Oracle® Banking Liquidity Management

Installation Guide

Release 14.7.4.0.0
G10122-01
June 2024

Oracle Banking Liquidity Management Installation Guide, Release 14.7.4.0.0

G10122-01

Contents

Preface

Purpose v
Audience v
Documentation Accessibility v
Diversity and Inclusion v
Related Resources vi
Organization vi

1 Database Setup

2 Product Installation using Installer

3 Domains and Cluster Configuration

4 Data Source Creation

5 Deployments

6 Restart and Refresh

7 Logging Area

8 Known Issues - Resolutions

Index

Preface

- Purpose
- Audience
- Documentation Accessibility
- Diversity and Inclusion
- Related Resources
- Organization

Purpose

This guide helps you to install theOracle Banking Liquidity Management 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.

> **Note:**
>
> For the exact version to be installed, refer to **Tech Stack** section in **Release Notes**.

Audience

This guide is intended for WebLogic admin or ops-web team who are responsible for installation of 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 on any related features, refer to the following documents:

- *Oracle Banking Liquidity Management Pre-Installation Guide*

Organization

This guide allows to install the following services in the same order:

Services

- oblm-cash-concentration-services
- oblm-dashboard-services
- oblm-icl-services
- oblm-integration-services
- oblm-maintenance-services
- oblm-messaging-services
- oblm-pool-services
- oblm-report-services
- oblm-rtl-services
- oblm-structure-services
- oblm-sweep-services
- vamlm-charge-services

UI

- app-shell
- cmc-component-server
- oblm-component-server
- sms-component-server
- obvamlm-component-server

> **Note:**
>
> To install Interest and Charges Services, refer to ***Interest and Charges Services Installation Guide***.

1

Database Setup

This topic describes the database setup for Oracle Banking Liquidity Management Installation.

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

Prerequisite

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

> **Note:**
>
> To know server's port number, refer to **Check Port Number** section in **Configuration and Deployment Guide**.

Database Setup

Create the below list of Oracle Banking Liquidity Management schema's:

Table 1-1 Database Setup

Service Name	Schema Required
oblm-batch-services	OBLMXXXLMB
oblm-cash-concentration-services	OBLMXXXLMC
oblm-dashboard-services	OBLMXXXLMD
oblm-icl-services	OBLMXXXICL
oblm-integration-services	OBLMXXXLMX
oblm-maintenance-services	OBLMXXXLMM
oblm-messaging-services	OBLMXXXLMG
oblm-pool-services	OBLMXXXLMX
oblm-report-services	OBLMXXXLMR
oblm-rtl-services	OBLMXXXLRT
oblm-structure-services	OBLMXXXLMA
oblm-sweep-services	OBLMXXXLMS
vamlm-charge-services	OBLMXXXCHG

> **Note:**
>
> Refer to **Migration of Schema for Existing Pool Structures** for change in existing schema from LMP to LMX for oblm-pool-services.

Migration of Schema for Existing Pool Structures

For the optimal performance of Pool & Reallocation operation, existing pool structures data has to be migrated. Following are the actions to be taken:

1. Update plato.properties set value = <<LMXSCHEMA>> where application = 'oblm-pool-services' and key = 'flyway.domain.schemas'.
2. Deploy the OBLM Pool Service.
3. The data from the tables mentioned above must be ported from existing pool schema (XXXLMP) to new schema (XXXLMX) for existing clients who have deployed oblm-pool-services
    - ERTB_MSGS
    - LMP_TB_POOL_CONTRIBUTION
    - LMP_TB_POOL_CONTRIBUTION_BVT
    - LMP_TB_POOL_LOG
    - LMP_TB_POOL_LOG_BVT
    - LMP_TB_POOL_LOG_SI
    - LMP_TB_POOL_POSITION
    - LMP_TB_POOL_POSITION_BVT
    - LMP_TB_POOL_POSITIONSI
    - LMP_TB_REALLOC_SYS_ACC_LINK
    - LMP_TB_REALLOCATION_DETAIL
    - LMP_TB_REALLOCATION_DETAILSI
    - LMP_TB_REALLOCATION_LOG
    - LMP_TB_REALLOCATION_LOGSI

User Grants

The following grants are provided to the user in the projection schema which is required in ML use cases.

