtopics:

- [First level issues](#)
This topic describes the possible issues that may occur during the basic investigation.
- [Call is Failing in Oracle Banking Routing Hub / Accounting Call \(FCUBS\)](#)
This topic provides the troubleshooting information about the call is Failing in Oracle Banking Routing Hub / Accounting Call (FCUBS).

- [Transaction Data Verification](#)
This topic provides the systematic instruction to verify the transaction data.
- [OBIC Call is Failing](#)
This topic provides the systematic instructions if OBIC call is failing.

4.1.1 First level issues

This topic describes the possible issues that may occur during the basic investigation.

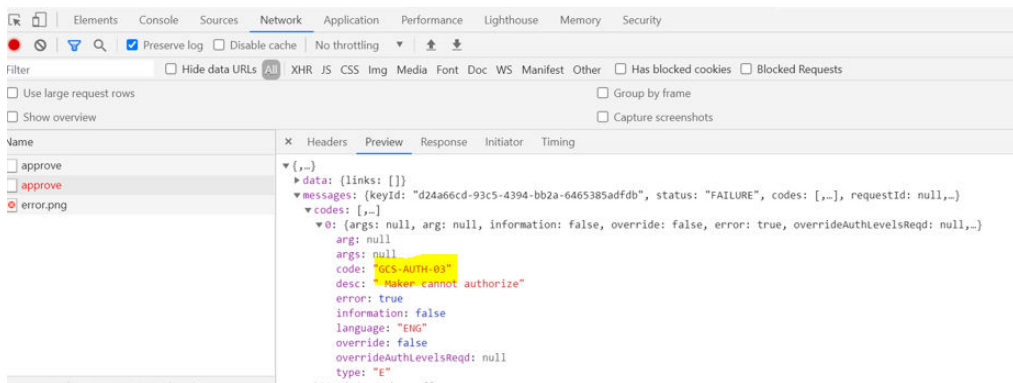
Error Message not shown

If there are any improper calls, check the ERTB_MSGS table of the respective schema to understand the cause of the error.

1. Press **F12** to open the **Networks**.
2. Check the error code in the response.

Query: SELECT * FROM ERTB_MSGS WHERE ERR_CODE='GCS_AUTH-03'

Figure 4-5 Error Code



Setting Log file path

Log generation path needs to be defined in **PLATO_LOGGER_PARAM_CONFIG** table of PLATO schema.

Query: Select * from PLATO_LOGGER_PARAM_CONFIG;

Figure 4-6 PLATO_LOGGER_PARAM_CONFIG

```
select * from plato_logger_param_config
```

Query Result x

All Rows Fetched: 3 in 0.05 seconds

ID	MODIFY_FIELD	PARAM_NAME	PARAM_VAL
1	1 N	LOG_PATH	/scratch/oblm/request-logs
2	2 N	LOG_LEVEL	INFO
3	3 N	LOG_MSG_WITH_TIME	Y

Dynamic log generation issues

For generating dynamic service logs, insert the data to **PLATO_DEBUG_USERS** table.

Query: Select * from PLATO_DEBUG_USERS;

Figure 4-7 Service Logs

/scratch/obvam/app/user_logs/

Name	Size	Changed	Rights	Owner
obvam-account-services_OBDX01_HEL_2021-05-07.log	4,784 KB	07-05-2021 16:02:23	rw-r-----	obvam
obvam-account-services_SHUB01_000_2021-05-07.log	20,336 KB	07-05-2021 16:02:20	rw-r-----	obvam
obvam-core-services_ARP02_000_2021-05-07.log	393 KB	07-05-2021 15:57:32	rw-r-----	obvam
obvam-entity-services_OBDX01_HEL_2021-05-07.log	6,141 KB	07-05-2021 15:57:31	rw-r-----	obvam
obvam-core-services_ADMINUSER1_000_2021-05-07.log	702 KB	07-05-2021 15:57:25	rw-r-----	obvam
obvam-account-services_OBDX01_HEL_2021-05-07.2021-05-07.0...	153,619 KB	07-05-2021 15:53:39	rw-r-----	obvam
obvam-statement-services_OBDX01_HEL_2021-05-07.log	1,081 KB	07-05-2021 15:53:31	rw-r-----	obvam
obvam-statement-services_DEB01_000_2021-05-07.log	355 KB	07-05-2021 15:53:26	rw-r-----	obvam

Figure 4-8 PLATO_DEBUG_USERS

ID	DEBUG_ENABLED	SERVICE_CODE	USER_ID
25	42 Y	obvam-core-services	ARP1
26	2 Y	obvam-core-services	SHUB01
27	8 Y	obvam-core-services	KEITH01
28	38 Y	obvam-eca-services	ARP1
29	26 Y	obvam-eca-services	ADMINUSER1
30	30 Y	obvam-entity-services	DEB01
31	22 Y	obvam-entity-services	ARP2
32	55 Y	obvam-entity-services	SYSTEM
33	7 Y	obvam-entity-services	KEITH01
34	21 Y	obvam-entity-services	ARP1
35	12 Y	obvam-entity-services	ADMINUSER1
36	23 Y	obvam-entity-services	KEITH02
37	19 Y	obvam-identifier-services	ARP2
38	32 Y	obvam-identifier-services	DEB01
39	9 Y	obvam-identifier-services	SHUB01
40	20 Y	obvam-identifier-services	ADMINUSER1
41	18 Y	obvam-identifier-services	ARP1
42	24 Y	obvam-identifier-services	KEITH02
43	13 Y	obvam-identifier-services	KEITH01
44	77 Y	obvam-projection-services	ADMINUSER1
45	78 Y	obvam-projection-services	ADMINUSER2
46	14 Y	obvam-statement-services	ADMINUSER1
47	57 Y	obvam-statement-services	ARP2

Call is failing in Gateway

If any API call is failing in Gateway, hit the same API endpoint without passing through api-gateway via the postman.

Figure 4-9 API Gateway

GET `http://whf00bjp.in.oracle.com:7205/oblm-maintenance-services/account?customerId=HDFC` Send

Params Authorization **Headers (11)** Body Pre-request Script Tests Settings

Headers 7 hidden

KEY	VALUE	DESCRIPTION	...	Bulk Edit
<input checked="" type="checkbox"/> appld	LMM			
<input checked="" type="checkbox"/> branchCode	LMB			

Body Cookies Headers (7) Test Results Status: 200 OK Time: 881 ms Size: 16.88 KB Sa

Pretty Raw Preview Visualize JSON ≡

```

1 |
2 |   "data": [
3 |     {
4 |       "keyId": "668792b5-343e-4b19-8bf5-197a5fd91d5f",
5 |       "makerId": "KANNAN1",
6 |       "makerDateStamp": "2018-11-30T04:29:29.000+00:00",
7 |       "checkerId": "KANNAN2",
8 |       "checkerDateStamp": "2018-11-30T04:30:25.000+00:00",

```



Note:

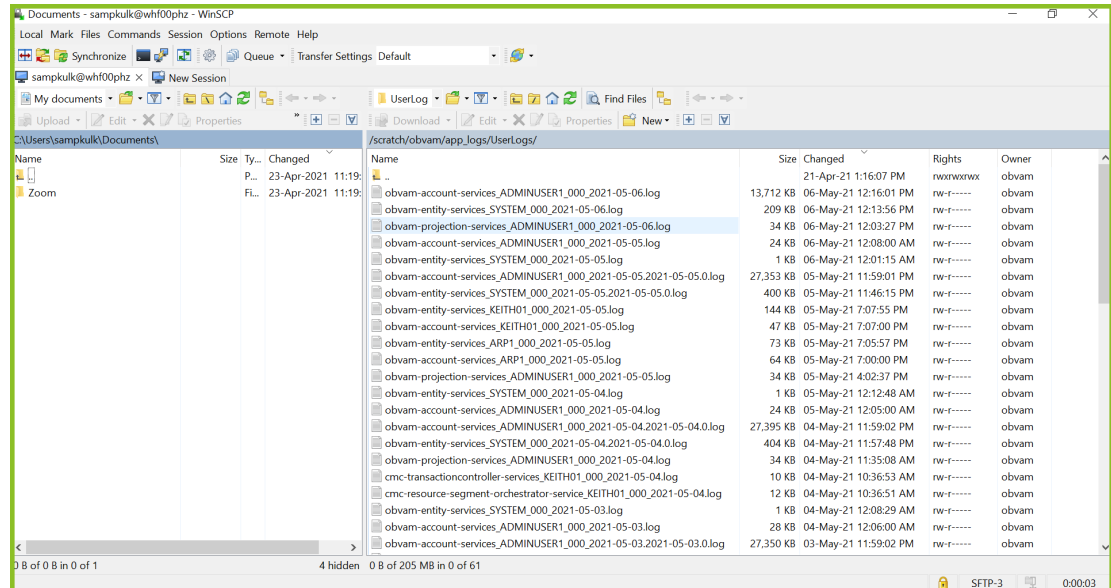
Restart the specific services if required.

Exact error through exception log

If there is an exact error through the exception log, log in to WINSCP and check the server logs with NIS credentials.

The path is `/scratch/obvam/app_logs/UserLogs`.

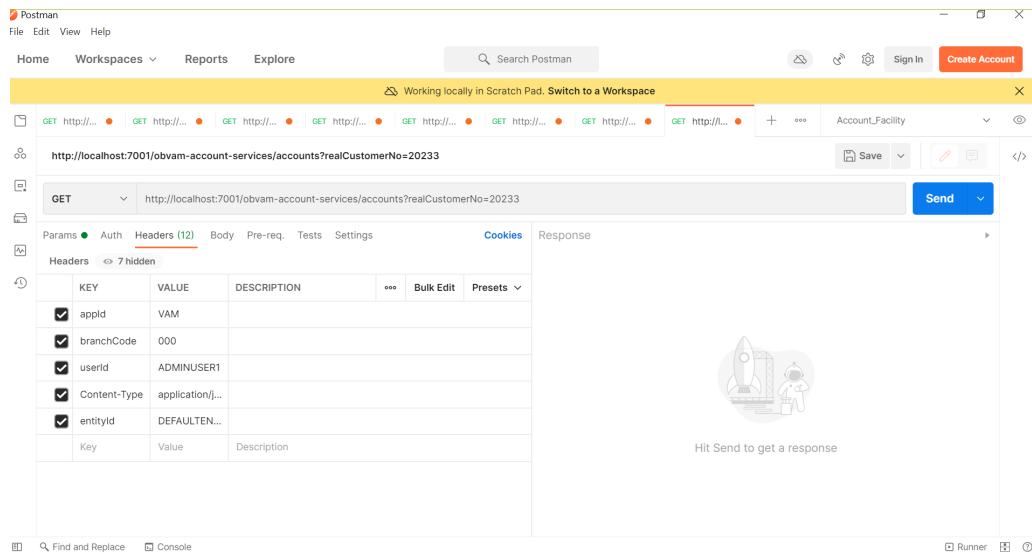
Figure 4-10 Exception Error Log



Logs are not generated

If you are not getting logs, put the loggers across API, hit through postman, and test again.

Figure 4-11 Postman



4.1.2 Call is Failing in Oracle Banking Routing Hub / Accounting Call (FCUBS)

This topic provides the troubleshooting information about the call is Failing in Oracle Banking Routing Hub / Accounting Call (FCUBS).

If any call is failing in Oracle Banking Routing Hub, open the CMC_RH_AUDIT_EVENT_LOG for getting Gateway response (**SUCCESS** or **FAILED**).

Select the following query to verify results.

