

Oracle® Banking Origination 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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Preface

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Purpose

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

Audience

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

Documentation Accessibility

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

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Oracle customers that have purchased support have access to electronic support through My Oracle Support. For information, visit <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info> or visit <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs> if you are hearing impaired.

Diversity and Inclusion

Oracle is fully committed to diversity and inclusion. Oracle respects and values having a diverse workforce that increases thought leadership and innovation. As part of our initiative to build a more inclusive culture that positively impacts our employees, customers, and partners, we are working to remove insensitive terms from our products and documentation. We are also mindful of the necessity to maintain compatibility with our customers' existing technologies and the need to ensure continuity of service as Oracle's offerings and industry standards evolve. Because of these technical constraints, our effort to remove insensitive terms is ongoing and will take time and external cooperation.

Conventions

The following text conventions are used in this document:

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

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.
- [Preliminary Checks from Service Log Files](#)
This topic describes about preliminary checks from service log files.
- [Login to Zipkin](#)
This topic describes the systematic instructions to troubleshoot the errors using the Zipkin Traces.
- [Troubleshooting Logs using ELK Stack](#)
This topic describes about Troubleshooting Logs using ELK Stack.
- [Check if Kafka is Running](#)
This topic provides information about Kafka is Running.
- [Troubleshooting Environmental Issues](#)
This topic describes about the troubleshooting environmental issues.

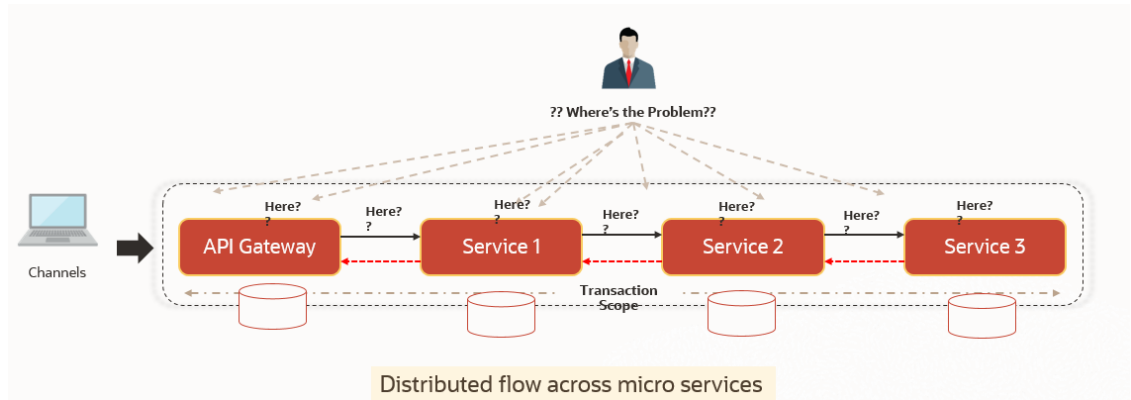
1.1 Where is the Problem

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. This can be achieved by complete understanding of UI, Service side flows along with the data architecture of application.

Figure 1-1 Distributed Flow across Micro Services

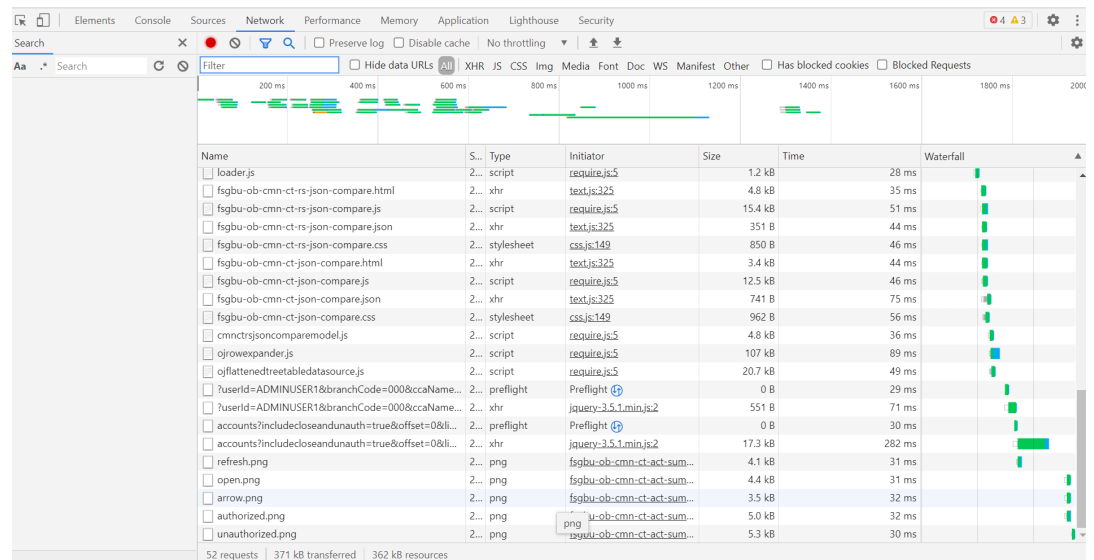


1.2 Preliminary Checks from UI

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.

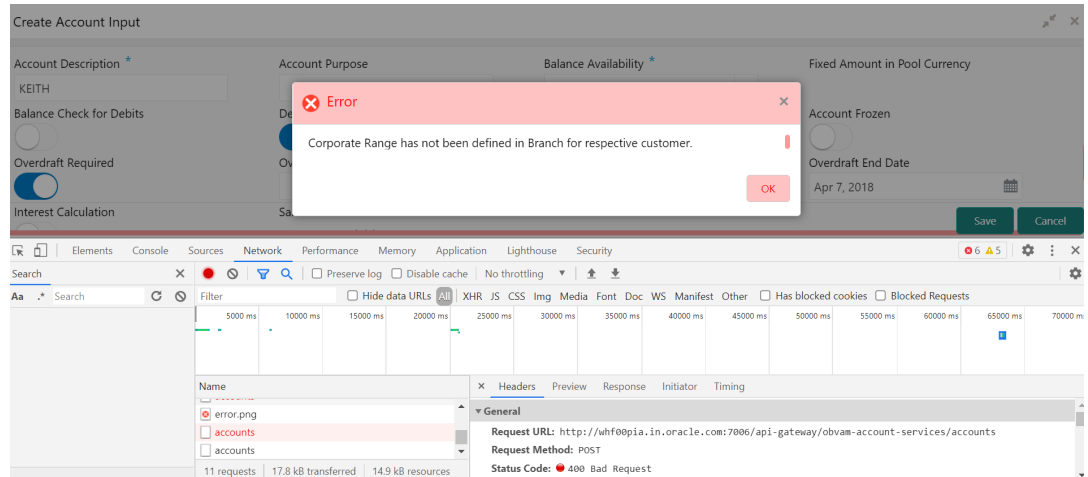
Figure 1-2 Call Responses



Note:

Usually red color indicates a non-2xx HTTP response.

