Oracle® Banking Enterprise Originations

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Preface

Oracle Banking Enterprise Originations enables banks to move from product-centric to customer-centric services, simplifying complex origination processes and delivering frictionless customer experiences across the origination lifecycle. Banks can consider deploying Oracle Banking Enterprise Originations, both as an independent standalone project or as a starting point for a broader progressive modernization program. The solution is built using standard enterprise components, provides efficient process automation, and is available on-premise, on the cloud or through a hybrid model.

Oracle Banking Enterprise Originations enables banks to deliver cross-channel consistent origination experience wherein the customers can use any channel they prefer. The solution operates across channels, providing a common origination process for both assisted and self-service customers. The process also allows customers to utilize different access points, so they may begin the process in one channel, yet use alternative channels to complete the process.

This preface contains the following topics:

- Audience
- Documentation Accessibility
- Related Documents
- Conventions

Audience

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

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 Originations Installation Guide - Silent Installation.
- For a comprehensive overview of security, see the Oracle Banking Enterprise Originations Security Guide.
- For the complete list of Oracle Banking licensed products and the third-party licenses included with the license, see the Oracle Banking Enterprise Originations Licensing Guide.

- For information related to setting up a bank or a branch, and other operational and administrative functions, see the Oracle Banking Enterprise Originations Administrator Guide.
- For information related to customization and extension, see the Oracle Banking Enterprise Originations Extensibility Guide for Host, SOA, and UI.

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 page, or text that you enter.

1 Overview

An efficient account origination solution enables banks to offer suitable products and/or product bundles across the lines of business to the targeted number of customers and enhances sales opportunities. Oracle Banking Enterprise Originations offers a user-friendly account origination product which can help banks in process automation to achieve exceptional levels of user experience and performance efficiency thereby improving customer base and revenue growth.

Oracle Banking Enterprise Originations (OBEO) covers the entire origination process right from prospecting through fulfillment, providing a common platform for originating any type of product across all channels.

It can also originate products that are to be processed by Oracle Banking or an alternative core banking platform. The solution supports deposit accounts, loans, and third party products such as credit cards and insurance as part of a single submission, removing application complexity and reducing redundant data entry.

This account origination system helps banks to streamline and improve their account opening plans for Liability accounts as well as Lending accounts. In a single submission, multiple borrowers can apply for different products of the bank. In respect of lending applications, the solution has the ability to capture details, evaluate or provide a mechanism to evaluate critical attributes like capital requirements, credit worthiness of customer, capacity of customer to repay and collateral adequacy. Banks will not only be able to take appropriate credit decisions and accord approvals to most of the lending applications in real time but also can ensure meeting ever-increasing regulatory requirements.

The solution also supports application of credit policy and quick assessment of financial risk so that the bank can take measures for mitigation of financial risk at the right time.

Oracle Banking Enterprise Originations (OBEO) supports origination of the following products:

- Home Loans
- Student Loans
- Vehicle Loans
- Personal Loans
- Secured and Unsecured Line of Credit
- Secured and Unsecured Overdrafts
- Current and Savings Account
- Investment Accounts
- Term Deposit
- Secured and Unsecured Credit Cards
- Home and Content Insurance/Landlord Insurance

The steps in the Origination flow differ based on the nature of product and the type of request selected. For example, the flow for asset products can be different from that of liability products.

1.1 Origination Flow for Asset Products

Figure 1–1 Asset Origination Flow



1.2 Origination Flow for Liability Products

Figure 1–2 Liability Origination Flow



1.3 Origination Flow for Credit Cards

Figure 1–3 Credit Card Origination Flow



1.4 Origination Flow for Home and Content Insurance or Landlord Insurance

Figure 1–4 Home and Content Insurance / Landlord Insurance Origination Flow



Some of the key features of the Oracle Banking Enterprise Originations solution are explained in the following chapters.

2 Borrowing Power Calculator

The calculator is introduced to help prospective home loan buyers to evaluate their borrowing capacity. Borrowing capacity or power can be defined as the ability of an individual or business entity to borrow funds, given the financial state of the entity. Borrowing power is usually proportional to the amount of surplus income that is available with the prospective borrower, which may be arrived at by computing the excess income available after deducting all regular expenses from the income of the borrower.

Although, borrowing power calculators are used for different product types including home loans, vehicle loans, and personal loans, the scope of the current release is limited to borrowing power calculators for home loan products and is limited to prospective borrowers who are salaried individuals. The calculator allows capture of financial details of the borrowers. It is mandatory to capture either the full address of the property being purchased or the state in which the borrower intends to purchase the property. A configurable help text is available to assist the banker in data capture.

Banks can configure a default home loan offer as part of Day Zero setting in the Borrowing Power Preferences. Based on this default offer, the calculator provides an estimate of the maximum amount of loan that can be borrowed and provides a high level visibility to upfront fees and costs that are involved.

The calculator can be used to simulate scenarios. For example, change the default loan term or input a customized rate on page, change the offer or bundle, and re-calculate the repayment schedule, change the contribution amount and re-calculate for better interest rates.

Financial rewards for the chosen Campaign ID can be viewed. The bundle benefit, margin and fees are displayed.

The quote generated can be saved. It can be retrieved and edited at a later point using the search functionality. The borrowing power quote can be printed by the bank.

Borrowing Power Calculator supports search of an existing quote based on the Party Search, Reference ID, Period From-To or Initiated By criteria.

From the Borrowing Power Calculator, the user can navigate to an In-Principle Approval or Capture Application process.

Borrowing Power Services:

Borrowing Power user interface can be embedded with an external system. The service sends a pregenerated borrowing power quote ID to an external CRM system, which calls the services of Borrowing Power. The opportunity ID created in the CRM system is passed to Borrowing Power. This ID is stored in the backend by the Borrowing Power.

3 Capture Application

The user can capture multiple types of applications within a single submission. The user can apply for a single product or a bundle. The request can be for a new product, variation of an existing product, review or renew of existing facility as well as an In Principal Approval. The application can be from a single applicant or from multiple applicants.

Products Supported

Capture Application supports following products and their combinations in the form of bundles:

- Lending
 - Home Loans
 - Secured Personal Loans
 - Unsecured Personal Loans
 - Secured Overdraft
 - Unsecured Overdraft
 - Home Equity Line of Credit
 - Student Loans
 - Auto Loans
 - Overdraft Line of Credit
 - Multi Option Facility
- Deposits
 - Savings Account
 - Current Account
 - Term Deposit
- Credit Cards
 - Personal Credit Cards
 - Secured Credit Cards (Secured by Term Deposit or CASA Account)
- Investment Product
 - Investment and Retirement Account
- Insurance
 - Home and Content Insurance or Landlord Insurance

Origination flow also supports In-Principle Approval (IPA) for following products:

- Lending
- Overdraft

Term Deposit

Capture Application is integrated with the following modules or sub-systems in Oracle Banking:

- Pricing
- Enterprise Product Manufacturing
- Limits and Collateral Management
- Document Management
- Alerts and Notifications Common Services
- Origination Analytics

The following application types can be captured in the landing page of the Application Form:

- New Product:
 - Lending
 - Deposit
 - Credit Cards
 - Insurance
- In-Principle Approval:
 - Lending
 - Deposit
 - Bundles

The user can select one or more options based on certain validations within the system.

If other options of application type are chosen along with the Variation option, then the selected applicant has to be the primary applicant for the selected product groups. System does not allow new or variation application and in-principle approval request to be part of same submission.

Based on the selected application type, the system resolves the steps in the Application Form that have to be filled mandatorily or optionally based on the configuration. The following table suggests the steps based on the type of product group selected. The following are the steps for the two distinct types of origination workflow behavior:

Sr. No.	Stage Name	Description
1	Product	Capture product details corresponding to product group and applicant details.
2	Party	Capture or refresh personal details of the applicants associated with the product groups.
3	Bundle	View bundle recommendations and link new or existing account to new or existing bundles.
4	Configure	Perform account configuration for the offer selected within the product

Table 3–1 Steps for Liability Origination Workflow Behavior

Sr. No.	Stage Name	Description
		group. Mandatory for liability product groups as part of the Application Form.
5	Review	A consolidated view of the product groups applied in the submission.

Note

Insurance stage is visible if Insurance products are applied for, along with CASA or TD products.

Table 3–2 Steps for Lending Origination Workflow Behavior

Sr. No.	Stage Name	Description
1	Product	Capture product details corresponding to product group and applicant details. Basic details vary based on whether the product group is for Loan or Overdraft.
2	Party	Capture or refresh personal details of the applicants associated with the product groups.
3	Bundle	View bundle recommendations and link new or existing account to new or existing bundles.
4	Collaterals	Link one or more collaterals to the applied facility. Link existing or new collaterals as part of the form. This step is enabled only when the product group is indicated as secured.
5	Funding	View, update and modify the outlay and funds sections for lending facilities applied, based on the configuration of funding template linked with product group and purpose type combination.
6	Financial	Capture and view financial information for the applicants and guarantors based on the template configured for the corresponding party type (and other logical entity, for example, employment type for Individual party type).
7	Configure	Perform account configuration for the offer selected within the product group. This step is optional as part of the Application Form for lending product groups.
8	Insurance	Cross-sell General Insurance as a part of Lending Origination (Only Home and Content Insurance or Landlord Insurance) is supported as of now.
9	Document	Process the document policies defined within the DMS module of Oracle Banking and display documents to be submitted by applicants and guarantors.
10	Review	A consolidated view of the product groups applied in the submission.

General Insurance Origination:

Origination of Home and Content Insurance or Landlord Insurance policy is supported in Oracle Banking Enterprise Originations. Home and Content Insurance or Landlord Insurance covers the building and content of the home (residential property). This policy is usually taken by the home owners to cover the building structure and contents of their homes. Building and Content Insurance policies can be taken separately.

- Home (or Building) Insurance: Protecting the home from various unforeseen circumstances.
- Contents Insurance: Securing precious belongings in the event of accidental loss or damage, theft, storm, flood, fire and so on.
- Landlord Insurance: Protecting property investment (Building or Contents).

3.1 Capture Application Steps

A brief synopsis of the different steps mentioned above is as follows:

3.1.1 Step 1 Product

The summary of product details is as follows:

- Mechanism to capture product specific information based on the product group chosen from the landing page.
- Applicants applying for the respective product groups.
- Capture of guarantors, if required, in case of lending product groups.
- Capture of cosigner, if required, in case of lending product groups including Credit Card products.
- Capability to capture co-applicant and add-on card holder for credit card products is enabled.
- Ability to capture property details in case of lending product groups being applied based on purpose type chosen. If the same property is provided as collateral, then user can link the same from the property section. The system auto creates such property as collateral.
- Provision to capture Education details, if the primary purpose is Education.
- Provision to capture Vehicle details, if the primary purpose is Motor Vehicle. If the same vehicle is
 provided as collateral, then user can link the same from Vehicle section. System auto creates such
 vehicle as collateral.
- Provision to capture External Refinance, Debt Payoff External, and Debt Payoff Internal in the Product stage. On selection of respective flag, the system auto-populates the relevant panels for capture.
- Provision to capture Draw Period and Repayment Period available for the product groups with Group type as HELOC. The capture of facility details is as per the existing MOF revolving facility.
- Provision to capture Applicant as Beneficiary and Special Needs Beneficiary available for Investment products.
- Capability to execute Applicant Eligibility Rule as part of Product stage to validate the allowed combination of party types and the maximum number of applicants allowed for the product group.
- Provision to enable Quick Refinance option for selection, if External Refinance is selected. If the Quick Refinance is applicable, then capturing of Outgoing Financial Institution Account is enabled in Product stage and Structure Solution.
- Ability to display the content that is captured as part of facility description across stages of capture application, instead of product group name.
- Ability to display the rewards against each offer in the offer tile, based on the rewards configuration in Product Manufacturing.
- Provision to process Debt payoff Internal functionality in Amend Facility and Amend Request.

- SMSF, Rural and Defense facts can be used in configuring rules using Rule Author framework.
- The renewal of revolving facility can be performed from any date between the current processing date and expiry date of the facility.
- The fields in the Vehicle panel are grouped logically to support external interface requirements. System has the capability to fetch the vehicle details from external interface and also capture the Vehicle details manually.
- Home and Content Insurance and Landlords Insurance Products are available for selection as a part of capture application.
 - Home and Content Insurance covers the building and content of home (residential property). This policy is usually taken by the home owners to cover the building structure and contents of their homes. Building and Content Insurance policies can be taken separately.
 - Landlords insurance is an insurance policy that covers a property owner from financial losses connected with rental properties. The policy covers the building with the option of insuring any contents that are inside and belong to the landlord.
- The label of Settlement required is renamed as Skip Settlement.
- Provision to capture multiple Outgoing Financial Institution (OFI) account details in external refinance is enabled.
- Ability to select External Refinance, Debt Payoff Internal, and Debt Payoff External in the product details step and allow the user to capture the refinance details in the respective panels, based on the selection.
- The outgoing financial institution account details captured in the External Refinance panel are related to property refinance.
- Ability to default outgoing financial institution account details captured in external refinance panel into Customer financials.
- Provision to capture Concession Group for lending products, pass this information to account configuration and fetch appropriate pricing, if applicable.
- Provision to default the value of concession group captured in Product stage into Bundle stage. If the concession group is not captured in Product stage, then the capture is enabled in Bundle stage.
- If the concession group is captured in Product stage and defaulted into Bundle stage or directly captured in Bundle stage, then the value of concession group is passed from Bundle stage. If bundle is not applicable, then the value of concession group is passed from Product stage.
- Ability to identify and distinguish the capture of External Refinance details and Debt Payoff details (that is, debts internal or external to the bank) separately by paying off partially or completely.
- Provision to identify whether the funds need to be transferred directly to the Other Financial Institution (OFI) account as captured in Product stage or need to be credited to an alternate account.
- The account number captured in Debt Payoff panel is masked, if the type of liability is Credit Card.
- Provision to capture Lending Questionnaire for both party and facility, if applicable based on the configuration.
- If an In Principle Approval application is converted to a full application, and if any of the question
 responses are still applicable in the full application, then such responses are pre-populated in the full
 application.

- Capability to resolve the offer based on the Lending Questionnaire responses, facts within the Lending Questionnaire responses are used to resolve the offers.
- Ability to pre-populate the responses to corresponding facility level fields, if applicable.
- The facts are used to resolve applicable sections in Lending Questionnaire.
- The offers are resolved based on the attributes captured in Lending Questionnaire.
- In case of mismatches between the data captured in the Lending Questionnaire and Application Form, system validates on click of Validate button or in Review and Submit stage. In case of mismatches respective questions in the Lending Questionnaire gets badged and user can rectify the same either in Application Form or in Lending Questionnaire and proceed with the application.
- Capability to generate the Lending Questionnaire document in the Review and Submit stage and in the Generate Offer task.
- Provision to display the Credit to Alternate Account field in the summary along with the other attributes, once the OFI details are saved.
- A trust is not a legal entity. As such, a trust cannot borrow money or grant security in the same manner as a company or an individual. Capability is enabled to automatically add the affiliates of the trust as joint applicants to the submission, irrespective of whether the trust is a primary or a joint applicant in a loan application.
- Ability to fetch the financial institution details from the new OFI maintenance during the capture of OFI
 details as part of External Refinance and Debt Payoff External.
- Capability to compute the Refinance amount in Internal Debt Payoff panel, based on the actions selected by the user.
- Facility Term details is hidden for evergreen facilities.
- If the facility type is identified as evergreen, then a message appears in the Facility Details tab stating, This is an Evergreen Facility.
- Ability to review the Evergreen facility is applicable.
- Ability to renew the Evergreen facility is not applicable.
- Provision to capture lending questionnaire for credit card products.
- Ability to mark an applicant as Applicant Not Present for a new as well as an existing customer.
- On completion of account opening, alerts are triggered to joint applicants who are not present, to provide their details and consents to get added to the account. Additionally, reminder alerts are also triggered for a configurable period of time. The number of days prior to the expiry of this period for sending the alert and the interval for the recurring alerts can be configured in the origination preferences.
- Ability to capture purchase and construction details for the new primary purpose Purchase and Construction (Owner Occupied) and Purchase and Construction (Investment).
- Ability to auto select the Construction in Stages check box if the primary purpose of the loan is selected as Construction (Owner Occupied) and Construction (Investment).
- Ability to execute campaign eligibility rule and display eligible campaigns for selection in the Offer tab.
- Ability to display campaigns that are expired but are within grace days for selection in the Offer tab.

3.1.2 Step 2 Party

The summary of party's personal details is as follows:

- Display of existing information, if any, for the applicants and guarantors (applicable for lending products) and update information, if any.
- Ability to capture personal details for cosigners.
- Ability to capture personal details for add-on card holder and co-applicant, which is similar to credit card applicant. Capturing employment details for add-on card holder is non mandatory.
- Separate sets of information capture and update for various party types such as individual, organization, and trust.
- Logic for panels and fields being mandatory or optional based on the type of products being applied. For example, employment information is optional for capture in case of liability products being applied.
- Capture of multiple business relationships between two parties is allowed.
- Ability to display the quick task of add or select group based on the technical configuration as part of Day Zero setup. This is for backend maintenance.
- Capability to display the affiliates of existing Trust or Organization when added as guarantors.
- The submissions and applications which are in progress can be tracked using the Application Tracker.
- Provision to upload documents as part of identification details capture.
- For employment type others and employment status Home Duties, Pensioner, Retired, Student, Superannuation and Unemployed, system mandates the user to capture only Start Date, End Date and Primary fields.
- Ability to modify effective date for current address in party module.
- The capture of employer name is mandatory for employment type Others and status as Casual, Non Resident, and Contractor.
- Provision to deliver offer documents to Branch based on party preferences.
- Ability to capture customer segment at the party level during the origination process. The best customer segment along with the primary applicant's customer segment are used for obtaining appropriate pricing.
- Ability to capture AML (Anti Money Laundering) information for applicants and affiliates in the origination process.
- Capability to mandate the capture of email ID or mobile number for affiliates if the nominate to receive alerts is opted.
- Ability to pass the party information to an external master data management system such as OCH (Oracle Customer Hub) on clicking the save button in the Application Form (Fast Path: OR101).
- Ability to capture tax residency questions for applicants as well as affiliates within the Application Form (Fast Path: OR101).
- Ability to make the capturing of date of birth optional and to hide the consent questions for affiliates through product hooks.
- Ability to capture AML consent and stamp the date for customers, guarantors, and affiliates for all party types.
- Ability to capture AML consents for existing and new parties.

- Ability to capture of US related FATCA details and CRS question in application form and customer onboarding.
- Ability to capture Mailing Name for trust parties.
- Ability to capture the Signing Authority for organization party type, if atleast one lending product is present in the submission. The value of the Signing Authority is persisted at submission level.
- Ability to capture the previous address only if effective date is less than the defined years in the Define Party Bank Policy (Fast Path: PI314). Ability to capture this address only if lending product is present in the submission.
- Ability to display establishment date and registered address in the duplication check results while onboarding new organization and trust customers.
- Ability to display date of birth, email, phone number, and residential address in the duplication check results while onboarding new individual customers.

3.1.3 Step 3 Bundle

As mentioned in the Application Form capture, system provides mechanism to originate bundle applications. This covers capture of mandatory or optional offers in the bundle being applied. Some of the key areas in the logical stages are as follows:

- Bundle step in the Application Form (Fast Path: OR101) presents recommendations for new and existing owned bundles. Bundles can be either fully or partially qualified.
- Mechanism to capture additional offer related information, in case of partially qualified bundle for mandatory offers in the bundle or for optional offers chosen from the bundle which is recommended.
- Mechanism to link existing or new accounts to a bundle through the Application Form (Fast Path: OR101).
- Bundle and Non Bundle related offers can be selected as part of a single product group in the submission. This is in addition to choosing additional application types to New Product Bundles option in the Application Form.
- Bundle Recommendation handling within Structure Solution as part of the Application Form (Fast Path: OR101).
- Bundle Recommendation handling within Structure Solution post credit assessment and handling of complex scenarios like multiple product groups applied for in the submission.
- Nomination for bundle maintenance fees and first account in the facility structure is nominated for bundle subscription fees.
- Indicator passed as part of account configuration so that the appropriate benefits defined for the bundle are displayed as part of the interaction with pricing within the Structure Solution stage.
- Specific handling in the Create Offer stage to print bundle related key details.
- The parties for whom partial information is available are treated as owners of bundle and are considered in bundle recommendations.
- Provision to capture Concession Group for the bundles opted, pass this information to account configuration, and fetch appropriate pricing if applicable.
- Capability to validate the maximum number of accounts allowed in a bundle based on configuration, before linking an account to the bundle.

3.1.4 Step 4 Collaterals

The summary of collaterals is as follows:

- Collaterals is enabled for Lending product groups in cases, where product group is configured as Secured and Collateral Required parameter in credit policy (linked to product group and business unit combination) is marked as Mandatory or Optional.
- Mechanism to convert vehicle as Collateral and allow user to capture additional details if required.
- System allows mechanism to link existing collaterals present in the system or add new collateral and link to respective facility.
- System allows the user to link only those collaterals belonging to the allowed list of collateral type and category combinations.
- System allows the user to link more than one collateral to a facility being applied or amended as part of the submission.
- System allows the user to capture and upload collateral documents. Document policy needs to be preconfigured. The system resolves and shows the applicable document based on the policy. The user can capture and upload ad-hoc documents.
- Option of manual allocation of Collaterals for LVR computation is available in this step and also in Manual Credit Decision (MCD). This is covered in detail in MCD section.
- Amount of Loan requested is validated with maximum loan amount against the collateral and guarantee collateral. If the amount requested is more than the maximum amount against collateral and guarantee collateral, then system displays warning message in the summary panel seeking additional collateral or insurance.
- System sends information of affiliates when an existing trust or organization is added as guarantor. The resolution and display of existing collaterals is same for affiliates of trusts and organizations, which are added newly as applicants. The display of owners list as part of collaterals is also same as in case of affiliates of trusts and organizations added newly as applicants.
- If a single collateral type and category is defined in Credit Policy and linked to the product group, then during origination when the banker selects Add New Collateral, the system defaults the collateral type and category, else the existing functionality continues.
- If Quick Refinance is selected, then the system forces the banker to add collaterals.
- The content captured as part of facility description is displayed instead of product group name.
- Allow banker to add collaterals belonging to affiliates of applicants in origination flow based on the new configuration in the Global Parameter Details page (LCM) and also enable the linkage of collaterals belonging to affiliates of guarantors as supporting collaterals.
- Provision to display collateral description for the supporting collaterals linked or added to the Guarantee type of collateral. This helps the banker uniquely identify the supporting collaterals.
- Collateral details can be captured for credit card products. The collateral categories Term Deposits and Savings are enabled for linkage during origination flow.
- Ability to compare party's name with name on title deed and identify if Name Change document is applicable or not.
- Provision to capture project name along with builder name for Property type of collateral.

- Capability to capture additional attributes like settlement required, self conveyancing, and so on, for Property type of collateral to identify whether the property requires settlement or not.
- Ability to obtain consent for second mortgage from other financial institution when own bank charge priority is other than 1.
- Ability to fetch estimated market value for a property type of collateral as part of collateral train stop after capturing address of collateral. The system fetches the AVM details fetched from Valex. This is an optional functionality.
- The Title Search request can be initiated or the title details can be captured manually. This is an optional step and does not stop review and submit of the Application Form.
- The Additional Property details can be captured for Property type of collateral. This information is
 persisted at application level.
- It is mandatory to capture guarantee collateral if the applicant is a trust with SMSF as the constitution.
- Ability to capture details such as the construction start date, the land value, details of the party constructing the property (the Owner Builder, or the Registered Owner Builder, or a Builder), for a property that is under construction.
 - Owner Builder: Individuals who can construct on property owned or leased by them.
 - Registered Owner Builder: Individuals who have obtained a license to construct on a property owned or leased by them.
 - Builder: A Builder is appointed to complete the construction.
- Ability to capture additional details for the owner builder or builder such as, contact person details and the account details.
- Service to pass the maximum construction period to account configuration in origination for direct collaterals that are marked as under construction.
- Ability to capture number of bathrooms for Property collateral type and all categories except Water Property.
- Ability to capture at collateral level that customer has given verbal payment authority to proceed with the subsequent or all future disbursements.
- Ability to capture the effective date from which the builder, owner builder, or registered owner builder has taken over or assigned with the construction work.
- Ability to display an indicator to show the current builder.
- Ability to view all the builders added for future reference.
- Ability to retain the information related to Under Construction details, Construction Stage details, or Verbal Payment Authority field, if at least single disbursement is performed.
- Ability to deselect the Under Construction option, even if single disbursement is performed.
- Ability to send updated collateral details to external credit decision system against each of the valuation records based on the valuation type used for the respective valuation record.
- Ability to capture details of external credit facility that are available in the legacy system and share the same collateral details to LCM module.

- Ability to display the external credit facility details and collateral details that are used to compute the market and bank LVR. This functionality is applicable only if the LVR Calculation Method is set as Residual Collateral Value Allocation.
- Ability to reduce the term deposit amount less from the numerator as well as denominator, if term deposit is linked to the Family Guarantee type of collateral. This improves the LVR and reduce the instance of additional LMI needed to be provided by the customer to secure a loan. This functionality is applicable only if the LVR Calculation Method is set as Residual Collateral Value Allocation.

3.1.5 Step 5 Funding

Summary

The summary of funding is as follows:

- Applicable for lending product groups only.
- Prerequisites of Funding Parameters and Funding Template are essential.
- Displayed based on template linked to product group and purpose type combination. In case of product groups where fees and/or LMI are applicable, it is assumed that operationally the bank has ensured that there is a template defined with the appropriate parameters for LMI within the template.
- Feature to display the outlay and source of funds, which gives the customer and banker a holistic picture of the overall arrangement in terms of funds.
- Execution of rules related to Lenders Risk Management (LRM), if applicable, prior to display of funds table.
- Capability to display Lenders Mortgage Insurance (LMI) quote amount.
- Capability to manually capture LMI premium details.
- Ability to negotiate fees post the derivation from the price policy chart within Oracle Banking Relationship Pricing.
- Expression Builder related features in the Rules module of Oracle Banking to support Mathematical functions like ABSOLUTE, ROUNDDOWN, ROUNDUP, TRUNCATE for the Big Decimal and Money data types.
- The fees for additional property details, change of name, and non-chargeable fees are resolved and displayed in the funds table.
- Ability to display the amount to settle value instead of outstanding balance in the fund table. The amount to settle value is captured while capturing external refinance or debt payoff details.

Features

The features of funding are as follows:

- Other Costs: Mechanism to define one or more funding parameters within the template belonging to the funding type Other Costs. As part of the funding table capture, the system provides a mechanism to capture one or more instance of such funding parameters defined within the template. Additionally, there is a Remarks column which can be used to capture information for each of the funding items of Other Costs funding type.
- Ad hoc Fees: The Price Definition (PD) defined within the Oracle Banking Relationship Pricing provides an option to classify the fees with purpose type as Ad hoc Fees defined with the domain category Origination. The PD maintenance can define a fee with zero amount. This is required to
handle the requirement where only in certain scenarios, Ad hoc fees have to be charged as part of the application. To handle this requirement, as part of the funds table, the user is given an opportunity to modify the amount for the ad hoc fees evaluated from the origination fees PPC defined within Oracle Banking Relationship Pricing. Such fees are displayed in a separate panel called Ad hoc Fees within the Outlay section of the Funds Table.

- Bundle Subscription Fees: This panel appears within Funds Table corresponding to the product group under which a new account is nominated for bundle subscription fees. The system displays the Capitalize indicator as checked within this panel, if the behavior of bundle subscription fees is defined as CAPITALIZE within the Fee Treatment Preferences of the respective product to which the nominated offer belongs.
- Capitalization of Fees and LMI: The Capitalize indicator is displayed as checked (if the particular component is capitalized) or unchecked (if the component is not capitalized). Fees is deemed as capitalized, if the user checks the option Capitalize Fees within the Product (step of the Application Form) for the respective product group. LMI is indicated as capitalized, if the Capitalize LMI option within the same step is checked in Product.

The user can override and un-capitalize certain origination fees only, if required, as part of the Funds Table. This option is available only against Origination fees and not against the Insurance components within Funds Table. The system supports negotiation for the respective origination fees (irrespective of whether they are capitalized or not) within this stage of the origination workflow. LMI premium can be negotiated

- Default the value of Contract of Sale field captured as part of Collaterals step in the Application Form for a Residential Property collateral category in the Transfer of Land value field captured as part of the Calculate button within the Funds Table.
- Cosigner and Application Branch State facts are sent to pricing along with the existing facts to get relevant fee computations.
- Funding Summary panel display details of Total Outlay, Total Funds, and Surplus or Deficit.
- A warning message is displayed to the banker in the Funding step, if there is change in LMI premium amount and negotiation was done for LMI premium amount.
- In case of Edit submission or banker moving back to previous train stops, a refresh call is made to
 pricing in order to refresh the origination fees.
- The content captured as part of facility description is displayed, instead of product group name.
- System displays existing LMI policies of the applicants (Active Policies) on clicking a hyperlink in Funding.
- LRM Complex Application rule is executed only if the outcome of the LRM Required rule is True. If the outcome of the LRM Complex Application rule is True, then system forces the banker to capture LMI details manually, else system executes the LRM Submission Type rule and the LRM Provider rule sequentially as per the existing behavior.
- The Negotiation icon is available against each of the fees in the funding table. On clicking this icon, system displays the negotiation panel and allows the user to negotiate the fees.
- Provision to restrict the modification of purchase or cost in funding table.
- Ability to add number of GSA registration and number of PPSR search as additional parameters. This
 allows to configure fees for the facts that uses existing framework. This frame work is linked with
 existing events such as OR New Lending Facility and OR Amend Facility.

Ability to resolve the capture fees with in funding table.

3.1.6 Step 6 Financial

The summary of financial details for Retail is as follows:

- Mandatory step applicable for lending product groups only.
- Feature to display and capture financial information for individual or organization or trust applicants.
- Capture of personal financial position and business income statement and balance sheet (for self employed kind of scenarios).
- Rule can be defined in Origination Preference to facilitate capture of cash forecast. Based on the
 outcome of the rule, system enables or disables capture of cash forecast.
- Display of existing assets and liabilities within Oracle Banking as part of individual party's financial position.
- Capture is configured based on financial parameters and template.
- Financial details are captured at a party level.
- Ability to clone financials across applicants in the same submission where one or more applicant share the same employment detail in case of self employed employment detail. This is only from ease of data capture perspective and not linked as part of the storage of employment and linked financials.
- Financial details can be captured for affiliates. This is optional.
 - Capture of guarantor financials can be mandatory or optional based on configuration. A rule is attached for guarantor financials at Origination preferences, the output of the rule determines whether capture is mandatory or optional.
 - Ability to configure the capture of guarantor financials as mandatory, if the guarantor is an income reliant guarantor.
- Financial details is captured for cosigner. Resolution of templates is similar to guarantors.
- Financial step is not applicable for add-on card holder for credit card products.
- Provision to capture contingent liabilities is available.
- Ability to link external refinance details, captured as part of Product Details step, and link them to the liabilities of the primary applicant.
- Integration with party module for financial template and profile capture for the following features:
 - Capture of mandatory financial parameters as defined in the template.
 - Financial Ratio is a fixed list of ratios computed by the Party module in Oracle Banking. Derived or User Input ratios are supported.
 - Display of Net Customer Position based on the financial details captured.
 - Mechanism to capture salaried and self employed related financial detail information.
 - Mechanism to capture Current Position of assets and liabilities in case of organization and trust.
 - Additional Details capture supports user-maintained list based on nature of financial parameters. Supports character, numeric, and date type of fields.
 - Factory shipped templates for Individual (Salaried, Self Employed, Salaried and Self

Employed), Organization (Simple type) and Trust.

- Capture of linked or associated asset-income-liability-expense financial parameters.
- Ability to read the rules maintained as part of Origination preferences and resolve the relevant financial template for Individuals only.
- Ability to resolve the highest priority template in case of the applicants applying for multiple product groups in the same submission.
- When financials are shared by two parties in the submission, banker captures the same set of information multiple times across parties. In order to reduce the manual capture of financial data, the ability to reflect or default the financials across parties is provided.
- Additional details captured are displayed by default, instead of making the banker click a link to view the same.

The same is applicable for Affiliates and Guarantors as well.

The summary of financial details for Business is as follows:

- Ability to support rule based financial templates based on facts such as party type and industry.
- Ability to support multiple statements like Balance Sheet, Profit and Loss, Cash Forecast and Business Plan.
- Ability to support multiple statement types and classification like audited, unaudited, projected and qualified, unqualified, Management, Accountant and Customer projected.
- Ability to capture and generate cash forecast using the business plan of the customer.
- Ability to define the number of years of statement required for current, past and future.
- Ability to support item wise capture for a financial parameter and capture month wise data for the financial parameter.
- Ability to maintain average values for the benchmark ratios and allow comparison of the calculated values to the bench mark ratios.
- Ability to upload the financial statements in bulk and link and view them as part of respective statements.
- Ability to spawn off the financial capture as a task for the back office to complete.
- Mechanism to carry forward the financials captured as part of borrowing power calculator to financials in Application Form when user moves from calculator to Application Form.
- Provision to capture the financial details of the customer through the financial questionnaire.