Query: select * from CMC_RH_AUDIT_EVENT_LOG

Figure 4-12 CMC_RH_AUDIT_EVENT_LOG

REQUEST_ID	DATA	EVENT_TYPE	ID
1	["body":{"data":null,"messages":{"keyId":null,"status":"FAILURE",...}	DISPATCH_RESPONSE	827b2614-cab0-42f0-8e61-d9491f28
2	["headers":{"Accept":["application/xml, text/xml, application/json...]	DISPATCH_REQUEST	5cf482f6-2735-4e70-841f-43a44b11
3	["body":{"data":null,"messages":{"keyId":null,"status":"FAILURE",...}	DISPATCH_RESPONSE	74e2c7ef-983f-4056-96fb-08002f10
4	["headers":{"Accept":["application/xml, text/xml, application/json...]	DISPATCH_REQUEST	e0635ae0-ca52-4f65-a76b-0d4bfbae
5	["body":{"data":null,"messages":{"keyId":null,"status":"FAILURE",...}	DISPATCH_RESPONSE	1c5d19d2-268e-4ac1-8fe1-c6b3be94
6	["headers":{"Accept":["application/xml, text/xml, application/json...]	DISPATCH_REQUEST	f6a8e7e2-296c-4627-80d0-f425d418
7	["headers":{"Accept":["application/xml, text/xml, application/json...]	DISPATCH_REQUEST	74dff85b-0b00-4a1b-9c89-662b7b19
8	["body":{"data":null,"messages":{"keyId":null,"status":"FAILURE",...}	DISPATCH_RESPONSE	27ba32c3-4171-449e-9efa-824937e9
9	["body":{"data":null,"messages":{"keyId":null,"status":"FAILURE",...}	DISPATCH_RESPONSE	8d187759-f806-4a06-82fe-ec3fe9d1
10	["headers":{"Accept":["application/xml, text/xml, application/json...]	DISPATCH_REQUEST	2a27932b-bf9c-4f20-b9be-829b9c68
11	["headers":{"Accept":["application/xml, text/xml, application/json...]	DISPATCH_REQUEST	a092b8c3-b784-4a30-9e60-89d2dced
12	["body":{"data":null,"messages":{"keyId":null,"status":"FAILURE",...}	DISPATCH_RESPONSE	2c74c94b-e583-4524-ac39-b9657399
13	["headers":{"Accept":["application/xml, text/xml, application/json...]	DISPATCH_REQUEST	d9c5b5ca-8d0e-42f3-9cca-3e21cb40
14	["body":{"data":null,"messages":{"keyId":null,"status":"FAILURE",...}	DISPATCH_RESPONSE	6ae5372-5652-451e-967b-8bab5a15
15	["headers":{"Accept":["application/xml, text/xml, application/json...]	DISPATCH_REQUEST	bcf24888-0dea-4f85-87fa-42876342
16	["body":{"data":null,"messages":{"keyId":null,"status":"FAILURE",...}	DISPATCH_RESPONSE	bed1ef6d-b965-4c75-8924-c36928cc
17	["headers":{"Accept":["application/xml, text/xml, application/json...]	DISPATCH_REQUEST	dace9a7c-e4d7-4606-bf20-586a0ad5
18	["body":{"data":null,"messages":{"keyId":null,"status":"FAILURE",...}	DISPATCH_RESPONSE	0d98527f-c33a-4f6b-8795-fe169c3f
19	["headers":{"Accept":["application/xml, text/xml, application/json...]	DISPATCH_REQUEST	5ed0891-f215-4f9a-929b-fe2f987a
20	["body":{"data":null,"messages":{"keyId":null,"status":"FAILURE",...}	DISPATCH_RESPONSE	61677103-2e51-462b-a44b-0eccc0ac
21	["body":{"data":null,"messages":{"keyId":null,"status":"FAILURE",...}	DISPATCH_RESPONSE	390b25fa-314e-479d-9371-8f714a19
22	["headers":{"Accept":["application/xml, text/xml, application/json...]	DISPATCH_REQUEST	d650a6d3-1641-4d21-a705-3cfd6330
23	["body":{"data":null,"messages":{"keyId":null,"status":"FAILURE",...}	DISPATCH_RESPONSE	df3c9cee-3224-4eb1-8fa3-23323491
24	["headers":{"Accept":["application/xml, text/xml, application/json...]	DISPATCH_REQUEST	2549fb6a-057b-4809-b59f-7a1b81ab
25	["headers":{"Accept":["application/xml, text/xml, application/json...]	DISPATCH_REQUEST	38058514-41ad-4fc7-9e91-0be08b57
26	["body":{"data":null,"messages":{"keyId":null,"status":"FAILURE",...}	DISPATCH_RESPONSE	7ab38875-560e-4141-b4d0-4b34037e

Code Error in GCS Side

If there is any error in GCS side codes, use java de-compiler to debug the error.

404 Error

The possible causes for 404 error are as follows:

- Check service is not running on Eureka.
- Check service is not deployed in WebLogic.

500 Internal Error

The possible causes for 500 Internal error are as follows:

- Issue with Plato entries
- Issue with Eureka
- Issue with any peace of code

The server-side debugging is needed for the above-mentioned issues, if it is not captured in logs.

4.1.3 Transaction Data Verification

This topic provides the systematic instruction to verify the transaction data.

1. In the **IN** request and **OUT** response, make sure that all the field data is going to service side.

2. If there is any error related to SMS, check for the availability of SMS entries.
3. Validate the endpoints and data.
4. Make sure that the data entered on the screen is accurate.

For example, the **Account Number** should be valid.

Figure 4-13 Create Journal Online

4.1.4 OBIC Call is Failing

This topic provides the systematic instructions if OBIC call is failing.

1. If the OBIC call is failing, check the `EIE_TB_MSG_REQ_LOG` and `EIE_TB_MSG_RES_LOG` in EIE schema for getting the response (**SUCCESS** or **FAILURE**).
2. Select the following query to verify results.

Query: `Select * from EIE_TB_MSG_RES_LOG`

Figure 4-14 EIE Schema

RES_ID	BRANCH	REQ_MSG_ID	ACTION	USER_ID	THEIR_USER_ID
1 72aaff88-789d-46a7-ad47-e39169bba552	HEL	7b72a620-d766-4421-8cd4-ec0c7009ed2	MODIFY_IC_ACCOUNT	ADMINUSER2	(null)
2 f8bcae03-f4ab-4522-9c0a-694bc3ba89cc	HEL	7db96ae0-4834-4ea5-ae18-c9535bfc69ca	MODIFY_IC_ACCOUNT	ADMINUSER2	(null)
3 3e57ab9b-3af9-4681-9a64-3e54a71488df	HEL	1ddcde02-4be9-47a6-8985-b19bd898d1f9	MODIFY_IC_ACCOUNT	ADMINUSER2	(null)
4 6d454a4b-8d65-4aeb-a0a7-c427ac1309a6	HEL	84582ff7-e7b5-4348-b23d-7a77f719edeb	MODIFY_IC_ACCOUNT	ADMINUSER2	(null)
5 056d30c4-e169-4dcd-919c-41eb93d8995d	HEL	1860005f-ee11-4ee2-9b7b-5d01a8661b1e	MODIFY_IC_ACCOUNT	ADMINUSER2	(null)

4.2 Troubleshooting SMS Errors

This topic describes about Troubleshooting SMS Errors.

The possible issues occur in Security Management System are mentioned below.

- Unable to login after launching the application.
- Menus are not displayed after logging in.

4.3 Oracle Banking Routing Hub Configuration

This topic describes about Oracle Banking Routing Hub configuration.

Refer to ***Routing Hub Configuration User Guide*** for the detailed explanation.

5

Troubleshooting OutOfMemory issues

This topic describes about Troubleshooting OutOfMemory issues

This topic contains the following subtopics:

- [Extract Heapdump](#)
This topic describes about the troubleshooting information to extract Heapdump.
- [JFR Tool in Java](#)
This topic describes about JFR Tool in Java.
- [Quick Recovery](#)
This topic provides the systematic instruction to troubleshoot the application for quick recovery.

5.1 Extract Heapdump

This topic describes about the troubleshooting information to extract Heapdump.

If there is an error like GC Overhead limit exceeded or OutOfMemoryException is thrown while starting the services, the following details need to be shared.

Heap Dump

A heap dump is a snapshot of objects that are in memory in the JVM at a certain timestamp in a transaction. Heap dumps help to troubleshoot memory-leak problems and optimize memory usage in microservices. Heap dumps are usually stored in binary format hprof files.

The HeapDumpOnOutOfMemoryError command-line option that generates a heap dump when a java.lang.OutOfMemoryError is thrown can be used to generate heap dumps:

```
java -XX:+HeapDumpOnOutOfMemoryError -XX:HeapDumpPath=<file-or-dir-path>
```

Remote Heap Monitor Setup

Alternatively, one can setup remote heap monitor to observe the memory leaks in the product. Perform the following steps:

1. To enable jmx, set the following environment variable to start jmx:
 - -Dcom.sun.management.jmxremote
 - -Dcom.sun.management.jmxremote.port=8888
 - -Dcom.sun.management.jmxremote.authenticate=false
 - -Dcom.sun.management.jmxremote.ssl=false

Note:

If the above variable are set, a jmx service will start on specified port.

2. Setup JVisualVM as follows, to collect heap dumps:
 - Start JVisualVM.
 - Under "Remote" option, add a host.
 - Under the new host, add new jmx connection.

 **Note:**

With this setup, the JAVA process can be monitored remotely.

5.2 JFR Tool in Java

This topic describes about JFR Tool in Java.

Java Flight Recorder (JFR) is a tool for collecting diagnostic and profiling data about a running Java application. It is integrated into the Java Virtual Machine (JVM) and causes almost no performance overhead, so it can be used even in heavily loaded production environments.

The below documentation provides steps to use JFRs to collect performance details and profiling data of services and can be used to report performance issues for OBMA services.

5.3 Quick Recovery

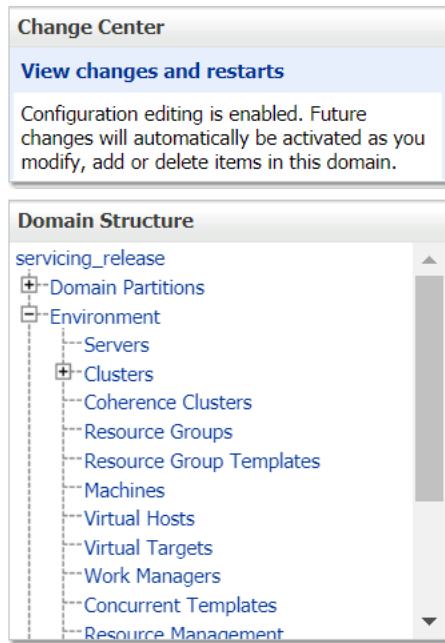
This topic provides the systematic instruction to troubleshoot the application for quick recovery.

As a quick fix, try to restart the managed server or try to increase the memory allocated to the managed server.

Perform the following steps to increase the memory:

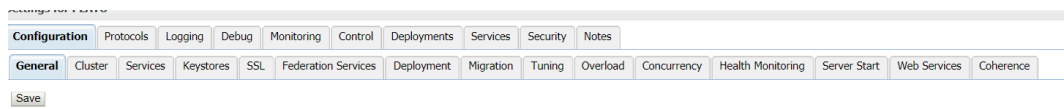
1. Click **Servers**.

Figure 5-1 Domain Structure



2. Select the managed server from which you are getting OutOfMemoryException or GC Overhead Limit exceeded.
3. Click **Server Start** tab.

Figure 5-2 Server Start



4. Specify the memory (which needs to be increased) according to requirement in 512, 1024, 2048 etc., and restart the managed server to fix the issue.

Figure 5-3 Memory Requirements



6

Troubleshooting Deployment Errors/Exceptions

This topic describes the troubleshooting information for Errors/Exceptions that can occur due to flyway while deployment.

Errors / Exceptions on Flyway Deployment

The error description is given below:

```
org.springframework.beans.factory.UnsatisfiedDependencyException:  
Error creating bean with name 'application': Unsatisfied dependency  
expressed through field 'flywayApplicationConfig'; nested exception is  
org.springframework.beans.factory.BeanCreationException: Error creating  
bean with name 'executeDomain' defined in class path resource  
[oracle/fsgbu/plato/flyway/FlywayConfig.class]: Bean instantiation via  
factory method failed; nested exception...SQL State : 42000
```

In the error, the bean-name can be any of the following:

- **executeDomain**
- **executePlato**
- **executePlatoSec**
- **executePlatoUI**
- **executeSms**
- **executeCmc**
- **executeMidofcmc**
- **executePlatofeed**
- **executePlatobatch**
- **executePlatoorch**

Solution for Errors/Exceptions

- At first for each case,, the service through Plato-configuration-service should be checked to see if it is suggesting the correct scheme via the **plato-config-service**.
- After checking that it is to be ensured for that particular APPLICATION, the following entries are present in the PROPERTIES table in the plato Schema.

