

**Oracle® Banking Platform Collections**

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 Collections to 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

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## Organization of the Guide

This document contains:

### Chapter 1, "Introduction"

This chapter presents an overview of event manager.

### Chapter 2, "Creating Event Category and Outcome"

This chapter provides information on creating event categories and outcomes.

### Chapter 3, "Event Category and Service Configuration"

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

### Chapter 4, "Tables Used by Event Manager"

This chapter describes the tables used by event manager.

### Chapter 5, "Event Manager Properties"

This chapter describes the property file used by event manager.

### Chapter 6, "Limitations"

This chapter describes the event manager limitations.

## Conventions

The following text conventions are used in this document:

Convention	Meaning
<b>boldface</b>	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.
<i>italic</i>	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.

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## 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 Collections can be classified as an event. Events are classified under categories and can be configured from Collections 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.





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## 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.

### 2.1 Event Category

Following are the event categories that are shipped along with Collections:

These event categories are shipped as day zero SQL scripts.

**Table 2–1 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. <b>Net Arrear Amount = Overdue Amount - Unclear Funds</b>
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.

### 2.2 Calling Event Manager

Event Manager can be called in the following ways:

- **Online:** All transactions that occur through OBP user interface.
- **Batch:** Transactions that occur through OBP Collection 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 2–2 Event Manager Call**

<b>Mode of Trigger</b>	<b>Online</b>	<b>Batch</b>	<b>Event Manager Batch</b>
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

## 2.3 Outcome

An outcome is result of any event triggered in the system. Collections 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 2–3 Product-Shipped Outcomes**

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

**Table 2–3 (Cont.) Product-Shipped Outcomes**

<b>Outcome</b>	<b>Description</b>
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. 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.

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

**Table 2–4 Outcome Handlers**

<b>Outcome Code</b>	<b>Outcome Name</b>	<b>Handler Name</b>
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

**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.
- Currently, four fields are added in Add/Edit event for Event Manager configuration:
  - **Case Status:** Case Status is displayed only when the event type is Case and a Case Type is selected.
  - **Action Code:** Action Code is displayed only when the event category selected is Follow-Up.
  - **Result Code:** Result Code is displayed when the event category selected is Follow-Up and the Action code is selected.
  - **Create Task on Error:** This indicates whether task needs to be created when execution of outcomes for the given Event ID fails. The task should mention the Event ID, Outcome for which it failed and details of the failure.
- Two new outcomes are added:
  - **Exclude from Dialer:** User can select this option to exclude an account or customer from dialer.
  - **Set Full Debit Balance Due Flag:** User can select this option to set the Full Debit Balance Due Flag.
- Facts for event category condition:
  - **Account Specific:**
    - \* Demand Notice Date
    - \* Full Debit Balance Due Flag
  - **Case:**
    - \* Case Status

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- The facts mentioned below are added for rule in 2.4:
    - Demand Notice Date
    - Full Debit Balance Due Flag
  - Facts are added for borrower centricity:
    - **Customer Specific :**
      - \* Number of delinquent accounts where the customer is main customer
      - \* Borrower Level Collections Switch
    - **Case Specific:**
      - \* Number of Delinquent Accounts associated with the case
      - \* Number of Delinquent Accounts of the primary customer of the case



## 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 Collections 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 3–1 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	-





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## 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



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## 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 5–1 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: P=Parallel 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.



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## 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.

