Oracle® Banking Base

Functional Overview

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Oracle Banking Base Functional Overview, Release 2.4.1.0.0

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Contents

Preface

Oracle Banking is a one-stop solution for a bank for its core banking operations, across retail and business banking operations. It is designed to help banks respond strategically to today's business challenges, while also transforming their business models and processes to reduce operating costs and improve productivity across both front and back offices.

Oracle Banking provides a unified yet scalable IT solution for a bank to manage its data and end-to-end business operations with an enriched user experience. It is a composed set of different modules wherein each of the modules is serviced by a set of services and other subsystems.

This preface contains the following topics:

- Audience
- Documentation Accessibility
- Related Documents
- Conventions

Audience

This guide is intended for the users of Oracle Banking Base.

Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc.

Access to Oracle Support

Oracle customers have access to electronic support through My Oracle Support. For information, visit http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info or visit http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs if you are hearing impaired.

Related Documents

For more information, see the following documentation:

- For installation and configuration information, see the Oracle Banking Installation Guide - Silent Installation

- For a comprehensive overview of security for Oracle Banking, see the Oracle Banking Security Guide

- For the complete list of Oracle Banking licensed products and the Third Party licenses included with the license, see the Oracle Banking Licensing Guide

- For information related to setting up a bank or a branch, and other operational and administrative functions, see the Oracle Banking Administrator's Guide

- For information related to customization and extension of Oracle Banking, see the Oracle Banking Extensibility Guide

Conventions

The following text conventions are used in this document:

Convention	Meaning
boldface	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.
italic	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
`monospace`	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

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Overview

Oracle Banking is built on a modular architecture, where each application manages the functionalities required in the different business areas like Current Accounts and Savings Accounts (CASA), Term Deposits, Loans, and so on. Oracle Banking Base offers a plethora of common services which are required for other applications under Oracle Banking, thereby providing a strong foundation for Oracle Banking products. Oracle Banking Base reduces proliferation of data and services in multiple products and helps banks to avoid redundancy of data and processes.

1.1 Core Functionality

The Oracle Banking Base provides the following core functionalities:

- The Core Entity Services are composed of different maintenances and different 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 products under Oracle Banking.

- The Calendar Services is used to define different holiday rules and it is linked to calendar types to mark the holidays for next "n" years. The ad-hoc holidays can be marked for a branch through ad-hoc calendar maintenance. These calendars are used for various purposes by the various modules.

- The Currency services provides for maintaining attributes of various currencies which can be used for various purposes by different products under Oracle Banking suite.

- Common Account Module also provides the ability to add Risk Indicators at party, account, facility, and collateral level. These indicators help the user to know the overall health of the entity. Such indicators can further be used by the Bank to configure the system impacts whether such Risk Indicators are checked or unchecked using the respective module screens.

- Party Module provides a placeholder and data store for all information related to all parties that bank or financial institution deals with as part of its business.

- Multi Entity Multi Branch concept supports Banking groups which may prefer to market their products under various brand names so as to get increased shelf space in the banking market.

- Product Manufacturing Unit provides the ability to define new products with desired features and publish them for use.

- Eligibility Framework enables banks to impose specific restrictions on certain transaction types or entities like Branch, Currency or Party, in order to ensure implementation of bank policies and comply with applicable regulations.

- Alerts can be generated on occurrence of any activity or events to inform customer as well as internal users of the bank.

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Key Features

This chapter describes the key features of Oracle Banking Base.

2.1 Core Entity Services

The Core Entity Services in Oracle Banking Base is a common service, which enables Bank to define the broad parameters within which the rest of all applications functions. The services cater to the typical functionality that is needed by any Financial Institution to support its day-to-day primary operations. These are the most important common services like definition of bank setup, the various geographical locations (countries, regions, states, cities, and so on), languages and the different time zones the bank operates in.

The maintenances also include various transactions, payment modes, financial cycles and accounting periods followed by bank. It also includes the core parameters and structure of the Bank through maintaining Regional offices, Lines of Business and various Branches along with unique identification codes.

The core entity services are used by all other products in Oracle Banking suite, and provides a variety of support functions to them.

The core entity services provide information on the following to all other products under Oracle Banking suite:

- Current working date
- Previous working date
- Next working date
- Financial cycle for a given date
- Accounting period code
- Check last day of financial year
- Check accounting period end date
- Branch type and other details
- Automatically update daylight saving date
- Automatically update city code, state code and country code from the given zip code
- Common processing services
- Maintain and enquire bank policy deviations

■ Maintain risk categories and risk codes that can be associated with credit applications during credit assessment

■ Maintain mitigant codes that can be used to mitigate the risks associated with a credit application

For all the core entity service maintenances, the application supports various action functions like Create, Update, Re-open, Close, Approve, Delete, Save as draft, Cancel, Fetch, and Copy for ease and operational efficiency in maintaining the crucial data.

Audit Trail function of the application enables the users to track all the changes done in any of the maintenances at any time.

The above functionalities are addressed in the following screens:

■ Financial Cycle (Fast path: CS10)

■ Branch Parameters (Fast path: CS06)

■ Country Codes (Fast path: CS09)

■ State Codes (Fast path: CS17)

■ Bank Policy (Fast path: CS26)

■ Bank Policy Deviation Definition (Fast path: CS39)

■ Bank Policy Deviation History (Fast path: CS40)

■ Audit Text Based Search (Fast path: BAM56)

2.2 Calendar Services

Calendar services are also a common service, which can be used by all products under Oracle Banking suite.

The Calendar Services offers definition of different calendar types and it serves to define and record the annual list of holidays for each calendar type defined by the bank. Ad-hoc holidays can be marked for a branch through ad-hoc calendar maintenance. The Calendar services serve to record and retrieve the various holidays of the bank in a calendar year.

■ Maintenance of holidays for a bank and all its branches for configurable number of years.

■ Maintenance of holidays for the various payment types (Clearing house or Networks) in which the bank is a member.

■ Maintenance of holidays for various currencies that the bank seeks to deal with.

■ Ad-hoc holiday maintenance for branch.

These calendar types are used, for various purposes by the various modules in day-to-day operations.

The above functionalities are addressed in the following screens:

■ Holiday Rule Maintenance (Fast Path CAL01)

■ Calendar Type Maintenance (Fast path: CAL02)

■ Adhoc Calendar Maintenance (Fast path: CAL03)

2.3 Currency Services

The Currency Services is also common service, which provides support functions to all products under Oracle Banking for day-to-day operations. Any module that requires currency related service for its operations refers to the Currency Service.