3.1.7 Step 7 Configure

The summary of configure (Structure Solution) is as follows:

- Applicable for liability (mandatory step) and lending product groups (mandatory or optional can be configured in Origination preferences).
- Offer selection and account configuration based on the product class Savings and Overdrafts, Term Deposit, Loans or Credit Cards.
- Interaction with Oracle Banking Relationship Pricing to determine and display applicable interest rates, margins and fees.

- Capability to negotiate margins and fees, based on configuration within Oracle Banking Relationship Pricing.
- Feature to configure sub-lines and accounts under the respective sub-lines under the Facility Summary for lending product groups.
- In case of Edit Submission or banker moving back to previous stages, a refresh call is made to pricing in order to refresh the origination fees.
- Capability to display remaining term in Mainline and Subline summary.
- The External / Quick Refinance task (which is part of Structure Solution) is enabled, if the External / Quick Refinance option is selected in the Product stage. The system allows capturing multiple outgoing financial institution account details as part of this task.
- The content captured as part of facility description is displayed, instead of product group name.
- Provision to restrict the completion of post assessment Structure Solution task before Verification and Title Search tasks, if NCCP flag is checked.
- Even though the Capitalize LMI flag is selected in Product stage, the system validates fee treatment behavior defined in product in Product Manufacturing and checks if any of the fees is set to Capitalize. If yes, then account configuration is mandatory, else it is non-mandatory.
- Ability to bring collaterals belonging to affiliates of applicants under the purview of Structure Solution process, similar to collaterals of applicants.
- Provision to display or capture LMI quote details is available. Also, negotiation on LMI quote can be done from here.
- Provision to display and hide the arrangement ID linked to the loan and OD accounts in account summary grid.
- Provision to display property type of collaterals for linkage to Other Financial Institution (OFI) in External Refinance quick task.
- Ability to capture Financial Rewards in the Quick Task section of the Configure stage. This quick task is visible only for Lending products (Loans and Overdraft). This quick task is enabled if at least one account is configured. The rewards applicable for the selected offer are displayed and the user is allowed to negotiate rewards, if any. This action is available in Configure stage of Application Form and in the post assessment Structure Solution human task.
- Ability to select the account other than nominated account for the credit of the financial reward amount.
 If the user does not select any credit account then the financial rewards are credited to Loan or OD account that which is configured and nominated for the fee collection in the Configure stage.
- Ability to force the user to reconfigure the credit account for receiving financial rewards if the corresponding borrower is removed from the product group.
- Provision to clear or remove the financial rewards saved by the banker.
- Provision to view and modify the lending questionnaire.
- Ability to process the campaign ID fact while initiating the credit card submission.
- Ability to enable or disable the modification of existing accounts that are linked with OD facility within Origination module through technical configuration. Ability to process this configuration to Transaction Account module.

3.1.8 Step 8 Insurance

The Insurance stage is applicable only for Home and Content Insurance or Landlord Insurance products and Home Loan products. Insurance stage in home loan application enables the banker to have a Home and Content Insurance or Landlord Insurance cross-sell conversation during the home loan application capture.

The insurance stage is visible only if any of the following conditions are satisfied:

- An Insurance product group is selected on landing page.
- A Lending product group of product type as Home Loan is selected on landing page. The Lending product group of type Home Loan must have the Cross Sell Insurance flag checked in the credit policy.

The following use cases are possible:

- Apply for only a Home and Content Insurance or Landlord Insurance product.
- Apply for a Home and Content Insurance or Landlord Insurance (new quote) along with other products (typically home loan).
- Apply for a Home and Content Insurance or Landlord Insurance (existing quote) along with other products (typically home loan).

3.1.9 Step 9 Review

The summary of review is as follows:

- Common step to display a summary of the product groups applied for by the applicants in a submission.
- Application form details are captured using the Application Form (Fast Path: OR100) page based on the application type and other configuration such as, funding table template, credit policy, and so on. The system provides a mechanism to capture information which is used to process the product groups applied in a submission by the respective borrowers.

The following are supported as part of generation and printing of application forms:

- There is an option to generate the application form for each product group applied in the submission.
 The Application Form template displays more information and extends to more product classes.
- A single template through the document type APPLICATION_FORM is used for liability and lending product groups.
- The user can generate the application form either through the Review and Submit stage of the Application Form or subsequently through the Application Tracker using the Generate Document option. In case of subsequent generation, the system uses the state of the application form when it was submitted in the system for the generation of application form.
- The document is indexed with application and submission identifiers, and can be subsequently searched through the Content module option for document search and upload.
- Since the generation of documents is asynchronous, the system provides a Refresh hyperlink till the document is generated successfully.
- Once document is generated, the View Document option is automatically enabled. The user can use this to view the generated application through the IPM viewer directly.
- Cosigner information appears on the Review stage similar to guarantor.

- Co-applicants information appears on the Review stage for credit card products.
- Affiliates of existing trust or organization, or new trust or organization (added as guarantors) are not displayed in the Review stage.
- Group information is displayed based on the technical configuration as part of Day Zero setup (backend maintenance).
- The content captured as part of facility description is displayed on the Review stage, instead of product group name.
- Capability to generate exposure report for applicants, guarantors and cosigners.
- Provision to view change log pertaining to Product, Party, Collateral and Financial stages when edit submission is opted.
- The Initial Amount (Pay-in amount) is available as part of Investment CASA account configuration which is handled by Investment module. The value in this field is defaulted from the offer and the user can reduce the same while performing account configuration as part of Structure Solution stage. If this amount is reduced, then the system also include this change as one more input to system while triggering the approval process.
- Collateral details are included in the review page if captured as part of Collateral stage.
- Ability to generate lending questionnaire related documents, if the lending questionnaire is applicable.
- Policy details of Home and Content Insurance or Landlord Insurance are displayed once the policy creation is complete. If policy creation is pending then the insurance quote status is displayed.
- Display reasons sent by the decision engine in the Submission Outcome page, if credit decision is Referred or Declined.
- Provision to display Party, Collaterals, Financials, and Document stages along with the Review stage, if a change is requested to modify repayment type and rate type, and move to IOI / IOA triggering credit assessment.
- Ability to link the new CASA account being created in the submission to the loan account as an offset account.
- Provision to capture the single consent for all applicants applied across various product groups within the submission at review page.
- Provision to execute the Financial and Objective Information Validity rule on submission of application and compute the expiry of the consent. The Consent Date and Consent Expiry Date should be stored. In case of edit submission, consent expiry date stored is validated with current process date to check whether financial and objective information validity is expired or not. If the consent is not expired, then system does not perform the computation again, else system computes the expiry again.
- With the design change for Process Flexibility, the user can traverse across stages in the application form to capture or modify application details. The Quick Refinance rule is executed on submission of application.
- Once the user submits the application form, system checks if any of the fact values used in Interest price policy chart configuration has been changed from the last account configuration date. If there is any change in the fact values, then system forces the user to reconfigure the account, else it allows the user to proceed further in the origination flow.

- A holistic view of the parties in the submission is available, with details of related parties (affiliates) along with the relationships.
- Provision to filter on a product in the submission, to view the parties who have applied for that product, along with their related parties (affiliates).
- Ability to display the list of offers recommended by credit decision engine on the outcome page, if the credit decision is Approved Downsell and offers are recommended by decision engine.
- Ability to display BSB number on the outcome page for transaction and term deposit accounts.

3.1.10 Step 10 Panel Drawer

The following widgets of the panel drawer are available in Capture Application:

- Document
 - Interaction with the Content module of Oracle Banking to execute the applicable document policy rules linked at the levels for application, product groups, and collateral.
 - Display document status and link, if document is already received.
 - Validate status of mandatory documents and disallow to move ahead unless mandatory documents are marked as received.
 - Display status for all inbound documents expected from applicants and guarantors.
 - Capability to display and upload ad-hoc documents.
 - All affiliates of existing Trust or Organization, or new Trust or Organization (added as guarantors) are sent to Content for the resolution of document checklist. System displays the same as part of inbound documents stage, and subsequently enables the banker to capture the document information similar to affiliates of applicants.
 - The supporting collaterals are also sent to Content as part of inbound documentation flow along with direct collaterals, so that system can resolve the relevant documentation and display the same against the relevant collateral owners.
 - The collaterals belonging to affiliates of applicants is also sent to Content as part of inbound documentation flow along with other collaterals, so that the system can resolve the relevant documentation and display the same against the relevant collateral owners.
 - Ability to resolve Authority to Act document in the Application Form.
 - Standard List of documents for the respective product group is available for the banker to view.
 - The Quick Refinance fact can be used in configuring document policy to resolve inbound documents, if any.
 - Ability to resolve the government grant inbound document and obtain it as part of the Application Form (Fast Path: OR101) if the government grant is applicable.
- Key Indicator
 - Key Indicator is available as a panel drawer widget in the Capture Application process. Once the banker starts the application and moves to the Product stage, this panel drawer is available on the right hand side of the page.
 - Since Key Indicator is a panel drawer, the banker can pull this information from any of the pages in the Capture Application process.

- It displays information pertaining to product groups and collaterals linked to such product groups.
- It displays information for Lending (Loans and Overdraft) and Credit Card product groups. There is no information shown for CASA or Term Deposit (TD) product groups.
- In the serviceability tab, the details regarding the debt servicing capabilities of the parties in their individual capacity and as a borrowing entity are displayed.
- It also displays the credit worthiness of each applicant.
- Summary
 - The banker may need to view the summary of the application multiple times during application capture. Therefore, the Summary panel drawer can be used to view the summary of the application.

3.2 Important Functions of Capture Application

Following are some of the main functionality of Capture Application.

3.2.1 Sourcing Entity Capture and Processing

Oracle Banking Enterprise Originations supports application for accounts from Brokers or Introducers. In such cases, the agent (broker or introducer) gets commission (upfront or trail) for the income or customer generated for the bank. There are also cases where the broker or introducer is willing to forego a portion of his or her margin which in turn translates into benefit (either discount or additional interest) for the customer's account (higher rate in case of deposit or lower rate in case of lending).

As part of the application creation process, user can specify the application as being broker sourced or introducer sourced. This is applicable as part of new, and IPA in the Origination workflow.

The system checks the eligibility of the offers applied under the respective product group and displays only those offers which are eligible to be sourced by either broker or introducer based on the sourcing entity captured as part of the application header in the submission.

The system allows mapping of broker or introducer to business groups, which are in turn linked with product groups and offers. System validates whether the broker or introducer selected at submission is allowed to source or service such product group and offers. If such broker or introducer is not mapped for selected product group or offers, the system prompts the user to map.

System is also capable of sending an alert to a broker during origination life cycle when the submission is approved or when the offer letter is dispatched.

The following features have been incorporated and integrated in Oracle Banking Enterprise Originations for the same:

- Capture of sourcing entity for applications: Broker or Introducer.
- Display of the broker or introducer details within the application.
- Validate whether the broker or introducer is allowed to source or service such product group or offers.
- Integration with offer selector to perform offer eligibility as part of the account configuration.
- Capture of Commission and Rebate Details within account configuration.
- Printing commission and rebate details of the broker or introducer within the offer letter.

- Stamping of the sourcing entity at the account level.
- Sending alert to broker or introducer during origination life cycle.

3.2.2 Backdated Account Opening for CASA and TD Accounts

Oracle Banking Enterprise Originations allows the opening of backdated CASA and Term Deposit accounts through the Origination process.

- Capture Submission Value Date as part of the application header. This field has to be manually entered as a backdated value to enable backdated opening of liability (savings and term deposit) accounts.
- Origination sends the value captured in submission value date field, in case of liability applications, to fetch the list of eligible offers as part of the Configure step of the Application Form.
- Offer Eligibility searches and fetches the list of offers which were valid as of the value date passed from Origination. It eliminates the offers where the expiry date (considering the value in the parameter Backdated Account opening allowed period (In Days) defined at the CASA Offer level) is less than the posting date in the system.
- This date is also used as part of the pricing interaction done by the module to fetch the interest rates and margins. Fees are applied based on the posting date on which the account configuration is being done.
- Origination validates the offer expiry in Configure step against the submission value date in the Application Form. In case of account opening, Origination sends the submission value date as the account opening date.
- There is specific handling in case of incomplete submission being submitted after End of Day operations (EOD) for the date on which submission has been captured are completed. In such a scenario, the system forces the user to re-configure the accounts within the Configure step of the Application Form.
- If the user captures a back value dated submission value date, the system expects the user to apply for New Deposit type of product groups. There is no backdated effect or processing for New Lending Facilities or New Credit Cards.
- The back value date is handed off to the third party product processors for account creation.

3.2.3 In-Principle Approval

Customers usually prefer to obtain In-Principle Approval (IPA) from bank before committing for Loan, OD, or TD account. This helps them to know the offerings of different banks. Based on this, the customer can take the decision. Customer also tends to negotiate fees and rates during IPA process. IPA provided to a customer is valid for a certain period of time. If the customer returns to the bank within the stipulated time period to open an account, the bank retrieves the particular IPA request and applies it on customer's account.

IPA is an indication of loan eligibility but not a formal offer that is binding on the bank. This approval is not construed as a final approval from the bank. It only shows the inclination of the bank to take up a detailed proposal, based on the minimum requirements furnished by the customer or borrower. However, the bank can insist for certain information and documents which are required for taking up a detailed approval later on.

- Origination supports the IPA request for following products:
 - Lending
 - Term Deposit
 - Bundles (with above combinations)
- Capture application for IPA follows the same behavior as new application.
- System generates a term sheet for successful IPA request. Template for term sheet has to be preconfigured in system.
- No account opening process is triggered in IPA.
- System has the capability to define validity period for an IPA term sheet. If customer approaches the bank within the validity period and shows interest to avail the product, then banker can convert the erstwhile IPA request to new application through Application Tracker page.
- Term sheet is generated at submission level for IPA request.
- For term deposit, term sheet is generated once the user confirms the Capture Application. For lending, term sheet is generated after Structure Solution.
- In case IPA request is declined by external decision engine, then system has the capability to generate decline letter for IPA request.
- Ability to display eligible product groups for initiation of IPA submission on the landing page of Application Form (Fast Path: OR101).

3.2.4 Affiliates

Affiliates are parties associated to individual, organization and trust in owner or administrator capacity.

The directors of an organization and trustees of a trust (individual trust or corporate trust) are captured as applicants for the product groups applied as part of the submission. However, this may not be ideal since from lending perspective, this makes such entities also part of the borrowing entity.

The following features are integrated as part of Oracle Banking Enterprise Originations:

- Integration with Party Relationship Maintenance and Party to Party Relationship.
- Capture of Directors of Organization or Trustees of Trust within Applicant Details panel of application.
- Capture Personal Details page to add Administrator if any, for Individual Applicant. Enable Owner and Administrator capture for Organization and Trust applicants. Provide mechanism to upload specific ad hoc documents for such affiliates.
- Capture Party Relationships in Personal Details.
- Collaterals step links affiliates with collateral sharing turned on at the party to party relationship level.
- Financial Details allows financial capture for affiliates with financial sharing enabled.
- Supports Document checklist for affiliate in Document step of the Application Form for inbound documents.
- Supports affiliate handling within the account configuration step for the respective modules CASA, Term Deposit, or Loans like linkage of affiliates to account and account holder preferences capture.
- Supports generation of outbound documents for affiliates.

 Creation of party to party relationships based on Application Form capture and party to account relationships based on affiliates linked to account.

3.2.5 Consumer Credit Insurance

Consumer Credit Insurance (CCI) is a mechanism for the borrowers to get protection for their loan which they are applying for with the bank. In case of one or more events which are covered by the insurance policy like death or disability, the insurance provider takes over the responsibility of making the repayments on behalf of the customer. To apply for this protection, the borrowers have to pay for the additional premium as a one-time charge which can be capitalized to the loan account within Oracle Banking.

Following are the prerequisites to be performed in Oracle Banking, before the same can be processed through Oracle Banking Enterprise Originations:

- Eligibility rule for CCI to be defined using Rule Author with domain category EL (for LCM module).
- Linkage of CCI eligibility rule is configured in the Insurance Offer.
- Enhance Credit Policy Definition to indicate if CCI applicable for credit policy defined for Loans or CASA product class.

The following changes are performed to support this feature as part of Oracle Banking Enterprise Originations for Loan product groups (for Loans product class):

- **Product step in the Application Form**: There is no option to select CCI as part of Product details.
- Structure Solution: Option to select CCI and capturing the CCI request information such as, plan, premium payment frequency, premium payment option, premium term, cover type, running the eligibility rules, retrieving the relevant premiums and so on. It is performed as part of account configuration.
 - It supports both periodic and one time premium payments.
 - Nomination of one account mandatory under a facility hierarchy in Structure Solution. In case of Bank Funded (to be capitalized) CCI, the CCI premium amount is added to the sanctioned amount of the nominated account.
 - Special handling for DSO calculation in credit assessment for the cases where CCI periodic premiums are Capitalized.
 - Option to opt out from selected CCI.
 - CCI functionality is enabled for Loans, Overdraft.
- Consumer Credit Insurance human task: Task for interaction with external system for creation of CCI related policies. Task is created at application level and handles calls for the product groups applied for (along with CCI) in the particular application. This task is automated, that is human task is created only when an exception occurs as part of automatic processing. View of CCI task details is available as part of Application Tracker. Ability to resolve the CCI questionnaire template and capture responses against each of the questions within CCI human task.
- Create Offer: Information related to CCI applied for by the borrower is printed in the offer letter in the appropriate application. Also, CCI welcome letter generated per borrower, who has applied for CCI (in the respective facility) as part of this stage.
- Create Account or Settlement Instruction: If CCI is capitalized, the same is to be handled as part of the interaction between Origination and third party system as part of settlement processing. During the

confirmation of settlement instruction or account opening, creation of the active insurance policies to be done at this stage. Alignment of the start date and end date of the CCI policy is done as part of the loan disbursement.

Handling of change in premium amount as per the CCI premium estimate that is, quote or rejected CCI policy is handled within the Oracle Banking Enterprise Originations workflow.

The following changes are done to support this feature as part of Oracle Banking Enterprise Originations for Credit Card product groups (for Credit Cards product class):

- Product step in the Application Form: There is no selection pertaining to CCI as part of product details.
- Credit Card Account Opening Interaction: The CCI indicator is available as part of Credit Card account configuration which is selected by the user. This is provisioned to be passed to external systems to indicate if the applicant has applied for CCI along with the credit card.

3.2.6 Capture of Property Details

Property Details indicate the details of the property that the borrowers intend to purchase in the context of the lending facilities that they are applying for with the bank. Typically, the borrowers have to pay stamp duty fees and registration fees based on the property being purchased. There could be additional fees levied or benefits provided (for example, subsidy or grant from the federal or state government) based on the purpose for which the property is being procured.

A panel to capture property details is available in the Product step of Application Form. The actual property being purchased is added here and the property being mortgaged for loan is captured in Collateral step of Application Form.

The property details panel is enabled in the scenario of New lending facilities. The user can capture multiple properties as well. The properties captured as part of one product is available as part of other products in the submission and the same can be selected as well. A button Fetch Properties is available for fetching the properties selected as part of other products in the Submission. The information details to be captured are as follows:

- Property ID and Property Description.
- Purchase price of the property.
- Address details of the property: Details like the state, city, zip (also known as postal code) are used as
 determinants in computation of stamp duty.
- Primary place of residence: Indicator whether the borrower intends to use this property as a primary place of residence.
- An indicator called as 'Will this Property be considered for Fees' is available. Based on this flag, the
 properties are sent to Pricing for the relevant fee evaluation.
- The information captured within the Property Details is used for the computation of fees like stamp duty fees and registration fees. It is passed by Origination in the call to Oracle Banking Relationship Pricing for the evaluation of the Origination Fees Price Policy Chart (PPC) as part of the processing performed prior to the display of fees within the Funding step of the Application Form. While displaying the fees, the Fee name is concatenated with the Property Description.
- Transfer of Land Value Amount: This is same as purchase price and in some exception cases, it might differ. This can also be used as one of the input in the fee computation.

- Add as Collateral: This check box indicates whether the property should to be converted as a Collateral or not.
- Type and Sub type: Categories and Sub categories of the property.
- Owners: Owners of the property.

3.2.7 Debt Payoff - Internal

The term Debt Payoff - Internal means that with the proceeds of new loans, the customer wants to square off the existing loan liabilities (either partially or fully). It is important to capture the internal refinance details to derive the correct Loan To Value (LTV) ratio. The amount of internal refinance has to be adjusted while computing the LTV. Besides, it is also important from settlement process to settle the existing liabilities which are selected as part of internal refinance application.

- If the banker selects the Debt Payoff Internal option, the application enables the Debt Payoff Internal panel. The system fetches the existing liabilities of customer.
- Ability to fetch the existing loan details such as the account number, facility ID, borrowing entity, total outstanding amount, EFS amount, refinance amount, minimum customer contribution, customer contribution, and loan.
- Banker can select the accounts which are to be included as part of debt payoff internal. Once the banker selects the account, the system provides the option to fetch the Early and Final Settlement amount for each selected account.
- Origination sends the internal refinance amount to Limits module for correct calculation of LTV.
- At Structure Solution stage, the system mandates the user to configure at least one account with internal refinance amount.
- At settlement page, the account number selected as part of internal refinance is defaulted so that it can be settled.
- Origination passes the information to third party product processors for effecting the credit in respective loan account which are captured for internal refinance.
- Capability to compute the refinance amount in the Internal Debt Payoff panel based on the action selected by the user.

3.2.8 Joint Application Form

Joint Application Form is the functionality within Oracle Banking Enterprise Originations to capture details of an applicant marked as Not Present, to link such a not present individual to the account and to fulfill the request. Note that an applicant can be marked as Not Present via the Application Form capture. This option is available for new individual applicants only while applying for liability products.

Following are the features of Joint Application Form:

- Handling of Not Present functionality for affiliates (for example: Directors of an Organization or Individual type of trustees for a Trust).
- Distinction between affiliate and applicant in search results. Appropriate handling of capture of information in Structure Solution step based on whether affiliate or applicant is being marked as present.

- Integration with the third party product processor for linking of the joint applicant to existing account is a
 pre-requisite.
- From the Joint Application Form, the user can either update the details of a joint applicant, who was not present during capture application, to be added to the account, or remove the applicant from the application.
- Once the applicant details are captured and the Joint Application Form is submitted, the manual identity verification rule is executed. A manual identity verification task is created, if applicable.
- On completion of the manual identity verification process, the applicant is added to the account.
- On successful addition of the joint applicant to the account, relevant outbound documents are generated and dispatched to the applicant.
- Ability to capture AML consent and stamp the date for customers, guarantors, and affiliates for all party types.
- Ability to capture AML consents for existing and new parties.
- Ability to capture of US related FATCA details and CRS question in application form and customer onboarding.
- Ability to capture Mailing Name for trust parties.
- Ability to capture the previous address only if effective date is less than the defined years in the Define Party Bank Policy (Fast Path: PI314). Ability to capture this address only if lending product is present in the submission.
- Ability to display establishment date and registered address in the duplication check results while onboarding new organization and trust customers.
- Ability to display date of birth, email, phone number, and residential address in the duplication check results while onboarding new individual customers.

3.2.9 Home and Content Insurance or Landlord Insurance

When customer applies for Home and Content Insurance or Landlord Insurance, the basic information about the customer and property is taken and an insurance quote is provided. If the customer is happy with the quote and decides to proceed, additional information is captured and policy creation process is triggered. This entire process can be done through capture application step.

It is also possible that due to various reasons (such as customer does not wish to proceed with policy at this point, customer wishes to link insurance policy creation along with home loan account opening, quote could not be given to customer, underwriting is required and so on) policy creation might not be initiated from capture application. In such cases, a Manage Insurance (STP task) is created on submission of application. This task can be accessed through Application Tracker and used to complete the quote or policy processing.

In some cases, it is possible that insurance provider is unable to provide a quote for the given customer or property (based on information furnished by the customer) and requires manual intervention through the underwriting process. In such cases, a Policy Underwriting task is created. Through this task, an underwriter can review the information and then decide either to approve the quote after certain adjustments (like imposing excesses, adding endorsements and so on) or decline the quote.

Whenever policy creation is sought by customer and approved by insurance provider, system triggers policy creation process. As part of this process, all information including payment details is passed to the insurance provider by Oracle Banking Enterprise Originations. Policy creation is done in the insurance provider system

and details are sent back to Oracle Banking Enterprise Originations. These details are stored against the party and are handed off to OCH.

3.2.10 Serviceability Details

Details of serviceability for applicants and borrowing entities are available as part of capture application which help the lender while capturing application details. Since, a lender can see a preview of how the serviceability of the application is, corrective measures such as guarantors, collaterals can be taken early on, if needed.

3.2.11 Miscellaneous Application Form Features

The following are the other miscellaneous features:

- Capture Email ID optional as part of the Applicant Details capture during the Product stage.
- Capture of Solicitor Details and Referee Details as part of the Application Form.
- Cancel Application option available in the Application Form.
- Display of party identifiers in the Outcome page of the Application Form.
- Capture Mobile number and Email ID made optional for Individual applicant in Personal stage of the Application Form.
- Integration for support of additional collateral types and categories within Collateral stage of the Application Form.
- Capture Current Work Address details in Personal stage for Individual applicant.
- Party module KYC rule integration and display or capture of KYC mode, if applicable, within Personal stage of the Application Form.
- Facility Level Fees integration in Configure stage for lending product groups.
- First date of disbursement: Logic for validation and approvals in Create account or Settlement Instruction human tasks within Oracle Banking Enterprise Originations.
- Modification of address and ownership details of collateral via the origination workflow.
- Regulated Loan handling within the account configuration for Loans and Overdrafts.
- Integration for Proposed Term Deposit as collateral.
- Handling of expiry of recurring documents in the Document stage of the Application Form capture.
- Integration with approvals for negotiation of fees and User Defined Margins (UDM) in Configure stage for lending product groups.
- Current Approval matrix used for triggering MCD approvals is enabled across all the stages of Origination.
- Ability to capture and link Solicitor Details with property type of collaterals added to the submission.
 User can perform this linkage only if the solicitor is responsible for settlement processing.
- Ability to display task status in BPM task for Create or Accept offer, Settlement Instruction, and Collateral Perfection human task.
- Capability to capture the translator details for applicants and joint applicants present across product groups within a submission.

3.2.12 Pre Approved Limits

Based on details available publicly or proprietary information such as Credit Rating report of an individual, a bank may grant individuals an approved limit for a specific product. The basis on which the approval is performed and the amount is approved, is specific and internal to the bank. The bank may or may not convey the same to the customer as part of the offer.

A pre-approved limit for an individual who may or may not be an existing customer of the bank conveys that, if the individual wishes to choose the specific product from the bank which has granted the pre-approved limit, then the bank confirms that he or she is eligible to opt for that product and is granted the product.

For customer, it may seem that there is no processing required from the bank to grant the loan. In reality, this is just a pre-qualification from a bank's perspective. The bank still does the required credit assessment to finally approve the limit.

In summary a pre approved limit may not give an assurance or a guarantee that the customer is approved for the selected product. However, it assists in defining the details required from the customer. It is an important factor while performing assessment of the customer.

As part of Origination, following features have been provided to support the pre-approved limits:

- As part of Product step, there is a provision to interact with the external system in order to find out whether the Product Group applied by the Customer along with the details like requested amount is pre-approved or not. A flag is introduced within Oracle Banking termed as pre-approved with values as Y or N. The pre-approved flag is stored against the Product group that is applied. Finally, once the account is successfully created in Oracle Banking, then there is a provision to interact with the external system in order to confirm the external system about the utilization of the pre-approved limit.
- Additionally, this pre-approved flag should be available as a fact for the rules that are defined to decide the financial template that needs to be used for the selected product group. This flag value enables a bank to define a simple financial template in case the bank policy requires capturing minimum financial details for a pre-approved application.
- If there are requests for Cancel Application or Withdraw Submission, there is a provision to interact with the external system in order to confirm about the cancellation of the pre-approved limit.
- If there are requests for Edit Submission as part of any stage in Origination, there is a provision to interact with the external system in order to get the latest value for the changed product details.
- In case of the Decline offer task or Reject Offer (Accept Offer task), there is a provision to interact with the external system in order to confirm about the cancellation of the pre-approved limit.

3.2.13 Retail vs. Business Banking Applications

Origination supports retail and business banking application. To derive the respective path of retail and business, bank can define rule in origination preferences. Difference in flow is required since business banking origination requires complex and detailed analysis which a retail origination does not require.

- Bank can attach a rule in Define Origination Preferences (Fast Path: ORM20) page to determine the system flow for due diligence.
- Bank can attach a rule in Define Origination Preferences (Fast Path: ORM20) page to determine whether submission qualifies for retail workflow or business banking workflow.
- Following are some of the facts which can be used to determine the flow (below list is sample not exhaustive):

- Product Group
- Purpose Type
- Party Type
- Constitution
- Amount
- Following is sample rule:

Tahlo ?.	-3 Samnle	Rule for	determinina	Retail or	Rusines	Ranking	Workflow
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Product Group	Purpose Type	Party Type	Constitution	Amount	Flow Type
Home Loan	Construction	Individual	Any	Any	Retail
Home Loan	Investment	Organization	Private Limited	Any	Business
Home Loan	Investment	Organization	Proprietorship	Any	Retail
Agri Term Loan	Crop Loan	All	All	Any	Business
Term Loan - Machinery	Purchase of Machinery	All	All	Any	Business

- Once the personal step in capture application flow is completed then system would resolve and identify
 if submission is for retail or business banking origination.
- In case of multiple applications in submission, if one application is determined as business banking flow, then the entire submission qualifies for business banking flow.

3.2.14 Manual Identity Verification

Manual identity verification is available as a separate step in Origination to cater to business scenarios where it is required to manually verify the customer. As part of Manual Identity Verification task, the user can perform the following actions:

- View the various Due Diligence statuses of all the applicable parties.
- Get a detailed view of identity verification pertaining to respective due diligence type.
- Perform various actions like manual verifications, reinitiating due diligence checks, cancelling the ongoing due diligence checks.
- Take the appropriate decision in case of any exceptions.
- Trigger approval process in case of overriding the exceptions.

3.2.15 Submission Level Price Approval

Over a period of time, pricing for banking products has become very competitive. Customers look for the best rates and bankers look to provide an optimal rate, so as to not lose out on business as well as maintain profitability. In order to enable banks to take calculated decisions regarding pricing, it is required that a holistic view (total expected business and discount being offered) of the submission (list of products applied) is provided.

For example, a customer who is applying for a Home Loan and Personal Loan, may negotiate with the banker for a better rate on the Personal Loan. The banker may offer a better rate for the personal loan, as the bank

may gain significant income from the home loan and if a better rate is not offered, the bank risks losing business from the customer. Thus to enable the pricing user to take a calculated decision on the fees and interest rates offered to the customer, a Submission Level Pricing Task is required.

Pricing Summary View

- The Pricing Summary displays the following information:
 - Application Fees
 - Facility Fees
 - Bundle Fees
 - Interest Rates
 - Servicing Fees
 - Financial Rewards
- Interest and Fees details can be accessed and negotiated in the Pricing Summary, in the account configuration and in the Funds Table.
- Application Fees, Bundle Fees, Facility Fees, and Financial Rewards details:
 - The Pricing Summary displays the net fees after negotiation for the Application Fees, the Facility Fees, and the Bundle Fees.
 - An indicator highlights if any fee has been negotiated.
 - These fees can be viewed and negotiated from the Pricing Summary itself. There is provision to navigate to the Collect Fee Task Flow for the negotiation.
 - The Pricing Summary displays the sum of the Financial Rewards for the product group. There is provision to view and negotiate the rewards.
- Interest Rates and Servicing Fees details:
 - The Pricing Summary displays the stage-wise interest rates for the accounts configured. For loans, the application displays the rate applicable for the first stage of the loan. For line of credit, the application displays only the rate applicable for the overdraft stage. For CASA, the application displays the credit interest rate.
 - The key account information is displayed, such as, Offer, Purpose, ROTE, LVR, Loan Amount, and Term. ROTE is the profitability of the account fetched from an external system.
 - A break up of the rates, such as Product Margins and UDMs on view and edit of account configuration from pricing summary.
 - Ability to navigate to account configuration to add or delete a UDM for all accounts such as Loan, Overdraft, Transaction Account, or Term Deposit.
 - · Ability to view and modify competitor rates.
 - Availability of a product hook to fetch margins (UDM) from an external system.
- Display of existing account information of parties:
 - Ability to display the existing accounts for each party which includes applicants and joint applicants present in the submission.
 - Any top up to an existing loan is addressed through the amend flow and it is not displayed in the existing accounts details.

• A product hook is provided to fetch accounts from any external system and display the information.

Price Approvals

- Capability to submit negotiations for approval from the Pricing Summary:
 - The interest and fee negotiations can be submitted for approval from the Pricing Summary during Application Form capture (prior to Review and Submit), for all accounts in the submission.
 - If the negotiations are not submitted for approval from the Pricing Summary, then the system triggers the approval task on submitting the Application Form.
 - Negotiations can also be submitted for approval from the Post Assessment Structure Solution task.
- If the submission contains only lending products, or credit card products, or both lending and credit card products, then there is provision to submit the Application Form and trigger the Credit Assessment task in parallel, when the approval task is initiated and the approval is pending.
- A single approval task is created for fee negotiations and UDM negotiations.
- The approval task is created based on DPA rules.
- The approver can drill down and view all the details in the Pricing Summary screen.
- The approver can either approve or decline the negotiations, but cannot edit the Pricing Summary or perform negotiations.
- The approval task is also available for mail based approval. An email with a PDF file attachment is sent to the approver. The file displays the details of the submission and the negotiation for fees or rewards or UDM. The approver has the option to approve or reject in the mail. Based on the action taken by the approver the initiator receives an email or notification.