- GRANT CREATE MINING MODEL TO <PROJECTION SCHEMA>;
- GRANT CREATE ANY MINING MODEL TO <PROJECTION SCHEMA>;
- GRANT ALTER ANY MINING MODEL TO <PROJECTION SCHEMA>;
- GRANT DROP ANY MINING MODEL TO <PROJECTION SCHEMA>;
- GRANT SELECT ANY MINING MODEL TO <PROJECTION SCHEMA>;
- GRANT COMMENT ANY MINING MODEL TO <PROJECTION SCHEMA>;
- GRANT AUDIT ANY TO <PROJECTION SCHEMA>;
- GRANT EXECUTE ON DBMS_DATA_MINING to <PROJECTION SCHEMA>;
- GRANT CREATE TABLE TO <PROJECTION SCHEMA>
- GRANT DROP TABLE TO <PROJECTION SCHEMA>

2

Product Installation using Installer

This topic describes the systematic information to install Oracle Banking Liquidity Management application using installer.

Pre-requisite

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

Software Pre-requisite

Before proceeding with installation setup, make sure that binaries of following software are present in the installer software directory.

- Oracle WebLogic
- Java HotSpot (TM) JDK (with WebLogic Application Server)
- Kafka
- Zookeeper (Embedded with Kafka)
- Zipkin

> **Note:**
>
> For the exact version to be installed, refer to **Tech Stack** section in **Release Notes**

Deployment Order

The deployment order for installing the services using installer.

- If OBLM And OBVAM are codeployed, then the order of deployment will be OBLM-> OBLM-IC-> OBVAM -> OBVAM-IC
- If OBLM is deployed standalone, then OBVAM-IC services are not required to be deployed.

Installer Path

The following table provides the path of the installer in OSDC Package.

Application	Archive Name	Path
Oracle Banking Mircoservices Architecture / Oracle Banking Liquidity Management	oblm-oblm_ic_patch_installer.zip, obma_patch_installer.zip, obvam_ic_patch_installer.zip	OBLM_14.7.3.0.0_7of7.zip

> **Note:**
>
> To install the application using installer, refer to **Oracle Banking Microservices Architecture Installer Guide**

3
Domains and Cluster Configuration

This topic describes the domain and cluster configuration for Oracle Banking Liquidity Management.

Prerequisites

1. Oracle Banking Microservices Architecture, SMS and Common core deployments are up and running. **(Required)**
2. Machine should have Java JDK installed.
3. Oracle Fusion Middleware has to be installed on the machine.

> **Note:**
>
> For the exact version to be installed, refer to the **Tech Stack** section in **Release Notes**.

Steps to Create Domain

It is recommended to have different managed server in one domain for each application. For creating domain and cluster configuration, refer to **Create Domain and Cluster Configuration** section in **Configuration and Deployment Guide**.

4

Data Source Creation

This topic describes about the data source creation for Oracle Banking Liquidity Management Installation.

Prerequisite

1. Database schema for all Oracle Banking Liquidity Management services are created, and all the required grants are given.
2. All the domains and clusters & managed servers are created.

Data Source List

The below list of the data sources has to be created on each domain before deployment of the applications onto the managed servers.

Table 4-1 Data Source List

Service Name	Data Source Name	Data Source JNDI	Target
oblm-maintenance-services	PLATO	jdbc/PLATO	Maintenance Server
	LMM	jdbc/LMM	
	SMS	jdbc/sms	
	PLATOFEED	jdbc/PLATOFEED	
	PLATOBATCH	jdbc/PLATOBATCH	
	CMNCORE	jdbc/CMNCORE	
	PLATO_UI_CONFIG	jdbc/ PLATO_UI_CONFIG	
oblm-integration-services	PLATO	jdbc/PLATO	Integration Server
	LMX	jdbc/LMX	
	SMS	jdbc/sms	
	PLATOFEED	jdbc/PLATOFEED	
	PLATOBATCH	jdbc/PLATOBATCH	
	CMNCORE	jdbc/CMNCORE	
	PLATO_UI_CONFIG	jdbc/ PLATO_UI_CONFIG	
oblm-rtl-services	PLATO	jdbc/PLATO	RTL Server
	LRT	jdbc/LRT	
	SMS	jdbc/sms	
	CMNCORE	jdbc/CMNCORE	
	PLATO_UI_CONFIG	jdbc/ PLATO_UI_CONFIG	
oblm-structure-services	PLATO	jdbc/PLATO	Structure Server
	LMA	jdbc/LMA	
	SMS	jdbc/sms	
	CMNCORE	jdbc/CMNCORE	

