Oracle® Banking Collections and Recovery Installation Guide





Oracle Banking Collections and Recovery Installation Guide, Release 14.7.0.0.0

F80593-01

Copyright © 2023, Oracle and/or its affiliates.

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish, or display any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited.

The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

If this is software, software documentation, data (as defined in the Federal Acquisition Regulation), or related documentation that is delivered to the U.S. Government or anyone licensing it on behalf of the U.S. Government, then the following notice is applicable:

U.S. GOVERNMENT END USERS: Oracle programs (including any operating system, integrated software, any programs embedded, installed, or activated on delivered hardware, and modifications of such programs) and Oracle computer documentation or other Oracle data delivered to or accessed by U.S. Government end users are "commercial computer software," "commercial computer software documentation," or "limited rights data" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, the use, reproduction, duplication, release, display, disclosure, modification, preparation of derivative works, and/or adaptation of i) Oracle programs (including any operating system, integrated software, any programs embedded, installed, or activated on delivered hardware, and modifications of such programs), ii) Oracle computer documentation and/or iii) other Oracle data, is subject to the rights and limitations specified in the license contained in the applicable contract. The terms governing the U.S. Government's use of Oracle cloud services are defined by the applicable contract for such services. No other rights are granted to the U.S. Government.

This software or hardware is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications that may create a risk of personal injury. If you use this software or hardware in dangerous applications, then you shall be responsible to take all appropriate fail-safe, backup, redundancy, and other measures to ensure its safe use. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software or hardware in dangerous applications.

Oracle®, Java, and MySQL are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

Intel and Intel Inside are trademarks or registered trademarks of Intel Corporation. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. AMD, Epyc, and the AMD logo are trademarks or registered trademarks of Advanced Micro Devices. UNIX is a registered trademark of The Open Group.

This software or hardware and documentation may provide access to or information about content, products, and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services unless otherwise set forth in an applicable agreement between you and Oracle. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services, except as set forth in an applicable agreement between you and Oracle.

Contents

Audience	
Documentation Accessibility Diversity and Inclusion	
Related Resources	
Conventions	
Database Setup	
Product Installation Using Installer	
Data Source	
Deployments	
Initial Setup	
Deste desemble	
Restart and Refresh	
Logging Area	



Preface

This guide helps to install the Oracle Banking Collections and Recovery services on designated environment. It is assumed that all the prior setup is already done related with WebLogic installation, WebLogic managed server creation, and Oracle DB installation.

This guide facilitates you to install the following services in the specified sequence:

- 1. OBCR-ACTION-SERVICES
- 2. OBCR-ACTIVITY-SERVICES
- 3. OBCR-COMMON-SERVICES
- 4. OBCR-CORRESPONDENCE-SERVICES
- 5. OBCR-ENTITY-SERVICES
- 6. OBCR-NOTES-SERVICES
- 7. OBCR-PTP-SERVICES
- 8. OBCR-SEGMENTATION-SERVICES
- 9. OBCR-SEGMENT-MAINT-SERVICES
- 10. OBCR-STRATEGY-MAINT-SERVICES
- 11. OBCR-STRATEGY-SERVICES
- 12. OBCR-TASK-MAINT-SERVICES
- 13. OBCR-TASK-SERVICES
- 14. OBCR-USER-MANAGEMENT-SERVICES



For the exact version to be installed, see section **System Requirements** and **Technology Stack** of *Oracle Banking Collections and Recovery Release Notes*.

User Interface

Follow the below steps to migrate from existing app-shell build to Foundation app-shell. The UI war is split into individual component server war files. All the component server war files should be deployed in the same managed server.

For Common Core components server, deploy the war files mentioned below:

- app-shell
- cmc-component-server



- moc-component-server
- sms-component-server

For Domain Specific component server, deploy the following war file:

- obcr-component-server

Audience

This guide is intended for WebLogic admin or ops-web team who are responsible for installing the OFSS banking products.

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.

Access to Oracle Support

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.

Related Resources

For more information, see these related Oracle resources:

- Oracle Banking Collections and Recovery Initial Setup Guide
- Oracle Banking Collections and Recovery Pre-Installation Guide

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.
italic	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.



Convention	Meaning
monospace	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.