The Currency Services enable the Bank to record and retrieve the various currency related information. The various maintenances and services that are supported by currency services are as follows:

Maintenances

- Currency Definition (Fast path: CY01)

- Description of Currency Amount in Text (Fast path: CY02)

- Denominations for each Currency (Fast path: CY05)

- Currency Branch Parameters (Fast path: CY04)

- Currency Pairs Maintenance (Fast path: CY03)

- Currency Rate Types like Spot rate, Forward rate, and so on. (Fast path: CY06)

- Exchange Rates for different Currency Rate Types (Fast path: CY07)

- Historical Rates Maintenance (Fast path: CY09)

- Forward Rates Maintenance for combination of currencies and periods (Fast path: CY06)

Processing Services

- Amount Rounding off Rule and Rounding off unit for each currency

- Amount Format for each currency

- Get Rate for each currency pair

- Get Rate and Spread

- Calculation of Exchange Rate based on Through Currency

- Spot Rate for each currency

- History Rate for each currency

- Forward Rate Computation

- Last Rate Date

- Currency Rates Purge

2.4 Risk Indicator's Impact Configuration

With the variety and complexity of products and services offered by a Bank to it's 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.

Maintenances

- Risk Indicators Impacts Cross-Reference (Fast path: ACCT010)

2.5 Party Information

Customer is at the heart of product sales and service and technology for any business. This is more so in service organizations like banks. Recognizing the fact, the Party Module in Oracle Banking Base serves as the single source of information data-store of all customers for Oracle Banking suite of products.

Party Module acts as the master party repository for all Products under Oracle Banking suite.

Party Module provides a placeholder and data store for all information related to parties that bank or financial institution deals with as part of its business. The parties include customers, agents, vendors, brokers, and so on. The information includes demographics, risk information, financial information, identification information, and so on.

Party information is created only once and all activities, business, history and contacts of the party are based on the unique party profile. This enables the institution to have an immediate, real-time and complete view of the party at all times. In addition to the streamlined management of party information, centralized party management allows views of party activity, holdings, and exposures across products of Oracle Banking suite.

Basic information about a party is maintained, which may typically contain information as per banking customs and practices specific to the countries in which the bank operates.

Usually the following information is captured:

- Customer Name (Fast path: PI004)
- Correspondence details, such as Residence address, Business address, preferred means of communication, preferred language, preferred times and modes (Fast path: PI012)
- Type of Party, that is, Customer, Broker, Organization, or Trust and so on
- Nationality and Country of Residence
- Details of the Party's identification document like Social Security Number
- Consents required to be obtained from a customer as per regulations
- The maximum exposure the bank is prepared to assume for the Party
- Credit rating of the Party
- KYC, AML, SDN Statuses, Party financial details, Employment history
- Party's Signature and Photo Image (Fast path: PI005)

Party Onboarding (Fast path: PI048)

Addition of a party to the system is referred as Party Onboarding. The user has a facility to onboard a party by inputting the bare minimum details and also a detailed onboarding (Party General Information - PI034) where the user can capture additional details for the party. Every party is associated with a role such as Customer, Member, Broker, Vendor and so on. Based on the party role certain on-boarding fields may vary. Customer can be onboarded on a standalone basis. Service Provider Onboarding (Fast

Path: PI028) functionality enables onboarding of broker, introducer and other service providers.

Relationship Management (Fast Path: PI020)

Relationship Management has been introduced in the solution to enable banks to maintain business relationships for large organizations and SME customers and to enable specific access. Specific relationships can be maintained to share collateral, share financial information, access bank accounts of the organization and SME customers via internet banking and transact on the accounts.

System allows creation of multiple business relationships between the same parties.

Due Diligence

Due Diligence solution enables banks to maintain rules by which identity verification maintained against due diligence can be carried out. System also provides a view of due diligence and identity verification history of a party.

Groups

Groups enable the bank to add multiple parties under one group. Groups are used in group submissions. The group search is also provided to search for a group during a submission or at the time of modification, closure, and reopening of the group.

Party Merge

There are instances where for a single party multiple party IDs get created. This happens because banks have multiple systems from which account get originated. Most often there is no check between the systems to do party dedupe to prevent creation of multiple party IDs. There can also be cases where due to error in data entry the dedupe fails, or the user may override the dedupe results and create multiple IDs for the same party.

Having multiple IDs for the same party is not an ideal situation and leads to inconvenience to the customer and the bank in managing the accounts of the customer.

A mechanism has been built in the system where the parties IDs are merged and system can have a single party ID. The party ID on the accounts are also be replaced.

Party Financials (Fast path: PI786)

Oracle Banking supports capture of multiple financial information in definable format for party type - Individual, Organization and Trust.

System allows the bank to define multiple templates for capture of party financials. The rules for resolution of templates can be set up based on the facts - Product Group, Purpose Type, Request type, Pre-approved and Party Type. In case of multiple applicants, parties in the submission, a priority can also be setup to resolve multiple templates.

Capture of the following statements is supported:

- Balance Sheet
- Profit & Loss
- Financial Ratios
- Statement of Equity
- Cash Forecast
- Business Plan

System allows the bank to spawn off the financial capture as separate human task to Back Office from the Capture application flow in Origination as well as standalone flow in party module.

System allows the bank to perform bulk upload of the financial documents in the financial profile screen in the Origination flow as well as standalone flow in party module.

Party Bank Policy (Fast Path: PI314)

Oracle Banking supports maintenance of bank policy for parameters related to party such as Stability, Minor, and Financial Year. It also supports the following:

- Due diligence types and related identity verifications

- Due diligence checks to be done for a combination of party type and party role

- Rules to derive the RM for a party type

- Rules to derive the list of managers for Broker and Introducer

2.6 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 Oracle Banking. The Banking Companies can make use of the MEMB framework to save costs in IT infrastructure and achieve operational efficiency.

Now-a-days 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. Banks 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.

2.7 Product Manufacturing Unit

Product manufacturing unit offers rich functionality to define variety of products to suit varied requirements of customers. In order to maintain high level segregation, the solution provides for creation of Product classes like Loans, Checking Accounts, Term deposits, Investment Accounts and so on. All Products created will belong to one of the Product classes defined by bank. Products can also be grouped together under Product Groups. The parameters maintained at Product Groups will be propagated to Products created under it there by avoiding same maintenances for each product.

The important features in PMU are as follows:

Bank Policy Definition

The system facilitates the Product Manager to define discrete and distinct policies for specialized modules or functions namely Party, Bundle, CASA, Loan, TD, Statement, Hardship Relief, Credit and Dormancy. This provides Product Manager ease and control of bank level parameters for specialized modules/functions. This definition will be a onetime activity.

Following are the different bank level policies available in the system along with the fast path for the screens:

- Define Bundle Bank Policy (Fast Path: PM005)
- Define CASA Bank Policy (Fast Path: PM002)
- Define Credit Policy (Fast Path: PM009)
- Define Dormancy Policy (Fast Path: PM008)
- Define Hardship Relief Policy (Fast Path: PM006)
- Define Loan Bank Policy (Fast Path: PM004)
- Define Statement Policy (Fast Path: PM007)
- Define TD Bank Policy (Fast Path: PM003)
- Define Activity Profile Questions (Fast Path: PM046)

The system provides a hierarchical definition for the product groups:

- Product Class
- Product Groups
- Products
- Offers

The application provides an option to group different products and create Product Groups. Product Groups are created for a particular Product Class. Further the application provides an option to define different Offers under a particular Product.

