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



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Oracle Banking Corporate Lending Process Management Oracle Conductor Process Installation Guide, Release 14.8.0.0.0

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## Preface

This topic contains following sub-topics:

- Purpose
- Audience
- Documentation Accessibility
- Critical Patches
- Diversity and Inclusion
- Related Resources
- Conventions
- Screenshot Disclaimer
- Acronyms and Abbreviations
- Basic Actions
- Symbols and Icons

### Purpose

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.

## **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 customer access to and use of Oracle support services will be pursuant to the terms and conditions specified in their Oracle order for the applicable services.

## **Critical Patches**

Oracle advises customers to get all their security vulnerability information from the Oracle Critical Patch Update Advisory, which is available at Critical Patches, Security Alerts and Bulletins. All critical patches should be applied in a timely manner to make sure effective security, as strongly recommended by Oracle Software Security Assurance.

## **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 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

### 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.
italic	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.

Table 1 Conventions	Table	) 1	Conventions
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## Screenshot Disclaimer

Personal information used in the interface or documents is dummy and does not exist in the real world. It is only for reference purposes.



## Acronyms and Abbreviations

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

	Table 2	Acronym	s 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

## **Basic Actions**

Action	Description	
Approve	Click <b>Approve</b> to approve the initiated report. This button is displayed, once the user click <b>Authorize</b> .	
Audit	Click <b>Audit</b> to view the maker details, checker details of the particular record, and record status. This button is displayed only for the records that are already created.	
Authorize	Click <b>Authorize</b> to authorize the record created. A maker of the screen is not allowed to authorize the report. Only a checker can authorize a record. This button is displayed only for the already created records.	
Close	Click <b>Close</b> to close a record. This action is available only when a record is created.	
Confirm	Click <b>Confirm</b> to confirm the performed action.	
Cancel	Click Cancel to cancel the performed action.	
Compare	Click <b>Compare</b> to view the comparison through the field values of old record and the current record. This button is displayed in the widget, once the user click <b>Authorize</b> .	
Collapse All	Click <b>Collapse All</b> to hide the details in the sections. This button is displayed, once the user click <b>Compare</b> .	
Expand All	Click <b>Expand All</b> to expand and view all the details in the sections. This button is displayed, once the user click <b>Compare</b> .	
New	Click <b>New</b> to add a new record. The system displays a new record to specify the required data. ( <b>Note:</b> The fields which are marked with Required are mandatory.)	
ОК	Click <b>OK</b> to confirm the details in the screen.	
Save	Click <b>Save</b> to save the details entered or selected in the screen.	
View	Click <b>View</b> to view the report details in a particular modification stage. This button is displayed in the widget, once the user click <b>Authorize</b> .	
View Difference only	Click <b>View Difference only</b> to view a comparison through the field element values of old record and the current record, which has undergone changes. This button is displayed, once the user click <b>Compare</b> .	

### Table 3 List of Basic Actions



## Symbols and Icons

The following symbols and icons are used in the screens.

Table 4 Symbols and Icons - Common

Symbol/Icon	Function
	Minimize
<b>ы</b> с	
<b>ч г</b>	
	Maximize
L J	
	Close
$\mathbf{\nabla}$	
	Perform Search
$\cap$	
X	
	Open a list
-	
•	
	Add a new record
	Navigate to the first record
K	
	Navigate to the last record
Х	

Symbol/Icon	Function
	Navigate to the previous record
	Navigate to the next record
88	Grid view
₿Ξ	List view
Ģ	Refresh
Ē	Calender
$\nabla$	Filter
Б	Copy a record
+	Click this icon to add a new row.

Table 4 (Cont.) Symbols and Icons - Common

### Table 4 (Cont.) Symbols and Icons - Common

Symbol/Icon	Function
	Click this icon to delete an existing row.
Ð	Click to view the created record.
•	Click to unlock, delete, authorize or view the created record.

