# Oracle® Banking Virtual Account Management EOD Configuration Guide





Oracle Banking Virtual Account Management EOD Configuration Guide, Release 14.6.1.0.0

F61127-01

Copyright © 2018, 2022, Oracle and/or its affiliates.

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish, or display any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited.

The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

If this is software, software documentation, data (as defined in the Federal Acquisition Regulation), or related documentation that is delivered to the U.S. Government or anyone licensing it on behalf of the U.S. Government, then the following notice is applicable:

U.S. GOVERNMENT END USERS: Oracle programs (including any operating system, integrated software, any programs embedded, installed, or activated on delivered hardware, and modifications of such programs) and Oracle computer documentation or other Oracle data delivered to or accessed by U.S. Government end users are "commercial computer software," "commercial computer software documentation," or "limited rights data" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, the use, reproduction, duplication, release, display, disclosure, modification, preparation of derivative works, and/or adaptation of i) Oracle programs (including any operating system, integrated software, any programs embedded, installed, or activated on delivered hardware, and modifications of such programs), ii) Oracle computer documentation and/or iii) other Oracle data, is subject to the rights and limitations specified in the license contained in the applicable contract. The terms governing the U.S. Government's use of Oracle cloud services are defined by the applicable contract for such services. No other rights are granted to the U.S. Government.

This software or hardware is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications that may create a risk of personal injury. If you use this software or hardware in dangerous applications, then you shall be responsible to take all appropriate fail-safe, backup, redundancy, and other measures to ensure its safe use. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software or hardware in dangerous applications.

Oracle®, Java, and MySQL are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

Intel and Intel Inside are trademarks or registered trademarks of Intel Corporation. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. AMD, Epyc, and the AMD logo are trademarks or registered trademarks of Advanced Micro Devices. UNIX is a registered trademark of The Open Group.

This software or hardware and documentation may provide access to or information about content, products, and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services unless otherwise set forth in an applicable agreement between you and Oracle. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services, except as set forth in an applicable agreement between you and Oracle.

# Contents

Preface	
Introduction	
EOD Configuration	
2.1 Steps to run EOD for branch	2-
Job Definition Naming Convention	
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.
<b>EOD Configuration</b>	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.



# **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

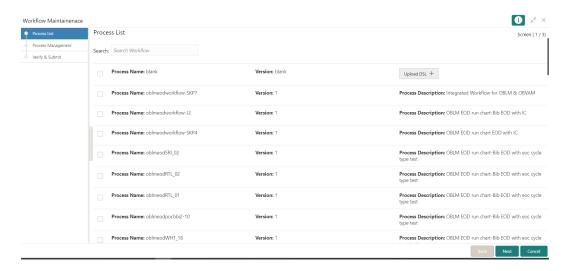
 Download the ResetSequenceSubWF.JSON and EODWF.json files and save in the local folder.

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.

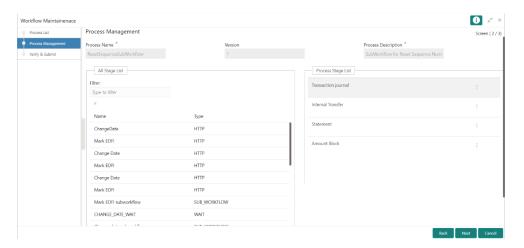
Figure 2-1 Product List



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

The **Process Management** screen displays.

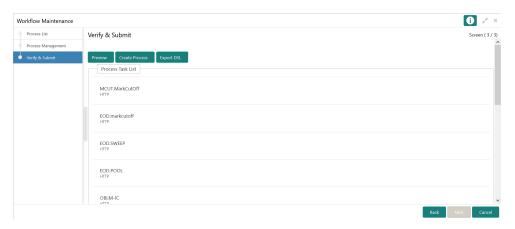
Figure 2-2 Process Management



7. Click **Next** button.

The Verify & Submit screen displays.