Price Approval Expiry

- There is provision to configure the pre-submission approval expiry period and the post submission approval expiry period.
- The pre-submission expiry period commences from the time the UDM is approved (either automatically or manually).
- A single expiry date is arrived at and stamped for the full Pricing Summary, at submission level.
- The expiry is reset at submission level each time the negotiation is approved.
- The expiry is not reset if the negotiation is declined.
- The check for price expiry date is done at Review and Submit stage and before initiating Create Offer task. In case, if the price is expired, then a message is displayed to the user that the price approval is expired. The user then has the option to either renegotiate and reconfigure the account, or submit the existing negotiations for approval.

Alerts & Notifications

Alerts / notifications are sent in the following instances:

- To notify the banker / customer when the Pricing Summary negotiation is submitted for approval.
- To notify the banker / customer when the approval task is completed with approve / decline status.

- To notify the banker / customer 'X' days before the price approval expiry.
- To notify the banker / customer when the price approval expires.

3.2.16 Credit Decision Timeline

As per various market regulations, if the application received by bank is incomplete regarding matters that an applicant can complete, the creditor shall notify the applicant either of action taken or of the incompleteness. If additional information is needed from an applicant, the creditor can either call up the customer or send a written notice to the applicant specifying the information needed, designating a reasonable period of time for the applicant to provide the information, and informing the applicant that failure to provide the information requested will result in no further consideration being given to the application. The creditor shall have no further obligation. This is applicable only for Asset type of products. The incompleteness of the application leads to a situation where in the Credit Decision cannot be taken by the bank.

3.2.17 Process Flexibility

As a part of process flexibility concept, capture application process supports capturing of information as and when received from the customer. For example, if the banker gets the party and financial information, then the system allows the banker to move from party page to financial page to update the information, and does not trigger errors to capture information in the intermediate page. The system supports guided flow and free flow for data capture, and all pages are opened up to the banker to navigate to any page and capture the said information. To achieve free navigation and to allow the banker to run validation at any point of time, there is a new Validate button available on the top of the page. If the banker clicks this button then the system validates information captured in all sections and shows red badging in the sections, tab, or page where there is error. On submission, system also performs check to ensure completeness.

3.2.18 Expired Document Handling

In Application Form, the system provides the capability to upload an expired document and also link an existing expired document to the submission. This functionality is driven based on parameters provided by the Content module, which needs to be passed by the calling module. When the Inbound Document task flow is invoked for party documents in the Documents panel drawer, system passes the value of the Content parameter to enable display and upload of expired documents. This ensures that expired documents are displayed in the Inbound Document task flow and the user can upload an expired document.

4 Financial Analysis

This task is applicable for Business Banking applications.

Financial Analysis is the process of evaluating businesses, projects, budgets and other finance-related entities to determine their suitability for investment. Typically, financial analysis is used to analyze whether an entity is stable, solvent, liquid, or profitable enough to be invested in. For a banker, it would mean to analyze a customer's financials to ensure that the customer is financially stable and will be in a position to generate sufficient income and repay the loan if a loan is sanctioned. The financial analysis is also the analysis of capacity of the borrower to repay the loan.

The entire Financial Analysis is divided into four main steps. These steps and their features are explained in detailed in the following sections:

4.1 Party Statements

The party statements step contains the summary of all parties and their statements which have been captured in the application. The summary appears as a tile for each party, borrowing entity or guarantor with the relevant statement captured against the party.

- The banker can add more parties who have a financial profile (employment in case of individual) from the group for assessment. In case the submission is not a group submission, then the banker cannot add more parties for assessment.
- The banker can also consolidate the statement of two or more parties who have been identified for assessment by giving percentages for consolidation. Consolidation is mainly done to eliminate intercompany transactions.
- The banker can view the details of the statements captured for the party including remarks and additional details.
- The banker can view the document linked to the statements, which was used to capture the financials.
- The statements that the banker can view include Balance Sheet, Profit and Loss, ratios, Statement of Equity for a party and Cash Forecast for Borrowing entity or Guarantor.
- The banker can create statement of equities in case the same is not generated or for the consolidated statements which are created.
- The banker can add more statements to the analysis using the historical statements.
- The banker can create additional projections using banker projections with any of the existing statements as a base statement.
- The banker can create sensitized statement using the sensitivity analysis and use such statements in further analysis.

4.2 Debt Servicing Groups

Debt Service is the cash that is required for a particular time period to cover the repayment of interest and principal on a loan. Debt service is often calculated on a monthly basis for retail loans like mortgages and on a yearly or half yearly or quarterly basis for business loans based on cash flows. As part of debt servicing, the

total income and expenses of the applicant and guarantors are taken into account to assess whether the applicant has sufficient surplus to repay the loan over its tenure.

Debt Servicing Groups is the second train stop in the financial analysis task. It is displayed, when Next is clicked from the Party Statements summary page or when previous is clicked from Party Surplus landing page.

- The debt servicing group is formed based on the entities who are supposed to repay the loan. By
 default, the system creates debt servicing groups based on the borrowing entities (Entities who are
 supposed to repay the loan).
- In each of the debt servicing groups, system displays the parties, borrowing entities and the consolidated parties in the debt servicing groups.
- A party can be part of multiple debt servicing groups.
- The banker can add more parties into a debt servicing group. These parties have to be either affiliates
 or additional members added from the group for analysis purpose.
- The banker can create new debt servicing groups by adding parties from analysis. System validates that such groups contain at least one borrowing entity.
- The banker can modify a debt servicing group to add or remove parties but the system always validates that there is a borrowing entity in each of the debt servicing group.
- The system also validates that all the borrowing entities of the submission is part of at least one debt servicing group to ensure that all the parties of the submission are taken into consideration while doing the financial analysis.
- In case the parties are consolidated across the borrowing entities, then in such cases both the parties are visible across both the debt servicing of groups. Removal of one of the consolidated party automatically removes the other consolidated party from the group.

4.3 Party Surplus

Once debt servicing groups have been created through Debt Servicing Groups page, banker is required to select statements for each DSG so that surplus can be calculated. This is done through Party Surplus step. Party Surplus is the third train stop in the financial analysis task, displayed when Next is clicked from the Debt Servicing Groups landing page or when previous is clicked from DSG Repayments landing page.

- Party Surplus is to be performed for each DSG. It involves selecting Party Surplus consisting of set up and debt servicing.
- Each debt servicing group name is displayed on top in a tile. An Edit button is provided in the tile. This option is not available when the DSG is visited for the first time. If user moves to the next DSG and from there uses the Previous button, then the DSGs prior to this one appear with Edit button which has to be used in case user wishes to make any change in the setup.
- By default, the Setup tab is displayed for each DSG and first DSG is displayed. A separate section sub-group is shown for each entity (party, borrowing entities or parties in consolidation) in a DSG based on how the parties are related in a DSG. Name of the entity is displayed at the top of each section.
- The following logic is applied for sub grouping of entities within the DSG. System identifies each borrowing entities within the DSG. For each Borrowing entity, system identifies the parties involved. In case these parties are part of another borrowing entity within the same DSG, then such parties are also fetched. System also checks if such parties are part of any consolidation and in case they are, then

such parties are also fetched. The same is repeated for each borrowing entity but by ensuring that no duplication occurs. Any other parties who are part of group but don't fit the above logic also appear as a separate sub group.

- For each entity in a DSG, banker is required to select the statements using which debt servicing scenarios are to be made. Compute Party Surplus On is an option button with values: Profit and Loss Account and Cash Forecast. For an entity for which both statement types are applicable, the option button is enabled. In case for an entity only one statement type is applicable, then the option button is disabled and the details of the applicable statement type are displayed by default.
- For a DSG and party combination, debt servicing scenario can be made either using Profit and Loss or cash forecast statements. So, if user selects Profit and Loss statements and then chooses the cash forecast option button and selects cash forecast statement, the selections made in Profit and Loss tab are discarded by system.
- For a period and party combination, only one statement type and classification can be selected within or across DSGs. For example, for party A, banker projected and customer projected statements are available for 2015 and 2016. Party A is present in two DSGs: DSG1 and DSG2. If user selects customer projected statement for 2015 in DSG1, then user cannot select banker projected statement for 2015 in DSG1, user selects banker projected statement for 2015, also for DSG2 user selects banker projected statement for 2015. Now in case user wishes to change this to customer projected statement for 2015, then user will have to uncheck the banker projected statement check box first at DSG2, then use the Previous button and go to DSG1. Here, user will have to uncheck banker projected statement check box and select customer projected statement check box at DSG1 then go to DSG2 and select customer projected check box at DSG2 at both DSGs and only then make a new selection.
- Details of Profit and Loss statements are displayed by default wherever both statement types are applicable. P&L includes P&L statements of all type and classification included for the party.
- Once the banker selects the statements for all the entities, then the system allows moving forward to debt servicing. All details are displayed in branch currency; this is because financials are captured in branch currency.
- Particulars like name of the party, borrowing entity or parties in consolidation in the debt servicing group are displayed in separate sections within the table. Gross surplus is calculated for each entity separately.
- Based on the debt servicing template, parameters like Net profit, Depreciation, Provisions are displayed. These parameters are income and expense type parameters which are marked as Include for DSO and defined in the DS statement template. These are input type parameters, so the value captured for them during financial capture is displayed here. Total Income and Expense are parameters defined specifically for base type Debt Servicing (marked as Include for DSO). These are of value type Expression and hence are calculated and displayed here.
- Gross Surplus is calculated per entity for each debt servicing group.
- Debt servicing calculation can be done on historical or projected P&L and cash forecast.
- In case consolidated parties are part of the debt servicing group then only consolidated statements are used for debt servicing.
- In case of an individual salaried party, salary may have to be extrapolated to yearly or half yearly as salary details are for a month or quarter and are not for a particular period, whereas for debt servicing details for a specified period are needed.

- Gross surplus also is a parameter defined specifically for base type Debt Servicing (marked as Include for DSO). Value type is Expression and is calculated and displayed here.
- Average values of the fields across periods is calculated and displayed here.
- The Next Debt Servicing Group button is available, on click of Next. If the current Party Surplus view is for the last DSG, then clicking Next takes the user to the DSG Repayments (last train stop) landing page. If the current Party Surplus view is for any other DSG, then clicking Next displays the Setup tab of the next DSG.
- Surplus computation has to be done necessarily for all the parties of the group.

4.4 DSG Repayments

Once surplus for each party in all DSGs has been calculated through Party Surplus page, banker is required to allocate the surplus across DSGs to analyze repayment capacity. This is done through DSG Repayments page. DSG Repayments is the last train stop in the financial analysis task. It is displayed when Next is clicked from the Party Surplus train stop. Page header displays DSG Repayment and the details are displayed in below two tabs, Statement of Outstanding tab is displayed by default which is followed by Repayments.

- Statement of outstanding shows existing obligations for each party in the submission. Obligations are displayed for actual payments, sensitized actual payment and sensitized principal and interest.
- Statement of outstanding derives from Current Position and all details are displayed in branch currency; this is because financials are captured in branch currency which may be different from submission currency.
- Statement of outstanding displays the Liabilities for a party and includes all parties in the submission and obligation details are shown for each party.
- The Add Liability button is available in case banker wishes to add more liabilities for the party.
- All Overdraft and Loan accounts in which the party is an account holder (either sole owner or joint owner) are fetched and displayed in separate rows.
- The repayments made by the borrower are classified into three types:
 - Actual Payment: This is the actual payment made by the customer at the above given frequency.
 - Sensitized Actual Payment: In case the banker wants to do a sensitivity on the actual payment then the same is done as part of sensitized actual payment.
 - Sensitized Principal and Interest: Sensitized principal and interest payment is calculated using the interest sensitivity rate considering principal and interest repayment.
- The banker can view, edit, and delete liabilities as part of the statement of outstanding.
- Since there are three ways in which existing obligations are calculated and displayed, banker is given an option to specify which one or more than one calculated values are to be used for debt servicing. Perform debt servicing on is a mandatory field and banker is required to select at least one option of the following, multiple options can be selected.
 - Actual Payment
 - Sensitized Actual Payment
 - Sensitized Principal and Interest

- The Next Step button is available, on click of which details of Repayments tab is displayed based on the selections made in the Perform debt servicing on field.
- The first section in the Repayments grid displays gross surplus details for each party, borrowing entity and parties in consolidation. In case there are multiple surplus details for the same entity, then to distinguish between different rows the statement type for which surplus is displayed for the entity is indicated.
- All statement periods selected in Party Surplus setup across parties and DSGs are shown in separate columns.
- The surplus calculated for the entity in Party Surplus train stop for a particular period across DSGs is added and displayed here. In case a statement period (column) does not apply to a particular party or DSG, then for that party or DSG blank is shown under the column. The average gross surplus across periods is calculated and displayed in the column Average.
- In the second section of the Repayment grid, surplus is allocated across DSGs, the unallocated surplus value for a period and party combination is displayed in different rows called Available in the first section. This value cannot go below zero.
- Debt Servicing Group is the second section in the grid and displays details for each debt servicing group. The banker is required to allocate surplus for all parties, borrowing entities, and parties in consolidation in all DSGs.
- Party, borrowing entity, and parties in consolidation for which gross surplus has been calculated are identified and displayed in separate rows in each DSG.
- In case a party is in more than one group, then that party's surplus is required to be appropriated across all the groups. By default, system allocates the surplus equally between all DSGs. If party is present in only one DSG for a period then the entire surplus is allocated by default to that one DSG.
- Banker is allowed to modify the income of a group by allocating more to any one group.
- If P&L statements have been used to calculate gross surplus then party names are displayed in separate rows. In case cash forecast statement is used then borrowing entity name is displayed. In case of a consolidated entity the party names are always displayed together irrespective of statement type used to calculate gross surplus.
- Total Gross Surplus: Gross surplus allocated against each entity in the DSG for a period is summed up and displayed as total gross surplus.
- Each payment type (actual, sensitized actual, sensitized principal and interest) selected in the Statement of Outstanding step is displayed as a sub-section for a DSG and below given values are displayed for each of the payment types.
 - Existing Obligation: This is sum of existing obligations (actual payment, sensitized actual payments or sensitized P&I) of all parties in the debt servicing group. This value remains constant across statement periods (different columns) as it is calculated using the party's current loan stage.
 - Proposed Obligations: This is the sum of proposed facility amounts of all borrowing entities in the debt servicing group. Individual proposed obligations are displayed in separate rows which is summed by and displayed in proposed obligations row.

This is calculated with an option to override so this field is modifiable.

Proposed obligation is calculated for a facility (product group level) using PMT formula with interest sensitivity rate, facility amount and term (nominal term for revolving facilities) and is calculated assuming monthly repayments. The calculated value is then calculated for the statement period.

All facilities are shown in separate rows along with the interest rate. Facility amount in individual rows is not modifiable; user can use the Proposed Obligation field for the same.

• Manual Adjustments: The banker can add positive or negative adjustments to modify the net surplus.

It is possible to add multiple manual adjustments. User can click the Manual Adjustments text, then click the Split Cell button, a row with text area appears, here user can add the name of the adjustment and also text area for adding amounts across applicable statement period appears.

- Net Surplus: This is the difference between total gross surplus, existing and proposed obligations and manual adjustments. Net surplus value indicates how well the borrowers will be able to service the loan with their existing obligations. Ideally net surplus should be a positive value.
- On click of Submit button, the task details are saved and decision engine is pinged (decision engine part is not covered in this document; it is a part of interface).
- Financial analysis task is closed and removed from the worklist of the banker.
- In case an alert is configured, Origination module passes the banker ID (of the initiator of the origination submission) to Alerts module. Alerts module, based on the alert configuration, sends an alert to the banker.

5 Credit Assessment

The stage of credit assessment is applicable only in the case of lending applications (that is, product groups where origination workflow behavior is defined as Asset).

Note

As part of the application form, the system captures and splits the submission (based on rules defined within Oracle Banking Enterprise Originations) into logical applications. Once this is performed, the system sends the information of the submission and the underlying lending applications for credit assessment.

If the credit decision is APPROVED or CONDITIONALLY APPROVED, the application has ability to guide the user through subsequent stages of origination and move to the next stage of processing that is, Configuring Facilities and Configuring Accounts. If the credit decision has given result as DECLINED or REFERRED, the system can guide the user to the next logical step so that the application can be processed manually to take appropriate Credit Decision which will be recorded as Manual Credit Decision.

Subsequent to credit decision, the overall decision for the entire application is stored by the solution. In addition to the decision for entire application, the solution also stores decisions for individual products applied by the customer.

Following are the features of credit assessment:

- Applicable for lending applications. The task related to manual credit review or downsell acceptance is created at submission level. The post approval tasks are created at the logical levels defined for the respective task.
- Capability to interact with external interface for credit decision outcome.
- Repair task to handle credit assessment failure and mechanism to get the submission re-assessed.
- Mechanism to handle different credit decision statuses like Approved, Conditionally Approved, Declined, Referred, or Referred Downsell.
- Capability to perform fraud check as part of the credit assessment process and handling of the same.
- Based on the credit decision outcome, the system can take different paths as mentioned below:
 - Approved or Conditionally Approved: Moves the submission into the post approval flow where the system will proceed to create tasks like valuation, verification, structure solution, and title search. There are a number of scenario, where based on the business rules configured within Oracle Banking or each logical task and based on the outcome from credit assessment, the requisite task instances get created.
 - **Referred:** Moves the submission into the manual review of credit assessment step. Here, the credit team will be given opportunity to either approve or decline a submission. Decline will take the submission into Reject Letter processing phase whilst Approve will take into the approval workflow based on authorization matrix. Only after all the approvals, if required, are completed, system will mark the submission as Approved and move to creation of post approval tasks.

- **Declined:** A declined decision from credit decision engine will move the submission into Reject letter processing task. Additionally, if the banker wants to do a manual review of credit assessment, then the banker can initiate the same through the link provided in the Application Tracker or the reject offer letter task. If the manual review of credit assessment is initiated, then banker can approve or decline submission. System removes the reject letter processing task once the manual review of credit assessment task is initiated.
- Referred Downsell: Downsell can be recommended by the engine for amount or offer. Referred Downsell takes the submission to Downsell Acceptance task, if the submission has a downsell and the user can either accept downsell (which will move it to approved flow), reject downsell (take it down the reject letter flow), or move the submission into manual review. System can be configured to generate Downsell Offer Letter documentation to the customer in case Auto decision is downsell and also have the capability to track downsell expiry date (based on parameter set in Origination Preferences) for customer alerts.
- System provides a mechanism to assess a submission multiple times and maintain the complete credit decision outcome for each of the submit done for the submission.
- System can carry forward the latest comments that were part of credit memorandum, if the submission
 has undergone multiple edits from or post manual review of credit assessment task. The user is not
 required to prepare the whole credit memorandum, each time the submission is edited.
- Credit Decision History Inquiry gives the user an opportunity to inquire, check and assess the outcomes for the submission for each credit decision outcome. This is the same view as the Manual Credit Decision task.
- System creates an overview of a submission if the submission is auto approved or approved by the user as part of manual review of credit assessment. The overview required indicator can come from the decision engine or on a random basis.
- Ability to perform credit assessment for new requests In-Principle Approval.

5.1 Manual Review of Credit Assessment

It is important for the banker to take into account, the entire information within application before credit decision. To support that information on application, exposure and existing accounts of the borrowers are displayed as part of the manual review of credit assessment.

The Manual Review of Credit Assessment (MCD) is applicable for both retail and business submissions. There are a set of functions some of which are common across retail and business and some which are different for retail and business. The following matrix shows the functions across the retail and business.

Function	Applicable for Business	Applicable for Retail
Credit Exposure	Yes	Yes
Financials	Yes *	Yes
Credit Worthiness	Yes	Yes
Collaterals	Yes	Yes *
Conditions and Covenants	Yes	Yes

Function	Applicable for Business	Applicable for Retail
Verification	Yes	Yes
Risks	Yes	No
Review/ Renew	Yes	Yes
Credit Memorandum and Manual Decision	Yes	Yes *

* There is a difference in function wherever highlighted which is explained below sections.

These functions allow banker to perform a set of actions which are at an application, party, or facility level as described in the following matrix.

Table 5–2 Functions with Different Context

Function	Context
Credit Exposure	Party/Group
Financials	Party
Credit Worthiness	Party
Collaterals	Submission
Conditions and Covenants	Application
Verification	Application
Risks	Application
Review/ Renew	Facility
Credit Memorandum and Manual Decision	Submission

Some key features of Manual Credit Assessment are explained in the following sections.

5.1.1 Landing Page

The features of landing page are as follows:

- Landing page is similar for retail and business. This displays the summary of the credit decision from the external engine. Submission level decision is rolled up decision of all the applications. In case there are multiple reasons, then the banker can view it by clicking the More icon.
- Landing page also displays the applications. Summary view of all applications within the submission is provided.
- The landing page also displays the widgets or functions available for the submissions. The banker can click on the widgets to open up the functionality.

5.1.2 Panel Drawer

The features of landing page are as follows:

- Notes: Displays any notes captured as part of application capture or any previous tasks. Following details are displayed: created by and on, subject, comment, internal to bank, stage.
- Policy Deviations: Policy deviation details are displayed with actions to view the policy deviations and capture policy deviations. If policy deviations are captured as part of MCD then the approval task for the policy deviations captured is invoked along with the other approvals required as part of Manual Credit Assessment. As per the existing approval functionality, if the task is approved, then all the policy deviations are updated as approved else Declined. If there is a decline, the task is returned to the initiator.
- Application Details: This provides the summary view of all the applications within a submission. Application wise information boxes are displayed with information on application ID, request type decision status at application level product groups in the application.

Additional reasons like Application summary, reasons can be viewed by clicking the arrow provided. The banker can add the reasons for the Party, Facility or Collateral as part of the application details.

Through application details panel drawer, provision is given to credit manager to recommend a lower amount for facilities under a submission. If a lower amount is recommended, downsell processing is triggered.

5.1.3 Credit Exposure

Exposure can be viewed for the group, if the submission is a group submission and for the applicants, guarantors, cosigners, and affiliates (of applicants and guarantors) for a non-group submission.

- As part of view exposure summary panel, a View File Summary Report link is provided. On clicking it, the file summary report will generate a report that contains the details of the various facilities owned by the borrowers, cosigners, and guarantors, the collaterals for those limits and the accounts under them with the respective outstanding.
- Exposure details are across Business Units (BU) or LOBs (Line of Business).
- For a group submission, Group name in context of the submission is displayed. A button Show Members is provided which can be used to view the members of the group. From the list of members, banker can select specific members to be included in the credit exposure view. The members who are not selected in this list their details are shown in the Associate Exposure tab.
- For a non group submission, Names of all parties (applicants, cosigners, and guarantors) in context of the submission are displayed. Exposure details for the parties are displayed (no direct and associate).
 A party filter is available which displays all parties (applicants, cosigners, and guarantors) in context of the submission. Details of parties not selected in the Party filter are shown in related exposure.
- A party filter is provided to select for which parties the credit exposure details are to be displayed. This
 is available in both the group and party submission cases. Based on the submission level (group or
 party) and party filter selection, credit exposure details are displayed (direct exposure is applicable for
 party and group submissions, and associate exposure is applicable for group submissions).
- Exposure details for the selections made above are displayed in two tabs: Credit Exposure and Associate Exposure. A party filter is available inside both the tabs.
- Credit Exposure: The filter in this tab displays all members in the group by default. In case Members to
 be included in the credit exposure view have been modified (using the View Members button), then the
 unselected parties are not shown in this filter. When viewing the credit exposure of the party or

borrowing entity, system also displays the cosigner exposure for the party or borrowing entity, if the party or the party under the borrowing entity has been associated as a cosigner with other facilities.

- Associate Exposure: The filter in this tab displays the members in the group that are not included in the credit exposure view (using the Show Members button). System also includes cosigner added to a group and displays them in the member listing.
- Details of parties not selected in the Party filter are shown in related exposure.

5.1.4 Financial Analysis

Financial Analysis function varies in retail and business scenarios. In the business scenario, banker reviews the entire financial analysis and can do only manual adjustments, where as in retail scenario, the banker can form debt service groups and calculate surplus.

As part of review of financials, the banker is able to view the individual and consolidated financial statements, horizontal analysis showing the year-on-year growth of the financial parameters, vertical analysis or the ratio analysis and sensitivity analysis. All the sections of the financial analysis task, except the debt servicing task, are viewable for the banker.

Debt servicing is done at a group level as part of the financial analysis task. As part of the manual credit assessment, the banker has an option to include an additional income or reduce some expenses which is part of the original debt servicing scenario.

In case of retail scenario, there is no financial analysis task and hence the entire process of formation of the debt servicing group will happen as part of MCD task. The user can add a cosigner also as part of a debt servicing group, if a cosigner is part of the application and also co-applicants of credit card, if any for the credit card facility. The banker can also add affiliates of guarantors in debt servicing groups, if financials have been captured for the affiliates.

As part of debt servicing, system identifies and marks certain financial parameters which are to be used for debt servicing.

The following features form part of the debt servicing capability within manual review of the credit assessment.

- Repayment summary consolidated consists of repayment summary Proposed and repayment summary Others. Repayment summary Proposed consists of the monthly debt servicing obligation for each product group. This is calculated using interest sensitivity rate, requested amount, and requested term along with additional components like Moratorium Interest Limit and CCI.
- Additional obligations are captured as the repayment obligations Others, which is the existing loans of the applicants or guarantor within the bank and outside the bank. This information has to be entered. System supports capture of both pre and post loan scenarios, which are essentially the scenarios before and after sanctioning of the loans.
- Debt servicing summary displays the information at debt service group level. The system displays available surplus for debt service (sum of incomes of each member of the group after expenses), repayment obligation (sum of existing and proposed loans of the members of the group) and balance amount after surplus (available surplus for debt service minus repayment obligation).
- The user can click the debt servicing group to expand the members of the debt servicing group. A view and delete link is provided as action against each member.
- The delete button is used to remove a person from the debt servicing group.

- The view button shows the values for financial parameters marked for debt servicing. The values are displayed as captured in the system and returned by the decision engine.
- At a debt servicing group level, the user can choose to add a person to the debt servicing group or modify the debt servicing summary. Same person can be added across multiple debt servicing groups.
- The modify debt servicing summary page opens financial summary of the debt servicing group. It contains all the income and expense parameters for each of the borrowers who are part of the debt service group.
- In case, same financial parameter has values across multiple borrowers, then the system will show the total value.
- For organization and trust where the financial statements are captured for a period (between a start date and end date), system will calculate the monthly value to arrive debt service value.
- In case of salaried individual where the income and expenses are captured based on frequency, system will arrive at the monthly value and use it for debt servicing.
- System displays the values as captured in application and as given by the decision engine. An additional column is provided for the user to input values which is different from those provided by decision engine and customer. This value is used to arrive at the debt servicing scenario.
- Based on the user input value, system displays the pre and post loan scenario for the members of the debt servicing group.
- The user can capture the comments and approve or decline the submission.
- For a HELOC product, in the Draw Period, the monthly repayment amount may be based on the interest accrued on the account plus some percentage of the principal outstanding. Accordingly, the Debt Servicing Obligation calculation for a HELOC account supports the repayment method of Interest and part Principal. The debt servicing calculation based on this repayment method of Interest plus Part Principal Amount is available for all MOF, OD, and HELOC products.
- Ability to perform manual adjustments for income and expense.
- Ability to display the financial summary of all the applicants, guarantor and cosigner that are involved in the submission including all assets and liabilities

5.1.5 Interest Sensitivity Rate

Interest sensitivity rate is the rate used for calculating the debt service obligation of the borrower. This rate is used only for calculating the debt servicing obligation for credit decision and does not have a bearing on the actual rate fixed for the account post credit decision.

The following are the features of interest sensitivity rate:

- It is stored against origination domain for each product group and against each offer within the product group.
- If the offer is selected upfront as part of application capture, the system uses the interest sensitivity rate at the offer level for calculating the debt servicing amount, else rate maintained at the product group is used.
- Interest sensitivity rate is calculated as sum of rate maintained, interest sensitivity buffer, and risk based margin. If this rate is lower than the floor rate maintained in Product Manufacturing, the system uses the floor rate to calculate debt servicing obligations.

5.1.6 Credit Worthiness

This includes the qualitative analysis of the credit assessment. It aims to provide the banker a set of information about the past performance and conduct of the existing accounts of the borrower which in turn gives input to the banker on the character of the borrower. The process involves assessment of the customer's integrity based on set of information about background, reputation, past credit history and so on. The borrower credit rating is also giving an input to the character of the borrower.

The objective of the process is to retrieve and display a set of information about the borrower and his accounts from Oracle Banking that aids the banker in credit assessment.

The information is provided for all the applicants, cosigners, and guarantors and all the borrowing entities (including co-applicant of credit cards) where applicant is a party.

- For the selected party, customer's photograph and signature are displayed. Information such as party name and role, customer's date of birth, onboarding date, home branch and address of the customer is displayed.
- All the borrowing entities, where the applicant or guarantor is a part, are identified, then all the Facilities of the borrowing entities are identified, then the product groups of the facilities and accounts under them are identified. For all these identified accounts of the party, account details are displayed in separate tabs of Summary, Loans and Credits, Cards, Deposits, Breaches, Bureau Reports and Warning Indicators.
- Summary: A Summary view of assets and liabilities is displayed in separate expandable or collapsible panels. In each panel, for each account balance or outstanding is displayed as on current date.
- In both the asset and liabilities panel, Total Balance or Outstanding (sum of all the individual accounts) is displayed along with currency. In case accounts are in different currency then conversion is done to branch currency and total is calculated.
- Loans and Credits: The panel contains details of asset products (loans and OD). Details are shown for each account under the asset class; in case of multiple accounts details are shown in separate rows in the sub-panel. For both loans and OD, account number and currency are displayed along with product group, business unit, account holders, opening date and current DPD. The information displayed for loans include Irregular since, Arrears, late payments, Interest rate and for OD cheque returns, debit and credit turnover Avg balance.
- Cards: Details of card products are shown here in sub-panels. Details are shown for each account under the asset class; in case of multiple accounts details are shown in separate rows in the subpanel. The display and population depends upon the interface setup and is part of consulting activity.
- Deposits: These contain details of liability products (savings and term deposits). Details are shown for each account (TD details are shown at account level) under the asset class; in case of multiple accounts details are shown in separate rows in the sub-panel. Also an icon is displayed against each asset class. For CASA the cheque returned balance, opening date, days in TOD are displayed.
- TD: Deposit amount is shown along with currency and Lien amount along with currency.
- Breaches: This tab displays details of any conditions and covenants which are in overdue status. Conditions and covenants are displayed in two separate expandable or collapsible sub-panels. In case no breached conditions or covenants exist then number of breached conditions is shown as 0 in the bracket and table is not displayed. Insider limit breach is also displayed in this section, if the party is identified as insider or insider relative and the current credit extension breaches the threshold limit maintained for Insiders.

- Bureau Reports: This tab displays bureau data at following three levels:
 - Bureau data fetched and used during credit assessment process for the submission in context.
 - Details of existing bureau reports for the party if any. These are stored in party module.
 - Provision is also given to initiate a new bureau call at this point.
- Warning Indicators: This tab displays the risk indicators from the party general information page. In MCD task, only the applicable (ticked risk indicators from party general information page) risk indicators for the party are displayed.
- Credit Score: This tab displays the credit score stored in the party module. If the credit score of the
 party is available from 1 or more risk engines, then party module provides details as per all the risk
 engines. System should display multiple credit scores for the party.
- Internal Risk Grade: This information is provided by relevant credit decision system which are stored in
 party module. This information is provided by party module to Origination and displayed in credit
 worthiness.
- A link is provided as part of credit worthiness, to enable the user to view the details of the selected party in the Single Party View screen.

5.1.7 Collateral

This includes the activities related to the collateral which are collateral exit analysis, collateral evaluation which include valuation and title search and finally Manual allocation of LVR.

- Collateral Exit or Collateral coverage consists details of all proposed facilities in the submission and displayed in separate rows. Details displayed include product group, net cover, surplus and added comfort. Banker can modify the net coverage by adding collateral adjustments. This is applicable only for business banking.
 - Collateral exit is done in the context of a proposed facility. All the facilities and collaterals linked to the selected proposed facilities are summed up separately and then the net position of facilities and collateral are taken separately to analyze the net position.
 - A sum of total facilities which include, Proposed facility amount in the context of selected facility, Proposed related facility, that is proposed facility amount of other facilities in the submission which share collateral with the selected facility, Existing related facility, that is facility amount of other existing facilities which share collateral with the selected facility.
 - In case Proposed related facility and existing related facility consist of multiple facilities then Individual facilities are summed up and total is displayed against Proposed related facility or Existing related facility with an option to view break up.
 - Total collaterals is the sum total of collaterals linked to this facility and related collaterals, which are collateral linked to proposed or existing facilities. This applies to direct collaterals as well as collaterals supporting a guarantee.
 - Collaterals linked directly to the selected facility as well as related collaterals can consist of multiple collaterals. For collaterals in this facility, individual collaterals are displayed in separate rows and their sum is displayed against Collaterals in this facility row.
 - For related collaterals, individual collateral values are summed up and total is displayed against related collateral. To view details of individual collaterals, a view button is provided.