Database Setup

This topic describes the database setup for Oracle Banking Collections and Recovery installation.

It is recommended to create a different schema for each application. The below setup is designed to work with the separate schema for each application.

Prerequisites

Before proceeding with the below setup, make sure that the required schemas are provided.



Product Installation Using Installer

This topic describes the information for Oracle Banking Collections and Recovery installation using Installer.

Prerequisites

Before proceeding with the installation setup, make sure that the database installation is completed and the required schemas are created.

Installer Path

You can download the installer from Oracle Software Delivery Cloud (OSDC). The following table provides the download path of the installer.

Table 2-1 Installer Path

Application	Archive Name	OSDC Path
OBMA Installer	obma.zip	INSTALLER/
OBCR Installer	obcr.zip	INSTALLER/



To install the application using Installer, refer to *Oracle Banking Microservices Architecture Installer Guide*.



Data Source

This topic describes the data source creation for Oracle Banking Collections and Recovery installation.

Prerequisites

Before proceeding with deployment setup, make sure that the database and application setup for Oracle Banking Microservices Architecture is done.

Data Sources List

The table below lists the data sources created as a part of product installation.

Table 3-1 Data Sources List

Serial Number	Data Source Name	Data Source JNDI	Targets
1	PLATO	jdbc/PLATO	obcr_server1
	PLATOBATCH	jdbc/PLATOBATCH	obcr_server1
	PLATOFEED	jdbc/PLATOFEED	obcr_server1
	PLATO_UI	jdbc/ PLATO_UI_CONFIG	obcr_server1
	SMS	jdbc/sms	obcr_server1
	PLATORULE	jdbc/PLATORULE	obcr_server1
	PLATOSEC	jdbc/PLATOSECURITY	obcr_server1
	CMNCORE	jdbc/CMNCORE	obcr_server1
	CR_ACTION	jdbc/CR_ACTION	obcr_server1
	CR_ACTIVITY	jdbc/CR_ACTIVITY	obcr_server1
	CR_CMN	jdbc/CR_CMN	obcr_server1
	CR_CORR	jdbc/CR_CORR	obcr_server1
	CR_ENTITY	jdbc/CR_ENTITY	obcr_server1
	CR_NOTES	jdbc/CR_NOTES	obcr_server1
	CR_PTP	jdbc/CR_PTP	obcr_server1
	CR_SEG	dbc/CR_SEG	obcr_server1
2	PLATO	jdbc/PLATO	obcr_server2
	PLATOBATCH	jdbc/PLATOBATCH	obcr_server2
	PLATOFEED	jdbc/PLATOFEED	obcr_server2
	PLATO_UI	jdbc/ PLATO_UI_CONFIG	obcr_server2
	SMS	jdbc/sms	obcr_server2
	PLATORULE	jdbc/PLATORULE	obcr_server2
	PLATOSEC	jdbc/PLATOSECURITY	obcr_server2
	CMNCORE	jdbc/CMNCORE	obcr_server2
	CR_SEGMAINT	jdbc/CR_SEGMAINT	obcr_server2



Table 3-1 (Cont.) Data Sources List

Serial Number	Data Source Name	Data Source JNDI	Targets
	CR_STRTGY	jdbc/CR_STRTGY	obcr_server2
	CR_STRTGYMAINT	jdbc/ CR_STRTGYMAINT	obcr_server2
	CR_TASK	jdbc/CR_TASK	obcr_server2
	CR_TASKMAINT	jdbc/CR_TASKMAINT	obcr_server2
	CR_USERMGMT	jdbc/CR_USERMGMT	obcr_server2



For creating data source, see section **Create Datasource** of *Configuration* and *Deployment Guide*.



Deployments

This topic describes the deployments for Oracle Banking Collections and Recovery installation.

Prerequisites

Before proceeding with the below setup, make sure that Kafka is configured and the related properties are present in PLATO schema. For more information, see Kafka SSL Setup.

To avail feature of record level approval functionality in Plato-Feed, the below property would need to be maintained as part of weblogic VM argument by each product domain including plato. If not maintained, the default behavior will be of file level approval only.

Property name - feed.recordLevelApprovalRegd

Property value - true or false

Default value - false

Below entries need to be done in the database for Email Alerts.

