

Oracle® Banking Enterprise Default Management

Functional Overview

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Preface

Oracle Banking Enterprise Default Management is a web-based innovative solution designed to assist financial institutions with managing the repayment of their consumer loan portfolios. The solution enables financial institutions in identification of delinquent accounts, accurate tracking and monitoring of delinquent accounts as well as charged-off accounts with high standards of efficiency.

The solution covers the delinquent life-cycle of a consumer loan starting from the identification of the symptoms of delinquency to actually tracking delinquency and impairment. It creates strategies in a befitting manner to achieve time and cost efficiency in collection activities.

This preface contains the following topics:

- [Audience](#)
- [Documentation Accessibility](#)
- [Related Documents](#)
- [Conventions](#)

Audience

This guide is intended for the users of Oracle Banking Enterprise Default Management.

Documentation Accessibility

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Related Documents

For more information, see the following documentation:

- For installation and configuration information, see the Oracle Banking Enterprise Default Management Installation Guide - Silent Installation.
- For a comprehensive overview of security, see the Oracle Banking Enterprise Default Management Security Guide.
- For the complete list of licensed products and the third-party licenses included with the license, see the Oracle Banking Enterprise Default Management Licensing Guide.
- For information related to setting up a bank or a branch, and other operational and administrative functions, see the Oracle Banking Enterprise Default Management Administrator Guide.

- For information related to customization and extension, see the Oracle Banking Enterprise Default Management Extensibility Guide for Host and UI.
- For information on the technical aspects, setups and configurations of Collections and Recovery, see the respective Oracle Banking Enterprise Default Management technical documents.

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.
<i>italic</i>	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
<code>monospace</code>	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

1 Overview

Oracle Banking Enterprise Default Management is a web-based innovative solution designed to assist financial institutions with managing the repayment of their consumer loan portfolios. The solution enables financial institutions in identification of delinquent accounts, accurate tracking and monitoring of delinquent accounts as well as charged-off accounts with high standards of efficiency. Oracle Banking Enterprise Default Management consists of - Oracle Banking Enterprise Collections and Oracle Banking Enterprise Recovery.

Oracle Banking Enterprise Collections covers the delinquent life-cycle of a consumer loan starting from the identification of the symptoms of delinquency to actually tracking delinquency and impairment. It creates strategies in a befitting manner to achieve time and cost efficiency in collection activities.

Key capabilities of Oracle Banking Enterprise Collections are as follows:

- Seamless Data Extract from Multiple Hosts
- Rule-based Customer Segmentation
- Workflow Automation with the help of Cases and Queues
- Operational Dashboards
- Best-in-class User Interface
- Vendor Management
- Concurrent Tasks Management
- Borrower Centricity
- Holistic and Enterprise Wide
- Performance Tracking and Auditing Tools
- Fully integrated with Oracle Financial Services Applications (such as OFSAA) and other Oracle Applications
- Role and Process-specific User Interface
- Digital Self-help for borrowers
- Specialized Collection Process for Bankruptcy
- Pre-configured intelligent segmentation
- Pre-configured early collections
- Repossession and Liquidation
- US Regulations Compliance

Oracle Banking Enterprise Recovery covers the life-cycle of a charged-off account and manages the account in tracking interest levied, expenses incurred, and payments received throughout the life-cycle of a charged-off account. It inherits all the capabilities of the Collection solution.

Key capabilities of Oracle Banking Enterprise Recovery are as follows:

- Seamlessly receiving information of charged-off accounts from multiple hosts
- Best-in-class interactive user interface to manage accounts in recovery
- In-house vs Recovery Agency allocation of charged-off accounts
- Vendor commission tracking
- System of record capabilities for tracking interest and expenses on charged-off accounts
- Transaction reversal framework

2 Key Features of Collections

This chapter describes the key features of Oracle Banking Enterprise Collections.

2.1 Data Extraction of Delinquent Accounts

Oracle Banking Enterprise Collections provides a framework for extraction of all the required data of delinquent accounts from multiple hosts and multiple products.

Following data extraction methods are supported in Oracle Banking Enterprise Collections:

- Through online calls from Collections
- Through online push from respective product hosts to Collections
- Through end of day batch process

Any subsequent changes in the data because of financial or non-financial transactions in accounts marked for collections will be updated online to make the latest information available. This will help the collector to take appropriate follow-up action without any delay.

2.2 Rules Engines

Oracle Banking Enterprise Collections supports highly configurable Rules Engine, which helps to automate decisioning and reduces human intervention without a negative impact to key performance measures.

Key features of Rules Engine are as follows:

- Intelligent segmentation of past due accounts based on facts like external risk score, balance, and number of times past due.
- Ruleset functionality where user can make complex business logic.
- Rule Engine is embedded in Oracle Banking Enterprise Collections which facilitates ease of configuration and better manageability.

2.3 Operational Dashboards

Oracle Banking Enterprise Collections provides best-in-class operational dashboard to present selected key metrics to management and key users. The dashboards are role based and are available to user directly after successful login. The dashboard gives a quick summary to the collector with drill down capability in order to explore each of the key metric. The dashboard can be preconfigured for each of the business role and adds significant business value to users at various levels.

The dashboard provides information about:

- Number of cases allocated
- Tasks allocated
- Key Performance Indicators
- Real time targets, status, and forecast of cases assigned to teams (for supervisors)

- Case Ageing Information
- Team member work load (for supervisors)

2.4 Queue Management

Queues aggregate work items (cases and tasks) assigned to an individual or team, and present in a predefined order. Queues support manual and automatic allocation of work items with extensive performance monitoring of the users, teams, and vendors.

Key features of Queue Management are as follows:

- Automatic Load Balancing with the help of Round Robin and Percentage-based methods
- Work Prioritization
- Capacity Planning for users, teams and queues
- Bulk Allocation and Reallocation of cases
- Concurrent Queuing
- Exception handling in queue management
- Supports different working modes such as Prompt, Dialer, or List Mode
- Automatic allocation of borrower level cases

2.5 Case Management (Strategy Management)

Oracle Banking Enterprise Collections supports strategy management with the help of Cases. This module is highly extensive and highly configurable by the end user.

Key features of the Case Management are as follows:

- Support for Account and Borrower centric approaches
- Integrated Rules Engine
- Adaptive to events and responds as configured
- Ability to support enter, exit, and interim processing
- SLA Tracking
- Case Association and sub cases
- Early, late and specialized collection strategies
- Ability to collect entire outstanding amount instead of only overdue amount
- Apply or ignore excess amount paid as part of scheduled payment arrangement
- Searching of cured accounts
- Navigation from Borrower to Account centric view and vice versa
- Seamless capture of follow-up actions
- Document Maintenance
- Best-in-class user interface for easy navigation

2.6 Vendor Management

Lenders outsource some of their processes to third party vendors. These vendors help lenders with their expertise on a particular working area. Vendors include Collection Agencies, Legal Service Providers, Property Consultants, and Skip Trace Consultants.

Key features of Vendor Management are as follows:

- Vendor onboarding
- Support vendor SLAs
- Support interfacing capabilities to send and receive files
- Automatic vendor assignment based on preconfigured rules
- Provision of framework to support file upload capability for vendor
- Provision for vendor agents to capture follow-up actions as well as promise to pay during the borrower interactions as a file upload

2.7 Follow-up and Contact Management

Follow-up actions can be taken by the collection user while working on the delinquent account. Oracle Banking Enterprise Collections supports multiple follow-up actions ranging from a simple outbound call to initiating risk reducing measures.

Follow-up functionality can be used to record the collection decisions in the system.

Key features of Oracle Banking Enterprise Collections Follow Up are as follows:

- Configurable contact summary
- Configurable action and result
- Quick capture of action results
- Capturing Promise to Pay
- Capability to send automated letters, notices, and SMSs

2.8 Specialized Processes

Oracle Banking Enterprise Collections provides extensive framework to support late collection strategies, with the help of specialized collection processes. Specialized process can be configured at both the account and customer levels.

Some of the key specialized processes which Oracle Banking Enterprise Collections supports are:

- Hardship
- Right Of Set Off (ROSO)
- Deceased
- Legal

2.9 Hardship Management

Hardship Management covers the tools and processes to remedy borrowers who have severe financial hardship, and are unlikely to resolve their indebtedness without the assistance from the lender. Oracle Banking Enterprise Collections provides framework to capture hardship related information and provides reliefs for a specified period of time.

The application can group all the accounts of the affected customer and provide a single view of the customer. User can view the details of all accounts separately. This enables decision making on providing applicable relief to the customer.

2.10 Event Manager

Any activity, internal or external, which may impact handling of an account in collections, is called as event. Oracle Banking Enterprise Collections supports Event Manager functionality which reacts to events in the system, performs a set of validations and if required performs a set of activities referred as outcome. Impact of these events can be at Global (account and customer) or at Case level. To handle the failure of event, a task is generated for the administrator.

Oracle Banking Enterprise Collections supports the following events:

- Payment
- Change in Net Arrear Amount
- Change in Outstanding Amount
- Account Level Risk Indicator
- Customer Level Risk Indicator
- Case Closure
- Follow-up
- User Defined Event

2.11 Task List

To complete various collection operations, Oracle Banking Enterprise Collections provides the ability to create tasks. These tasks can be created at different levels:

- Case
- Account
- Customer

Tasks can be manually or automatically assigned to respective users and queues. Task list enables user to take necessary action to fulfill tasks.

