EOD Configuration Guide

Oracle Banking Liquidity Management

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EOD Configuration Guide

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1 Preface

1.1 Background

Oracle Banking Liquidity Management allows you to execute several functions every day on a routine basis as part of the End of Day (EOD) process. These functions can be run at various stages of the EOD process.

1.2 Introduction

The End of Day process is to tie up all the operations for a financial day and prepare the system for the next day. The EOD process should be defined for a branch and executed separately for each branch. When the process is running, you could choose to monitor it from Invoke EOD screen.

EOD uses Oracle Banking Microservice Architecture Orchestrator and Batch service for orchestrating all the jobs required to complete End of Day processing. This document helps in the required set up to run EOD.

1.3 Document Accessibility

- 1. Oracle Banking Microservice Architecture Orchestrator needs to be deployed as per installation guide.
- 2. Oracle Banking Microservice Architecture Batch needs to be deployed as per installation guide.

1.4 Acronyms, Abbreviations and Definitions

| Acronyms | Definition |
|----------|------------|
| EOD | End of Day |

1.5 Related Documents

The related documents are as follows:

- Oracle Banking Common Core User Guide
- Oracle Banking Liquidity Management User Guide



2 EOD configuration Steps

The following Functional Activities needs to be maintained in user's role to perform EOD operations

CMC_FA_BRANCH_EOD_PROCESS

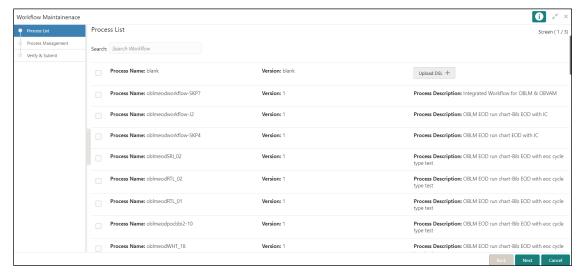
1. Save the below attachment to local folder. This is a standard batch process definition script for Oracle Banking Liquidity Management that includes the list of batch tasks to be automatically executed in a sequence.



Note: Refer to PDF attachments for downloading json file.

- 2. On **Home Screen**, under **Tasks** menu, click **Business Process Maintenance** to import, create or modify batch process definition.
 - → **Product List** screen is displayed.

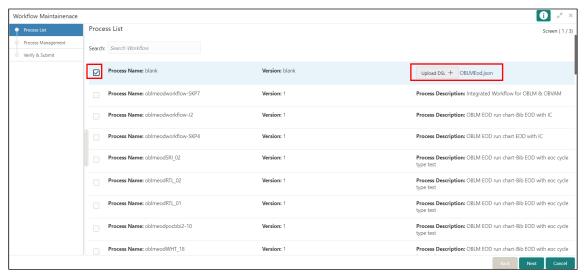
Figure 1: Process List





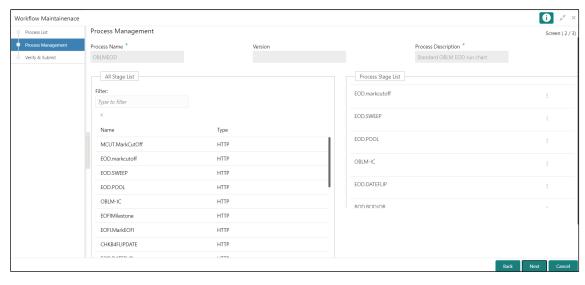
 Select the Process Name: blank checkbox. Click on Upload DSL+ button and choose file OBLMEod.json from local folder.

Figure 2: Process List - Upload DSL



- 4. Click Next button
 - → **Product Management** screen is displayed.

Figure 3: Process Management

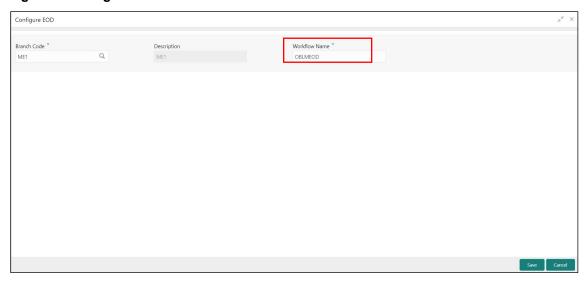


Click Next button and Click Review or Create Process in Verify & Submit screen to register the batch.