Define Unclaimed Policy

Maintenance to Define Unclaimed Policy is available. Product class, product group, product, offer can be used as facts to decide fixed outcomes of Unclaimed Period, Unclaimed Threshold Value and Percentage to be Transferred. The maintenance page

has the following sections (similar to those available in the existing PPC page) and one field:

- Decision Table: Unclaimed Period

- Decision Table: Unclaimed Parameters

- Field: Number of TD Auto Renewal

The above functionality is addressed in the Define Unclaimed Policy (Fast Path: PM029) screen.

Product Class

Product Class is a list of values that defines the high level need of the Customer. For example Loan, Current or Checking, Savings, Term Deposit and Investments. The Interest Rules defined for a Product Class will be associated to a product.

Product Group Creation

The fundamental features are as follows:

- One Product can be linked to single Product Group

- A Product Group can be Group of products or Group of Product groups also

The system will allow the user to capture purpose of the product group.

The above functionality is addressed in the Define Product Group (Fast Path: PM010) screen.

Product Creation

A product is defined under a Product Group. A single Product can be offered in multiple currencies. There is a list of tasks to be performed as a part of Define New Product. The Product Definition is complete only if all the tasks are complete. The list of tasks to be completed are:

- Capture Product Details

  - Define CASA Product (Fast Path: PM013)

  - Define Loan Product (Fast Path: PM014)

  - Define TD Product (Fast Path: PM015)

  - Define Credit Card Product (Fast Path: PM016)

- Define Interest Rule (Fast Path: PM011)

- Define Product Interest Linkage (Fast Path: PM017)

- Add Product to Interest Rate Price Policy Chart for a Product Group (Fast Path: PR007)

- Add Product to Fees Price Policy Chart for a Product Group (Fast Path: PR007)

The above functionalities are addressed in the following screens:

- Define CASA Product (Fast Path: PM013)

- Define Loan Product (Fast Path: PM014)

- Define Term Deposit Product (Fast Path: PM015)

- Define Investment Product (Fast Path: PM047)

- Define Credit Card Product (Fast Path: PM016)

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 screens:

- Define Accounting Class (Fast Path: PM036)

- Define Domain Category Accounting Template (Fast Path: PM037)

- Define Domain Role Mapping (Fast Path: PM038)

- Define Product Account Role Mapping (Fast Path: PM035)

- Define Product Accounting Template (Fast Path: PM033)

- Define Product Group Accounting Template (Fast Path: PM032)

- Define Product Group Role Mapping (Fast Path: PM034)

Product Offers

The solution provides ability to have multiple offers for a Single product. The Offer will have facilities, Brand Association, Eligibility rule and pricing.

The above functionality is addressed in the following screens:

- Define CASA Offer (Fast Path: PM020)

- Define Loan Offer (Fast Path: PM022)

- Define Term Deposit Offer (Fast Path: PM021)

- Define Investment Offer (Fast Path: PM048)

- Define Credit Card Offer (Fast Path: PM023)

Copy a Product or Offer

The solution also provides a feature to copy an existing product or offer and create a new product or offer. The user also has an option to change few of the products or offer specific parameters of the copied product or offer and define a new product or offer.

Validate and Publish a Product Group, Product, and Offer to Origination

There is a sequence of maintenances (that is, Day 0 setups and configurations) in PMU that a Product Manager or Bank user needs to perform in order to publish a product group, product, and offer for further consumption and usage in Oracle Banking Originations.

System validates if all the necessary and mandatory setups or maintenances have been performed by the bank user before publishing the product group, product, and offer to Origination.

Validations are applicable at the product group level and product level to ensure that domain accounting entry definition is maintained and price policy chart for all applicable currencies is maintained. This is applicable across product class.

Definition of Allowed Currencies

The system provides an option to the Product Manager to define allowed currencies at the Product Group level and further override them at the Product and Offer levels.

A list of allowed currencies, under which term deposit accounts can be opened under a product, and minimum term for interest eligibility for each currency can be specified. Step up parameters for defining step up TD can be maintained.

Definition of Allowed Term

The system provides an option to the Product Manager to define allowed term (that is, minimum and maximum term) for 'Asset' at the Product Group level and further override them at the Product level. This provides the Product Manager more flexibility in defining asset products.

Option to link different Interest Rule per Currency for a Product

The system provides an option to link different Interest Rule per currency for a Product. This reduces un-necessary product proliferation in PMU.

Debit Card Features

Debit card definition is enabled as a feature that can be linked to a CASA product and to CASA offer. More than one feature can be defined and attached to an offer which is displayed in origination. The customers can choose the card that they prefer.

The above functionality is addressed in the Define Debit Card Features (Fast Path: PM039) screen.

Linkage of Dependent Offers

Certain offers may be enabled for subscription only if some other mandatory offers are subscribed for or maintained. Such dependency can be defined in a maintenance screen. Presently, this linkage exists among CASA and Loan offers.

The above functionality is addressed in the Link Dependant Offers (Fast Path: PM018) screen.

Office Accounts as CASA Accounts

CASA accounts can be defined as Office Accounts. These accounts are specifically marked as Office Accounts during configuration. They are used for specific purposes such as pool account of the bank to collect taxes or any such amount on behalf of the government which later needs to be reconciled. Biller accounts is another example of office accounts.

Product Hierarchy View

A User Interface is designed for view of the entire product hierarchy. All maintenances from product class to offer and the associated linkages are displayed here.

The above functionality is addressed in the Product Hierarchy View (Fast Path: PM041) screen.

Define Campaigns

Campaign definition can be done in PMU. Campaign start and end date can be maintained along with product groups and offers that are a part of the campaign. Accounts can then be originated in the campaign.

The above functionality is addressed in the Define Campaigns (Fast Path: PM024) screen.

Flexi Credit Facility

To enable flexi credit facility (FCF), validations are built in the credit policy with group type as MOF and product class as CASA. Specific parameters for FCF such as interest rate type and interest set off applicability are available in CASA offer.

Offer Bundling

The solution provides a feature to the bank to group products across different lines of business (For example, Home Loan, Transaction account and Credit Card).

A bundle is considered as a single unit for sale and specific benefits can be configured for customer who subscribes for the bundle.

The solution is beneficial to the bank as well as customers. Using this feature the bank can cross sell products to new and existing customers and earn revenues in the form of bundle subscription and maintenance fees, while the customers are benefited in terms of additional interest margins and discounts or waivers on fees. These bundle benefits can be offered for a limited period or perpetual.

The above functionality is addressed in the Define Offer Bundle (Fast Path: PM026) screen.

Bundle recommendation in servicing

Oracle Banking provides an option to open new account in servicing typically in two cases:

Split Loan functionality: Using this functionality in loans, the customer may opt to split a parent loan account and create a new child account under it.