Key features of Task List are:

- Bulk operation on tasks like Forward and Complete
- Advance search and supervisor support
- Navigational support to task page of respective case, account or customer

2.12 Supervisory Activity

Supervisors are responsible for a range of activities from managing work assignment for a team of collectors to managing performance of the portfolio. Supervisors are required to view statistical information of the portfolio on a regular basis and strategize to improve the performance.

Oracle Banking Enterprise Collections provides a comprehensive workspace to perform these activities and to manage their portfolios.

Key bulk operations which Supervisory Activity module supports are:

- Case Creation and Reallocation
- Sending correspondence
- Next action scheduling
- Holding and Remove Hold of cases

2.13 Suspend Activity

During the lifecycle of collection cases, there are instances where certain ongoing or future activities or transactions need to be stopped or suspended. Oracle Banking Enterprise Collections provides an easy method to suspend all or selected transaction at the account and/or customer level.

Key Suspension Activities which Oracle Banking Enterprise Collections supports are:

- Case creation and reallocation
- Task creation and status change
- Dialer exclusion
- Letter, e-mails and SMS

2.14 Enterprise View

Lenders often utilize different receivable systems as the system of record for varying consumer product portfolios such as mortgages, indirect auto loan and lease, personal loan and credit card. Offering collection agents with a 360 degree and holistic view of a borrower's entire banking relationship provides them with important information for making appropriate decisions and engaging in a more meaningful discussion with the borrower.

To achieve this key requirement, Oracle Banking Enterprise Collections supports 360-degree view of the customer accounts. This view is referred as Enterprise View.

Key data elements which Enterprise View supports are:

- Party Information
- Account Information
- Collection Indicator
- Collateral Indicator

2.15 Digital Self-Help in Collections

Oracle Banking Enterprise Collections provides comprehensive digital self-help collections option. Customers can cure the delinquency of their account from any device at the time which is suitable to them without worrying about the calls from the collector. The solution emulates super-agent behavior, knowledge and attitude, through digitized strategies and business rules providing exemplary customer experience and psychographic persuasion technology.

Based on the customer and account data, the customers are provided with the following options:

- Pay partial overdue or outstanding amount
- Pay full overdue or outstanding amount
- Make promise to pay the overdue amount

The banks can configure the options presented to the customers as per their requirements.

2.16 Specialized Collections - Bankruptcy

Bankruptcy process in Oracle Banking Enterprise Collections enables lenders to efficiently process loans where the borrower has sought debt relief through the US Federal Bankruptcy Code. Bankruptcies represent a material workload in a defaults management operation and lenders expect bankruptcy processing to be inherent in any collection application. The bankruptcy process is unique and requires special workflow, data collection, vendor management and linkage to outside data to effectively manage debt protected by a bankruptcy stay.

Based on the bankruptcy chapter, the full lifecycle of activities is determined. The banker can:

- Upload various documents at appropriate point of time.
- Capture outcomes of different stages.
- Track the accounts considered under bankruptcy case for a primary borrower as well as a co-borrower.
- Process specific search criteria for bankruptcy which enables faster search of cases.
- Allows free navigation within bankruptcy train flow.
- Provision to capture customer intention during the bankruptcy.
- Separate tolerance days limit for bankruptcy promise to pay.
- Ability to track the arrearage payment plan along with confirmed plan.

It is designed with most commonly filed bankruptcy cases by retail customers such as Chapter 7 and Chapter 13. However, the framework is capable of supporting any other chapter of bankruptcy to cater to future needs.

2.17 Supervisory Dashboard

Oracle Banking Enterprise Collections provide best in class Supervisory dashboard to oversee the collection operation and to make changes dynamically to improve collection outcomes. Oracle Banking Enterprise Collections identifies Key Performance Measures (KPM) and provides a comprehensive dashboard that displays information in real time.

Supervisory dashboard design allows supervisors to view information or data based on filter conditions. These filters can be saved and re-used multiple times. The dashboard gives a quick summary to the supervisor about the following:

- Summary of cases and tasks
- Case aging
- Member status

The user-friendly interactive display enables the supervisor to view the dashboard and conduct various supervisory activities with ease. Supervisory dashboard is available with drill down capability in order to explore each of the key metric.

2.18 Pre-configured Intelligent Segmentation

Lenders use segmentation to rank order and segment all of their delinquent accounts based on repayment risk.

By processing accounts through Intelligent Segmentation, the lenders can:

- Group similar risk profiled accounts together.
- Apply customized treatments.
- Assign work to agents that are uniquely trained to resolve those accounts.

Based on the best practices of industry, pre-configured intelligent segmentation provides the most commonly used facts and filters used by the lenders to segment all their delinquent accounts.

Lenders can use these facts and filters to design their own intelligent segmentation as per their own requirements.

2.19 Pre-configured Early Collections

Collections cases define the set of collection activities that are completed as per the defined case lifecycle. The logical decisions and embedded operational guidelines are defined in the case lifecycle. With minimal changes in the pre-configured early collections case type, lender can implement multiple early collections case types for different products and customer risk groups.

Pre-configured early collections features:

- Provides the lenders a template for early collections.
- Provides ability to create low risk, medium risk, and high risk early collections case.
- Designs own case lifecycle by using template as per business requirements.
- Provides sharing of case data in the task for vendors as well as internal users.
- Improvements in Collector Dashboard
- Ability to call back at specific time as requested by the borrower.
- Ability to move the case based on risk indicator.
- Dialer pop-up when call is routed to a collector.
- Helps in defining dynamic panels and associating with specific case type.

Cases are a key part of the overall workflow management in a collection operation and work in concert with Intelligent Segmentation.

2.20 Better User Experience

Every extra click saved for collector can save huge amount of efforts and resource utilization for the collection organization. In order to save valuable time of collector, the user interface offers the following capabilities:

- Widget based Service Collection Account page showing most significant information to the collector. The page contains the Account, Borrower, Case, and Activity widgets that helps to view details and perform various tasks.
- Follow Up is linked with contacts. So the collector does not need to click Create Contact and this saves precious seconds.
- In Task List, collector can self-assign a task using the **Assign to Me** button.
- Automatic allocation of tasks to vendors.
- Party search based on Social Security Number (SSN).
- Allows to capture multiple contacts in the same session.
- Allows quick result capture for most frequently used action-result.

These capabilities save significant time of the collector and further help to reduce cost and leverage the resources in most optimized manner.

2.21 Specialized Collection - Asset Repossession and Liquidation

Asset Repossession is a set of actions by which party having right of ownership of the property takes the property back from the party having right of possession without invoking court proceedings.

Asset Repossession and Liquidation process is an account level process. The collector can initiate an asset repossession case on an account in collections. The asset repossession case can also start as an outcome of bankruptcy or legal case.

Oracle Banking Enterprise Collections provides:

- Pre-configured case lifecycle for repossession and liquidation.
- Intuitive user interface to capture various details during lifecycle.
- Interface to vendors to fulfill liquidation activities.
- Process specific search criteria for asset repossession which enables faster search of cases.
- Calculation of redemption amount based on state.

It is designed with most commonly used automobile loans where automobile is used as collateral for the loan.

2.22 General Data Protections

Oracle Banking Enterprise Collections also allows the user to view and update communication address, and change the consents provided for communication. Certain Personally Identifiable Information (PII) data elements of party can be masked and tokenized for data security purpose. For example, Social Security Number (SSN) can be masked and tokenized, and Email can be masked. Oracle Banking Enterprise Collections supports the following functionality through backend services:

- Ability to bulk export the party's Personally Identifiable Information (PII) data elements in standard file format.
- For purging of party's Personally Identifiable Information (PII), it uses the framework provided by Master Data Management (MDM).

2.23 Identification of Accounts for Partial Charge Off

Oracle Banking Enterprise Collections has the capability to identify accounts qualify for partial charge off. This is done through a batch. Once such accounts are identified by the batch, details of these accounts, such as account number, partial charged off amount, and the reason for partial charge off, are sent to servicing. The actual charge off of such accounts is done in servicing system.

Following are certain criteria for partially charging off an account:

- All the financially responsible parties of an account, have either Bankruptcy or Deceased indicator. The financially responsible parties include the Sole Owner (SOW), Joint and First (JAF), Joint and Others (JAO) or Cosigners.
- All collaterals attached to an account have been repossessed and the redemption period has expired (this is internally derived on the basis that all attached collaterals' liquidation process has started).

2.24 Personally Identifiable Information (PII)

The capture of the following list of Personally Identifiable Information (PII) elements for a party is supported.