Table 6-1 Properties Table

BEAN	PROPERTY_SET NEED TO BE PRESENT
executeDomain	flyway.domain.db.*
executePlato	flyway.plato.db.*

Table 6-1 (Cont.) Properties Table

BEAN	PROPERTY_SET NEED TO BE PRESENT
executePlatoSec	flyway.platosec.db.*
executePlatoUI	flyway.platoui.db.*
executeSms	flyway.sms.db.*
executeCmc	flyway.cmc.db.*
executeMidofcmc	flyway.domain.db.*
executePlatoFeed	flyway.platofeed.db.*
executePlatoBatch	flyway.platobatch.db.*
executePlatoOrch	flyway.platoorch.db.*

Depending on whether for the flyway db connection, JNDI name is being used or the JDBC URL and other details are used, each property set will look as follows:

CASE 1: USING JDBC

```
flyway.domain.db.username
flyway.domain.db.password
flyway.domain.db.jdbcUrl
flyway.domain.db.driver-class-name
flyway.domain.schemas
flyway.domain.locations
flyway.domain.placeholderReplacement
flyway.domain.ignoreMissingMigrations
flyway.domain.outOfOrder
```

CASE 2: USING JNDI

```
flyway.domain.db.jndi
flyway.domain.schemas
flyway.domain.locations
flyway.domain.placeholderReplacement
flyway.domain.ignoreMissingMigrations
flyway.domain.outOfOrder
flyway.jndi.datasource.enabled
```

In each case, make sure that all the relevant placeholders are available in the scripts in the respective locations.

Error Description:

```
No value provided for placeholder: ${eureka.host}. Check your
configuration!
```

In the example above, an error occurred due to the absence of passing the following parameter in the properties table:

```
flyway.domain.placeholders.eureka.host
```

Solution:

Similarly, any placeholder where the error occurred must pass to the environment through the properties table or the command line arguments (as -D parameters).

A

Business Error Codes

This topic describes about the error codes and messages.

Table A-1 List of Error Codes

Error Code	Description
GC-CLS-02	Record Successfully Closed
GC-REOP-03	Record Successfully Reopened
GCS-AUTH-01	Record Successfully Authorized
GCS-AUTH-02	Valid modifications for approval were not sent. Failed to match
GCS-AUTH-03	Maker cannot authorize
GCS-AUTH-04	No Valid unauthorized modifications found for approval
GCS-CLOS-002	Record Successfully Closed
GCS-CLOS-01	Record Already Closed
GCS-CLOS-02	Record Successfully Closed
GCS-CLOS-03	Unauthorized record cannot be closed, it can be deleted before first authorization
GCS-COM-001	Record does not exist
GCS-COM-002	Invalid version sent, operation can be performed only on latest version
GCS-COM-003	Please Send Proper ModNo
GCS-COM-004	Please send makerId in the request
GCS-COM-005	Request is Null. Please Resend with Proper Values
GCS-COM-006	Unable to parse JSON
GCS-COM-007	Request Successfully Processed
GCS-COM-008	Modifications should be consecutive
GCS-COM-009	Resource ID cannot be blank or "null"
GCS-COM-010	Successfully cancelled \$1
GCS-COM-011	\$1 failed to update
GCS-DEL-001	Record deleted successfully
GCS-DEL-002	Record(s) deleted successfully
GCS-DEL-003	Modifications did not match valid unauthorized modifications that can be deleted for this record
GCS-DEL-004	Send all unauthorized modifications to be deleted for record that is not authorized even once
GCS-DEL-005	Only Maker of first version of record can delete modifications of record that is not once authorized
GCS-DEL-006	No valid unauthorized modifications found for deleting
GCS-DEL-007	Failed to delete. Only maker of the modification(s) can delete
GCS-MOD-001	Closed Record cannot be modified
GCS-MOD-002	Record Successfully Modified
GCS-MOD-003	Record marked for close, cannot modify
GCS-MOD-004	Only maker of the record can modify before once auth

Table A-1 (Cont.) List of Error Codes

Error Code	Description
GCS-MOD-005	Not amendable field, cannot modify
GCS-MOD-006	Natural Key cannot be modified
GCS-MOD-007	Only the maker can modify the pending records
GCS-REOP-003	Successfully Reopened
GCS-REOP-01	Unauthorized Record cannot be Reopened
GCS-REOP-02	Failed to Reopen the Record, cannot reopen Open records
GCS-REOP-03	Successfully Reopened
GCS-REOP-04	Unauthorized record cannot be reopened, record should be closed and authorized
GCS-SAV-001	Record already exists
GCS-SAV-002	Record Saved Successfully
GCS-SAV-003	The record is saved and validated successfully
GCS-VAL-001	The record is successfully validated
VAI-BRP-01	Mask can contain only the characters a,n and f
VAI-BRP-02	Please don't enter Fixed Value as the character f is not present in the Mask
VAI-BRP-03	Please Enter the Fixed Value as the mask Contains the character f
VAI-BRP-04	f cannot have multiple occurrence in the Mask
VAI-BRP-05	\$1 Branch Code is not Valid
VAI-BRP-06	Sum of identifier Start position and the length of the Mask cannot exceed Maximum size of the Account Number
VAI-BRP-07	Record cannot be closed as there are active identifiers mapped to real account number
VAI-BRP-08	Cannot Reopen Record as the Branch Code is Closed
VAI-BRP-10	\$1 cannot be Modified
VAI-BRP-11	Rate Type is invalid
VAI-IBAN-001	Invalid identifier branch for the given Identifier
VAI-IBAN-002	BBAN format mask is not maintained
VAI-IBAN-003	Length of Bank code differs from bban format bank code mask character length
VAI-IBAN-004	BBAN Bank code is not maintained
VAI-IBAN-005	Length of Branch code differs from bban format branch code mask character length
VAI-IBAN-006	BBAN Branch code is not maintained
VAI-IBAN-007	Length of Identifier account does not match with the length of mask character z maintained in BBAN format mask
VAI-IBAN-008	Identifier Account could not be generated
VAI-IBAN-009	Failed to validate BBAN data type
VAI-IBAN-010	Mismatch in length of bban format mask and bban data type
VAI-IBN-24	BBAN Format Mask is mandatory if BBAN Data Type is present
VAI-IBN-25	IBAN Country Code can have maximum of only two characters to generate IBAN, If you want to generate IBAN choose a country with only two characters as Country Code
VAI-IBN-26	BBAN Data Type is mandatory if BBAN Format Mask is present

Table A-1 (Cont.) List of Error Codes

Error Code	Description
VAI-IBN-27	BBAN Data Type length and BBAN Mask Length must be the same
VAI-IBN-29	Bank Code is part of BBAN Mask and the same is not maintained
VAI-IBN-30	Alphabet h can occur only once in BBAN Format Mask
VAI-IBN-31	Account mask maintained in BBAN format Mask is not the same as the Account Mask maintained for the branch
VAI-IBN-34	Branch Code is part of BBAN Mask and the same is not maintained
VAI-IBN-35	Branch Code needs to be maintained with the length and data type maintained as in BBAN Data Type field
VAI-IBN-36	Bank Code needs to be maintained with the length and data type maintained as in BBAN Data Type field
VAI-IBN-40	Identifier Mask is not maintained for the host
VAI-IBN-56	Bban bank code should be blank if b is not part of bban format mask
VAI-IBN-57	Bban branch code should be blank if s is not part of bban format mask
VAI-IBN-59	Country code is not valid. Country code maintained for Current branch is \$1
VAI-IBN-62	\$1 Checksum Algorithm is invalid
VAI-IBN-65	The length of BBAN Remittance ID Mask does not match BBAN Format Mask. Allowed length for Remitter Id mask is \$1
VAI-IBN-66	Remitter Id mask needs to be maintained with the length and data type maintained as in BBAN Data Type field
VAI-IBN-68	Country Code is not maintained for the Current branch.
VAI-MAP-01	Only One Account Can be selected as Default Account
VAI-MAP-02	Duplicate Rows with Same Transaction Currency are Present in the Multi Block
VAI-MAP-03	Length of Virtual Identifier and Identifier Mask must be equal
VAI-MAP-04	Please Enter a Numeric Digit in Virtual Identifier for the corresponding mask character n in the Mask
VAI-MAP-05	Please Enter an Alpha-Numeric Digit in Virtual Identifier for the corresponding mask character a in the Mask
VAI-MAP-06	The Value of fixed Identifier at Position \$1 should not be altered
VAI-MAP-07	Please Select one default Account
VAI-MAP-08	Please Enter All the Values in the Multi Block
VAI-MAP-09	Enter Atleast one Row in the MultiBlock Grid
VAI-MAP-10	Real customer should not be modified
VAI-MAP-11	Select one Account as Default
VAI-MAP-12	Invalid Account Number for given branch
VAI-MAP-13	Invalid Account Number for the Given Customer
VAI-MAP-14	Duplicate Rows with Same Account No are Present
VAI-MAP-15	Identifier Value must be Same in both Master and Detail
VAI-MAP-16	Invalid Currency \$1
VAI-MAP-17	Invalid Branch Code \$1
VAI-MAP-18	Invalid Customer No \$1
VAI-MAP-19	Invalid Rule Id \$1
VAI-MAP-20	Account Currency of \$1 and Transaction currency must be same

Table A-1 (Cont.) List of Error Codes

Error Code	Description
VAI-MAP-21	\$1 cannot be modified
VAI-MAP-22	Account Group Id must not be entered when Account Linkage is A
VAI-MAP-23	Real Account Number and Branch cannot be null when Account Linkage is A
VAI-MAP-24	Invalid Account for the Customer in Core
VAI-MAP-25	Invalid Account for the Customer
VAI-MAP-26	Please input Account Group Id as the Account Linkage is G
VAI-MAP-27	Real Account Number and Branch is not required as the Account Linkage is G
VAI-MAP-28	Invalid Account Group Id for the Real Customer
VAI-MAP-29	Cannot close Identifier as it is mapped in Identifier Rule
VAI-MAP-30	Invalid host code
VAI-REML-001	Invalid value for Virtual Identifier
VAI-REML-002	Remitter list id is not mapped to the identifier. Please choose identifier mapped to remitter list id
VAI-REML-003	The length of the combination of Remittance ID and Virtual Account Identifier must be between minimum and maximum length of rule
VAI-REML-004	The length of the remitter id must be equal to the length of the remitter mask
VAI-REML-005	Invalid Remitter List Id
VAI-REML-006	IBAN generation failed
VAI-REML-007	RECORD not found
VAI-REML-008	The characters in Remittance ID does not match with the BBAN Remittance ID Mask
VAI-REML-009	Start Date cannot be less than Application Date \$1
VAI-REML-010	End Date cannot be less than Start Date
VAI-REML-011	Invalid Date Format
VAI-RMLS-01	Invalid Real Customer Number
VAI-RMLS-02	RemitterListId should be alphanumeric
VAI-RMLS-03	Invalid Remitter ID: Either Remitter ID is not present in the List or its Status is Closed
VAI-RMLS-04	Atleast one record should be present in detail block
VAI-RMLS-05	Remitter ID for 2 records cannot be same
VAI-RMLS-06	Validity End Date Should be Greater than Validity Start Date
VAI-RMLS-07	Transaction Value Date should be Greater than the Validity Start Date of Remitter ID
VAI-RMLS-08	Transaction Value Date should be Less than the Validity End Date of Remitter ID
VAI-RMLS-09	Remitter Id should be alphanumeric
VAI-RMLS-10	RemitterListId is linked to a real customer in Static Rule Maintenance
VAI-RMLS-11	Maximum Length allowed for RemitterListID is 35
VAI-RMLS-12	RemitterList ID in master and detail blocks are not matching
VAI-RMLS-13	Maximum Length allowed for RemitterID is 35
VAI-RMLS-14	Record Cannot be reopened as Customer is closed

Table A-1 (Cont.) List of Error Codes

Error Code	Description
VAI-RMLS-15	Invalid Remitter List Id
VAI-RMLS-16	Validity Start Date format is invalid
VAI-RMLS-17	Validity start date should be an application date or less
VAI-RMLS-18	Validity End Date format is invalid
VAI-RULE-01	Please Enter both Minimum Length and Maximum Length
VAI-RULE-02	Please Enter both Start Number and End Number
VAI-RULE-03	Please Enter both From Amount and To Amount
VAI-RULE-04	Collection start date and end date both should be entered
VAI-RULE-05	Maximum Length Cannot be greater than Max Length of Account Number
VAI-RULE-06	Minimum Length Cannot be greater than Max Length of Account Number
VAI-RULE-07	Minimum Length Cannot be greater than Maximum Length
VAI-RULE-08	Remitter Id Start Number Cannot be Greater than Remitter Id End Number
VAI-RULE-09	Txn amount Start Range Cannot be greater than Txn amount End Range
VAI-RULE-10	Collection Start Date Cannot be greater than Collection End Date
VAI-RULE-11	Both CheckDigit Position and Algorithm must be input
VAI-RULE-12	Remitter ID Range, User Defined Rules and Checksum fields must not be input when Remitter List ID is input
VAI-RULE-13	Check Digit Position is greater than Max length of Account Number
VAI-RULE-14	RuleId must be Alphanumeric \$1
VAI-RULE-15	Enter both start time and end time
VAI-RULE-16	Enter start position and Date Format when end date is checked
VAI-RULE-17	Remitter List ID is invalid
VAI-RULE-18	Start time must be of the form hh:mm:ss
VAI-RULE-19	End Time must be of the form hh:mm:ss
VAI-RULE-20	The Value Entered for Reporting Preference is Invalid
VAI-RULE-21	Invalid Value for Failure Action
VAI-RULE-22	Enter Prefix/Suffix as Reporting Preference has pre/suf value
VAI-RULE-23	Don't Enter Prefix/Suffix as Reporting Preference does not have pre/suf value
VAI-RULE-24	Don't enter Prefix/Suffix as Reporting Preference is null
VAI-RULE-25	Exception Suffix must be present when Failure Action is Proceed
VAI-RULE-26	Real Customer No does not Exist
VAI-RULE-27	Length Validation Failed for Account No \$1
VAI-RULE-28	Remitter ID Range Validation Failed for Account No \$1
VAI-RULE-29	Transaction Amount Range Validation Failed for Account No \$1
VAI-RULE-30	Collection Date Validation Failed for Account No \$1
VAI-RULE-31	Remitter List Id Validation failed
VAI-RULE-32	Modulo 10 checksum Validation Failed for Account \$1
VAI-RULE-33	Modulo 11 checksum Validation Failed for Account \$1