Manage Facility within Arrangement: As part of this functionality, the user can create a new account under an existing facility to utilize the un-utilized facility amount.

Thus, whenever a new account is opened in servicing using the above avenues, the system provides recommendation of bundles, so that the customer may opt to include the new account to a bundle. As a result, the new account will receive bundle benefits (that is, in terms of additional interest margins and discounts/waivers in fees) once the same is opened in servicing.

As part of bundle recommendation, the system recommends new as well as existing bundles to the user. The customer may opt to include the new account to any of the bundle.

Bundle Eligibility

Banks can define eligibility rules and attach it to the bundle. Customer satisfying the eligibility rules will be able to subscribe to the bundle. While setting up the bundle, bank can define whether the eligibility criteria should be met by all the bundle owners or any of the bundle owners.

Bundle subscription and managing a bundle in servicing

Customers may opt to subscribe bundle and link existing accounts to a bundle. As a result, these accounts will receive bundle benefits (that is, in terms of additional interest margins and discounts or waivers in fees), once the same is linked in servicing. Customers may also opt to unsubscribe a bundle or delink accounts from a bundle or change the bundle fee recovery account in servicing.

The above functionality is addressed in the following screens:

- Subscribe for Bundles (Fast Path: PI100)

- Manage Bundle (Fast Path: PI101)

2.8 Eligibility Framework

A bank may need to specify a set of predefined values as the eligibility criteria for each entity and evaluate whether a particular value or a set of values matches eligibility criteria defined at any time.

Banks have varying product offerings such as retail loans, mutual funds, and payment services to suit the diverse profile of clientele they have. Each of these products offered is targeted towards a specific group of customers and will have its own inherent characteristics. For example, a bank might want to offer one product only to a specific group of customers, namely salaried individual customers. The bank might want to offer this product through a list of pre-defined branches only. The bank might want to offer a product only in a specific currency. For example, all home loans are to be in local currency only.

Eligibility framework is a simple maintenance using the user-friendly rule framework. Using Rule definition, offer eligibility is achieved. Rules are set up using specific offer eligibility fact groups. Such fact groups are for channels, party, collateral, purpose codes and sourcing entity including brokers. System returns the value of the rule on evaluation which determines whether a customer is eligible to apply for a specific offer.

The various parameters based on which offer eligibility rules can be defined are as follows:

- Allowed or Disallowed list of **Channels** in which an Offer is to be made available.

- Allowed or Disallowed list of **Collaterals** for an offer.

- Allowed or Disallowed list of **Facilities** for an offer.

- Allowed or Disallowed list of **Party Values** for an offer

- Allowed or Disallowed list of **Sourcing Entities** for an offer

2.9 Alerts

The solution offers the following features:

- The Solution offers feature to generate alerts and bank notifications to Customers, 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.

- The Solution provides the ability to defer dispatch of alerts if alert dispatch type is selected as "Deferred" for Subscription type of Alerts. In such cases, system does not send the alerts on occurrence of an event, instead it puts the alerts on hold and sends it in EOD.

- Solution provides the ability to dispatch the alert to recipients such as, initiator of transaction on completion of approval process or to a broker on certain events occurring either due to the milestone being reached in Oracle Banking Originations workflow or servicing events based off maintenance or transactions performed from Oracle Banking Originations.

  For example: Account opening is an activity and CASA account opening can be an event under this activity. Fund transfer can be an activity which will have fund transfer credit event and fund transfer debit event.

- 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 or application.

- Ability to send alerts to third parties: Earlier alerts were sent only to account holders. As part of the latest release alerts are also sent to third parties such as brokers and so on.

- Ability to send alerts to other related parties linked to the account apart from the account holders.

- Ability to send alerts to Secure Mailbox.

- Use the alert template rule to include a fixed outcome, if alert can be dispatched. This attribute can be used to handle scenarios such as, 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 will bring the flexibility where bank can choose to notify customers or not depending upon the business model adopted by the bank.

- Ability to set different "From" email IDs and phone numbers, when alerts are to be sent by different market entities or business units.

The above functionality is addressed in the following screens:

- 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.

The above functionality is addressed in the Alert Support (Fast Path: AL10) screen.

2.10 Document Management System (DMS)

This section provides information on some of the key features offered by Document Management System in Oracle Banking Base.

Documents form an integral part of any bank without which they are not able to perform their day-to-day business activities. Content management in Oracle Banking is handled through Document Management System (DMS) module. DMS is designed to provide a uniform set of services for content management across Oracle Banking 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 important features of DMS are as follows:

2.10.1 Document Type Definition

A definition of every document to be used in Oracle Banking, 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.

The above functionality is addressed in Document Type Definition (Fast path: CNM01) screen.

2.10.2 Document Policy

Various rules can be created to help associate a document type or document category with certain processes or events of Oracle Banking 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) screen.

2.10.3 Interface with Third-Party Systems

For generation and dispatch of outbound documents, DMS has capability to interface with multiple external third party document management systems. Various document templates stored in these systems can be accessed from DMS. Oracle Banking framework enables triggering of different API pertaining to different document generation systems.

2.10.4 Document Scrutiny

The documents collected by the banks normally are scrutinized for the correctness of the data or authenticity of the document itself. The bank may do this internally or can give to any specialized external agencies to scrutinize the documents. DMS module provides a mechanism to search and update the internal or external scrutiny status for an inbound document.

The above functionality is addressed in Document Scrutiny (Fast path: CNM07) screen.

2.10.5 Document Checklists

Document Checklist is a task flow that can be invoked by various Oracle Banking 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 Oracle Banking event/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.

2.10.6 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 task flow is present for displaying documents which require acceptance /execution. User can manually update the status of documents once customer has accepted the document or a document execution has been completed.

2.10.7 Document Search and Upload

Soft copies of every inbound and outbound document are stored in an external system (not part of Oracle Banking) called Image Processing System (IPM) where versions of uploaded documents are also maintained. User can assess these soft copies anytime from DMS. Every uploaded document is given a unique index which helps in further processing of document.

A separate screen is provided for searching a document based on various parameters like document type, document status, indexes, and so on. The screen 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) screen.

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

2.11 Remittances and Collections

Oracle Banking is built on a modular architecture, where each application would manage the functionalities required in the different business areas like Current Accounts and Savings Accounts (CASA), Term Deposits, and Loans. Remittances and Collections offers a solution for functions such as clearing, collections and payments which are required by the end customers for their ad hoc requirements and which are commonly required for the various other applications under Oracle Banking, thereby providing a strong foundation for existing suite of Oracle Banking products. Remittances and Collections functions can be invoked as a part of Settlements by any of the other modules such as CASA, Term Deposits, or Loans.

2.11.1 Core Functionality

The Remittances and Collections provides the following core functionalities:

- The Payments/Clearing/Collection (also referred to as Remittances and Collections) Services are composed of different maintenances (Day 0 Maintenances), each of which serve to define 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 the various products under Oracle Banking.