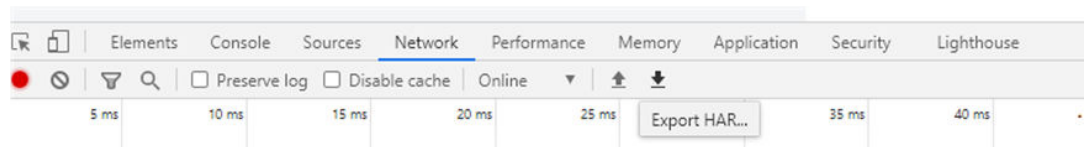
Figure 1-3 Non-2xx Response



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 Preliminary Checks from Service Log Files

This topic describes about preliminary checks from service log files.

The war deployments for each microservice sub-domain can generate the log files in the WebLogic server.

The configuration of this log can be found at `logback.xml`:

```
<root level="INFO">
    <appender-ref ref="FILE" />
</root>
```

In production scenarios, make sure that the root level is configured as **ERROR** so that log files do not get overwhelmed.

Note:

Refer to **Oracle WebLogic Server Documentation Library** to know the path where these files are generated. In on-premises cases, the log files can be zipped and sent for remote troubleshooting purposes.

1.4 Login to Zipkin

This topic describes the systematic instructions to troubleshoot the errors using the Zipkin Traces.

1. Launch the Zipkin URL.

Note:

The basic layout of Zipkin displays.

Figure 1-5 Layout of Zipkin

The screenshot shows the Zipkin search interface. At the top, there are navigation links: "Investigate system behavior", "Find a trace", "View Saved Trace", and "Dependencies". To the right, there are buttons for "Try Lens UI", "Go to trace", and "Search". Below this is a search form with the following fields:

- Service Name:** A dropdown menu with "zipkin" selected.
- Span Name:** A dropdown menu with "all" selected.
- Remote Service Name:** A dropdown menu with "all" selected.
- Lookback:** A dropdown menu with "15 minutes" selected.
- Annotation Query:** A text input field containing "For example: http.path=/foo/bar/ and cluster=foo and cache.miss".
- Duration (µs) >=:** A text input field containing "Ex: 100ms or 5s".
- Limit:** A text input field containing "10".
- Sort:** A dropdown menu with "Longest First" selected.

At the bottom of the form is a blue "Find Traces" button with a help icon. Below the form is a light blue banner with the text: "Please select the criteria for your trace lookup."

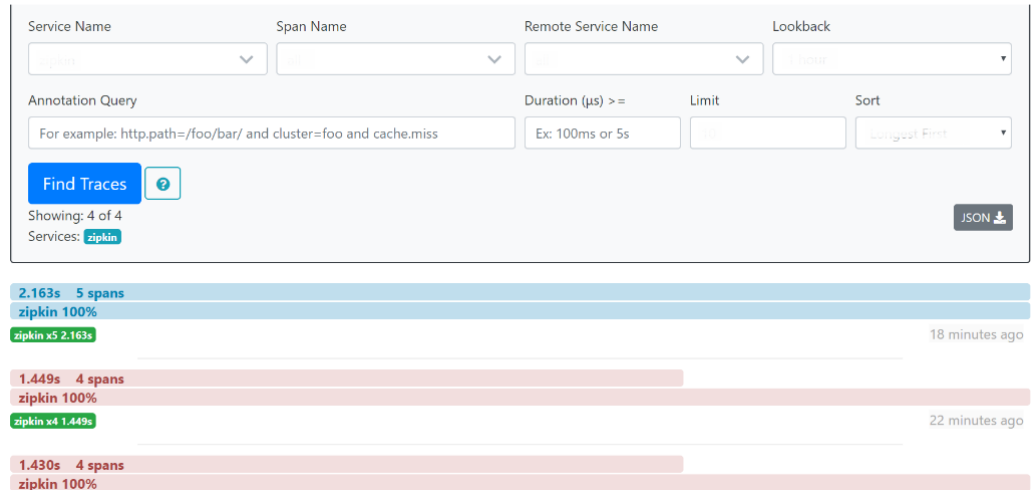
2. Use **Search** to find the traces of required API calls and services.

Note:

The search options given in the user interface are self-explanatory, and there is another UI option (**Try Lens UI**). It is given a different user interface with the same functionality.

Some error API calls are made to showcase how to track errors. The blue listing shows the successful API hits, and the red listing indicates the errors. Each block indicates a single trace in the listing. The below figure shows the list of traces.

Figure 1-6 List of Traces



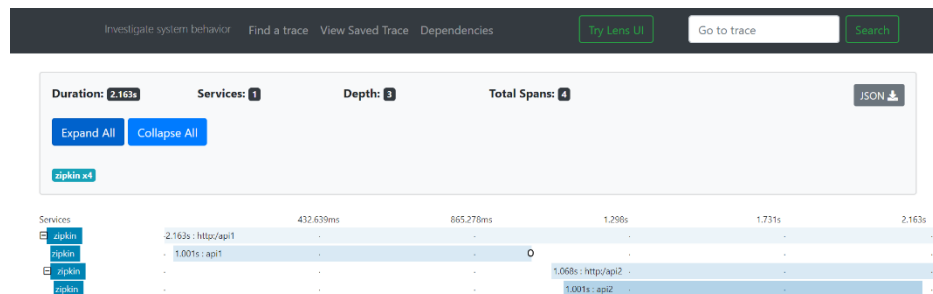
3. Open the individual trace.

It describes the time taken for each block. As the two custom spans are created inside two service calls, user can find a total of four blocks.

The time taken for an individual block is shown below.

The details of an individual trace displays.

Figure 1-7 Individual Trace



4. Click on the individual block to display the details.

Figure 1-8 Details of Individual Block

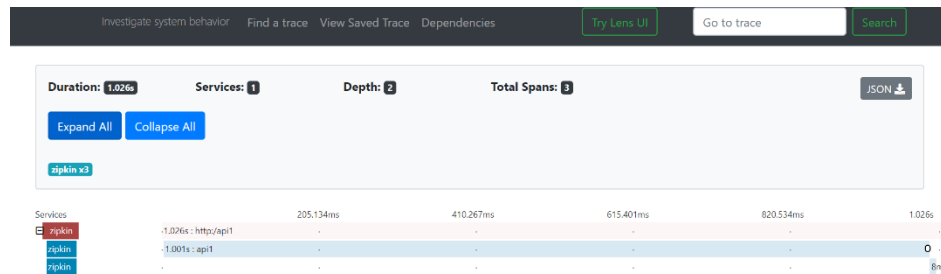
Date Time	Relative Time	Annotation	Address
		Server Start	(zipkin)
	2.163s	Server Finish	(zipkin)

Key	Value
http.host	localhost
http.method	GET
http.path	/api1
http.status_code	200
http.url	http://localhost:8080/api1
mvc.controller.class	Controller
mvc.controller.method	api1
spring.instance_id	

traceld
spanid

The user can also view the logging events in the Zipkin UI as small circular blocks. An example of an error log is shown below.