Table A-1 (Cont.) List of Error Codes

Error Code	Description
VAI-RULE-34	Modulo 11 with weights checksum Validation Failed for Account \$1
VAI-RULE-35	Please Enter Collection Start Date and End Date as Collection Time is specified
VAI-RULE-36	Record Cannot be Closed as active Record for this Rule Id Exists in IDMAP
VAI-RULE-37	Collection Date Format is Invalid
VAI-RULE-38	hh cannot be greater than 23
VAI-RULE-39	mm cannot be greater than 59
VAI-RULE-40	ss cannot be greater than 59
VAI-RULE-41	Cannot reopen as Real Customer is invalid
VAI-RULE-42	Same CCy cannot be present multiple times in the block
VAI-RULE-43	RuleId in Master and Detail Cannot be different
VAI-RULE-44	Enter Both Transaction Currency and Transaction Amount Range with amount greater than 0
VAI-RULE-45	Enter Valid Value for CheckSum Algorithm
VAI-RULE-46	Min Length Value must be greater than 0
VAI-RULE-47	Max Length Value must be greater than 0
VAI-RULE-48	Remitter Id Start and End Range must be greater than 0
VAI-RULE-49	Failed in Validating Include End Date Part for Account \$1
VAI-RULE-50	Invalid Currency \$1
VAI-RULE-51	ChkdgtIncludeTxnamt flag must be Y or N
VAI-RULE-52	EndDatePartOfAccno flag must be Y or N
VAI-RULE-53	Start Time Cannot be Greater or Equal To End Time If Start and End Date is same
VAI-RULE-54	Cannot Reopen as Real Customer is Closed in Remittance
VAI-RULE-55	Cannot Reopen as Real Customer is Closed in Core Customer
VAI-RULE-56	Time Format is Invalid
VAI-RULE-57	Failure Action Should Not Empty as Reporting Preference is inputed
VAI-RULE-90	remitter list id is already mapped to remittance detail and hence cannot be modified
GC-CLS-02	Record Successfully Closed
GC-REOP-03	Successfully Reopened
GCS-AUTH-01	Record Successfully Authorized
GCS-AUTH-02	Valid modifications for approval were not sent. Failed to match
GCS-AUTH-03	Maker cannot authorize
GCS-AUTH-04	No Valid unauthorized modifications found for approval
GCS-CLOS-002	Record Successfully Closed
GCS-CLOS-01	Record Already Closed
GCS-CLOS-02	Record Successfully Closed
GCS-CLOS-03	Unauthorized record cannot be closed, it can be deleted before first authorization
GCS-COM-001	Record does not exist
GCS-COM-002	Invalid version sent; operation can be performed only on latest version

Table A-1 (Cont.) List of Error Codes

Error Code	Description
GCS-COM-003	Please Send Proper ModNo
GCS-COM-004	Please send makerId in the request
GCS-COM-005	Request is Null. Please Resend with Proper Values
GCS-COM-006	Unable to parse JSON
GCS-COM-007	Request Successfully Processed
GCS-COM-008	Modifications should be consecutive
GCS-COM-009	Resource ID cannot be blank or "null"
GCS-COM-010	Successfully cancelled \$1
GCS-COM-011	\$1 failed to update
GCS-DEL-001	Record deleted successfully
GCS-DEL-002	Record(s) deleted successfully
GCS-DEL-003	Modifications did not match valid unauthorized modifications that can be deleted for this record
GCS-DEL-004	Send all unauthorized modifications to be deleted for record that is not authorized even once
GCS-DEL-005	Only Maker of first version of record can delete modifications of record that is not once authorized
GCS-DEL-006	No valid unauthorized modifications found for deleting
GCS-DEL-007	Failed to delete. Only maker of the modification(s) can delete
GCS-MOD-001	Closed Record cannot be modified
GCS-MOD-002	Record Successfully Modified
GCS-MOD-003	Record marked for close, cannot modify
GCS-MOD-004	Only maker of the record can modify before once auth
GCS-MOD-005	Not amendable field, cannot modify
GCS-MOD-006	Natural Key cannot be modified
GCS-MOD-007	Only the maker can modify the pending records
GCS-REOP-003	Successfully Reopened
GCS-REOP-01	Unauthorized Record cannot be Reopened
GCS-REOP-02	Failed to Reopen the Record, cannot reopen Open records
GCS-REOP-03	Successfully Reopened
GCS-REOP-04	Unauthorized record cannot be reopened, record should be closed and authorized
GCS-SAV-001	Record already exists
GCS-SAV-002	Record Saved Successfully
GCS-SAV-003	The record is saved and validated successfully
GCS-VAL-001	The record is successfully validated
VAC-FCLT-001	Cannot remove the Association as Mapping exists for the \$1 Real Account Number
VAC-FCLT-002	Cannot Close the Facility as Virtual Account Mapping exists for the Real Account Number
VAC-FCLT-003	Cannot Map \$1 Account Number more than once
VAC-FCLT-004	Atleast One Real Account No must be Mapped to the Customer
VAC-FCLT-005	Cannot Close the Maintenance as Virtual Customer exists

Table A-1 (Cont.) List of Error Codes

Error Code	Description
VAC-FCLT-006	Cannot Close the Maintenance as Virtual Account Code exists
VAC-FCLT-007	Cannot Reopen the Facility as the Customer is Closed
VAC-FCLT-008	Cannot Reopen the Facility as the one of the Accounts is Closed
VAC-FCLT-009	Cannot Reopen the Facility as the one of the Branches is Closed
VAC-FCLT-010	Real Customer Number in Master and Detail cannot be different
VAC-FCLT-011	Cannot remove the association as Real Account is Mapped with Virtual Account
VAC-FCLT-012	Cannot Close the Customer as Active Mapping exists in Identifier Service
VAC-FCLT-013	Default Virtual Entity is Invalid
VAC-FCLT-014	Cannot remove the association as Real Account is Mapped in Idmap Service
VAC-FCLT-015	Cannot close the Facility as Real Account is used in IDMAP
VAC-FCLT-016	\$1 is an invalid Real Account Number
VAC-FCLT-017	\$1 is an invalid Customer Number
VAC-FCLT-018	Cannot Close the facility as existing identifier rule is active
VAC-FCLT-019	Cannot Close the facility as existing remittance Id is active
VAC-FCLT-020	Cannot Close the facility as existing virtual entity is active
VAC-FCLT-021	Currency is not valid for the given real account - \$1
VAC-FCLT-022	Currency is not applicable for multi-currency account \$1
VAC-FCLT-023	Active account group with the real account number that is being removed exists. Modification not allowed.
VAC-FCLT-024	Active account group for this customer exists. Close not allowed
VAC-FCLT-027	Source System \$1 should be maintained in External DDA Service
VAC-FCLT-030	Please enter mandatory entity details needed for the Default Virtual Entity
VAC-FCLT-031	Virtual entity id should be same for facility and entity
VAC-FCLT-032	Default Virtual Entity cannot be removed
VAC-FCLT-033	Default Virtual Entity can be created only at the time of facility creation
VAC-FCLT-034	Default Virtual Entity cannot be changed once facility created
VAC-FCLT-035	Entity cannot be modified from facility side after once auth
VAC-FCLT-040	Account class cannot be null
VAC-FCLT-041	Account class \$1 is not valid for Real account \$2 and Branch \$3
VAC-FCLT-042	Sanction check Exempted flag cannot be ON when sanction check required flag in bank parameter is OFF
VAC-FCLT-043	Account Product \$1 cannot be mapped to Customer number Twice
VAC-GRP-001	Cannot close the Group as Active Group exist in Identifier Mapping
VAC-GRP-002	Cannot close the Group as Active Group exist in Virtual Account Structure
VAC-GRP-003	Cannot reopen Real Customer number is Invalid
VAC-GRP-004	Cannot reopen Real Customer number is Invalid in Core
VAC-GRP-005	Cannot reopen as Ccy \$1 is invalid
VAC-GRP-006	Real Customer No in all the detail blocks must be same as the Master block

Table A-1 (Cont.) List of Error Codes

Error Code	Description
VAC-GRP-007	Modify failed as currency present in Account Group is mapped in Account Structure
VAC-GRP-025	Cannot map two accounts with the same currency
VAC-GRP-026	More than one Account cannot selected as Default
VAC-GRP-027	Account Group Id in all the detail blocks must be same as the Master block
VAC-GRP-028	Real Account \$1, branch \$2 and currency \$3 Mapping is Invalid for customer \$4
VAC-GRP-029	Account \$1 is Invalid in Core
VAC-GRP-030	Ccy \$1 is invalid
VAC-GRP-031	Please Map atleast one Account-currency pair
VAC-GRP-032	Rolled Back Due to Exception
VAC-GRP-033	Virtual Multi-ccy Account not found for the Customer
VAE-CIF-01	Entity cannot be created, as customer is closed
VAE-CIF-02	Size of Virtual Customer No and virtual customer mask maintained at virtual bank parameters do not match
VAE-CIF-03	Inputed Virtual Entity is not matched with Mask
VAE-CIF-04	Virtual Entity Id is not the same for Individual type customer
VAE-CIF-05	Virtual Entity Id is not the same for Corporate type customer
VAE-CIF-06	Virtual Entity Bank Parameters is not maintained
VAE-CIF-07	Provide Individual details
VAE-CIF-08	Cannot close the record as active virtual account found
VAE-CIF-09	\$1 is invalid
VAE-CIF-10	Entity cannot be created, as facility is closed
VAE-CIF-11	Entity cannot be modified, as customer is closed
VAE-CIF-12	Entity cannot be modified, as Facility is closed
VAE-CIF-13	Entity cannot be reopened, as customer is closed
VAE-CIF-14	Entity cannot be reopened, as facility is closed
VAE-CIF-15	\$1 Cannot be modified
VAE-CIF-16	Mobile Number and Mobile Number ISD Should be Entered, as Preferred Mode is Mobile
VAE-CIF-17	Email Id Should be Entered, as Preferred Mode is Email
VAE-CIF-18	Provide Corporate Details
VAE-CIF-19	PreferredMode should be either E or M
VAE-CIF-20	Default virtual entity record can be modified only after its corresponding account facility record is authorized
VAE-CIF-21	The default virtual entity can be authorized only using the Account Facility screen
VAE-CIF-22	Cannot delete the default virtual entity record as it is linked to an account facility
VAE-CIF-23	Record doesn't exist
VAE-CIF-24	\$1 Length cannot be more than 35
VAE-CLS-001	Cannot close entity which has accounts in open state
VAE-COM-001	txnControllerRefNo should not be null or empty