- The Clearing Services can be used to perform one of the basic functions of a bank, which is to accept and honor written instruments and enable customers to issue instruments for money transfer, be it a Cheque, Manager's Cheque, Demand Draft, or Money Order.

- The Collections services provides for functions similar to the Clearing Services with one difference. The clearing services cater to the transfer of money vide a

physical instrument whilst the electronic collections cater to transfer of the funds vide electronic channels. Collections services cater to various incoming and outgoing collection instructions such as Request For Debit (RFD) or Direct Debit. The services to manage Mandates, such as Addition, Deletion, Edit, of Mandates (which form the basic authorization mechanism for Collection Instruments) are also provided for.

- The Payments Module provides the services of Domestic Payments using any of the bank's chosen networks and includes initiation and processing of outward payments as well as receipt and processing of inward payments.

- The Payments and Collections work out of the same module with some incremental features like Mandate Registration and Counterparty Maintenance for Collections.

- Exception Management provides services to manage any exceptions arising out of the processing of instructions in any of the above mentioned modules that is, Clearing, Collections or Payments.

- Bank Drafts can be issued, liquidated or printed on the request of the customers. The status of the instruments issued can be modified for a fee and the instruments can be reprinted if necessary.

2.11.2 Maintenances

The entire Remittances and Collections module is based on the maintenances that are configured as part of the initial setup. These maintenances define the behavior of each of the individual functionalities and also enables the setting up of the processing logic or processing rules.

The entire set of maintenances help the bank to set up the various clearing zones, identify the network through which any instruction is sent or received as well as the treatment for each transaction in case of returns or refusals.

The various maintenances to be set up are:

- **Zone Maintenance (Fast path: PC001)**: The various clearing zones and circles are maintained in Zone Maintenance screen. Zone and Circle are geographical locations. The Circle ID is used to identify the location of the institution and can be further used to resolve the endpoint for the clearing transaction. Each Zone may have multiple Circles attached to it. Each Bank-Branch is attached to a single circle. This will be maintained in Bank Directory maintenance.

- **Bank Directory Maintenance (Fast path: PC226)**: Bank Directory is used to maintain and inquire a list of all institutions (banks and their branches) that may participate in clearing and payment transactions. This maintenance also captures the address of the bank-branch and the applicable Clearing Sort Code (routing number), IFSC code and SWIFT code which are also termed as Institution ID types.

- **Float Configuration (Fast path: PC006)**: Float configuration is used to maintain the various combinations of float days involved in the resolution of the related value dates in clearing and payment transactions. Various types of floats can be maintained based on the Posting Date, Activation Date, Endpoint Entry Date, Endpoint Value Date, Bank Value Date or Customer Value Date.

- **Endpoint Maintenance (Fast path: PC220)**: Endpoint is the physical entity with which the bank interacts for clearing or payment transactions. Different Endpoint can be maintained for different currencies. Under this maintenance, various aspects of the endpoint such as Institution ID Type, Calendar ID, Electronic gateway used by endpoint, network used, and so on can be recorded. One or more

endpoint segments can be attached to an endpoint. Endpoint segment denotes a logical grouping to which instruments deposited or uploaded are attached.

- **Clearing Branch Linkage Maintenance (Fast path: PC018)**: Normally a single branch within a certain geographical area such a city or a district is assigned to perform the clearing related activities for all other branches within the city or district. The Clearing Branch Linkage maintenance is used to link all the branches of the Bank as defined in the Branch Master in Common Services to their respective Clearing Branches. This maintenance is used to determine the clearing branch GL for clearing transactions on any account in any branch.

- **Institution Endpoint Participation Maintenance (Fast path: PC218)**: This maintenance is used to list all the institutions participating in an endpoint. We can also capture the correspondent institution for an institution which participates through its correspondent. The various transaction types such as DD, RFD, Clearing, and so on have to be selected for the institution participating in an endpoint.

- **Transaction Template Maintenance (Fast path: PC232)**: Payments and Clearing transactions may have to be classified and assigned different preferences across various set of parameters. Such classification may further need to be differentiated for transactions where the drawee and beneficiary accounts are within the same Oracle Banking installation, within the same bank but on different systems or in different banks. This is supported by defining the Transaction Templates. A transaction template is defined for a combination of Transaction Type, Collection Type and Transfer Type.

  Transaction Template defines the various Amendment Parameters which can be modified for re-processing of transactions that were rejected during upload. It defines the parameters to be used for arriving at or validating the activation date for a transaction. It also defines the parameters with respect to reject, recall and dispatch behavior for each transaction namely, the date till when such an action is valid and the basis for calculating that date. It also defines whether a particular transaction can be processed or not as a 'Return'. Further, the retention days for various types of transactions can be defined. For Clearing transactions the instruments applicable for that transaction are linked in the Instrument Category Linkage section.

- **Transaction Category Maintenance (Fast path: PC217)**: There are various types of Payments and Clearing transactions such as Inward Clearing, Outward Clearing, Incoming Collections, Outgoing Collections, Incoming Payments, Outgoing Payments, and so on. Each of these transaction type is defined and maintained in Transaction Category Maintenance. The attributes for recognizing duplicate records are defined for each transaction category. Transactions for reject, recall and reverse of clearing and payment transactions are also defined as categories and linked to the respective transaction category in the Category Relations section. Each transaction category is defined on the basis of Transaction Type, Collection Type and Transfer Type. This maintenance also defines if a mandate needs to be validated or not in case of an inward collection transaction.

- **Instrument Category Maintenance (Fast path: PC210)**: For paper based clearing there could be multiple types of instruments such as Savings Account cheques, Overdraft Account cheques, Demand Drafts, and so on. All these types of instruments are defined and maintained using the Instrument Category Maintenance. Each instrument is classified as either a Manager's Cheque (for example, Demand Drafts) or a Personal Cheque (or just Cheque, for example, Savings Account Cheque, At-par Cheque). The Bank can also identify the number of days post which the cheque (instrument) has to be considered as Stale or

out-of-date. Additionally, the instrument can be identified as allowed in local presentation to support At Par clearing. This is useful when there are multiple clearing houses all over the country to support local clearing and within such a set-up certain types of instruments can be processed for clearing at any of the clearing houses, preferably the one pertaining to the location of the beneficiary.

- **Reject Code Maintenance (Fast path: PC016)**: While processing payments and clearing transactions by upload, the record may either pass or fail certain validations performed by the system. Failed records are marked as Rejected and queued for Reject Processing. The reason for rejecting a transaction needs to be available for each record for further processing. Similarly, a user too can reject a record which was passed by system (for example, signature mismatch check is done manually and system may pass the record) by assigning a reason for reject.

  The reject reasons are assigned to reject codes and are defined and maintained in Reject Code Maintenance. Each reject code is linked to a transaction category and instrument type. Also each reject code is linked to one or more system exception codes (business policy violation codes) which are the codes that identify the exception conditions as encountered by the system during processing.