Figure 1-9 Sample Error Log



5. Click the error to get clear details and place of the error.

Figure 1-10 Details of Error

Date Time	Relative Time	Annotation	Address
		Server Start	(zipkin)
	1.026s	Server Finish	(zipkin)

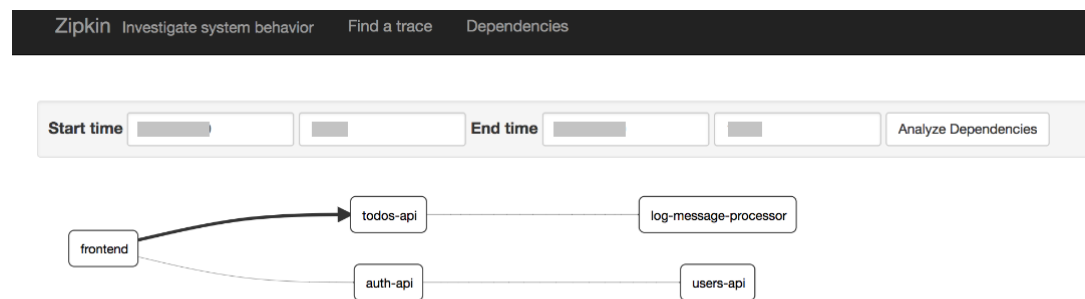
Key	Value
error	Request processing failed; nested exception is org.springframework.web.client.HttpServerErrorException: 500 null
http.host	localhost
http.method	GET
http.path	/api1
http.status_code	500
http.url	http://localhost:8080/api1
mvc.controller.class	BasicErrorController
mvc.controller.method	errorHtml
spring.instance_id	

Note:

If the **Lens UI** is used in Zipkin, the above figures are not applicable but are relatable to the **Lens UI** as well. Traces of the application can be found using **TraceId**. The **TraceId** can be found in the debug logs of the deployment when `spring-cloud-sleuth` is included in the dependencies (included in `spring-cloud-starter-zipkin` dependency).

- Click the **Dependencies** to get the dependency graph information between micro-services.

Figure 1-11 Sample Dependency Graph



1.5 Troubleshooting Logs using ELK Stack

This topic describes about Troubleshooting Logs using ELK Stack.

This topic contains the following subtopics:

- [Set Up ELK](#)
 This topic provides the links to setup ELK.

- [Access Kibana](#)
This topic provides systematic instructions to access Kibana.

1.5.1 Set Up ELK

This topic provides the links to setup ELK.

1. Download the Elastic search from <https://www.elastic.co/downloads/elasticsearch>
2. Download the Kibana from <https://www.elastic.co/downloads/kibana>
3. Download the Logstash from <https://www.elastic.co/downloads/logstash>

Note:

The default ports are as follows:

- Elastic search - 9200
- Kibana - 5601

Step to run ELK:

4. Run the `elasticsearch.sh` file present in the folder path `/scratch/software/ELK/elasticsearch-6.5.1/bin`.
 - Edit `network.host` to `localhost` and port if necessary. This should be enough for it to run.
 - Start: `nohup bin/elasticsearch &`
5. Configure the Kibana to point the running instance of elastic search in the `kibana.yml` file.

Figure 1-12 Logstash Configuration

```
# Kibana is served by a back end server. This setting specifies the port to use.
#server.port: 5601

# Specifies the address to which the Kibana server will bind. IP addresses and host names are both valid values.
# The default is 'localhost', which usually means remote machines will not be able to connect.
# To allow connections from remote users, set this parameter to a non-loopback address.
server.host: "whf00peb"

# Enables you to specify a path to mount Kibana at if you are running behind a proxy.
# Use the `server.rewriteBasePath` setting to tell Kibana if it should remove the basePath
# from requests it receives, and to prevent a deprecation warning at startup.
# This setting cannot end in a slash.
#server.basePath: ""

# Specifies whether Kibana should rewrite requests that are prefixed with
# `server.basePath` or require that they are rewritten by your reverse proxy.
# This setting was effectively always `false` before Kibana 6.3 and will
# default to `true` starting in Kibana 7.0.
#server.rewriteBasePath: false

# The maximum payload size in bytes for incoming server requests.
#server.maxPayloadBytes: 1048576

# The Kibana server's name. This is used for display purposes.
#server.name: "your-hostname"

# The URL of the Elasticsearch instance to use for all your queries.
#elasticsearch.url: "http://localhost:9200"

# When this setting's value is true Kibana uses the hostname specified in the server.host
```

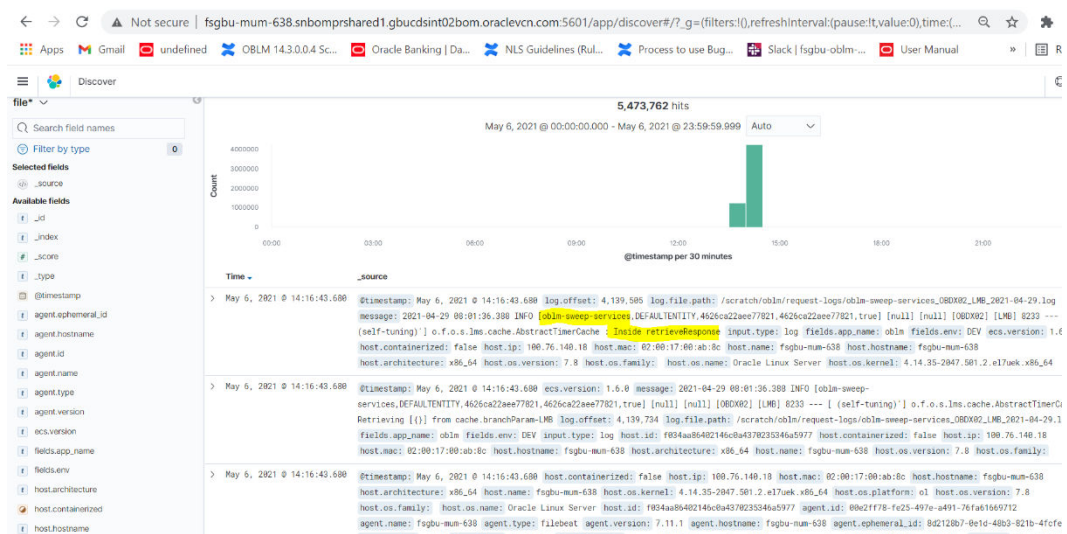
6. Follow the below steps to configure the Logstash.

1.5.2 Access Kibana

This topic provides systematic instructions to access Kibana.

1. Go to path `/kibana-7.8.1-linux-x86_64/config/kibana.yml`.
2. Edit `server.host: "0.0.0.0"` for access outside host and `server.port: <any port, defaults to 5601>`.
3. Validate `elasticsearch` properties - it defaults to `localhost:9200`
4. Go to **`http://host:port`** you should be able to see the Kibana console UI. Kibana needs `elasticsearch` to be UP as it creates indexes & fetches logs from it.
5. Start the `nohup bin/kibana &`

Figure 1-15 Kibana



1.6 Check if Kafka is Running

This topic provides information about Kafka is Running.

1. Run the cmd `$ netstat -tlnp | grep :9092`.

Note:

9092 is default port of kafka.