Table 4-1 (Cont.) Data Source List

Service Name	Data Source Name	Data Source JNDI	Target
	PLATO_UI_CONFIG	jdbc/ PLATO_UI_CONFIG	
oblm-cash-concentration-services	PLATO	jdbc/PLATO	Cash Concentration Server
	LMC	jdbc/LMC	
	SMS	jdbc/sms	
	PLATOFEED	jdbc/PLATOFEED	
	CMNCORE	jdbc/CMNCORE	
	PLATO_UI_CONFIG	jdbc/ PLATO_UI_CONFIG	
oblm-sweep-services	PLATO	jdbc/PLATO	Sweep Server
	LMS	jdbc/LMS	
	SMS	jdbc/sms	
	CMNCORE	jdbc/CMNCORE	
	PLATO_UI_CONFIG	jdbc/ PLATO_UI_CONFIG	
	PLATOBATCH	jdbc/PLATOBATCH	
oblm-pool-services	PLATO	jdbc/PLATO	Pool Server
	LMP	jdbc/LMP	
	SMS	jdbc/sms	
	PLATOBATCH	jdbc/PLATOBATCH	
	CMNCORE	jdbc/CMNCORE	
	PLATO_UI_CONFIG	jdbc/ PLATO_UI_CONFIG	
oblm-dashboard-services	PLATO	jdbc/PLATO	Dashboard Server
	LMD	jdbc/LMD	
	SMS	jdbc/sms	
	PLATOBATCH	jdbc/PLATOBATCH	
	CMNCORE	jdbc/CMNCORE	
	PLATO_UI_CONFIG	jdbc/ PLATO_UI_CONFIG	
oblm-report-services	PLATO	jdbc/PLATO	Report Server
	LMR	jdbc/LMR	
	SMS	jdbc/sms	
	CMNCORE	jdbc/CMNCORE	
	PLATO_UI_CONFIG	jdbc/ PLATO_UI_CONFIG	
oblm-icl-services	PLATO	jdbc/PLATO	ICL Server
	ICL	jdbc/ICL	
	SMS	jdbc/sms	
	CMNCORE	jdbc/CMNCORE	
	PLATO_UI_CONFIG	jdbc/ PLATO_UI_CONFIG	
oblm-messaging-services	PLATO	jdbc/PLATO	Messaging Server
	LMG	jdbc/LMG	
	SMS	jdbc/sms	

Table 4-1 (Cont.) Data Source List

Service Name	Data Source Name	Data Source JNDI	Target
	PLATOBATCH	jdbc/PLATOBATCH	
	CMNCORE	jdbc/CMNCORE	
	PLATO_UI_CONFIG	jdbc/ PLATO_UI_CONFIG	
vamlm-charge-services	PLATO	jdbc/PLATO	Charges Server
	VAMLMCHG	jdbc/VAMLMCHG	
	SMS	jdbc/sms	
	CMNCORE	jdbc/CMNCORE	
	PLATO_UI_CONFIG	jdbc/ PLATO_UI_CONFIG	

Note:

For creating a data source, refer to **Create Data Source** section in **Configuration and Deployment Guide**.

5 Deployments

This topic describes about the deployments for Oracle Banking Liquidity Management Installation.

Prerequisite

- While deploying the services, change the WLS time out to reasonably high (may be 100s of minutes or hours) as it may have data conversion scripts. After successful deployment, the timeout can be restored back to customer organization standards.
- During deployment of services, turn the flyway enabled “true”. After successful deployment, turn the flyway enabled flag to “false”.

Before proceeding with the below setup, make sure that the previous steps are completed.

Deployment List

The below table gives the details of the deployments required on each server to run Oracle Banking Liquidity Management application. Deploy one after the another in the given order.

Table 5-1 Deployment List

Services Application	Archive Name	OSDC Path	Target
oblm-maintenance-services	oblm-maintenance-services-{version}.war	\OBLM_SERVICES\oblm-maintenance-services	Maintenance Server
oblm-integration-services	oblm-integration-services-{version}.war	\OBLM_SERVICES\oblm-integration-services\	Integration Server
oblm-rtl-services	oblm-rtl-services-{version}.war	\OBLM_SERVICES\oblm-rtl-services\	RTL Server
oblm-structure-services	oblm-structure-services-{version}.war	\OBLM_SERVICES\oblm-structure-services\	Structure Server
oblm-cash-concentration-services	oblm-cash-concentration-services-{version}.war	\OBLM_SERVICES\oblm-cash-concentration-services\	Cash Concentration Server
oblm-sweep-services	oblm-sweep-services-{version}.war	\OBLM_SERVICES\oblm-sweep-services\	Sweep Server
oblm-pool-services	oblm-pool-services-{version}.war	\OBLM_SERVICES\oblm-pool-services\	Pool Server
oblm-dashboard-services	oblm-dashboard-services-{version}.war	\OBLM_SERVICES\oblm-dashboard-services\	Dashboard Server
oblm-report-services	oblm-report-services-{version}.war	\OBLM_SERVICES\oblm-report-services\	Report Server
oblm-icl-services	oblm-icl-services-{version}.war	\OBLM_SERVICES\oblm-icl-services\	ICL Server
oblm-messaging-services	oblm-messaging-services-{version}.war	\OBLM_SERVICES\oblm-messaging-services\	Messaging Server
vamlm-charge-services	vamlm-charge-services-{version}.war	\OBVAM_LM_CHARGES\vamlm-charge-services\	Charges Server

> **Note:**
>
> Refer to OSDC file for the exact version number for each service.