- **Endpoint Reject Code Linkage Maintenance (Fast path: PC214)**: An end point may recognize a separate set of reject codes from those used by another end point or by the Bank. To facilitate this the Bank can define End Point specific Reject Codes using the End Point Reject Code Linkage. Using this maintenance, the Bank can also identify which particular reject codes can be set for auto return. A record which encounters such a reject code will be marked for return automatically and will not wait for the Outward Clearing (OC) batch for return processing.

- **Institution Category (Fast path: PC247)**: An institution type and the way it is identified can be defined in this maintenance. Institutions can be identified by way of various standardized IDs such as SWIFT, BSB, IFSC, IBAN and so on. The various types of such identification codes can be defined.

- **Processing Queues (Fast path: PC207)**: Users can define the various processing queues that they require for any Payments or Collections transaction. The default queues are SUCC and PROC.

2.11.3 Clearing

Clearing module offers the ability to accept, post, process and clear all kinds of physical instruments like cheques, drafts, and so on. Inward clearing (where the customer's account is debited) and outward clearing (where the customer's account is credited) are handled out of the clearing module.

The various transactions or processes involved in clearing are:

- **Cheque deposit (Fast path: PC213)**: Cheques deposited to the credit of CASA, TD, or Loans can be accepted. Any valid CASA or GL account can be captured as the beneficiary account. The details pertaining to the cheque such as amount, currency, instrument type, routing number and narration are captured.

  Based on the float configuration, proceeds are credited to the account either as cleared funds or unclear funds.

- **Immediate Credit (Fast path: PC206)**: There may be a request from a customer for immediate credit against the cheque deposited for outward clearing. The Immediate Credit option helps to extend such credit against a cheque already deposited for that account and is in unclear status. There can be a case of full immediate credit or a partial immediate credit.

- **Clearing File Upload (Fast path: PC111)**: Outward as well as Inward Clearing File Upload is not a separate interface rather it is supported through the GEFU interface. Any outsourced agency may also send periodic information dumps (in electronic file formats) to the bank with summarized information of funds that need to be credit to customer's account. This enables the Bank to extend unclear funds to the customers rather than awaiting details. The clearing module supports such activities. File uploads can be Summary Uploads (intra-day) and Detailed Uploads (end of day).

- **Float Extension (Fast path: PC239)**: There may be occasions when a cheque deposited to customer account may not be honored by the drawer's bank within the specified float or when there may be delay at the endpoint in providing clear funds to the bank due to unavoidable circumstances. In such cases, the Float Extension option is used.

- **Global Float Extension (Fast path: PC239)**: There may be occasions when a particular institution may not be able to complete processing for clearing transactions and provide clear funds. In this case one can use the Global Float Extension option to extend the float for all Outward Clearing and Outward Collection which were drawn on a particular institution. The new value date for these Outward Clearing and Outward Collection items will be arrived at based on the number of days entered for extending the float.

  Float extension will be applicable to Outward Clearing and/or Outward Collection as per selected activation date and Transaction Type (belonging to selected Institution ID) and having instrument value date greater than current date.

- **Inward Clearing run/Outward Clearing run and Clearing File Uploads**

  The Inward Clearing (IC) process is executed online, when the inward clearing file is uploaded. The inward clearing process can be run multiple times and those instruments which came for processing after the previous IC run will be available. This service can also be executed through the scheduler.

  The Outward Clearing (OC) process can be executed online and at any point during the day. This service can also be executed through the scheduler. Outward clearing process is run for Returns Batch processing; Endpoint consolidation for GL entries (if defined); and Call to pricing to fetch fees to debit CASA accounts for Inward Returns.

  OC can be run multiple times and all those instruments which were not picked up in the earlier OC run, will be picked up now. Clearing module handles the status of the instruments for this purpose.

  Once the OC is run for the returns clearing, all instruments in scan reject will be marked internally returned. Then there can be no more action which can be done in the Scan Pass (Fast path: PC203) or Scan Reject (Fast path: PC204) screen.

  The number of days available to act on passed or returned instruments are defined as the maximum response days. For outward clearing, they are based on the value date and for inward clearing, they are based on the posting or the activation date.

- **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.

- **Exception Handling/Returns Handling**: All the returns of Inward clearing (referred to as Outward returns) are handled as part of the Outward clearing run (Fast path: PC234).

All returns of Outward clearing (referred to as Inward returns) are a part of the Inward clearing file and hence no separate treatment is required for the same.

All exceptions are handled out of Scan Reject (Fast path: PC204) page.

The refusal of returns is also handled as part of the returns handling process.

- **Accounting**: Accounting for Clearing transactions involves Customer Accounts (CASA, TD and Loans for outward clearing, CASA for inward clearing) and certain General Ledger accounts such as Endpoint GL, Intermediary GL (used for consolidation entry for endpoint), Cheque For Clearing (CFC) GL and Inward and Outward Clearing Suspense GLs.

- **Alerts:** Alerts for certain defined events are generated and communicated vide SMS, email, and so on.

2.11.4 Payments and Collections

The features are:

- The Payments module enables the bank to send payments to multiple networks. The payment transaction capture can be initiated from multiple channels like Internet Banking, Branch, and Phone Banking.

- The Payments module has a provision for interfacing with other external systems for various purposes such as fraud check, bill payments, and messaging.

- The Payments module is a comprehensive transaction handling and management system, which integrates with the overall system for settlement of payments, charges, commissions and MIS. All the relevant account balances will be updated when transfers are processed.

- Exchange rate conversions are automatically effected in cases of cross-currency transfers based on the rate and method of conversion that is defined.

- Any transactions, which involve transfer of funds between accounts, involves the user to provide certain specifications.

- Once the transaction is submitted, the system sends funds transfer messages to external networks based on the transaction type and pass the appropriate accounting entries.

- In case of incoming transactions, rules are maintained in the Payments module to enable STP. On receipt of any payment message, it resolves a Product for each of the transaction and accordingly the customer is credited or debited.

- Payments module is broadly classified into two stages - Capture and Processing. Capture is where user captures the transaction and basic validations are done. Processing is where the resolutions such as network, value date, settlement resolution is done, and the transaction is handed over for messaging and release into the network.

- Payments can be either Incoming Payments or Outward Payments.

- Similarly, Collections can be either Inward collection or Outward Collection.

- An Outward Collection transaction involves the transfer of funds from a different account into customer's account. Such transactions are initiated by the creditor who instructs his bank (the creditor bank) to draw a certain sum from the debtor's account (in the debtor bank), assuming that such an agreement exists between the debtor and the creditor of the transaction and their respective banks.

For Outward Collection, customer can set up credit mandate for periodic collections or onetime collection through branch banking.

- Funds Movement service is a facility which the bank can use in its direct banking. The bank can expose a single UI to its customers for the entire breadth of payment services. The underlying Funds Movement service then identifies the relevant trigger module as well as the final destination. Based on this, the type of payment, that is funds transfer, domestic payment, international payment, collections or a bill payment transaction service will be called. The entire orchestration is managed by the Funds Movement service.

