

# Oracle® Banking Corporate Lending Process Management Oracle Conductor Process Installation Guide



Release 14.7.0.0.0  
F72044-01  
November 2022

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

ORACLE®

F72044-01

Copyright © 2018, 2022, 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

---

Introduction	iv
Audience	iv
Acronyms and Abbreviations	iv
List of Topics	iv
Related Resources	v

## 1 Deployment of Processes

---

1.1 OBCLPM Processes	1-1
1.2 Steps to Deploy Conductor Process	1-2

## Index

---

# Preface

This topic contains following sub-topics:

- [Introduction](#)
- [Audience](#)
- [Acronyms and Abbreviations](#)
- [List of Topics](#)
- [Related Resources](#)

## Introduction

This guide would help you to install the Oracle Banking Corporate Lending Process Management Conductor based process on designated environment. It is assumed that all the prior setup is already done related to Netflix Conductor.

## 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:

**Table 1 Acronyms and Abbreviations**

Abbreviation	Description
DSL	Domain Specific Language
JNDI	Java Naming and Directory Interface
OBCL	Oracle Banking Corporate Lending
OBCLPM	Oracle Banking Corporate Lending Process Management

## List of Topics

This manual is organized into the following topics.

**Table 2 List of Topics**

Topics	Description and Cross References
<a href="#">Deployment of Processes</a>	This topic helps you to deploy Oracle Banking Corporate Lending Process Management (OBCLPM) and Conductor Process.

## Related Resources

For further information on conductor process installation of Oracle Banking Corporate Lending Process Management application, refer to the following manuals.

- *Oracle Banking Corporate Lending Process Management Installation Guide*
- *Oracle Banking Microservices Platform Foundation Installation Guide*

# 1

## Deployment of Processes

This topic contains following sub-topics.

- [OBCLPM Processes](#)  
Use conductor processes to deploy in the Oracle Banking Corporate Lending Process Management.
- [Steps to Deploy Conductor Process](#)  
Use steps to deploy conductor process to deploy common and all workflow specific task definitions.

### 1.1 OBCLPM Processes

Use conductor processes to deploy in the Oracle Banking Corporate Lending Process Management.

Deploy the following list of conductor processes for Oracle Banking Corporate Lending Process Management (OBCLPM).

In conductor workflows are defined using a JSON based DSL and includes a set of tasks that are processed as part of the workflows. The tasks are either system tasks or simple tasks (also known as worker tasks). These simple/worker tasks are implemented by application(s) and run in a separate environment from Conductor. These tasks talk to Conductor server through RESTclient. In OBCLPM, for every workflow a workflow definition json (For example, LoanAmendment.JSON) file and if required its own worker tasks definition json (TaskDefinitions.JSON) file is maintained. In addition, there is a SharedSimpleTaskDefinitions.JSON file having task definitions that are used across different workflows.

**Table 1-1 OBCLPM Processes**

S.No	OBCLPM Processes	Process Specific Tasks(if any)
1	LOAN AMENDMENT PROCESS	CLMO_FA_LNAMND_HANDOFF
2	LOAN DISBURSEMENT PROCESS	CLMO_FA_LNDSBR_HANDOFF
3	LOAN DRAFT PROPOSAL PROCESS	-
4	LOAN DRAWDOWN PROCESS	-
5	LOAN FINANCIAL AMENDMENT PROCESS	CLMO_FA_FNAMND_HANDOFF
6	LOAN ORIGATION PROCESS	CLMO_FA_LNPMNT_HANDOFF
7	LOAN PAYMENT PROCESS	CLMO_FA_LNPMNT_HANDOFF
8	NLP PROCESS	CLMO_FA_NLPPRC_ENRICH_NLPDE TAILS,CLMO_FA_NLPPRC_UPDATE_ TXNLOGS,CLMO_FA_NLPPRC_INITIA TE_CLMO_APPLICATION
9	RATE QUOTATION PROCESS	CLMO_FA_LNRQTN_CONTRACT_RE VERSAL,CLMO_FA_LNRQTN_INIT_L NORG
10	ROLLOVER PROCESS	CLMO_FA_ROLVAU_HANDOFF

**Table 1-1 (Cont.) OBCLPM Processes**

S.No	OBCLPM Processes	Process Specific Tasks(if any)
11	SYNDICATION AGENCY DRAWDOWN PROCESS	CLMO_FA_SNAGDD_TRYREQ
12	SYNDICATION OPSENICHMENT PROCESS	CLMO_FA_SNOOPEN_HANDOFF
13	SYNDICATION PARTICIPANT PROCESS	-
14	SYNDICATION PARTICIPANT DRAWDOWN PROCESS	CLMO_FA_SNPTDD_TRYREQ
15	SYNDICATION POST MANDATE AGENT PROCESS	-
16	SYNDICATION POST MANDATE ARRANGER PROCESS	CLMO_FA_DO_NOTHING
17	SYNDICATION PREMANDATE COARRANGER PROCESS	CLMO_FA_CREDIT_CHECK
18	SYNDICATION PRE MANDATE LEAD ARRANGER PROCESS	-