Sr. No.	Element Name	Description	Mandatory (M) / Optional (O) / Conditional / Configurable (C)	Masking
1	Full name	Full name of a party (derived field) Multiple name types can be maintained for a party.	M	N
2	Date of Birth	Date of birth of a party	M	Y
3	Address	Current, past and future address details of a party for multiple address types such as home, work, postal and more. Includes address types (Work, Residential, Postal, Seasonal, Holiday), Line 1 to Line 12, City, State, Country and Pin Code.	M	N
4	Gender	Gender of a party	O	Y
5	Party Identification	Tax and other identification details of a party	M	Y
6	Other Tax Residency details	All FATCA (US)/CRS (Non US) details of a party	O	Y
7	First name	First name of a party	M	N

Sr. No.	Element Name	Description	Mandatory (M) / Optional (O) / Conditional / Configurable (C)	Masking
8	Second Name	Second name of a party	O	N
9	Middle Name	Middle name of a party	O	N
10	Last Name	Last name of a party	O	N
11	Login name	Email ID or User ID or Customer ID of a party	C	Y
12	Marital status	Marital status of a party	O	Y
13	Industry	Type of industry in which a party is employed	O	N
14	Occupation	Occupation of a party	O	N
15	All Telephone numbers	Contact details such as phone numbers, email addresses, fax numbers and so on, of a party along with preferences. Includes Fixed Landline Office, Fixed Landline Work, Fixed Landline Others, Fixed Landline Seasonal, Mobile Work, Mobile Personal, Mobile Seasonal, and Mobile Others	O	N
16	All Email address	Email ID details of a party. Multiple email IDs can be maintained with any one ID set as preferred. Includes Work, Personal, Seasonal, Others (including the one captured in Basic details tab)	C	Y
17	Employer name	Name of party's employer in the party's past and current employments	O	N
18	Employee ID	Employee ID of a party in the party's past and current employments	O	N
19	Job title/Designation	Designation of a party in the party's past and current employments	O	N
20	Deceased	Risk indicator to denote that a party is deceased	O	N
21	Bankruptcy	Risk indicator to denote that a party is bankrupt	O	N
22	Property title reference	Unique title reference number for a collateral. Includes all property collaterals where party is collateral owner (collateral description and property title reference number)	O	N
23	Vehicle registration number	Vehicle registration number for a collateral. Includes all automobile collaterals where party is collateral owner (collateral description and vehicle registration number)	O	N
24	Financial information	Complete financial details captured for a party	C	N

Sr. No.	Element Name	Description	Mandatory (M) / Optional (O) / Conditional / Configurable (C)	Masking
25	Bank account information	All bank accounts (account ID, account type and amount) where a party is an account owner.	C	N
26	Electronic communication consent	Consents given by a party to receive notices and documents through electronic means of communication. If selected, it is mandatory to capture at least one preferred email address for the party.	O	N
27	All Other Consents	All consents at party level (including text and value)	M	N

2.25 Upgrade of Technical Components

Oracle Banking Enterprise Collections has modified technical components. This is to ensure flexibility in configurations and make integration with external components easier.

Following are the upgrades made to technical components:

- Security stack has been made optional. This ensures that Oracle Banking Enterprise Collections can be deployed with either native database security or Oracle security stack.
- Document generation is now possible using Apache FOP. This removes the dependency on Documaker and Oracle Analytics Server.
- SOA component has been deprecated. All the approvals required for PTP, Hardship, Legal, and ROSO are now ported to the Work Item Inquiry (Fast Path: WL001) page. This removes the dependency on SOA component and helps to achieve faster approval process with higher efficiency.

3 Key Features of Recovery

Oracle Banking Enterprise Recovery has all the basic building blocks of Collections, such as intelligent segmentation of charged-off accounts, case life cycle management, and queue management capabilities for charged-off accounts. It provides complete follow-up action results framework for actions performed on the charged-off accounts. It also provides task management for all the tasks created for charged-off accounts.

In addition, Oracle Banking Enterprise Recovery provides system of record capabilities for charged-off accounts which allow charging of interest, raising an expense, and receiving payments on charged-off accounts. The complete accounting entries for any events on the charged-off accounts are logged in the appropriate general ledgers. Oracle Banking Enterprise Recovery facilitates to track the efforts of recovery of charged-off accounts up to the point where no further recovery is possible.

This chapter describes the key features of Oracle Banking Enterprise Recovery.

3.1 Seamlessly Receiving Charged-Off Accounts Information

Oracle Banking Enterprise Recovery provides a framework for receiving all the required data of charged-off accounts from multiple hosts and multiple products. This data consists of borrower information, account information, charge-off related information, and outstanding balance information along with break-up of principal, interest, and fees.

The following data extraction methods are supported in Oracle Banking Enterprise Recovery:

- Through online calls from Recovery
- Through online push from respective product hosts to Recovery
- Through end of day batch process

The charge-off account information is used for any further processing of accounts in recovery.

3.2 Best-in-Class Interactive User Interface

Oracle Banking Enterprise Recovery provides interactive user interface to access the accounts in recovery. User is able to view all the critical information of charged-off account in recovery in a single glance. All the information is divided into logical groups and is presented to user in a precise manner.

The landing page has many significant widgets, such as:

- Payment Details
- Charge Off Details
- Balance Details
- Party
- Case
- Activity Log

The user can expand every widget to see detailed information. The charge-off account information is used for any further processing of accounts in recovery. The user actions are grouped logically to ensure that the user is able to perform different actions on the accounts in recovery.

3.3 Operational Dashboards

Oracle Banking Enterprise Recovery provides best-in-class operational dashboard to present selected key metrics to management and key users. The dashboards are role based and are available to the user directly after successful login. Different dashboards are provided for recovery agents, supervisors, and managers. The dashboard gives a quick summary with drill down capability in order to explore each of the key metric. The dashboard can be preconfigured for each of the business role and adds significant business value to users at various levels.

The dashboard provides information about:

- Number of cases allocated
- Break-up of cases
- Tasks allocated
- Key Performance Indicators

3.4 In-House vs Recovery Agency Allocation

Oracle Banking Enterprise Recovery provides a framework for allocating the charged-off accounts to either in-house recovery team or recovery agency. The configuration allows allocating cases based on different attributes of charged-off accounts, such as days since charged-off, total outstanding amount, and product types. This ensures maximum efficiency in recovery operations and ensures the right set of team is working on right set of accounts. In addition, work allocated to recovery agency can be based on the roles they play in the operations.

A recovery agency can be on-boarded as:

- Primary
- Secondary
- Tertiary

The charged-off accounts can be allocated to agency based on the age of the charge-off or any other attributes of charged-off accounts.

3.5 Vendor Commission Tracking

Oracle Banking Enterprise Recovery provides a framework for tracking the charged-off accounts allocated to vendors. The service level agreement with individual vendor can be tracked. This ensures the performance of every vendor is monitored and necessary corrective action is taken up as required. Commission percentage for vendor can be defined in the system and system provides the ability to calculate the commission for vendor on the accounts allocated to the vendor. This helps in paying the commission earned by vendor agency for the efforts in recovering the amounts from charged-off accounts.

3.6 Interest Computation for Accounts in Recovery

Oracle Banking Enterprise Recovery provides system of record capability of charging the interest on the charged-off account. This allows in levying interest on the charged-off accounts at a default interest rate. The configuration allows specifying the interest plan which can be attached to the account. If lender does not want to levy interest on the charged-off accounts, they simply need to configure the interest plan accordingly. The interest cycle ensures the interest is calculated based on the provided interest rate plan at a pre-defined

frequency and the interest amount is added to the account. The interest bucket is available for viewing and tracking the interest amount.

3.7 Expense Tracking for Charged-off Accounts

Oracle Banking Enterprise Recovery provides system of record capability of tracking the expense occurred on the charged-off account. This allows in adding the expense to the outstanding amount of charged-off account and viewing the added expenses. The expenses are tracked in a different bucket making it easy to view and track. The configuration allows if the added expenses need to be approved before it is added to the charged-off account. The approver can be a user of senior level to ensure that only right expenses are charged to the account.

3.8 Payments Processing for Accounts in Recovery

Oracle Banking Enterprise Recovery provides system of record capability of accepting the payments for the charged-off accounts. This ensures any payment towards the account in recovery is applied to the account. The system also provides the capability to appropriate the payment received against every available bucket. The appropriation sequence can be defined to ensure the default applicability of payments. However, user with right authority can change the appropriated amount for each of the bucket. The payment information is tracked by the recovery system and can be made available as a part of customer account statements.

3.9 Transaction Reversal

Oracle Banking Enterprise Recovery provides system of record capability of reversing a payment received for a charged-off account or an expense posted on the account. This ensures any erroneous payment made or a wrongly charged expense is reversed from the charged-off account.

The framework allows complete reversal capability to ensure system replays all the transactions posted to the account after the reversed payment or expense. The transactions are reposted to the account in the correct manner and all the buckets are adjusted accordingly. System adjusts the interest amount due to the reversed transaction. The reversed transaction and the interest adjustment entries are shown in customer statement as well.

3.10 Account Status

Oracle Banking Enterprise Recovery provides the capability to track the system defined and user defined statuses of an account. System also has the capability to add a user defined status to an account so that certain actions like making a payment and adding an expense can be restricted on such accounts. Transactions can be posted to such restricted accounts with appropriate approvals.

3.11 Risk Indicators

Oracle Banking Enterprise Recovery provides the capability to apply risk indicators on an account or a party. Risk Indicators are certain conditions on the basis of which an account can be blocked when those conditions are met. Applying risk indicator leads to the addition of a user defined status to an account so that certain actions like making a payment and adding an expense can be restricted on such accounts. Transactions can be posted to such restricted accounts with appropriate approvals.

3.12 Settlement Offer

Oracle Banking Enterprise Recovery provides the capability to apply settlement offers on the accounts in Recovery. This is one of the tools used in Recovery wherein borrowers are given an option of closing the loan by paying an amount less than the total amount owed (settlement amount) within a specific period of time (settlement term).