- 6. On Core Maintenance menu, under Branch EOD, click Configure EOD to configure batch for a branch. Refer Section 2.5 in Oracle Banking Common Core User Guide.
 - → Configure EOD screen is displayed.

Figure 4: Configure EOD



7. Select branch code to configure the batch.

Note: The value specified in Workflow name field must be same as the workflow **name** attribute specified in 3rd line of batch script **OBLMEod.json** file

```
OBLMEod.json - Notepad
                                                                                                                                                        File Edit Format View Help
createTime": 1594656285069,
          "name": <a href="mailto:"OBLMEOD",">"OBLMEOD",</a>
"description": "Standard OBLM EOD run chart",
          "tasks": [{
    "type": "HTTP",
    "name": "EOD.markcutoff",
                     "taskReferenceName": "EOD.markcutoff",
                     "inputParameters": {
                                "http_request": {
                                          "connectionTimeOut": "0",
                     "readTimeOut": "0",
"vipAddress": "OBLM-BATCH-SERVICES",
                                          "uri": "/oblm-batch-services/jobscheduler/markEodCutOff/${workflow.input.branchCode}",
"method": "GET",
"headers": {
                                                    , . {
"appId": "LMB",
"branchCode": "${workflow.input.branchCode}",
                                                     "userId": "${workflow.input.userID}",
                           "eocType": "EOD"
                               }
                     },
"startDelay": 0,
"optional": false,
                     "asyncComplete": false
                    "type": "HTTP",
                                                                                               Ln 1, Col 1
                                                                                                                     100% Windows (CRLF) UTF-8
```



2.1 Steps to run EOD for a branch

- 1. On Core Maintenance menu, under Branch EOD, click Invoke EOD.
 - → Invoke EOD screen is displayed.

Figure 5: Invoke EOD



- 2. Select the branch to run EOD.
- 3. Click **Refresh** to view the current status of branch.



3 Job definition Naming Convention

Naming convention to be followed when a custom job is introduced as a task into EOD process

1. Milestone task name must be prefixed with "MS-". Ex: MS-BranchCutOff

Milestone stage

Milestone stage will pause the batch execution till it is manually resumed.

Sample template for milestone stage

```
"name": "MS-CHKAFTEREOTI",
    "taskReferenceName": "MS-CHKAFTEREOTI",
    "inputParameters": {
        "http request": {
            "connectionTimeOut": "0",
            "readTimeOut": "0",
            "vipAddress": "CMC-BRANCH-SERVICES",
            "uri": "/cmc-branch-services/brancheod/milestone",
            "method": "POST",
            "headers": {
                "appId": "CMNCORE",
                "branchCode": "${workflow.input.branchCode}",
                "userId": "${workflow.input.userID}"
            },
            "body": {
                "data": [
                    {
                        "workflowId": "${workflow.workflowId}",
                        "taskId": "${CPEWF_TASK_ID}",
                        "waitTime": "5000"
                    }
                ]
            }
        }
    "type": "HTTP",
    "startDelay": 0,
    "optional": false,
    "asyncComplete": true
}
```



Steps to integrate Custom Jobs

1. If the custom job uses Oracle Banking Microservice Architecture Batch service, then use the below template to include the job as a task in EOD Flow definition.

```
"type":"HTTP",
"name":"<MilestoneCode.JobName>",
"taskReferenceName":"<MilestoneCode.JobName>",
"inputParameters":{
 "http_request":{
   "connectionTimeOut":"0",
   "readTimeOut":"0",
   "vipAddress": "PLATO-BATCH-SERVER",
   "uri":"/plato-batch-server/jobLauncher/launch/",
   "method": "POST",
   "headers":{
     "appId":"${workflow.input.appId}",
     "branchCode":"${workflow.input.branchCode}",
     "userId":"${workflow.input.userId}"
   },
   "body":{
     "jobName":"<JobName>",
     "jobParameters":[
         "key": "appld",
         "value":"<Application ID of microservice>"
       },
         "key": "microServiceName",
```



```
"value":"<Microservice name>"
},
{
  "key":"contextRoot",
  "value":"<Context root of microservice>"
},
  "key":"workflowld",
  "value":"${workflow.workflowId}"
},
{
  "key": "referenceTaskName",
  "value":"<MilestoneCode.JobName>"
},
{
  "key":"userId",
  "value":"${workflow.input.userId}"
},
{
  "key":"branchCode",
  "value":"${workflow.input.branchCode}"
},
  "key":"isCallback",
  "value":"Y"
},
  "key":"callbackType",
```



```
}
           ]
         }
       },
       "asyncComplete":true
     },
     "startDelay":0,
     "optional":false,
     "asyncComplete":true
   }
2. If the custom job doesn't uses Oracle Banking Microservice Architecture Batch service and the
    Batch API is implemented as a synchronous call, then use the below template to include the job
    as a task in EOD Flow definition
    {
     "type":"HTTP",
     "name":"<MilestoneCode.JobName>",
     "taskReferenceName":"<MilestoneCode.JobName>",
     "inputParameters":{
       "http request":{
         "connectionTimeOut":"0",
         "readTimeOut":"0",
         "vipAddress":"<Microservice name registered in eureka>",
         "uri":"<relative URL>",
         "method":"<HTTP Method>",
         "headers":{
           "appId":"${workflow.input.appId}",
           "branchCode": "${workflow.input.branchCode}",
```