**Table 1-2 Common Task Definitions**

S.No	Common Task Definitions(Used across different OBCLPM processes)
1.	FA_KYC_CHECKER
2.	FA_CAMS_HANDOFF
3.	FA_LNORGN_HANDOFF
4.	FA_STATUS_UPDATE
5.	FA_RISK_APPROVAL
6.	FA_INITIATE_OPS_ENRICH
7.	FA_BORROWER_ONBOARDING
8.	FA_MILESTONE_CHECK
9.	FA_INITAITE_QE
10.	FA_SNDRWD_HANDOFF

## 1.2 Steps to Deploy Conductor Process

Use steps to deply conductor process to deploy common and all workflow specific task definitions.

### Pre-Requisite

**PLATO-O** and **PLATO-ORCH-SERVICE** services should be up and registered in the Eureka registry.

For the installation of **PLATO-O** and **PLATO-ORCH-SERVICE**, refer to *Oracle Banking Microservices Platform Foundation Installation Guide*.

### Post-Requisite

**CLMO-ORCHESTRATION-SERVICE** should be deployed after registering common task definitions and all workflow specific task definitions (total of 26 task definitions listed above) as this service would have worker implementation for all the simple

tasks. Presently this service has 26 worker implementations with 36 threads configured for worker coordinator to manage these workers.



**Note:**

Steps to deploy a process remains the same for all the process files.

In OBCLPM, for every workflow a workflow definition json (e.g. LoanDraftProposal.JSON) file and if required its own worker tasks definition json (TaskDefinitions.JSON) file will be maintained. Also, there is a SharedSimpleTaskDefinitions.JSON file having simple task definitions that are used across all workflows. To deploy all or any workflow definition.

1. Firstly shared simple tasks definitions should be done. for that below endpoint can be invoked from postman tool with header and payload as described below.

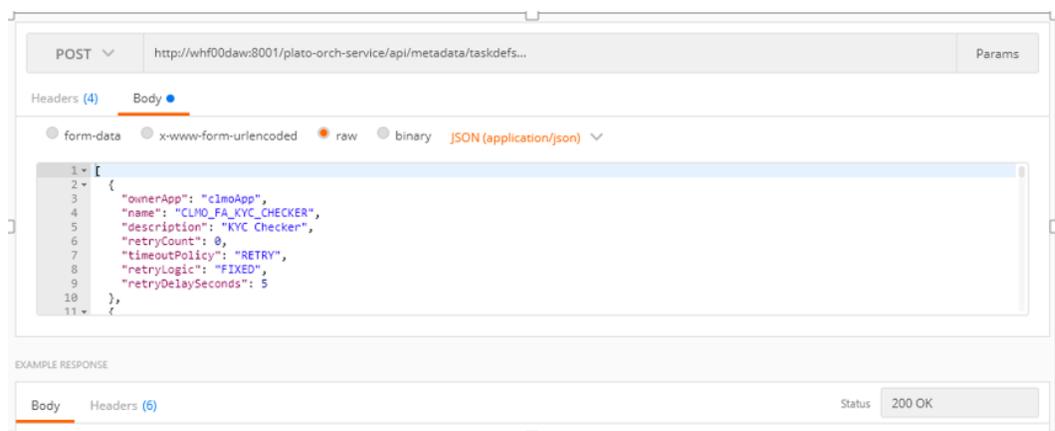


**Note:**

The host name and port number of the PLATO-ORCH-SERVICE from the eureka registry should be used in this endpoint

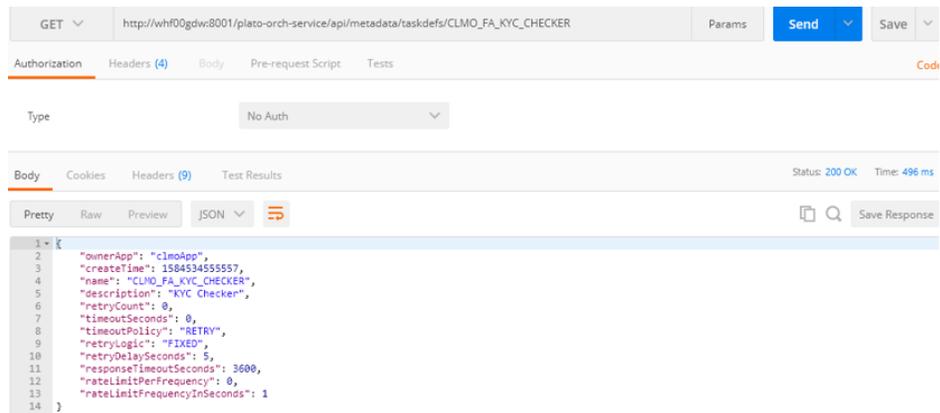
Task definitions end point:  
http://whf00mdj:9009/plato-orch-service/api/metadata/taskdefs  
HTTP Method: POST  
Header parameters:  
Content-Type:application/json  
appId:platoorch  
branchCode:004  
userId:  
Payload:SharedSimpleTaskDefinitions.JSON content

**Figure 1-1 HTTP Method: POST**



2. To verify if any of the task is registered , `http://whf00mdj:9009/plato-orch\u0002service/api/metadata/taskdefs/{taskname}` endpoint can be invoked with GET HTTP Method as shown below.