The following types of settlement offers are supported:

- **System Settlement Offer:** This settlement offer is created automatically by the system for the applicable accounts using a pre-defined criterion.
- **Manual Settlement Offer:** This settlement offer is created manually by the banker based on discussion with the borrower wherein the borrower agrees to settle the account by paying a certain settlement amount. The settlement amount that can be offered is restricted by the authorized limit set for the banker. If the allowed limit for settlement amount is breached, the settlement offer requires approval.
- **Vendor Settlement Offer:** This settlement offer is created on the recovery accounts that are assigned to vendors. The settlement offers can be made by the vendor based on the allowed limit specified in the SLA. Any breach in allowed limit requires approval.

The customers who receive the offers are then expected to accept the offer and settle the loan with the bank. Once all payments are received from the borrower towards the settlement amount, the remaining outstanding amount is written-off and account is marked as Closed in Recovery.

4 Core Components

This chapter describes the core components of Oracle Banking Enterprise Default Management. These components include functionalities that are used to perform primary operations and to define the broad parameters within which the application functions.

4.1 Common Services

The Common Services module is composed of different maintenances and processing services, each of which serve to define the bank, the branch, and the various parameters within which a banking company seeks to operate, and the essential service calls required to honor the core functionalities. These services are used for various purposes by various Oracle Banking products. The common services and maintenance are broadly grouped as follows.

- Core Entity Services
- Calendar Services
- Currency Services

4.1.1 Core Entity Services

Core Services enable the bank to configure the broad parameters such as bank and branch configurations that include defining the structure of the bank through maintenance of regional offices, lines of business and various branches, along with unique identification codes, financial cycles and accounting periods, followed by the bank, the policies of the bank, geographical locations (countries, regions, states, cities, and so on), languages and the different time zones in which the bank operates.

Following are the maintenance pages that enable the bank to configure various core entity parameters required for the bank to support its day-to-day primary operations.

- **Bank Codes (Fast Path: CS01):** This page helps the user to define a unique bank code for the own bank.
- **Bank Parameters (Fast Path: CS03):** This page helps the user to configure various parameters such as bank name, address, bank currency, holidays, and so on.
- **Branch Parameters (Fast Path: CS06):** This page helps the user to configure various parameters such as branch name, address, branch currency, SWIFT and other payment network codes, and so on.
- **Country Codes (Fast Path: CS09):** This page helps the user to configure countries and its time zones.
- **State Codes (Fast Path: CS17):** This page helps the user to configure the states, province or emirates of a country.
- **Bank Policy (Fast Path: CS26):** This page helps the user to configure various policies of the bank related to AML reporting, unclaimed processing and so on.
- **Reason Codes (Fast Path: CS16):** This page helps the user to configure multiple primary and secondary reason codes that the bank may want to stamp to a business event at different stages of the business process.

- **Purpose Codes (Fast Path: CS24):** This page helps the user to configure various purpose codes that can help the bank to select a suitable product to service the customers need.
- **Transaction Code Maintenance (Fast Path: CS44):** This page helps the user to configure various transaction codes that can be linked to a financial transaction for accounting and reporting purpose.
- **Define Non-Financial Event Transaction Code Mapping (Fast Path: CS45):** This page helps the user to configure various transaction codes that can be linked to non-financial transactions for audit or reporting purpose.
- **Data Security Configuration (Fast Path: CS50):** This page helps the user to configure the data privacy and security configuration such as Masking in UI, Tokenization in Database (SSN only) and Masking in data portability (for a predetermined list of PII fields) field-wise (applicability and masking technique) and user-wise (masked for some users and plain text for other users) for the individual customers of the bank.
- **Audit Text Based Search (Fast Path: BAM56):** This page helps the user to track all the changes done in any of the maintenance records at any time.

The core entity provides various services to access those parameters configured through the above pages. Some of the most important services of this module that other modules use are as follows:

- Financial cycle for a given date
- Accounting period code
- Check last day of financial year
- Check accounting period end date
- Bank level AML threshold
- SWIFT address of the branch
- Bank and Branch Currency
- Branch Hierarchy
- ISO Country Codes
- Time Zones

4.1.2 Calendar Services

Calendar Services enable the bank to configure rule-based calendars for the different branches of the bank, currencies and payment networks that the bank deals with. It also allows the bank to define ad hoc holidays to handle unexpected situations that may arise due to natural calamity or government directive. The generic rule-based calendar configuration can be extended for a period of N years using custom scripts.

The Calendar functionality is achieved through the following pages:

- **Holiday Rule Maintenance (Fast Path: CAL01):** This page helps the user to define the generic rules that need to be evaluated to mark a day as a holiday in a calendar. This rule is applicable for every calendar year defined.
- **Calendar Type Maintenance (Fast Path: CAL02):** This page helps the user to define a calendar type and link the holiday rules. They can later attach the defined calendar type to a branch, currency or payment calendar.

- **Ad hoc Calendar Maintenance (Fast Path: CAL03):** This page helps the user to define any ad hoc holidays to handle unexpected situations that may arise due to natural calamity or government directive.
- **Define Payment Calendar Codes (Fast Path: CS15):** This page helps the user to define a calendar and link the holiday rules for a clearing or payment network that the bank deals with for its transactions.

The calendar services serve to record and retrieve the various holidays of the bank in a calendar year. Some of the most important services of this module that other modules use are as follows:

- Current working date
- Previous working date
- Next working date
- Working day check for a given date

4.1.3 Currency Services

Currency Services enable the bank to configure international currency codes, currency pairs, exchange rate types, buy and sell spreads, exchange rates, exchange rate history and attributes of various currencies such as spot days, decimals allowed or rounding, which can be used for various purposes by different products under Oracle Banking suite.

The Currency support functionality is achieved through the following pages:

- **Currency Codes (Fast Path: CY01):** This page helps the user to configure the unique ISO currencies used in banking and business globally. This page also allows the bank to configure various currency related attributes such as adopted countries, spot days, decimals allowed, amount format and rounding rules.
- **Amount Text (Fast Path: CY02):** This page helps the user to configure the locale word equivalent of an amount that is in practice in a country. This page also allows the configuration of pre and post decimal text values for each currencies.
- **Currency Pairs (Fast Path: CY03):** This page helps the user to configure the currency pairs supported by the bank through a specific branch. This page also allows the configuration of the currency quote method (direct, indirect) and the common currency used as through currency for the calculation of exchange rates.
- **Currency Branch Parameters (Fast Path: CY04):** This page helps the user to configure the currencies in which the branch is allowed to transact.
- **Currency Denominations (Fast Path: CY05):** This page helps the user to configure the currency denominations in circulation as notes and coins for each currency.
- **Currency Rate Types (Fast Path: CY06):** This page helps the user to configure the exchange rate types such as STANDARD, EFT, and TC that are commonly used in the banking industry for calculating exchange rates.
- **Exchange Rate Spreads (Fast Path: CY07):** This page helps the user to configure the buy and sell spreads for a currency pair that the bank may want to apply on the mid-rate to calculate the exchange rate.
- **Exchange Rate History (Fast Path: CY09):** This page helps the user to retrieve and view the latest rate available of a currency pair. This page also helps the user to view rate history of a currency pair on a specific date, a date range or the movement of rates in the past one to three months.

Any module that requires currency related service for its operations refers to the currency services module.

The currency services module provides various services to access those parameters configured through the above pages. Some of the most important services of this module that other modules use are as follows:

- ISO currency codes allowed in a branch
- Amount Rounding off Rule and Rounding off unit for each currency
- Amount Format for each currency
- Get Exchange Rate for a given currency pair
- Get Exchange Rate Spread for a given currency pair
- Last Rate Date
- View Exchange Rate Movement in a date rate
- Convert amount of a currency into another currency of the currency pair

4.2 Rules Framework

The Rules framework enables the bank to define various business rules, which are in turn used for specific purposes. It is a generic setup and used as a common module to define and resolve the defined rules.

Two flavors of rules can be defined - Decision Table and Guided Rule Editor. Facts are evaluated and used for defining inputs and the defined outcomes are given to the calling modules.

There are basic validations that the rule should be meaningful and complete. That is, the values of facts should be defined such that the evaluation will not remain incomplete. The number of facts and outcomes can also be defined by the business users. Maximum of 8 facts can be used to define rules.

Each defined rule belongs to a domain category and hence can be linked for the specific purpose of that domain category. The rules are attached at the respective placeholders in modules and executed at relevant places. For example, rules for asset classification, fees, interest setup, alert template resolution, and so on.

The above functionality is achieved through the following pages:

- **Rule Author (Fast Path: RL001):** This page helps the user to define a Decision Table and Guided Rule Editor based rule for a domain category.
- **Rule Simulator (Fast Path: RL002):** This page helps the user to evaluate the functionality of the defined rules by simulating a required scenario with sample test inputs.
- **Rule Search (Fast Path: RL003):** This page helps the user to search and view a defined rule.
- **Expression Builder (Fast Path: RL004):** This page helps the user to define various complex arithmetic expressions or formulas using facts and numerals. These expressions can be used while authoring a rule.
- **Filter Definition (Fast Path: RL005):** This page helps the user to define various filters that can be applied dynamically to identify certain details. The filters defined currently are being used to identify various accounts that qualify for collections. This functionality is specifically used in Collections module.
- **RuleSet (Fast Path: RULE01):** A RuleSet can be created using this page by grouping one or more rules that uses the same set of inputs. This functionality also helps to order the execution sequence of the rules where multiple rules need to be asserted for the same set of inputs. This functionality is specifically used in Collections module.

