

Oracle® Banking Virtual Account Management EOD Configuration Guide



Release 14.7.1.0.0

F77000-01

May 2023

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Contents

Preface

1 Introduction

2 EOD Configuration

2.1 Steps to run EOD for branch

2-3

3 Job Definition Naming Convention

4 Oracle Banking Virtual Account Management Job

Index

Preface

Purpose

This guide provides the information on the required set up to run the End of Day process.

Audience

This guide is primarily intended for the following user/user roles:

Table 1 Audience

Role	Function
Implementation and IT Staff	Implementation and maintenance of the software

Acronyms and Abbreviations

The list of acronyms and abbreviations that you are likely to find in the guide are as follows:

Table 2 Acronyms

Abbreviation	Description
API	Application Programming Interface
EOD	End of Day

List of Topics

This guide is organized as follows:

Table 3 List of Topics

Topics	Description
Introduction	This topic provides the information on the EOD process.
EOD Configuration	This topic provides the information on the functional activities needs to be maintained in user's role to perform EOD operations.
Job Definition Naming Convention	This topic provides the information on naming convention to be followed when a custom job is introduced as a task into EOD process.
Oracle Banking Virtual Account Management Job	This topic provides the information on Oracle Banking Virtual Account Management Job table.

Related Documents

The related documents are as follows:

- *Oracle Banking Security Management System User Guide*
- *Oracle Banking Common Core User Guide*
- *Oracle Banking Getting Started User Guide*
- *Overview User Guide*
- *Customer and Accounts User Guide*
- *Charges User Guide*
- *Configuration User Guide*
- *Transactions User Guide*
- *Oracle Banking Virtual Account Management Installation Guide*

1

Introduction

This guide provides the background information on EOD process.

Oracle Banking Virtual Account Management allows the user 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.

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.

2

EOD Configuration

This topic describes the systematic instructions to configure EOD operations.

Specify **User ID** and **Password**, and login to **Home** screen.

The following functional activities needs to be maintained in user's role to perform EOD operations

CMC_FA_BRANCH_EOD_PROCESS

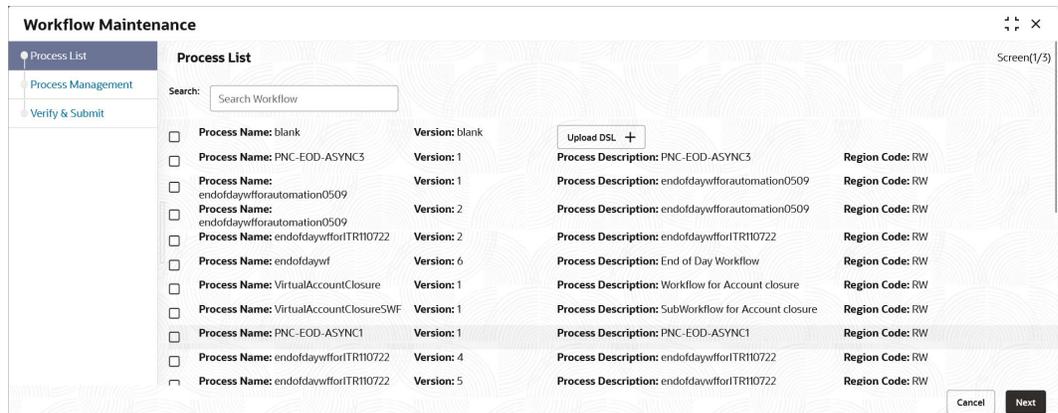
1. Download the [ResetSequenceSubWF.JSON](#) and [EODWF.json](#) files and save in the local folder.

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.

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

The **Product List** screen displays.

Figure 2-1 Product List



3. Select the **Process Name: blank** checkbox.
4. Click **Upload DSL+** button to upload batch process definition.
5. Select the file **ResetSequenceSubWF.json** from the local folder.
6. Click **Next** button.

The **Process Management** screen displays.

Figure 2-2 Process Management

7. Click **Next** button.
The **Verify & Submit** screen displays.

Figure 2-3 Verify & Submit

8. Click **Preview** or **Create Process** to register the batch.
9. Repeat the step 2 to 8 to create new batch definition for **EODWF.json** file.
10. 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 displays.

Figure 2-4 Configure EOD

11. Click the search icon and select the **Branch Code** to configure the batch.
12. Specify the **Workflow Name** in the respective field.

 **Note:**

The value specified in **Workflow name** field must be exactly same as the **first name** attribute specified in batch process definition file (**EODWF.json**).

Figure 2-5 Workflow Name

```

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

```

- [Steps to run EOD for branch](#)
This topic describes the systematic instructions to run EOD for a branch.

2.1 Steps to run EOD for branch

This topic describes the systematic instructions to run EOD for a branch.

Specify **User ID** and **Password**, and login to **Home** screen.

1. On **Home** screen, click **Core Maintenance**. Under **Core Maintenance** menu, click **Branch EOD**.
2. Under **Branch EOD**, click **Invoke EOD**.

The **Invoke EOD** screen displays.

