# Oracle® Banking Corporate Lending Process Management Installation Guide



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Oracle Banking Corporate Lending Process Management Installation Guide, Release 14.7.2.0.0

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## Preface

This topic contains following sub-topics:

- Introduction
- Audience
- Acronyms and Abbreviations
- List Of Topics

## Introduction

This guide would help you to install the 'Oracle Banking Corporate Lending Process Management' OBCLPM services on designated environment. It is assumed that all the prior setup is already done related with WebLogic 12.2.1.4 installation, WebLogic managed server creation and Oracle DB installation. It is recommended to use dedicated managed server for the OBCLPM services.

## Audience

This document is intended for admin or ops-web team who are responsible for installing the Oracle Financial Services Software Limited banking products.

## Acronyms and Abbreviations

The list of the acronyms and abbreviations used in this guide are as follows:

| Abbreviation | Description                           |
|--------------|---------------------------------------|
| CMC          | Common Core                           |
| EOD          | End of Day                            |
| LDAP         | Lightweight Directory Access Protocol |
| OBRH         | Oracle Banking Routing Hub            |
| SMS          | Security Management System            |

#### Table 1 Acronyms and Abbreviations

## **List Of Topics**

This manual is organized into the following topics.



### Table 2 List of Topics

| Topics                           | Description and Cross References   |
|----------------------------------|--|
| Database Setup                   | This topic helps you to set up database related configuration for OBCLPM Installation.   |
| Domain and Cluster Configuration | This topic helps you to set up domain and cluster configuration.   |
| Data Sources Creation            | This topic helps you to create data sources.   |
| Deployments                      | This topic helps you to setup database and data<br>sources creation that needs to be performed prior<br>to the application deployment stage. |
| Restarts and Refresh             | This topic helps you to restart all the managed servers.   |
| Logging Area                     | This topic discusses about the log area where<br>after deployment of Common Core Applications in<br>WebLogic server.                         |
| Integration Routing using OBRH   | This topic discusses about integration routing using OBRH.   |

# 1 Database Setup

Use OBCLPM service schemas and SMS schemas to setup database.

#### Introduction

This section explains about setting up database related configuration for OBCLPM Installation.

#### **Pre-requisite**

Below setup is dependent on OBCLPM service schemas and SMS schema. So, before you proceed with below setup ensure OBCLPM service schemas and SMS Schema is provided to you.

#### **Database Setup**

To setup DB for OBCLPM schema's to be created.

#### Table 1-1 Database Setup

| Service Name                          | Schema Required |
|---------------------------------------|-----------------|
| CLMO-CMC-PARTY-SERVICES               | Yes             |
| CLMO-PARTY-SERVICES                   | Yes             |
| CLMO-LOANAPPLICATION-SERVICES         | Yes             |
| CLMO-BACKOFFICE-SERVICES              | Yes             |
| CLMO-BUSINESSPROCESS-SERVICES         | Yes             |
| CLMO-BUSINESSPRODUCT-SERVICES         | Yes             |
| CLMO-HANDOFF-SERVICES                 | Yes             |
| CLMO-MAINTENANCE-SERVICES             | Yes             |
| CLMO-ORCHESTRATION-SERVICES           | Yes             |
| CLMO-SYNDICATIONAPPLICATION-SERVICES  | Yes             |
| CLMO-TRANSACTIONORCHESTRATOR-SERVICES | Yes             |
| CLMO-CONDITIONSUBSEQUENT-SERVICES     | Yes             |
| CLMO-COVENANTS-SERVICES               | Yes             |
| CLMO-BATCH-FORGETCUSTOMER-SERVICES    | Yes             |
| CLMO-NLP-PROCESSING-SERVICES          | Yes             |
| CLMO-PAYMENT-SERVICES                 | Yes             |



# 2 Domain and Cluster Configuration

Use domain and cluster configuration to create Oracle Banking Corporate Lending Process Management domain.

#### Prerequisites

- 1. Machine should have Java JDK11.0.14 has installed.
- 2. Oracle Fusion Middleware 14c 14.1.1 has to be installed on the machine.