Possible issue while starting kafka

2. Kafka is not starting may be because zookeeper is not yet started.
 - Run the cmd `$ netstat -tlnp | grep :2181`.

Note:

2181 is default port of zookeeper.

if any services is not running on this port means, zookeeper is down.

3. Check if any permission issue is there for kafka log folder.

 **Note:**

To Create console producer and consumer for troubleshooting, refer to <http://cloudurable.com/blog/kafka-tutorial-kafka-from-command-line/index.html>.

 **Note:**

Some references that can be useful https://docs.cloudera.com/documentation/kafka/latest/topics/kafka_faq.html

1.7 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 the possible issues that may occur in the environment.
- [Possible Issues While Logging in and Launching Screen](#)
This topic describes the possible issues that may occur while logging in to the application and launching the screens.

1.7.1 Possible Issues While Deploying Services

This topic describes the possible issues that may occur in the environment.

This subsection describes the possible issues that may occur in the environment.

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. For example,
`weblogic.application.naming.EnvironmentException: duplicate persistence units with the name PLATO in scope cmc-customer-services-5.3.0.war.`

1.7.2 Possible Issues While Logging in and Launching Screen

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

Login Page is not Launching

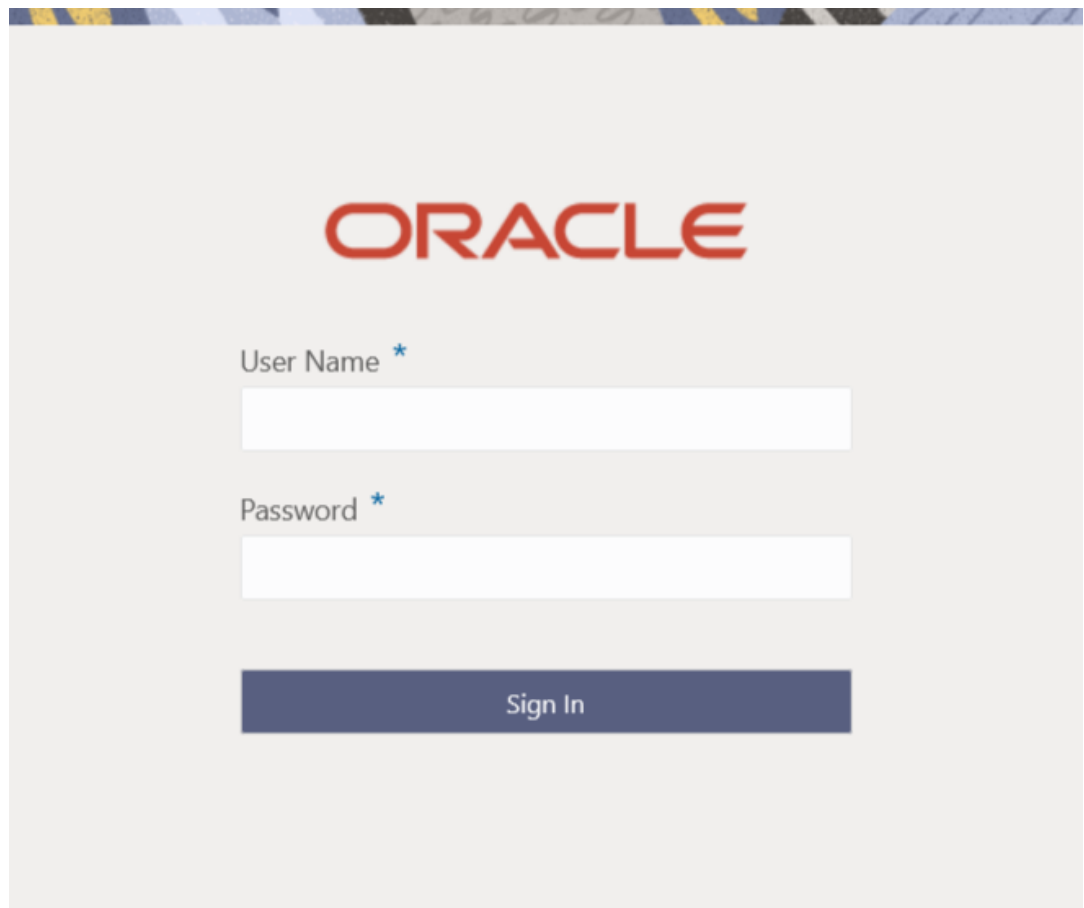
Perform the following checks if the login page is not launching.

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 1-16 Sign In



The screenshot shows a login page with the Oracle logo at the top. Below the logo, there are two input fields: "User Name *" and "Password *". The "User Name" field is a white rectangular box. The "Password" field is a white rectangular box with a small eye icon to its right. Below the password field is a dark blue button with the text "Sign In" in white.

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 1-17 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.

Retail Banking menus are not displayed after logging in

After you log in, if the Retail Banking menus are not displayed, map the functional activity codes in the table SMS_TM_ROLE_ACTIVITY. Once it is mapped, check if the corresponding role is assigned to your user ID.

Screens are not launching after logging in

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

Health Checks

This topic provides information about health checks.

Until the health check APIs are implemented, the health need to be monitored using WebLogic JVM managed server status and Eureka instance.

Figure 2-1 Health Checks

Application	AMIs	Availability Zones	Status
CMC-ACCOUNT-SERVICES	n/a (1)	(1)	UP (1) - whf00cdl.in.oracle.com:cmc-account-services:7005
CMC-ADVICE-SERVICES	n/a (1)	(1)	UP (1) - whf00cdl.in.oracle.com:cmc-advice-services:7005
CMC-BASE-SERVICES	n/a (1)	(1)	UP (1) - whf00cdl.in.oracle.com:cmc-base-services:7005
CMC-BRANCH-SERVICES	n/a (1)	(1)	UP (1) - whf00cdl.in.oracle.com:cmc-branch-services:7005
CMC-BUSINESSOVERRIDES-SERVICES	n/a (1)	(1)	UP (1) - whf00cdl.in.oracle.com:cmc-businessoverrides-services:7005
CMC-CHECKLIST-SERVICES	n/a (1)	(1)	UP (1) - whf00cdl.in.oracle.com:cmc-checklist-services:7005
CMC-COMMENTS-SERVICES	n/a (1)	(1)	UP (1) - whf00cdl.in.oracle.com:cmc-comments-services:7005
CMC-CURRENCY-SERVICES	n/a (1)	(1)	UP (1) - whf00cdl.in.oracle.com:cmc-currency-services:7005
CMC-CUSTOMER-SERVICES	n/a (1)	(1)	UP (1) - whf00cdl.in.oracle.com:cmc-customer-services:7005
CMC-DATASEGMENT-SERVICES	n/a (1)	(1)	UP (1) - whf00cdl.in.oracle.com:cmc-datasegment-services:7005
CMC-DOCUMENT-SERVICES	n/a (1)	(1)	UP (1) - whf00cdl.in.oracle.com:cmc-document-services:7005
CMC-EXTERNAL-CHART-ACCOUNT-SERVICES	n/a (1)	(1)	UP (1) - whf00cdl.in.oracle.com:cmc-external-chart-account-services:7005
CMC-OBCBS-SERVICES	n/a (1)	(1)	UP (1) - whf00cdl.in.oracle.com:cmc-obcbs-services:7005
CMC-OBRRH-SERVICES	n/a (1)	(1)	UP (1) - whf00cdl.in.oracle.com:cmc-obrrh-services:7005

This topic contains the following subtopics:

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

2.1 WebLogic

This topic describes about the Weblogic details.