- **Rule Execution:** Rule IDs can be configured by other modules as appropriate to the relevant business event where the rule needs to be resolved. The modules call the rule resolution services at appropriate business events to evaluate the conditions to get the defined outcome.

4.3 Common Account

The following features are offered as part of Common Account.

4.3.1 Risk Indicator's Impact Configuration

With the variety and complexity of products and services offered by a bank to its customers, there is a need to follow prudential norms to safeguard the interests of the bank and also avoid any fraudulent or malicious activities. Banks fall back upon the system to help them aid in this objective. Risk Indicators functionality helps the banker to automate the actions that need to be taken as a prudent banker, when certain identified indicators of risks are maintained.

Through risk indicators framework, a bank can also maintain various restrictions that it wants to put on an account due to party's due diligence status.

This functionality is addressed using the Risk Indicators Impacts Cross-Reference (Fast Path: ACCT010) page.

4.4 Multi Entity Multi Branding

The application provides a framework that enables enterprises to cater to their Multi Entity Multi Branding (MEMB) requirements using a single implementation of the application. The banking companies can make use of the MEMB framework to save costs in IT infrastructure and achieve operational efficiency.

Banking groups prefer to market several products under various brand names so as to get increased shelf space in the banking market. The different products they market are managed by several lines of businesses which act as independent units.

The solution provides flexibility for the banks to define multiple levels of entities as per hierarchy with in an enterprise. Users are always linked to the lowest level in the hierarchy. It gives the flexibility to resolve data for any entity above this level. Bank servicing units or branches can be configured to service one or more business units.

Users are mapped to a Home Business Unit and can have access to one or multiple Business Units.

Quite often it so happens that the products launched by the banking group under one brand compete with the products launched by the same banking group under some other brand in the market. In such cases confidential data should not be shared across the competing units.

Similarly, some Business Units in the enterprise offers products and services which complement each other. The data of such complementary units should be visible across the business units to reap the benefits of cross selling of products and services.

In order to reduce the overall investments in IT infrastructure, banking groups prefer to use the same IT infrastructure to cater to its entire banking empire of the enterprise.

The following key features of MEMB helps in resolving the data availability issues:

- Supports the co-existence of multiple entities within a single enterprise, such as Legal Entities, Market Entities and Business Units, while ensuring that system data is precisely partitioned between these

entities.

- Facilitate information sharing across complementary business units.
- Ensure that confidential data is not accessible across competing business units.
- Robust and responsive to changes in information security policies over time.

The solution offers partitioning of data amongst multiple entities based on visibility rules configured for different categories of users of the bank and self-service channels for efficiently sharing and securing critical information across complementary and competing business units respectively.

4.5 Enterprise Product Manufacturing

The following features are offered as part of Enterprise Product Manufacturing.

- **Hardship Relief Policy (Fast Path: PM006):** If a customer is going through a financial hardship due to certain events such as job loss, drought, and accident, and so on, and is unable to repay the outstanding dues in the account, the bank may provide certain type of relief for a specified duration. The bank can evaluate the customer's case and provide hardship relief for the agreed period. This relief may be necessitated due to a regulatory directive in some cases.

The Hardship Relief Policy allows the user to configure hardship reliefs allowed for CASA Products. Different types of relief can be configured, namely, freeze past due calculation, change interest rate, waive fees, and freeze interest.

- **Define Interest Rule (Fast Path: PM011):** Interest rules can be defined as per Pricing Policy. Pricing works on the concept of defining charges on the basis of rules created based on customer, transaction, account and other attributes.
- **Define Domain Category Settlement Mode (Fast Path: PM030):** Define Domain Category Settlement enables the user to link the combination of domain and event to a default rate type. It also facilitates the association of the various settlement modes to different rate types and transaction codes. As a result of this linkage all the entities in a domain, and affiliated with the events are linked to a rate type and transaction code associated here.

4.6 Alerts

The following features are offered as part of Alerts.

- Alerts and bank notifications can be generated and sent to customers, cosigners, broker or introducer (only bank notifications), and some external parties for pre-defined events. The events can be financial and non-financial. On occurrence of such activity or events customers get alerts. Message templates can be maintained for each alert. The message template will be resolved based on a rule set up, in addition to the existing parameters.
- Dispatch of alerts can be deferred if alert dispatch type is selected as Deferred for Subscription type of alerts. In such cases, the alerts are not sent on occurrence of an event, instead they are put on hold and sent at end of day.
- Rules can be defined for alerts based on business requirement. For example: Transaction amount greater than USD 100.
- Customers and some external parties of bank can also subscribe for specific events. The subscription for alerts can be for specific customer account.

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- Alerts can also be sent to third parties such as brokers and so on.
 - Alerts can also be sent to other related parties linked to the account apart from the account holders.
 - Alerts can also be sent to Secure Mailbox.
 - The alert template rule can be used to include a fixed outcome, if alert can be dispatched. This attribute can be used to handle scenarios where the bank may not want to dispatch alerts directly to customers when they have contacted the bank through a broker. The bank may want the notifications to be sent directly to the brokers who in turn manage the communications with the customer. This parameter brings the flexibility where bank can choose to notify customers or not depending upon the business model adopted by the bank.
 - Alerts can also be sent from different email IDs and phone numbers, when alerts are to be sent by different market entities or business units.
 - Other delivery channels such as mobile, app, or twitter can be configured, so that alerts hand off can be sent to those channels.

The above functionality is addressed in the following pages:

- Message Template (Fast Path: AL03)
- Alert Maintenance (Fast Path: AL04)
- Alert Subscription (Fast Path: AL05)

In cases, where the alerts have missed the desired recipient due to technical/DND or other reasons, alerts can be inquired and resent manually. This functionality is addressed in the Alert Support (Fast Path: AL10) page.

4.7 Accounting

Accounting acts as the pillar upon which the other functional components rest. Through this single entity, bankers can consolidate and maintain balances and turnovers for all types of accounts held by a bank. In addition, the module enables to retrieve online information on the product ledgers maintained in a bank.

The following features are offered as part of Accounting.

4.7.1 Bank Level Parameters

Accounting provides a facility to maintain basic information about a bank. The basic details such as GAAP code, yearend profit and loss ledgers, and suspense ledgers for real, contingent, and profit and loss that are maintained for a bank are applicable for all the branches of the bank. Processing a GL in a particular branch is governed by branch level parameters.

The above functionalities are addressed in the following pages:

- Define Accounting Configuration (Fast Path: AS001)
- Define Accounting Bank Policy (Fast Path: AS002)
- Define Branch Parameters (Fast Path: AS003)
- GAAP Maintenance (Fast Path: AS005)

4.7.2 Accounting Ledger

The accounting ledger has been structurally designed as a tree, bearing a multi-level structure (like a tree's main branch and sub-branches). At the head is the Head GL that does not report to any other GL. The subsequent levels consist of Nodes and Leaves. A Node GL is one that reports to another GL and has other GLs reporting to it. A Leaf GL is one that reports to another GL but does not have any GL reporting to it. Leaf GLs are merely points of contact through which all entries are passed to the nodes based on financial periods. Consolidation of all accounting takes place at the nodes.

Accounting supports categorization of head GLs to any of the following categories:

- Asset
- Liability
- Expense
- Income
- Contingent Asset
- Contingent Liability
- Memo
- Position
- Position Equivalent

The bank can opt for position accounting for a foreign currency by maintaining a position GL and a position equivalent GL for every foreign currency transacted by the bank.

The above functionalities are addressed in the following pages:

- Define Accounting Periods (Fast Path: AS007)
- Define Accounting Ledger Group (Fast Path: AS008)
- Define Accounting Ledger (Fast Path: AS009)
- Define Accounting Ledger (Additional) Details (Fast Path: AS010)

4.7.3 Accounting Template Creation

The accounting template contains a list of events for which accounting entries have to be passed. The list of events is specific for every product class. The user can define accounting entries for each of these events and attach them to a product. The accounting entries will be passed on the occurrence of these events for each account.

The above functionality is addressed in the following pages:

- Define Inter Branch Parameter (Fast Path: AS006)
- Define Domain Category Accounting Template (Fast Path: AS016)
- Define Domain Account Role Mapping (Fast Path: AS019)

4.7.4 System Accounts

System accounts are the lowest level at which accounting entries are posted. The system stores GL balances at this level. System accounts help a bank to get a breakup of the GL balances which provides the

details on the various attributes of a transaction. The bank may configure all such parameters for the generation of system accounts.

The bank needs to set up certain elements known as System Defined Elements (SDE) for generation of system accounts. The SDE elements can either be a product attribute or an account attribute and if such attribute is of type Number or Date, then the bank may configure the system to consider the value in ranges (buckets).

The above functionality is addressed in the following pages:

- Define System Defined Element (Fast Path: AS013)
- Define SDE Number Range (Fast Path: AS012)
- Define System Defined Element Class (Fast Path: AS011)

4.7.5 Servicing

Accounting supports inquiry of unprocessed events, accounting transactions, product ledger balance, and suspense and reconciliation of suspense and office accounts through the following pages.