"value": "PLATOORCH"



```
"userId":"${workflow.input.userId}"
}
},

"asyncComplete":false
},

"startDelay":0,

"optional":false,

"asyncComplete":true
}
```

NOTE: HTTP Method - One of the GET, PUT, POST, DELETE, OPTIONS, HEAD

3. If the custom job doesn't uses Oracle Banking Microservice Architecture Batch service and if the Batch API is implemented as an asynchronous call, then call back needs to be implemented in the respective API. Please use the below template to include the job as a task in EOD Flow Definition.

```
"type":"HTTP",

"name":"<MilestoneCode.JobName>",

"taskReferenceName":"<MilestoneCode.JobName>",

"inputParameters":{

"http_request":{

"connectionTimeOut":"0",

"readTimeOut":"0",

"vipAddress":"<Microservice name registered in eureka>",

"uri":"<relative URL>",

"method":"<HTTP Method>",

"headers":{

"appId":"${workflow.input.appId}",

"branchCode":"${workflow.input.branchCode}",

"userId":"${workflow.input.userId}"
```



```
}
},
"asyncComplete":true
},
"startDelay":0,
"optional":false,
"asyncComplete":true
}
```

The following API should be used as a call back to update the status of a task.

| Method | POST | |
|---------|---|--|
| Url | http:// <hostname>:<port>/plato-orch- service/api/tasks</port></hostname> | |
| Headers | userId : <logged id="" in="" user=""> branchCode : <logged branch="" code="" in=""> appId : platoorch Content-Type : application/json Accept : application/json</logged></logged> | userId – User who updates the task branchCode – Branch where the update is performed |
| Body | { "workflowInstanceId": " <eod_workflow_id", "<task_id="" "taskid":="">", "status": "<status>" }</status></eod_workflow_id",> | EOD_Workflow_ID – A Workflow ID gets generated when EOD is invoked Task_ID – Unique task ID gets generated for each task once it starts Status – COMPLETED / FAILED_WITH_TERMINAL_ERROR / FAILED / IN_PROGRESS |

NOTE: asyncComplete – field in EOD workflow definition should be set to true if the Http task makes an asynchronous call and the task has to be updated explicitly by calling above update APIs. Only after successful update, next task will get executed.



4 Oracle Banking Liquidity Management Job

| S No | EOD stage | Job Name | Description | Input Parameters |
|------|--------------|------------|---|------------------|
| 1 | MCUT | markcutoff | Job will check for pending tasks and any existing running process before starting EOD | BranchCode |
| | MS-EOD | MS-EOD | Milestone stage for running EOD | |
| 2 | EOD | SWEEP | Job will execute sweep process scheduled to run during EOD | BranchCode |
| 3 | EOD | POOL | Job will execute all pool structures. | BranchCode |
| 4 | EOD | IC | Job will execute Interest batch | BranchCode |
| 5 | EOD | DATEFLIP | Job will change system date to next working date | BranchCode |
| 6 | MS-BOD | MS-BOD | Milestone stage for running BOD | BranchCode |
| 6 | BOD | BOD | Job will execute Reallocation, Reverse sweep and bod sweeps in sequence | BranchCode |

