Installation Guide Oracle Banking Corporate Lending Process Management Release 14.4.0.0.0 Part No. F30281-01 May 2020

FINANCIAL SERVICES



Installation Guide

Oracle Financial Services Software Limited Oracle Park Off Western Express Highway Goregaon (East) Mumbai, Maharashtra 400 063 India Worldwide Inquiries: Phone: +91 22 6718 3000 Fax: +91 22 6718 3001 www.oracle.com/financialservices/

Copyright © 2020, Oracle and/or its affiliates. All rights reserved.

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

U.S. GOVERNMENT END USERS: Oracle programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, delivered to U.S. Government end users are "commercial computer software" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, use, duplication, disclosure, modification, and adaptation of the programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, shall be subject to license terms and license restrictions applicable to the programs. No other rights are granted to the U.S.

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 failsafe, 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.

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.

This software or hardware and documentation may provide access to or information on 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. 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.

Table of Contents

1. PRE	FACE	1-1
1.1	INTRODUCTION	1-1
1.2	AUDIENCE	1-1
1.3	DOCUMENTATION ACCESSIBILITY	1-1
1.4	ORGANIZATION	1-1
2. DAT	ABASE SETUP	
2.1	INTRODUCTION	2-1
2.2	Pre-requisite	2-1
2.3	DATABASE SETUP	2-1
3. 1. D	OMAIN AND CLUSTER CONFIGURATION	
3.1	OBCLPM DOMAIN CONFIGURATION	
3.1.1	Prerequisites	
3.1.2	*	
4. DAT	A SOURCES CREATION	4-1
4.1	Prerequisite	4-1
4.2	DATA SOURCES LIST	4-1
4.3	CREATING DATA SOURCE	4-1
5. DEP	LOYMENTS	5-2
5.1	Pre-requisite	
5.2	DEPLOYMENTS LIST	5-2
5.3	STEPS TO DEPLOY AS APPLICATION	5-3
6. RES	TARTS AND REFRESH	6-4
6.1	RESTARTING SERVERS	
7. LOG	GGING AREA	7-5
7.1	INTRODUCTION	
7.1.1	Logging Area:	

1. Preface

1.1 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.

1.2 Audience

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

1.3 **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.

1.4 Organization

This installation user guide would allow you to install following services and UI

- 1. CLMO-CMC-PARTY-SERVICES
- 2. CLMO-PARTY-SERVICES
- 3. CLMO-LOANAPPLICATION-SERVICES
- 4. CLMO-BACKOFFICE-SERVICES
- 5. CLMO-BUSINESSPROCESS-SERVICES
- 6. CLMO-BUSINESSPRODUCT-SERVICES
- 7. CLMO-HANDOFF-SERVICES
- 8. CLMO-MAINTENANCE-SERVICES
- 9. CLMO-ORCHESTRATION-SERVICES
- 10. CLMO-SYNDICATIONAPPLICATION-SERVICES
- 11. CLMO-TRANSACTIONORCHESTRATOR-SERVICES
- 12. CLMO-CONDITIONSUBSEQUENT-SERVICES
- 13. CLMO-COVENANTS-SERVICES

UI

14. app-shell



2. Database Setup

2.1 Introduction

In this section you are going to setup database related configuration for OBCLPM Installation.

2.2 Pre-requisite

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

2.3 Database Setup

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

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



3.1. Domain and Cluster Configuration

3.1 OBCLPM Domain Configuration

3.1.1 Prerequisites

- 1. Machine should have Java JDK1.8.0_241 has installed.
- 2. Oracle Fusion Middleware 12cR2 12.2.1.4.0 has to be installed on the machine. [Note: Before proceeding with below steps complete Plato installation guided.]
- 3. Steps for creating OBCLPM domain, properties like port numbers, names will be changing based on the domain. Screenshots provided for such deviations. Domain creation process remains the same.

3.1.2 Steps to Create Domain

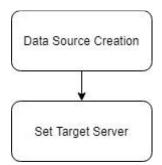
It is recommended to have different managed server in one domain for each application. For Creating Domain and Configuration please refer to ANNEXURE-1 "**How to create and Cluster Configuration**".



4. Data Sources Creation

4.1 **Prerequisite**

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



4.2 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	
OBCLPMLOANAPP	jdbc/OBCLPMLOANAPP	
OBCLPMBACKOFF	jdbc/OBCLPMBACKOFF	
OBCLPMBUSSPRC	jdbc/OBCLPMBUSSPRC	
OBCLPMBUSSPRD	jdbc/OBCLPMBUSSPRD	
OBCLPMHANDOFF	jdbc/OBCLPMHANDOFF	OBCLPM Managed Server
OBCLPMMAINTCE	jdbc/OBCLPMMAINTCE	
OBCLPMORCHESN	jdbc/OBCLPMORCHESN	
OBCLPMSYNDAPP	jdbc/OBCLPMSYNDAPP	
OBCLPMTXNORCH	jdbc/OBCLPMTXNORCH	
OBCLPMCNDSUB	jdbc/OBCLPMCNDSUB	
OBCLPMCOVMN	jdbc/OBCLPMCOVMN	

Steps to create data source in WebLogic is same for all the above except for the connection details and names. Check the section (4.3 - Creating Data source) to understand data source creation.