- Unprocessed Event(s)/Entry(s) Inquiry (Fast Path: AS021)
- Accounting Transaction Inquiry (Fast Path: AS022)
- Product Ledger Balance Inquiry (Fast Path: AS023)
- Suspense Inquiry and Reconciliation (Fast Path: AS024)
- View and Reconcile Office Accounts (Fast Path: PL088)

4.8 Branch

The following features are offered as part of Branch.

4.8.1 Maintenances

The following are the maintenances that can be performed for branch.

- **Branch Vault Maintenance (Fast Path: BR001):** The vault is maintained at every branch to hold the physical cash for branch operations. The minimum and maximum cash limit that needs to be maintained at a branch vault is defined in this page. Each branch is allowed to hold only one vault.
- **Teller Currency Limit (Fast Path: BRM01):** This maintenance allows configuration of currency restrictions for tellers. These restrictions are applied on the roles created in the application and are applicable for all the tellers mapped to that role. The minimum and maximum limit allowed for the role for a particular currency is maintained. The tellers who are mapped to the roles for which the minimum and maximum limit is maintained are called Cash Users, whereas others are called Non Cash Users.

4.8.2 Transactions

The branch-related transactions that can be performed are as follows:

- **Open Branch Batch (Fast Path: BRM02):** Opening a branch batch for a particular date indicates to the head office that the branch is open for the selected date. Posting date gets auto-populated once the previous day branch batch is closed. Teller is not allowed to perform any cash operations till the branch

batch is opened by the supervisor.

- **Open Teller Batch (Fast Path: BRM03):** Opening a teller batch for the particular date indicates to the system that all transactions performed by the teller will be stamped with the selected date. System allows the user to initiate the teller batch with expected cash that has been retained from previous day or it will allow user to start with zero cash.
- **Branch Currency Transactions (Fast Path: BR002):** This page is used to transfer cash to and from vault. It can also be used to transfer cash between different tellers in the same branch. If the cash held by a user is greater than or less than or equal to the minimum limit, system allows user to transfer cash to another teller.
- **Denomination Exchange (Fast Path: BR009):** This page is used to exchange denominations for the particular currency. High value denominations can be exchanged for multiple low value denominations or multiple low value denominations for the equivalent high value denominations. The application does not post any accounting entries for the same and does not increase the debit or the credit count.
- **Miscellaneous General Ledger Transfer (Fast Path: BR008):** This page is used to transfer the cash to and from GL account. In case of debit transaction, expected units are decreased, while in case of credit transaction, expected units are increased.
- **Book Cash Shortage or Overage (Fast Path: BR006):** This page is used to book the cash shortage for the particular currency. If the physical cash present with the teller is less than the cash attributed in the application, then teller can book a shortage. Similarly, if the physical cash present with the teller is more than the cash attributed in the application, then the teller can book an overage.
- **Reversal of Cash Shortage or Overage (Fast Path: BR007):** This page is used to reverse the cash shortage or overage booking. Shortage GL can be nullified by debiting the particular CASA or GL account and crediting the shortage GL. Overage GL can be nullified by debiting overage GL and crediting the particular GL or CASA account. Partial shortage reversal is also allowed. Also, if any customer or teller pays shortage or overage amount by cash, then cash denomination panel can be used to update cash position.
- **Buy/Sell Foreign Currency (Fast Path: BR014):** This page is used for exchanging the foreign currency or local currency to the equivalent local or foreign currency by a customer or non-customer, that is a transacting party.
- **Close Teller Batch (Fast Path: BRM05):** This page is used to close the teller batch for current posting date. Batches are allowed to be closed only after processing the posted transactions for the posting date. It processes the closure based on the settings configured in the Teller Batch Closure Configuration page.
- **Absent Teller Activity (Fast Path: BR011):** It may happen that the teller is absent or has to leave in emergency, or go to another branch, and is unable to transfer cash for that day. In such cases supervisor or branch manager takes the control over cash box of such teller and performs the remaining activity like sell cash to vault, book overage/shortage, if any and finally close the teller batch of absent teller using this page.
- **Close Branch Batch (Fast Path: BRM04):** This page is used to close the branch batch for the posting date, indicating that the branch operations are stopped for that posting date. Branch close posting date is same as branch batch open date and is auto populated. All the teller batches have to be closed before closing the branch batch for the posting date.

4.8.3 Inquiries

The following are the inquiries that can be made for branch.

- **Branch Batch Status Inquiry (Fast Path: BRM06):** For corporate office or head office, users can check the branch batch status of any branch. For non-head office branches, users can view only that branch's status. Branch batch status is displayed for the current and previous posting date. Inquiry can be performed by branch wise or status wise. If the inquiry is performed at branch wise, then system displays the data specific to that branch. If the inquiry is performed at status wise, then system displays the data specific to that status.
- **Cash Position Inquiry (Fast Path: BR012):** This page is used to inquire the cash position of Branch, Teller and Vault.
 - Branch Cash Position: Users can inquire the total amount and the number of debits and credit transaction for a particular branch or for all branches. Branch cash position for the selected currency = Teller cash position of all the tellers for the selected currency + Vault cash position for the selected currency.
 - Teller Cash Position: Users can inquire the total amount and the number of debits and credit transaction for a particular teller or for all tellers.
 - Vault Cash Position: Users can inquire cash position for vault of a branch.
- **Interim Cash Inquiry (Fast Path: BR010):** This page is useful to tellers for identifying discrepancies during the day rather than at the end of the day and take necessary actions to find the discrepancies before end of day. It enables the users to inquire the balance of the physical cash which the user has entered against the system generated cash position. They can also record the cash position, view any recorded overage or shortage and print the details.
- **Teller Batch Status Inquiry (Fast Path: BRM07):** This page is used to view the status of all teller batches. It displays whether the user batch for the posting date is opened, reopened or closed. For corporate or head office, the teller batch status for the particular branches can be inquired.
- **Teller Transaction Verification (Fast Path: BR013):** This page helps supervisors to view and verify all the teller transactions with the available physical documents, before closure of the teller batch.
- **Work Item Inquiry (Fast Path: WL001):** This page is used by tellers and supervisors to view the status of all financial and non-financial transactions performed by them during the posting date for which the teller batch is open. They can also reverse their posted transactions.

4.9 Content (Document Management System)

Documents form an integral part of any bank without which they are not able to perform their day-to-day business activities. Content offers the capabilities to manage documents and content. It is designed to provide a uniform set of services for content management across different modules. It serves as a standalone system for managing all the document related processes in an organization. These documents are basically of two kinds:

- **Inbound Documents:** Documents collected from customers
- **Outbound Documents:** Documents generated and dispatched to customers

These documents once defined can then be easily attached to individual processes or entities by creating some custom rules based on various parameters.

The following features are offered as part of Content.

4.9.1 Document Type Definition

A definition of every document to be used, whether inbound or outbound, can be created. Once defined a unique document type is created. Information like whether an inbound document type is recurring in nature or permissible delivery channels for an outbound document type can be captured here. Additional data like tags for inbound and inserts (scanned copies of additional materials to be sent along with documents) for outbound documents can also be specified.

A number of inbound document types can be logically grouped to create a document category. Documents under a category can be marked as mandatory or optional.

An inbound document that is received and stored in IPM can be retrieved and sent as an outbound document, like a covering letter, along with this particular inbound document as an insert.

The above functionality is addressed in Document Type Definition (Fast Path: CNM01) page.

4.9.2 Document Policy

Various rules can be created to help associate a document type or document category with certain processes or events or certain entities like party. Document Policy is assessed in runtime to determine what set of documents need to be collected or dispatched to respective bank customers. Policies can be created at Application, Collateral, Party, Product Group, and Submission level.

The above functionality is addressed in Document Policy Definition (Fast Path: CNM03) page.

4.9.3 Interface with Third Party Systems

For generation and dispatch of outbound documents, the capability is present to interface with multiple external third party document management systems. Various document templates stored in these systems can be accessed from Content module. The framework enables triggering of different API pertaining to different document generation systems. The document upload service can be consumed by other external system for enabling inbound document upload. The data sufficiency required to interface with external systems of physical documents storage is present. Additionally, services can be exposed for upload of documents that have been rescanned.

4.9.4 Document Checklists

Document Checklist is a taskflow that can be invoked by various modules at appropriate stages of a business process to view and act on both inbound and outbound documentation requirement that gets resolved as per the document policy defined for a particular event or process. There is provision to upload inbound documents and create instructions for generation and dispatch of outbound documents from checklists. Various delivery channels like Post and Email can be specified for a document to be dispatched to a recipient.

Ability is provided to override the mode of delivery for one or all of the list of documents generated in the outbound checklist.

4.9.5 Regeneration and Resending of Documents

A configuration is available at service level to allow or suppress multiple regeneration of outbound documents in all tasks supporting outbound documents panel.

An inbound document given by a customer and stored in IPM can be retrieved and sent back to either the same party or customer, or to another email ID or mailing address as entered in the page or task flow.

4.9.6 Acceptance and Execution of Documents

For outbound document types, it can be specified whether they require customer acceptance and/or execution process. Any business process which generates this document type can use these flags and built a mechanism to track the acceptance of the document by the customer or execution of the document.

A separate taskflow is present for displaying documents which require acceptance or execution. User can manually update the status of documents once customer has accepted the document or a document execution has been completed.

