

EOD Configuration Guide

Oracle Banking Virtual Account Management

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EOD Configuration 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

<https://www.oracle.com/industries/financial-services/index.html>

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1 Preface

1.1 Background

Oracle Banking Virtual Account 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:

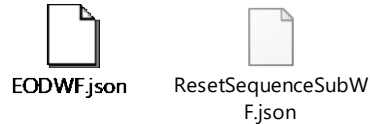
- Oracle Banking Common Core User Guide
- Oracle Banking Virtual Account Management User Guides

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 Virtual Account Management that includes the list of batch tasks to be automatically executed in a sequence.



Refer PDF Attachment for downloading the json files.

2. On **Home Screen**, under **Tasks** menu, click **Business Process Maintenance** to import, create or modify batch process definition.

→ The **Product List** screen is displayed.

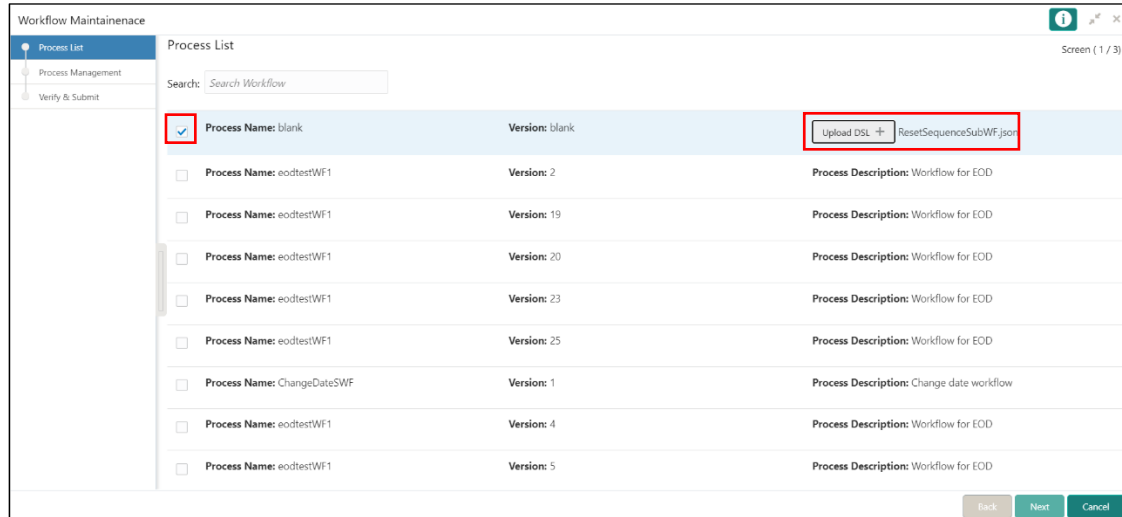
Figure 1: Process List

The screenshot shows the 'Process List' screen within the 'Workflow Maintenance' application. The interface includes a sidebar with 'Process List', 'Process Management', and 'Verify & Submit' options. The main area displays a table of process definitions with a search bar and an 'Upload DSL +' button. The table lists various process names and their descriptions.

| Process Name | Version | Process Description |
|----------------------|---------|---|
| blank | blank | |
| oblmeodworkflow-SKP7 | 1 | Integrated Workflow for OBLM & OBVAM |
| oblmeodworkflow-J2 | 1 | OBLM EOD run chart-Bib EOD with IC |
| oblmeodworkflow-SKP4 | 1 | OBLM EOD run chart EOD with IC |
| oblmeodSRI_02 | 1 | OBLM EOD run chart-Bib EOD with eoc cycle type test |
| oblmeodRTL_02 | 1 | OBLM EOD run chart-Bib EOD with eoc cycle type test |
| oblmeodRTL_01 | 1 | OBLM EOD run chart-Bib EOD with eoc cycle type test |
| oblmeodpocbbi2-10 | 1 | OBLM EOD run chart-Bib EOD with eoc cycle type test |
| oblmeodWHT_18 | 1 | OBLM EOD run chart-Bib EOD with eoc cycle type test |