## Note:

Before proceeding with below steps complete Oracle Banking Microservices *Platform Foundation Installation Guide*.

3. Steps for creating OBCLPM domain, properties like port numbers, names are changed based on the domain. Screenshots provided for such deviations. Domain creation process remains the same.

#### **Steps to Create Domain**

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



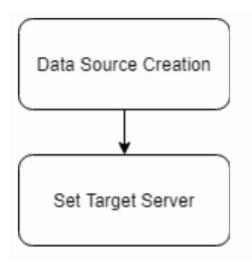
# 3 Data Source Creation

Use database and application setup for OBCLPM services has to be performed prior to deployment setup.

#### Prerequisite

The data sources for the respective micro-services must be created first before the application deployment. Each of the data source target to their corresponding servers on which the application will be deployed. The following sections explain the list of data sources required to be created for OBCLPM services and the steps to configure them in the server.

#### Figure 3-1 Data Source Creation



#### **Data sources List**

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

| Data source Name | Data source JNDI   | Targets        |
|------------------|--------------------|----------------|
| OBCLPMPRTYAPP    | jdbc/OBCLPMPRTYAPP | OBCLPM Managed |
| OBCLPMLOANAPP    | jdbc/OBCLPMLOANAPP | Server         |
| OBCLPMBACKOFF    | jdbc/OBCLPMBACKOFF |                |
| OBCLPMBUSSPRC    | jdbc/OBCLPMBUSSPRC |                |
| OBCLPMBUSSPRD    | jdbc/OBCLPMBUSSPRD |                |
| OBCLPMHANDOFF    | jdbc/OBCLPMHANDOFF |                |
| OBCLPMMAINTCE    | jdbc/OBCLPMMAINTCE |                |

#### Table 3-1 Data sources List



| Data source Name      | Data source JNDI       | Targets |
|-----------------------|------------------------|---------|
| OBCLPMORCHESN         | jdbc/OBCLPMORCHESN     |         |
| OBCLPMSYNDAPP         | jdbc/OBCLPMSYNDAPP     |         |
| OBCLPMTXNORCH         | jdbc/OBCLPMTXNORCH     |         |
| OBCLPMCNDSUB          | jdbc/OBCLPMCNDSUB      |         |
| OBCLPMCOVMN           | jdbc/OBCLPMCOVMN       |         |
| OBCLPMNLPPRCNGA<br>PP | jdbc/OBCLPMNLPPRCNGAPP |         |
| OBCLPMPAYAPP          | jdbc/OBCLPMPAYAPP      |         |
| OBCLPM                | jdbc/OBCLPM            |         |
| OBCLPMBUSSOVR         | jdbc/OBCLPMBUSSOVR     |         |

| Table 3-1 | (Cont.) | Data sou | rces List |
|-----------|---------|----------|-----------|
|-----------|---------|----------|-----------|

Steps to create data source in WebLogic is same for all the above except for the connection details and names.

For creating data source, refer How to create Data sources section in *Configuration and Deployment* guide.



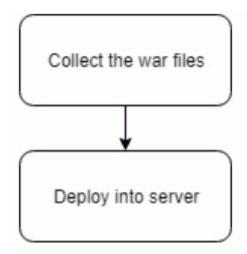
## 4 Deployments

Use database setup and data sources creation prior to the application deployment stage.

#### **Pre-requisite**

Each of the services corresponds to a specific war file that needs to be deployed into the server. The following sections explain the list of war files of the OBCLPM service and the steps to deploy them into the server.

Figure 4-1 Deployments



- Environment variables need to be set, refer Configuration and Deployment Guide.
- For any issues with fly configuration setup, refer Observability Guide.

#### **Deployments List**

Below table gives details of the deployments required on each domain for the OBCLPM applications to run. Deploy one after other in the same given order.