This topic contains the following subtopics:

2.2 Configure Data Sources in WebLogic

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

1. On the WebLogic console, in the **Domain Structure** panel, click **Data Sources**.
2. On the **Summary of JDBC Data Sources** screen, click **New** and add the data source providing the required details.

Figure 2-2 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)

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

New | Delete

Figure 2-3 Create a New JDBC Data Source


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 2-4 Create a New JDBC Data Source

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:

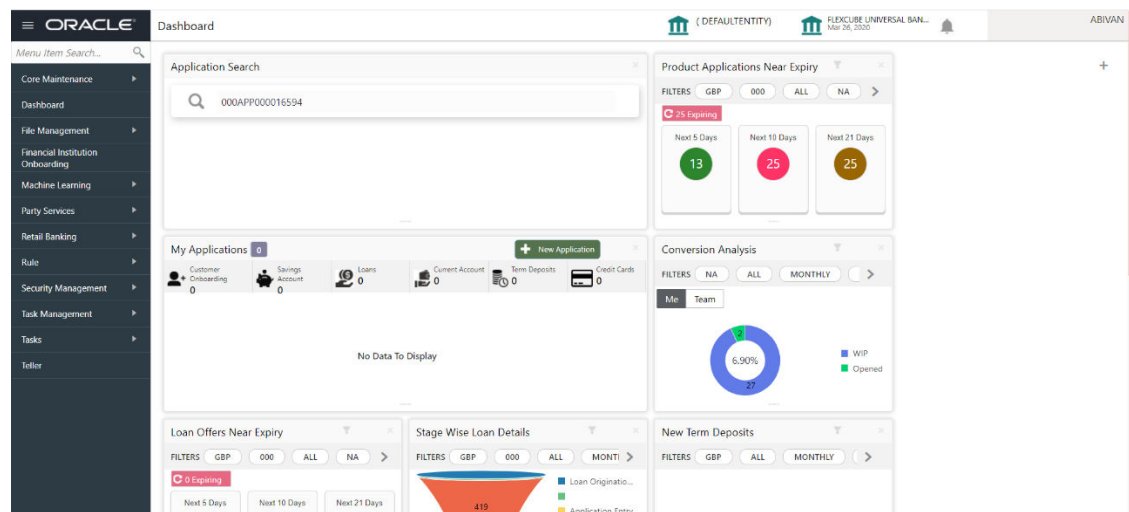
3

Troubleshooting Application Workflows

This topic provides information about troubleshooting application workflows.

On successful login, the Oracle Banking Origination dashboard screen displays depending on the user privileges.

Figure 3-1 Oracle Banking Origination 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.

 **Note:**

Only authorized users can access the system with the help of a unique User Login ID and password.

- On **Security Management**, click **Role** screen.

Figure 3-2 Role Maintenance

Functional Activity Code	Functional Activity Description
CMC_FA_BRANCH_EOD_PROCESS	Branch EOD process
SMS_FA_USER_NEW	User Create
SMS_FA_ROLE_AMEND	Role Amend
SMS_FA_ROLE_CLOSE	Role Close
SMS_FA_ROLE_REOPEN	Role ReOpen

The user profile of a user contains the details of the user in four sections - User details, Status, Other details and User role branches.

- On **Security Management**, click **User** screen.

Figure 3-3 Users Maintenance

Branch Code	Role Code	Role Description
EOD	ADMIN_ROLE	Default role for initial login
UMB		

Application Name	Application Description
OBDM	Oracle Banking Liquidity Management System
LMR	OBDM Integration
LAC	OBDM Cash Concentration
CSBC	Oracle Banking Interest and Charges System
LMP	OBDM Pool

Note:

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

- [First level issues](#)
This topic provides information about the first level issues.
- [Transaction data verification](#)
This topic provides information about the transaction data verification.

- [Party Module Integration Troubleshooting](#)
This topic describes the possible issues that may occur in Party Module integration.
- [FLEXCUBE Host Integration Troubleshooting](#)
This topic describes the possible issues that may occur in FLEXCUBE Universal Banking Solution integration.

3.1 First level issues

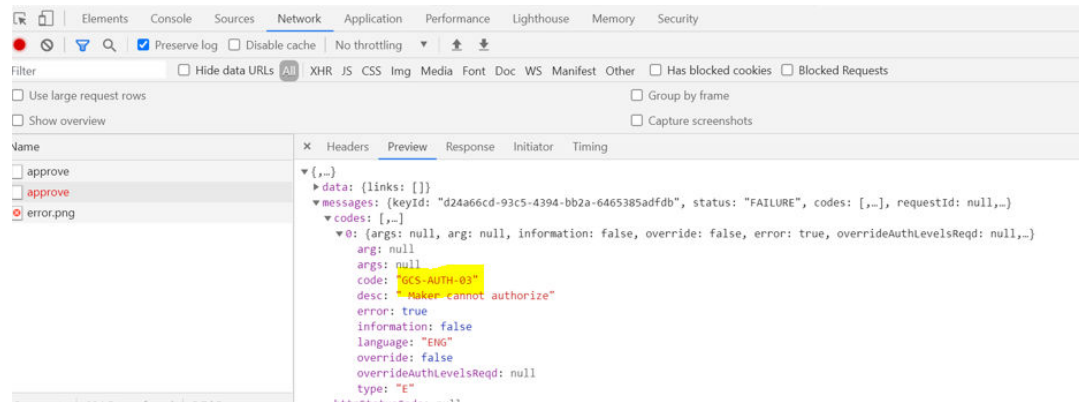
This topic provides information about the first level issues.

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 3-4 Error Message not Shown

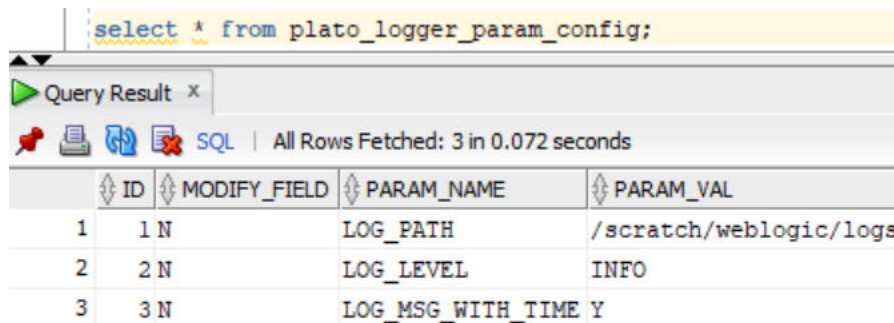


Setting Log File Path

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

Query: Select * from PLATO_LOGGER_PARAM_CONFIG;

Figure 3-5 Setting Log File Path



Dynamic Log Generation Issues

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

Figure 3-6 Dynamic Log Generation Issues

The screenshot shows a SQL query window with the query: `select * from plato_debug_users;` The results are displayed in a table with the following columns: ID, DEBUG_ENABLED, SERVICE_CODE, and USER_ID. There are 6 rows of data.