- An Inward Collection transaction involves receiving the incoming collection message from the creditor bank, and processing the payment by drawing a certain sum from the debtor's (customer's) account provide. Such an agreement is maintained between the debtor and the creditor of the transaction and between them and their respective banks.

   For Inward Collection, customer can register a mandate through branch banking for an Inward Direct Debit.

- Outward collection processes consists of key activities such as addition of linked accounts, verification of linked accounts, setting up a credit or receive funds instruction, and raising a Collection request.

- 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.

The above functionalitites are addressed in Payment or Collection Transaction (Fast path: PC216) screen.

2.11.5 Business Payments / Business Collections

The features are:

- Business Payments allow a business customer to transfer funds from one account to many accounts and is useful for regular multiple transfers, such as payrolls, creditors payment. Money can be transferred to a customer's own accounts, to third party CASA or loan accounts within the bank or to accounts with other financial institutions. In other words, it is single debit and multiple credits. Business payment can be triggered from Internet banking, branch through file upload. Business payment can be current dated as well as future dated up to a maximum of 120 calendar days.

- Business collection allows customer to collect funds from many accounts to credit a single account. Money can be collected from third party accounts or own accounts within the bank or to accounts with other financial institutions. For example, Insurance Premium Collection. In other words, it is single credit and multiple debits. Business collection can be triggered from Internet banking, branch through file upload. Business collection can be of current dated as well as of future dated.

- Business Payments or Business Collections transactions can also be uploaded as Standing Instructions through a file upload. The option to define if it is one time transaction or the recurrence pattern if it is a repetitive transaction is provided.

- Fees for Business Payments (Credit) and Business collection (Debit) are charged on a cumulative number per month basis calculated on the number of transactions processed at a fixed price per transaction.

- The facility for business payments or business collections is defined at the CASA offer level.

- Direct Entry Identification Code Maintenance: DE Identification Code refers to direct entry user ID. This is used by the Corporates while processing business payment and collection. There can be more than one DE Identification ID for single customer which have been assigned to the customer according to the Line of Business (LOB) For example, ABC company may have 3 different DE Identification ID for three different line of business (Banking, Insurance, Wealth Management).

- Trace Account: Trace account number is an account number on which dishonor transaction is posted. Trace account number is used when external payment is sent as part of business payment, and external bank has returned such transaction due to any reason. Such return is processed to trace account mentioned in original record. This will be applicable to business payment and not to business collection.

The above functionalitites are addressed in Business Payments / Business Collections (Fast path: PC112) screen.

2.11.6 Mandate Registration

The Mandate is an instruction given to the bank by the customer to honour an inward direct debit received from the counterparty. It is a prerequisite setup required to honor an inward direct debit. The mandate ID maintained by the customer would be communicated to the counterparty bank through a response file or an equivalent mode.

The conditions defined in a mandate, which need to be considered while validating a transaction are typically:

- Validity of the mandate

- Amount requested to be within maximum limit defined in mandate

- Sufficiency of funds

Such inward collections transactions that have been successfully posted can be recalled within the maximum response days as defined in the transaction template.

The above functionality is addressed in Mandate Registration (Fast path: PC008) screen.

2.11.7 Counterparty Maintenance

The linked account maintenance will capture details of the counterparty. On submission of a request, counterparty's account would receive a penny credit along with a reference number. The reference number would form a part of the transaction narration and can be checked by the counterparty. Status of the linked account would be "Unverified" till the time it is authenticated.

In addition to the linked accounts, this option can also be used to maintain a list of payees by the customer.

The above functionality is addressed in Counterparty Maintenance (Fast path: PC015) screen.

2.11.8 Exception Handling

All the transactions handled out of Clearing, Collections, or Payments are finally routed through two pages which are the Scan Pass (Fast path: PC203) page and Scan Reject (Fast path: PC204) page. The transactions that have passed all validations set for that particular transaction successfully will move into the Scan Pass page.

A user may be permitted the following actions against a particular transaction from the Scan Pass page:

- **Reject**: The user can reject the transaction and move it to the Scan Reject queue.

- **Recall**: The user can recall a transaction. This is typically applicable for an inward collection transaction that has been successfully posted. The transaction can be recalled within the permissible time limit as defined in the Transaction Template (maximum response days).

- **Float Extension**: The user can allow for extension of float in certain circumstances and this is possible by accessing the transaction in the Scan Pass page.

All the transactions that fail due to any or all validations set for that particular transaction will fall into the Scan Reject queue.

A user may be permitted the following actions against a particular transaction from the Scan Reject page:

- **Float Extension**: Similar to the action in Scan pass, float extension can be permissible for a transaction in Scan Reject.

- **Reject**: Normally for transactions arising from the clearing or collection functions, all line items falling in the Scan Reject items are picked up at the end of day or during the day when the user invokes the OC run. These transactions are then processed as outward returns. At times, the user may want to manually reject the transactions and in such cases, the Reject action is invoked. A refusal (that is, reject of a return, also called as Type 3 transaction) is handled in this workflow.

- **Reprocess**: The user may want to reprocess the transaction and settle it against another CASA account, or a GL account. In such cases, the reprocess option is invoked.

The Scan Pass and Scan Reject queues are primarily governed by the Day 0 setup and the option of enabling or disabling any action button is driven by what is defined in the Day 0 setup.

2.12 Generic Feeds

Oracle Financial Services Analytical Applications (OFSAA) enables financial institutions to mange enterprise performance, risk, financial compliance and customer insight through various analytical tools. OFSAA primarily depends on the data supplied by various enterprise applications for the analytics. The data from various enterprise applications are fed into a common staging area from which OFSAA picks up the data for various analysis and report generation.

Like any other enterprise application, Oracle Banking also provides various details related to the bank, branches, customers and accounts to OFSAA. The account transaction details supplied to the common staging area will also be used by FAH for enterprise level general ledger accounting.

> **Note:**   OFSAA and FAH are products of Oracle which need separate licensing.

2.13 NPA Management

A new component which stores the date of first default has been introduced in common accounts, to keep a track counter of number of consecutive days, for which an account is irregular. This is computed from the day, the account first became overdue, till the day all the arrears are fully paid. Hence this counter is distinct and independent of the DPD count computed for an account.

2.14 Hardship Relief

Whenever a relief type is given, system shows a simulated relief benefit amount on the screen. User can click on the screen to get the relief details for relief types. If the details of relief benefit for arrears types is required to be known, then the user can click on the screen to get the details of benefit for different arrears types.