#### Note:

Prior to deploying CLMO-ORCHESTRATION-SERVICES, ensure that the conductor workflows are deployed. Refer to *Oracle Banking Corporate Lending Process Management Conductor Process Installation Guide* for deployment of conductor workflows.



| Application                               | Archive name  | OSDC path   | Targets                  |
|---|---|---|--------------------------|
| CLMO-BACKOFFICE-<br>SERVICES              | clmo-backoffice-<br>services-x.x.x.war              | {Unzip OSDC<br>Package}<br>\OBCLPM_SERVICE<br>S\cImo-backoffice-<br>services\               | OBCLPM Managed<br>Server |
| CLMO-<br>BUSINESSPROCESS<br>-SERVICES     | clmo-<br>businessprocess-<br>services-x.x.x.war     | {Unzip OSDC<br>Package}<br>\OBCLPM_SERVICE<br>S\ clmo-<br>businessprocess-<br>services      | OBCLPM Managed<br>Server |
| CLMO-<br>BUSINESSPRODUCT<br>-SERVICES     | clmo-<br>businessproduct-<br>services-x.x.x.war     | {Unzip OSDC<br>Package}<br>\OBCLPM_SERVICE<br>S\ clmo-<br>businessproduct-<br>services\     | OBCLPM Managed<br>Server |
| CLMO-CMC-PARTY-<br>SERVICES               | clmo-cmc-party-<br>services-x.x.x.war               | {Unzip OSDC<br>Package}<br>\OBCLPM_SERVICE<br>S\ clmo-cmc-party-<br>services\               | OBCLPM Managed<br>Server |
| CLMO-<br>CONDITIONSUBSEQ<br>UENT-SERVICES | clmo-<br>conditionsubsequent-<br>services-x.x.x.war | {Unzip OSDC<br>Package}<br>\OBCLPM_SERVICE<br>S\ clmo-<br>conditionsubsequent-<br>services\ | OBCLPM Managed<br>Server |
| CLMO-COVENANTS-<br>SERVICES               | clmo-covenants-<br>services-x.x.x.war               | {Unzip OSDC<br>Package}<br>\OBCLPM_SERVICE<br>S\ clmo-covenants-<br>services\               | OBCLPM Managed<br>Server |
| CLMO-HANDOFF-<br>SERVICES                 | clmo-handoff-<br>services-x.x.x.war                 | {Unzip OSDC<br>Package}<br>\OBCLPM_SERVICE<br>S\ clmo-handoff-<br>services                  | OBCLPM Managed<br>Server |
| CLMO-<br>LOANAPPLICATION-<br>SERVICE      | clmo-loanapplication-<br>services-x.x.x.war         | {Unzip OSDC<br>Package}<br>\OBCLPM_SERVICE<br>S\ clmo-<br>loanapplication-<br>services\     | OBCLPM Managed<br>Server |
| CLMO-<br>MAINTENANCE-<br>SERVICES         | clmo-maintenance-<br>services-x.x.x.war             | {Unzip OSDC<br>Package}<br>\OBCLPM_SERVICE<br>S\ clmo-maintenance-<br>services\             | OBCLPM Managed<br>Server |

Table 4-1Deployments List



| Application                                   | Archive name  | OSDC path   | Targets                  |
|---|---|---|--------------------------|
| CLMO-<br>ORCHESTRATION-<br>SERVICES           | clmo-orchestration-<br>services-x.x.x.war               | {Unzip OSDC<br>Package}<br>\OBCLPM_SERVICE<br>S\ clmo-orchestration-<br>service                 | OBCLPM Managed<br>Server |
| CLMO-PARTY-<br>SERVICES                       | clmo-party-services-<br>x.x.x.war                       | {Unzip OSDC<br>Package}<br>\OBCLPM_SERVICE<br>S\ clmo-party-<br>services\                       | OBCLPM Managed<br>Server |
| CLMO-<br>SYNDICATIONAPPLI<br>CATION-SERVICES  | clmo-<br>syndicationapplication<br>-services-x.x.x.war  | {Unzip OSDC<br>Package}<br>\OBCLPM_SERVICE<br>S\ clmo-<br>syndicationapplication<br>-services\  | OBCLPM Managed<br>Server |
| CLMO\TRANSACTIO<br>NORCHESTRATOR-<br>SERVICES | clmo-<br>transactionorchestrato<br>r-services-x.x.x.war | {Unzip OSDC<br>Package}<br>\OBCLPM_SERVICE<br>S\ clmo-<br>transactionorchestrato<br>r-services\ | OBCLPM Managed<br>Server |
| app-shell                                     | obclpm-app-<br>shell-14.x.0.0.0.war                     | {Unzip OSDC<br>Package} \UI\obclpm-<br>app-shell  | OBCLPM Managed<br>Server |