Vamlm-charge-services Deployment

vamlm-charge-services is the common services for Oracle Banking Virtual Account Management and Oracle Banking Liquidity Management. In a co-deployed situation, it should be deployed from one of the packages.

Both the product packages should contain the same version of this service. If the user deploy it from the one of the product packages, then do not deploy it from the other one.

> **Note:**
>
> The value of deployment type in the property table is dependent on the type of deployment.
>
> - If the deployment is standalone for Oracle Banking Liquidity Management, the value should be **lmchg**.
> - If the deployment is standalone for Oracle Banking Virtual Account Management, the value should be **vamchg**.
> - If the deployment is common for both the products, the value should be **codeployed**.

The below listed common core services must be deployed in a common server to enable the vamlm-charge-services.

- cmc-businessoverrides-services
- cmc-charges-calculation-services
- cmc-resource-segment-orchestrator-service
- cmc-resourceclass-services
- cmc-screenclass-services

UI

Table 5-2 Deployment List - UI

Services Application	Archive Name	OSDC Path	Target
app-shell	app-shell-{version}.war	\UI	UI Server
oblm-component-server	oblm-component-server-{version}.war	\UI	UI Server
cmc-component-server	cmc-component-server-{version}.war	\UI	UI Server
sms-component-server	sms-component-server-{version}.war	\UI	UI Server
obvamlm-component-server	obvamlm-component-server-{version}.war	\UI	UI Server

Table 5-2 (Cont.) Deployment List - UI

Services Application	Archive Name	OSDC Path	Target
obic-component-server	obic-component-server-{version}.war	\UI	UI Server

> **Note:**
>
> Refer to OSDC file for the exact version number for each service.

obvamlm-component-server Deployment:

obvamlm-component-server is the common component server for Charges in Oracle Banking Virtual Account Management and Oracle Banking Liquidity Management. In a co-deployed situation, it should be deployed from only one of the packages.

Both the product packages contain the exact same version of this component server. If the user deploy it from the one of the product packages, then do not deploy it from the other one.

> **Note:**
>
> To deploy the application, refer to **Deploy Application** section in **Configuration and Deployment Guide**.

> **Note:**
>
> Refer to the **Known Issues – Resolution** section to resolve the deployment issue for the services

6
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.

> **Note:**
>
> To restart the server, refer to **Restart Server** section in **Configuration and Deployment Guide**.

7

Logging Area

This topic describes about the logging area of Oracle Banking Liquidity Management applications in WebLogic server.

Oracle Banking Liquidity Management application writes logs in the below area of the server:

`<WEBLOGIC_DOMAIN_CONFIG_AREA/servers/OBLMAPP/logs/OBLMAPP.out`

Let us assume a domain has been created **oblm_domain** with **managed_server** name called **OBLMAPP** in the following area of the server.

`/scratch/oracle/middleware/user_projects/domains/oblm_domain`.

Logging area for Oracle Banking Liquidity Management applications would be `/scratch/oracle/middleware/user_projects/domains/oblm_domain/servers/OBLMAPP/logs/OBLMAPP.out`.

8
Known Issues - Resolutions

This topic describes about the known issues - resolutions.

Deployment issue while installing the application using Installer

Datasource Properties Issue
Problem
While deploying the war file fails with below error:

Error
```
dataSource or dataSourceClassName or jdbcUrl is required
```

Solutions

1. If the product and foundation setup are in 2 different VM's, ensure that the syncup between these 2 VM's are performed.
2. Login to the plato schema and verify the entries for the respective warfile application are correct in the properties table like, jdbcURL, schema name, port etc..,
3. Check the Hostname and plato related URL in setuserOverrides.sh of product.
4. Restart the service.

JDBC Issue
Problem
While deploying the war file fails with below error:

Error
```
jdbc.<<SCHEMA_NAME>
```

Solutions
The JDBC Issue is encountered due to incorrect password in databag or incorrect entries in the properties table for the war file getting deployed.

1. Verify the password of the respective schema of the war file being deployed in databag.
2. In Plato schema, verify the entries of the war file being deployed in the properties table. Check jdbcurl, schema name and port no. are correct.
3. If required update the same with correct values.
4. Restart the service.

Index

D

Data Source Creation, *4-1*
Database Setup, *1-1*
Deployments, *5-1*
Domains and Cluster Configuration, *3-1*

K

Known Issues - Resolutions, *8-1*

L

Logging Area, *7-1*

P

Product Installation using Installer, *2-1*

R

Restart and Refresh, *6-1*