ID	DEBUG_ENABLED	SERVICE_CODE	USER_ID
1	95 Y	plato-orch-service	ABIVAN
2	96 Y	plato-orch-service	ABIVAN2
3	97 Y	plato-o	ABIVAN
4	98 Y	plato-o	ABIVAN2
5	99 Y	plato-alerts-management-services	ABIVAN
6	100 Y	plato-alerts-management-services	ABIVAN2

Query: Select * from PLATO_DEBUG_USERS;

Note:

Login to WINS CP and check server logs. Log files for each service will be generated based on the user_id, branch_code and date at the path provided in the plato_logger_param_config table.

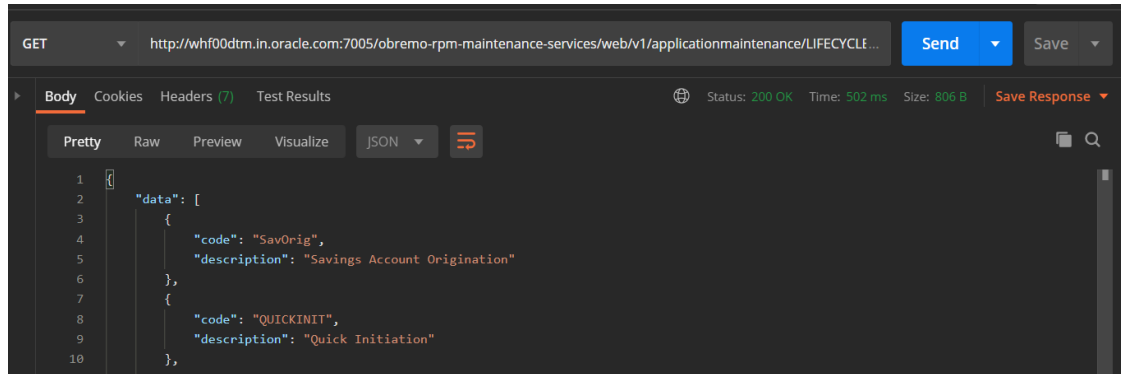
Figure 3-7 Server Logs

The screenshot shows a file explorer view of the directory `/scratch/weblogic/logs/`. It lists five log files with their names, sizes, and modification dates.

Name	Size	Changed
obremo-rpm-projection-services_ABIVAN_000_2021-05-07.log	173 KB	5/10/2021 11:37:10 AM
obremo-rpm-cmn-applicantservices_ABIVAN_000_2021-05-07.log	96 KB	5/10/2021 11:37:09 AM
obremo-rpm-maintenance-services_ABIVAN_000_2021-05-07.log	285 KB	5/10/2021 11:37:08 AM
obremo-rpm-maintenance-services_ABIVAN_000_2021-05-10.log	69 KB	5/10/2021 11:37:07 AM
cmc-transactioncontroller-services_ABIVAN_000_2021-05-10.log	130 KB	5/10/2021 10:21:51 AM

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 3-8 Call is Failing in Gateway

The screenshot shows a REST client interface with a GET request to `http://whf00dtm.in.oracle.com:7005/obremo-rpm-maintenance-services/web/v1/applicationmaintenance/LIFECYCLE...`. The response status is 200 OK, with a time of 502 ms and a size of 806 B. The response body is displayed in JSON format:

```
1 {
2   "data": [
3     {
4       "code": "SavOrig",
5       "description": "Savings Account Origination"
6     },
7     {
8       "code": "QUICKINIT",
9       "description": "Quick Initiation"
10    }
11  ]
12 }
```

**Note:**

Restart the specific services if required.

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 if service is deployed in WebLogic

500 internal error

The possible causes for 500 internal error are as follows:

- Issue with Oracle Banking Microservices Architecture entries
- Issue with Eureka
- Service may not be up
- Issue with any piece of code

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

3.2 Transaction data verification

This topic provides information about the transaction data verification.

Follow the best practices mentioned below to avoid getting any errors:

- In the IN request and OUT response, verify that all the field data is going to service side.
- If there is any error related to SMS, check for the availability of SMS entries.
- Validate the endpoints and data.
- Validate the request headers passed during the API call.

- Verify that the data entered in the screen is accurate.

Apply Now is Failing in Product Catalogue

If **Apply Now** in Product Catalogue is failing, troubleshoot using the below points:

- Check if conductor war and plato-orch-service war is deployed in WebLogic.
- Check whether PLATO-O and PLATO-ORCH-SERVICE is registered in Eureka.

PLATO-O	n/a (1) (1)	UP (1) - plato-o:8001
PLATO-ORCH-SERVICE	n/a (1) (1)	UP (1) - whf00dtm.in.oracle.com:plato-orch-service:7011

- Check whether the INITIATION workflow DSL is imported.
 - Front-End Menu: Tasks ▢ Business Process Maintenance ▢ Search for INITIATION workflow
- Check whether obremo-rpm-projection-services is up and running as this service is required during INITIATION(Apply Now).
- Check whether Sequence Generator service is up and running.

SEQUENCEGENERATORSERVICE	n/a (1) (1)	UP (1) - whf00dtm.in.oracle.com:sequencegeneratorservice:7020
--------------------------	-------------	---



Note:

Refer [Preliminary Check for UI](#) topic to see if any API call is failing

3.3 Party Module Integration Troubleshooting

This topic describes the possible issues that may occur in Party Module integration.

The possible issues and causes are described in the following subsections:

Existing Customer Details Fetch is failing

This topic describes the systematic instructions to fetch the existing customer details.

If in **Customer Information** data-segment, the existing customer details is not fetching, follow the below steps:



Note:

Refer to [Preliminary Check for UI](#) to see if any Party API is failing.

1. Check Oracle Banking Routing Hub Audit Request to see if any Oracle Banking Routing Hub calls to Party Module has failed.
 - a. On **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **Routing**.
 - b. Under **Routing**, click **Service Consumers**. Under **Service Consumers**, Click **RPM_ORIGINATION**.