- Gross surplus or deficit: This is the difference between Total Facilities and Total Collaterals. Amount is displayed along with currency. If amount is positive then it is displayed in green, if negative it is displayed within brackets and in red.
- Added Comfort is an input field, additional coverage amount, if any, can be captured here. Based on input the Net Cover is the difference between Gross Surplus or Deficit and Added Comfort. When the panel is displayed for the first time and Added Comfort is zero (not entered) net cover value is same as gross surplus or deficit.
- Manual allocation of Collateral for LVR is possible in MCD. This is also available as part of Capture Application.
 - In case, if the Decision taken is based on the LVR arrived due to the Manual allocations, then if there is any change in the collateral amounts post valuations, LCM provides an option to the banker to re-do the allocations again by creating a Manual Reallocation task.
 - For Manual Allocation against the applied facility, the system would require to check the Manual Reallocation status as part of Post Credit Assessment Structure Solution, instead of checking the LVR threshold breach and LTV matrix deterioration in case of LMI or NCCP applicable.
 - For Manual Allocation against the applied facilities, the system would require to check the Manual Reallocation status as part of Accept Offer instead of checking the LTV matrix deterioration in case of NCCP not applicable.
- Valuations tab displays details of the collaterals linked to the facilities in the submission (including the collaterals where valid valuation report is already present). If there is a valid (that is, unexpired) valuation present for the collateral and the recommended valuation type, then no valuation is required to be triggered for such collaterals, hence these collaterals are not displayed.
 - The banker can initiate valuation, change valuation type and waive valuation.
 - On click of Waive, a panel opens to capture details of waiver and the status is displayed as Waived by default.
 - In case the valuation is waived, Action column displays action Cancel Waiver in case user wishes to cancel the waive action. On click of Cancel Waiver, existing comments (captured during the Waive action) are displayed, user can click on Ok to cancel the waiver action.
 - Status of the valuation is updated from waived to uninitiated and Waive action is enabled again against the collateral.
 - Action button of Change Valuation Type: Valuation is identified with a type and this button can be used to change the valuation type.
 - Action button of Initiate: This option enables banker to initiate or trigger valuation task at collateral level.
 - If valuation is already done then instead of the action buttons of waive or initiate, existing valuation report link is displayed. This field is populated by the credit decision interface and returned as part of the response from the interface. Valuation report for expired valuations is also available.

This applies to direct collaterals as well as the collaterals supporting a guarantee.

Title search process is similar to valuation process. If there is a valid (that is unexpired) title search report present for the collateral in LCM module, then no title search is required to be triggered for such collaterals, hence these collaterals are not displayed. The following actions are available for the banker to perform:
- Initiate: This option enables banker to initiate or trigger title search task at collateral level.
- Waive: On click of Waive, a panel opens to capture details of waiver. The status is displayed as Waived by default. A field is provided to capture Comments with an edit icon next to it. On click of edit icon, details can be captured in the comments field.
- On click of Ok, the status of the title search is updated to Waived.
- Action column displays action Cancel Waiver: In case user wishes to cancel the waive action. On click of Cancel Waiver, existing comments (captured during the waive action) are displayed, user can click Ok to cancel the waiver action.
- Status of the title search is updated from waived to uninitiated and Waive action is enabled again against the collateral.

This applies to direct collaterals as well as the collaterals supporting a guarantee.

5.1.8 Conditions and Covenant

The condition or covenants are issued by the banker that the borrower is required to comply over the life of loan. Conditions are defined and stored within LCM module. Condition or covenants can be captured for all parties in the application or borrowing entity including cosigners. As part of the credit assessment stage, credit decision interface links the conditions returned by the decision engine. As part of the manual credit decision task, the user can also attach conditions (which are defined as internal). Details of conditions and covenants are shown in two separate tabs.

- Conditions are added to an application. When an application is chosen for which conditions are being reviewed, Origination module fetches all active conditions from LCM module.
- Once the facility is selected, condition summary panel displays the condition or covenant details in a table format.
- The banker can View, Waive, Modify, Delete, and Add More Conditions.
- Conditions added manually within the review step are populated with Condition mode as Manual.
 Conditions that are determined by the internal rule defined within Oracle Banking are set with mode as Derived.
- Conditions are displayed here based on the definition of the condition within the LCM module. This attribute can have two values, that is Internal and External. Internal indicates silent conditions, that is if condition is defined with Conditions View=Internal, it is only displayed in the system to the banker but not printed on the offer letter. Conditions defined with value as External for this attribute are included in the offer letter.
- When conditions (which are recommendations from decision engine) are waived, then this is treated as a policy exception and requires approval from higher level role.
- Modify Action is enabled for a set of combination of condition type, condition status and condition mode values. On clicking the Modify action, the Monitoring panel based on the condition type (Preliminary, Precedent, or Subsequent) will allow to modify the User Addition field with or without the monitoring parameters.
- Monitoring preferences are enabled based on the condition type and are defaulted from the condition code definition. Only conditions belonging to condition type Subsequent allow for capture of monitoring parameters.

5.1.9 Verification

Verification is in the context of an Application. Once the application is selected, verification panel displays the recommended verification types required for all the applicants in the particular application that is being reviewed.

- The verification types are resolved based on the verification policy and also given by the decision engine. Verifications added in Capture Application are also available through credit assessment task. The banker can either add more verification types or initiate the verification task from the verification action.
 - Banker can also perform verification from MCD task itself. Functionality to complete verification from MCD task based on configuration is provided in Origination Preferences and Verification Category.
- The banker can waive a verification type. Waive: On click of Waive, the Waiver panel is enabled. Approval is configured for a Wavier request. User can input the waiver comments and save the details. On click of Save, the details are saved and the waiver panel is closed.
 - Based on configuration, ability to link MCD task submit with completion of verifications initiated from MCD. If linked verifications are found on MCD submit which have not been completed, then banker is informed of the same.

5.1.10 Risk

Risks in origination parlance are the potential events that could impact the repayment of the loan by the borrower thereby creating a loss to bank. Mitigants are a clause or an action which can help to mitigate the impact of a specific risk. Risk and Mitigant Analysis is the subjective risk assessment where the banker identifies various risks associated with the projects proposed to be funded. Risks include other risks such as management risks, foreign exchange risk, supplier or customer risk, financial risks.

- Risk is captured in context of Application. Once the application is selected an Add New Risk panel opens by default, giving a provision to capture Risk Details. Mitigant Details panel is also available to capture any mitigant details against the captured risk. Both Risk Details and Mitigant Details are expandable or collapsible panels.
- Add New Risk panel: Risk and the corresponding mitigants can be captured using the add new risk panel.
- The User can click on add mitigant button to add more mitigant against the selected risk. Another row in the mitigant details table is shown below the existing rows and the user can add a new mitigant.
- Risks and mitigants that are captured here are not tracked in the system. In case risks are captured against an application at the time of Origination these risks do not impact the account later, if the same facility is later amended then the captured risks are not shown again. Any fresh risks associated with the amend flow of the facility are expected to be captured again.
- Risk and mitigant analysis is applicable only for business submission.

5.1.11 Review and Renew

Review and Renew widget is shown for only those submissions where there is an application with request type of Review and Renew. In case the submission contains multiple facilities for renew then the facilities are displayed in a drop-down list and banker can select the required facility to action.

- Banker can perform all the other functions, on submit system mandates the user to perform the action of Review and Renew if the submission contains a Review and Renew request.
- On submit origination passes on the new expiry date and review date to LCM and LCM updates the Review and Renew date of the facility.
- System does not allow the MCD task to complete unless user visits the Review and Renew action if the submission contains a review or renew request.

5.1.12 Credit Memorandum and Manual Decision

Credit assessment of a borrower and the subsequent capture of comments by a credit appraiser are comprehensively captured in a credit memorandum, this is available to the decision making authority in the bank to quickly understand the borrowers standing and their strengths and weakness in a variety of parameters. Credit memorandum gives a 360 degree view of a borrower's profile with regard to background, financials, cash flows, industry of operation, and competitors.

Each of the section or category covers various details of customer, request summary, customer profile and industry outlook, past performance, financial and other analysis done. Banker's recommendation is provided, which backs the approval or decline of the application.

- On click of the Credit Memorandum and Manual Decision widget, the page displays panels for Manual Decision and Credit Memorandum.
- Manual Decision page displays a mandatory radio button with values Approved and Declined.
- If Approved is chosen then Comments field is displayed for user to capture any comments for the approval. Also, the reason for overriding the decision engine's decision can be captured.
- If Declined is chosen then Comments field is displayed for user to capture any comments for the decline. Also, a panel for capturing Decline Reasons is opened with header New Reason.
- Credit Memorandum: As part of making the credit decision, banker prepares a credit memorandum which is a summary of all the findings of the credit analysis. Credit memorandum generation is mandatory if manual decision is Approved.
- A document policy is available in Oracle Banking document management to resolve the credit memorandum applicable for a particular template.
- The actual credit memorandum template is maintained in Documaker. Bank can maintain one or multiple credit memorandums in Documaker which can be resolved using the rules or policy maintained in Oracle Banking.
- On click of the Generate Credit Memorandum button, system runs the document policy and resolves the template for the submission. The template ID is passed to Documaker and template is opened with data prefilled in sections where the mapping has been done and few sections which are editable are open to edit.
- While the memorandum is being generated page displays the message Your credit memorandum is being generated with an icon. Credit memorandum document is generated.
- The memorandum document is stored within the IPM (Image and Process Management) component of Oracle Fusion Applications to view the credit memorandum document subsequently. Any subsequent changes to be made in the credit memorandum can be done by downloading the document and saving it to the local desktop of the approver and re-uploaded.

- Once memorandum is generated, page displays a mandatory check box Read and reviewed Credit Memorandum.
- For retail flow, mandatory sections of the credit memorandum have to be captured. Credit decision engine recommends for each application within the submission which sections of the credit memorandum are mandatory for the particular submission. This check is done on click of Submit in manual decision. If this validation fails, then system does not allow the user to proceed and displays the error message Submission cannot be approved without Credit Memo generation.
- For the retail flow, on click of Submit, system compares the amount of loan requested with the maximum amount of the collateral. If the loan requested is more than the maximum amount allowed for a collateral, then system displays a warning message stating LTV Limit breached, Additional Collateral or Mortgage insurance is required.
- Reasons capture for 5Cs is mandatory, if not captured an error is thrown.
- Comments against the 5Cs are mandatory components of the memorandum, if not captured, an error is thrown on click of Save on the page.
- Notes functionality is enabled to capture comments against the 5C's which enables multiple users who
 access the MCD task to add their comments along with their user ID and time.

5.1.13 Approval of Credit Decision

On submit of MCD task, if approval is configured then approver views the MCD task in read only mode. The data displayed is the same as entered by the initiator, along with the manual decision taken by the initiator.

When the task is approved by the approver, origination flow moves forward. If the task is rejected by the approver decline flow is triggered, that is, decline task is created. In case approver requires more information from the credit manager then approver has the provision of sending the task back to initiator for more information. An alert is also sent to the initiator to inform that the task is assigned to him for providing more information.

5.2 Timeout Scenario

Credit Assessment is the process by which the bank determines whether to approve or refer or decline the loan application. This involves evaluation of the facility applied, the borrower and guarantor, if any, their financial position, credit bureau information and risk scores, and evaluation of the collateral linked to the facilities applied.

The system submits the submission (and its lending applications) for credit assessment through an adapter mechanism and provides a mechanism to return outcome at various levels in the submission, namely submission, application, applicant, facility and collateral. When the system makes a call to get an outcome from the credit decision engine and if the call fails for any reason, the system creates a human task called Credit Assessment Failure (at the submission level) which can be used to re-submit the submission for credit assessment. However, there is no mechanism to override this option and push the submission for a manual credit review.

The system provides a mechanism with the Credit Assessment Failure task to push the submission for manual credit decision processing using the action button Perform Manual Credit Review. When the submission is pushed for Manual Credit Review through the Review of Credit Assessment human task, the entire functions available as part of manual credit assessment will be available for the banker.

- **Credit Decision Status:** The system will default the Pending credit decision status for the different levels in the submission where a credit decision status is expected namely, submission, application, applicant, facility and collateral.
- Verifications: The internal verification policy defined within Common Services module of Oracle Banking Core (licensed separately) is executed to determine if any recommended verification is to be done. No external recommendations for verification from credit decision engine will be available.
- Valuation: There is no default recommended valuation for a collateral. However, system gives user an
 opportunity to capture recommended valuation type for collateral in the scenario where the submission
 is pushed for manual credit review.
- Conditions and Covenants: Recommended conditions and covenants from the internal Conditions Policy and Covenants Policy defined within Oracle Banking Limits and Collateral Management are displayed and user can add any additional conditions and covenants.
- Credit Decision Reason Codes: Since there is no interaction with the credit decision engine, there
 are no default reason codes populated for such a submission. However, the system provides user an
 option to add any credit decision reason codes, as may be applicable, for the different levels in the
 submission.
- **Credit Memorandum:** In the scenario where the submission is pushed for manual credit review, the credit memorandum indicator at the submission level is set to Not Required.
- **Overview:** For a submission which is overridden for manual credit review, the overview indicator is set to Required.
- Fraud Status: The system makes a separate call to the fraud assessment system. In case of no
 response from this system, the default fraud status is set as Referred which creates the Fraud Status
 Resolution task documented separately in this document.

5.3 Fraud Resolution

The system provides a mechanism to store the fraud status at an application level. This fraud status is expected to be returned as an outcome of the interaction with external credit decision engine. A call is made to the application fraud check interface to get the details. From product perspective, there is a mechanism or place holder to have customer specific task for fraud resolution but no actual human task within the product release. The fraud status is validated during generation of outbound documents as part of the Create Offer stage in the origination workflow.

Following are the features of Fraud Status Resolution task:

- The call for credit decision and fraud outcomes are split into two separate calls. The credit decision outcome is an input to the fraud resolution. Therefore, in case the credit decision times out, the system makes the call to the fraud interface with a Pending credit decision status.
- If outcome of the fraud status is other than Approved (that is, negative) then system can either:
 - · Suspend the origination workflow till fraud resolution is done, or
 - Continue with the origination workflow (that is, irrespective of fraud outcome origination workflow will continue) till Create Offer stage. (The behavior is, if the credit decision status is APPROVED or CONDITIONALLY APPROVED using automatic or manual credit decision, the workflow will only stop at Create Offer stage for the respective application if fraud status is DECLINED or REFERRED).

This is achieved using an outcome indicator as to whether the expected behavior is to HOLD the tasks

created post approval of credit decision or to CONTINUE with the tasks created post approval of credit decision. The default product behavior is to HOLD the post approval tasks in case the credit decision is APPROVED or CONDITIONALLY APPROVED but the fraud outcome is DECLINED or REFERRED. In this scenario, the system creates the Fraud Status Resolution task and on successful completion of this task, if the status is overridden to APPROVED, only then system will move forward to create the post approval tasks within Origination.

- The system allows the capability to override fraud analysis status in Oracle Banking Enterprise Originations with the new human task (created at submission level) titled Fraud Status Resolution. This task enables the user to override negative outcome (DECLINED or REFERRED) of the fraud status at an application level, if required. The application level statuses are rolled up to a submission level status. A reason code capture is provided whenever the status at the application level is being modified.
- The Credit Decision History Inquiry displays the fraud outcome (automated and manual) at the application level. To provide this mechanism, the system stores two separate identifiers for the fraud status (one each for automated and manual outcomes) as part of the attributes stored for the outcome of credit decision interaction.
- The system provides extension capabilities within the Fraud Status Resolution sub-process to ensure that this can be overridden within the consulting layer.
- Interfacing capability with an external fraud check engine is supported in the product. Details of the external system call such as reference number, status, date and time are displayed. Provision for initiating call to the fraud check engine is also given through the human task, in case the call to the engine fails due to technical errors.

5.4 Approval Confirmation

To ensure that an offer made to a customer post initial credit assessment stands valid before create offer, an approval confirmation call to the decision engine is available for a banker. There can be multiple calls to the decision engine until the Approved status is returned by the decision engine. Each call considers latest information (for example, party, financials, collaterals) and assesses whether the offer is still valid after any changes in the details of the party.

- A configuration is provided in origination preferences to decide whether approval confirmation is required or not.
- A tech configuration is also available for the bank to decide whether single or multiple approval confirmation call must be initiated.
- The approval confirmation call is made just before the Create Offer task:
 - after completion all parallel tasks such as Verification, Valuation, Fraud, Manual Identity Verification, Title Search and Structure Solution are complete, and
 - applicable tasks of LMI, CCI and Quick Refinance are complete.
- This call is applicable only for lending applications.
- The approval confirmation call is similar to the credit decision call post submission of application form. All the updated data between the last decision call and present state are sent to the engine in a request and the response is received.

- The following responses are expected from approval confirmation call:
 - Approved: All application move to create offer stage post approval.
 - Approval subject to verification: If new verification types for which verification has not been performed are returned in the recommendation from the decision engine, a verification task is created with the additional verification types. Once the verification is completed, all applications move to the Create Offer task.
 - Approval subject to valuation: In case the Valuation task is created and Structure Solution is retriggered, once structure solution is confirmed, all applications move to Create Offer task.
 - Refer: Manual Credit Decision task is created. If the credit decision is to decline, then the applications move to the reject flow. If it is approved, all the applications move to Create Offer task.
 - Downsell: Downsell task is created. Once task is completed and Manual Credit Decision task is approved (if applicable) or all applicable tasks are completed, the applications move to Create Offer task. If the task is declined, then the applications move to the reject flow.
 - Declined: The reject flow is initiated for all applications. Ability to initiate manual credit decision from the decline offer task.
- Approval confirmation date is stored as the last decision date and used for the calculation of offer expiry date.
- An alert is sent to the banker, if the response received from the decision engine is declined.

6 Verification

Verification indicates the logical information provisioned by applicants (including credit card co-applicant and add-on applicant), cosigner and guarantors which has to be verified by the bank post the credit approval. Such cases are called conditionally approved cases subject to conditions such as, verification or valuation being completed successfully. Also, there could be scenarios where the bank might approve the submission only after tasks like verification or valuation are completed successfully.

Oracle Banking Enterprise Originations provides both these flexibilities based on the outcome of credit assessment.

Following are the features of verification:

- Applicable for lending applications. Task is created at application level.
- Mechanism to display recommended verification, if any, from external interface.
- Execute and display outcome of verification policy executed at different levels based on the configuration within the Verification Policy maintenance within the Common Services module of Oracle Banking.
- Option to add any additional verification over and above recommended (from external system or internal rules) verifications.
- Actions to perform verification or waiver of external or derived verification within this task.
- Capture and display of linked document types to each logical verification type.
- Options to either mark verifications as Successful or Unsuccessful with appropriate comments.
- Support approval of waiver of recommended verifications.
- As part of facility creation or modification, system validates for insider limit breach and in case of a breach, system resolves the Verification Type Board Approval.
- Request More Information: A status called Request More Information is available at each verification instance level. It appears in the Verification Details panel of the Verification task at application level. This enables the bank to indicate that additional information is required from the applicant for the verification to be completed. This status and the associated comments (which are visible outside bank) can be viewed from the customer facing channels like internet banking to indicate to the customer what exactly needs to be furnished for the verification to be completed. In case, the status is moved to Request More Information, then the system sends an alert to indicate the customer that the verification is pending more information.
- **Comments or Notes Integration**: The Comments functionality is integrated within the Verification task. This task supports replying to existing comments, providing history of the changes to the comments, and mechanism to identify whether the comments should be internal or external to bank users.
- **Conditions Capture**: For more information on the functionality of conditions capture within Verification task, see Section 16.4 Conditions.
- **Display of application details**: View Submission link is provided in the Verification task for the banker to view the application details. On clicking it, the system displays the application details such

as, personal details, employment details, financial details and so on. The user can view whether the customers have submitted the document to support their claims in application form.

- Display of completed verifications: It is possible that the submission might undergo multiple edits during its life cycle. In each edit scenario, a new set of verifications is resolved which the user has to verify. These verifications may also include verifications that have been performed earlier. System stores all the completed verification types for party or collateral as part of submission. Whenever a submission is edited and a fresh set of verification types is created for verifications which are already verified, system enables the View History link. The user can click the link to view the verification and based on the history, current verification can be marked successful.
- Automatic update of verification status for multiple instances of same verification type: As part of verification policy, it is possible that the same verification type is resolved for the party or collateral as part of different applications. System updates all the instances of verification type within the same submission across applications, if the verification type is completed in any one application.
- Modify verification status: System allows modification of verification status and verification type from successful to unsuccessful or request more information till the verify application data task is submitted. Additionally, for each of these modifications, banker can capture comments. System will not allow further modification once the task is submitted.
- Maintain validity of verification and display such verifications as valid, if it is resolved for the same party or collateral: System allows maintaining validity for a verification type. If the same verification type is resolved again for the same party or collateral within the validity period, the system marks them as successfully verified.
- Ability to automatically initiate the verification task on successful upload of documents: System initiates verification task only if the mandatory documents are attached to it. System enables the link from Application Tracker where the banker can upload the mandatory documents for each verification type. Once the mandatory documents are uploaded, the system initiates the task in the worklist where the banker can complete the verifications.
- Certain verifications are very common for a lending application. Verification of Asset and Liability of a
 customer applying for a loan is a very common occurrence. Also many loans require the customer to
 pay a contribution. System has the capability to use various facts for resolving verification for Asset
 Verification, Liability Verification and Customer Contribution Verification.
- The Verification human task has been transformed to improve usability and user experience.
- Verification completion from Application Form: The frontline banker can add and complete a
 verification type from the Application Form. This functionality is enabled based on configuration
 provided at Origination Preferences to allow verification from Application Form and at the Verification
 Category level parameter to allow verification to be completed by frontline banker.
- Contextual Verification: The verification type configuration includes the configuration for Contextual Verification. If the field Contextual Verification Applicable is selected, then the user has to necessarily select the context to be associated with the verification type in the Applicable Context field. A predefined list of fields or task-flows are available to be selected as a context. A verification type can be associated with multiple contexts. If a verification type is associated with a context, the Verification panel displays the data entered for the context in the Application Form.
- Multiple Verification Tasks based on Verification Category: Verification category is passed as an input to the BPM task configuration rules so that separate tasks are created based on the verification

category. BPM task configuration rule also allows grouping of verification categories so that a single task can be created for more than one verification category.

- Message in the Verification Task when all mandatory verifications are completed: The system validates and provides a message in the Verification Task to intimate the user that all the mandatory verification types are completed. This validation is done when the Verification Task is created and when the user completes a mandatory verification type in the task.
- Verification is enabled for Concession Group and Verification of Identity (VOI).
- Verification History: The Verification History link helps the banker performing the verification to have a view of the action taken on the same verification type in a previous instance.
 - History from Previous Submission: If a verification type has been actioned (that is, marked as Successful, Unsuccessful or Request More Info) in a previous submission, system displays the verification history against the verification type. Only the last action taken on the verification type in the previous submission is displayed.
 - History from Current Submission: If a verification type has been actioned (that is, marked as Successful, Unsuccessful or Request More Info) in a previous instance of the same submission (that is, before Edit Submission), system displays the verification history against the verification type. Only the last action taken on the verification type before Edit Submission is displayed. A record is displayed for each instance of Edit Submission, if an action was taken on the verification type in that instance.
- Verification document validity check against Review and Submit Date: If configuration is maintained in Verification Type (Fast Path: CS22) to check the validity of a particular document against Process Step Reference Date (Review and Submit Date), system checks the validity of a document against the Review and Submit Date. If a document is valid at the Review and Submit Date, it is deemed valid for the purpose of that particular submission.
- Verification with Expired Documents: If a document linked to a verification type is expired, in the Verification page, system retains the expired document with status as Elapsed based on parameters provided by Content module. If the user tries to mark a verification type that has an associated expired document as Successful, system validates and does not allow the verification type to be marked as successful, unless Override Reason Code is captured. The system validates whether the override reason is captured for all the expired, mandatory and optional documents. Approval can be configured for marking a verification type as successful with an expired document.
- Verification on Approval Confirmation: The verification process is re-triggered in case the approval confirmation call to the credit decision engine returns as Approved subject to verification, Referred, or Downsell. In all the scenarios, system retains the original verification checklist to which the newly recommended verification types are added. Also system performs checks to retain the status of the verification type as Successful, if context has been modified (applicable for Contextual Verifications) and if the verification has a validity (applicable for Non-Contextual Verifications).
- Verification Questionnaire: If a configuration for questionnaire has been done in Verification Type (Fast Path: CS22), system renders the verification questionnaire against the verification type and the document type (inline with each Document Type). The user working on the verification is required to answer the questions as part of the verification process before the verification can be completed.
 - System validates that all mandatory questions configured for the verification type and the document types are answered by the verifier. The system validates whether the document level questionnaire is answered for both mandatory as well as optional documents uploaded against

verification type.

- If the user selects an adverse response (negative response as per the adverse rule configuration done for the question in Section Maintenance (Fast Path: CS104)) in any of the question set linked to the verification type, system does not allow the user to complete the verification type without capturing an Override Reason Code. The system validates the document level questionnaire for the adverse response. Approval can be configured for marking a verification type as successful with an adverse response to a question.
- For the alert event Request More Info for a verification type, system passes additional data elements in the alert message including a dynamic list of documents that is still outstanding from customer or has expired.
- Indexing of Verification Documents: For inbound documents uploaded in the Verification process, system passes the additional indices of Application ID and Truncated Application ID along with the other indices/
- Ability to record the outbound document delivery preferences for broker sourced application in the Application Header section, to deliver the customer's offer documents to broker.
- Ability to display verification type description in the Type Description field.

7 Valuation

Valuation indicates the process by which the bank will assess the current market value of the collateral (depending upon the type of assessment of valuation). This will also determine other key indicators for the loan applied for by customer, which are the Loan to Value Ratio (also called LVR) and the bank value of the collateral calculated based on the valuation process.

Typically, bank interacts with external valuation agencies, either through manual or automatic process, to get the collateral evaluated in lieu of the facilities applied for by the customer, though this information may not necessarily be always shared with the vendors who perform the valuation.

Following are the features of valuation:

- This task is created at collateral level. It can be initiated either from Review of Credit Assessment (also known as Manual Credit Decision) or as part of the post approval tasks once a submission credit decision has been approved.
- Capability to handle business rules like creation of task only if the collateral task has Valuation Required parameter enabled as part of Collateral Category Preferences within Oracle Banking Limits and Collateral Management.
- The Valuation request task title also displays the Collateral address details to help the banker easily identify the collateral related valuation request task.
- Handling of recommended valuation type as part of the outcomes for credit assessment received from external interface.
- Task creation is not triggered when unexpired valuation reports are present within Oracle Banking Limits and Collateral Management.
- In case the submission is sourced by a broker, the broker information will be available as part of valuation request.
- Valuation contains the following features or capabilities:
 - Initiate request for valuation to valuation agency
 - Amend or Re-initiate request
 - Cancel valuation request
 - Receive or Capture or Display the collateral valuation report
 - Inquire a completed valuation report
 - Update status for collateral valuation request
 - · Verify valuation report once it has been captured
- System can identify the valuation agency or agencies to which the valuation request can be sent based on rules defined for different collateral categories and key attributes like the geographical location of the particular asset.
- This task has been integrated with the valuation process developed within Oracle Banking Limits and Collateral Management. The valuation task (at collateral level) within Oracle Banking Enterprise Originations has the mechanism to invoke the LCM valuation sub-process which has the following steps:

- Valuation Request Details Capture
- Valuation Report
- Valuation Report Verification
- These tasks form part of the sub-process developed within LCM module. As part of the integration with Oracle Banking Enterprise Originations, the functionality of change of recommended valuation type and waiver of valuation continues to be part of the Valuation task within Oracle Banking Enterprise Originations. At the end of the iteration of each sub-process for collateral, Oracle Banking Enterprise Originations Valuation task is instantiated again to perform any further valuations, if required or to proceed ahead in the origination workflow.
- The valuation report validity can be maintained for Collateral category Valuation type combination level.
- Based on the configuration, the valuation request task can be automated (no human task) or handled manually through BPM human task. The system has the capability to auto populate the details required and complete the Valuation request task without any human intervention. The system has the logic not to automate the valuation request task, if the following conditions are not satisfied:
 - All mandatory documents required for valuation are not provided
 - Contact person details for the property are not captured
- The Valuation report verification can be manually verified through BPM task or through external system verification. This is handled through Collateral category level configuration.
- Based on the above configuration, once the Valuation report details are received, the system automatically sends these details to the third party external system to complete verification. In case the verification is rejected, either the system reinitiates the Valuation Request task or creates the valuation report verification task for manual intervention depending on the response received.
- The tracking of valuation tasks is possible in Application Tracker.
- Ability to trigger the cancellation of valuation request in the following scenarios:
 - If the submission is withdrawn
 - If the submission is edited and collateral is removed
- Ability to retain the valuation request in case of edit submission when the collateral is same and the decision engine returns the same valuation type. The valuation request is retained if the valuation report is not received before the submit of edit submission.
- Ability to validate on initiation of the manual valuation request task if the collateral has a valuation report which is pending or with an open query. If yes, the new request is initiated and request task is remain open.
- Ability to re-initiate an online valuation request call from the Valuation Error task to an integrated external interface in case of valuation failure. Ability to view the request details, failure details and reinitiate the call to external interface using Re-initiate button.
- Once the valuation report is received, you can add a query based on the valuation report status received from decision engine.
 - Report Approved : Allowed to add query.
 - Report Rejected : Allowed to add query only if valuation is not requested by credit decision

engine and no subsequent valuation requests are in-progress.

- Report Referred : Not allowed to add query.
- If the valuer agrees to a dispute raised then a new amended valuation report is received and market value and LVR gets updated.

8 Title Search

Title Search is the process by which the bank can authenticate if the collateral is registered with the applicant or guarantor claiming to be the owner of the collateral. This process involves interaction with agencies in charge of title registration and involves multiple steps, similar to valuation.

Following are the features of title search:

- This task is created at collateral level. It can be initiated either from Review of Credit Assessment (also known as Manual Credit Decision) or as part of the Post Approval tasks once a submission has been approved.
- Task creation is not triggered when unexpired title search reports are present within Oracle Banking Limits and Collateral Management or the title details are captured manually as part of Application Form itself.
- In case the submission is sourced by a broker, then the broker information will be available as part of Title Search Request.
- Capability to identify the agency to which the Title Search Request has to be sent is based on rules defined for collateral category and address information of the collateral. Ability to configure collateral categories for which Title Search is required.
- Key steps within title search are as follows:
 - Initiate title search request to title search agency (including capability to send multiple requests).
 - Amend or Re-initiate existing title search request.
 - Cancel title search request.
 - Receive, store and display of title search reports.
 - Mechanism to update the status of the title search request.
- The Title Search sub-process developed within Oracle Banking Limits and Collateral Management is
 performed on the same lines as Valuation mentioned above. The Title Search task within Oracle
 Banking Enterprise Originations is integrated with the LCM Title Search sub-process having the same
 logical steps as mentioned for Valuation.
- The only key difference within the Oracle Banking Enterprise Originations Title Search task is the Waive functionality which continues to be available only through Origination module. The logic of recreating the Oracle Banking Enterprise Originations task for title search after each sub-process iteration is completed is similar to that of valuation as mentioned above.
- The title search initiated from Capture Application has the request task automated (always) and the report and verification can be manually done through BPM Tasks.
- The tracking of Title Search tasks is possible in Application Tracker.
- Ability to initiate and perform second title search in case the collateral pledged as security is to be subdivided and will has new Title particulars (like Title and lot references) after subdivision is completed.

9 Structure Solution

This is the stage where the account can be configured for the product groups applied for in the submission.

Following are the features of Structure Solution:

- Applicable for both lending and liability product groups.
- Mandatory for liability product groups as part of the Application Form.
- Mandatory post credit assessment for lending product groups.
- Task is created at product group level. If the account configuration is done pre-assessment, then this is
 retained post assessment, except a few scenarios like downsell acceptance.
- Handling of loan and overdraft cases within this stage. Mechanism to create one or more sub-lines within the facility (or main line) applied for. Option to decrease mainline limit in case customers want lesser limit than what is approved by the credit decision engine.
- Interaction with offer selector for recommendation of offers based on features required and offer eligibility validations.
- Configuration of account information based on which accounts will be created during the account opening process triggered from either Create Account or Settlement Instruction human task within Oracle Banking Enterprise Originations.
- Capability to interact with Oracle Banking Relationship Pricing for derivation and display of interest rates, margins and fees, wherever applicable.
- Negotiation of margins and fees. Approval handling for negotiation of interest margins and fees. As part of the overall solution when the user submits the task via the Confirm button in the Lending Structure Solution task and if there are any fee and/or margin negotiations for which approval is needed, system generates a approval notification document which is sent via email to the approval user or user group resolved by DPA.
- Retrieval of origination fees, option to collect or defer these fees so that they are deducted as part of disbursement during settlement instruction execution.
- Refresh of the funds table for the respective product group.
- LVR, Outstanding Exposure are available as facts in Pricing to determine the relevant pricing for the accounts.
- Ability to cancel or unsubscribe the bundle as part of Post Credit Assessment Structure Solution.
- Retrieval of Origination Fees based on the offer selected under the Product Group.
- Check or validate for other product offers before allowing to select a specific product offer.
- Validate the Facility Warning Indicators, if any.
- Capture Broker or Introducer details in account configuration.
- Identify the immediate Product Groups when there is a bundle selection as part of Group of Group Product Groups.
- Validate and process the Product Groups, which are indicated for Internal Refinance accordingly.
- Ability to link existing CASA accounts to Overdraft facility.