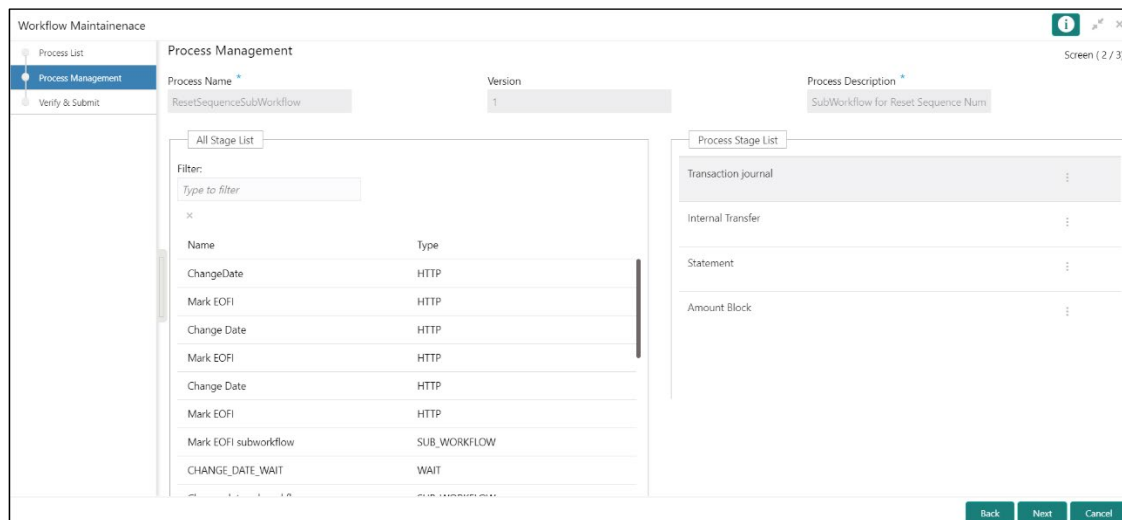
3. Select the **Process Name: blank** checkbox. Click on **Upload DSL+** button to upload batch process definition and choose file **ResetSequenceSubWF.json** and **EODWF.json** in order from the local folder.

Figure 2: Process List – Upload DSL



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

Figure 3: Process Management

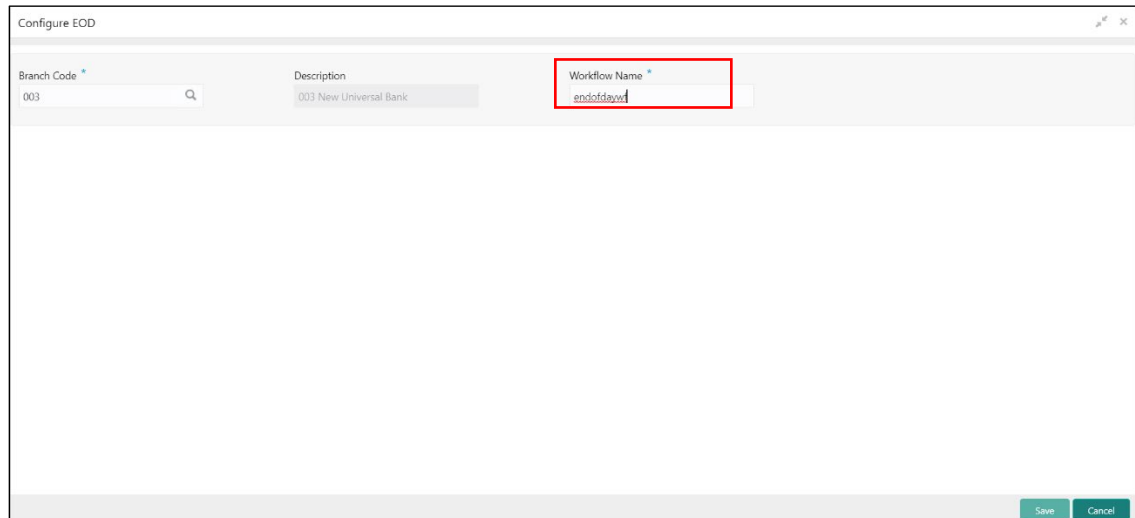


5. Click **Next** button and Click **Review** or **Create Process** in **Verify & Submit** screen to register the batch. Click **Process List** again to create new batch definition for **EODWF.json**.

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**.

→ The **Configure EOD** screen is displayed.

Figure 4: Configure EOD



The screenshot shows the 'Configure EOD' window. It has a header bar with the title 'Configure EOD'. Below the header, there are three input fields: 'Branch Code' with the value '003', 'Description' with the value '003 New Universal Bank', and 'Workflow Name' with the value 'endofdaywf'. The 'Workflow Name' field is highlighted with a red box. At the bottom right of the window, there are two buttons: 'Save' and 'Cancel'.