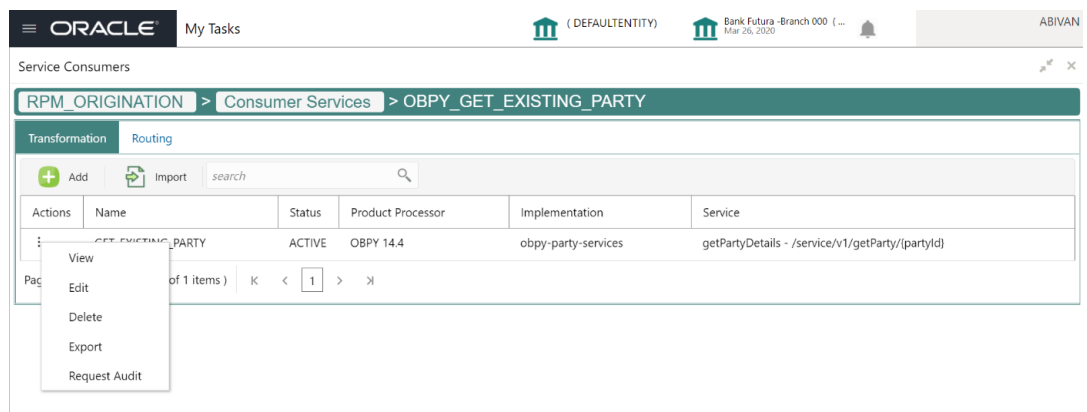
- c. Under **RPM_ORIGINATION**, click **Consumer Services**. Under **Consumer Services**, click **OBPY_GET_EXISTING_PARTY**

Note:

If you do not find any Oracle Banking Routing Hub configuration named **OBPY_GET_EXISTING_PARTY**, that means, the Oracle Banking Routing Hub configurations are not fully imported. Import the Oracle Banking Routing Hub configuration available in the source folder.

- 2. From the **Actions**, click on **Request Audit**.

Figure 3-9 Service Consumers



- 3. Check the latest **getPartyDetails** Oracle Banking Routing Hub call.
- 4. Click on the **Request ID** and check the **Provider Response** to check for any errors.

Figure 3-10 Request Audit

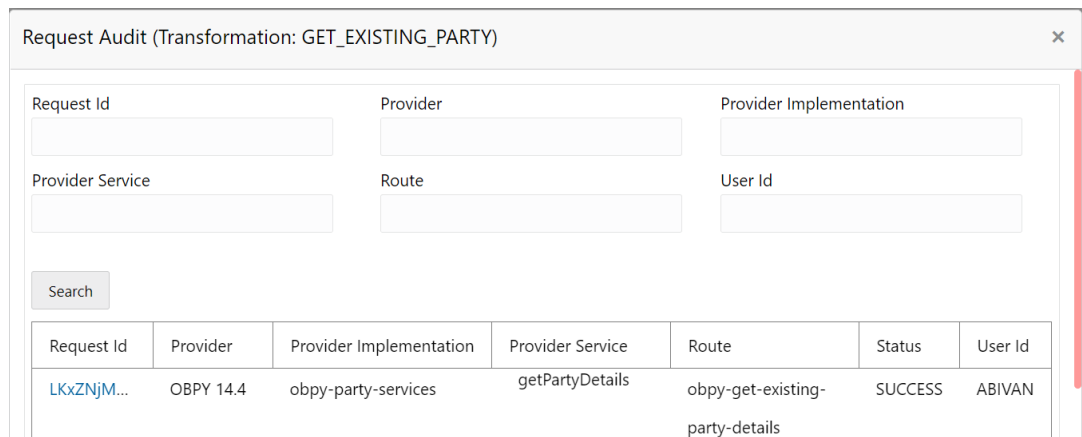
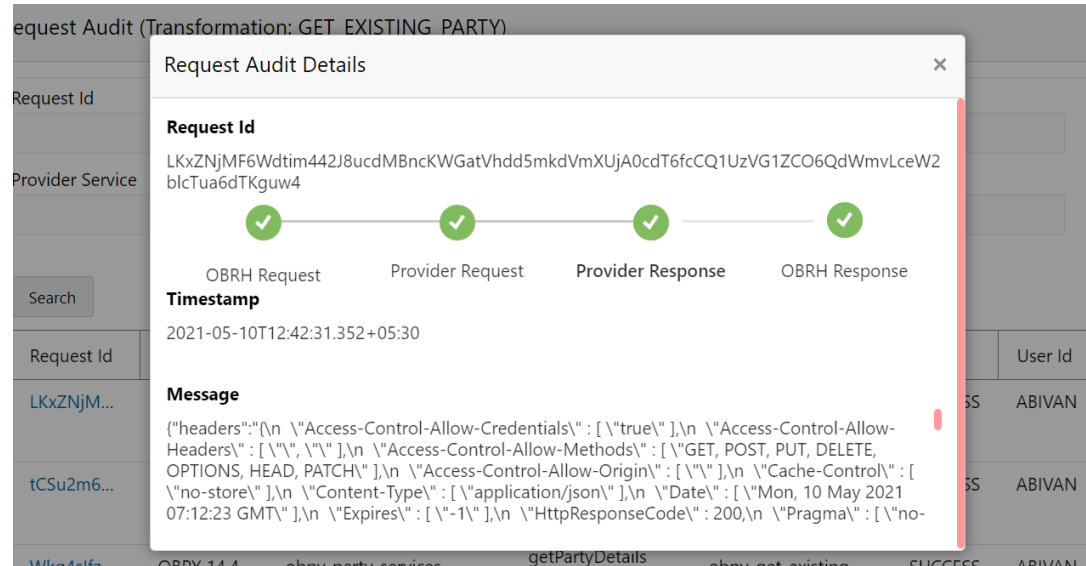


Figure 3-11 Request Audit Details



Customer Information Data-segment Drop-downs not Fetching

This topic describes the systematic instructions to fetch the existing customer details.

If in **Customer Information** data-segment, the existing customer details is not fetching, follow the below steps:

Note:

Refer to **Preliminary Check for UI** to see if any Party API is failing.

1. Check Oracle Banking Routing Hub Audit Request to see if any Oracle Banking Routing Hub calls to Party Module has failed.
 - a. On **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **Routing**.
 - b. Under **Routing**, click **Service Consumers**. Under **Service Consumers**, Click **RPM_ORIGINATION**.
 - c. Under **RPM_ORIGINATION**, click **Consumer Services**. Under **Consumer Services**, click **OBPY_GET_EXISTING_PARTY**

Note:

If you do not find any Oracle Banking Routing Hub configuration named **OBPY_GET_EXISTING_PARTY**, that means, the Oracle Banking Routing Hub configurations are not fully imported. Import the Oracle Banking Routing Hub configuration available in the source folder.

2. From the **Actions**, click on **Request Audit**.
3. Check the latest **getPartyMaintenance** Oracle Banking Routing Hub call.
4. Click on the **Request ID** and check the **Provider Response** to check for any errors.

3.4 FLEXCUBE Host Integration Troubleshooting

This topic describes the possible issues that may occur in FLEXCUBE Universal Banking Solution integration.

The possible issues and causes are described in the following subsections:

Host Calls Failing

Host call failure may be due to various reasons ranging from improper Oracle Banking Routing Hub configuration to absence of maintenance in the Oracle FLEXCUBE Universal Banking environment. Host call may fail during Business Product Host Product listing, Interest or Charge Details data-segment fetch or during Oracle FLEXCUBE Universal Banking Account creation time.