**Figure 1-2 GET HTTP Method**



3. Next workflow specific task definitions should be done. for that use the task definition endpoint mentioned at step 1 and provide workflows specific TaskDefinitions.JSON file content as payload.
4. Next workflow definitions should be done. for that use the workflow definition endpoint mentioned below and provide workflows definition json (e.g. LoanDraftProposal.JSON) file content as payload.

k definitions end point:

`http://whf00mdj:9009/plato-orch-service/api/metadata/workflow`

HTTP Method: POST

Header parameters:

Content-Type:application/json

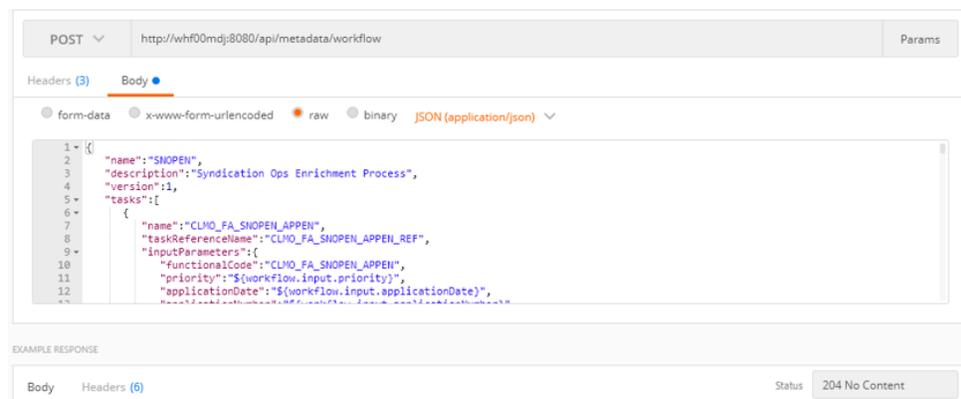
appId:platoorch

branchCode:004

userId:

Payload: LoanDraftProposal.JSON content

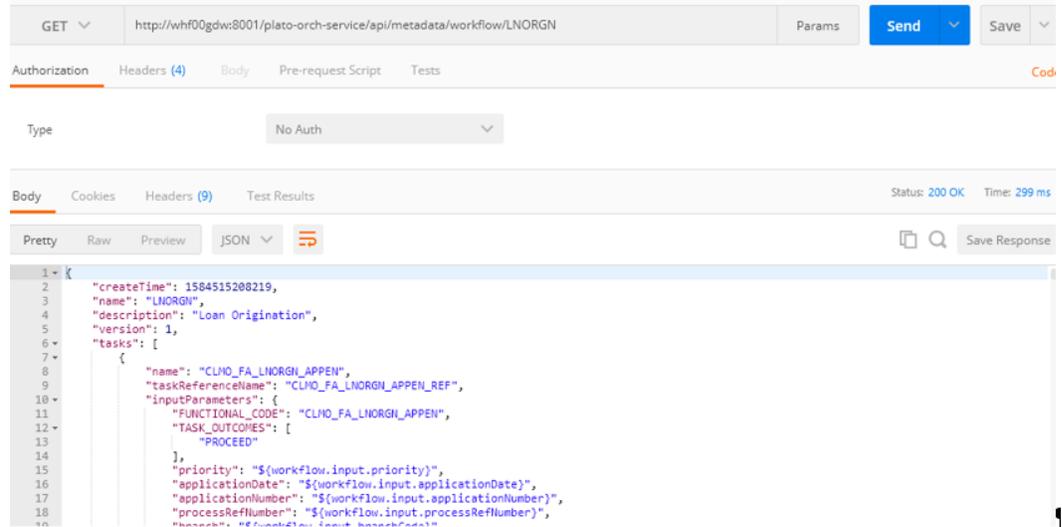
**Figure 1-3 Post HTTP Method**



5. To verify if the workflow is registered , `http://whf00mdj:9009/plato-orch\u0002service/api/metadata/workflow/DRFTPR?version=1` endpoint can be invoked with GET HTTP Method and check if workflow definitions is available. The workflow name to be used in this GET can be referred from name property

workflow definition json. Similarly, all the workflow definitions can be registered and verified one by one.

**Figure 1-4 Get HTTP Method**



# Index

## D

---

Deploy Conductor Process, [1-2](#)

## O

---

OBCLPM Processes, [1-1](#)