Figure 2-3 Verify & Submit

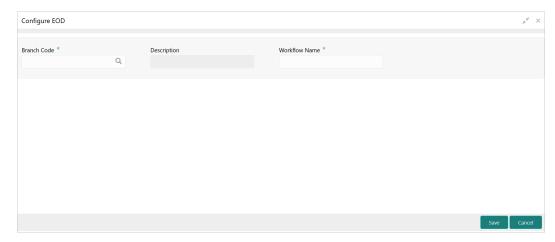


- 8. Click **Preview** or **Create Process** to register the batch.
- 9. Repeat the step 2 to 8 to create new batch definition for **EODWF.json** file.
- **10.** On **Core Maintenance** menu, under **Branch EOD**, click **Configure EOD** to configure batch for a branch.

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 systemetic instructions to run EOD for a branch.

# 2.1 Steps to run EOD for branch

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

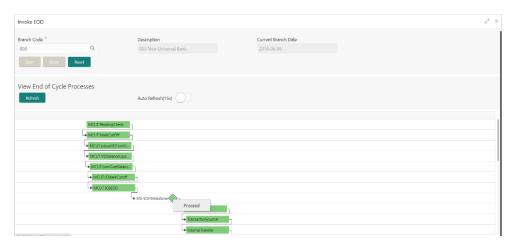
Specify User ID and Password, and login to Home screen.

- 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



- 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.



# **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- FOFIMilestone

### 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": "${workflow.input.userId}"
  "body":
  "jobName":"<JobName>",
  "jobParameters":
    "kev": "appId",
    "value":"<Application ID of microservice>"
    "key": "microServiceName",
    "value":"<Microservice name>"
    },
    "key": "contextRoot",
    "value":"<Context root of microservice>"
    },
    "key": "workflowId",
    "value": "${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 uses 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 uses 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</port></hostname>	_
Headers	userId : <logged id="" in="" user=""></logged>	userId – User who updates the task
	branchCode : <logged branch="" code="" in=""></logged>	branchCode – Branch where the update is performed
	appld : platoorch	
	Content-Type : application/json	
	Accept : application/json	
Body	{     "workflowInstanceId":	EOD_Workflow_ID – A Workflow ID gets generated when EOD is invoked
	<pre>"<eod_workflow_id", "<task_id="" "taskid":="">", "status": "<status>"</status></eod_workflow_id",></pre>	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	Milesto ne	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	pauseVDTurnOver	Job to pause Intraday VdBalance and Turnover job.
3	MCUT	VDBalanceUpdate	Job to calculate value dated balances for virtualaccounts.
4	MCUT	VamIcMaintQueueUpdate	Job to update IC maintenance queue for value dated balance changes
5	MCUT	turnOverBalanceUpdate	Job to calculate turnover balance for a virtual account which is used for charge calculations.
6	MCUT	ICMarkCutoff	Job to mark cutoff so that interest processing can start.
7	MCUT	ICBEOD	Job to process interest calculations.
8	EOFI	EodStatement	Job to generate EOD statement.
9	EOFI	ForgetEntity	Job to forget virtual entity.
10	EOFI	ForgetVirAccount	Job to forget virtual account.
11	BOD	ICFlipDate	Job to change branch date.
12	BOD	ResetSequenceWorkflow	Job to reset the sequence used to generate processing reference number for transactions, amount block/eca, internal transfer and statements.
12a	BOD	ResetSequenceSubWorkflow	Job to reset the sequence used to generate processing reference number for transactions, amount block/eca, internal transfer and statements.
13	RCUT	ICReleaseCutoff	Job to release cutoff after interest processing is done.
14	RCUT	UntankBalance	Job to untank accounting entries.
15	RCUT	MarkAccountInactive	Job to mark virtual accounts inactive.



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

Serial Number	Milesto ne	Job Name	Description
16	RCUT	AmountBlockExpiry	Job to mark amount block expired based on expiry date.
17	RCUT	CreditlimitUtil	Job to re- valuate credit limit utilization based on updated exchange rates.
18	BOD	ChargeCalculation	Job to run charge calculation.
19	BOD	UncollectedAmount	Job to release the uncollected amount.



# Index

Ε

EOD Configuration, 2-1

