# Oracle® Banking Enterprise Default Management

Event Manager Guide

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# Preface

This document helps you to define event configuration, which includes day zero setup and information about how to create event category, outcome, and how to attach a specific event category to your service (Business Object/Business Service). An event can trigger multiple outcomes and this document covers the details of configuration required in Oracle Banking Enterprise Collections and Oracle Banking Enterprise Recoveryto enable this feature. The document also covers the list of product-shipped event outcomes and related configurations shipped with product deliverable.

This preface contains the following topics:


- Audience
- Documentation Accessibility
- Organization of the Guide
- Conventions


## Audience

This document is intended for the following:

- Consulting Staff
- Administrators

## Documentation Accessibility

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## Organization of the Guide

This document contains:

Chapter 1 About this Guide

This chapter provides details about applicability of this guide.

Chapter 2 Introduction

This chapter presents an overview of event manager.

Chapter 3 Creating Event Category and Outcome

This chapter provides information on creating event categories and outcomes.

Chapter 4 Event Category and Service Configuration

This chapter provides information on configuring event categories and service relations.

Chapter 5 Tables Used by Event Manager

This chapter describes the tables used by event manager.

Chapter 6 Event Manager Properties

This chapter describes the property file used by event manager.

Chapter 7 Limitations

This chapter describes the event manager limitations.

# 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. |

# 1 About this Guide

This guide is applicable for the following products:

- Oracle Banking Platform (Oracle Banking Collections and Oracle Banking Recovery)
- Oracle Banking Enterprise Default Management (Oracle Banking Enterprise Collections and Oracle Banking Enterprise Recovery)

References to Oracle Banking Platform or OBP in this guide apply to all the above mentioned products.

# 2 Introduction

Event manager responds to events in the system by performing set of validations and set of activities (referred as outcome). Any activity, internal or external that affects the handling of accounts in Oracle Banking Enterprise Collections and Oracle Banking Enterprise Recovery can be classified as an event. Events are classified under categories and can be configured from Oracle Banking Enterprise Collections and Oracle Banking Enterprise Recovery admin user interface. Each category can have multiple events defined with different priorities. Event categories can be mapped to multiple events in the system. Outcomes are triggered on occurrence of the events in the system.

# 3 Creating Event Category and Outcome

Every event is created under a category. Each category can have multiple events defined with different priority levels. Each event can have different set of outcome. This chapter covers the details of product-shipped categories and outcomes along with the steps to configure new category and outcome.

## 3.1 Event Category

Following are the event categories that are shipped along with Oracle Banking Enterprise Collections and Oracle Banking Enterprise Recovery:

These event categories are shipped as day zero SQL scripts.

***Table 3–1 Event Categories***

| Event Category | Description |
|---|---|
| Payment | Event under this category is triggered when payment is received from the host. |
| Net Arrear Amount | Event under this category is triggered when there is change in the net arrear amount.<br>**Net Arrear Amount = Overdue Amount - Unclear Funds** |
| Outstanding Amount | Event under this category is triggered when there is change in outstanding amount. |
| Account Level Warning Indicator | Event under this category is triggered when any warning indicator is updated for the account. |
| Customer Level Warning Indicator | Event under this category is triggered when any warning indicator is updated for the customer. |
| Case Closure | Event under this category is triggered when case is closed. |
| Follow-up | Event under this category is triggered when follow-up is taken. Follow-up can be on Case or PTP. |
| Condition | Event under this category is triggered when conditions are satisfied for a set of accounts, customers or cases. |
| User Defined Events | This category is for implementation team. |

## 3.2 Calling Event Manager

Event Manager can be called in the following ways:

- **Online**: All transactions that occur through application user interface.
- **Batch**: Transactions that occur through Oracle Banking Enterprise Collections and Oracle Banking Enterprise Recovery batches.
- **Event Manager Batch**: Batch to execute events on list of accounts, customers, and cases.

