

Kafka Configuration Guide
Oracle Banking APIs
Patchset Release 22.1.2.0.0

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ORACLE®

Kafka Configuration Guide

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1. Preface

1.1 Intended Audience

This document is intended for the following audience:

- Customers
- Partners

1.2 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>.

1.3 Access to Oracle Support

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<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.

1.4 Structure

This manual is organized into the following categories:

Preface gives information on the intended audience. It also describes the overall structure of the User Manual.

The subsequent chapters describes following details:

- Introduction
- Preferences & Database
- Configuration / Installation.

1.5 Related Information Sources

For more information on Oracle Banking APIs Patchset Release 22.1.2.0.0, refer to the following documents:

- Oracle Banking APIs Installation Manuals

2. Context

This document contains step to configure kafka notifications for VAM/LM event in the system.

Below JMS changes will be required –

1. Create NotificationServer under JMS Servers.

The screenshot shows the Oracle WebLogic Server Administration Console interface. The main content area is titled "Summary of JMS Servers". Below the title, there is a table with the following columns: Name, Persistent Store, Target, Current Target, and Health. The table lists 11 JMS servers, all of which have a health status of "OK".

| Name | Persistent Store | Target | Current Target | Health |
|----------------------|------------------------------|--------------|----------------|--------|
| AccessJMS | WLS_JMS_ACCESS_PS | obdc_Cluster | obdc_Cluster | OK |
| AuditJMS | WLS_JMS_AUDIT_PS | obdc_Cluster | obdc_Cluster | OK |
| ExtSystemReceiver | WLS_JMS_EXTSYSTEMRECEIVER_PS | obdc_Cluster | obdc_Cluster | OK |
| ExtSystemSender | WLS_JMS_EXTSYSTEMSENDER_PS | obdc_Cluster | obdc_Cluster | OK |
| FileUploadJMS | WLS_JMS_FILEUPLOAD_PS | obdc_Cluster | obdc_Cluster | OK |
| SOFTMS | WLS_JMS_SOFTMS | obdc_server1 | obdc_server1 | OK |
| JPAJMS | WLS_JMS_JPA | obdc_Cluster | obdc_Cluster | OK |
| NotificationServer | WLS_JMS_NOTIFICATION_PS | obdc_server1 | obdc_server1 | OK |
| ReportsJMS | WLS_JMS_REPORT_PS | obdc_Cluster | obdc_Cluster | OK |
| UBNotificationServer | WLS_JMS_UCDB_PS | obdc_server1 | obdc_server1 | OK |

2. Create NotificationServer Module under JMS Modules.

Create below destinations

| Name | Type | Description |
|--------------------|--------------------------|--|
| NOTIFICATION_TOPIC | Topic | Local Notification Topic where message will be routed. |
| NotificationTCF | Topic Connection Factory | |

The screenshot shows the Oracle WebLogic Server Administration Console interface. The main content area is titled "Summary of JMS Modules". Below the title, there is a table with the following columns: Name and Type. The table lists 10 JMS modules, all of which have a type of "JMSSystemResource".

| Name | Type |
|----------------------|-------------------|
| AccessJMSModule | JMSSystemResource |
| AuditJMS | JMSSystemResource |
| ExtSystemReceiverQCF | JMSSystemResource |
| ExtSystemSender | JMSSystemResource |
| FileUploadJMS | JMSSystemResource |
| SOFTMS | JMSSystemResource |
| HostSystemModule | JMSSystemResource |
| JPA_JMS | JMSSystemResource |
| NotificationServer | JMSSystemResource |
| ReportsJMSModule | JMSSystemResource |

The screenshot shows the Oracle WebLogic Server Administration Console for the NotificationServer. The main configuration area includes the following details:

- Name:** NotificationServer
- Descriptor File Name:** jms/notificationserver-jms.xml

The Summary of Resources table is as follows:

| Name | Type | JMDF Name | Subdeployment | Targets |
|------------------------|---------------------------|------------------------|-------------------|--------------------|
| NotificationOCF | Connection Factory | NotificationOCF | Default Targeting | obdx_server1 |
| NotificationTCF | Connection Factory | NotificationTCF | Default Targeting | obdx_server1 |
| NOTIFICATION_QUEUE | Uniform Distributed Queue | NOTIFICATION_QUEUE | NotificationSD | NotificationServer |
| NOTIFICATION_TOPIC | Uniform Distributed Topic | NOTIFICATION_TOPIC | NotificationSD | NotificationServer |
| UBSNotificationTCF | Connection Factory | UBSNotificationTCF | Default Targeting | obdx_server1 |
| UBS_NOTIFICATION_TOPIC | Uniform Distributed Topic | UBS_NOTIFICATION_TOPIC | NotificationSD | NotificationServer |

3. Kafka properties changes

Below changes are required to point to correct Kafka config. Open war in 7zip tool and go to digx-kafkanotification.war\WEB-INF\lib\com.ofss.extsystem.kafka.notification-22.1.0.0.0-SNAPSHOT.jar\ folder. We have to make changes in application.properties as shown below.

There are separate properties for LM and VAM. In case of multiple entity setup the target.unit property can be changes to new entity and same war can be deployed entity times.