- Display the Available Amount of the Credit Facility in the Structure Solution during Origination workflow.
- Support for Flexi Credit Facility products with functionalities like restricting only one level of Sublines, restricting only one accounts under each Subline.
- Support the configuration of Office Suspense accounts.
- Support account configurations for IPA.
- Pass Broker and Introducer details for the relevant modules.
- Origination: Loan Structure Solution: Subsequent Acct Fee is displayed under Capitalized Servicing Fee only when the Capitalize Fee is unchecked under Product details.
- The Account Holder Preferences are added for a Cosigner.
- The Start Date of the Subline is defaulted with Current process date and allows the user to modify the Subline Start Date to any date between Current Process Date to Mainline Start Date.
- The decision engine recommends the downsell offer along with downsell amount. Decision engine can recommend offer, amount or both that is, amount and offer.
 - If the account is configured as part of pre-structure solution process and the decision engine recommends a different offer as downsell, then system validates and displays the error message to delete the configuration which was made as part of pre-structure solution and configure again with the approved offer.
 - If the account is not configured as part of pre-structure solution process, then system displays the approved offers in the structure solution and allows the user to configure account only with recommended offers.
 - A quick task called Settlement Payout is provided, which is an optional quick task. This quick task is not visible if Settlement required flag is set as No in Credit Policy linked to the Product group. If the user wants to capture the payout details and contribution details upfront during the application capture, then the user can capture it here.
- Execute Quick Refinance rule on submission of post assessment Structure Solution human task.
- The attributes of External Refinance panel of Product stage are available as part of External Refinance quick task.
- The Financial Rewards quick task is visible only for Lending products (Loans and Overdraft). The quick task is enabled for action only if at least one account is configured. User can perform this action either in Configure stage of Application Form or in the Structure Solution human task.
- User can select an account (that is, other than nominated account) for the credit of the financial reward amount. However, if the user does not select any credit account, then the financial rewards are credited to the Loan or OD account that is being configured and nominated for fee collection in the Configure stage.
- The Additional Property fees, Change of Name fees and Non Chargeable fees configured and resolved are displayed under Collect Fee taskflow. The collection type for Non Chargeable fees is tagged with Non Chargeable collection type and user is not allowed to change the collection type for such fees.
- If the LMI quote fetched in the Application Form is different from the LMI premium in Structure Solution human task, then a message is displayed to the user to take appropriate action.

- Once the user confirms Structure Solution human task, system checks if any of the fact values used in Interest price policy chart configuration has been changed from the last account configuration date. If there is any change in the fact values, then system forces the user to reconfigure the account, else it allows the user to proceed further in the origination flow.
- Capability to have the Structure Solution task at submission level or at product group level based on technical configuration.
- If the technical configuration for the structure solution human task is set at submission level, then on invoking the Structure Solution human task, only asset products with submission type new and amend in the submission is displayed as a tile, similar to the Configure stage of the Application Form. This behavior is applicable for regular as well as IPA submissions. For example, if a party applies for a Home Loan, a Personal Loan and a Business Line of Credit product group, then once the credit decision is complete and the decision status is either approved or conditionally approved, a single Structure Solution task is created and all the product groups are displayed as tiles.
- Capability to display the following message under the Mainline summary and the Subline summary for evergreen facilities: This is an Evergreen Facility. Additionally, user cannot capture a Term against such a facility, as these facilities do not have any expiry.
- Ability to validate and display an error message on submitting the Structure Solution human task, if there is any dispute query pending for action.
- Ability to record the outbound document delivery preferences for broker sourced application in the Application Header section, to deliver the customer's offer documents to broker.

9.1 Current and Savings Account Configuration

The key features of Current and Savings Account (CASA) account configuration are as follows:

- Account Title: The account title is auto-populated with the names of all the applicants who are present as part of the Application Form. This is handled for applications created for individual or organization or trust type of applicants.
- Alternate Account Capture: The system provides mechanism to capture alternate account for credit or debit interest and fees as part of the account configuration itself. Integration with third party product processor to fetch the accounts and display is a pre-requisite.
- Capture of Default Mailing Address and Correspondence Preferences related features: Default Mailing Address mandatory for all borrowers. Correspondence Preference mandates at least one account owner to be selected. This includes the affiliates linked to the account as well.
- Capability to link affiliates associated with applicants to the account.
- Cheque Book Request capture is optional for the accounts where the offer selected has cheque book facility and the customer wishes to apply for cheque book as part of account configuration. Based on whether cheque book details are to be captured, the appropriate fields are enabled for capture.
- Personalized title for the cheque book can be captured as part of the cheque book details panel.
- Mechanism to capture Account Preference called Employee Referred Account. This indicator can be used to identify whether the account has been referred by an employee. Thereby, appropriate margins can be applied. As part of Account Preference panel, the user can either select the account as Employee Account or Employee Referred Account.

- Backdated Account Opening: As per integration with Oracle Banking Relationship Pricing to fetch rates based on the value date.
- Capture of Account Operating Instructions.
- Warning indicator actions such as Prevent Cheque Book Issue action can be handled as part of Cheque Book Issue Details Capture in Account Configuration.
- Customized rates are supported.
- Account configuration for IPA is supported.
- For OD type of accounts, banks can send a bill to the customer. Suppose customer opts for
 instructions to repay amount, then such instructions (billing instructions) can be captured during
 account configuration.
- In Structure Solution for an OD facility when user selects the option to link existing account and selects an existing CASA account, system checks if the selected CASA account has already been added as collateral and has a lien of type Collateral. If yes, system throws an error message saying that CASA account cannot be linked to the OD account as it is already linked as Collateral. Integration with third party product processor to fetch the accounts and display is a pre-requisite.
- In Structure Solution for HELOC new account (which is solutioned as MOF facility), system allows only one account to be added and configured. System also creates the OD subline automatically with expiry date equal to equal to Draw period of the HELOC facility.
- Annual Percentage Yield (APY):
 - Ability to compute APY for OD accounts in credit stage is supported.
- Annual Percentage Rate (APR):
 - Ability to compute amount financed value and store against the OD account is supported.
 - Computation and display of APR for OD accounts is supported.
- Regulatory Codes:
 - Ability to capture and save the relevant regulatory code (For example, in the US Community Reinvestment Act) pertaining to each regulation at the account level.
 - Regulatory codes are configurable and can be generic across geographies.
 - Regulatory codes can be captured during origination of new OD account.
- Cosigner:
 - Ability to add cosigner relationship to the OD account.
 - Ability to capture cosigner account holder and statement preferences.

9.2 Term Deposit Account Configuration

The key features of Term Deposit account configuration are as follows:

- Account Title: The account title is auto-populated with the names of all the applicants who are present
 as part of the Application Form. This is handled for applications created for individual or organization or
 trust type of applicants.
- Backdated Account Opening: As per integration with Oracle Banking Relationship Pricing to fetch rates based on the value date.

- Mechanism to capture transacting party details in case of threshold limit breach for certain modes of payin.
- Mechanism to capture Account Preference called Employee Referred Account indicator. It is used to identify if the account has been referred by an employee and so appropriate margins can be applied. As part of Account Preference panel, the user can either select the account as Employee Account or Employee Referred Account.
- Capability to link affiliates associated with applicants to the account.
- Account Operating Instructions can be captured.
- Customized rates are supported.
- Account configurations for IPA are supported.

9.3 Loan Account Configuration

The key features of Loan account configuration are as follows:

- Account Title: The account title is auto-populated with the names of all the applicants who are present
 as part of the Application Form. This is handled for applications created for individual or organization or
 trust type of applicants.
- Capture of Default Mailing Address and Correspondence Preferences related features: Default Mailing Address mandatory for all borrowers. Correspondence Preference mandates at least one account owner to be selected. This includes the affiliates linked to the account as well.
- Capability to link affiliates associated with applicants to the account.
- Mechanism to capture Account Preference called Employee Referred Account: This indicator can be used to identify whether the account has been referred by an employee. Thereby, appropriate margins can be applied. As part of Account Preference panel, the user can either select the account as Employee Account or Employee Referred Account.
- Capture of Account Operating Instructions.
- Capture of Repayment instructions and Periodic Credit instructions.
- Customized rates are supported.
- Consumer Credit Insurance (CCI) is supported during account configuration.
- Capability to capture seasonal payments, escalated payments, bullet payments and balloon payments as repayments are supported as part of Flexi Repayment Schedule configuration.
- Moratorium period can be configured for the loan account both as term and amount.
- On click of Submit of Post Assessment Structure Solution, system compares the amount of loan requested with the maximum amount of the collateral. If the loan requested is more than the maximum amount allowed for a collateral, then system displays warning message stating LTV Limit breached, Additional Collateral or Mortgage insurance is required.
- Annual Percentage Rate (APR) by US Actuarial Method:
 - Ability to compute amount financed value and store against the loan account is supported.
 - Computation and display of APR for loan accounts is supported.

- Regulatory Codes:
 - Ability to capture and save the relevant regulatory code (For example, in the US Community Reinvestment Act) pertaining to each regulation at the account level.
 - Regulatory codes are configurable and can be generic across geographies.
 - Regulatory codes can be captured during origination of new loan account.
- Cosigner:
 - Ability to add cosigner relationship to the loan account.
 - Ability to capture cosigner account holder and statement preferences.
- Ability to provide interest benefit to customers while opening the loan account if:
 - Repayment instructions are captured while configuring the loan account.
 - Cosigner is added as part of the loan account.
- Ability to apply different fees based on states.
- Provision to display and hide the Arrangement ID linked to the loan and OD accounts in account summary grid.
- The Approval Notification document is generated if there is any fee and/or margin negotiations performed for which approval is needed in the Lending Structure Solution human task. The approval notification document also includes policy deviations.
- The fees configured with nature as Non Chargeable is displayed in the Collect Fee task flow with Non Chargeable collection type. User is not allowed to manually change the collection type to Collect or Defer for such fees.
- Ability to capture Financial Rewards in the Quick Task section of the Configure stage. This quick task is visible only for Lending products (Loans and Overdraft). This quick task is enabled if at least one account is configured. The rewards applicable for the selected offer are displayed and the user is allowed to negotiate rewards, if any. This action is available in Configure stage of Application Form and in the post assessment Structure Solution human task.
- Ability to select the account other than nominated account for the credit of the financial reward amount. If the user does not select any credit account then the financial rewards are credited to Loan or OD account that which is configured and nominated for the fee collection in the Configure stage.
- Capability to validate if any of the Collateral in the task has a Valuation Report with a pending/open query, on confirming the Structure Solution task. If yes, system disallows the completion of the Structure Solution task till the time the query is resolved.
- The broker compensation can be computed internally or by an external system. Broker compensation computation is driven by the configuration in the Common Services module.

9.4 Credit Card Account Configuration

Credit card account configuration is based on the credit card offer chosen from the list of eligible offers under the credit card product group chosen within the Application Form. The system allows the user to configure the account covering key areas like:

- Primary card holder details
- Add on card holder details, if applicable

- Delivery Preferences
- Balance Transfer Details
- Membership Details
- Additional Information

10 Lenders Mortgage Insurance

Oracle Banking Enterprise Originations supports the functionality of lenders mortgage insurance which protects the lenders interest. The features are as follows:

- Parameter to indicate if LMI can be configured through credit policy linked to product group.
- Rules for whether LRM is applicable, LRM provider, and type of LRM request to be initiated are configured within Origination Preferences and executed just before the display of the Funds Table.
- Mechanism to handle whether LRM is applicable at facility level as part of the credit assessment outcomes. If LRM applicability is not expected to come from the credit decision engine then the ability to read the applicability from credit policy and process LMI accordingly.
- Also, handling of the same in case of manual review of the submission where the LRM condition can be manually added at the facility level.
- Human task called Mortgage Insurance is created to manage interaction with external system for creation of insurance policy within Oracle Banking. For LMI details, a call is made to the LMI interface.
- In case, the interface is not able to provide the LMI policy details, the user can manually capture the policy details.
- Provision to create human task in case of any exceptions found as part of automatic processing.
- Process the Mortgage Insurance task automatically without creating the human task, that is, managing the interaction with external system for creation of insurance policy.
- Support Negotiation of LMI Estimate in Funds Table and Structure Solution.
- Enable Approval matrix for the LMI estimate negotiation approvals.
- Fields such as reference number, status, and reason that are related to interface with third party products are displayed in Mortgage Insurance Human task.
- Provision to view the Existing Policies linked to the respective facilities as part of the task.
- In cases as part of a current submission, where mortgage insurance task is reassessed (multiple LMI tasks due to edit submission scenarios) then provision is given to view the history of previous tasks. This helps the banker in working on the current LMI task.
- Provision to view the LMI negotiation details as part of the task.
- Provision to view the Mortgage Insurance task details as part of Application Tracker.
- A warning message is displayed to the banker in the Funding step, if there is change in LMI premium amount and negotiation is done for LMI premium amount.
- The LRM Complex Application rule is executed only if the outcome of the LRM Required rule is True. If the outcome of the LRM Complex Application rule is True, then system forces the banker to capture LMI details manually, else system executes the LRM Submission Type rule and the LRM Provider rule sequentially as per the existing behavior.
- Processing along with activation of facility to move linked insurance policy from proposed to active stage. Handling of LMI premium amount to be collected as an arrear in the nominated account within the Settlement Instruction step of the origination workflow.

- Mechanism to set Policy commencement and expiry dates as dates captured manually or received through the interface at mortgage insurance task. In absence of this data, ability to use first disbursement date for loan and account opening date for OD as policy commencement date. Similarly, use facility expiry as policy end date.
- Ability to send alert to all applicants of the facility if LMI is applicable.

11 Manage Quick Refinance

The Quick Refinance task is created if any of the facilities require a quick refinance. From this task, the processing of quick refinance can be initiated. By clicking Initiate, a call is made to the external interface to get the quick refinance details.

- The Quick Refinance task is created (if applicable) on completion of the post assessment Structure Solution. This is an application level task.
- This task is created parallel to LMI and CCI (if applicable). However, the Valuation and Title Search tasks should be completed first, as these tasks can impact the decision to call Quick Refinance.
- The name of the task is Initiate Quick Refinance for Application < ApplicationID> under Submission
 <Submission ID>.
- The task displays the refinance details, that is Outgoing Financial Institution (OFI) account details as entered in Structure Solution. OFI details entered for different product groups in Structure Solution are consolidated and displayed in this application level task for each product group. The user can also add refinance details and edit a record that is already entered.
- The task has a panel for Inbound Document Checklist shown per product group. The OR_QUICK_ REFINANCE_INBOUND_DOCS event needs to be created for Quick Refinance inbound documents upload.
- There is an option to initiate the Quick Refinance interface from the task. The interface can be triggered by clicking the Initiate Refinance Call option.
- The task will remain open and wait for status update from the interface to proceed ahead.
- The user can capture Quick Refinance Reference Number and Status manually in Quick Refinance panel based on the configuration in Origination Preferences.

12 Create Offer and Execute Documents

Prior to acceptance by the customer, the bank generates and dispatches a set of documents to be signed and accepted by the customer based on the requirements and negotiations, if any done with the banker. This is a crucial step before the acceptance of the terms and conditions put forward by the bank (through its different operations team) for the customer to understand and accept or re-process them if there is something unacceptable within the same.

Create Offer is a logical stage in the origination workflow which handles the processing of outbound documents to be dispatched to the borrowers, affiliates and guarantors, if applicable. This task covers two steps: Generation and Dispatch of Documents, and Acceptance and Execution Details, which are covered in same logical task.

- **Create Offer**: This task is created at application level and deals with the Generation and Dispatch part of the Create Offer task. After all the documents are generated and dispatched, the system gives an informational message indicating the same and on user confirmation, system proceeds to close this task and moves to the Accept Offer stage. This change is done so that the user need not explicitly click Submit to mark this task as Logically Completed and moves forward in the origination workflow.
- Accept Offer: The task displays the details of the outbound documents generated and dispatched to the concerned parties. It also provides the mechanism to record Acceptance and Execution Details for the documents generated for the particular application. This task is created at application level, similar to the Create Offer task. The banker can also extend the expiry period of the offer letter on receiving suitable approvals. If the bank does not want to spawn off a task for accept offer, the system allows to capture the same using the Application Tracker. This setup can be maintained based on rules.

12.1 Create Offer

Following are the features of Create Offer:

- Task is created at application level.
- Interaction with Content module through the Inbound document policy for identifying the documents to be resolved for the respective party and collateral entities.
- Additional ad hoc documents can be also be uploaded through the inbound document panel.
- Government grant details, if any (optional), can also be captured in the facility details panel. The details
 include fields such as Is Grant Applicable for Settlement, Expected Credit Date, Reference Number
 and Amount.
- Interaction with Content module through the outbound document policy for identifying the recipients and the documents to be dispatched to the respective recipients.
- The optional documents are by default hidden by the system and the system displays only the mandatory documents in outbound documents panel. User can add optional document from the optional document page.
- The generation and dispatch details display list of recommended documents to be sent to the recipients (including cosigners, and solicitors) based on the rules configured within the Content module of Oracle Banking.

- Capability to reuse documents (from previous instance) instead of regenerating the same (applicable for edit submission scenario).
- Capability to regenerate the same documents multiple times in case any material change needs to be done from standalone page. The same is reflected in the document content post new regeneration.
- Ability to re-dispatch already generated and dispatched outbound documents that is the banker can redispatch the already generated versions of document. This can be done from create and accept offer task.
- Covers lending applications only. Key details like the facility structure, account configuration, key
 attribute information like origination fees and servicing fees can be printed along with information if the
 accounts are bundled, condition and covenants applicable at the facility level and so on.
- Handling of document template through Documaker.
- Ability to define document preference as optional or mandatory. On final submit, system ensures that all the mandatory documents are generated and dispatched.
- Ability to generate and send the offer letters to the recipients based on the automation rule set in the system. In this case, only the mandatory documents are generated and dispatched.
- Ability to generate documents at both application and submission level.
- Default dispatch preferences can be overridden by the user based on certain validations.
- Mechanism to capture acceptance and execution status for the documents based on attributes defined at the document type level within the Content module.
- Ability to view submission and application decision details, collateral, verification, valuation and title search details.
- Ability to view and edit settlement booking details and solicitor details.
- Ability to allow the user to manually update Fast Refinance details in a scenario where Fast Refinance process is handled manually, that is without an interface in place.
- Ability to obtain consent for Second Mortgage physically as well as digitally (that is, through external settlement system)
- Ability to capture Government Grant details in Create Offer stage to support the following scenarios:
 - When Government Grant applicability is selected in the Application Form (Fast Path: OR100) page.
 - When Government Grant applicability is not selected in the Application Form. This is to support the scenario where customer is not sure of the government grant benefit while submitting the Application Form (Fast Path: OR100) page.
- Ability to consider the Responsible Lending (RL) expiry in the calculation of the offer expiry alert. This
 is to handle the scenario where RL expiry date is before the offer expiry date and since the offer is no
 longer valid after RL expiry, the offer expiry date is updated as the RL expiry date.
- Ability to resolve documents in the offer stage when the collateral is being refinanced from an OFI.
- Capability to send an alert about he pending documents to the customer only for the number of times as maintained in a configuration in the Define Origination Preferences (Fast Path: ORM20) page.

- Capability to pass additional data elements in the create offer and pending document alerts. The
 additional data elements are related to inbound and outbound document level details, that are
 generated and required to be submitted by the customer to complete the offer stage.
- Capability to resolve inbound document required to be provided by the customer/builder for construction loans.
- Capability to generated Written Unsuitability Assessment (WUA) letter for lending questionnaire.
- Capability to check that the submission level pricing approval (if configured) is still valid before the offer stage outbound documents are generated.
- Capability to handle the impact of pending (open) query for a valuation report in the Create Offer stage. When the user tries to generate the offer documents, the system validates if any of the collaterals in the application has a valuation report with a pending/open query and alerts the user appropriately so that the user can decide not to generate the offer documents due to the pending query.
- Capability to generate documents at the OFI level, which are required to be signed by the customer.
- Capability to configure pricing approval for fees negotiated in the funds table in the Create Offer task.
- Ability to stitch documents which is introduced in Document Management, is available in the Create Offer task to resolve and generate the stitched Inbound and Outbound document.
- Ability to run the Financial and Objective Information Validity rule on the applicant's financial details to check the expiry of the submitted regulatory lending details. The broker should collect regulatory documents from customer again, if the regulatory lending expiry date is less than the submission date of an application.
- Ability to record the outbound document delivery preferences for broker sourced application in the Application Header section, to deliver the customer's offer documents to broker.

12.2 Accept Offer

Following are the features of Accept Offer:

- Ability to reuse the inbound document policy resolved in Create Offer.
- Additional ad hoc documents can be also be uploaded through the inbound document panel.
- Government grant details, if any (optional), can also be captured in the facility details panel. The details
 include fields such as Is Grant Applicable for Settlement, Expected Credit Date, Reference Number
 and Amount.
- Mechanism to upload the received signed documents, perform reference number match validation and capture verification status for the documents based on attributes defined at the document type level within the Content module.
- Capability to view the due diligence details (read only) from Accept offer task.
- Capability to validate for pending KYC and financial consent declaration expiry on accept offer submission.
- Capability to capture the subsequent mortgage consent from Accept offer in case of second mortgage scenario.
- A panel for Quick Refinance appears in the Create Offer and Accept Offer tasks, if Quick Refinance is applicable. The system also has the option to cancel the Quick Refinance at this stage.

- System has the capability to validate and check if the data capture for insurance application is completed at the time of accepting the Home Loan offer when Home Loan is linked with Home and Content Insurance or Landlord Insurance in a submission.
- In Accept Offer task, system validates the existence of an unexpired valuation report for the valuation type recommended by the decision engine. This is to handle the scenario where the valuation report was valid at the time of credit decision (so valuation task was not created) but the same expired by the time the offer was accepted by the customer.
- System also supports Offer Letter generation by a front line banker from the Application Tracker.
- The offer extension cannot be extended beyond the maximum extension period maintained at bank level.
- Banker can capture any document related to collateral as part of Accept Offer task (if no settlement or perfection task is applicable for the submission). System enables the capture collateral document link, if the collateral document collection mandatory flag is checked at Collateral Category level. The banker has to either collect the document or defer the document collection in order to complete the task. Also, banker has to mandatorily capture or defer the documents for the collaterals, which do not have any charge pending perfection (if settlement task is not applicable and perfection task is applicable).
- Ability to allow the user to manually update Fast Refinance details in a scenario where Fast Refinance process is handled manually, that is without an interface in place.
- Ability to obtain consent for Second Mortgage Physical as well as Digitally (that is, through external settlement systems).
- Ability to accept an offer document digitally. On submitting the Accept Offer task, system validates that all documents for which acceptance is required, have a verification status as either Successful or Digital. If the above validation is successful, system allows the Accept Offer task to be closed. If the above validation is not successful, system throws an error message and the Accept Offer task cannot be closed.
- Ability to capture Government Grant details in Create Offer stage to support the following scenarios:
 - When Government Grant applicability is selected in the Application Form (Fast Path: OR100) page.
 - When Government Grant applicability is not selected in the Application Form. This is to support the scenario where customer is not sure of the government grant benefit while submitting the Application Form (Fast Path: OR100) page.
- Capability to generate and dispatch outbound documents to the builder for construction loans.
- Capability to generate, dispatch, and forward outbound documents to the OFI and support the following scenarios:
 - Documents generated in Create Offer stage and signed and returned by the customer is forwarded to the OFI.
 - Generate and dispatch documents in Accept Offer stage to the OFI.
- Capability to validate the mandatory OFI and the builder documents are generated, dispatched, and forwarded before the offer is accepted
- Capability to validate if second title search is applicable for any of the collateral in the application. If yes, then the system allows the offer acceptance only once after the second title search is completed.
- Capability to configure pricing approval for fees negotiated in the funds table in the Accept Offer task.

- Ability to run the Financial and Objective Information Validity rule on the applicant's financial details to check the expiry of the submitted regulatory lending details. The broker should collect regulatory documents from customer again, if the regulatory lending expiry date is less than the submission date of an application.
- Ability to record the outbound document delivery preferences for broker sourced application in the Application Header section, to deliver the customer's offer documents to broker.
- Ability to capture offset account details, repayment instructions details, periodic credit instructions and lending questionnaire in the Account Configuration section in panel drawer and store the updated information.

12.3 Offer Letter Template

Following information can be configured in Offer Letter template:

- Commission and Rebate Details information in case of broker or introducer sourced accounts.
- Mechanism to generate outbound documents to be dispatched to affiliates by passing relationships between affiliates and applicants.
- Display the break-up of the components that constitute the facility amount requested for by the borrowers which includes capitalized origination fees, LMI premium amount, CCI premium amount, capitalized servicing fees (for each account configured within the Structure Solution stage), capitalized advance interest amount. It also displays the capitalized bundle subscription fees, if any.
- Consumer Credit Insurance details like the policy information applied for by the borrower and the premium amount per borrower.
- Bundle related information in case of bundle subscribed (either upfront or through bundle recommendation) for the particular application.
 - Details of the subscribed bundle like bundle identifier, name and subscription date.
 - Details of the bundle owner Full name of the owner of the bundle.
 - Existing accounts linked to the bundle.
 - Details of the nominated account for bundle fees.
 - Information related to bundle subscription and maintenance fees.
 - Benefits of the bundle (interest and fees) applicable for accounts.
- The Offer Letter template shows the revised repayment details for a target loan account which is partially paid-off by Internal Refinance.
- The Review and Renew Offer letter displays the Renewal Effective Date.
- All the outbound documents display the unique reference number generated for the document in the document footer section to be used for version mismatch check in offer acceptance check.
- The Offer Letter displays the Translator details if they are captured in the Application Form (Fast Path: OR100) page.
- The Offer letter displays the relationship name of Applicant Name against an applicant, if an affiliate is added as applicant based on the relationship details defined in the Define Origination Preferences (Fast Path: ORM20) page.

12.4 CCI Welcome Letter

The system has the ability to generate a CCI Welcome Letter for the borrowers who have applied for CCI as part of a particular facility in the application.

The factory shipped template for the CCI welcome letter is generated at a borrower level.

The following are the data elements that are part of the XML sent to Documaker:

- Interest and Repayment: The system populates the Margin and Margin Type field details in the Interest and Repayments section.
- Servicing Fee: The system displays the servicing fee panel in the offer letter for subsequent accounts in the following scenarios:
 - Open multiple accounts under a facility within a submission.
 - Open multiple facilities with one account under each facility within a submission.
- Default Interest: The system displays the Penal Interest Rate in the Default Interest Rate panel.
- Offer letter recipients in case of applicants of party type trust and organization.
- If an applicant is of party type organization or trust, the address of the affiliate is stamped in the offer letter and the letter is sent to the Applicants only. In this section, the Registered Address of the organization or trust party is displayed.
- The user cannot change the address for individual parties.
- Details of applicant and affiliate in offer letter.
- Details of applicants and affiliates in the account.

12.5 Other Features

Other features are as follows:

- Ability to send the collateral documents to the collateral owners.
- Ability to send documents to the solicitors (recipient).
- Ability to display the recipient role for each document recipient.
- Ability to view other applications create offer tasks details from create offer task and other applications
 accept offer tasks details from accept offer task.
- An updated template for Personal Guarantee is available. However, the templates are configurable in Documaker.
- Ability to add, display, and amend affiliates against the existing trust and organization parties, when the same are added as guarantors in a submission. So the process of Create Offer Document also caters to document generation and dispatch for affiliates added for existing trust and organization parties added as guarantors.
- Ability to generate outbound document such as the Mortgage Document for supporting collateral in a similar manner in which they do for direct collaterals.
- Ability to send out outbound documentation to the banker (such as offer letter) who is managing the submission.
- Ability to receive or upload inbound documents and perform scrutiny at the time of accepting offer.

- Ability to generate an outbound document for collaterals of affiliates in a similar manner as done for collaterals of applicants, guarantors or cosigners.
- Ability to generate a covering letter containing the list of pending inbound documents and the list of mandatory outbound documents that are generated and dispatched with it.
- Ability to filter and view the outbound documents list by recipient name or document status in case of large number of outbound documents are resolved.
- Ability to generate outbound documents such as Authority to Act (in case of external refinance), Name change document (If collateral document title deed name does not match with party name), and customer consent for second mortgage (when other bank mortgage has higher priority over our bank charge).
- Ability to view the Verification, Collateral, Valuation, Title search details from the create or accept offer tasks.
- Ability to view or edit solicitor details from the create or accept offer tasks.
- Ability to support the addition of one bank solicitor and one customer solicitor to a collateral. The same solicitor can represent both the bank and the customer.
- Ability to capture the booking details and payout instruction from create or accept offer tasks.
- Ability to identify the collateral settlement mode as digital or physical, and manually edit the same (in case the solution is not integrated with third party system).
- Ability to generate an outbound document for Written Unsuitability Assessment Letter.
13 Create and Modify Accounts

Following are the features of Create Account:

- This task is created at product group level. This is created only for product groups where Settlement Required parameter is not enabled at the credit policy level.
- Human task is created only when there are exceptions (when the check mentioned below fails) encountered, else the system initiates the Create Account process and the accounts are created automatically in the third party system.
- This step involves checking of preliminary and precedent conditions being complied, activation of facility hierarchy and related information like linkage of facility to collaterals, conditions, covenants that is, moving them from Proposed state to Active state.
- If there are any facility level risk indicators, then the system creates an error and creates the human task.
- If the customer due diligence status prevents an account opening, the system does not create the account.
- If the account opened is an OD with a customized rate, the system does not allow opening the
 account, if the customized rate is not valid.
- If opening of the account is dependent on another account, the system validates whether the account under mandatory offer is in existence. Integration with third party system is a pre-requisite for such validations.
- In case of review or renew request, there is no account creation. However, the system updates the review and renew date for the facility which is being reviewed or renewed.
- Any deferred origination fees for the respective product group are handed off to third party system during first disbursement in case of Loans, and during account opening in case of CASA account.
- System has the functionality to generate outbound documentation as part of the Create Account process. This serves the purpose of sending various documentations to the customer after account is opened. This functionality is provided for all new applications.
- Insurance policy creation is triggered only on fulfillment of Home Loan when Home Loan and Home and Contents Insurance are applied for in a single submission.
- For Secured Credit Card Origination, the lien is placed on the Savings account (offered as collateral for the Credit Card) only on the fulfillment of Credit Card account.
- In a scenario where Loan account and CASA account to be linked as the Principal Offset account is part of the same submission, once all the other steps for the Loan are completed and the Origination module calls the Loan Account opening service, Origination also passes the CASA Account number created on Review and Submit of the submission.
- If Financial Reward is configured for a Loan or OD account, as part of the Account opening service call, Origination passes the Financial rewards amount and the Nominated Account to the product processor. The product processor credits the financial reward amount to the nominated account after account origination is complete.

- Capability is provided to collect rate lock fee from another account (other than the loan account) as part
 of account opening, if the same is captured in loan account configuration.
- Capability to credit the financial reward amount to another account (other than the account nominated for fee) as part of account opening, if the same is configured.
- Provision to display and hide the arrangement ID linked to the loan and OD accounts in the Facility Tree panel.
- Capability is provided to collect rate lock fee from other account (other than the OD account) as part of account opening, if the same is captured in OD account configuration.

14 Settlement Instructions

Settlements Instructions task is part of the work flow within Origination after Offer Acceptance by the customer. Settlement Instructions task is created in the BPM Worklist based on the configuration of Settlement Required flag at each product group in Enterprise Product Manufacturing.

In case of amending existing facilities, Settlement Instructions task are initiated or created under the following scenarios:

- Limit details have been amended and Sanctioned Loan Amount has been increased for an existing loan account as a part of Structure Solution.
- Limit details have been amended and a new account has been configured against the limit.

The settlement process supports physical and digital settlement process along with fund settlement. The settlement process for physical and digital settlement includes the functionality of Settlement Booking and capturing settlement instructions as part of the Origination process.

Physical Settlement

The process of property settlement involves the exchange of all relevant legal documents and cheques between the buyer and the seller of a property. This exchange is necessary to not only complete the conveyance process but also finalize the real estate transaction. This exchange typically happens at a particular location, date and time.

Digital Settlement

Digital Settlement minimizes the manual processes and paperwork associated with property settlement by enabling lawyers, conveyancer and financial institutions to transact together online. It enables the user to lodge documents and complete financial settlements digitally.

Digital settlement works in an integrated environment where OBEO is integrated with the digital settlement system or in a manual scenario where there is no integration with the digital platform, but still the bank can capture and track digital settlement scenario.

The following sections explain the features of Settlement Instructions.

14.1 Settlement Booking

The features of settlement booking are:

- Capability to capture Settlement booking details manually into OBEO. Additionally, provision to capture final payout amount and upload relevant documents received from Other Financial Institutions for Refinance transaction.
- Provision to update or cancel booking details manually in OBEO and maintain the history of booking details for a submission if modified or altered multiple times.
- Capability to add one or multiple booking details for a submission and restrict only one booking per collateral.
- Ability to capture booking details for both physical and digital settlements.
- Ability to book settlements manually based on the priority order configured during accept offer stage.