| Table 4-1 (Cont.) Deployments Li |
|----------------------------------|
|----------------------------------|

To deploy application, refer *How to deploy* section in *Configuration and Deployment Guide*.

# 5 Restarts and Refresh

Use restart for restarting all the managed servers and refresh for refreshing the configuration properties.

Once everything is deployed, restart all the managed servers. And for each application call path "/refresh" for refreshing the configuration properties.

To restart the server, *How to restart* section refer to *Configuration and Deployment Guide*.



# 6 Logging Area

Use logging area for deployment of Common Core Applications in WebLogic server.

#### Introduction

This section talks about the logs area where after deployment of Common Core Applications in WebLogic server.

#### **Logging Area**

Common Core Application writes logs in the below area of the server-

<WEBLOGIC DOMAIN CONFIG AREA>/servers/OBCLPAPP/logs/OBCLPAPP.out

Let's assume a domain has been created OBCLPM\_domain with managed\_server name called OBCLPM in the following area of the server

/scratch/oracle/middleware/user projects/domains/CommonCore domain

Logging area for Common core would be

/scratch/oracle/middleware/user\_projects/domains/ OBCLPM\_domain/servers/ OBCLPMAPP/logs/OBCLPMAPP.out

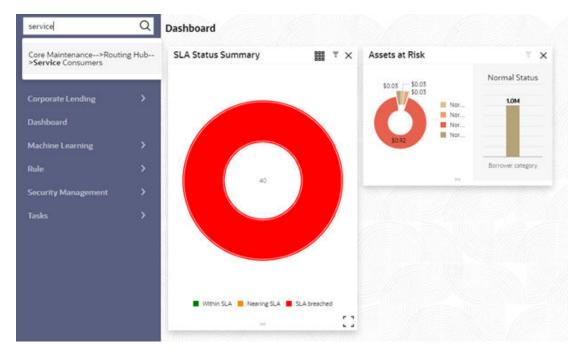


# 7 Integration Routing using OBRH

Use integration of Oracle Banking Corporate Lending Process Management with Oracle Banking Routing Hub (OBRH) product for seamless and standardized integration.

#### **OBCLPM** as service consumer in OBRH

Following landing page is where OBCLPM would be registered as service consumer of any internal / external integration touch points.



#### Figure 7-1 OBRH Dashboard

# Service Consumers Add Inspect Search O OBCLPM I I SLA\_API\_I Page I of 1 (1-3 of Sitems) IX I

#### Figure 7-2 OBRH Dashboard Service Consumers

#### Importing OBRH configuration

Importing OBCLPM configurations by clicking import in below page and then select the json file from the below path and click **Extract**.

OBCLPM\_14.4.0.1.0\_ROLLED\_UP/OBRH\_CONFIGURATION/OBCLPM\_consumer.json

| 1 Ann D Import Search Q          |  |
|----------------------------------|--|
| um I slajanji I slajan           | 1  |
| pe 1 of 1 (1:3of3uena) × 4 1 + × | Import Service Consume X<br>Fer<br>Ter<br>Terrer<br>Terrer<br>Ourserle extended temptates<br>O res ● No<br>✓ Service Providers |
|                                  | Norme<br>No data to display<br>Import  |