Table A-1 (Cont.) List of Error Codes

Error Code	Description
VAE-ENT-FOR01	Cannot reopen forgotten entity
VAE-ENT-PII01	User doesnt have access to PII data, cannot perform create or modify operations
VAE-FOR-001	Request is null, not valid
VAE-FOR-002	Forget entities request created successfully
VAE-FOR-003	Failed to create forget entities request
VAE-FOR-004	Invalid id sent, cannot delete
VAE-FOR-005	Record is already authorized
VAE-FOR-006	Authorized successfully
VAE-FOR-007	Record not found, invalid id.
VAE-FOR-008	Cannot delete authorized record
VAE-FOR-009	Record successfully deleted
VAE-FOR-010	Invalid Entity \$1 added. Entity should be valid and in closed and authorized state and without pending maintenance
VAE-FOR-011	Invalid request. Duplicate requests for entity number \$1
VAE-STR-032	Mandatory fields are missing for structured address. Town Name, Post Code, and Country are mandatory to proceed
VAE-STR-033	Structured address is disabled at bank level...
VAE-STR-034	Mandatory fields are missing in Address. Please enter Registered address1, Country, and correspondence Address1
VAE-STR-035	Structured address is missing
VAM-ACC-101	\$1 account is already linked to another structure
VAM-ACC-102	\$1 child has been mapped to multiple parents
VAM-ACC-103	\$1 doesnt have a parent
VAM-ACC-104	\$1 has been mapped to itself
VAM-ACC-105	\$1 account is not mapped to the structure properly
VAM-ACC-106	Virtual Main Account should not have a parent
VAM-ACC-107	\$1 Account has a parent account which has balance check not required checked
VAM-ACC-108	Duplicate Rows are not allowed in multigrid
VAM-ACC-109	\$1 account has non zero balance hence mapping cannot be closed
VAM-ACC-110	\$1 account has non zero balance hence cant be removed from the mapping
VAM-ACC-120	Account \$1 is closed. Reopen not allowed
VAM-ACC-121	Virtual parent and child account cannot be null in detail block
VAM-ACC-122	Virtual account number \$1 is not allowed as no Real account number of currency \$2 is found in Account group
VAM-ACC-123	Failed in updating the Parent Account in Account Balance Table
VAM-ACC-125	Account linkage for \$1 is not S,this account cannot be part of a structure
VAM-ACC-126	Value for Real Account Linkage cannot be modified because the current account is part of an active structure
VAM-ACC-127	Virtual Account \$1 with balance check not required cannot be parent account to virtual account \$2 with Balance check required

Table A-1 (Cont.) List of Error Codes

Error Code	Description
VAM-ACC-128	IBAN Account no already generated, modify not allowed
VAM-ACC-129	Overdraft fixed amount cannot be less than utilized amount \$1
VAM-ACC-130	Virtual Account doesn't exist
VAM-ACC-131	Atleast one Virtual parent - Virtual Child account mapping is mandatory
VAM-ACC-132	Balance Fetch Failed for Virtual Account \$1 and Real Customer \$2
VAM-ACC-133	OD Start Date cannot be lesser than application Date
VAM-ACC-134	Error while parsing OD Start Date
VAM-ACC-135	OD End Date cannot be lesser than OD start Date
VAM-ACC-136	Error while parsing OD End Date
VAM-ACC-137	Dont Pass OD Start and End Dates when OverDraft allowed flag is N
VAM-ACC-138	Corporate Range has not been defined in Branch for respective customer
VAM-ACC-139	Account number cannot be generated as all the range/s exhausted and No Active Range/s available
VAM-ACC-140	Given Account number is out of defined range/s for Customer/ Corporate in respective Branch
VAM-ACC-141	Account number cannot be generated as no Active Range/s available in Branch for respective customer
VAM-ACC-142	Virtual Account \$1 not allowed as closure request is initiated for the same
VAM-ACC-143	The length of Zip code must not exceed 15 characters
VAM-ACC-144	Cannot modify Balance. Check for debits flag to Y as the Parent Account flag is N
VAM-ACC-145	Cannot modify Balance. Check for debits flag to N as the child Account flag is Y
VAM-ACC-AUTH01	Event request logged for handing off account details to \$ system
VAM-ACC-FOR01	Cannot reopen forgotten virtual account
VAM-ACCK-001	\$1 account is in unauthorized state
VAM-ACCK-002	\$1 account is not in open status
VAM-ACCK-003	\$1 account is frozen
VAM-ACCK-011	Invalid Virtual Account \$1
VAM-ACCK-012	KYC Status is \$1 for Virtual Entity \$2
VAM-ACN-002	Length of Branch Code is greater than Branch Code of Account Mask
VAM-ACN-003	Length of Currency is greater than Currency of Account Mask
VAM-ACN-004	Real Account currency and default account currency are not same
VAM-ACN-008	Check digit generation failed for \$1
VAM-ACN-015	Account cannot be closed: Either current balance/Unauthorized debit/ credit amount is not 0 or some amount is blocked
VAM-ACN-016	Account cannot be closed: Account is currently mapped to another account
VAM-ACN-018	Virtual Account Number Generation Failed: Account \$1 Already Exists
VAM-ACN-020	Virtual customer no is closed. Virtual Account cannot be reopened
VAM-ACN-021	Branch code is closed. Virtual Account cannot be reopened
VAM-ACN-022	Currency is closed. Virtual Account cannot be reopened

Table A-1 (Cont.) List of Error Codes

Error Code	Description
VAM-ACN-023	Branch \$1 is not allowed for Customer \$2; Virtual Account cannot be reopened
VAM-ACN-026	\$1 flag should be enabled first at Account Product Level
VAM-ACN-027	Fixed Amount is Mandatory when Overdraft Allowed is Y
VAM-ACN-028	Fixed amount from pool is Mandatory when Balance Availability Options is selected as Own Bal+Fixed Amt from Pool(B)
VAM-ACN-029	Real Account Number and Real Account Branch is mandatory when Real Account Linkage is Account Level
VAM-ACN-020	When balAvailabilityOptions is not B then fixed amount from pool should not be given
VAM-ACN-031	Currency is not applicable for multi-currency real account \$1
VAM-ACN-032	Account cannot be closed: Either Unauthorized debit/credit amount is not 0 or some amount is blocked
VAM-ACN-033	Structure Code and VirtualParentAcc are applicable for linkage at Structure level
VAM-ACN-034	Structure Code or Virtual Parent Account is missing
VAM-ACN-035	Structure Linkage cannot be done for different RealAccountNos
VAM-ACN-120	The manually input Virtual Account number is not as per the mask
VAM-ACN-121	Real Account Number/Branch/Currency is not required when Real Account Linkage is Structure level
VAM-ACN-122	Virtual Account Number is mandatory when autogen flag is N
VAM-ACN-125	Default Virtual Entity is not available
VAM-ACN-201	Account number cannot be generated as the limit exhausted.
VAM-ACN-301	PII access not enabled for user, cannot perform create
VAM-ACN-302	PII access not enabled for user, cannot perform modify
VAM-BAL-001	Failed to save Account Balance
VAM-BAL-002	Successfully validated and updated balance
VAM-BAL-003	Insufficient funds for \$1 account
VAM-BAL-004	Insufficient funds for \$1
VAM-BAL-005	Sufficient funds available for \$1
VAM-BAL-006	Successfully inserted data into Value Dated table for \$1
VAM-BAL-007	Successfully updated data into Value Dated table for \$1
VAM-BAL-008	Successfully inserted data into Account Transaction table for \$1
VAM-BAL-009	Failed to build URL to call Turn over balance
VAM-BAL-010	No records sent to post turn over balance
VAM-BAL-011	No response has come after call to turn over balance
VAM-BAL-012	Successfully updated turn over balance
VAM-BAL-013	Failed to insert turn over balance for virtual account \$1
VAM-BAL-014	Successfully retrieved
VAM-BAL-015	Failed while fetching the records for the given combination, please check the logs for further details
VAM-BAL-016	It is mandatory to pass either the virtual account number or the value date to fetch records

Table A-1 (Cont.) List of Error Codes

Error Code	Description
VAM-BAL-017	Virtual Account number, from date and to date, all three are mandatory fields
VAM-BAL-018	From date cannot be greater than to date
VAM-BAL-020	Failed to acquire balances of participating account(s)
VAM-BAL-021	Virtual Account \$1 and currency \$2 combination is Invalid
VAM-BAL-022	Failed to acquire account details of participating account(s)
VAM-BAL-023	Failed to merge Account Balance details for Tanked Batch
VAM-BAL-024	Successfully merged account details for Untanking batch
VAM-BAL-025	Failed to retrieve current balance
VAM-CLS-001	Inserted entry into Virtual Account Closure Request Status Successfully
VAM-CLS-002	Updated Virtual Account Closure Request Status Successfully
VAM-CLS-003	Virtual account closure request initiated successfully
VAM-CLS-004	Failed when pushing into Virtual Account Closure Request Status queue
VAM-CLS-005	Retry request for Virtual Account Closure submitted successfully
VAM-CLS-006	Virtual account closure aborted successfully
VAM-CLS-007	Cannot abort virtual account closure as it is already aborted
VAM-CLS-008	Cannot retry virtual account closure that is already aborted
VAM-CLS-009	Virtual account closure request already exists for the given source system and source reference number
VAM-CLS-010	Atleast one virtual account closure request is mandatory
VAM-CLS-011	Transfer out virtual account is mandatory when outstanding balance is greater than zero
VAM-CLS-012	Transfer in virtual account is mandatory when outstanding balance is less than zero
VAM-CLS-013	Virtual account and transfer in/out virtual account must be in same currency
VAM-CLS-014	Virtual account and transfer in virtual account must be in same currency
VAM-CLS-015	Virtual account and transfer in/out virtual account should belong to same Real account
VAM-CLS-016	Transfer out virtual account \$1 is not valid as account closure request is initiated for the same
VAM-CLS-017	Closure request already initiated for virtual account \$1
VAM-CLS-018	Transfer in virtual account \$1 is not valid as account closure request is initiated for the same
VAM-CLS-019	Multiple account closure requests found for virtual account \$1
VAM-CLS-020	Virtual account \$1 for which closure is requested cannot be given as Transfer In Account
VAM-CLS-021	Virtual account \$1 for which closure is requested cannot be given as Transfer Out Account
VAM-CLS-022	Closure request for virtual account \$1 is not allowed as it has non zero outstanding balance
VAM-CLS-023	Transfer virtual account \$1 is not linked to any real account

Table A-1 (Cont.) List of Error Codes

Error Code	Description
VAM-CLS-025	Closure request for virtual account \$1 not allowed as it is maintained as transfer account in another account closure request
VAM-CLS-026	Virtual account closure request authorization failed
VAM-CLS-027	Virtual account closure request authorized successfully
VAM-CLS-028	Virtual account closure request deleted successfully
VAM-CLS-029	Deletion of virtual account closure request failed
VAM-CLS-030	Maker and Checker cannot be same
VAM-CLS-031	Virtual account closure request saved successfully
VAM-CLS-032	Only Maker can delete the record
VAM-CLS-033	Authorized record cannot be deleted
VAM-CLS-034	Virtual account closure request is already authorized
VAM-CLS-037	Failed to abort conductor workflow
VAM-CLS-038	Failed to start conductor workflow
VAM-CLS-039	Cannot retry virtual account closure request that is in-progress
VAM-CLS-040	Cannot retry Account closure in Pending state
VAM-CLS-042	Virtual Account Closure saved and authorized successfully
VAM-CLS-043	Closure Request already exists for the Virtual Account \$1
VAM-CLS-044	Failed while generating RequestRefNo
VAM-CLS-045	Virtual Account Closure Request Failed
VAM-CLS-046	No Closure request found to Delete
VAM-CLS-047	No Closure request found to Authorize
VAM-CLS-048	Virtual Account Number \$1 is part of an Unauthorised Account Structure
VAM-EXT-001	External system could not generate the Virtual Account Number
VAM-EXT-002	External system could not generate the IBAN Number
VAM-EXT-003	Externally Generation Virtual Account Number Validation Failed: Account \$1 Already Exists
VAM-EXT-004	Externally Generation IBAN number validation Failed: IBAN number \$1 Already Exists
VAM-EXT-005	Externally generated VA number length cannot exceed 35 characters
VAM-EXT-006	Externally generated IBAN length cannot exceed 35 characters
VAM-IBAN-006	IBAN Account already exists for this account
VAM-IBAN-007	IBAN Generation Failed -Virtual account number is not available
VAM-IBAN-008	IBAN Generation Failed -IBAN format validation failed
VAM-IBAN-016	IBAN Generation Failed -Value for Bank Code does not match corresponding Mask
VAM-IBAN-018	IBAN Generation failed -BBAN Mask Value could not be fetched
VAM-IBAN-019	IBAN Generation Failed -Value for Branch Code does not match corresponding Mask
VAM-IBAN-020	IBAN Generation Failed -Value for Branch Code could not be fetched
VAM-IBAN-021	IBAN Generation Failed -Value for Account Number could not be fetched
VAM-IBAN-023	IBAN Generation Failed -Virtual Account Number does not match corresponding Mask