To find the root issue, follow the below steps:

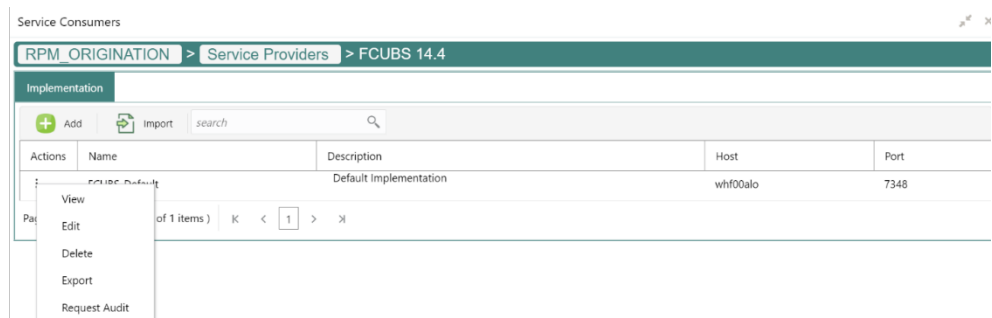
1. Check Oracle Banking Routing Hub Audit Request to see if any Oracle Banking Routing Hub calls to Oracle FLEXCUBE Universal Banking Module has failed.
 - a. On **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **Routing**.
 - b. Under **Routing**, click **Service Consumers**. Under **Service Consumers**, Click **RPM_ORIGINATION**.
 - c. Under **RPM_ORIGINATION**, click **FCUBS**.

Note:

If you do not find any Oracle Banking Routing Hub configuration for Oracle FLEXCUBE Universal Banking, that means, the Oracle Banking Routing Hub configurations are not fully imported. Import the Oracle Banking Routing Hub configuration available in the source folder.

- d. From the **Actions**, click on **Request Audit**.

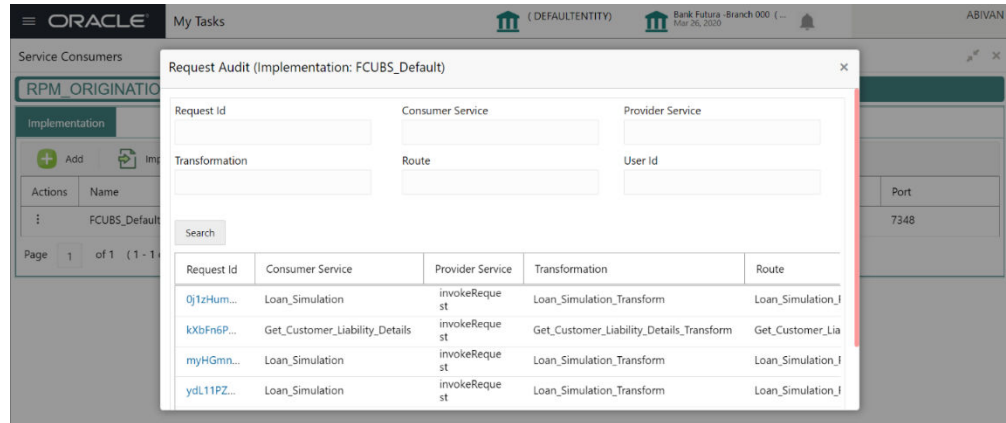
Figure 3-12 Service Consumer



Actions	Name	Description	Host	Port
	FCUBS Default	Default Implementation	whif00alo	7348

- e. Check the latest Transformation for which you have performed the operation.

Figure 3-13 Request Audit



- f. Click on the **Request ID** and check the **Provider Response** to check for any errors.
2. If there is no Oracle Banking Routing Hub call but, still Host call is failing (especially for Account Creation), then failure might be in the workflow task level. In order to debug this scenario, follow the below steps:
 - a. Using the Application Number, call the `plato-orch-service` search API (API details given below) using Postman.

API Url: `http://whf00dtm.in.example.com:7011/plato-orch-service/api/v1/extn/custom-actions/queries/tasks?offset=0&limit=100`

Figure 3-14 Body

```
{
  "q": "applicationNumber eq 000APP000006967",
  "queryType": [
    "ACQUIRED",
    "AVAILABLE",
    "HOLD",
    "COMPLETED"
  ]
}
```

Headers:

Content-Type:application/json

userId:

appld:platoorch

branchCode:

entityId:DEFAULTENTITY

- b. From the response, search for **subWorkflowId**.

Figure 3-15 subWorkflowId

```
"taskType": "SUB_WORKFLOW",
"status": "COMPLETED",
"inputData": {
  "workflowInput": {
    "TASK_DESCRIPTION": "Savings Origination
    HandOff",
    "applicationDate": 1585218545000,
    "applicationNumber": "000APP000016729",
    "processRefNumber": "000INSTAS0007184",
    "branch": "000",
    "user": "ABIVAN",
    "processName": "INSTANTACCOUNT",
    "processCode": "SavOrig",
    "stage": "Account Creation",
    "stageCode": "RPM_INSTACC_HNDOFF",
    "currentBranchCode": "000"
  },
  "subWorkflowId":
    "ad194dd5-738f-4ce3-b9b9-2a9f72bb59c6",
  "subWorkflowName": "CASAHOSTORCH",
```

- c. Use this subWorkflowId as parameter in the below API.

API Url: <http://whf00dtm.in.example.com:7011/plato-orch-service/api/workflow/ad194dd5-738f-4ce3-b9b9-2a9f72bb59c6>

Headers:

Content-Type:application/json

userId:

appId:platoorch

branchCode:

entityId: DEFAULTENTITY

- d. The response shows the actual error for HTTP task to fail.

4

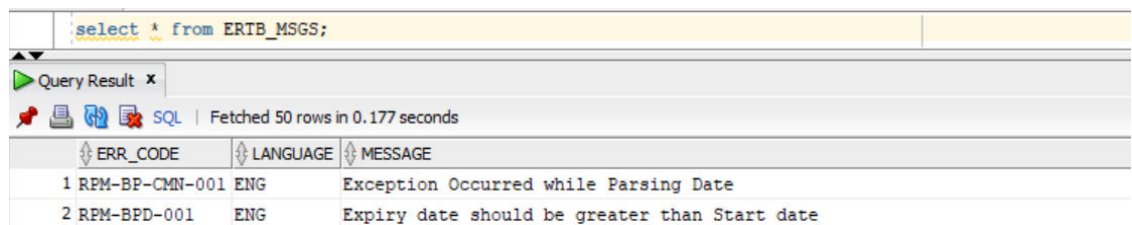
Business Error Codes

This topic provides information about business error codes.

The list of overrides/information/error codes that might be faced during usage of the application can be found in the table `ERTB_MSGS` of the corresponding service schema being operated on.

For example, if you face an error in Business Product maintenance screen and you want to see the error code in the table, you should connect to your Business Product schema and search for that particular error code in the `ERTB_MSGS` table.

Figure 4-1 Error Codes and Messages



The screenshot shows a SQL query execution interface. The query entered is `select * from ERTB_MSGS;`. The result set contains two rows of data. The first row shows an error code `REPM-BP-CMN-001` in English with the message `Exception Occurred while Parsing Date`. The second row shows an error code `REPM-BPD-001` in English with the message `Expiry date should be greater than Start date`.

ERR_CODE	LANGUAGE	MESSAGE
1 REPM-BP-CMN-001	ENG	Exception Occurred while Parsing Date
2 REPM-BPD-001	ENG	Expiry date should be greater than Start date

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