

Oracle® Banking Liquidity Management

Interest and Charges Services Installation Guide



Release 14.7.0.3.0

F86179-01

August 2023

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

ORACLE®

Copyright © 2018, 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

Preface

Purpose	iv
Audience	iv
Documentation Accessibility	iv
Diversity and Inclusion	v
Related Resources	v
Conventions	v
Organization	v

1 Database Setup

2 Domains and Cluster Configuration

3 Data Source Creation

4 Deployments

5 Restarts and Refresh

6 Logging Area

Index

Preface

- [Purpose](#)
- [Audience](#)
- [Documentation Accessibility](#)
- [Diversity and Inclusion](#)
- [Related Resources](#)
- [Conventions](#)
- [Organization](#)

Purpose

This guide helps to install the Interest and Charges 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.

It is recommended to use dedicated managed server for each of the Interest and Charges services.



Note:

For the exact version to be installed, refer to **Tech Stack** section of **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 Installation Guide*
- *Configuration and Deployment 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.
<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.

Organization

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

- oblm-ic-config-services
- oblm-ic-charge-calc-services
- oblm-ic-bod-batch-services
- oblm-ic-external-adapter-services
- oblm-ic-intchg-accting-services
- oblm-ic-interest-accrual-services
- oblm-ic-interest-allocate-services
- oblm-ic-interest-batch-services
- oblm-ic-interest-calc-services

- oblm-ic-interest-input-services
- oblm-ic-interest-liquidation-services
- oblm-ic-interest-maintqueue-services
- oblm-ic-interest-resolve-services
- oblm-ic-maintenance-services
- oblm-ic-online-liquidation-services

If the IC services are installed for Oracle Banking Virtual Account Management instead of the above services below listed services has to be deployed in the below order:

- obvam-ic-config-services
- obvam-ic-charge-calc-services
- obvam-ic-bod-batch-services
- obvam-ic-external-adapter-services
- obvam-ic-intchg-accting-services
- obvam-ic-interest-accrual-services
- obvam-ic-interest-allocate-services
- obvam-ic-interest-batch-services
- obvam-ic-interest-calc-services
- obvam-ic-interest-input-services
- obvam-ic-interest-liquidation-services
- obvam-ic-interest-maintqueue-services
- obvam-ic-interest-resolve-services
- obvam-ic-maintenance-services
- obvam-ic-online-liquidation-services

1

Database Setup

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

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

- For IC to Oracle Banking Liquidity Management, IC services will use the existing Oracle Banking Liquidity Management's Integration Schema.
- For IC to Oracle Banking Virtual Account Management, IC services will use the existing obvam-account-services Schema.

 **Note:**

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

2

Domains and Cluster Configuration

This topic describes about the domain configuration for Interest and Charges Services in Oracle Banking Liquidity Management.

Prerequisite

- Oracle Banking Microservices Architecture, SMS & Common core deployments are up & running. **(Required)**.
- Machine should have Java JDK installed.
- Oracle Fusion Middleware has to be installed on the machine.
- Deployment of OBLM integration services or OBVAM account service must be completed.



Note:

For the exact version to be installed, refer to **Tech Stack** section of **Release Notes**.

Domains Creation and Configuration

It is recommended to create the domain structure as given below and to maintain the same nomenclature. For creating Domain and Configuration, refer to **Create Domain and Cluster Configuration** section in **Configuration and Deployment Guide**.

Domain name: obic

- oblm-ic-config-cluster
 - managed_server1
- oblm-ic-charge-calc-cluster
 - managed_server2
- oblm-ic-intchg-accting-cluster
 - managed_server3
- oblm-ic-interest-accrual-cluster
 - managed_server4
- oblm-ic-interest-allocate-cluster
 - managed_server5
- oblm-ic-interest-batch-cluster
 - managed_server6
- oblm-ic-interest-calc-cluster
 - managed_server7

- oblm-ic-interest-input-cluster
 - managed_server8
- oblm-ic-interest-liquidation-cluster
 - managed_server9
- oblm-ic-interest-maintqueue-cluster
 - managed_server10
- oblm-ic-interest-resolve-cluster
 - managed_server11
- oblm-ic-maintenance-cluster
 - managed_server12
- oblm-ic-online-liquidation-cluster
 - managed_server13
- oblm-ic-bod-batch-cluster
 - managed_server14
- oblm-ic-external-adapter-cluster
 - managed_server15

Domains Creation and Configuration IC with Oracle Banking Virtual Account Management

It is recommended to create the domain structure as given below and to maintain the same nomenclature. For creating Domain and Configuration, refer to **Create Domain and Cluster Configuration** section in **Configuration and Deployment Guide**.