The following table summarizes various ways of calling Event Manager:

*Table 3–2 Event Manager Call*

| Mode of Trigger | Online | Batch | Event Manager Batch |
|---|---|---|---|
| Payment **(PAY)** | YES | YES | NO |
| Net Arrear Amount **(NAMT)** | NO | YES | NO |
| Outstanding Amount **(OAMT)** | NO | YES | NO |
| Account Level Warning Indicator **(WACC)** | NO | YES | NO |
| Person Level Warning Indicator **(WPER)** | NO | YES | NO |
| Case Closure **(CCLS)** | YES | YES | NO |
| Follow-up **(FOUP)** | YES | NO | NO |
| Condition | NO | NO | YES |
| User Defined Events | YES | YES | NO |

# 3.3 Outcome

An outcome is result of any event triggered in the system. Oracle Banking Enterprise Collections ans Oracle Banking Enterprise Recovery provides a set of outcomes, which can be mapped to events defined for specific categories. The product architecture provides a way to plug in a new handler for a given outcome. The outcome and corresponding handler class are part of flx_fw_config_all_b table which is described in the next section.

Below is the list of outcomes shipped with product:

*Table 3–3 Product-Shipped Outcomes*

| Outcome | Description |
|---|---|
| Create Case | This outcome creates case for configured case type depending upon the input to the event.<br>For example, account or customer. |
| Close Case | This outcome closes case for configured case type depending upon the input to the event.<br>For example, account or customer or case. |
| Hold Case | This outcome holds case of configured case type for specified number of days.<br>For example, account or customer or case. |

| Outcome | Description |
|---|---|
| Unhold Case | This outcome unholds the case of configured case type. |
| Reallocate Case | This outcome helps to flag a case for reallocation. Reallocation switch will be turned to Y. |
| Create Task | This outcome creates task of configured task type for particular account, customer, or case. |
| Create Worklist | This outcome sets next display date of case depending upon input to the event.<br>For example, number of days and account, customer, or case. |
| Cancel Correspondence | This outcome cancels an unprocessed correspondence on an account or customer. |
| Update Strategy Review Date | This outcome creates a task on account, customer or case. |
| Change Case Status | This outcome changes the status of a case. |
| Exclude from Dialer | This outcome excludes an account or customer from dialer. |
| Set Full Debit Balance Due Flag | This outcome sets the Full Debit Balance Due Flag. |
| Execute Algorithm | This outcome triggers generic event manager algorithm. |

The following table provides you details of Outcome Code, Outcome Name and their corresponding handlers:

***Table 3–4 Outcome Handlers***

| Outcome Code | Outcome Name | Handler Name |
|---|---|---|
| CLCS | Close Case | CloseCaseEventHandler.java |
| CRCS | Create Case | CreateCaseEventHandler.java |
| HLDC | Hold Case | HoldCaseStatusEventHandler.java |
| UHLD | Unhold Case | UnholdCaseEventHandler.java |
| REAL | Reallocate Case | ReallocateCaseEventHandler.java |
| CTSK | Create Task | CreateTaskEventHandler.java |
| CTWL | Create WorkList | CreateWorkListEventHandler.java |
| CNCO | Cancel Correspondence | CancelCorrespondenceEventHandler.java |
| USRD | Update Strategy Review Date | UpdateStrategyReviewDateEventHandler.java |
| CCST | Change Case Status | ChangeCaseStatusEventHandler.java |
| EXDL | Exclude from Dialer | ExcludeFromDialerEventHandler.java |
| FDBD | Set Full Debit Balance Due | SetFullDebitBalDueFlgEventHandler.java |
| GEOA | Execute Algorithm | GenericEventHostUpdateEventHandler.java |

**Note:**

You can override the above handlers by performing the following steps:

1. Implement your own handler.

2. Change mapping of handler in flx_fw_config_all_b table against Category Id CollectionEventManagerFactory.

Points to note:

- Occurrence of each event category will trigger event manager to perform one or many outcomes.
- Occurrence of each event category will first trigger all the global events (for a specific event category) and then all the case specific events (for that event category) in order of priority that is, highest to lowest.
- One event category should only execute events defined within that category.
- For user defined events consulting should decide to pass input parameters as per the user defined events. However, parameters will be restricted to Account, (P) Primary customer, and Case ID.
- Multiple event IDs can be defined for each event category.
- Each event will have a priority. Events under each event category are executed in order of priority.
- Business rules can be associated with each event ID.
- Business rules are evaluated by rule engine when the event is triggered.
- If no rule is attached to an event then business rule evaluation is skipped.
- Event category conditions are set of rules which are executed in batch. Each condition can have an output account, customer, or case.
- For global events, system should allow to configure a queue against task creation to which the created task will be allocated.