Figure 7-3 Import Service Consumer



| Add D Import | Search Q             |   |
|--------------|----------------------|---|
| BCLPM        | SLA_API              | i |
| Page 1       | Edit 4 of 4 items) < |   |
|              | Delete               |   |
|              | Export JSON          |   |
|              | Configuration SQL    |   |
|              | Request Audit        |   |
|              |                      |   |
|              |                      |   |
|              |                      |   |
|              |                      |   |
|              |                      |   |
|              |                      |   |

Figure 7-4 Import Service Consumer Success Message

Figure 7-5 OBCL Import

| C Add C Ampor | e Sear | ih .                  | ٩         |  |                |
|---------------|--------|-----------------------|-----------|--|----------------|
| BCLPM         | :      | SLA, API, 1           | SLAJAPI   | DONOTUSE   | 1              |
| Page 1        |        | of 1 (1-4 of 4 terms) | к • т • м | Import Service Consumer<br>Fie<br>OBCLPM_Consumer (1) poor<br>Name<br>Test                     | Select Extract |
|               |        |                       |           | Overwrite extended templates           Ves         No           Service Providers         Name |                |
|               |        |                       |           | No data to display,  | Import         |

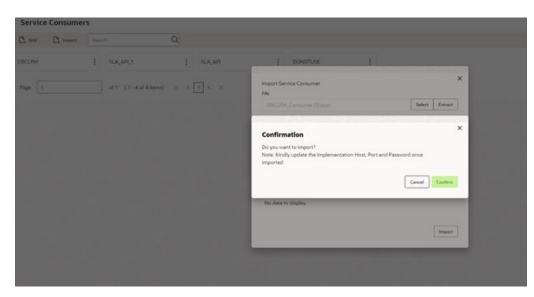
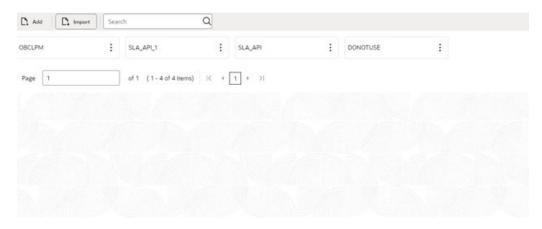


Figure 7-6 Import Service Consumers Confirm

Figure 7-7 Import Service Consumers Success

| C      | Seat                 | Q                |                             |   |   |  |
|--------|----------------------|------------------|-----------------------------|---|---|--|
| BCUPM  | I SLALAPUL           | 1 514,491        | I boworusz                  | E |   |  |
| Page 1 | of T (1-A of A burn) | s + <b>1</b> + 3 |                             |   |   |  |
|        |                      |                  |                             |   |   |  |
|        |                      |                  | Success                     |   | × |  |
|        |                      |                  | Data imported successfully. |   |   |  |
|        |                      |                  |                             |   |   |  |
|        |                      |                  |                             |   |   |  |
|        |                      |                  |                             |   |   |  |
|        |                      |                  |                             |   |   |  |

Figure 7-8 Service Consumers





After successful import of OBRH configuration for OBCLPM, update the host and port as per requirement for every implementation of configured service provider.

Figure 7-9 Edit Implementation

| Service Consumers<br>DONOTUSE                    |             |              | Edit Service Provider  |   |    | ×   |  |
|--|-------------|--------------|--|---|----|-----|--|
|  |             |              | Product Name   | Type  |    |     |  |
|  |             |              | oecucs!  | INTERNAL                                      | •  |     |  |
| Service Providers Comun                          | er Services |              | Britan D to 200 characters.<br>No numeric value allowed at beginning No space<br>allowed     |   |    |     |  |
| D. Ant D. Import                                 | Search      | Q            | Version  | Active  |    |     |  |
| ORCLCS<br>Version M.4<br>Status ACTIVE<br>Page 1 | 1<br>       | <b>a)</b> 16 | 54.4<br>> Headers<br>~ Service<br>Type URL<br>WSDL •<br>Service<br>/maintenance/ratecode/for | Densitier<br>Operation<br>getällöttelisteCode | or |     |  |
|  |             |              |  |   |    | See |  |



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