Domain name: obic

- obvam-ic-config-cluster
 - managed_server1
- obvam-ic-charge-calc-cluster
 - managed_server2
- obvam-ic-intchg-accting-cluster
 - managed_server3
- obvam-ic-interest-accrual-cluster
 - managed_server4
- obvam-ic-interest-allocate-cluster
 - managed_server5
- obvam-ic-interest-batch-cluster
 - managed_server6
- obvam-ic-interest-calc-cluster
 - managed_server7
- obvam-ic-interest-input-cluster

- managed_server8
- obvam-ic-interest-liquidation-cluster
 - managed_server9
- obvam-ic-interest-maintqueue-cluster
 - managed_server10
- obvam-ic-interest-resolve-cluster
 - managed_server11
- obvam-ic-maintenance-cluster
 - managed_server12
- obvam-ic-online-liquidation-cluster
 - managed_server13
- obvam-ic-bod-batch-cluster
 - managed_server14
- obvam-ic-external-adapter-cluster
 - managed_server15

3

Data Source Creation

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

Prerequisites

- Database schemas for all Interest and Charges services are created and all the required grants are given.
- All the domains and clusters & managed servers are created.

Data Sources List

The table below lists the data sources to be created on each managed server prior to deployment of applications onto managed servers.

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

Table 3-1 Data Source List

Data Source Name	Data Source JNDI	Target
PLATO	jdbc/PLATO	managed_server1
OBIC	jdbc/OBIC	managed_server2
PLATOBATCH	jdbc/PLATOBATCH	managed_server3
PLATOFEED	jdbc/PLATOFEED	managed_server4
PLATO_UI_CONFIG	jdbc/PLATO_UI_CONFIG	managed_server5
SMS	jdbc/sms	managed_server6 managed_server7 managed_server8 managed_server9 managed_server10 managed_server11 managed_server12 managed_server13 managed_server14 managed_server15

4

Deployments

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

Prerequisite

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

Deployment List - Oracle Banking Liquidity Management

The below table provides the deployment details required on each server for Oracle Banking Liquidity Management applications to run. Deploy one after another in the same order.

Table 4-1 Deployments List - Oracle Banking Liquidity Management

Application	Archive Name	OSDC Path	Target
oblm-ic-config-services	oblm-ic-config-services-{version}.war	\\OBIC_SERVICES\OBL\M\oblm-ic-config-services\	oblm-ic config server
oblm-ic-charge-calc-services	oblm-ic-charge-calc-services-{version}.war	\\OBIC_SERVICES\OBL\M\oblm-ic-charge-calc-services\	oblm-ic charge calc server
oblm-ic-intchg-accting-services	oblm-ic-intchg-accting-services-{version}.war	\\OBIC_SERVICES\OBL\M\oblm-ic-intchg-accting-services\	oblm-ic intchg accting server
oblm-ic-interest-accrual-services	oblm-ic-interest-accrual-services-{version}.war	\\OBIC_SERVICES\OBL\M\oblm-ic-interest-accrual-services\	oblm-ic interest accrual server
oblm-ic-interest-allocate-services	oblm-ic-interest-allocate-services-{version}.war	\\OBIC_SERVICES\OBL\M\oblm-ic-interest-allocate-services\	oblm-ic interest allocate server
oblm-ic-interest-batch-services	oblm-ic-interest-batch-services-{version}.war	\\OBIC_SERVICES\OBL\M\oblm-ic-interest-batch-services\	oblm-ic interest batch server
oblm-ic-interest-calc-services	oblm-ic-interest-calc-services-{version}.war	\\OBIC_SERVICES\OBL\M\oblm-ic-interest-calc-services\	oblm-ic interest calc server
oblm-ic-interest-input-services	oblm-ic-interest-input-services-{version}.war	\\OBIC_SERVICES\OBL\M\oblm-ic-interest-input-services\	oblm-ic interest input server
oblm-ic-interest-liquidation-services	oblm-ic-interest-liquidation-services-{version}.war	oblm-ic-interest-liquidation-services-6.0.0.war	oblm-ic interest liquidation server
oblm-ic-interest-maintqueue-services	oblm-ic-interest-maintqueue-services-{version}.war	\\OBIC_SERVICES\OBL\M\oblm-ic-interest-maintqueue-services\	oblm-ic interest maintqueue server

Table 4-1 (Cont.) Deployments List - Oracle Banking Liquidity Management

Application	Archive Name	OSDC Path	Target
oblm-ic-interest-resolve-services	oblm-ic-interest-resolve-services-{version}.war	\\OBIC_SERVICES\OBL\M\oblm-ic-interest-resolve-services\	oblm-ic interest resolve server
oblm-ic-maintenance-services	oblm-ic-maintenance-services-{version}.war	\\OBIC_SERVICES\OBL\M\oblm-ic-maintenance-services\	oblm-ic maintenance server
oblm-ic-online-liquidation-services	oblm-ic-online-liquidation-services-{version}.war	\\OBIC_SERVICES\OBL\M\oblm-ic-online-liquidation-services\	oblm-ic online liquidation server
oblm-ic-bod-batch-services	oblm-ic-bod-batch-services-{version}.war	\\OBIC_SERVICES\OBL\M\oblm-ic-bod-batch-services\	oblm-ic bod batch server
oblm-ic-external-adapter-services	oblm-ic-external-adapter-services-{version}.war	\\OBIC_SERVICES\OBL\M\oblm-ic-external-adapter-services\	oblm-ic external adapter server

**Note:**

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

Deployment List - Oracle Banking Virtual Account Management

The below table provides the deployment details required on each server for Oracle Banking Virtual Account Management applications to run. Deploy one after another in the same order.