Table 4-1 Database Entries for Email Alerts

Schema Name	Table Name	Entries Required
PLATO	PROPERTIES	Set VALUE column value as ' <sender's address="" email="">' where: APPLICATION = 'plato-alerts-management-services' and KEY = 'EMAIL.USER_ID'.</sender's>
PLATO	PROPERTIES	Set VALUE column value as ' <branch code="">' where: APPLICATION = 'plato-alerts-management-services' and KEY = 'CMC.branchCode'.</branch>

Deployments List

The below table gives details of the deployments required on each domain to run the Oracle Banking Collections and Recovery application. It also provides path where application war files are located at Oracle Software Delivery Cloud (OSDC).



For the exact version of the archive name, refer to the OSDC file available as a part of the release.

Table 4-2 Deployments List

Application	Archive Name	OSDC Path	Targets
OBCR Activity Services	obcr-activity-services- {version}.war	OBCR_SERVICES/	OBCR Server1



Table 4-2 (Cont.) Deployments List

Application	Archive Name	OSDC Path	Targets
OBCR Action Services	obcr-action-services- {version}.war	OBCR_SERVICES/	OBCR Server1
OBCR Common Services	obcr-common-services- {version}.war	OBCR_SERVICES/	OBCR Server1
OBCR Entity Services	obcr-entity-services- {version}.war	OBCR_SERVICES/	OBCR Server1
OBCR PTP Services	obcr-ptp-services- {version}.war	OBCR_SERVICES/	OBCR Server1
OBCR Segmentation Services	obcr-segmentation- services-{version}.war	OBCR_SERVICES/	OBCR Server1
OBCR Correspondence Services	obcr-correspondence- services-{version}.war	OBCR_SERVICES/	OBCR Server1
OBCR Segment Maintenance Services	obcr-segment-maint- services-{version}.war	OBCR_SERVICES/	OBCR Server2
OBCR Strategy Services	obcr-strategy-services- {version}.war	OBCR_SERVICES/	OBCR Server2
OBCR Strategy Maintenance Services	obcr-strategy-maint- services-{version}.war	OBCR_SERVICES/	OBCR Server2
OBCR Task Services	obcr-task-services- {version}.war	OBCR_SERVICES/	OBCR Server2
OBCR Task Maintenance Services	obcr-task-maint- services-{version}.war	OBCR_SERVICES/	OBCR Server2
OBCR User Management Services	obcr-user-management- services-{version}.war	OBCR_SERVICES/	OBCR Server2
OBCR Notes Services	obcr-notes-services- {version}.war	OBCR_SERVICES/	OBCR Server2
OBCR UI	 app-shell- {version}.war cmc-component- server-{version}.war sms-component- server-{version}.war obcr-component- server-{version}.war 	UI/	API Gateway Server



Initial Setup

This topic describes the initial setup for Oracle Banking Collections and Recovery installation.

Once everything is deployed, run the CMC and SMS initial setup scripts from the below mentioned paths at Oracle Software Delivery Cloud to create the required maintenances.

- OBCR_INITIAL_SETUP/cmc_initial_setup.sql To be compiled in Common Core schema.
- OBCR_INITIAL_SETUP/sms_initial_setup.sql To be compiled in SMS schema.
- OBCR_INITIAL_SETUP/obma_role_seed.sql To be compiled in SMS schema.
- OBCR_INITIAL_SETUP/obcr_role.sql To be compiled in SMS schema.

CMC Initial Setup

This script would prompt a user to enter the below values.

Table 5-1 CMC Initial Setup - Field Description

Serial Number	Field	Description
1	Bank Code	A four-letter Bank Code
2	Bank Description	Description of the Bank Code
3	Branch Code	A three letter Branch Code
4	Branch Name	Name of the Branch
5	Branch Address Line 1	Address line 1 of the branch
6	Branch Address Line 2	Address line 2 of the branch
7	Branch Address Line 3	Address line 3 of the branch
8	Branch Currency	A three letter ISO Currency Code
9	Country Code	A two letter ISO Country Code
10	Walk-In Customer	Walk-in customer number
11	Host Code	Host code of the Branch
12	Host Description	Host code description
13	Host Process Time Zone	Host code time zone (GMT+5.30)
14	Source System	External source system
15	Source System Description	Source system description
16	Source System Branch	Branch code as in the source system
17	Previous Working Day	Previous working day of the Branch
18	Current Working Day	Current working day of the Branch
19	Next Working Day	Next working day of the Branch



SMS Initial Setup

This script would prompt the user to create two admin users.