Relief types:

- Waive Interest

- Waive Arrears

- Waive Fee

- Waive Repayment

The above functionality is addressed in the following screens:

- Hardship (Fast path: COLL06)

- Hardship Relief Assistance (Fast path: ACCT013)

2.15 Rule Author

Rule Author (Fast Path: RL001) page allows bank users to define 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 GRE based rule. The facts of Oracle Banking are used for defining inputs, which are evaluated and the defined outcomes are given to the calling modules. There are basic validations that the rule should be meaningful and complete, in the sense that the values of facts have to defined in such a way 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 the 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 place holders in modules and executed at relevant places. For example, rules for asset classification, fees, interest setup, alert template resolution, and so on.

2.16 Security Management System (SMS)

Oracle Banking, comprising of several modules, has to interface with various systems in an enterprise to transfer/share data, which is generated during business activity that takes place during teller operations or processing. While managing the transactions that are within Oracle Banking'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.

2.16.1 Security

Oracle Banking 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.

- Authorization Policy Manager (APM) is used to manage access policy definitions.

- 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`.

2.16.1.1 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 within Oracle Entitlements Server (OES). These entitlements drive the access privileges granted to the application role. For example, "perform" on an application service or "view" on a report resource.

Association of enterprise and applications roles is done within OES. Authorized personnel from the bank can use Oracle Directory Services Manager (ODSM) for OID maintenance and Authorization Policy Manager (APM) for OES management.

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 in Oracle Banking Originations.

- Only allow users with access privileges to capture Office Account Ledger within the following list of tasks (maintenances/transaction) or common task flows in Oracle Banking.

  - 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 task flow, 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.

2.16.1.2 Transaction Blackout Configuration

Transaction Blackout typically is required when the bank wants to implement blackout or restrictions on the execution of certain maintenances/transactions within Oracle Banking. Such restrictions may be required for different business scenarios. Oracle Banking provides a mechanism 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 in Oracle Banking. There is a configuration within Oracle Banking by which the Banker Portal tasks can be allowed or disallowed during execution of batch processes in Oracle Banking. This is checked when the application service associated with the particular maintenance/transaction in Oracle Banking is executed. System appropriately displays an error message if the blackout condition is met.

2.16.2 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 Oracle Banking, the approval configuration is to be done primarily on the application service being executed corresponding to the task or business function being performed.

Oracle Banking provides a mechanism called Artifact Dependency Map (ADM) to assert and identify the application services that are associated to a particular task or business function. The overridable business exceptions/reason codes associated with the application service can be configured for approval.

Oracle Banking is pre-integrated with the Oracle SOA Suite for executing its business workflows. The Originations module uses several process or human workflow features to originate customers and accounts. The Approvals module makes use of the

sophisticated participant assignment, routing or work-list features to fulfill the approvals use cases.

- The SOA suite identifies its users through authentication provider pointing to OID. The Oracle Banking UI and app servers also point to the same identity store to provide authentication rights to its users.

- Work-list users or process users are protected through access policies set up in OPSS. The SOA server domain is also re-associated to the same domain that the Oracle Banking UI and app-servers use to get the benefits of a centrally set up policy store.

Whenever a transaction is submitted by a user (banker, customer, and so on), security access check interceptors assert role-based access and fraud policies added on the service executed. Additionally, these interceptors also evaluate whether there are approvals configured on the service.

The output of these asserters is a decision on whether approvals are required or not. If approvals are required, system executes the process (BPEL) configured for the transaction. Thereon, the BPEL process takes the responsibility of routing the approval task (work-item) to the configured assignees and ensuring that the assignees take the required action to complete the approval process.

Approval checks are of the following types:

- **Dual Control:** Any transaction can be set up for approvals (2-eyes principle).

- **User Limits:** User Limits asserter evaluates whether transaction amount is within limits available to the user (role).

- **Matrix Based:** Matrix asserter evaluates a matrix of facts available in the context of the transaction. This asserter is used to evaluate the delegated commitment authority and discretionary pricing facts.

- **Business Override Severity configuration**: The severity configuration for the reason codes typically are as follows:

  - IGNORE

  - OVERRIDE

  - OVERRIDE - LOCAL (Local Authorization)

  - REJECT

  - NOTIFY

  This severity option can be configured differently for combination of dimensions like application role + branch + channel.

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/reason code and its corresponding description

- View approver's history as part of the approval work-item

- Capture comments to indicate approval/rejection

Local Authorization provides a mechanism for the approver to action the approval request from the initiator's workstation, thereby saving time in remote access of the approval work item from the worklist. Typically, it is useful for scenarios like over-the-counter transactions where the number of users in physical branch are less.

2.16.2.1 Matrix Based Authorization

This section explains the matrix based authorizations available in Oracle Banking.

2.16.2.1.1 Pricing Approval Negotiations

Oracle Banking supports matrix based authorization for different pricing dimension negotiations like:

- User Discretionary Margin (UDM)

- Fees

- Customized (base) rate capture

- Economic cost negotiation in servicing transactions like Term Deposit Redemption

This functionality is available for a wide range of transactions spanning Origination (for lending covering Loans and Overdraft) primarily as part of Structure Solution step, Loans (Actions within Manage Loan Account like Split Loan or Offer Swap OR Actions in Manage Facility Within Arrangement task like Add New Account respectively), and Term Deposit (Contract Modification/Fund Term Deposit).

The key difference at a high level between Origination and Non Origination approvals is that there is a Return task capability for origination approval rejections while this capability is available for servicing only in a limited set of tasks.

Different attributes are provisioned which can be used in rules for UDM or fee negotiation approvals. For example, Requested Amount and Product Group for a UDM negotiation approval while the Fee Negotiation details for Fee negotiation approvals. Also, generic attributes like business unit, transaction branch are available.

2.16.2.1.2 Credit Approval Negotiations

This functionality is for approval of credit for lending applications within the Oracle Banking Origination process. Matrix attributes like aggregate application amount, sum of facilities being applied based on the Loan To Value (LTV) group, business unit and so on can be used to create different rules for getting the applications approved.

2.16.2.1.3 Collateral Processing Approvals

Configure approval matrix authorization for the following transactions in LCM module of Oracle Banking:

- Collateral Sub Division

- Collateral Consolidation

- Collateral Valuation

- Collateral Realization

- Release of Collateral

Common Attributes as well as certain specific attributes with respect to these transaction can be used for creating conditions for authorization rule within Oracle Entitlements Server (OES) as well as approval task assignment rules within Oracle SOA Suite.

2.16.2.1.4   Transaction Limit Checks

Oracle Banking provides flexibility for transaction limits checks as part of Approval module. The product provides flexibility in handling approval of:

- Daily/Cumulative limit checks for specific transactions
- Cumulative limit check for a group of transactions
- Specific override limits for a customer/account for handling exceptions to the transaction limit checks configuration

2.16.2.1.5   Inquiry and tracking of Approval process

Oracle Banking provides a rich inquiry mechanism for initiators/approvers to check the work-item status and then drill down into the process details. Approvals module has mechanism to track the approval process and understand the state transition of the approval task. Details like when the task was assigned, claimed, or actions taken are available for viewing in an intuitive manner. Approval processes involving one or more approval tasks can be viewed through the process graph option available within the system.