Figure 2-6 Invoke EOD

The screenshot shows a web application window titled "Invoke EOD". It is divided into two main sections. The top section, "Initiate End of Day Batch Operation", contains three input fields: "Branch Code" (018), "Description" (EODBRANCH), and "Current Branch Date" (2018-04-09). Below these fields are buttons for "Start", "Retry", and "Reset". The bottom section, "View End of Cycle Processes", has a "Refresh" button and an "Auto Refresh(60s)" toggle switch. Below the toggle is a list of six processes, each with a green progress bar and a right-pointing arrow: "MCUT.PendingCheck", "MCUT.MaskCutOff", "MCUT.pauseVDTurnOver", "MCUT.VDBalanceUpdate", "MCUT.Verm-MainQueueUpdate", and "MCUT.Verm-MainQueueUpdate".

3. Click the search icon and select the **Branch Code** to run EOD.
Refer **Section 2.5** in *Oracle Banking Common Core User Guide*.
4. Click **Refresh** to view the current status of branch.

3

Job Definition Naming Convention

This topic describes about the naming convention to be followed when a custom job is introduced as a task into EOD process.

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 Branch EOD** in *Oracle Banking Common Core User Guide*.

Figure 3-1 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 Microservices 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": "${workflow.input.userId}"
      },
      "body":
      {
        "jobName": "<JobName>",
        "jobParameters":
        [
          {
            "key": "appId",
            "value": "<Application ID of microservice>"
          },
          {
            "key": "microServiceName",
            "value": "<Microservice name>"
          },
          {
            "key": "contextRoot",
            "value": "<Context root of microservice>"
          },
          {
            "key": "workflowId",
            "value": "${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 use Oracle Banking Microservices 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}",
        "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 use Oracle Banking Microservices 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
}
```

Table 3-1 Batch API

Serial Number	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	{ "workflowInstanceId": "<EOD_Workflow_ID", "taskId": "<Task_ID>", "status": "<Status>" }	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. The task has to be updated explicitly by calling the above update APIs. Only after successful update, the next task will get executed.

4

Oracle Banking Virtual Account Management Job

This topic describes about Oracle Banking Virtual Account Management Job names and its description.

Table 4-1 Oracle Banking Virtual Account Management Job

Serial Number	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	MarkCutOff	Job to mark cut off.
3	MCUT	pauseVDTurnOver	Job to pause Intraday VdBalance and Turnover job.
4	MCUT	VDBalanceUpdate	Job to calculate value dated balances for virtual accounts.
5	MCUT	VamIcMaintQueueUpdate	Job to update IC maintenance queue for value dated balance changes.
6	EOD	ChargeCalculation	Job to run charge calculation
7	EOD	ChargePosting	Job to run charge posting
8	MCUT	turnOverBalanceUpdate	Job to calculate turnover balance for a virtual account which is used for charge calculations.
9	MCUT	ICMarkCutoff	Job to mark cutoff so that interest processing can start.
10	MCUT	ICBEOD	Job to process interest calculations.
11	EOF1	MarkEOF1	Job to mark EOF1.
12	EOF1	EodStatement	Job to generate EOD statement.
13	EOF1	InitiateAccountStatement	Initiate Account Statement Generation.
14	EOF1	ForgetEntity	Job to forget virtual entity.
15	EOF1	ForgetVirAccount	Job to forget virtual account.
16	EOF1	ForgetCoreCustomer	Job to forget core customer.
17	EOF1	ForgetCoreAccount	Job to forget core account.
18	BOD	ChangeDate	Job to change branch date.
19	BOD	UncollectedAmount	Job to release the uncollected amount.
20	BOD	ICFlipDate	Job to change branch date.

Table 4-1 (Cont.) Oracle Banking Virtual Account Management Job

Serial Number	Milestone	Job Name	Description
21	BOD	ResetSequenceWorkflow	Job to reset the sequence used to generate processing reference number for transactions, amount block/eca, internal transfer and statements.
21a	BOD	ResetSequenceSubWorkflow	Job to reset the sequence used to generate processing reference number for transactions, amount block/eca, internal transfer and statements.
22	RCUT	ReleaseCutOff	Job to release cutoff after interest processing is done.
23	RCUT	ICReleaseCutoff	Job to release IC cutoff after interest processing is done.
24	RCUT	resumeVDTurnOver	Resume VD Balance Turnover.
25	RCUT	UntankBalance	Job to untank accounting entries.
26	RCUT	MarkAccountInactive	Job to mark virtual accounts inactive.
27	RCUT	AmountBlockExpiry	Job to mark amount block expired based on expiry date.
28	RCUT	CreditlimitUtil	Job to re- valuate credit limit utilization based on updated exchange rates.
29	RCUT	VATxnUtilization	Job to reset the virtual account level transaction limit restriction and move existing to history.

 **Note:**

The **Charge Calculation** (ChargeCalculation) and **Charge Posting** (ChargePosting) jobs are allowed to be configured either before date flip (EOD) or after date flip (BOD). Based on the bank's requirement, this can be configured. By default, these jobs are shipped with EOD configuration.

Index

E

EOD Configuration, [2-1](#)