Table 5-2 SMS Initial Setup - Field Description

Serial Numbe r	Field	Description
1	User Login ID 1	Login ID of the first User
2	User Name 1	Name of the first User
3	User Login ID 2	Login ID of the second User
4	User Name 2	Name of the second User
5	Users Home Branch Code	A three letter Home-Branch Code of the users
6	Users Locale	Users locale (2 letter ISO country code)
7	Start Date	Start date
8	End Date	End date

These users are assigned the default ADMIN_ROLE, and the below functional activities are mapped.

- 1. SMS_FA_USER_NEW
- 2. SMS_FA_USER_AMEND
- 3. SMS_FA_USER_CLOSE
- 4. SMS_FA_USER_REOPEN
- 5. SMS_FA_USER_DELETE
- 6. SMS_FA_LOAN_DASHBOARD_PREFERENCE
- 7. SMS_FA_USER_VIEW
- 8. SMS_FA_USER_AUTHORIZE
- 9. SMS_FA_ROLE_NEW
- 10. SMS_FA_ROLE_AMEND
- 11. SMS_FA_ROLE_CLOSE
- 12. SMS_FA_ROLE_REOPEN
- 13. SMS_FA_ROLE_DELETE
- 14. SMS_FA_LOAN_DASHBOARD_PREFERENCE_PUT
- 15. SMS_FA_ROLE_VIEW
- **16.** SMS_FA_ROLE_AUTHORIZE
- 17. SMS_FA_LOAN_DASHBOARD_VIEW
- 18. SMS_FA_APPLICATION_VIEW
- 19. SMS_FA_MENU_DASHBOARD_VIEW
- 20. CMC_FA_EXT_BRANCH_PARAMETERS_LOV
- 21. CMC_FA_EXT_BRANCH_PARAMETERS_VIEW



- 22. CMC_FA_EXT_BANK_PARAMETERS_VIEW
- 23. CMC_FA_EXT_BANK_PARAMETERS_LOV
- 24. CMC_FA_SYSTEM_DATES_VIEW
- 25. CMC_FA_CURRENCY_DEFN_VIEW
- 26. CMC_FA_LOCAL_HOLIDAY_VIEW
- 27. CMC_FA_LANGUAGE_CODE_VIEW

LDAP Setup

The users created using the SMS script must also be created in the LDAP server.



For LDAP setup, see Configuration and Deployment Guide.

Fact Creation

For creating facts, download the <code>obcr_facts.csv</code> file from this path:

OBCR_INITIAL_SETUP/obcr_facts.csv at Oracle Software Delivery Cloud. The

obcr_facts.csv file contains the list of facts that are used to configure rules in the system.

To create facts:

- 1. From the main menu in the Oracle Banking Collections and Recovery application, navigate to Rule and then click Fact.
- 2. From the Fact menu , click Create Fact.
- 3. Click Bulk Upload.
- Click Drag and Drop to browse to the required folder and select the obcr_facts.csv for upload.
- 5. Click Upload.

The obcr facts.csv file contains the list of facts as mentioned below.

Table 5-3 List of Facts for Oracle Banking Collections and Recovery

Code	Description	Product Processor	Туре
AccountOpeningORIntitialDisbursementDate	Account Opening OR Intitial Disbursement Date	OBCR	DATE
AccountWriteOffAmount	Account WriteOff Amount	OBCR	NUMBER
AccountWriteOffDate	Account WriteOff Date	OBCR	DATE
AccuralStatus	Accrual Status	OBCR	TEXT
AddressCountry	Address Country	OBCR	TEXT
AddressState	Address State	OBCR	TEXT
ApplicationScore	Application Score	OBCR	NUMBER