 Ability to fetch the settlement booking in case of integrated digital settlement or manual capture of the digital settlement in case of assisted digital.

14.2 Settlement Instructions

The features of settlement instructions are:

- Task is created at submission level. It is created for product groups where Settlement required is enabled at the credit policy level.
- It supports skipping of settlement instructions, if the banker chooses to.
- Capture of borrower contribution, disbursement, and generation of payout instruction is done as part of this task.
- Oracle Banking Enterprise Originations provides facility to capture information within two areas of settlement instruction which are:
 - Borrower Contribution Instruction: Instruction for the contribution amount from the borrowers to be included along with the sanctioned amount of the accounts to be disbursed to arrive at the final payout amount.
 - Settlement of Payout Instruction: Instruction to disburse the loan along with contribution, if any, to be paid out to the seller and applicable beneficiaries.
- Capability to support different modes of settlement for contribution and final payout.
- Mechanism to maintain future dated or current dated settlement instructions.
- Current dated settlement instruction is executed as part of the same posting date EOD process.
- Future dated settlement instructions are executed in that day's BOD process.
- Capability to Revoke (Settlement confirmed but not disbursed), Reverse (executed instructions on the same posting date), and to submit the task to Complete settlement instructions. (To indicate logical fulfillment of the settlement instruction task).
- Capability to view and modify the Refinance details.
- System displays the break-up of the capitalized and un-capitalized components of fees and insurance premium by clicking on the View Fees action against each facility.
- Backdated Settlement Instructions: The system allows the user to capture back value dated settlement payout instructions where the payout date cannot be beyond the offer letter acceptance date. Backdated settlement instruction also means that the activation of facility and account opening are performed with backdated effect. The disbursement date or instruction debit date for Loan and Overdraft accounts are backdated. In case of backdated settlement, the allowed modes are only CASA Account or GL Account. However, in case of loan account settlement, certain benefits like Mortgage Offset Benefit linkage or Accelerated Payment Setup are done only from current posting date.
- There are a number of other module related validations that are performed in case of backdated settlement instruction maintenance. Contribution is allowed in case of backdated settlement. The process of account opening and settlement instruction creation and execution is done as part of the Confirm button in Settlement Instruction task.
- Partial settlement is allowed to facilitate progressive disbursements for an account configured under the facility.

- Disburse Now: In case of current dated settlement instructions, the system provides an option to the user to disburse online by clicking Disburse Now action displayed against settlement type. The Disburse now action appears only if all the information for a settlement type is captured and authorized. Additionally, the status of the transaction should be either Settling (that is for settlement type other than Purchase and Refinance) or Settled (that is for settlement type Purchase and Refinance). The following scenarios are applicable:
 - The user might want to disburse only certain accounts as part of the settlement instruction task.
 - For the other accounts, the user might want the execution to happen as part of that day's EOD processing.
- Display of Funds Table: The funding table for each facility is displayed in Settlement Instructions task. Additionally, it allows the user to negotiate fees in Funding table.
- Modes for Contribution: The system supports contribution paying by cheque and external account.
- Reversal Handling: Reversal is supported in case of the first disbursement being backdated for loans, overdrafts, and MOF type of product groups. Reversal is allowed only on the posting date on which the settlement instruction has been executed through online or batch execution. This button is not enabled on subsequent posting date and the user can only mark the Settlement Instruction task as Completed.
- Settlement for Internal Refinance: For the settlement of loan with the purpose internal refinance, the system defaults the settlement accounts and amounts to the internal refinanced accounts and amounts as captured in the application.
- The system refresh the internal refinance amount which is captured while submitting an application and suitably modify the settlement amount.
- Settlement for Quick Refinance: When Quick Refinance is applicable, settlement amount with an Other Financial Institution (OFI) is settled through the settlement task. OFI account details are displayed, the settlement is performed and shortfall validation is done. Outbound statuses such as Certified for Settlement and Settled are sent to the external quick refinance system. For quick refinance details, a call is made to the quick refinance external system. Once the final payout amount is received from first title the same is defaulted into destination funds.
- Collateral Document: Banker can capture any document related to collateral as part of Collateral Perfection task. System enables capture of collateral document link, in case collateral document collection mandatory flag is checked at collateral category level. The banker has to either collect the document or defer the document collection in order to complete the task.
- Customized Rate: If the OD account is opened with a customized rate, the user cannot open the
 account, if the customized rate is not valid. For loans, the system validates whether the settlement
 date is within the validity date of customized rate.
- The option to comply precedent and preliminary condition as part of settlement instructions is provided.
- If opening of the account is dependent on another account, the system validates whether the account under mandatory offer is in existence.
- The system has the capability to validate and check if the data capture for insurance application is completed on confirm of settlement instruction when home loan is linked with Home and Content Insurance.
- Ability to resolve cheque direction and payout quote inbound documents for purchase and refinance settlement types in settlement instruction task.

- Capability to wake up the Settlement task on receipt of cheque instructions or payout quote, or before X number of days from Actual Settlement date.
- Provision to default Expected Settlement date as captured in Application Form and capture the proposed settlement date.
- Ability to resolve settlement documents and generate agent instructions for processing physical settlements.
- Ability to view the settlement documents as part of Agent Instructions tab and email the agent instructions and supporting document to the settlement agent.
- Capability to view collateral details, valuation report and title search report in the Settlement task.
 Additionally, a provision is available to initiate title search request if required in case on adverse title.
- Ability to receive stamp duty concession from solicitor and negotiate stamp duty charges in the Funding table.
- Capability to negotiate fees and charges in the funding table as part of Settlement Instruction task.
- Ability to configure and send for DPA approval for fee negotiation
- Ability to have an identifier if the funds are contributed from solicitor towards customer contribution.
- Ability to capture payout instructions for internal and external liability accounts.
- Ability to pull funds from linked applications within submission or existing Loan accounts for customer contribution.
- Provision to display and hide the arrangement ID linked to the loan and OD accounts in the payout page.
- Ability to load special instructions and add additional documents to settlement agent.
- Ability to review, generate and dispatch the settlement instructions to settlement agent.
- Ability to resend the documents to settlement agents, if required.
- Ability to receive notification from settlement agent for successful or unsuccessful completion of settlement and update the settlement status manually into the system.
- Ability to capture the reason if the settlement is unsuccessful.
- Provision to capture the date on which the government grant is received from the government.
- Ability to capture Booking Reference Number in the Booking tab. This allows the user to modify the booking reference number by clicking modify booking instead of cancelling the booking details and rebooking.
- Ability to process a loan through a Quick Refinance process in Oracle Banking Enterprise Originations without any integration with external title search system and allow the user to capture Quick Refinance details manually in Oracle Banking Enterprise Originations.
- Capability to view and update Additional Property Details in Purchase and Settlement panel of Settlement Instructions task and refresh the fees, if applicable.
- Ability to refresh the fees for Change of Name and Government Fees configured under OR_ Settlement_Fee event on completion of Accept Offer task.
- The fees that are classified as Non Chargeable are not displayed in destination funds from Funds table.

- Capability to allow the user to collect the rate lock fee from an alternate account or linked account shared by the customer, instead of debiting it from the loan account during disbursement. If the rate lock fees are to be collected from an alternate account or linked account, then the rate lock fees are not displayed under Servicing Fees in the Settlement Instructions task.
- Capability to default the Debt Payoff details along with Purchase, Refinance, Equity, Quick Refinance settlement types, instead of creating Additional Payout settlement type and defaulting the payout amount.
- Ability to capture the settlement mode for the refinance and debt pay off amounts that has been defaulted in the settlements.
- Capability to view Debt Payoff details in Settlement Instructions task and to edit the Reduced Limit and Action in Future details for each of the OFI, if required.
- Once the payout amounts are defaulted into destination funds, user should be allowed to modify the payout amount if applicable.
- Provision to exclude the defaulting of OFI details into destination funds in the Settlement Instruction task. The OFI details with Credit to Alternate account flag as checked are not defaulted into destination funds of Settlement Instruction task.
- Ability to trigger alerts within the Settlement Instruction task for the events New Booking (OR_STL_ NEWBOOKING), Modify booking (OR_STL_MODIFYBOOKING), Cancel booking (OR_STL_ CANCELBOOKING), Settlement confirmed (OR_STL_SETTLEMENTCONFIRMED) and Disbursement (OR_STL_DISBURSEMENT).
- Ability to send different alerts for purchase and refinance settlements.
- Ability to send alert to a customer in pre-defined days before settlement. The bank can also configure the pre-defined days on the day of settlement.
- Ability to assign the settlement task to multiple users using the BPM Worklist view and additional flex fields and facts such as, settlement status, settlement type, and mode.
- Ability to record the outbound document delivery preferences for broker sourced application in the Application Header section, to deliver the customer's offer documents to broker.
- Ability to display whether rate lock is opted for an account within source accounts in the Payout tab.
- Ability to support Progressive Disbursements as follows:
 - Ability to set disbursement requirement for the collateral using the Global Parameter Details (Fast Path: LCM48) page.
 - Ability to configure and select appropriate reason codes for modification or cancellation of payout instructions.
 - Ability to configure and resolve inbound documents.
 - Ability to perform collateral valuation before the disbursement.
 - Ability to display origination and servicing fees for collection.
 - Ability to perform collateral disbursement at various construction stages (first or second disbursements).
 - Ability to perform single or multiple disbursements under same construction stage.
 - Ability to validate stage wise available balance before performing the disbursement.

- Ability to persist the disbursement details in this page.
- Ability to comply conditions that are applicable for the facility, collateral, or party in context before performing the disbursements.

14.3 Digital Settlement

The features of digital settlement are:

- Ability to do a digital settlement eligibility
 - Check with the digital settlement interface to find out if the land title can be settled digitally.
 - Check with the digital settlement interface to determine if the counter party (solicitor or other financial institution) of the settlement is qualified to perform digital settlement.
- Ability to perform title search based on the new title in case of constructions loans.
- Ability to perform digital settlement based on the integration with external settlement systems:
 - Ability to create a workspace for settlement and invite the parties to the settlement.
 - Ability to receive and process an invitation for settlement from the counter party.
 - Ability to receive and process various messages from the digital settlement process and allow the user to take actions in the system based on the notifications received.
 - Ability to convert a digital settlement to physical settlement and continue processing the settlement through physical or manual settlement on account of any exceptions from the digital settlement platform.
 - Ability to capture the settlement instructions and push data to external settlement systems.
 - Ability to ensusre the fees are pushed to external systems for only those collaterals which is part of settlement booking.
 - Ability to auto submit the task on successful completion of all digital settlements.
- Ability to receive notification from external settlement systems on settlement completion and auto disburse the loan.

14.4 Title Check Search

If the collateral supports Title search then the existing Title search reports can be viewed from Settlement instruction human task.

- The banker can initiate a check search for the title. This is an optional step, which does not impact the settlement task submission if skipped or if the check search process is in progress.
- As part of check search process if we get adverse response, then the system automatically calls for a complete title search process, which completely automates the title search request and report tasks. The verification can be performed directly from the settlement task itself.
- Banker can capture any document related to collateral as part of Settlement task (if no perfection task is applicable for the submission). System enables the capture collateral document link, if the collateral document collection mandatory flag is checked at Collateral Category level. The banker has to either collect the document or defer the document collection in order to complete the task. Also, the banker has to mandatorily capture or defer the documents for the collaterals, which do not have any charge pending perfection (if perfection task is applicable).

15 Collateral Perfection

Following are the features of collateral perfection:

- The task is created at submission level post offer acceptance. This is an optional task as part of a submission.
- Configuration to directly create the collateral perfection human task or wait till creation event is triggered from Application Tracker post document upload or manual wake up from is available.
 - If configured to wait for trigger from Application Tracker then banker can either upload documents to automatically initiate the Collateral Perfection human task creation or by clicking wake up button to manually initiate the Collateral Perfection human task creation.
 - If Collateral Perfection human task is initiated then in this case User accessing Application Tracker will have option to upload, generate and dispatch documents and view the other details in read only.
 - Back office user can suspend the Collateral Perfection human task and wake it up in Application Tracker as explained in point a.
 - The actual completion of the perfection task has to be completed from human task only.
- It enables the bank to maintain charge related details for the collaterals linked to the facilities in the submission.
- It supports maintenance of status based on the type of charge to be created like Registered, Hold Unregistered, Not Held – Registered.
- It allows selection of multiple collaterals for perfection or registration of a charge.
- Interaction with Content module through the Inbound document policy for identifying the documents to be resolved for the respective collateral entities.
- Additional ad hoc documents can be also be uploaded through the inbound document panel.
- Interaction with Content module through the outbound document policy for identifying the recipients and the documents to be dispatched to the respective recipients related to the collateral.
- Banker can capture any document related to collateral as part of Collateral Perfection task. System enables the capture collateral document link, if the collateral document collection mandatory flag is checked at Collateral Category level. The banker has to either collect the document or defer the document collection in order to complete the task. If the approval is configured and the user defers the mandatory documents, then system triggers the approval task.
- With digital settlement now supported through external settlement systems, Oracle Banking Enterprise Originations is able to identify whether collateral lodgement can be performed through digital or physical settlement mode. When lodgement is done digitally through external settlement systems, Oracle Banking Enterprise Originations automates the Collateral Perfection task.
- Ability to create approval task on collateral perfection task submission is provided, when there is a
 reference number mismatch between generated and received documents in outbound document panel.

- Ability to provide following task statuses in the Collateral Perfection task:
 - Lodgement in progress: Perfection task is created and no documents uploaded.
 - Lodgement completed: Documents are received from titles office and uploaded in the inbound document panel.
 - Re-lodgement in progress: Documents are regenerated due to issues with the available documents (signature mismatch, incorrect printing).
 - Perfection completed:
 - If approval is not triggered, then submit the task.
 - If approval is triggered on submission of the task, then complete the approval task for perfection.
- Ability to record the outbound document delivery preferences for broker sourced application in the Application Header section, to deliver the customer's offer documents to broker.

16 Solution Highlights

Following are some of the key functionality offered by Oracle Banking Enterprise Originations across the application flow.

16.1 Integration Touchpoints

This section provides details about integration touchpoints.

- For allowing current existing accounts in any legacy system to be made available for bundling, fees nomination, offset account, repayment account, there needs to an external interface done as part of consulting to populate these details. Product only provides a placeholder to populate such details. The assumption is that such external interfaces are available as part of consulting to retrieve such third party accounts.
- The pricing negotiations done as part of Originations are sent to the legacy system and beyond that if any changes are made in the legacy systems with respect to pricing, then updates of the same in Oracle Banking Enterprise Originations is to be done as part of integration. Until such updates are done, the data in Oracle Banking Enterprise Originations is considered as updated and final.
- Nominated account for facility fee can be a third party account and in such cases the assumption is that the same is allowed in Oracle Banking Enterprise Originations providing such handling is available in Oracle Banking Limits and Collateral Management to collect fees from third party system.
- If Origination fees are marked for collection from third party accounts then product scope is limited to having a service available to be implemented by consulting for the debit leg of the transaction. The product would expect a synchronous confirmation and if the same is not available from third party system, from origination perspective the transaction is considered as completed and fee marked as collected. At a later point if the transaction is failed in the third party system for any reason then the same needs to be handled operationally outside of origination.
- Oracle Banking Enterprise Originations will update OCH with regard to creation of new facilities and accounts.

16.2 Edit Submission

Following are the features of edit submission:

- It appears for all the key tasks within Oracle Banking Enterprise Originations.
- Mechanism to rollback the credit assessment, stop work on existing tasks to modify the state of applied facilities like reduce requested amount, add more collaterals or change charge amount at collateral level post credit assessment.
- After a confirmation warning message, this option creates a human task Edit Submission at submission level which is similar to the Application Form capture.
- System will reassess the submission once the user confirms the submission as part of the Review and Submit step through this option.

- This task offers convenience to bank users in practical situations, where collateral valuation received is different from earlier estimated value or when customer requests for increase or decrease in loan amount before final settlement or for any other genuine reasons.
- Truncated Application ID: Every submission creates one or more application IDs based on the borrowing entity and product groups selected. In case of an edit submission, the system retains the submission ID but regenerates the new application IDs. Due to this, the customer and bank are unable to maintain the traceability between submission ID and various application IDs under them when edit submission occurs. To resolve this issue, the application ID generation logic supports a 3 digit version number at the end of the application ID logic. This version number is incremented each time an edit submission is performed. Hence, the truncated application ID (minus the last 3 digits) will always be common for an application, irrespective of number of edit submissions.

Edit Submission for Reject Letter

Once a submission has been declined as an outcome for credit assessment through the Review of Credit Assessment (also known as Manual Credit Decision), the system creates a Reject Letter task at the submission level to generate and dispatch the reject letter to the borrowers. Though the task is at submission level, the reject letters are generated at application level for all applications in the submission.

The posting date on which the user rejects the submission and the decision validity period parameter defined within Origination Preferences is used to compute the expiry date till which the Edit Submission action is enabled within the Decline Offer human task. Providing this option within this task, gives the user the opportunity to re-process the submission based on customer request, where either the customer might want to reduce the loan amount or get guarantor or provide more collateral to get the application approved.

There is a need to capture the reasons for triggering Edit Submission and the execution is behest of banker's mistake or customer's request. Once the user clicks Edit Submission from any of the human task or Application Tracker system prompts to capture the following fields:

- Date
- Requested By
- Comments
- Reason

16.3 Withdraw Submission

When the banker or the customer does not want to go ahead with the Submission for any reason, the system allows the user to Withdraw Submission.

The following are the features of Withdraw Submission:

- This Action button is provided within the Human Tasks in Oracle Banking Enterprise Originations. It can be triggered at any point based on either the customer's request or banker's discretion.
- It creates a separate task at submission level to capture withdraw submission details.
- Existing tasks initiated for the submission are marked as Read Only, since the submission is Marked for Withdraw.
- On execution of the withdraw action, the system cancels the pending tasks, deletes all the proposed facilities, and associated dependencies (such as, collateral linkages, proposed conditions and covenants) and marks the submission as Closed.

 Some banks intimate the applicants, as per the prevailing banking regulations, when there is a withdrawal by the banker with proper justification. The withdraw function is enhanced to capture reason codes and mandate the reject letter documentation based on the reason codes.

16.4 Conditions

Conditions are related to the terms and conditions that the borrower needs to satisfy before the loan is disbursed or on a regular basis post the loan is disbursed. These conditions are the stipulations mentioned by the banker as part of the offer letter dispatched to the borrower and form part of the legal documentation for the loan approved to the borrower by the bank.

Conditions can be processed either as an outcome from credit decision engine (tagged within Oracle Banking with condition mode as External) or as the outcome of execution of conditions policy (tagged within Oracle Banking with condition mode as Derived) defined within Oracle Banking Limits and Collateral Management or manually captured (tagged within Oracle Banking with condition mode as Manual) within the Review of Credit Assessment task (also known as Manual Credit Decision task). The system also provides the functionality of waiver (for external or internal mode of conditions) of conditions within the same task.

The following are the features of Conditions:

- Manual capture of conditions as part of Application Form
- Capture of conditions in Verification, Valuation and Structure Solution tasks
- Waiver of conditions in Structure Solution
- Condition capture in Application Form: The system provides an optional action in the Application Form titled Condition Details which will provide the user a mechanism to capture conditions as part of the application form capture itself. Based on the facilities being applied the banker can decide to attach conditions at different levels (facility or borrower or collateral or cosigner) associated with the product groups applied for in the submission. All new conditions manually captured or set via internal rule or received from external source will be set with the condition status as Proposed New.
- Verification: The verification task (created at application level) also provides a mechanism to manually
 capture conditions (and link to either the facility or borrower or collateral within the application). The
 system will not allow more than one instance of Borrowing Entity+ Entity ID (either facility or borrower
 or collateral identifier) + Condition ID to be created. The system will display existing active conditions
 within this stage with the View action enabled.
- Valuation: The valuation task (created at collateral level) also provides a mechanism to manually
 capture conditions (and link to either the facility or borrower or collateral within the application). The
 rules around capture and display of existing conditions are similar to the Verification task.
- Structure Solution: The Structure Solution task (created at a product group level) provides a mechanism to manually capture conditions (and link to either the facility or borrower or collateral within the application) as well as waiver of External or Derived conditions. The system also provides a mechanism for maker checker approvals in case of waiver of conditions being performed in the structure solution stage of the origination workflow. This will be in addition to the approval for negotiation of margins and fees within this task. The rules around capture and display of existing conditions are similar to the Verification task.

16.5 Policy Deviation

The number of bank policies which guides the banker to perform the relevant activities is large. All of them cannot be monitored automatically by the system as and when the user deviates from the same. For this

reason, there should be a provision to capture these kinds of deviations manually by the user who is deviating from the policy and seek approval from the relevant higher authorities.

The Policy Deviations capture is only applicable for Asset and Credit Card kind of products.

The following are the functions pertaining to the Policy Deviations capture:

- A link called as Policy Deviations is provided to enable the user to capture the bank policy deviations encountered in the process manually. This option enables the user to capture those bank policies which are not maintained in Oracle Banking.
- The library of Policy Deviation Codes is maintained as part of Common services.
- This option of Capture Policy Deviations is available in all the stages of Origination.
- There is a link called View Policy Deviation History for each combination where in the user can view all the existing policy deviations for the applicants to the Product group.
- There is an approval task flow for the approval of the deviations.
- For the Policy deviations captured as part of Capture Application will need to be done as part of Manual Credit Assessment.
- Provision to capture Policy deviation for cosigner is available.
- Provision to capture Standard and Sub Standard reason against each policy deviation added by the initiator.
- Once the policy deviation is declined by the approver, the banker will comply with the policy deviation by selecting the Policy Recommendation is Met check box.
- Based on the DCA rules, the Policy Deviation task can be sent to approval. The changes in the approval task are as follows:
 - Approvers can selectively approve or decline policy deviations.
 - Approvers can capture primary reason, secondary reason, and comments for the policy deviations that are approved.
 - Approvers can capture comments for the policy deviations that are declined.
 - Approvers can approve the policy deviation task only if all the policy deviations are approved, else system will enforce the user to decline the policy deviation task.
- If Policy Deviation task is declined, then a repair task is created for the initiator to either comply or make appropriate changes to the deviation and resend to the approver.

16.6 Capitalization of Fees and Interest

Capitalization (that is, loan funded) means that the fees or insurance components are added to the loan account applied by the customer. The capitalization of origination and servicing fees as well as LMI and CCI components is supported.

- Capitalize Fees and Capitalize LMI options captured in Application Form:
 - **Capitalize Fees:** Option provided within the Product step of the Application Form to capitalize origination fees (which will be added to the requested amount over and above the base requested amount captured within the same step). Selecting this option makes Configure step mandatory in pre-assessment stage.

- **Capitalize LMI:** Indicates that the LMI also needs to be capitalized along with the base requested amount captured in the Product step of the Application Form.
- CCI is deemed capitalized when the premium payment option for CCI is Bank Funded and the periodicity of premium is One Time or Periodic in the account configuration of Structure Solution.
- Structure Solution:
 - This step is mandatory in pre-assessment stage to get complete account configuration to identify, if any servicing fees are also to be capitalized as part of the New flows for lending product groups. Nomination of an account within the facility is mandatory to which the capitalized components are added to the sanctioned amount of the loan account.
 - The base amount on which LMI quote is made includes the capitalized origination and servicing fees. Any change in these components re-triggers LMI quote.
 - In case of structure solution post assessment, the system will also allow the user to modify the capitalized components captured in origination like origination fees and any changes done to the same, if breaching the credit cushion (parameters configured at credit policy and linked to product group) will force the user to perform Edit Submission.
- Mortgage Insurance task: Mechanism to check if the policy amount differs from the premium quote amount and mechanism to force the user to go back to Structure Solution to refresh the nominated account.
- Consumer Credit Insurance task: This is a human task (similar to Mortgage Insurance) at application level for CCI policy creation. Mechanism to handle reject of CCI policy and CCI premium amount being different from capitalized CCI quote amount done as part of this task.
- Create Offer: For features of Offer Letter template, see Chapter 12 Create Offer and Execute Documents.
- Settlement Instruction: Display of capitalization components within the Capitalization details panel in Settlement Instruction task. Passing of the capitalized and uncapitalized components to the servicing module for handling during disbursement (in case of loans) or debit (in case of OD) from accounting perspective and also processing of the settlement instruction itself.

16.7 Workflow Concepts

Following are the important features:

- Oracle Banking Enterprise Originations uses the BPEL workflow for process orchestration. The business rules decide task routing.
- Tasks can be human tasks (user needs to claim it and action on it) or it can be an automated task (system performs it).
- The access of users to tasks is controlled through roles to which the task access is allocated through Security Management System. The user can belong to a role, based on the configuration with the Oracle Security Stack related integration within the overall Oracle Banking solution.
- The BPM work list component is used for the tasks driven through Oracle Banking Enterprise Originations. BPM features like Claim (to start work on a particular task) or Release (through which the user can return the task to his or her role work list) are integrated within Oracle Banking Enterprise Originations. Over and above this, Oracle Banking Enterprise Originations provides specific actions for

each logical task and the user can move back and forth in the origination workflow in the context of a particular submission.

- SLA rules configuration is enabled in SOA composer, so that while creating the relevant Origination task, the system can compute the Due Date.
- Task Priority rules configuration is enabled in SOA composer, so that while creating the relevant Origination task, the system can compute the priority of the task.
- Task Ownership rules configuration is enabled in SOA composer, so that while creating the relevant Origination task, the system could identify the owner of the task.
- The warning indicator check (for preventing account opening) extends to all the Origination human task processes.
- Ability to view all the parties in the submission in all the origination human tasks from application header section.
- Facility to support banker to banker communication using Work Activity functionality from BPM work list.
- Ability to display the current submission status in BPM through Flex fields enhancement.
- Ability to save the work activity as draft. Ability to amend already saved work activity and submit it for the further actions. Only one draft work activity is allowed in one task.

16.8 Work Activity

Oracle Banking Enterprise Originations provides the option of creating, responding, and viewing the work activity through which bankers can raise queries and receive responses. Following are its features:

- The work activity can be created from any in-progress BPM human task or from the Application Tracker.
- The banker can use the assignee fields and the send response fields to route the query or the response to a user or user group, when creating a work activity query.
- The work activity capability is also extended to brokers. Bankers and brokers can create or assign work activities to each other.

16.9 Notes Capture

Oracle Banking Enterprise Originations provides the option of capturing notes during application capture, which can be viewed at later stages. Following are its features:

- Ability to capture of notes as part of the Application Form.
- Ability to view notes captured in Application Form in subsequent stage of the origination workflow.
- Ability to delete or respond to existing notes.
- Ability to capture email IDs as part of notes and response as an optional field to send notifications.
- Ability to logically display notes based on the appropriate stage in the origination workflow (work list tasks) and mechanism to view the same from Application Tracker.

16.10 Aggregator Support

Aggregator is the kind of entity which collates applications from a set of brokers and interacts with the lending institutions and acts as an agent between the banks and the lowest level brokers. Typically, the mechanism of interaction for such aggregators could be an industry or regional standards which are followed by banks. For example, LIXI (Lending Industry XML Initiative) standards are followed within Australia for interactions done by aggregators with a bank for lending applications.

The following capabilities are built within Oracle Banking Enterprise Originations to support aggregator origination:

- Introduction of a new stage to record credit decision status that is, Preliminary.
- Enhancements in credit decision history inquiry to display the credit decision outcome for preliminary credit assessment.
- Introduction of new values for submission status to depict preliminary credit decision outcome:
 - Preliminary Assessment Failed
 - Preliminary Decision Approved
 - Preliminary Decision Conditionally Approved
 - Preliminary Decision Declined
 - Preliminary Decision Referred
- Storage of preliminary credit assessment result and mechanism to update submission status.
- Mechanism to create human task for data enrichment for submission.
- Display of he submission status in case of preliminary assessment in the Application Tracker.

16.11 Existing Customer Check Task

When application is received from broker through an industry standard message format, it also contains party information. Such parties received from broker can be either new to the bank or existing parties of the bank. Before starting the application processing, a check is performed to find out whether a party is new or existing using the Existing Customer Check task. It supports the following features:

- Ability to perform the party deduplication checks to identify whether the applicant is new or existing.
- Ability to view the details received for the applicant from the industry standard message format.
- Ability to compare the existing OCH and Oracle Banking party data with the received party data and display the mismatch information.
- Ability to display the list of all probable matches and to select one of the record to link the party to an existing party.
- Ability to identify the party as new and create a submission with new party in enrichment task for such cases.
- Ability to refresh the party deduplication list, that is view the latest potential matches every time the banker access the task or refreshes the matches.
- Ability to view the uploaded documents of the applicant's in the Documents section of Panel Drawer. It
 is mandatory to receive at least one document of the applicant in order to proceed with account opening
 process. The Enrichment Task for that submission is suspended if documents are not uploaded and
 received.

16.12 Enrichment Task

The customer and application related data received through an industry standard message format, may not be sufficient to process the application in Oracle Banking Enterprise Originations. The Enrichment task is created to enrich the application details for its successful processing.

- Ability to create a manual task to enable user to enter the required mandatory data for successful submission.
- Ability to perform the collateral deduplication checks. If existing collateral is selected, system
 overwrites the collateral details received through the industry standard message format with the
 existing details available for selected collateral.
- Ability to check whether the broker is inactive. If broker is inactive, user has to either change the status
 of broker to active or cancel the submission.
- Ability to create facts for broker-sourced applications. These facts can be used in routing logic.
- Ability to add new product such as Saving Account or Credit Card.
- Ability to add new collateral or link existing collateral.
- Ability to update collateral deduplication indicator in Oracle Banking Channels Application when collateral deduplication is performed in the Enrichment task.
- Ability to retain the financial data as received from broker.
- Ability to configure questionnaire specific to broker.
- Ability to show the comparison of some fields when a broker sourced In-Principle Approval (IPA) submission is converted in a full submission.
- Ability to change the task priority for the broker sourced application in the Application Header section.
- Ability to record the outbound document delivery preferences for broker sourced application in the Application Header section, to deliver the customer's offer documents to broker.
- Ability to run the Financial and Objective Information Validity rule on the applicant's financial details to check the expiry of the submitted regulatory lending details on the submission of the broker sourced application. The broker should collect regulatory documents from customer again, if the regulatory lending expiry date is less than the submission date of an application.
- Ability to view the customer's documents that are uploaded through broker to identify whether the customer is new or existing.
- Ability to show the changes made in submission when received as resubmission request in the View Change Log section. The section shows the comparison of old values and new values in the submission. Ability to select the values that proceeds in further account opening process.
- Ability to accept the In-Principle Approval (IPA) conversion request at any stage and start new process
 of account opening as full submission.

Note

For more information on the broker-related features offered by Oracle Banking Channels Application, see its functional overview document.

16.13 Data Privacy and Security

Oracle Banking Enterprise Originations supports the following features for data privacy and security:

- Ability to mask Personally Identifiable Information (PII) of customers of the individual party type for all party roles, in the user interface. The masking is done for PII collected across the Origination module based on configuration maintained in the Common Services module.
- Ability to tokenize PII data elements of customers of the individual party type for all party roles, in the database. The tokenizing is done for PII collected across the Origination module based on configuration maintained in the Common Services module.
- Ability to mask or show as plain text, data of customers of the individual party type for all party roles, across the Origination module, based on the banker role configuration maintained in the Common Services module.

17 Monitoring and Tracking

Oracle Banking Enterprise Originations provides different mechanisms to monitor and track application status and progress. Each of the ones described below has a different purpose and objective.

17.1 Application Tracker

Application Tracker option provides a number of features, which enable the bank to track the application status. It provides a lot of information to the banker and enables the banker to take required actions.

Submission Summary page

- Retrieval of incomplete submission and mechanism to update and submit the submission. This is applicable for all application types - new, amend, review or renew and In Principle Approval.
- Ability to view details of the applicants and affiliates for a submission.
- Ability to view the collateral details such collateral ID and description of all the collaterals associated with the broker sourced submission. This details appears till the submission is submitted in the Enrichment Task page.

Basic and Advanced Search panel

- Mechanism to search applications or submission based on a number of basic or advanced search criteria.
- Additional search criteria to search for business or retail submission alone.
- Ability to view aggregator sourced submissions.
- Ability to view the account variation submissions.
- Ability to save the advanced search criteria at user level and retrieve the same on next login.
- Ability to search for applications across edit submissions using the application ID prefix.
- Ability to display or hide the arrangement ID in the basic search based on configuration.

Application Stage Details

- Ability to display notifications in Application Tracker details page and Next Steps actions in search result panel and Application Tracker details page.
- Ability to view all the stages of the application and stage related details (detail level varies from stage to stage) along with the stage completion status.
- Ability to view the task details such as task name, claim status, claimed or assigned by, start and end date of task for each stage.
- Banker role based access is applicable in Credit Decision, Verification, Offer Letter, Settlement stages and Due Diligence panel drawer, and Edit or Withdraw Submission links. The supported modes are: no access, read only, upload only, booking only, and all accesses.
- The Task Status section under all the stage details shows the task history details.

- Instead of BPM Human task, Application Tracker allows the banker to perform actions of verification, valuation, accept offer, accept downsell and withdraw submission directly based on SOA composer setup.
- Ability to view the status of all the relevant tasks pertaining to an application in the Application Tracker.
- All the stages and task status section display the Task SLA details and highlight when the SLA is breached for all the in-progress tasks.
- The Timeline widget displays the approval confirmation flow and change log details. This widget also displays external settlement system related details such as land title check, subscriber check and workspace details.