Table A-1 (Cont.) List of Error Codes

Error Code	Description
VAM-IBAN-025	IBAN Generation Failed -Virtual Customer Type does not match corresponding Mask
VAM-IBAN-026	IBAN Generation Failed -Value for Customer Type could not be fetched
VAM-IBAN-029	IBAN Generation Failed
VAM-IBAN-030	Mismatch in the length of bban data type and bban format mask
VAM-MAND-001	Please input all mandatory values
VAM-MAP-01	Real account number is mandatory when Account linkage is A
VAM-MAP-02	Account group id is not required when Account linkage is A
VAM-MAP-03	Real account number is not required when Account linkage is G
VAM-MAP-033	Account Structure not found for given header account
VAM-MAP-035	Download Account Structure is not applicable on Closed Structures
VAM-MAP-04	Account group id is mandatory when Account linkage is G
VAM-MAP-05	Linking and De-Linking of the same Virtual Account cannot be in the same request
VAM-MAP-06	Virtual Account Number \$1 cannot be de-linked, as it is not a part of given structure
VAM-MAP-07	Virtual Account Number \$1 is not the leaf account, as there are account/s connected to this as a child
VAM-MOD-001	\$1 cannot be modified
VAM-MOD-INV	\$1 is invalid
VAM-SANC-001	Cannot update sanction status, account is closed
VAM-SANC-002	Can not update sanction status, no account with given virtual account number exists
VAM-SANC-003	Record Successfully Saved
VAM-SANC-004	Maker and checker cannot be same
VAM-SANC-005	No Entry for this virtual account, cannot authorize
VAM-SANC-006	Record Successfully authorized
VAM-SANC-007	Authorized record cannot be deleted
VAM-SANC-008	Record Successfully Deleted
VAM-SANC-009	Transaction not allowed for virtual account/s with posting restrictions for specific status
VAM-STR-032	Mandatory fields are missing for structured address. Town Name, Post Code, and Country are mandatory to proceed
VAM-STR-033	Structured address is disabled at bank level...
VAM-STR-035	Structured address is missing
VAM-STR-AUTH01	Event request logged for handing off account map details to \$ system
VAM-STR-AUTH02	Failed to process handing off account map details to \$ system
VAM-STR-AUTH03	Failed to process authorization of account map
VAM-RNG-000	Account Range provided has already been defined for another Real Customer in the same Branch
VAM-RNG-001	Record cannot be closed as there are active Accounts for the Real Customer and Branch combination
VAM-RNG-002	At least one Account Number Range must be maintained

Table A-1 (Cont.) List of Error Codes

Error Code	Description
VAM-RNG-003	Account Range provided doesn't lie within the Account Number Range provided at Branch level
VAM-RNG-004	Account Range cannot be modified
VAM-RNG-005	Account Range cannot be deleted
VAM-RNG-006	Duplicate entry of \$1 Account Range exists in the record
EIE-INT-001	Interest is not enabled for this Virtual Account
EIE-INT-002	Interest retrieved successfully
EIE-INT-003	Unable to fetch accrued interest
EIE-INT-004	Unable to fetch Virtual Account details
EIE-LIQ-002	Virtual account Interest Liquidation request initiated successfully
EIE-LIQ-003	Maker and Checker cannot be same
EIE-LIQ-004	Record already authorized
EIE-LIQ-005	Virtual account interest Liquidation request authorized successfully
EIE-LIQ-006	Authorization of Interest Liquidation Failed
EIE-LIQ-007	Failed while liquidating interest in IC
EIE-LIQ-008	Interest Liquidation Record Deleted successfully
EIE-LIQ-009	Failed when liquidating the interest
EIE-LIQ-010	Interest Liquidation not allowed for this Virtual account
EIE-LIQ-011	Virtual account is not Valid
EIE-LIQ-012	Virtual account Interest Liquidated successfully
VAM-LAL-001	Successfully created entry in account line utilization
VAM-LAL-002	Line id -customer configuration does not exists
VAM-LAL-003	Virtual Account-Real customer combination does not exists
VAM-LAL-004	An Account can be linked to only one Line
VAM-LAL-006	The virtual account selected for line linkage should be either a header account of a Structure or directly linked to Real Account
VAM-LAL-009	For linkage as Percent, the linkage value should be within 1 to 100
VAM-LAL-012	Balance Availability of virtual account is not Own Balance and hence cannot be linked to a Line
VAM-LAL-014	Credit Line Account Linkage cannot be closed: utilization is greater than zero
VAM-LAL-020	Linkage entry doesn't exist
VAM-LINE-04	Successfully utilized Line
VAM-LINE-06	Internal credit is linked to a VA. Cannot Close the Record
VAM-LINE-07	Real Customer No is Invalid
VAM-LINE-08	Currency is Invalid
GC-CLS-02	Record Successfully Closed
GC-REOP-03	Successfully Reopened
GCS-AUTH-01	Record Successfully Authorized
GCS-AUTH-02	Valid modifications for approval were not sent. Failed to match
GCS-AUTH-03	Maker cannot authorize
GCS-AUTH-04	No Valid unauthorized modifications found for approval
GCS-CLOS-002	Record Successfully Closed

Table A-1 (Cont.) List of Error Codes

Error Code	Description
GCS-CLOS-01	Record Already Closed
GCS-CLOS-02	Record Successfully Closed
GCS-CLOS-03	Unauthorized record cannot be closed, it can be deleted before first authorization
GCS-COM-001	Record does not exist
GCS-COM-002	Invalid version sent; operation can be performed only on latest version
GCS-COM-003	Please Send Proper ModNo
GCS-COM-004	Please send makerId in the request
GCS-COM-005	Request is Null. Please Resend with Proper Values
GCS-COM-006	Unable to parse JSON
GCS-COM-007	Request Successfully Processed
GCS-COM-008	Modifications should be consecutive
GCS-COM-009	Resource ID cannot be blank or "null"
GCS-COM-010	Successfully cancelled \$1
GCS-COM-011	\$1 failed to update
GCS-DEL-001	Record deleted successfully
GCS-DEL-002	Record(s) deleted successfully
GCS-DEL-003	Modifications did not match valid unauthorized modifications that can be deleted for this record
GCS-DEL-004	Send all unauthorized modifications to be deleted for record that is not authorized even once
GCS-DEL-005	Only Maker of first version of record can delete modifications of record that is not once authorized
GCS-DEL-006	No valid unauthorized modifications found for deleting
GCS-DEL-007	Failed to delete. Only maker of the modification(s) can delete
GCS-MOD-001	Closed Record cannot be modified
GCS-MOD-002	Record Successfully Modified
GCS-MOD-003	Record marked for close, cannot modify
GCS-MOD-004	Only maker of the record can modify before once auth
GCS-MOD-005	Not amendable field, cannot modify
GCS-MOD-006	Natural Key cannot be modified
GCS-MOD-007	Only the maker can modify the pending records
GCS-REOP-003	Successfully Reopened
GCS-REOP-01	Unauthorized Record cannot be Reopened
GCS-REOP-02	Failed to Reopen the Record, cannot reopen Open records
GCS-REOP-03	Successfully Reopened
GCS-REOP-04	Unauthorized record cannot be reopened, record should be closed and authorized
GCS-SAV-001	Record already exists
GCS-SAV-002	Record Saved Successfully
GCS-SAV-003	The record is saved and validated successfully
GCS-VAL-001	The record is successfully validated
VAC-BGP-001	Cannot close the Branch Group as it is linked to a Customer

Table A-1 (Cont.) List of Error Codes

Error Code	Description
VAC-BGP-002	Cannot close the Branch Group as there are active Branches linked
VAC-BGP-003	Failed to validate Branch linkage to this Branch Group
VAC-BNK-001	Only one bank can be maintained
VAC-BNK-002	Structured Address cannot be deactivated once activated
VAC-BNK-003	Bank Code is not valid
VAC-BNK-004	Transaction allowed related parameters cannot be ON when Sanction check required is OFF
VAC-COM-001	Transaction controller reference number is mandatory
VAE-BNK-01	Bank code is invalid
VAE-BNK-111	Only one bank code is allowed
VAM-BNK-001	Only one bank code is allowed
VAM-BNK-002	Invalid Virtual Customer No Mask. It can have only a and n as identifiers
VAM-BNK-003	There are accounts created on bank parameters. Cannot modify the start account number
VAM-BNK-004	End Account No cannot be less or equal to the last virtual account number created for this branch
VAM-BNK-005	For Auto account generation, Account Mask should be numeric, and Checksum Algorithm has to be blank
VAM-BNK-006	On selecting Modulo 97 Checksum algorithms, All components of the account mask have to be numeric
VAM-BNK-007	Start or End account number is not required when auto account generation flag is disabled
VAM-BNK-008	Bank Code is not valid
VAM-BNK-009	Residual Transfer Transaction Code should be maintained if Positive or Negative balance transfer is enabled
VAM-BNK-010	Offset Transaction Code should be maintained if Positive or Negative Balance Transfer is enabled
VAM-BNK-011	Transfer Out Transaction Code should be maintained if Positive Balance Transfer is enabled
VAM-BNK-012	Residual Transfer Transaction Code or Offset Transaction code should not be maintained if Positive or Negative balance transfer is disabled
VAM-BNK-60	Last Account Number generated should be between start and end account Number, Give Proper Start and End Account Number
VAM-BRN-01	Start Account Number and End Account Number should be entered
VAM-BRN-02	Start or End account number cannot be negative or zero
VAM-BRN-03	The Auto Generation of Account Number is possible only with a Numeric Account mask
VAM-BRN-04	Length of Start Account No and End Account No cannot be greater than account mask
VAM-BRN-05	Start Account Number should be less than End Account Number
VAM-BRN-06	Checksum Algorithm should not be given when Auto Generate flag is checked
VAM-BRN-07	Each character in the mask needs to be consecutively placed
VAM-BRN-08	If Account Auto Generate flag is not checked and account mask is not numeric then Checksum Algorithm cannot be blank

Table A-1 (Cont.) List of Error Codes

Error Code	Description
VAM-BRN-09	Invalid character D, only d is allowed for customer account mask
VAM-BRN-10	For Modulo 10 length of mask cannot be different from 10
VAM-BRN-11	The length of the virtual account mask cannot be more than 13 for checksum algorithm modulo 11 with weights
VAM-BRN-12	Either no. checksum digits exceed 2 or they do not appear at the end of the account mask
VAM-BRN-13	Cannot have d denoting Alphanumeric Characters in account mask while using mod97 Checksum algorithm
VAM-BRN-14	The format for Customer Account mask is invalid
VAM-BRN-15	The length of b in mask should be 3
VAM-BRN-16	The length of c in mask exceeds permissible length of 9
VAM-BRN-17	The length of \$ in mask should be 3
VAM-BRN-18	The length of t in mask exceeds permissible length of 4
VAM-BRN-19	The length of v in mask exceeds permissible length of 12
VAM-BRN-20	The length of CIF in Virtual Account Mask and the length of the CIF mask do not match
VAM-BRN-21	Virtual Account mask should be maintained either at bank or branch level
VAM-BRN-22	User Defined Algorithm can only be entered if Check digit Algorithm is User Defined
VAM-BRN-23	User Defined Algorithm cannot be null if Check digit Algorithm is User Defined
VAM-BRN-24	BBAN Format Mask is mandatory if BBAN Data Type is present
VAM-BRN-25	IBAN Country Code can have maximum of only two characters to generate IBAN, If you want to generate IBAN choose a country with only two characters as Country Code
VAM-BRN-26	BBAN Data Type is mandatory if BBAN Format Mask is present
VAM-BRN-27	BBAN Data Type length and BBAN Mask Length must be the same
VAM-BRN-28	BBAN Mask characters b-Bank Code s-Branch Code z-Account Number l-Alternate Account Number d-BBAN Check Digit t-Account Type i-National Identifier and h-No of Account Holders only are allowed
VAM-BRN-29	Bank Code is part of BBAN Mask and the same is not maintained
VAM-BRN-30	Alphabet h can occur only once in BBAN Format Mask
VAM-BRN-31	Account mask maintained in BBAN format Mask is not the same as the Account Mask maintained for the branch
VAM-BRN-32	Space is not allowed in BBAN Mask
VAM-BRN-33	BBAN Data Type can only have characters a, n, and c
VAM-BRN-34	Branch Code is part of BBAN Mask and the same is not maintained
VAM-BRN-35	Branch Code needs to be maintained with the length and data type maintained as in BBAN Data Type field
VAM-BRN-36	Bank Code needs to be maintained with the length and data type maintained as in BBAN Data Type field
VAM-BRN-37	In Identifier Mask field, only a,n and f are allowed
VAM-BRN-38	Fixed Value field cannot be blank if virtual account mask contains f
VAM-BRN-39	Only numbers and alphabets are allowed for fixed value