4.9.7 Document Search and Upload

Soft copies of every inbound and outbound document are stored in an external system called Image Processing System (IPM) where versions of uploaded documents are also maintained. User can assess these soft copies anytime from Content module. Every uploaded document is given a unique index which helps in further processing of document.

Inbound document can be scanned for virus and malware before uploading in Documaker.

A separate page is provided for searching a document based on various parameters like document type, document status, indexes, and so on. The page can also be used for updating indexes, status and tags of a document.

The above functionality is addressed in Document Search and Upload (Fast Path: CNM06) page.

Documents which are not part of document policy can be collected from customer by uploading them from a separate ad hoc document upload page.

Upload of multiple documents is supported in application tracker and in verification task inside the inbound checklist page. The allowed limit for a single document file in multiple documents is 20MB and the total upload limit for all documents is 40MB.

Documents are allowed to be configured with expiry tracking types for inbound document after they are uploaded depending upon the document upload date, issue date of document or expiry date of document.

Both functionalities of questions related to the documents upload in context of verification and document for a set of questions is supported.

4.9.8 Document Upload by External System

System allows upload of documents for inbound as well as outbound documents and stores details of external system reference ID, external system name, receiver name and brand name with document type.

4.9.9 Services to Support Digital Channel

- Service to fetch deleted items for a digital channel.
- Service to accept digital acceptance for a digital channel.
- Ability to display the document type or document category differently in digital channel.

4.9.10 Stitching of Documents

Documents (external or uploaded or generated any of the types) can be inserted at the beginning or at the end of another generated document, such that all of them are stitched together as insert in one document through Documaker.

4.10 Pricing

The following features are offered as part of Pricing.

4.10.1 Setting up of Price Policy Chart

A Price Policy Chart allows the banker to create price plan for interest and fees. It facilitates setting up conditions and action using various facts. Condition columns have evaluation rules and action columns have output values like Interest Rate Chart, Margin Rate Chart, fees and so on.

The above functionality is addressed in the Price Policy Chart Maintenance (Fast Path: PR007) page.

4.10.1.1 Price Policy Chart for Interest

Price Policy Chart for Interest can be defined at bank, product offering, product group, and account level.

4.10.1.1.1 Bank Level

Individual Price Policy Chart is defined for each domain (for example, Retail Banking is a domain), domain category (for example, Current Accounts and Savings Accounts (CASA) is a domain category) and price element (for example, Regular interest, Penalty interest).

- Bank level Price Policy Charts are defined for such domain categories where products groups are not defined (for example, Bank Drafts).

4.10.1.1.2 Product Group Level

A price policy can be set up for the bank as a whole, for each domain and domain category. Price policy can also be set up for a product group or for a specific offer in a product group.

- Price Policy Chart is defined for domain categories where product groups are defined.
- Price Policy Chart is defined interest stage wise and currency wise for each product group.
- Accounting template is defined once Price Policy Chart is defined for Interest.

4.10.1.1.3 Account Level Pricing Plan

Based on the Price Policy Charts set up at bank or product group level, the system automatically evaluates a price plan for interest and fees.

- Pricing Plan is created for the account during account opening. It contains the details of base Interest rates and applicable Margins rates to be applied on an account.
- Fees applicable for various events on the account.
- The Price Policy Chart for Interest and Fees and Price Benefit charts for Bundles or Campaigns are evaluated while evaluating the account level pricing plan.
- Account level pricing is displayed during Account Origination showing the Interest and event level fees applicable on an account. The same can be negotiated during Origination.
- Interest rates can be negotiated by way of providing User Discretionary Margin. Fees can be negotiated by way of providing discounts or replacing the fee by an absolute amount.
- Interest and Fees can also be negotiated any time during the life of an account.

4.10.1.2 Price Policy Chart for Fees

Similarly, Price Policy Chart for Fees can be defined event wise as well. Multiple fees can be linked to an event and each fee shall consist of a base fee and multiple additional fees applied on the base fee.

4.10.2 Interest Index Definition

Index can be defined for Interest and Margins. Index can be:

- Fixed Index
- Benchmark Index
- Derived Index

Interest Index has positive value and Margin Index can have positive or negative value.

Currency wise interest set up can be done through definition of indices for various bank products.

Maintenance of such indices for base interest as well as margins us supported.

An Interest index can be a simple index having a constant rate or a derived index rate based on a benchmark rate such as LIBOR, MIBOR, and so on.

- Rate charts can be defined for Interest and Margins separately.
- Different tier structures can be defined for Fixed Period and Variable periods in a rate chart.
- Margin Validity period can be defined.
- Interest indices have a refresh frequency. As per the maintained frequency, the change in index value is applied to the corresponding accounts. In case of billing accounts, the refresh frequency can also be aligned to the respective account's billing date, which will override the refresh frequency maintained at the interest indices level.

The above functionality is addressed in the Interest/Margin Index Code Definition (Fast Path: PR005) page.

4.10.3 Rate Chart Definition

Simple as well as complex tier structures can be created to define the interest pricing. Such tiers can be term based or amount based or a combination of both term and amount. The interest rates so defined can be attached with cumulative effect or incremental effect on tiers.

- Rates can be tiered based on Period, Amount or Both.
- Tiers can be Incremental or Cumulative.
- Rate charts can be maintained separately for Interest and Margins.
- Rate charts can also be maintained separately for fixed and variable term periods.
- Different tier structures can be defined for Fixed Period and Variable periods in a rate chart.
- Different index can be attached to different tiers in a rate chart.
- Margin Validity period can be defined to restrict applicability of a margin.

The interest index and the tiers are put together in the rate chart and interest pricing is created. The above features of Index Definition, Tier Criteria Definition and Rate Chart Definition are specific to interest pricing definition. These definitions can also be used to define interest sensitivity rate which is used in origination to determine the customer's debt service capability.

Apart from fixed, benchmark and derived index, Pricing also supports customized rates. Customized rates are taken directly from the treasury desk for an account or deposit. These are generally applicable for large value transactions or deals for which rate cannot be pre-determined. Hence, the bank prefers providing a tailored rate based on account or deposit details rather than using the card rates. Customized rate is a base rate and is defined through Rate Chart definition.

Pricing also supports step-up rates for TD by the way of a step-up margin. At a defined frequency (defined at offer level), the step up margin gets applied and net rates change accordingly.

The above functionality is addressed in the Rate Chart Maintenance (Fast Path: PR004) page.

4.10.4 Price Definition

Price Definition enables setup for Fees and Rewards. Rewards are incentives provided by the bank to customer in the form of cash back. Fee consists of a base fee, multiple additional fees and discounts. It can be defined either, as an absolute amount/value or as a percentage based upon a particular amount fact. Additional fees such as Tax or Cess, are applied on the base fee (as per regulatory norms) and are payable to the regulatory authorities. Discounts are concessions applied on the base fee. Price Definition also allows the bank to define additional fees either on the base fee (gross) or on the base fee less discounts (net). Fees defined through Price Definition can be either tiered, non-tiered, simple, rule based or expression based. The bank can define the branch in which the fee income will be recognized. Bank can choose between the Transaction branch and the Account Branch to recognize the fee. Banks can also maintain fees for the purpose of Annual Percentage Rate (APR) calculation.

The above functionality is addressed in the Price Definition (Fast Path: PR006) page.

4.10.5 Charge Attribute Definition

Various attributes that may require to be linked to a Price Definition can be defined. This definition decides the behavior of the fee deduction such as frequency to compute and apply the fee, whether to compute online and apply online or end of period, whether such application is calendar or anniversary based, duration for levy of fees, and so on.

- Online fee can be charged:
 - Compute online and charge online
 - Compute online and charge end of day
 - Compute online and charge end of a period
- Charging frequency of periodic fees can be defined.
- Collection of periodic fee either in advance (start date of each period) or in arrears (end date of each period).
- Periodicity of periodic fees can also be aligned to the account statement cycle or billing cycle.
- Non Sufficiency of Funds (NSF) treatment can be defined:
 - Force Debit
 - Reject Transaction
 - Part Waive Part Debit
 - Mark Hold

The above definitions of Price Definition and Charge attributes are specific to Pricing Fees definition.

The above functionality is addressed in the Charge Attribute Definition (Fast Path: PR008) page.

4.11 Remittances and Collections

The following features are offered as part of Remittances and Collections for functions such as clearing, collections, and payments.

- **Reject Code Maintenance (Fast Path: PY100):** Since the product processor speaks to the external network in this model, this maintenance page is used to map the internal Oracle Banking level exception codes with the network level reject codes that are maintained by the product processor.
- **Define Bank Float (Fast Path: PY001):** Since the product processor does not have any control over accounts maintained in Oracle Banking, the float definition is handled out of Oracle Banking. Bank float helps in defining the type of accounting that is performed specifically for the outward collection flavor in the US region.
- **Clearing Inquiries (Fast Path: PC009):** The user can do a cheque status inquiry of both an inward as well as an outward clearing cheque. Based on the search criteria, the cheque status can be inquired, till the data is purged.
- **Payment and Collection Transaction Inquiry (Fast Path: PC211):** All the payments and collections transactions can be viewed by using the Payments and Collections Transaction Inquiry (Fast path: PC211) page. User can search and inquire a transaction using various search options.