# 4 Event Category and Service Configuration

In order to execute events after the service is invoked, you must configure service with one of the above listed categories. You can map a single category to a service. Events belonging to the mapped category are executed after the service is invoked.

In order to map service with category, you must create SQL script.

The system supports addition of new event category and service association by using scripts. Execute the script **AddEventCategoryServiceRel.sql** and then provide the input parameters. Log in to the SQL client with any credential that has access to Oracle Banking Enterprise Collections and Oracle Banking Enterprise Recovery schema and has privilege to execute scripts.

For example,

For FollowUp event category write script as:

>@ AddEventCategoryServiceRel.sql "C1-ChangeFollowUp" "FOUP" "Y" "//accountNumber" "//hostCustomerNbr" "//accountId" "//personId" "//sourceHostString" "//partyTypeFlg" "//toDoCaseId"

Enter the following parameters in the above script:

***Table 4–1 Script Parameters***

| Parameter | Description |
|---|---|
| SERVICE_NAME | Service name (Business Service/Business Object) on which you want to configure the event. |
| EVENT_CAT_CD | Event category code |
| ACTIVE_SW | Y/N |
| IS_SEQUENTIAL | Y/N (This parameter is by default given a value as **"N"**, so no need to provide it as input in above script). |
| PARAM_VAL1 | Host Account Number |
| PARAM_VAL2 | Host Customer Number |
| PARAM_VAL3 | Account Id |
| PARAM_VAL4 | Person Id |
| PARAM_VAL5 | Source Host String |
| PARAM_VAL6 | Party Type Flag |
| PARAM_VAL7 | Case Id |
| PARAM_VAL8 | - |
| PARAM_VAL9 | - |
| PARAM_VAL10 | - |

# 5 Tables Used by Event Manager

Event manager uses the following tables:

1. CI_EVENT
2. CI_EVENT_L
3. CI_EVENT_CATEGORY
4. CI_EVENT_CATEGORY_L
5. CI_OUTCOME
6. CI_OUTCOME_L
7. CI_EVENT_CAT_SERVICE_REL
8. CI_EVENT_OUTCOME_REL
9. CI_EVENT_EXE_LOG

# 6 Event Manager Properties

Event manager properties have been saved in table **flx_fw_config_all_b** against **category_id CollectionEventManagerFactory.**

For detailed description of each event manager related property in the table, see the following table:

***Table 6–1 Event Manager Properties***

| Property Name | Description |
|---|---|
| MAX_POOL | Indicates the maximum number of parallel tasks for an outcome event. |
| MIN_POOL | Indicates the minimum number of parallel tasks for an outcome event. |
| OUTCOMELIST | Indicates the global list of outcome. |
| OUTCOME CODE= Handler Class Name | Indicates the outcome code and corresponding handler class mapping. |
| EXCEPTION_HANDLER | Indicates the exception handler implementation class. You can implement your own exception handling. |
| DATA_PERSIST_IMPL | Indicates the persist data for log implementation class. You can implement your own logging class or method. |
| EVENTCATEGORY.Event Category Code | Indicates the event category execution mode mapping. Following are the values:<br>P=Parallel<br>S=Sequential |
| Q_JNDI_NAME | Indicates the JNDI name for JMS queue. |
| QCF_JNDI_NAME | Indicates the JNDI name for JMS connection factory. |
| CONSUMERNAME | Module using Event Manager functionality. Currently, the property value in the table is COLLECTION. |

# 7 Limitations

Event manager has the following limitations:

- There is no user interface to create the following objects:
  - Event Category
  - Outcome
  - Event Category and Service Relation
- Facts for rule engine are populated by using rule fact extraction algorithm.