The screenshot shows a file explorer window with the following contents:

| Name | Size | Package |
|------------------------|---------|---------|
| META-INF | 25 | |
| com | 138 442 | 49 |
| avro | 1 389 | |
| application.properties | 2 368 | |

```

1 # LM Kafka properties
2 spring.kafka.lm.bootstrap-servers=100.76.136.57:9093
3 spring.kafka.lm.configuration.ssl.truststore.location=C:/Users/rplopes/Documents/work/documents/sprint/accountaccess/kafka/OBLMClientTrust_142.jks
4 #spring.kafka.lm.configuration.ssl.truststore.location=/scratch/obdx/domains/OBLMClientTrust_142.jks
5 spring.kafka.lm.configuration.ssl.truststore.password=oracle123
6 spring.kafka.lm.consumer.group-id=vamlm-chage-services-grp
7 spring.kafka.lm.consumer.topic.name=lm.accountnotification
8 spring.kafka.lm.configuration.security.protocol=SASL_SSL
9 spring.kafka.lm.configuration.security.mechanism=SCRAM-SHA-256
10 spring.kafka.lm.properties.sasl.jaas.config.username=alice
11 spring.kafka.lm.properties.sasl.jaas.config.password=alice-secret
12 spring.kafka.lm.properties.auto.offset.reset=earliest
13 spring.kafka.lm.properties.auto.commit.interval.ms=1000
14 spring.kafka.lm.properties.session.timeout.ms=30000
15 spring.kafka.lm.properties.enable.auto.commit=false
16
17 # VAM Kafka properties
18 spring.kafka.vam.bootstrap-servers=100.76.142.18:9093
19 spring.kafka.vam.configuration.ssl.truststore.location=C:/Users/rplopes/Documents/work/documents/sprint/accountaccess/kafka/KafkaClientTrustStore.jks
20 #spring.kafka.vam.configuration.ssl.truststore.location=/scratch/obdx/domains/KafkaClientTrustStore.jks
21 spring.kafka.vam.configuration.ssl.truststore.password=orcl123
22 spring.kafka.vam.consumer.group-id=obvam-projection-services-grp
23 spring.kafka.vam.consumer.topic.name=vam.virtualaccountnotification
24 spring.kafka.vam.configuration.security.protocol=SASL_SSL
25 spring.kafka.vam.configuration.security.mechanism=SCRAM-SHA-512
26 spring.kafka.vam.properties.sasl.jaas.config.username=obvam
27 spring.kafka.vam.properties.sasl.jaas.config.password=obvam-secret
28 spring.kafka.vam.properties.auto.offset.reset=earliest
29 spring.kafka.vam.properties.auto.commit.interval.ms=1000
30 spring.kafka.vam.properties.session.timeout.ms=30000
31 spring.kafka.vam.properties.enable.auto.commit=false
32
33 # Queue properties
34 spring.weblogic.context.factory=weblogic.jndi.WLInitialContextFactory
35 spring.weblogic.notification.topic.factory=NotificationTCF
36 spring.weblogic.notification.topic=NOTIFICATION_TOPIC
37
38 target.unit=OBDX_BU

```

4. Connector changes

This is optional step. If we don't want to keep passwords in above properties file, same can be added to obapi connector resource adapter.

Create below connectors

1. ra/DIGXConnectorOBLM_KAFKA_JAAS
2. ra/DIGXConnectorOBLM_KAFKA_SSL
3. ra/DIGXConnectorOBVAM_KAFKA_JAAS
4. ra/DIGXConnectorOBVAM_KAFKA_SSL

| | | |
|--------------------------|----------------------------------|--------------------------------------|
| <input type="checkbox"/> | ra/DIGXConnectorOBLM_KAFKA_JAAS | javax.resource.cci.ConnectionFactory |
| <input type="checkbox"/> | ra/DIGXConnectorOBLM_KAFKA_SSL | javax.resource.cci.ConnectionFactory |
| <input type="checkbox"/> | ra/DIGXConnectorOBSCF | javax.resource.cci.ConnectionFactory |
| <input type="checkbox"/> | ra/DIGXConnectorOBTFFPM_14.3 | javax.resource.cci.ConnectionFactory |
| <input type="checkbox"/> | ra/DIGXConnectorOBVAM | javax.resource.cci.ConnectionFactory |
| <input type="checkbox"/> | ra/DIGXConnectorOBVAM_KAFKA_JAAS | javax.resource.cci.ConnectionFactory |
| <input type="checkbox"/> | ra/DIGXConnectorOBVAM_KAFKA_SSL | javax.resource.cci.ConnectionFactory |
| <input type="checkbox"/> | ra/DIGXConnectorREWARDS | javax.resource.cci.ConnectionFactory |

- i. EIS User Name - OBVAM_KAFKA_SSL, EIS User Password - <<password here>>
- ii. EIS User Name - OBVAM_KAFKA_JAAS, EIS User Password - <<password here>>
- iii. EIS User Name - OBLM_KAFKA_JAAS, EIS User Password - <<password here>>
- iv. EIS User Name - OBLM_KAFKA_SSL, EIS User Password - <<password here>>

| | | | |
|--------------------------|---------|------------------|----------------------------------|
| <input type="checkbox"/> | Default | OBVAM_KAFKA_SSL | ra/DIGXConnectorOBVAM_KAFKA_SSL |
| <input type="checkbox"/> | Default | OBVAM_KAFKA_JAAS | ra/DIGXConnectorOBVAM_KAFKA_JAAS |
| <input type="checkbox"/> | Default | OBLM_KAFKA_JAAS | ra/DIGXConnectorOBLM_KAFKA_JAAS |
| <input type="checkbox"/> | Default | OBLM_KAFKA_SSL | ra/DIGXConnectorOBLM_KAFKA_SSL |

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