Table 5-3 (Cont.) List of Facts for Oracle Banking Collections and Recovery

Code	Description	Product Processor	Туре
AssetClassificationCode	Asset Classification Code	OBCR	TEXT
AvailableForDisbursement	Available For Disbursement	OBCR	TEXT
BICOEFlag	BICOE Flag	OBCR	TEXT
BehaviourScore	Behavior Score	OBCR	NUMBER
ChargeOffAmount	ChargeOff Amount	OBCR	NUMBER
CollateralType	Collateral Type	OBCR	TEXT
CustomerRiskScore	Customer Risk Score	OBCR	NUMBER
DaysChargeOff	Days Charge Off	OBCR	NUMBER
DaysPastDue	Days Past Due	OBCR	NUMBER
DaysSinceAccountLinkagetoCase	Days Since Account Linkage to Case	OBCR	NUMBER
DaysSinceCaseCreation	Days Since Case Creation	OBCR	NUMBER
DelinquencyStartDate	Delinquency Start Date	OBCR	DATE
DisbursedAmount	Disbursed Amount	OBCR	NUMBER
HomeBranchCode	Home Branch Code	OBCR	TEXT
InsuredSwitch	Insured Switch	OBCR	TEXT
InterestRate	Interest Rate	OBCR	NUMBER
LastPaymentAmount	Last Payment Amount	OBCR	NUMBER
LastPaymentDate	Last Payment Date	OBCR	DATE
LoanMaturityORLimitExpiryDate	Loan Maturity OR Limit Expiry Date	OBCR	DATE
OutstandingAmount	Outstanding Amount	OBCR	NUMBER
OverdueAmount	Overdue Amount	OBCR	NUMBER
PartyType	Party Type	OBCR	TEXT
ProductSubType	Product Sub Type	OBCR	TEXT
ProductType	Product Type	OBCR	TEXT
SecuredSwitch	Secured Switch	OBCR	TEXT
SystemAccountStatus	System Account Status	OBCR	TEXT
TotalCollateralAssessedValue	Total Collateral Assessed Value	OBCR	NUMBER
UnClearedPaymentAmount	UnCleared Payment Amount	OBCR	NUMBER
UserDefinedAccountStatus	User Defined Account Status	OBCR	TEXT
BusinessDate	Business Date	OBCR	DATE
CollectionStatus	Collection Status	OBCR	TEXT
ExistPromiseCount	Existing Promise Count	OBCR	NUMBER
ForcedAccountSwitch	Forced Account Switch	OBCR	TEXT
MaxPTPInstallCount	Maximum PTP Install Count	OBCR	NUMBER



Table 5-3 (Cont.) List of Facts for Oracle Banking Collections and Recovery

Code	Description	Product Processor	Туре
NewPromiseCount	New Promise Count	OBCR	NUMBER
ProductProcessorCd	Product Processor Code	OBCR	TEXT
PromiseAmount	Promise Amount	OBCR	NUMBER
PromiseDate	Promise Date	OBCR	DATE
Segment	Segment Code	OBCR	TEXT
VIPFlag	VIP Flag	OBCR	TEXT



Restart and Refresh

This topic describes the procedure to restart and refresh the servers.

Once everything is deployed, restart all the managed servers. For each application, call path /refresh to refresh the configuration properties.

Restart Server

To restart the server, see section **Restart Servers** of *Configuration and Deployment Guide*.



Logging Area

This topic describes the logging area of about the logging area of Oracle Banking Collections and Recovery applications in server.

The logging area is configurable. The user can configure any path within the server, where you want to write the Oracle Banking Collections and Recovery application logs. Oracle Banking Collections and Recovery applications write the logs in the configured path with the name: **Application name>.logs.** For example, if application name is **obcr-action-services**, then the logs file name would be obcr-action-servies.log.



A

Kafka SSL Setup

To configure Kafka SSL, follow below steps:

1. Execute below commands to create certificate on local machine.

```
"<keytoolPath>" -genkeypair -alias OBCRcert -keyalg RSA -keysize 1024 -
sigalg SHA512withRSA -validity 365 -keystore "<sslPath>/
KafkaServerKeystore.jks" -ext "SAN=IP:<machineIp>"

"<keytoolPath>" -export -alias OBCRcert -file <sslPath>/KafkaCert.crt -
keystore <sslPath>/KafkaServerKeystore.jks -keypass <Password> -storepass
<Password>

"<keytoolPath>" -import -alias OBCRcert -file <sslPath>/KafkaCert.crt -
keystore <sslPath>/KafkaServerTrustStore.jks -storepass <Password>

"<keytoolPath>" -import -alias OBCRcert -file <sslPath>/KafkaCert.crt -
keystore <sslPath>/KafkaClientTrustStore.jks -storepass <Password>
```