Application Details

- Ability to display the application level details such as product group, applicants, term, requested amount, offer, and account details.
- Ability to withdraw a deposit application (including investment) and insurance applications.
- Ability to display and hide the arrangement ID linked to the account configuration in Application widget based on configuration.
- Ability to view the status of all applicants from the parent application, in the scenario where the joint applicant is not present during application form submission.
- Ability to view all the collateral ID and description.

Submission Details

- Ability to display the Edit Submission history details (including task history) and credit decision details (including fraud check details) in Submission Details section.
- Mechanism to view or generate Application Form and Capture Application level documents, if not generated already, for an application.
- Facility to auto save the details when user clicks the Push to Worklist option from Withdraw Submission page (if initiated from Application Tracker in STP case) and create the human task with the saved data.
- Ability to trigger IPA conversion to full application (if within validity date).
- Ability to send adhoc notice to customer and receive response for the same.
- Ability to retain all the application and product group level notes captured before edit submission and display them in Application Tracker Submission Notes page post edit submission.
- Role based access control (no access, read only, conditional, and all access) has been introduced to edit or withdraw submission and withdraw application actions from Application Tracker.

Application Tracker Panel Drawer

- Collect origination fees marked as deferred, prior to settlement instruction or account opening.
- Mechanism to view and upload documents provided by applicants and guarantors related to a submission.
- Capture solicitor details and link them to collaterals requiring settlement.

- Notes functionality: Integration with the revised comments functionality to display comments captured at each logical step in the origination workflow including the data entry stage. Also, mechanism to add or reply to existing comments for a particular application.
- Ability to view and edit the details of the person who is going to manage the submission.
- Ability to provide an effective way of managing banker to banker communications or task management.
- Ability to provide work activity response from Application Tracker or BPM human task based on configuration.
- Ability to record the outbound document delivery preferences for broker sourced application in the Application Header section, to deliver the customer's offer documents to broker.

Create Application Stage Details

- View Submission: Application Form like inquiry of the complete submission to display state of the data captured in the application form when it was submitted into the system.
- Cancel Application functionality within Application Tracker is similar to the functionality available in Application Form to mark a submission as Cancelled.

Financial Analysis Stage details

- Ability to view the Financial Analysis task details from the Financial Analysis stage in the Application Tracker.
- Ability to complete financial analysis from the Application Tracker. Based on configuration, financial analysis can either be completed from the Financial Analysis stage in the Application Tracker, or the Financial Analysis task created by the system.

Credit Decision Stage Details

- Mechanism to push a submission for manual credit review in case of failure from automatic credit assessment.
- Ability to trigger manual credit assessment in case of Reject Offer being dispatched within the respective grace period.
- Ability to complete manual credit decision from the Application Tracker. Based on configuration, the
 process can either be completed from the Credit Decision stage in the Application Tracker, or the
 Manual Credit Decision task created by the system.

Verification Stage Details

- Support multiple upload of documents linked to verification types associated with an application.
- The Inbound Document checklist in the Verification panel is enabled irrespective of auto credit decision status.
- Ability to wake up the suspended verification tasks from Application Tracker.
- Capability to perform verification from Application Tracker itself based on verification category level configuration.
- Display of verification comments through the Application Tracker.

Valuation and Title Search Stage Details

- Display of Valuation (including View or Edit collateral details), Title Search and Mortgage Insurance task details.
- The valuation report dispute functionality is enabled from the Application Tracker (Fast Path: OR100) to the Accept Offer task completion, and post that it is disabled.
- The second title search request is initiated from the Application Tracker (Fast Path: OR100).

Structure Solution Stage Details

- The capture of rate lock agreement details, generation, dispatch, upload and acceptance of those documents can be performed in Structure Solution task. The Application Tracker Structure Solution stage also displays the details and allows the user to capture the rate lock agreement details, generation, dispatch, upload and acceptance of those documents based on configuration.
- If setup in SOA composer is defined in such a way that task for structure solution is not to be created, the system allows the user to complete the Structure Solution task from Application Tracker. The banker has an option for Push to worklist in case the back-end task for Structure Solution is required.

Quick Refinance Stage Details

• The Quick Refinance stage in Application Tracker is applicable for loan applications only.

Offer Letter Stage Details

- Ability to provide inbound documentation capability as part of Offer Letter stage.
- Capability to perform document upload (inbound and outbound documents), extend expiry or reject offer from Accept offer page in offer letter stage.
- Capability to wake up the accept offer task (if suspended) from Application Tracker on upload of all the mandatory documents or by manually clicking the wake up button.
- Ability to generate and dispatch Create Offer documents, Decline Letter or IPA term sheet documents from Application Tracker based on configuration.
- Ability to upload accepted offer documents in the Offer Documents panel with Application Tracker.
- Ability to view intermediate application states for offer acceptance process to track whether all the documents are received from customer or any document is outstanding from customer due to banker rejection.

Settlement Stage Details

- The settlement details are shown as a new stage between offer letter and fulfillment stage (account opening documents).
- Banker can book settlement, modify or cancel booking, upload payout instruction documents, and mark the settlement as completed or revoke the same from settlement. Settlement is always be in Non STP mode.
- Ability to display progressive disbursement details section as read only.

Fulfillment Stage Details

- Mechanism to view or generate account level documents, if not generated already, for an application.
- The submission is marked as completed only post account opening documents generation and dispatch is completed successfully else it continues to be submission in progress.

 Ability to automatically suspend the state tasks of the submission that is marked for edit or withdraw. Ability to display only active task assigned to the logged in user.

Collateral Perfection Stage Details

Banker can upload documents (both inbound and outbound documents) in collateral perfection stage.
 On upload of any document or manual clicking of wake up button from Application Tracker, the system automatically resumes the collateral perfection human task (if suspended).

Create Term Sheet Stage Details

Ability to extend term sheet validity from Application Tracker - Create Term Sheet stage.

Insurance Application Related Details

- Ability to track and monitor insurance applications from Application Tracker.
- Ability to launch the Insurance task from the insurance application details page. The task has the basic details of quote and also all steps for post quote.

Services

Through backend services, the following capabilities are supported:

- For a given party ID, ability to check for any active submission exists or not and inform the same with submission details.
- For a given party ID, ability to delete all the Personally Identifiable Information (PII) data elements from Origination and mark the submissions related to the party as Unsearchable.

17.2 Monitoring Dashboards

Oracle Banking Enterprise Originations provides Monitoring Dashboard using BAM Dashboards. The purpose of these Dashboards is to provide detailed and relevant information to the end stakeholder.

The primary objective of building analytics, for any enterprise workflow like Origination, is to build widgets or dashboards to help the key stakeholders add insight into their business. At a broad level, analytics requirements are categorized as real-time or historical.

Real-time analytics is about monitoring the activities happening today or state of some object as of today and everything else is categorized as historical. As an example of real-time data requirements, application pipeline gives the statistics about how many applications are pending in various origination process stages like credit assessment, verification and so on. Also workload information gives idea about number of tasks assigned to each user. However on the other hand, historical data requirements is all about volumes of objects, trends and performance over a period of time.

All the BPM processes and human workflows in origination life cycle are instrumented, to extract various business indicators. All the business indicators captured, as part of instrumentation process, are sent to analytics system.

Attributes such as initial submission date, count of instances of edit submission and current status submission are also sent from Oracle Banking to BAM as part of application metrics data object.

18 Interface with Oracle Sales Cloud

This chapter describes the key features related with productized interface of Oracle Banking Enterprise Originations with Oracle Sales Cloud (OSC).

18.1 Key Features

Sales and Origination productized integration is supported between Oracle Banking Enterprise Originations, Supplier Customer Hub, Supplier Sales Cloud and Supplier Siebel CRM. The high-level description of the scope is as follows:

- Synchronize Sales Catalogue
- Customer Synchronization with Customer Master
- Opportunity to application submission process flow and UI integration
- UI mash up is supported for the following Oracle Banking Enterprise Originations UI in Supplier CRM using URL embedding:
 - Customer Onboarding and Verify Customer (Know Your Customer): Banker from OSC page can onboard the customer in Oracle Banking Party.
 - Application Capture (Initiate New Application): Banker from OSC page can initiate a new application in Oracle Banking Enterprise Originations.
 - Application Tracker: Banker from OSC page can track applications.
 - Statement Inquiry: Banker from OSC page can view transactions for financial accounts (for example, Loan or CASA account).
- Single Sign-on
- Reference Data Synchronization

19 SME Lending

This chapter explains the products offered for Small and Medium Enterprises (SME) Lending as part of Oracle Banking Enterprise Originations.

19.1 Government Guaranteed Loan and Line of Credit

In Government Guaranteed Loan or LOC, a percentage of loan amount is guaranteed by the government agency to the lender so that if the borrower fails to make the payment to the loan, the agency reimburses the lender to the extent of percentage guaranteed. This reduces the risk of loss to the lender and they can sanction more of SME loan. This is done by the government to promote entrepreneurship, which indirectly creates more of employment.

Government agency does not directly lend funds to the borrower but only guarantees the loan. The borrower has to follow normal process of applying for the loan to the lender.

Oracle Banking Enterprise Originations supports application processing of business loan and line of credit, with exception to some Government Guaranteed Loan or LOC specific requirements as detailed below as assumptions:

Assumptions:

- The party to the application must always be an existing party. No new party can be onboarded through the application form.
- The party to the application must be an Organization or Trust. Individual parties cannot apply for government guaranteed loan or line of credit.
- Only new application can be processed. Amendment of applications is not supported.
- Any change in party details must be done through the Single Party View (Fast Path: PI100) page.

The relevant steps that are applicable for government guaranteed loans are depicted in the following diagram.



Figure 19–1 Government Guaranteed Loans Origination Flow

In addition to the existing functionality of originating accounts through the application form, the features supported for government guaranteed loans are mentioned in detail below.

19.1.1 Capture Application

The government guaranteed loan specific features supported in the steps of the application form are mentioned below. The other steps and processes remain the same for government guaranteed loan.

19.1.1.1 Step 1 Product

The summary of product details is as follows:

- Ability to check the eligibility of the party (organization or trust) for government guaranteed loan.
- Ability to allow selection of government agency guaranteeing the loan to get the loan processed either as a government guaranteed loan or none, if the loan application is to be processed as normal loan.
- Ability to auto create owners as Guarantors whose ownership share is in excess of certain percentage (For example, owners holding 20% or above individually or when added with their spouse would be guarantor to the application processed as government guaranteed application. The percentage at which guarantor would be created is configurable.

19.1.1.2 Step 2 Party

Government guaranteed loan or line of credit can be processed only for existing party and any change in party details should be done through the Single Party View (Fast Path: PI100) page, and not as part of the Capture Application process.

The summary of party details is as follows:

 Ability to validate that the ownership details are captured in full, that is the sum of ownership share should be 100%.

19.1.1.3 Step 3 Bundles

Since bundle is not applicable for government guaranteed loan, this step should be skipped.

19.1.1.4 Step 4 Collaterals

The summary of collateral details is as follows:

- Ability to link existing collateral for government guaranteed loan or line of credit as per the existing functionality.
- Ability to automatically create a Personal Guarantee collateral of Unlimited type for the guarantor added as part of the Product step.
- Ability to automatically create a Bank and Government Guarantee collateral to capture the government agency guaranteeing the loan. The value of the collateral will be the guarantee percentage approved by the government agency.

19.1.1.5 Step 6 Review

The summary of review details is as follows:

- Ability to displays a message stating that the applicant is eligible for Government Guaranteed Loan, in cases where the applicant was eligible for Government Guaranteed Loan but opted to process the application as normal term loan or line of credit.
- Ability to resolve the specific documents as required for government guaranteed loan and mandatory
 printing of the documents before submitting the application.

19.1.2 Credit Assessment

The existing features of Credit Assessment are applicable for government guaranteed loan and line of credit. Based on the internal credit assessment:

- If the application is approved, the Government Guarantee Interface Task is created.
- If the application is approved with down sell, the Downsell task is created and on acceptance, Government Guarantee Interface Task is created.
- If the application is referred for manual credit decision, the Government Guarantee Interface Task is created on manual approval.
- If the application is rejected, the Decline Offer task is created and rejection letter is issued.

19.1.3 Government Guarantor Interface Task

The Government Guarantor Interface Task is created post approval of Credit Assessment.

- Post internal approval, most of the government guaranteed loans need to be appraised and approved by the agency guaranteeing the loan. This task also has the ability to trigger interface to the government agency appraisal system for approval.
- Currently, Verification, Valuation and Structure Solution tasks are created post approval of credit assessment. For government guaranteed loan applications, these task are created post approval by the government agency guaranteeing the loan.
- In case of failure of initial interface call, the ability to re-trigger the task is provided.

19.2 Business Line Of Credit (LOC)

With a business line of credit, the lender approves a pool of funds which is the credit line. The customer can draw from this line whenever need. Interest is usually paid only for the money drawn by the customer. Line of

credit can be secured or unsecured and are usually revolving in nature. Business LOCs are ideal to meet the short- term operating costs of small businesses.

To be eligible for Business LOC, the business should meet the following primary eligibility criteria

- It must be an established business that is at least two years old and has a positive track record of growing revenues and profit.
- The owners of the business are permanent residents and are of age 18 years and above.

Oracle Banking Enterprise Originations supports origination of Business LOC. The relevant steps that are applicable for Business LOC are depicted following diagram.



Figure 19–2 Business LOC Origination Flow

In addition to the existing functionality of originating accounts through the application form, the features supported for Business LOC are mentioned in detail below.

19.2.1 Capture Application

The Business LOC specific features supported in the steps of the application form are mentioned below. The other steps and processes remain the same for Business LOC.

19.2.1.1 Step 1 Product

The summary of product details is as follows:

- Ability to capture Business Needs as a purpose to business line of credit.
- Ability to auto create personal guarantee under business line of credit wherein a single owner of the
 organization has a stake above a certain threshold, or if added up with spouse, crosses the threshold.
 For example, if threshold is maintained as 25% or above, during application form capture, this
 parameter is validated and if the owner individually or with spouse crosses this threshold, a personal
 guarantee is auto created.

19.2.1.2 Step 2 Collaterals

This step is enabled for lending product groups in cases where the Secured and Collateral Required parameter is set in credit policy (which is linked to product group and business unit combination) and marked as Mandatory or Optional. The summary of collateral details is as follows:

 For secured business line of credit, bank can set up the allowed collateral types through Enterprise Product Manufacturing module.

19.2.1.3 Step 3 Configure

This step is applicable for liability (mandatory step) and lending product groups (mandatory or optional can be configured in origination preferences). The summary of configure details is as follows:

- Ability to interact with Oracle Banking Relationship Pricing to determine and display applicable interest rates, margins and fees.
- Ability to negotiate margins and fees, based on configuration within Oracle Banking Relationship Pricing.
- Ability to view and modify the lending questionnaire.
- Ability to select a billing schedule that supports seasonal repayment under business line of credit.

19.2.2 Retail vs. Business Banking Applications

Oracle Banking Enterprise Originations supports retail and business banking origination applications. To derive the respective path of retail and business, bank can define rules in origination preferences. Difference in flow is required as business banking origination requires complex and detailed analysis whereas retail origination does not require it. The following can be used to determine if a retail or business banking flow is required.

- Facts can be used to determine the flow. For example, Product Group, Purpose Type, Party Type, Constitution, Amount.
- Rules can be used to determine the flow. For example, for a Line Of Credit product type, a rule can set as follows:

Product Type	Party Type	Submission Classification Type	
Line Of Credit	Organization	Business	
Line Of Credit	Trust	Business	
Line Of Credit	Individual	Retail	

Table 19–1 Sample rule for determining Retail or Business banking work flow

 Applicant eligibility rules can be set for allowed combinations of Party Types. For example, a rule can be set as follows:

Individual	Organization	Trust	Outcome
Yes	No	No	Allowed
No	Yes	No	Allowed
No	No	Yes	Allowed
Yes	Yes	Yes	Disallowed
Yes	No	Yes	Disallowed
Yes	Yes	No	Disallowed
No	Yes	Yes	Disallowed

Table 19–2 Sample rule for applicant eligibility

19.2.3 Structure Solution

Oracle Banking Enterprise Originations provides the ability to select a billing schedule that supports seasonal repayment under business line of credit.

19.3 Equipment Finance Lease

Leasing as financial service is a contractual agreement where a party being the owner (lessor) of an asset (leased asset) provides the asset for use by the lessee at a consideration (rentals), either fixed or dependent on any variables, for a certain period (lease period), either fixed or flexible, with an understanding that at the end of such period, the asset, subject to the embedded options of the lease, will be either returned to the lessor or disposed of as per the lessor's instructions.

Note

- This functionality is supported for headless (External UI) implementation using APIs.
- Equipment Finance Lease account will not be opened in Oracle Banking Enterprise Originations. The required data for account opening will be passed to the product processor and account will be opened in third party system.

Oracle Banking Enterprise Originations supports the following features for Equipment Finance Lease.

19.3.1 Day 0 Setup

Following are the key enhancements in day 0 setup:

- Ability to define product group for Equipment Finance Lease product type under Loan class.
- Ability to define offer as Sale Type Lease or Direct Finance Lease.
- Ability to capture the Fixed Interest Rate at offer level which is used to calculate the lease rent, in cases where lease rental amount is not decided upfront between customer and bank.

19.3.2 Lease Details

Following are the key enhancements in lease details:

- Ability to initiate application form for Equipment Finance Lease for existing customers of Organization party type.
- Ability to capture the basic details of the lease such as purpose, equipment details, lease amount and term, buyout details for Sale Type Lease and salvage value details for Direct Finance Lease, repayment option, security deposit and initial direct cost amount, if incurred.
- Ability to capture lease rental or calculate lease rental, if not decided upfront.
- Ability to execute offer eligibility rule and recommend suitable offers and select only one offer. Multiple
 offer cannot be selected.
- Ability to add the owners as guarantor automatically based on ownership share.

19.3.3 Applicants

Following is the key enhancement in applicants:

• Ability to display basic details of the applicants and guarantor and capture their consents.

19.3.4 Collateral

Following are the key enhancements in collateral:

- Ability to create the following collateral automatically :
 - Personal Guarantee collateral for guarantor added automatically based on ownership share.
 - Equipment Lease Agreement equivalent to the Equipment Price.
- Ability to create Personal Guarantee collateral automatically, if guarantor is present in the submission.
- Ability to display existing collateral of the applicant and guarantor, and link it to the application.

19.3.5 Account Configuration

- Ability to configure the account automatically and display basic lease account details.
- Ability to calculate and display Implicit Rate of Return.
- Ability to draw and display lease repayment schedule.

19.3.6 Fee and Settlement Details

Following are the key enhancements in account configuration:

- Ability to capture settlement details for Equipment Price and Initial Direct Cost, if any.
- Ability to display the origination fee and capture the applicant's account for fee collection.

19.3.7 Documents

Following is the key enhancement in documents:

 Ability to upload collateral inbound documents such as Proforma Invoice, Valuation report, and Salvage report.
19.3.8 Summary

Following are the key enhancements in summary:

- Ability to display the summary of the application details including lease, applicants and guarantors, collateral, account details at any point of time.
- Ability to display fees, settlement and deposit amount in the summary along with lease details.
- Ability to submit the application and get the decision for the application.
- Ability to download and print Equipment Lease Application.

19.3.9 Key Indicators

Following are the key enhancements in key indicators:

- Ability to display key indicators, credit worthiness and serviceability.
- Ability to display the applicant risk score and application risk score.

19.3.10 Other Capabilities

Following are the other key enhancements:

- Ability to save the application form and resume it later.
- Ability to cancel the submission.
- Ability to capture notes.
- Ability to capture policy deviations for party, collateral and facility.
- Ability to navigate across steps within the application form and capture relevant information that is available with the banker.

19.4 Business Credit Card

A business credit card is a credit card intended for use by a business. Usually, business credit cards are available to businesses of all sizes. They help to build a credit profile to improve future credit borrowing terms. They can also provide a much-needed financial cushion when the business is short in cash.

Note

- This functionality is supported for headless (External UI) implementation using APIs.
- Business Credit Card will not be opened in Oracle Banking Enterprise Originations. The required data for card issuance will be passed to the product processor and card account will be opened in third party system.
- Oracle Banking Enterprise Originations currently supports origination of retail credit cards only.

Oracle Banking Enterprise Originations supports the following features for Business Credit Cards.

19.4.1 Day 0 Setup

Following are the key enhancements in day 0 setup:

- Ability to define product group for Business Credit Cards product type under Business Credit Card class
- Ability to define unauthorized usage liability details, if applicable.
- Ability to configure Term Deposit and Personal Guarantee collateral, if applicable.
- Ability to link questionnaire to Business Credit Card product type.

19.4.2 Credit Card Details

Following are the key enhancements in Credit Card details:

- Ability to initiate Individual Liability Credit Card by selecting Individual type of applicants.
- Ability to capture and view financials for Individual party.
- Ability to initiate Corporate Liability Credit Card by selecting Organization or Trust type of applicants.
- Joint applicants are not allowed for Business Credit Card applications.
- Ability to add guarantor in application, if applicable.
- Ability to capture card type and credit limit details.
- Ability to resolve offers based on the party type and questionnaire responses.
- Ability to capture cardholder details. If the applicant is of Individual type of customer, then applicant is treated as Card Holder. If the applicant is not of Individual type, then the ability to capture the cardholder details is provided.
- Ability to capture unauthorized usage details, if maintained as part of day 0 setup.

19.4.3 Applicants

Following is the key enhancement in applicants:

Ability to display basic details of the applicants and guarantor, and capture their consents.

19.4.4 Collateral

Following are the key enhancements in collateral:

- Ability to create the Personal Guarantee collateral automatically :
 - Personal Guarantee collateral for guarantor added automatically based on ownership percentage, which is unlimited guarantee in nature
 - Personal Guarantee is automatically created if a guarantor is added in the application.
- Ability to display existing Term Deposit and Personal Guarantee collateral of the applicant, and link them to the application.

19.4.5 Documents

Following is the key enhancement in documents:

• Ability to upload inbound documents such as Board Resolution documents.

19.4.6 Summary

Following is the key enhancement in summary:

 Ability to display the summary of the application details including applicants, guarantors, and collateral details at any point of time.

19.4.7 Key Indicators

Following are the key enhancements in key indicators:

- Ability to display key indicators, credit worthiness and serviceability.
- Ability to display the applicant risk score.

19.4.8 Other Capabilities

Following are the other key enhancements:

- Ability to save the application form and resume it later.
- Ability to cancel the submission.
- Ability to navigate across steps within the application form and capture relevant information that is available with the banker.

20 Core Components

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





20.1 Core Functionality

The Oracle Banking Enterprise Originations 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 Enterprise Originations.
- 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 maintains attributes of various currencies which can be used for various purposes by different products under Oracle Banking Enterprise Originations.

- 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 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 such as 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.

20.2 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
- Settlement Services
- Address Taskflow
- Verification Framework
- Questionnaire Framework

20.2.1 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.
- Business Group (Fast Path: CS02): This page helps the user to define a group various product groups based on their line of business. This helps the bank accredit a broker or introducer to handle the offers that are part of a business group.
- 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.
- Other Financial Institution Details (Fast Path: CS07): This page helps the user to configure the name, registration or business number and address details of different departments of other financial institutions or banks.
- 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.
- Bank Policy Deviation Definition (Fast Path: CS39): This page helps the user to configure specific deviations that the bank may want to apply during a business process.
- Bank Policy Deviation History (Fast Path: CS40): This page helps the user to view all the policy deviations applied during a specific business process.
- 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.
- Risk Codes (Fast Path: CS42): This page helps the user to configure various risk codes that can be associated with credit applications during credit assessment.
- Risk Category (Fast Path: CS41): This page helps the user to group risk codes under a meaningful category.
- Mitigants (Fast Path: CS43): This page helps the user to configure user to configure various mitigant codes that can be used to mitigate the risks associated with a credit application.
- 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
- Other Financial Institution contacts

20.2.2 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

20.2.3 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

20.2.4 Settlement Services

This module provide services to settle the money involved in a transaction. It provides the mechanism to define and maintain various modes of settlement in both settlement directions (Pay and Receive) that aligns with both payment models. It also provides the ability to capture settlement instructions for core modules and to capture pay or receive instructions as instructed by the customers.

Further, all types of transactions, whether online or batch and immediate or future-dated, can utilize the services of this module to handle settlements.

Settlements can also be initiated with blank rows or with amount pre-populated from the modules. In case the amount is pre-populated, the modes remain blank. While selecting the account in the course of settlement, details such as the type of account, party names, available balance, utilized amount are displayed to facilitate selection of the appropriate account.

Settlement provides the following settlement modes:

- Cash
- Own Transaction Account
- Other Transaction Account
- Registered Transaction Account
- Linked Account
- Payment to External Account
- Payment to Loan Account
- Ledger
- Re-invest into new TD Account
- Re-invest into existing TD Account
- Cards
- Cheque
- Manager's Cheque Issuance
- Manager's Cheque Liquidation

Fetching accounts for Own Transaction and Loans from external legacy system is supported. Through an interface with the OCH source and with relevant validations, the accounts are fetched and considered for an instruction. The execution of such instructions is an implementation activity.

Further in Oracle Banking Enterprise Originations, the accounts which are inflight can be fetched to set up instructions. For example, offset account for a loan account or repayment account for a loan account.

The money settlement functionality is achieved through the following pages:

- Define Domain Category Settlement Mode (Fast Path: PM030): This page helps the user to attach settlement modes from the list provided above to a transaction event of a domain such as Payment, Insurance and Banking.
- Define Product Settlement Mode (Fast Path: PM031): This page helps the user to attach settlement
 modes from the list provided above to a transaction event linked to a product such as Loan product or
 Transaction Account product.

- Settlement Taskflow: This taskflow can be linked in any of the transaction pages to configure the settlement instruction as per the bank's or customer's choice. This taskflow allows the user to select one or more settlement modes available for the transaction event while creating the settlement instruction.
- Settlement Instruction Execution: Services are available to settle the money as per the instructions provided for an event when it occurs. The service supports execution of the settlement instructions either online or batch or future-dated as per the configuration.

20.2.5 Address Taskflow

Common Services also provides a generic address taskflow to configure any type of addresses such as home address, correspondence address, office address, collateral address, employment address, company registered address, branch address and so on.

The address taskflow is invoked wherever required and capture appropriate addresses. The address taskflow provides an option to the bank to capture a detailed address manually or using an integrated address search engine in a single line.

20.2.6 Verification Framework

The verification process describes the handling of the verifications during a business process. It is used to help the banker validate if the claims made by the customer during capture of application form are genuine or not.

The configurations required for resolving a verification policy specific to a business process can be achieved through the following pages:

- Verification Category (Fast Path: CS21): This page helps the user to configure different verification categories (Income Sources, Identifications) that can be linked to a business process to validate documents or data provided by the customer to avail any banking services.
- Verification Type (Fast Path: CS22): This page helps the user to configure various verification types
 that the user wants to link to a business process. The verification type alone can be linked to a
 business process or it can be attached to a verification category and the category can be linked to a
 business process.
- Verification Policy Checklist (Fast Path: CS23): This page helps the user to configure rules to
 resolve the verification types applicable for a business event.
- Policy Resolution and Verification Process: Verification policy code can be configured for a specific business event where the policy needs to be evaluated. During a business process various modules resolve the verification policy to find the verification details and perform the verification either internally or through external agencies through online or manual mode.

Currently, verification process is used only in origination of application to avail various banking products and services.

20.2.7 Questionnaire Framework

The Questionnaire framework enables the bank to define various questions that the bank may want to ask its customers during business processes such as determining offer eligibility during the application form capture process, loan account configuration, verification process, and so on. The answers recorded can be used for making various decisions or offer a product or service to customers.

The Questionnaire functionality is achieved through the following pages:

- Section Maintenance (Fast Path: CS104): This page helps the user to configure various questions that they may want to ask during a business process to service the customer with appropriate products and services. This page also allows the bank to create conditions and dependencies to display the questions in a specific order.
- Questionnaire Maintenance (Fast Path: CS103): This page helps the user to link the questions to the specific business process such as insurance application, offer eligibility check, loan account configuration, verification process, CCI, and so on.
- Questionnaire resolution: Questionnaire IDs can be configured for other modules as appropriate to
 the relevant business event where the questions need to be displayed for capturing the responses.
 During the specific business event, the relevant module makes a call to common services with the
 configured questionnaire ID to get the questions for capturing the responses. The captured responses
 are stored with unique instance IDs so that the responses can be edited at a later stage.

20.3 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.
- 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.

20.4 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.

20.5 Pricing

Pricing enables the bank to create price plans for interest and fees, setup for fees and rewards, define interest index codes and charge attributes, and maintain interest rates.

20.5.1 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.

20.5.1.1 Price Policy Chart for Interest

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

20.5.1.1.1 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).

20.5.1.1.2 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.

20.5.1.1.3 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 fees can be negotiated.
- 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.

20.5.1.2 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.

20.5.2 Event Definition

Banks normally levy fee on customer accounts for financial or non-financial transactions. For example, periodic account maintenance fee, cheque book issue fee, fee for closure of account, and so on. Such transactions or circumstances are recognized as Events in Oracle Banking suite of products. One or more Price Definitions can be maintained in Pricing which is then linked to the respective events by defining a Price Policy Chart.

20.5.3 Fact Definition

A Fact is an attribute or parameter of an entity that can be recognized in the Oracle Banking suite of products, which can hold values either as static or evaluated during run time, while performing a transaction. These attributes can be used as a basis to define fees for various events. The solution supports storing attributes (facts) related entities like Party, Transaction or Financial Terms. Facts such as LVR, customer credit score, state code, region code, and so on can be used to define pricing.

20.5.4 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.

20.5.5 Tier Criteria and 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 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 predetermined. 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 following pages:

- Tier Criteria Definition (Fast Path: PR009)
- Rate Chart Maintenance (Fast Path: PR004)

20.5.6 Price Definition

Price Definition enables setup for Fees and Rewards.

Fees:

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.

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.

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).

Base fees can be set up as Negotiable, Negotiable- Waive Full Fee, or Non Negotiable. If set as Negotiable-Waive Full Fee, then the price type of such a fee should be set as Fixed only, else system give an error message on validation.

Reward:

Rewards are incentives provided by the bank to customer in the form of cash back. Rewards can be set up as Negotiable or Non Negotiable.

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

20.5.7 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.

20.5.8 Modifications to the Price Policy Chart

Versioning of the price policy chart is a unique feature which enables linkage of an earlier version of the price policy chart to a product group or account.

Modification of the price policy chart is allowed in addition to modification of the rate chart, index and the price definition. Applicability of the modification can be maintained for all accounts or new accounts.

Whenever there is a modification in the price policy chart, the accounts will get re-priced and the interest and fee for the account may change. Pricing will trigger the re-pricing only for those accounts which will be impacted by the modification in the price policy.

20.5.9 Negotiations

Interest rates, fees and rewards can be negotiated at account level. Such negotiation is enabled during account opening process and at any servicing event during the life cycle of an account.

Interest negotiation:

Interest rate negotiation is done by setting up User Discretionary Margins (UDMs). UDMs so defined, are segregated as active, expired or future, based on their expiry date and displayed. System validates and provides a caution message, if UDMs are not beneficial to customers. UDMs once provided for an account can be deleted or modified restrictively, any time during the tenure of an account. Deletion and modification of existing, new, approved, and unapproved UDMs are allowed with certain restrictions. System also supports to capture of interest rate quotes provided by competitors (other financial institutions) to support interest negotiations.

Fee and Reward negotiation:

Fee negotiations can be done either during transaction or at account level, if such negotiation is allowed at price definition level. The behavior varies as follows based on the type of negotiation set for a fee:

- Negotiable: Negotiation is enabled for fees and rewards.
- Negotiable-Waive Full Fee: The Negotiate option is defaulted to Replace and the amount is defaulted to 0. Both these fields are disabled for any modification.
- Non-Negotiable: Negotiation is not allowed for fees and rewards.

20.5.10 Price Benefit Chart

Benefits can be defined for interest by way of margins and for fees by way of variance to an applicable fee or by way of replacing an applicable fee with an absolute value. This feature is very useful in promotion of campaigns and offer bundles by banks to capture market. Bank user can define all interest margins and fee benefits through maintaining details in price benefit chart. Fee benefits can be provided either as a discount in absolute terms or in percentage terms. Interest benefits are provided by linking margin rate charts. The banker can also set campaign benefit application periods (start and end durations at offer level).

The above functionality is addressed in the Price Benefit Chart (Fast Path: PR015) page.

20.5.11 Benefit Priority Maintenance

Priority can be defined in application of bundle and campaign benefits. This helps the banker provide all benefits, best of the benefits or least of the benefits.

The above functionality is addressed in the Benefit Priority Maintenance (Fast Path: PR027) page.

20.5.12 Re-pricing

Re-pricing of an account is supported. Such re-pricing may be required due to changes in the customer attributes or account attributes or due to events in the account such as restructure, facility amendment, reschedule of a loan account or changes in the relationship of customer with bank.

20.5.13 Transaction Level Fee

A fee is defined for a particular transaction or event. While performing the transaction or event, the solution has the capability to display the applicable fee and allows bank user to negotiate the fee manually to facilitate negotiation of fee. Banker can negotiate the fees during the transaction by giving a discount. The fee negotiated during the transaction will be the final fee applicable on the account for that transaction.