7. Select the **Branch Code** to configure the batch.

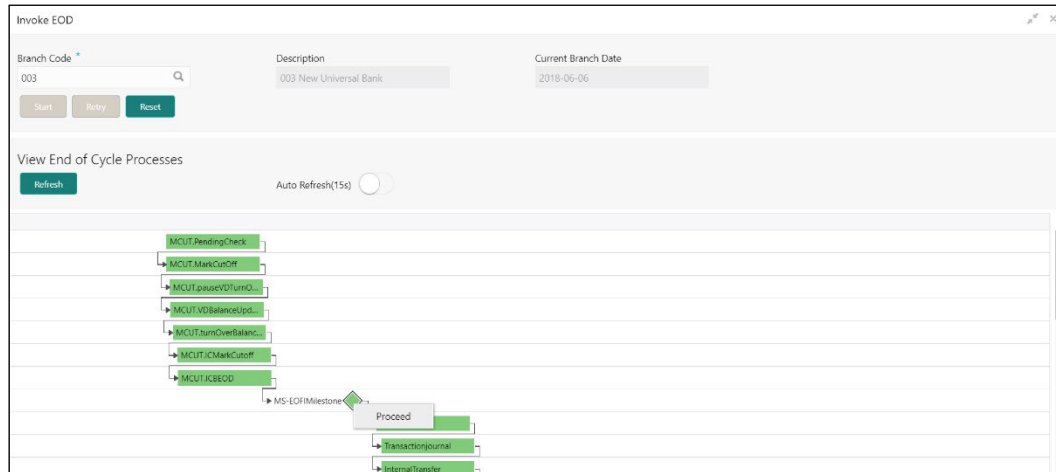
Note: The value specified in **Workflow name** field in above screen must be exactly same as the **first name** attribute specified in batch process definition file **EODWF.json** file

```
{
  "createTime":1594656285069,
  "name":"endofdaywf",
  "description":"End of Day Workflow",
  "version":1,
  "tasks": [
```

2.1 Steps to run EOD for a branch

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

Figure 5: Invoke EOD



2. Select the branch to run EOD. Refer **Section 2.5** in **Oracle Banking Common Core User Guide**.
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** and **taskReferenceName** must be same and prefixed with "MS-". Ex: MS-EOFIMilestone

Milestone

EOD run pause at each **Milestone** shall be resumed by clicking **Proceed** button manually.

Refer **Section 2.5** in **Oracle Banking Common Core User Guide**.

Sample template for milestone stage

```

{
  "type": "HTTP",
  "name": "MS-EOFIMilestone",
  "taskReferenceName": "MS-EOFIMilestone",
  "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"
          }
        ]
      }
    }
  },
  "asyncComplete": true
},
"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": {
        "appld": "${workflow.input.appld}",
        "branchCode": "${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": "workflowId",
    "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",

```

```

        "value":"PLATOORCH"
      }
    ]
  }
},
"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":{
        "appld":"${workflow.input.appld}",
        "branchCode":"${workflow.input.branchCode}",

```

```

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

| S No | Milestone | Job Name |
|---------|---|--|
| Url | http://<hostname>:<port>/plato-orch-service/api/tasks | |
| Headers | userId : <Logged in user id> branchCode : <Logged in branch code> appld : platoorch Content-Type : application/json Accept : application/json | userId – User who updates the task branchCode – Branch where the update is performed |
| Body | <pre> { "workflowInstancelId": "<EOD_Workflow_ID", "taskId": "<Task_ID>", "status": "<Status>" } </pre> | 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 Virtual Account Management Job

| S No | Milestone | Job Name | Description |
|------|-----------|-----------------------|---|
| 1 | MCUT | Pending Check | Task to check if any pending maintenance or transaction exist. This pending check task will fail if there is any unauthorized maintenance or transaction. If pending check task fails, you should check for unauthorized maintenance or transaction and take necessary action. This action could be authorizing/ deleting maintenance/ transaction. |
| 2 | MCUT | pauseVDTurn Over | Job to pause Intraday VdBalance and Turnover job. |
| 3 | MCUT | VDBalanceUpdate | Job to calculate value dated balances for virtual accounts |
| 4 | MCUT | turnOverBalanceUpdate | Job to calculate turnover balance for a virtual account which is used for charge calculations |
| 5 | MCUT | ICMarkCutoff | Job to mark cutoff so that interest processing can start |
| 6 | MCUT | ICBEOD | Job to process interest calculations |
| 7 | EOF1 | EodStatement | Job to generate EOD statement |
| 8 | EOF1 | ForgetEntity | Job to forget virtual entity |
| 9 | EOF1 | ForgetVirtualAccount | Job to forget virtual account |
| 10 | BOD | ICFlipDate | Job to change branch date |

| S No | Milestone | Job Name | Description |
|-------------|------------------|-----------------------|---|
| 11 | BOD | ResetSequenceWorkflow | Job to reset the sequence used to generate processing reference number for transactions, amount block/eca, internal transfer and statements |
| 12 | RCUT | ICReleaseCutoff | Job to release cutoff after interest processing is done |
| 13 | RCUT | UntankBalance | Job to untank accounting entries |
| 14 | RCUT | MarkAccountInactive | Job to mark virtual accounts inactive |
| 15 | RCUT | AmountBlockExpiry | Job to mark amount block expired based on expiry date |
| 16 | RCUT | CreditLimitUtil | Job to re-valuate credit limit utilization based on updated exchange rates |
| 17 | BOD | ChargeCalculation | Job to run charge calculation |

| S No | Milestone | Job Name | Description |
|-------------|------------------|--------------------------|---|
| 11a | BOD | ResetSequenceSubWorkflow | Job to reset the sequence used to generate processing reference number for transactions, amount block/eca, internal transfer and statements |