### Table 5 Symbols and Icons - Audit Details

Symbol/Icon	Function
0	A user
Ē	Date and time
Δ	Unauthorized or Closed status
$\oslash$	Authorized or Open status

Symbol/Icon	Function
£	Open status
D	Unauthorized status
ß	Closed status
	Authorized status

Table 6 Symbols and Icons - Widget



## 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 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_T XNLOGS,CLMO_FA_NLPPRC_INITIAT E_CLMO_APPLICATION			
9	RATE QUOTATION PROCESS	CLMO_FA_LNRQTN_CONTRACT_REV ERSAL,CLMO_FA_LNRQTN_INIT_LNO RG			
10	ROLLOVER PROCESS	CLMO_FA_ROLVAU_HANDOFF			
11	PREMANDATE ARRANGER	CLMO_FA_SNPMND_EXEST			

#### Table 1-1 OBCLPM Processes



S.No	OBCLPM Processes	Process Specific Tasks(if any)
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 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:USER1
Payload:SharedSimpleTaskDefinitions.JSON content
```

### Figure 1-1 HTTP Method: POST

	Body • x-www-form-uriencoded • raw • binary JSON (application/json) ~	
1 • [ 2 • {		
4 5 6 7	"ownerApp": "clmoApp", "name": "ClmoApp", "name": "ClmoLA_XYC_CHECKER", "retryCount": 0, "timeoutPolicy": "RETRY", "retryLogic": "FIXED", "retryDelaySeconds": 5	



 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.

http://whf00gdw:8001/plato-orch-service/api/metadata/taskdefs/CLMO\_FA\_KYC\_CHECKER GET 🗸 Params Save 🗸 Authorization Headers (4) Pre-request Script Tests Code No Auth Туре Status: 200 OK Time: 496 ms Body Headers (9) Test Results Pretty Preview JSON 🗸 🚍 Q Save Response 1 - 6 "ownerApp": "ClmoApp", "createFine": IS6453455557, "name": "CUD\_FA\_VYC\_CHECKER, "description": "RVC Checker", "retryCourt: 0, "timeoutPoicy: "RETR", "retryLogic": "FIXED, "retryLogic": "FIXED, "retryLogicSconds": 5, "responseTimeoutSeconds": 5600, "rateLinitFrequencyInSeconds": 1 9 10 11 12 13 14 }

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.
- 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

Body •	
{	
"functionalCode": "CLMO_FA_SNOPEN_APPEN",	
"applicationDate": "S(workflow.input.applicationDate)",	
	<pre>&gt; x-www-form-urlencoded  raw  binary JSON (application/json) &gt;&gt; ame":"SNOPEN", escription":"Syndication Ops Enrichment Process", ersion":1, esks":[ {     "name":"CLNO_FA_SNOPEN_APPEN_,     "taskReferenceName":"CLNO_FA_SNOPEN_APPEN_REF",     "inputParameters":{     "functionalCode":"CLNO_FA_SNOPEN_APPEN_REF",     "priority":"S(workflow.input.appicationDate)",     "spolicationDate";"(LNO_FA_SNOPEN_APPEN_REF",     "priority":"S(workflow.input.appicationDate)",</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.

GET V http://whf00gdw:800	11/plato-orch-service/api/metada	ata/workflow/LNORGN	Param	s Send	✓ Save
Authorization Headers (4) Body	Pre-request Script Test	ts			c
Туре	No Auth	$\checkmark$			
Body Cookies Headers (9) T	lest Results			Status: 200	OK Time: 299 r
Pretty Raw Preview JSON	~ =			ΓQ	Save Respon
10 • "inputParameters" 11 *FUNCTIONA_1 12 • "TASK_OUTCON 13 "PROCEED 14 ], 15 "priority": 16 "application 17 "application 18 "processReff	gination", LNORGH_APPEN", me": "CLMO_FA_LNORGH_APPEN_ ": ( CODE": "CLMO_FA_LNORGH_APPEN ES": [	", plicationDate}", spplicationNumber}", rocessRefNumber)",			

### Figure 1-4 Get HTTP Method