Table 4-2 Deployment List - Oracle Banking Virtual Account Management

Application	Archive Name	OSDC Path	Target
obvam-ic-config-services	obvam-ic-config-services-{version}.war	\\OBIC_SERVICES\obvam\obvam-ic-config-services\	obvam-ic config server
obvam-ic-charge-calc-services	obvam-ic-charge-calc-services-{version}.war	\\OBIC_SERVICES\obvam\obvam-ic-charge-calc-services\	obvam-ic charge calc server
obvam-ic-intchg-acting-services	obvam-ic-intchg-acting-services-{version}.war	\\OBIC_SERVICES\obvam\obvam-ic-intchg-acting-services\	obvam-ic intchg acting server
obvam-ic-interest-accrual-services	obvam-ic-interest-accrual-services-{version}.war	\\OBIC_SERVICES\obvam\obvam-ic-interest-accrual-services\	obvam-ic interest accrual server
obvam-ic-interest-allocate-services	obvam-ic-interest-allocate-services-{version}.war	\\OBIC_SERVICES\obvam\obvam-ic-interest-allocate-services\	obvam-ic interest allocate server

Table 4-2 (Cont.) Deployment List - Oracle Banking Virtual Account Management

Application	Archive Name	OSDC Path	Target
obvam-ic-interest-batch-services	obvam-ic-interest-batch-services-{version}.war	\OBIC_SERVICES\obvam\obvam-ic-interest-batch-services\	obvam-ic interest batch server
obvam-ic-interest-calc-services	obvam-ic-interest-calc-services-{version}.war	\OBIC_SERVICES\obvam\obvam-ic-interest-calc-services\	obvam-ic interest calc server
obvam-ic-interest-input-services	obvam-ic-interest-input-services-{version}.war	\OBIC_SERVICES\obvam\obvam-ic-interest-input-services\	obvam-ic interest input server
obvam-ic-interest-liquidation-services	obvam-ic-interest-liquidation-services-{version}.war	\OBIC_SERVICES\obvam\obvam-ic-interest-liquidation-services\	obvam-ic interest liquidation server
obvam-ic-interest-maintqueue-services	obvam-ic-interest-maintqueue-services-{version}.war	\OBIC_SERVICES\obvam\obvam-ic-interest-maintqueue-services\	obvam-ic interest maintqueue server
obvam-ic-interest-resolve-services	obvam-ic-interest-resolve-services-{version}.war	\OBIC_SERVICES\obvam\obvam-ic-interest-resolve-services\	obvam-ic interest resolve server
obvam-ic-maintenance-services	obvam-ic-maintenance-services-{version}.war	\OBIC_SERVICES\obvam\obvam-ic-maintenance-services\	obvam-ic maintenance server
obvam-ic-bod-batch-services	obvam-ic-bod-batch-services-{version}.war	\OBIC_SERVICES\OBBLM\obvam-ic-bod-batch-services\	obvam-ic bod batch server
obvam-ic-external-adapter-services	obvam-ic-external-adapter-services-{version}.war	\OBIC_SERVICES\OBBLM\obvam-ic-external-adapter-services\	obvam-ic external adapter server
obvam-ic-online-liquidation-services	obvam-ic-online-liquidation-services-{version}.war	\OBIC_SERVICES\obvam\obvam-ic-online-liquidation-services\	obvam-ic online liquidation server

**Note:**

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

Steps to Deploy as Application

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

5

Restarts 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 Servers** section in **Configuration and Deployment Guide**.

6

Logging Area

This topic describes about the logging area of Interest and Charges Applications in WebLogic server.

Server Logs

Managed Server writes logs in the below area of the server: `<WEBLOGIC_DOMAIN_CONFIG_AREA/servers/managed_server1/logs/ managed_server1.out`

Let's assume a domain has been created obic with managed_server name called managed_server1 in the following area of the server `/scratch/oracle/middleware/user_projects/domains/obic`.

Logging area for Interest and Charges applications would be `/scratch/oracle/middleware/user_projects/domains/obic/servers/managed_server1/logs/managed_server1.out`

Application Log

Application logs are found under `/scratch/obic/logs` and this path has to be configured in `setDomainEnv.sh` as `-Dplato.service.logging.path=/scratch/obic/logs`

Index

D

Data Source Creation, [3-1](#)

Database Setup, [1-1](#)

L

Logging Area, [6-1](#)