First command will prompt for the following attributes of the certificate and keystore:

- a. Keystore Password: <Password>
- b. Key Password: <Password>
- c. First and Last Name (CN):<machineName>
 - e.g. First and Last Name (CN):ofss-mumxxxx.snbomprshared1.gbucdsint02bom.oraclevcn.com
- d. Name of your Organizational Unit: obcr
- e. Name of your Organization : Oracle Financial Services
- f. Name of your City or Locality: Mumbai
- g. Name of your State or Province: Maharastra
- h. Two-letter CountryCode for this Unit: IN
- i. Please verify provided information is correct or not as below:
 OU=obcr, O=Oracle Financial Services, L=Mumbai, ST=Maharastra, C=IN correct?
 [no]: yes

Below files will be generated in ssl folder:

- KafkaServerKeystore.jks
- KafkaCert.crt
- KafkaServerTrustStore.jks



- KafkaClientTrustStore.jks
- 2. Copy generated files on env ssl folder (/scratch/ssl/kafka cert).
- 3. Verify /scratch/obma/kafka/kafka_2.13-2.8.1/config/server.properties, password, and ssl location is correct.

```
ssl.endpoint.identification.algorithm=
ssl.truststore.location=/scratch/ssl/kafka_cert/KafkaServerTrustStore.jks
ssl.truststore.password=Oracle@123
ssl.keystore.location=/scratch/ssl/kafka_cert/KafkaServerKeystore.jks
ssl.keystore.password=Oracle@123
ssl.key.password=Oracle@123
ssl.key.password=Oracle@123
sasl.enabled.mechanisms= SCRAM-SHA-256
sasl.mechanism.inter.broker.protocol= SCRAM-SHA-256
security.inter.broker.protocol=SSL_SSL
listeners=SASL_SSL://ofss-mum-2550.snbomprshared1.gbucdsint02bom.oraclevcn.com:9092
advertised.listeners=SASL_SSL://ofss-mum-2550.snbomprshared1.gbucdsint02bom.oraclevcn.com:9092
listener.name.sasl_ssl.scram-sha-256.sasl.jaas.config=org.apache.kafka.common.security.scram.Scr
```

4. Verify /scratch/obma/kafka/kafka_2.13-2.8.1/config/ssl.properties, ssl.truststore.password, username, password is correct.

```
ssl.truststore.location=/scratch/ssl/kafka_cert/KafkaClientTrustStore.jks
ssl.truststore.password=Oracle@123
security.protocol=SASL_SSL
ssl.endpoint.identification.algorithm=
sasl.mechanism=SCRAM-SHA-256
sasl.jaas.config=org.apache.kafka.common.security.scram.ScramLoginModule required \
username="obcr" \
password="obcr-secret";
```



5. Update kafka properties. Execute below queries on PLATO schema (replace machine name as per env).

```
update properties set value='ofss-mum-
xxxx.snbomprshared1.gbucdsint02bom.oraclevcn.com' where key like
'%plato.eventhub.kafka.brokers%';
update properties set value='ofss-mum-
xxxx.snbomprshared1.gbucdsint02bom.oraclevcn.com' where key like
'%plato.eventhub.zk.nodes%';
update properties set value='ofss-mum-
xxxx.snbomprshared1.gbucdsint02bom.oraclevcn.com:9092' where key like
'%spring.cloud.stream.kafka.binder.brokers%';
update properties set value='ofss-mum-
xxxx.snbomprshared1.gbucdsint02bom.oraclevcn.com:2181' where key like
'%spring.cloud.stream.kafka.binder.zknodes%';
update properties set value='obcr' where key like
'%spring.cloud.stream.kafka.binder.jaas.options.username%';
update properties set value='obcr-secret' where key like
'%spring.cloud.stream.kafka.binder.jaas.options.password%';
update properties set value='<Password>' where key like
'%spring.cloud.stream.kafka.binder.configuration.ssl.truststore.password%'
;
```

- 6. Stop zookeeper and kafka.
 - In putty, go to this location /scratch/obma/kafka/kafka_2.13-2.8.1/bin and run below command.