4.3 Creating Data source

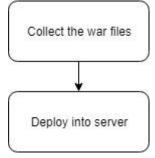
For creating data source in please refer ANNEXURE-1 "How to create Data sources section"



5. Deployments

5.1 Pre-requisite

The database setup and data sources creation have to be performed prior to the application deployment stage. 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.



Environment variables need to be set. Refer 'ANNEXURE-1'. For any issues with fly configuration setup, Refer 'ANNEXURE-2'. For OBCLPM environment variables setup, Refer 'OBCLPM - Environment Variable Setup Guide'.

5.2 **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_14.4.0.0.0_In stallation_Guide' for deployment of conductor workflows.

Application	Archive name	OSDC path	Targets
CLMO-BACKOFFICE-SERVICES	clmo-backoffice-services- 5.0.0.war	{Unzip OSDC Package} \OBCLPM_SERVICES\clmo- backoffice-services\	OBCLPM Managed Server
CLMO-BUSINESSPROCESS- SERVICES	clmo-businessprocess-services- 5.0.0.war	{Unzip OSDC Package} \OBCLPM_SERVICES\ clmo- businessprocess-services\	OBCLPM Managed Server
CLMO-BUSINESSPRODUCT- SERVICES	clmo-businessproduct-services- 5.0.0.war	{Unzip OSDC Package} \OBCLPM_SERVICES\ clmo- businessproduct-services\	OBCLPM Managed Server
CLMO-CMC-PARTY-SERVICES	clmo-cmc-party-services- 5.0.0.war	{Unzip OSDC Package} \OBCLPM_SERVICES\ clmo-cmc- party-services\	OBCLPM Managed Server
CLMO-CONDITIONSUBSEQUENT- SERVICES	clmo-conditionsubsequent- services-5.0.0.war	{Unzip OSDC Package} \OBCLPM_SERVICES\ clmo- conditionsubsequent-services\	OBCLPM Managed Server



	clmo-covenants-services-	{Unzip OSDC Package}	OBCLPM
	5.0.0.war	\OBCLPM_SERVICES\ clmo-	Managed Server
CLMO-COVENANTS-SERVICES		covenants-services\	-
	clmo-handoff-services-5.0.0.war	{Unzip OSDC Package}	OBCLPM
		\OBCLPM_SERVICES\ clmo-	Managed Server
CLMO-HANDOFF-SERVICES		handoff-services\	
	clmo-loanapplication-services-	{Unzip OSDC Package}	OBCLPM
	5.0.0.war	\OBCLPM_SERVICES\ clmo-	Managed Server
CLMO-LOANAPPLICATION-SERVICE		Ioanapplication-services\	
	clmo-maintenance-services-	{Unzip OSDC Package}	OBCLPM
	5.0.0.war	\OBCLPM_SERVICES\ clmo-	Managed Server
CLMO-MAINTENANCE-SERVICES		maintenance-services\	
	clmo-orchestration-services-	{Unzip OSDC Package}	OBCLPM
	5.0.0.war	\OBCLPM_SERVICES\ clmo-	Managed Server
CLMO-ORCHESTRATION-SERVICES		orchestration-services\	
	clmo-party-services-5.0.0.war	{Unzip OSDC Package}	OBCLPM
		\OBCLPM_SERVICES\ clmo-	Managed Server
CLMO-PARTY-SERVICES		party-services\	
	clmo-syndicationapplication-	{Unzip OSDC Package}	OBCLPM
CLMO-SYNDICATIONAPPLICATION-	services-5.0.0.war	\OBCLPM_SERVICES\ clmo-	Managed Server
SERVICES		syndicationapplication-services\	
CLMO-	clmo-transactionorchestrator-	{Unzip OSDC Package}	OBCLPM
TRANSACTIONORCHESTRATOR-	services-5.0.0.war	\OBCLPM_SERVICES\ clmo-	Managed Server
SERVICES		transactionorchestrator-services\	
	obclpm-app-shell-	{Unzip OSDC Package}	OBCLPM
app-shell	14.4.0.0.0.war	\UI\obclpm-app-shell	Managed Server

5.3 Steps to Deploy as Application

To deploy application please refer ANNEXURE-1. "How to deploy section".



6. Restarts and Refresh

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

6.1 <u>Restarting Servers</u>

To restart the server please refer to ANNEXURE-1."How to restart" section.



7. Logging Area

7.1 Introduction

This part of the document will talk about the logs area where after deployment of Common Core Applications in WebLogic server.

7.1.1 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