Table A-1 (Cont.) List of Error Codes

Error Code	Description
VAM-BRN-40	Fixed value field must be input when f is present in identifier mask
VAM-BRN-41	Identifier Start position should be given when Identifier Mask is maintained
VAM-BRN-42	Identifier Start position can have value only from 1 to 15
VAM-BRN-43	Identifier Fixed value cannot be input when Short Identifier Mask is not maintained
VAM-BRN-44	Identifier start position cannot be given when Short Identifier Mask is not maintained
VAM-BRN-45	Identifier start position cannot be given when Short Identifier Mask doesn't not contain f
VAM-BRN-46	Fixed value should not be given if account mask is not maintained or account mask doesn't contain f
VAM-BRN-47	The length of f in mask exceeds permissible length of 1
VAM-BRN-48	Last digit of account mask must be 'd' when account mask is alphanumeric and checksum algorithm is mod11
VAM-BRN-49	Maximum account mask length allowed for user input is 19 when account mask is Numeric and checksum algorithm is mod11
VAM-BRN-50	Maximum account mask length allowed for user input is 18 when checksum algorithm is mod97
VAM-BRN-51	Checksum digit d is not allowed for user input when account mask is numeric and checksum algorithm is mod11 or mod11WW
VAM-BRN-52	Cannot have 'dd' in account mask when checksum algorithm is mod11 or mod11WW
VAM-BRN-53	f can be present either at start or end of the account mask
VAM-BRN-54	Identifier mask length and start position should be maintained such that identifier mask is within virtual account mask range
VAM-BRN-55	Maximum account mask length allowed for user input is 12 when account mask is Numeric and checksum algorithm is mod11 with weights
VAM-BRN-56	Bban bank code should be blank if b is not part of bban format mask
VAM-BRN-57	Bban branch code should be blank if s is not part of bban format mask
VAM-BRN-58	Branch Code is not valid
VAM-BRN-59	Country code is not valid. Country code maintained for Current branch is \$1
VAM-BRN-60	Last Account Number generated should be between start and end account Number,Give Proper Start and End Account Number
VAM-BRN-61	Cannot Close the Branch as Active Account exist with the Branch
VAM-BRN-62	\$1 Checksum Algorithm is invalid
VAM-BRN-63	Checksum Algorithm is invalid
VAM-BRN-64	Account Auto generate is not allowed when Account Mask is not maintained
VAM-BRN-65	Start or End Account Number cannot be given when Account Mask is not maintained
VAM-BRN-66	Checksum Algorithm cannot be given when Account Mask is not maintained
VAM-BRN-67	Account Mask cannot have d when checksum algorithm is not given

Table A-1 (Cont.) List of Error Codes

Error Code	Description
VAM-BRN-68	Country Code is not maintained for the Current branch
VAM-BRN-69	Rate Type is invalid
VAM-BRN-70	Cannot modify the Value of Corporate Specific Range Required when there are accounts for the specified Branch
VAM-BRN-71	Cannot modify the Value of Corporate Specific Range Required as there are open Account Range defined for the Branch
VAM-BRN-72	Cannot close the Branch as there are open Account Range defined for the Branch
VAM-BRN-80	Cannot modify the Value of account mask when there is an open account for the branch
VAM-BRN-81	Cannot modify start account number when there is an open account for the branch
VAM-BRN-83	Length of Start Account No and End Account No should be same as that of account mask
VAM-BRN-84	New end account number should be greater than previous end account number when there is an open account for the branch
VAM-BRN-85	External Account Generation option for Account and IBAN cannot be blank
VAM-BRN-86	Cannot modify the Values of External Account Generation when there are open accounts for the specified Branch
VAM-BRN-87	Cannot have 'dd' in account mask when checksum algorithm is mod10
VAM-BRN-87	Valid record already exists. Can have only one record
VAM-IC-002	Action is not valid
VAM-IC-003	Actions not maintained
VAM-IC-004	Updated Event Master Successfully
VAM-IC-005	Added Event Master Successfully
VAM-IC-006	Unknown Error, failed to process authorize
VAM-ICG-010	Mandatory inputs are missing in request
VAM-LM-001	Valid record already exists. Can have only one record
VAM-LM-002	Action is not valid
VAM-LM-003	Actions not maintained
VAM-LM-004	Updated Event Master Successfully
VAM-LM-005	Added Event Master Successfully
VAM-LM-006	Unknown Error, Failed to process authorize
VAM-LMT-001	Successfully merged re-evaluate limit utilization amounts
VAC-PRDT-001	Product template code size must be \$1
VAC-PRDT-002	If Interest Calculation is selected, then IC Group Template should be present
VAC-PRDT-003	Only Positive Non-decimal numbers greater than zero are allowed for Inactive days
VAC-PRDT-004	IC Group Template \$1 is invalid
VAC-PRDT-005	Cannot Map Identical Transaction Codes Twice
VAC-PRDT-006	Transaction Code \$1 is invalid
VAC-PRDT-007	Cannot Map Identical Currency Codes Twice
VAC-PRDT-008	Currency Code \$1 is invalid

Table A-1 (Cont.) List of Error Codes

Error Code	Description
VAC-PRDT-009	Cannot Map Identical Customer Category Codes Twice
VAC-PRDT-010	Customer Category Code \$1 is invalid
EDA-CMC-001	DDASystem1 \$1 is Invalid
EDA-CMC-002	DDASystem2 \$1 is Invalid
EDA-CMC-003	DuefromDDASystem1 \$1 is Invalid
EDA-CMC-004	DuefromDDASystem2 \$1 is Invalid
EDA-CMC-005	DuetoDDASystem1 \$1 is Invalid
EDA-CMC-006	DuetoDDASystem2 \$1 is Invalid
EDA-PREF-001	Record Saved Successfully
EDA-PREF-002	Record already exist
EDA-PREF-003	Cannot modify ECA system name
EDA-PREF-004	Record Successfully modified
EDA-PREF-005	Record does not exist
GC-CLS-02	Record Successfully Closed
GC-REOP-03	Successfully Reopened
GCS-AUTH-01	Record Successfully Authorized
GCS-AUTH-02	Valid modifications for approval were not sent. Failed to match
GCS-AUTH-03	Maker cannot authorize
GCS-AUTH-04	No Valid unauthorized modifications found for approval
GCS-CLOS-002	Record Successfully Closed
GCS-CLOS-01	Record Already Closed
GCS-CLOS-02	Record Successfully Closed
GCS-CLOS-03	Unauthorized record cannot be closed, it can be deleted before first authorization
GCS-COM-001	Record does not exist
GCS-COM-002	Invalid version sent; operation can be performed only on latest version
GCS-COM-003	Please Send Proper ModNo
GCS-COM-004	Please send makerId in the request
GCS-COM-005	Request is Null. Please Resend with Proper Values
GCS-COM-006	Unable to parse JSON
GCS-COM-007	Request Successfully Processed
GCS-COM-008	Modifications should be consecutive
GCS-COM-009	Resource ID cannot be blank or "null"
GCS-COM-010	Successfully cancelled \$1
GCS-COM-011	\$1 failed to update
GCS-DEL-001	Record deleted successfully
GCS-DEL-002	Record(s) deleted successfully
GCS-DEL-003	Modifications did not match valid unauthorized modifications that can be deleted for this record
GCS-DEL-004	Send all unauthorized modifications to be deleted for record that is not authorized even once
GCS-DEL-005	Only Maker of first version of record can delete modifications of record that is not once authorized

Table A-1 (Cont.) List of Error Codes

Error Code	Description
GCS-DEL-006	No valid unauthorized modifications found for deleting
GCS-DEL-007	Failed to delete. Only maker of the modification(s) can delete
GCS-MOD-001	Closed Record cannot be modified
GCS-MOD-002	Record Successfully Modified
GCS-MOD-003	Record marked for close and cannot modify
GCS-MOD-004	Only maker of the record can modify before once auth
GCS-MOD-005	Not amendable field, cannot modify
GCS-MOD-006	Natural Key cannot be modified
GCS-MOD-007	Only the maker can modify the pending records
GCS-REOP-003	Successfully Reopened
GCS-REOP-01	Unauthorized Record cannot be Reopened
GCS-REOP-02	Failed to Reopen the Record, cannot reopen Open records
GCS-REOP-03	Successfully Reopened
GCS-REOP-04	Unauthorized record cannot be reopened, record should be closed and authorized
GCS-SAV-001	Record already exists
GCS-SAV-002	Record Saved Successfully
GCS-SAV-003	The record is saved and validated successfully
GCS-VAL-001	The record is successfully validated
VAB-ACC-142	Amount block not allowed as closure request initiated for virtual account
VAB-ACC-143	Amount Block not allowed for virtual account/s with posting restrictions for specific status
VAB-ECA-01	Expiry Date is less than Effective Date
VAB-ECA-02	Expiry Date Cannot be less than Application Date
VAB-ECA-03	Effective Date Cannot be less than the Application date
VAB-ECA-04	Requested Amount Block must be greater than zero
VAB-ECA-05	Record Saved Successfully
VAB-ECA-06	Request is Null. Please Resend with Proper Values
VAB-ECA-07	Virtual Account \$1 cannot be passed multiple times
VAB-ECA-08	Invalid virtual account \$1 and currency \$2
VAB-ECA-09	Authorized record cannot be deleted
VAB-ECA-10	Only maker can delete the Record
VAB-ECA-11	Record deleted successfully
VAB-ECA-12	Record does not Exist
VAB-ECA-13	Failed to update balance
VAB-ECA-14	Key Id is null
VAB-ECA-15	Record already authorized
VAB-ECA-16	Maker cannot authorize
VAB-ECA-17	Record Successfully Authorized
VAB-ECA-18	Record does not Exist
VAB-ECA-19	Cannot be Released as the Amount Block is unauthorized
VAB-ECA-20	Record is already released

Table A-1 (Cont.) List of Error Codes

Error Code	Description
VAB-ECA-21	Record Released Successfully
VAB-ECA-22	Failed in External DDA
VAB-ECA-23	Virtual Account is not mapped to Real Account
VAB-ECA-24	Expiry Date cannot be less than Value date
VAB-ECA-25	TxnAmount and Approved Amount are not same
VAB-ECA-26	Updated Released Amount Successfully
VAB-ECA-27	Released Amount cannot be greater than Approved Amount
VAB-ECA-28	BlockRef number is already locked by \$1 ProcessReference number
VAB-ECA-29	Requested ECA References does not exists in Database
VAB-ECA-30	Transaction Request to ECA is Empty
VAB-ECA-31	Valid Value Date
VAB-ECA-32	Rolled back the Locked and Released Blocked Amounts
VAB-ECA-33	Cannot be Lock/Released as the record is unauthorized
VAB-ECA-34	One of Requested ECA BlockReference does not exists in Vab table
VAB-ECA-35	Already Unlocked as Part of Compensation of Lock and Release Amount Block
VAB-ECA-36	Combination of Virtual Account and ECA Block Ref does not exists in the VAB details table
VAB-ECA-37	Fetches DDAECAReferenceNumbder based on BlockRefNo
VAB-ECA-38	Already locked by some other Block Reference Numbers
VAB-ECA-39	Roll back the call External DDA of close ECA
VAB-ECA-40	Block Details list is empty
VAB-ECA-41	Effective Date should be same as Application date and Application date is \$1
VAB-ECA-42	Failed to Authorize the release Block, hence roll backed the Balance
VAB-ECA-43	Rollback the authorized Regulatory Block Type due to Failure
VAB-ECA-44	Rolled back the release flow of Amount Block
VAB-ECA-45	Record Successfully Saved and Authorized
VAB-ECA-46	Failed to update balance in VAM
VAB-ECA-47	Currency URL building has failed, so Currency Conversion failed
VAB-ECA-48	Currency Conversion amount and rate is null
VAB-ECA-49	Create ECA of EDA Failed and also failed to rollback the balance of Create Block
VAB-ECA-50	Authorize of Block failed and also failed to roll back balance
VAB-ECA-51	Close ECA of EDA failed and also Failed to roll back the balance of release Block
VAB-ECA-52	Record Successfully Approved from Amount Queue
VAB-ECA-53	Data Merged successfully in the User Queue
VAB-ECA-54	Updated Transaction status successfully without new Exchange Rate
VAB-ECA-55	Rate Code and Rate Type details are empty fetched from VAM Branch Parameter
VAB-ECA-57	Record cannot be authorized Until Amount Block Queue is Approved
VAB-ECA-58	Amount Block Queue cannot be Approved before updating exchange rate