To stop zookeeper use command:

```
./zookeeper-server-stop.sh
```

- **Verify: No zookeeper server to stop** (run above command 2 times then this message is displayed)

To Stop Kafka use command

```
./kafka-server-stop.sh
```

- **Verify: No Kafka server to stop** (run above command 2 times then this message is displayed)
- If still the kafka/zoopkeeper does not stop, use the below command to stop kafka:

ps -ef|grep zookeeper

For specific process ID use the below command:

```
ps aux | grep
"org.apache.zookeeper.server.quorum.QuorumPeerMain" | grep -
v grep | awk '{print $2}'
```

Once you run the command, kill the process ID with below command:

```
kill -9 cess ID>
```

- ps -ef|grep kafka 2.13-2.8.1

For specific process ID use the below command:

```
jps | grep Kafka | awk '{print $1}'
```

Once you run the command, kill the process ID with below command:

```
kill -9 cess ID>
```

- 7. Delete kafka logs from this location (/scratch/obma/kafka/logs and /scratch/obma/kafka/kafka/scratch/obma/kafka/logs and /scratch/obma/kafka/logs and /scratch/obma/kafka/kafka/logs and /scratch/obma/kafka/logs and /scratch/obma/kafka/kafka/logs and /scratch/obma/kafka/logs and /scratch/obma/kaf
- 8. In Putty, go to this location /scratch/obma/kafka/kafka_2.13-2.8.1/bin and start zookeeper using command.

```
nohup ./zookeeper-server-start.sh ../config/zookeeper.properties &
```

9. In Putty, go to this location /scratch/obma/kafka/kafka_2.13-2.8.1/bin and execute below commands (replace machine name in command).

```
./kafka-configs.sh --zookeeper ofss-mum-xxxx.snbomprshared1.gbucdsint02bom.oraclevcn.com:2181 --alter --add-config "SCRAM-SHA-256=[password=admin-secret], SCRAM-SHA-512=[password=admin-secret]" --entity-type users --entity-name admin
```

```
./kafka-configs.sh --zookeeper ofss-mum-xxxx.snbomprshared1.gbucdsint02bom.oraclevcn.com:2181 --alter --add-config "SCRAM-SHA-256=[password=obcr-secret], SCRAM-SHA-512=[password=obcr-secret]" --entity-type users --entity-name obcr
```

10. In Putty, go to this location /scratch/obma/kafka/kafka_2.13-2.8.1/bin and start kafka using command:

```
nohup /scratch/obma/kafka/kafka_2.13-2.8.1/bin/kafka-server-
start.sh /scratch/obma/kafka/kafka 2.13-2.8.1/config/
```



```
server.properties > /scratch/obma/kafka/kafka_2.13-2.8.1/bin/start_server.log &
```

Verify: see the start log on location /scratch/obma/kafka/kafka_2.13-2.8.1/bin/start_server.log (if there is SSL handshake error is present the go for the step 11, other than any logs are present then follow the Verify Kafka is Up section below.

- Login in weblogic, restart server Plato_Others_Server1 and CMC_Server4 which contains below services.
 - plato-alerts-management-services
 - plato-batch-servers
 - cmc-advice-services

Confirm kafka error is gone in logs (/scratch/work area/logs).

Verify Kafka is Up

1. Execute below command:

```
ps -ef|grep kafka 2.13-2.8.1
```

It should show pid running.

- 2. Check logs at /scratch/obma/kafka/kafka_2.13-2.8.1/bin/server.log → no ssl error should present on this file.
- 3. Check logs here /scratch/obma/kafka/kafka_2.13-2.8.1/logs → it should display topic names.

Alternatively, you can check using below commands:

```
netstat -tlnp | grep :9092
```

Verify Kafka Health

Run the below command and verify:

```
$ netstat -tlnp | grep 9092
```



9092 is default port of kafka

Verify Zookeeper Health

Kafka instance will not start if Zookeeper is not yet started.

1. Run the below command and verify.

```
$ netstat tlnp | grep :2181 (2181 is default port of zookeeper)
top6 0 0 :::2181 :::* LISTEN 19936/java
```



2. To debug, check if the permissions of Kafka log folder are correct.

The log folder path can be found by looking at the value of the property log-dirs in the server.properties file of Kafka installation.

