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



Release 14.6.1.0.0 F79717-01

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Oracle Banking Corporate Lending Process Management Oracle Conductor Process Installation Guide, Release 14.6.1.0.0

F79717-01

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## Preface

This topic contains following sub-topics:

- Introduction
- Audience
- 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 manual is intended for the following User/User Roles:

- Relationship Managers (RMs)
- Credit Risk Mangers (CRMs)
- Legal
- Back end operation
- Other loan executive staffs in charge of maintaining the loan accounts in the bank.
- WebLogic admin or ops-web team who are responsible for installing OFSS Banking Products.

## List of Topics

This manual is organized into the following topics.

#### Table 1 List of Topics

Topics	Description and Cross References
Preface	This topic provides the general information about the manual. It also list the various topics covered in the User Manual.
Deployments	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 deply 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, LoanAmmendmend.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.

S.No	OBCLPM Processes	Process Specific Tasks(if any)
1	LOAN ORIGINATION	CLMO_FA_LNORGN_MRTRY
2	FINANCIAL AMENDMENT	CLMO_FA_LNRSTR_AMRTY
3	NON FINANCIAL AMENDMENT	CLMO_FA_LNRSTR_AMRTY
4	LOAN PAYMENT	CLMO_FA_LNPMNT_HRTRY
5	ROLLOVER	CLMO_FA_LNRSTR_AMRTY
6	RATE QUOTATION	CLMO_FA_LNRQTN_DRADN
7	DRAFT PROPOSAL	CLMO_FA_DRFTPR_AGRNR
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 ODCLPW PIOCESSES	Table 1-1	<b>OBCLPM Processes</b>
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S.No	OBCLPM Processes	Process Specific Tasks(if any)
11	PREMANDATE ARRANGER	CLMO_FA_SNPMND_EXEST
12	PREMANDATE CO ARRANGER	CLMO_FA_SNPMCA_TREXD
13	CONSOLIDATION ROLLOVER	CLMO_FA_SYCNRL_AMRTY
14	ROLLOVER	CLMO_FA_SYSPRL_AMRTY
15	PAYMENT	CLMO_FA_SNPMNT_HRTRY
16	POST MANDATE ARRANGER	CLMO_FA_SNPOAR_RCCPS
17	POST MANDATE AGENT	CLMO_FA_SNPOAG_APCPS
18	PARTICIPANT PROCESS	CLMO_FA_SNPRTP_RCVCS
19	OPERATIONS ENRICHMENT	CLMO_FA_SNOPEN_APCPS
20	AGENCY DRAWDOWN	CLMO_FA_SNAGDS_RHDOF
21	PARTICIPANT DRAWDOWN	CLMO_FA_SNDRWD_HANDOFF
22	DRAWDOWN AMENDMENT	CLMO_FA_SYDAMD_HANDOFF
23	PARTICIPANT TRANSFER	CLMO_FA_SNPATR_HANDOFF
24	RESTRUCTURE	CLMO_FA_LIQDD_HANDOFF
25	BULK PAYMENT	CLMO_FA_BLKPMT_HANDOFF
26	TRANCHE MARGIN AMENMENT	CLMO_FA_SNMRAM_HANDOFF
27	TRANCHE AMENDMENT	CLMO_FA_SNTRAM_HANDOFF
28	TRANCHE NON FIN AMENDMENT	CLMO_FA_TNFAMD_HANDOFF
29	DRAWDOWN	CLMO_FA_LNORGN_MRTRY

Table 1-1 (Cont.) OBCLPM Processes

### Table 1-2 Common TaskDefinitions

S.No	Common TaskDefinitions(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 *Plato Infrastructure Services 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:USER1
Payload:SharedSimpleTaskDefinitions.JSON content
```



Figure 1-1 HTTP Method: POST

POST $\lor$ http://whf00daw:8001/plato-orch-service/api/metadata/taskdefs	Params
Headers (4) Body •	
● form-data ● x-www-form-urlencoded ● raw ● binary JSON (application/json) >	·
<pre>1 - [ 2 - { 3</pre>	
MPLE RESPONSE	
Body Headers (6)	Status 200 OK

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

Figure 1-2 GET HTTP Method

GET	$\sim$	http://whf00	gdw:8001/j	plato-orch-service/api/	metadata/tas	kdefs/CLMO_FA_KYC_	CHECKER	Params	Send	~	Save	$\sim$
Authorizati	ion	Headers <b>(4)</b>		Pre-request Script	Tests							Code
Туре				No Auth		~						
Body	Cookies	Headers (9	) Tes	t Results					Status: 20	0 OK	Time: 49	6 ms
Pretty	Raw	Preview	JSON N	- =					ĒC	), s	ave Respo	inse
1 ~ K 2 3 4 5 6 7 8 9 10 11 12 13 14 }	"owne "crea "desc "retr "time "time "retr "retr "rets "rate	erApp": "clmoA FatTime": 1584 ": "CLMO_FA_K rription": "KV ryCount": 0, soutSeconds": 1 soutSeconds": 1 soutSeconds": "FIX yOblaySeconds sonseTimeoutSe climitPrefueu climitFrequency	pp", 534555557 YC_CHECKE C Checker 8, RETRY", ED", ": 5, conds": 3 ency": 0, yInSecond	, R", ", 600, s": 1								

- 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.
- 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:USER1
Payload: LoanDraftProposal.JSON content
```



Figure 1-3 Post HTTP Method

🔍 form-da	ata 🔍 x-www-form-urlencoded 🔹 raw 🔍 binary JSON (application/json) 🗸	
1 • { 2 3 4 5 • 6 • 7 8 9 • 10 11 12	<pre>"name":"SNOPEN", "description":"Syndication Ops Enrichment Process", "version"1, "tasks"it, " f "name":"CLVO_FA_SNOPEN_APPEN", "taskReferenceWame":"CLWO_FA_SNOPEN_APPEN_REF", "input/Parameters":(LWO_FA_SNOPEN_APPEN", "prinction=ICode":"CLWO_FA_SNOPEN_APPEN", "prinction=ICODE":"CLWO_FA_SNOPEN_APPEN:", """""""""""""""""""""""""""""""""""</pre>	

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

GET $\checkmark$ http://whf00gdv	w:8001/plato-orch-service/api/metadata/workflow/LNORGN	Params	Send Y Save Y
Authorization Headers (4)	Body Pre-request Script Tests		Code
Туре	No Auth $\checkmark$		
Body Cookies Headers (9)	Test Results		Status: 200 OK Time: 299 ms
Pretty Raw Preview	ISON V 🚍		Q Save Response
<pre>1 * {     "createTime": 158451     "aname": "LNGRGW"     "description": "Loam     "version": 1,     "tasks": [     "name": "CUD     "taskReferen"     "inputParama     "inp</pre>	<pre>S208219, 1 Origination", S208219, 10 Crigination", SceName": "CUND_FA_LNORGH_APPEN_REF", sceName": "CUND_FA_LNORGH_APPEN", Sterright State State</pre>		