Table A-1 (Cont.) List of Error Codes

Error Code	Description
VAB-ECA-59	Invalid virtual account \$1
VAB-ECA-60	If Requested amount in Virtual Account currency is given, then Exchange rate between Block Currency and Virtual Account currency is mandatory
VAB-ECA-61	If Exchange rate between Block Currency and Virtual Account currency is given, Requested amount in Virtual Account currency is mandatory
VAB-ECA-62	The amount to be released is greater than approved amount
VAB-ECA-63	Transaction currency and block currency for the provided ECA reference number is different
VAB-ECA-64	During full release, txn amount must be equal to outstanding amount
VAB-ECA-65	Record with the Block reference No not found
VAB-ECA-66	Rolled Back release ECA due to failure in auto-authorization
VAB-ECA-67	Rolled Back create ECA due to failure in auto-auth
VAB-ECA-68	\$1 account is in unauthorized state
VAB-ECA-69	\$1 account is not in open status
VAB-ECA-70	\$1 account is frozen
VAB-ECA-71	Debits are not allowed on \$1 account
VAB-ECA-72	\$1 account is not in Active status
VAB-ECA-74	\$1 account does not have a real account mapped
VAB-ECA-75	EAC failed
VAB-ECA-80	Amount block queue is already approved
VAB-ECA-81	Transaction Status is not in Pending status in Block Queue
VAI-INT-01	Transaction Account and Offset Account cannot be the same
VAI-INT-02	Invalid Transaction Code
VAI-INT-03	Invalid Offset Transaction Code
VAI-INT-034	Transaction Rolled Back due to failure
VAI-INT-04	Authorized record cannot be deleted
VAI-INT-05	Record does not Exist
VAI-INT-06	Key Id is null
VAI-INT-07	Record already authorized
VAI-INT-08	Maker cannot authorize
VAI-INT-09	Cannot be Reversed as the txn is unauthorized
VAI-INT-10	Record Already reversed
VAI-INT-11	Transaction Currency and Offset Currency must be same
VAI-INT-12	Please Authorize the new record
VAI-INT-13	Already reversed record cannot be reversed
VAI-INT-14	Only maker can delete the Record
VAI-INT-15	Record Successfully Reversed
VAI-INT-16	Record Successfully Authorized
VAI-INT-17	Record deleted successfully
VAI-INT-18	Failed during update balance
VAI-INT-19	Invalid Currency \$1
VAI-INT-20	Real Customer No does not Exist

Table A-1 (Cont.) List of Error Codes

Error Code	Description
VAI-INT-21	\$1 Branch Code is not Valid
VAI-INT-22	Request is Null. Please Resend with Proper Values
VAI-INT-23	Record Saved Successfully
VAI-INT-24	Failed during Statement update
VAI-INT-25	Virtual Accounts doesn't belong to same real Account
VAI-INT-26	Exception occurred during Account Check
VAI-INT-27	Invalid Source Code \$1
VAI-INT-30	Booking date is different from Current Application date
VAI-INT-31	Booking date is not in the required format
VAM-EAC-001	\$1 account is in unauthorized state
VAM-EAC-002	\$1 account is not in open status
VAM-EAC-003	\$1 account is frozen
VAM-EAC-004	Credits are not allowed on \$1 account
VAM-EAC-005	Debits are not allowed on \$1 account
VAM-EAC-006	\$1 account is not in Active status
VAM-EAC-007	\$1 transaction code is not allowed for \$2
VAM-EAC-008	EAC is success for \$1
VAT-EAC-001	EAC is success for \$1
VAT-EAC-010	Call for Account Check failed
VAT-EIC-001	EIC is success for \$1
VAT-EXAC-001	External Account Check failed
VAT-INT-033	Failed in interacting with VAM domain
VAT-INT-037	Failed in interacting with VAS domain
VAT-JNOL-001	Invalid value \$1 for transaction branch
VAT-JNOL-002	Invalid value \$1 for transaction currency
VAT-JNOL-003	Invalid value \$1 for transaction code
VAT-JNOL-004	Invalid value \$1 for DDA Offset number
VAT-JNOL-005	Invalid value \$1 for Source Code
VAT-JNOL-006	Reversal is not allowed for transactions with ECA reference number
VAT-JNOL-007	Currency URL building has failed, so transaction save failed
VAT-JNOL-008	Currency amount and rate is null for \$1 and \$2
VAT-JNOL-010	Please login into the transaction posted branch for doing any operations on the same
VAT-JNOL-011	Saved and authorized successfully
VAT-JNOL-012	The request sent for transaction posting can not be null
VAT-JNOL-013	Transaction with \$1 ID doesn't exist
VAT-JNOL-016	Transaction successfully deleted
VAT-JNOL-017	Transaction successfully authorized
VAT-JNOL-018	Transaction is not in unauthorized state
VAT-JNOL-019	Transaction persistence failed
VAT-JNOL-020	Transaction successfully saved
VAT-JNOL-021	\$1 transaction has been reversed already

Table A-1 (Cont.) List of Error Codes

Error Code	Description
VAT-JNOL-022	Transaction successfully reversed
VAT-JNOL-023	Authorise the reversal transaction not the original transaction
VAT-JNOL-024	This transaction was created by reversal hence should not be reversed
VAT-JNOL-025	Only maker can delete a transaction
VAT-JNOL-026	Maker and checker cannot be same
VAT-JNOL-027	Failed in interacting with VAI domain
VAT-JNOL-028	Failed in interacting with VAM domain
VAT-JNOL-029	Failed in interacting with EDA domain
VAT-JNOL-031	Transaction Rolled Back due to failure
VAT-JNOL-032	Booking date defaulted to current Application date
VAT-JNOL-033	ECA reference number should not be given for credit transactions
VAT-JNOL-034	Failed in interacting with ECA domain
VAT-JNOL-035	ECA reference number should not be given for identifier based transactions
VAT-JNOL-036	Booking date and Application date are different
VAT-JNOL-037	Failed in interacting with VAS domain
VAT-JNOL-038	Account currency entered is different from actual account currency
VAT-JNOL-039	Failed in fetching branch status
VAT-JNOL-040	Skip DDA Entries flag should not be set for identifier transactions
VAT-JNOL-041	Block reference number should not be sent for transactions which are not being posting to DDA system
VAT-JNOL-042	If exchange rate is given, then Amount in virtual account currency is mandatory
VAT-JNOL-043	If Amount in virtual account currency is given, then exchange rate is mandatory
VAT-JNOL-044	Record Successfully Updated
VAT-JNOL-045	Record Updation Failed
VAT-JNOL-046	Record Successfully Authorized
VAT-JNOL-047	Authorization Failed
VAT-JNOL-048	User rate queue of Transaction with \$1 ID should get Authorize First
VAT-JNOL-049	User cannot Authorize Exchange rate queue record before Accepting the Exchange Rate
VAT-JNOL-050	If exchange rate for DDA local ccy amount is given, then Amount in DDA local currency is mandatory
VAT-JNOL-051	Approved record cannot be modify
VAT-JNOL-052	Transaction details cannot be empty while posting a transaction
VAT-JNOL-055	If Amount in DDA local currency is given, then exchange rate for DDA local ccy amount is mandatory
VAT-JNOL-057	Branch is not maintained in VAM
VAT-JNOL-070	Given input is not a valid virtual account/IBAN/identifier
VAT-JNOL-071	Transaction Branch is mandatory for Identifier Real account fetch
VAT-JNOL-072	VirtualAccountIdentifier is a mandatory input
VAT-JNOL-073	Successfully Fetched real account
VAT-JNOL-074	Account Branch entered is different from actual account branch

Table A-1 (Cont.) List of Error Codes

Error Code	Description
VAM-ACCK-013	Transaction not allowed for virtual account \$1 as account closure initiated for the same
VAM-ACCK-004	Credits are not allowed on \$1 account
VAM-ACCK-005	Debits are not allowed on \$1 account
VAM-ACCK-006	\$1 account is not in Active status
VAM-ACCK-007	\$1 transaction code is not allowed for \$2
VAM-ACCK-008	EAC is success for \$1
VAM-ACCK-009	\$1 account doesnt have a real account mapped
VAM-ACCK-010	EAC failed
VAM-ACCK-011	Invalid Virtual Account \$1
VAM-ACCK-012	KYC Status is \$1 for Virtual Entity \$2
VAM-ACCK-014	Account is not mapped to Real Account Number
EDA-REV-001	Record already reversed
EDA-REV-002	Reverse failed with exception
EDA-REV-003	Record Successfully Reversed
EDA-REV-004	Reverse Transaction in OBVAM Failed
EDA-REV-005	Reverse Transaction in DDA Failed
EDA-REV-006	Failed to call Transaction Journal Service
EDA-REV-007	Returning Success as there are no records to reverse
EDA-VAT-001	Transaction Rolled Back due to failure
EDA-EAC-001	Account is Valid
EDA-EAC-002	Real account check failed in \$1 source system
EDA-EAC-003	Real account details for \$1 are not maintained in Common core Accounts
EDA-EAC-004	Source system is null for one of the Real accounts in VAC
EDA-EAC-005	Multi DDA Transactions are not allowed
EDA-EAC-006	EacRequiredFlag is N hence External Account check skipped
EDA-ECA-001	\$1 Source Code is not configured
EDA-ECA-002	\$1 Source Code is not configured to form a new Adapter
EDA-ACC-001	\$1 real account is not maintained in the common core
EDA-ACC-004	Failed in fetching local branch currency. Please check logs for further details
EDA-ACC-005	\$1 source code is not maintained in OBVAM
EDA-ACC-006	Failed while rollback, please check the business exception queue for further details
EDA-ACC-007	One or more real account is not maintained in the facility screen properly
EDA-ACC-008	One or more DDA offset GL is not maintained in the common core external chart accounts
EDA-ACC-009	All the GLs and real accounts are maintained properly
EDA-ACC-010	Successfully retrieved the for the inter DDA GLs
EDA-ACC-011	Failed to retrieve the inter DDA GLs
EDA-ACC-015	Retry cannot be called for Sync Txn Reference: \$1

Table A-1 (Cont.) List of Error Codes

Error Code	Description
EDA-ACC-016	ReverseTxn cannot be called for Sync Txn Reference: \$1
EDA-ACC-017	Txn Came in Async Mode hence batch will process the records from Tank Tables which are Unprocessed
VAM-BAL-001	Failed to save Account Balance
VAM-BAL-002	Successfully validated and updated balance
VAM-BAL-003	Insufficient funds for \$1 account
VAM-BAL-004	Insufficient funds for \$1
VAM-BAL-005	Sufficient funds available for \$1
VAM-BAL-006	Successfully inserted data into Value Dated table for \$1
VAM-BAL-007	Successfully updated data into Value Dated table for \$1
VAM-BAL-008	Successfully inserted data into Account Transaction table for \$1
VAM-BAL-009	Failed to build URL to call Turn over balance
VAM-BAL-010	No records sent to post turn over balance
VAM-BAL-011	No response has come after call to turn over balance
VAM-BAL-012	Successfully updated turn over balance
VAM-BAL-013	Failed to insert turn over balance for virtual account \$1
VAM-BAL-014	Successfully retrieved
VAM-BAL-015	Failed while fetching the records for the given combination, please check the logs for further details
VAM-BAL-016	It is mandatory to pass either the virtual account number or the value date to fetch records
VAM-BAL-017	Virtual Account number, from date and to date, all three are mandatory fields
VAM-BAL-018	From date cannot be greater than to date
VAM-BAL-020	Failed to acquire balances of participating account(s)
VAM-BAL-021	Virtual Account \$1 and currency \$2 combination is Invalid
VAM-BAL-022	Failed to acquire account details of participating account(s)
VAM-BAL-023	Failed to merge Account Balance details for Tanked Batch
VAM-BAL-024	Successfully merged account details for Untanking batch
VAM-BAL-025	Failed to retrieve current balance
VAI-IDCH-01	Only Credit Transactions are allowed for Identifier Account \$1
VAI-IDCH-02	Invalid Branch for the Account \$1
VAI-IDCH-03	Invalid Identifier for Branch Code \$1 and Account \$2
VAI-IDCH-04	Account Numbers are repeated
VAI-IDCH-05	Failed while parsing Application date during Identifier Check
VAI-IDCH-06	No Real Account is Mapped for the Identifier Account \$1 and Currency \$2
VAI-IDCH-07	Remittance Detail is not configured for the associated remitter list id
VAI-RMLS-07	Transaction Value Date should be Greater than the Validity Start Date of Remitter ID
VAI-RMLS-08	Transaction Value Date should be Less than the Validity End Date of Remitter ID

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