4.12 Security Management System

The application, comprising of several modules, has to interface with various systems in an enterprise to transfer or share data, which is generated during business activity that takes place during teller operations or processing. While managing the transactions that are within application's domain, it also needs to consider security and identity management and the uniform way in which these services need to be consumed by all applications in the enterprise. This is possible, if these capabilities can be externalized from the application itself and are implemented within products that are specialized to handle such services. Examples of these services include authentication against an enterprise identity-store, creating permissions and role based authorization model that controls access to not only the components of the application, but also the data that is visible to the user based on fine-grained entitlements.

There are two alternate options provided for end-to-end security. Either Local security (based on database) or Oracle Identity Manager can be used to provide authentication or authorization mechanism.

4.12.1 Security with OIM

The application uses the best of breed components from Oracle's Fusion Middleware to deliver cutting edge solution in terms of a banking platform. The participating systems are as follows:

- Oracle Identity Manager (OIM) is used for managing user provisioning.
- Oracle Access Manager (OAM) is used for managing declarative authentication and SSO.
- Oracle Platform Security Services (OPSS) is used for runtime evaluation of authentication/authorization.
- Oracle Adaptive Access Manager (OAAM)/Oracle Adaptive Risk Manager (OARM) is used for step-up authentication and fraud management.
- Oracle Internet Directory (OID) is used as the identity/policy store.

For configuration details of the mentioned applications, visit the Oracle® Collaboration Suite Security Guide at http://docs.oracle.com/cd/B25553_01/collab.1012/b25494/toc.htm.

4.12.1.1 Set Up User Roles and Entitlement Policies

Every bank employee is mapped to an enterprise role. The enterprise roles are created in Oracle Internet Directory (OID) or equivalent Lightweight Directory Access Protocol (LDAP) store.

For handling business transactions, a user may need to be mapped to a set of services that are typically available to a single role. Such role is referred as the Application Role. Entitlements are defined on resources for the particular application role using Policy Management task. These entitlements drive the access privileges granted to the application role. For example, "perform" on an application service or "view" on a report resource.

Authorized personnel from the bank can use Oracle Directory Services Manager (ODSM) for OID maintenance or the native role configuration functionality provided in the system.

A bank user can be mapped to multiple application roles. Each application role can be linked to its authorization policy within which coarse grained and fine grained authorization configuration can be done.

Examples of user access restrictions are as follows:

- Allow users without access restrictions to only view and select product groups classified as Office Accounts, once the user selects New Deposit from Landing page of Application Form during account opening process.
- Only allow users with access privileges to capture Office Account Ledger within the following list of tasks (maintenances or transaction) or common taskflows.
 - All financial transactions where settlement mode is GL
 - Miscellaneous General Ledger Transfer (Cash Deposit to GL)
 - Cheque Deposit to GL
 - Journal Multi Voucher Entry
 - Product ledger Balance Inquiry
 - Reconcile Office Accounts
 - Payment or Collection Transaction
 - Scan Reject
 - CASA Backdated Transaction
 - In the Common Settlement taskflow, one of the supported modes is GL, that is Ledger. Once this option is chosen, based on the branch, the system will allow the user to filter and select the appropriate GL to perform the transaction. From the picklist, the appropriate ledger code can be selected by the user.
 - System provides a mechanism to define these entitlements or access policies that are to be maintained for the application roles applicable within the bank.

4.12.1.2 Transaction Blackout Configuration

Transaction Blackout typically is required when the bank wants to implement blackout or restrictions on the execution of certain maintenances or transactions. Such restrictions may be required for different business scenarios. A mechanism is provided to have user based blackout (combination of customer and application role) or total blackout for a particular transaction.

The dimensions on the basis of which the blackout details are maintained will typically include:

- Transaction (or application service)
- Channel (from where the request is initiated)
- Start Time (beginning of blackout date and time duration)
- End Time (end of blackout date and time duration)

Over and above this maintainable blackout, there is also a system enforced blackout during batch operations. There is a configuration by which the Banker Portal tasks can be allowed or disallowed during execution of batch processes. This is checked when the application service associated with the particular maintenance or transaction in the application is executed. An error message is displayed, if the blackout condition is met.

4.12.2 Local Security

This option for security is based on the database. User, group, and role information is stored in database. The authentication and authorization services are provided using the Weblogic security framework. Custom authenticator called SQL authenticator has been developed to provide security to the application service and UI.

- Manage User Creation (Fast Path: SM004)
- Define Application Role (Fast Path: SM002)
- Define Enterprise Role (Fast Path: SM003)
- Password Policy Management (Fast Path: SM001)

4.12.3 Approvals

Typically, the administration team within the bank configures the tasks for approvals as per the bank's credit, pricing, regulatory or other policies. Within the application, the approval configuration is to be done primarily on the application service being executed corresponding to the task or business function being performed.

The approval is provided using the Work Item Inquiry (Fast Path: WL001) page. The decision to send a transaction for approval is supported through the use of rules and facts defined in the system. Based on the attributes in a given transaction, it is decided whether to send a transaction for approval or not. If a transaction is configured for approval, the data is not committed to database store, it is first sent for approval. Based on approval or rejection, the transaction status is updated at later stage.

The approval task typically indicates to the approvers the following details:

- Request details including the initiator's user ID, and date and time when the request was initiated.
- Business exception or reason code and its corresponding description.
- Approver's history as part of the approval work item.
- Comments captured to indicate approval or rejection.

5 US Localization Features

This chapter describes the key features of Oracle Banking Enterprise Default Management for US localization.

5.1 US Regulations

In order to fulfill multiple regulatory requirements of US geography, Oracle Banking Enterprise Default Management have begun the journey to drive regulatory compliance. Regulations which put specific restrictions related to the time of contact, method of contact, person contacted, information provided during contact, managing disputes are now supported.

The federal regulations supported in debt collections space are:

- Fair Debt Collection Practice Act (FDCPA)
- Telephone Consumer Protection Act (TCPA)
- Service-members Civil Relief Act (SCRA)
- Truth in Lending Act (TILA)
- Fair Credit Reporting Act (FCRA)
- Equal Credit Opportunity Act (ECOA)
- Privacy of Consumer Financial Information
- Unfair, Deceptive, or Abusive Acts or Practices (UDAAP)
- Uniform Retail Credit Classification and Account Management Policy
- Bank Holding Company Manual

Oracle Banking Enterprise Default Management also supports data requirement for Metro 2 Reporting.

5.2 Personally Identifiable Information (PII)

The capture of the following list of Personally Identifiable Information (PII) elements for a party is supported.

Sr. No.	Element Name	Description	Mandatory (M)/ Optional (O)/ Conditional / Configurable (C)	Masking
1	Full name	Full name of a party (derived field) Multiple name types can be maintained for a party.	M	N
2	Date of Birth	Date of birth of a party	M	Y
3	Address	Current, past and future address details of a	M	N

5.2 Personally Identifiable Information (PII)

Sr. No.	Element Name	Description	Mandatory (M)/ Optional (O)/ Conditional / Configurable (C)	Masking
		party for multiple address types such as home, work, postal and more. Includes address types (Work, Residential, Postal, Seasonal, Holiday), Line 1 to Line 12, City, State, Country and Pin Code		
4	Gender	Gender of a party	O	Y
5	Party Identification	Tax and other identification details of a party	O	Y
6	Other Tax Residency details	All FATCA (US)/CRS (Non US) details of a party	O	Y
7	First name	First name of a party	M	N
8	Second Name	Second name of a party	O	N
9	Middle Name	Middle name of a party	O	N
10	Last Name	Last name of a party	M	N
11	Login name	Email ID or User ID or Customer ID of a party	C	Y
12	Marital status	Marital status of a party	O	Y
13	NAICS	Type of industry in which a party is employed	O	N
14	Occupation	Occupation of a party	O	N
15	All Telephone numbers	Contact details such as phone numbers, email addresses, fax numbers and so on, of a party along with preferences. Includes Fixed Landline Office, Fixed Landline Work, Fixed Landline Others, Fixed Landline Seasonal, Mobile Work, Mobile Personal, Mobile Seasonal, and Mobile Others	O	N
16	All Email address	Email ID details of a party. Multiple email IDs can be maintained with any one ID set as preferred. Includes Work, Personal, Seasonal, Others (including the one captured in Basic details tab)	C	Y
17	Employer name	Name of party's employer in the party's past and current employments	O	N
18	Employee ID	Employee ID of a party in the party's past and current employments	O	N
19	Job title/Designation	Designation of a party in the party's past and current employments	O	N

Sr. No.	Element Name	Description	Mandatory (M)/ Optional (O)/ Conditional / Configurable (C)	Masking
20	Deceased	Risk indicator to denote that a party is deceased	O	N
21	Bankruptcy	Risk indicator to denote that a party is bankrupt	O	N
22	Property title reference	Unique title reference number for a collateral Includes all property collaterals where party is collateral owner (collateral description and property title reference number)	O	N
23	Vehicle registration number	Vehicle registration number for a collateral Includes all automobile collaterals where party is collateral owner (collateral description and vehicle registration number)	O	N
24	Financial information	Complete financial details captured for a party	C	N
25	Bank account information	All bank accounts (account ID, account type and amount) where a party is an account owner.	C	N
26	Electronic communication consent	Consents given by a party to receive notices and documents through electronic means of communication. If selected, it is mandatory to capture at least one preferred email address for the party.	O	N
27	All Other Consents	All consents at party level (including text and value)	M	N