20.5.14 Definition of Fee Groups for Free Transactions

Bank can group fee for different events and define the number of transactions in the group that can be free. The free transactions evaluation can be based on Occurrence, Cheapest or Costliest. Pricing evaluates the fees across all the events defined in the group and will apply the free transactions. At the end of the period, it applies the fees only for those transactions which are chargeable.

The above functionality is addressed in the following pages:

- Fee Group Maintenance (Fast Path: PR019)
- Map Fee Group to Offer (Fast Path: PR020)

20.5.15 Fees Inquiry

The Fees Inquiry (Fast path: PR022) page allows the bank user to inquire event wise for a particular account, the fees that are computed but are not charged to the account and the number of transactions for which fees is charged and not charged. As part of the fees inquiry, the following details are displayed for an account:

- The transaction events for which fees are not collected
- The computation date and the charge date for each fees associated with each event
- The net fee amount to be charged along with its break-up details (Base fee, Additional fee details and Discount details)
- Total number of transactions for which fee is charged and total number of transactions for which fee is not charged

20.5.16 Price Control Policy

The following features are supported for price control policy:

20.5.16.1 Floor and Ceiling Interest Rates

The financial institutions operating in a country are bound by the legal interest rate specified by the regulators. Maintenance of Floor and Ceiling interest rates for an account is supported. The Ceiling Net Interest Rate is the maximum interest rate that can be applied on an account. The Floor Net Interest Rate is the minimum interest rate that should at least be applied on an account. During pricing or re-pricing an account, the system evaluates the applicable interest rate and then compares the same with the floor and ceiling interest rate that has been maintained for the account. If the evaluated interest rate is greater than the ceiling interest rate, then the ceiling interest rate, then the floor interest rate, then the system will automatically trigger a re-pricing on the account when the existing floor and ceiling interest rates applicable for an accounts are modified.

The above functionality is addressed in the Pricing Control Policy Maintenance (Fast Path: PR025) page.

20.5.16.2 Rate Refresh

Generally, the financial regulators of a country provide necessary protection to borrowers against arbitrary increase in interest rates on credits offered by financial institutions. As a result, the financial institutions offering credit to borrowers should specifically state the maximum and minimum increase or decrease in net interest rate for a particular credit, as disclosures in the offer document provided to the borrowers.

To support such regulations, the maximum and minimum interest rates can be maintained and can be either increased or decreased during rate refresh on an account. During rate refresh, if the new interest rate breaches any of these parameters set for an account, then the bank also has an option to continue with the old rate (ignore the rate refresh) or apply the interest rate within the prescribed limit set by the bank.

The above functionality is addressed in the Pricing Control Policy Maintenance (Fast Path: PR025) page.

20.5.17 Special Interest Rate Maintenance

Banks often introduce promotional offers targeting borrowers who have underutilized their sanctioned credit. In such cases, banks charge lesser rate of interest as compared to the sanctioned terms. The purpose of such promotional offers is to provoke the borrowers to utilize the unutilized sanctioned limit.

To support such requirement, special interest rates can be maintained for every promotional offer given to its borrowers.

The above functionality is addressed in the Special Interest Rate Maintenance (Fast Path: PR028) page.

20.6 Content

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.

20.6.1 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. Details like whether an inbound document type is recurring in nature or permissible delivery channels for an outbound document type can be configured. Additional data like tags for inbound and inserts (scanned copies of additional materials to be sent along with documents) for outbound documents can be specified. Whether physical tracking is required for a document or not can also be set.

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.

20.6.2 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.

20.6.3 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.

20.6.4 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.

20.6.5 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.

20.6.6 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.

20.6.7 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.

20.6.8 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.

20.6.9 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.

20.6.10 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 stitched together as insert in one document through Documaker.

20.6.11 Rectification of Documents

When documents are uploaded through an external vendor, there are chances that the upload may fail due to following reasons:

- Invalid index type for the document type
- Invalid document type
- Non availability of the primary index
- Technical reasons such as size mismatch, clarity of documents, or corrupted document

The first three fall under rectifiable category while the last one is non rectifiable.

All such failed documents are queued for taking relevant actions and can be filtered for rectification. All rectifiable documents can be rectified by changing document type or index type. An option to move the rectifiable documents to the non rectifiable queue is also provided. The documents under rectifiable and non rectifiable queues can be filtered using sourced by, document type, received on date and error type filters.

The above functionality is addressed in Rectify Documents (Fast Path: CNM21) page.

20.6.12 Maintain Kiosk for Physical Documents

Kiosks for physical document tracking can be maintained. The details for creating kiosks such as kiosk ID, kiosk name, email ID, contact person, contact number, and address can be recorded.

The above functionality is addressed in Maintain Kiosk for Physical Documents (Fast Path: CNM22) page.

20.7 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.

- Alerts can be dispatched 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 or servicing events based off maintenance or transactions performed. 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.
- 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 send 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.

20.8 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.

20.8.1 Security

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.

20.8.1.1 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.

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.

An example of user access restriction is 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.

20.8.1.2 Origination Application Tracker Entitlements

The Application Tracker (Fast Path: OR100) within Oracle Banking Enterprise Originations enables users and customers to identify the progress with their particular application and to perform the necessary tasks or actions to ensure the application moves forward in the process. The ability to define the entitlements that are applicable for each user role is provided to the bank. The actions and options displayed within the Application Tracker take into account such entitlement definitions.

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

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

The application is pre-integrated with the Oracle SOA Suite for executing its business workflows. The Oracle Banking Enterprise 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 application 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 application 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, the application 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 (4-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)
 - OVERRIDE _ RULES (This option provides the flexibility to maintain different entitlement rules per service and reason code combination)
 - 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 or 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.

Support for deferred approval is allowed for set of tasks and based on the preconfigured periods. The supervisor can approve the same and if no action is taken within the period, the task becomes void. The posting date of such transactions will change to the date on which the supervisor approves the transactions.

20.8.2.1 Matrix Based Authorization

This section explains the matrix based authorizations.

20.8.2.1.1 Pricing Approval Negotiations

Matrix based authorization are supported 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 Oracle Banking Enterprise Originations (for lending covering Loans and Overdraft) primarily as part of Structure Solution step. There is a Return task capability for approval task rejections.

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.

20.8.2.1.2 Credit Approval Negotiations

This functionality is for approval of credit for lending applications within the 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.

20.8.2.1.3 Cancel Pending Approval Request

Flexibility is provided to initiators to cancel their approval requests prior to the completion of the approval process. Currently, this option is available only to the initiator of the approval request. Another advantage of this capability is that when the Close Teller Batch fails due to approval requests pending completion, the initiator can cancel such requests and proceed with teller batch closure. Prior to this option being available, the initiator had no option but to pursue the required approvers to either approve or reject the requests.

20.8.2.1.4 Approval Process Tracking

The following capabilities are provided:

- View the status of the approval tasks associated with a particular request pending approval.
- View complete task history and state transitions for each of the approval tasks created.

Approval of origination tasks can be tracked through the Application Tracker (Fast Path: OR100). The status of approval requests initiated from assisted or banker pages can be tracked through Work Item Inquiry (Fast Path: WL001).

20.9 Product Manufacturing

Product Manufacturing 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 such as Loans, CASA, Term deposits, Investment Accounts, Insurance and so on. All products created 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 are propagated to products created under it, thereby avoiding same maintenances for each product.

The following features are offered as part of Product Manufacturing.

20.9.1 Dashboard

The Dashboard consists of the following widgets:

- Product Configuration
- Notifications
- Offers
- Latest Offers

Product Configuration

The Product Configuration widget displays the list of active product groups, products, and product offers along with its total count. The user has an option to further navigate to the product group, product or offer by selecting the respective icons. The user can also create or modify the existing product groups, product or offers. The system also displays the pending tasks to be completed for publishing and activating the offers. Various filters are also supported to view the details of the products.

The user can also view the Product Hierarchy Structure of all the product classes, product groups, products, and offers.

Notifications

Under this widget, the system displays the notifications for following activities of the last 15 days:

- Number of approved product offers
- Number of approved products
- Number of products or product offers pending for approval
- Failure or Success status of the export or import of data

Product Offers

This widget displays the total number of product offers in a bar diagram. The product offers are displayed against each product class and product.

Latest Offers

This widget displays the last five product offers that were created. The system displays the summary of each product offer. The user can also view the brochure of the selected product offer. The user can also navigate to other product offers by clicking the deck component and view the summary details of all product offers.

Day Zero Maintenances

Configuration of Day Zero maintenances can be done from the landing page. The user can use the hamburger menu on the top left side of the Dashboard to navigate through the menu list to access the required maintenances.

20.9.2 General Maintenances

This section describes the general maintenances.

20.9.2.1 Define Product Type (Fast Path: PM049)

Product Type Definition helps categorize different types of products based on Product Class and Origination work flow behavior. Product Types are factory shipped and cannot be modified. Product Types are linked to the Product Class in the background.

The following product types are supported.

Table 20–1	List of Product	Types
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Product Type	Origination Workflow Behavior	Product Class
Checking	Liability	CS
Savings	Liability	CS
Loans	Asset	LN
Term Deposit	Liability	TD
Credit Card	Credit Card	СС
Investments	Investment	IA
HELOC	Asset	CS
Overdraft	Asset	CS
Line of Credit	Asset	CS
Automobile	Asset	LN
Personal	Asset	LN
Loans	Asset	LN
Term Loan	Asset	LN
Educational Loan	Asset	LN
CCI	Insurance	Insurance
LMI	Insurance	Insurance
FDPI	Insurance	Insurance
Asset Insurance and Others	Insurance	Insurance
Home and Content Insurance	Insurance	Insurance
Landlord Insurance	Insurance	Insurance

20.9.2.2 Define Credit Policy (Fast Path: PM009)

Credit Policy definition is a predefined template which enables the Credit Manager to organize various Origination parameters for different asset classes and link it to a specific product group.

Credit Policy Template can be configured for a specific product group and business unit combination. Hence, setting up of Credit Policy Template as part of day zero is mandatory for the Origination system for Asset type of products.

During Origination process, depending on the product group selected in the respective Business Units, the system validates the attributes, which are configured in the Credit Policy Template.

As part of Credit Policy definition the main functionalities defined are product type, purpose codes, group type, Origination workflow behavior, collateral types and categories, facility category, credit and behavioral decision parameters, Insurance related parameters, and so on.

20.9.2.3 Define Statement Policy (Fast Path: PM007)

A Statement Policy can be configured to specify the statement delivery modes, frequency and other parameters. The statement policy defined can be attached to a CASA, TD or Loans type of product, which are inherited by the accounts opened under these products (with relevant modifications as required).

As part of statement policy the main functionalities defined are delivery modes, billing statement parameters, statement frequency, statement generation based on occurrence of certain events, statement generation parameters on account opening and closure of account, blocking of statement generation with specific user and system defined statuses, and so on.

20.9.2.4 Define Offer Bundle (Fast Path: PM026)

The solution provides a feature to the bank to group products across different lines of business. For example, product offers of home loan, transaction account and credit card can be bundled together.

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 functionalities are addressed in the following maintenances:

- Define Offer Bundle (Fast Path: PM026)
- Bundle Bank Policy (Fast Path: PM005)

20.9.2.5 Offer Selector

The product offer selector functionality is provided as part of Origination. Using this functionality, the user can filter product offers, compare multiple product offers to choose the appropriate one and add the product offer to the origination of the account. The account is opened under the selected product offer.

The user can also filter, view and select product offers that have non-financial benefits defined for the product offers such as providing t-shirt to the customer if they avail a certain product offer within a certain period of time. A Rewards link appears alongside the TC (Terms and Conditions) link, that allows the user to view the applicable rewards attached to the product offer along with its details. If user chooses to filter product offers based on the rewards criteria, then only those product offers where the rewards are attached are displayed. The details of the Financial Rewards, if maintained are also displayed in the offer selector. The user can

toggle the offer selector between the list view and tile view. In addition, the offers are also recommended based on the response to the lending questionnaire.

If any campaigns are expired but are within the grace days, then such campaigns are also displayed in the offer selector for selection.

20.9.2.6 Define Transaction Restrictions (Fast Path: PM027)

Define Transaction Restriction Maintenance is used to restrict transactions between accounts of two different product offers for selected events.

20.9.2.7 Define Reward Maintenance (Fast Path: PM053)

Non-financial benefits or rewards refer to compensation given in a transaction (non-monetary benefit). A nonmonetary physical reward can consist of almost any material objects such as jewellery, precious metals, electronic gadgets, gift coupons or an automobile, and so on.

Non-financial benefits are product offers that banks give their business or retail clients to help them operate more efficiently and to increase their business.

As part of reward maintenance definition, the main functionalities that are configured are reward code and description, validity period, terms and conditions of the reward, eligibility rules linkage of the rewards to TD, CASA, Loans, Credit Card, and so on. The rule is executed during account opening.

20.9.2.8 Link Product Group to Business Group (Fast Path: PM028)

A business group is a group of associated product groups, which helps identify a particular business area. A broker or an introducer is linked to one or more of these business groups. Due to this all the product offers that are a part of the product groups linked to the business groups are available to the broker or introducer. The user can define eligibility rules that are linked to the product offers. The eligibility rules can validate and identify the set of product offers, which the broker or the introducer is allowed to handle.

20.9.2.9 Define Product Settlement Mode (Fast Path: PM031)

Define Product Settlement enables to link the combination of product 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 accounts under the product and affiliated with the events will be considered for treatment under the rate type and transaction code associated here.

20.9.2.10 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.

20.9.2.11 Link Product Offers for Principal Offset Facility (Fast Path: PM025)

Loans and CASA module supports Principal Offset functionality. Principal offset means a loan or an overdraft account is linked to one or more CASA accounts so that the credit balance available in CASA accounts can be used to offset the loan balance to avail the interest benefit.

The interest for loan or overdraft account is calculated on the principal remaining in the loan or overdraft account, minus the aggregate amount of savings in one or more deposit accounts. Borrowers still have access to their savings and if they withdraw money from savings during the month, the next loan or overdraft payment is calculated on a higher principal balance.

The Link Product Offer for Principal Offset Facility screen allows user to link loan product offers and the corresponding CASA product offers for offset linkage. Based on the linkage, the principal offset is allowed only between the accounts opened under the linked product offers.

20.9.2.12 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.

20.9.2.13 Define Product Interest Linkage (Fast Path: PM017)

The interest rules defined for a product class are associated to a product. The interest rules are applicable for all product and currency combinations. The following interest rules have to be defined for every Product + All Currency combination.

- Interest Computation Rule
- Interest Accrual Rule
- Interest Capitalization Rule
- Interest Settlement Rule

20.9.2.14 Define Campaign (Fast Path: PM024)

Campaign refers to a series of advertisements using various marketing tools that share the similar messages and thoughts to promote a business or an event. Different media resources such as newspapers, billboards, TV commercials and digital space are used in typical promotional campaigns. Campaign can be defined by maintaining start and end dates along with product groups and product offers that are a part of the campaign. Accounts can then be opened under the campaign. Campaign eligibility rule and grace days can also be defined for each campaign.

Banks may run campaigns from time to time that offer certain pricing benefits. A common setup is available to define such campaign with unique identification so that these may be used across modules.

20.9.2.15 Product Hierarchy View

Product Hierarchy View provides a consolidated view of hierarchy of all the product classes, product groups, products and product offers. It enables the user to drill down from the product class to the product offer level. It displays important attributes of each entity. It also enables viewing of key linkages at each level. The user can view the hierarchy in a single view and can toggle between standalone views of each entity.

20.9.2.16 Link Dependent Product Offers (Fast Path: PM018)

Customers may be required to hold certain accounts mandatorily if they wish to avail certain other accounts. For example, banks may mandate customers to hold specific types of CASA accounts to avail certain Home Loan product offers. A setup is required to handle such cross product or product offer linkages.

To support such requirements, Link Dependent Product Offers screen is used to maintain the dependent and mandatory product offers. This relationship can be maintained with the Nature of Dependency as All or Any XX.

20.9.2.17 Define Bonus Interest Parameters (Fast Path: PM019)

Bonus Interest Parameters are defined for various products under eligibility rules. They are defined for a specific period of time, which means the rule is valid from a particular date till a particular date. The bonus interest rate percentage under each rule is captured. The user can view the historical bonus interest rates.

20.9.2.18 Product Templates

The template functionality is supported in some of the pre-specified maintenances. This functionality helps the auto population of all the data from the previous saved template.

When the user creates a new record, then on capturing the key values, all the attributes or values from the template are defaulted. At any point in time only one template is saved. However, the user can update the template any number of times. The last saved values are stored in the template for the respective screens.

20.9.3 CASA

This section describes the maintenances related to CASA.

20.9.3.1 CASA Bank Policy (Fast Path: PM002)

In the course of its business, a bank defines many CASA products from time to time. Each of these product definitions may vary significantly or otherwise. However, there are some definitions that remain more or less static across various products. Such parameters or definitions are global in nature and do not change very often with the launch of products. Such global parameters that belong to CASA domain are defined in this definition screen. The features that are captured in this maintenance are re-price parameters, user discretionary margin, access channels for servicing, and so on.

20.9.3.2 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.

20.9.3.3 Dormancy Policy (Fast Path: PM008)

CASA accounts which have not registered any transactions for a certain period are marked as inactive, dormant, and then unclaimed.

The Dormancy Policy definition allows the configuration of the rules which can classify the accounts as inactive, dormant or unclaimed based on the number of days it has not registered any transactions in the accounts.

The same policy can be attached to multiple products.

20.9.3.4 Unclaimed Policy (Fast Path: PM029)

CASA accounts could be marked as Unclaimed if there is no activity in the account for a specified period of time (Note: The account goes through Inactive and Dormant statuses before being marked as Unclaimed).

To mark accounts as Unclaimed, parameter for unclaimed period is defined in the Define Unclaimed Policy maintenance. Accounts where period since the Last Activity Date has exceeded the unclaimed period are picked up for unclaimed processing.

Further, regulatory requirements in some geography may specify that the amount lying in account marked as unclaimed should be transferred to the state. This is based on a threshold value and the quantum to be transferred is controlled as well. To support this, unclaimed threshold value and percentage to be transferred are defined in the unclaimed policy as well.

Similar processing is applicable for matured Term Deposits which remain unclaimed.

20.9.3.5 Define Question Sets (Fast Path: PM046)

The Question Sets allow defining a set of questions and its data type for obtaining answers from the customer during the Origination to ascertain the anticipated activity on an account.

20.9.3.6 Define Debit Card Features (Fast Path: PM039)

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

20.9.3.7 Define Product Group

A product group is defined for a list of products that are closely related as they function in a similar manner, belongs to a product class-product type combination, has similar marketing strategies, and has similar pricing strategies. For example, various range of CASA products such as Women's Savings account, Senior Citizen account, Regular Savings account, Kids Savings account, and so on, which a bank markets under Current and Savings Account portfolio belonging to the Liability class Current and Savings Account can be grouped as Current and Savings product group.

This maintenance requires the banker to choose the Origination workflow behavior, the linkage type and the group type, upfront. The Origination workflow behavior can be asset, liability, investment, insurance or credit card. Parameters for definition change based on this selection.

As part of CASA Product Group, the attributes captured at high level are product type, investment type, allowed currencies, fast refinance applicable, settlement required, co-signor applicable, applicant eligibility rule, draw and repayment period, regulatory questionnaire linkage, hardship policy, and credit policy.

20.9.3.8 Define CASA Product

Current and Savings account products are defined under product groups. Such product groups can be defined with Liability or Asset workflows. The products that are defined under the product group are structured according to the workflow.

Generally, banks define specific products for Savings and for Checking (Current) areas. A Savings product may be a simple Savings product offering which permits only Credit balance. A Checking product on the other hand will allow the account to be in debit, permit over drawings.

The following parameters can be defined in CASA product. These parameters impact all the product offers that are defined under the product. Control parameters govern and control the behavior of the product and all its product offers. Such parameters are allowed to be modified in a restrictive manner in the product offer level. For example, a superset of values is defined at product of which a subset can be maintained at product offer, but a new value outside the superset cannot be added.

20.9.3.9 Define CASA Product Offer

A product offer is the final saleable product offering that the bank takes to the market. It is the ultimate produce which is marketed by the bank. Product offers are created for niche customers, specific target segments, or en masse. This is the next set of parameters after the product level which governs the customer account. Many of these parameters are modifiable at account level.

Currencies from the product level can be further selected to create a subset of allowed currencies for the product offer. Alert and Outbound documentation events from product level can be further filtered at product offer level but new events cannot be added directly at product offer level.

Specific facilities that can vary from account to account based on customer preferences are defined here. Such facilities become a part of account configuration during Origination. Allowed access channels, fund transfer options and restricted transaction types find a place in this maintenance.

Currency control parameters from product are displayed at product offer level which can be overridden. Such parameters include fields for minimum balance type and minimum balance amount.

Statement policy linked at product level can be modified and a new policy can be maintained for the product offer. Days up to which back dated account opening is allowed and specific alternate account fields are also maintained here. Additionally, the various product offer types can be created and can be selected as part of CASA product offer screen.

Further, customized product offers can be created for opening office accounts. Office accounts are CASA accounts opened for internal business requirements of the bank. They are used by banks to account for miscellaneous transactions that will be given appropriate accounting treatment at a later date. The original entry is referred as Master Entry and its reversal is referred as Contra Entry. The Master entry can be either debit or credit. Typically, such OA entries are reconciled using a common Reference Number.

Such accounts can also be for third party Account Payables, where bank collects money on behalf of a third party and makes a payment to them at a later point in time.

It is required to reconcile the master debit or credit entry by passing necessary contra entries. Flexi Credit parameters are also maintained in the CASA product offer if the product offer for the product offer supports Flexi Credit Facility. Flexi credit is a line of credit extended to a customer. This facility allows an account to oscillate between fixed and variable rate periods. In the fixed period it behaves like a non revolving loan and in variable period like a revolving loan. Specific parameters for such facility are also maintained in the CASA product offer.

Courtesy pay can be defined for the CASA product offer. This can be defined only if the TOD flag is checked.

20.9.4 Loans

This section describes the maintenances related to Loans.

20.9.4.1 Define Loan Bank Policy (Fast Path: PM004)

All global level parameters that impact Loans as a product class are defined in Loan Bank Policy. These parameters do not change often and remain as the basis for defining all Loan product and product offers of the bank.

This definition has control parameters, reprice parameters, user discretionary margin persistency parameters along with parameters for access channels.

20.9.4.2 Define Hardship Relief Policy (Fast Path: PM006)

If a customer is going through a financial hardship due to certain events such as job loss, drought, accident, and so on, and is unable to make repayment for the outstanding dues in the account, the bank may provide certain type of relief for a specified duration. Bank evaluates customer's case and bank could 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 Loan products. Different types of relief can be configured, namely, freeze interest, waive arrears, reduce installment, revise installment amount, deferment of loan, rollover of repayment or arrears, change Interest rate, consolidate loan, change term, change DPD calculation, and so on.

20.9.4.3 Define Installment Rule Details (Fast Path: PM058)

Each loan account contains a loan repayment schedule. Repayment schedule directs the bank to charge the loan account and guides the borrower to repay the loan. Installment rules are used to define repayment schedule whether interest is to be paid by the customer or principal to be paid or both. Installment rule contains date basis on which installment due (interest of principal) is to be paid. The available date basis are Calendar and Anniversary. If Calendar date basis is selected, then interest or principal is to be paid on a month end, such as, 31st Jan, 28th or 29th Feb, 31st Mar, 30th Apr, and so on. If Anniversary date basis is selected, then interest or principal to be paid on the disbursement or selected day. For example, 10th of every month.

20.9.4.4 Define Loan Schedule Type (Fast Path: PM059)

Schedule Type setup enables the bank to define different repayment schedules that can be attached to a loan product offer. Repayment schedule specifies the amount, number and type of installment that the customer has to pay as a part of loan repayment.

20.9.4.5 Define Product Group

A product group is defined for a list of products that are closely related as they function in a similar manner, belongs to a product class-product type combination, has similar marketing strategies, and has similar pricing strategies. For example, various range of home Loan products such as Home Construction Loan, Home Improvement Loan, Home Extension Loan, Land Purchase Loan, and so on, which a bank markets under Home Loan portfolio belonging to asset class Loan can be grouped as Home Loan product group.

This maintenance requires the banker to choose the Origination workflow behavior, the linkage type and the group type, upfront. The Origination workflow behavior can be asset, liability, investment, insurance or credit card. Parameters for definition change based on this selection.

As part of Loan product group, the attributes captured at high level are product type, investment type, allowed currencies, fast refinance applicable, settlement required, co-signor applicable, applicant eligibility rule, draw and repayment period, regulatory questionnaire linkage, hardship policy, and credit policy. Whether product groups are eligible for In Principle Approval application or not can be defined.

20.9.4.6 Define Loan Product

Loan product is defined under product class Lending and product group specifically defined for Loans. Various parameters that should uniformly apply to product offers created under the product are defined here. Control parameters, currency parameters and Asset classification parameters are maintained in this definition. Most parameters maintained here are not overridable in the Loan product offer, so this definition is referred during processing for such parameters. This definition also has fee treatment preferences for account opening as well as servicing. Delinquency parameters are also maintained here.

20.9.4.7 Define Loan Product Offer

Using Define Loan Product Offer screen, user can create a product offer ID under a product. Multiple product offers can be created under a product. A product offer can be created with start date and expiry date, advertising message and standard features such as facilities, penalty parameters, quote parameters, amount parameters for variation events, documentation parameters, allowed rate and transaction type, account preferences, and channels.

Some of these parameters are choices to be exercised during account configuration in account opening and afterwards in servicing.

20.9.5 Term Deposit

This section describes the maintenances related to Term Deposit.

20.9.5.1 Term Deposit Bank Policy (Fast Path: PM003)

Parameters that are uniformly applicable to all Term Deposit products and product offers are defined in this maintenance. All products and product offers have to be maintained within the boundaries defined in this definition.

Parameters maintained here are basic details and access channels for servicing. All other parameters are defined in product and product offer levels.

20.9.5.2 Term Deposit Interest Pay-out Plan (Fast Path: PM012)

The Interest Payout Plan provides restrictions on the interest payout frequency based on the deposit amount or deposit term or a combination of both. Interest Payout frequency is the time interval at which, the interest earned on the deposit is paid out to the customer.

The bank maintains an Interest payout plan specifying various interest payment frequencies that are allowed for a particular deposit, based on deposit amount and/or deposit tenor. After the definition of Interest Payout Plan, it is linked to a TD product as part of TD product definition.

20.9.5.3 Define Product Group

A product group is defined for a list of products that are closely related as they function in a similar manner, belongs to a product class-product type combination, has similar marketing strategies, and has similar pricing strategies. For example, various range of Term Deposit products such as Regular Fixed Deposits, Tax Saver Fixed Deposit, Super Saver Facility, and Recurring Deposits and so on which a bank markets under Deposit protfolio belonging to liability class. Term Deposit can be grouped as Term Deposit product group.

This maintenance requires the banker to choose the Origination workflow behavior, the linkage type and the group type, upfront. The Origination workflow behavior can be asset, liability, investment, insurance or credit card. Parameters for definition change based on this selection.

As part of TD product group, the attributes captured at high level are product type, investment type, allowed currencies, settlement required, applicant eligibility rule, and regulatory questionnaire linkage.

20.9.5.4 Define TD Product

Term Deposit products are defined under product groups defined with Liability workflow and product class as Term Deposits.

Various common parameters that are required to be maintained for defining a TD product are maintained here. These parameters are commonly applicable to all the product offers defined under the product. Similar to CASA product, control parameters are defined in the TD product maintenance. These parameters cannot be modified at product offer level and they act as boundaries within which the marketable product offers are created.

Allowed currencies are maintained at the product level, a subset of which is made available at the product offer level.

Parameter to facilitate payment of interest from posting or value date is maintained.

Other specific parameters in the TD product are for linking of the Interest Payout Plan (IPP), Maturity parameters and Redemption parameters. Maturity parameters facilitate processing of a matured TD when the deposit in the unclaimed status, to determine whether any outstanding penalty is to be recovered, and so on. Redemption parameters deal specifically with part and premature redemption circumstances.

Other parameters defined are for alert and outbound documentation, statement policy linkage, and facilities.

20.9.5.5 Define TD Product Offer

This maintenance facilitates definition of TD product offer parameters. Product offers are ready to market product offerings from the bank, in this case for TD products. Such product offers can be designed for a specific customer segment or it can be designed as a general product offering. In addition the various product offer types can be created and can be selected as part of TD Product Offer screen.

Features and facilities which differ at product offer level are configured here. These parameters are generally account level choices that the customer customizes for his deposit account.

Some of the parameters at product offer are for maintenance of currency, restricted transaction types, access channels, and contract modification parameters.

Parameters are also maintained for minimum and maximum amount of deposit, and for incremental amounts in deposits.

Many of the parameters defined here are stamped at account level during account opening because these are configurable at account opening. Others may be read from product offer itself for processing.

20.9.6 Credit Card

This section describes the maintenances related to Credit Card.

20.9.6.1 Define Affinity (Fast Path: PM042)

This screen allows the user to define the loyalty program belonging to third party and having association with credit card. This program can be linked in the Credit Card Product Offer screen.

20.9.6.2 Define Product Group

A product group is defined for a list of products that are closely related as they function in a similar manner, belongs to a product class-product type combination, has similar marketing strategies, and has similar pricing strategies.

This maintenance requires the banker to choose the Origination workflow behavior, the linkage type and the group type, upfront. The Origination workflow behavior can be asset, liability, investment, insurance or credit card. Parameters for definition change based on this selection.

As part of Credit Card Product Group, the attributes captured at high level are product type, investment type, allowed currencies, fast refinance applicable, co-signor applicable, co-applicant applicable applicant eligibility rule, draw and repayment period, and credit policy.

20.9.6.3 Define Credit Card Product

To support the origination of Credit Cards, definition of Credit Card product and product offer is supported. The difference between Credit Cards and other products is that, the actual credit card processing will be done in bank's Card Management System. The scope in case of Credit Card is limited to origination of the card.

The user selects the relevant PG, enters other product details such as start date, expiry date, and so on. The rule to resolve bill codes for the credit card is also linked. The user selects the card type, allowed currencies and completes the product definition.
20.9.6.4 Define Credit Card Product Offer

Credit Card Product Offer definition is the final step in the hierarchy of maintenances supported for credit card. Similar to other products, the take-to-market attributes are defined in the Credit Card Product Offer. These attributes vary to form different product offers under a Credit Card product.

20.9.7 Investment Account

This section describes the maintenances related to Investment Account.

20.9.7.1 Define Product Group

A product group is defined for a list of products that are closely related as they function in a similar manner, belongs to a product class-product type combination, has similar marketing strategies, and has similar pricing strategies. For example, various range of Investment products such as Traditional IRA, Roth IRA, SEP IRA, Simple IRA, and so on, which a bank markets under Investment portfolio belonging to Liability class Investment can be grouped as Investment product group.

This maintenance requires the banker to choose the Origination workflow behavior, the linkage type and the group type, upfront. The Origination workflow behavior can be asset, liability, investment, insurance or credit card. Parameters for definition change based on this selection.

As part of Investment product group, the attributes captured at high level are product type, investment type, allowed currencies, fast refinance applicable, settlement required, and applicant eligibility rule.

20.9.7.2 Define Investment Product

Universally, banks support innovative investment products that have evolved over periods of time. As a next step to traditional banking deposit products such as CASA and TD accounts, Investment Accounts are also supported. While there are many Investment products offered by banks, from the product perspective, retirement accounts for investment is on top in the priority list as these are widely offered by banks to their customers. This retirement account is a personal retirement savings plan available to anyone who receives taxable compensation, such as wages, salary, tips, bonuses and similar income, during the year.

The customers make contributions at regular intervals to these accounts and receive tax benefits, usually in the form of deferment of tax liability (not under all plan types, some plan types have different method of granting the tax benefit). Hence, these accounts are generally termed as Tax Deferred Accounts. In addition to retirement planning, contributions to certain plans can be made to cover specific needs such as education and health. The underlying transaction accounts under these plans can be CASA or TD, where the customers deposit money, generally in favour of a beneficiary.

The types of such plans, generally referred to as Individual Retirement Account (IRA) plans, are given below. The names of the plans may differ based on the geography.

- Traditional IRAs: These are the Individual Retirement Accounts where contributions accrue earnings on a tax-deferred basis and distributions are treated as ordinary income.
- Roth IRAs: These are Individual Retirement Accounts where contributions accrue on a tax-deferred basis and qualified distributions are tax-free.
- SEP IRAs: These are Individual Retirement Accounts which are established and funded by business owners or employers for their employees.
- SIMPLE IRA: These are Individual Retirement Accounts which are established and funded by business owners or employers for their employees. Employees may also make salary deferral contributions to SIMPLE IRAs.

- **KEOGH plans:** These are retirement plans for the owners and employee of unincorporated businesses like sole proprietors, partnerships, and self employed.
- Educational Savings Account: These are qualified plans set up for utilization for beneficiary's qualified educational expenses.
- Health Savings Account: These are qualified plans set up for utilization for beneficiary's qualifying medical expenses.

20.9.7.3 Define Investment Product Offer

This maintenance is for defining all product offer level parameters for Investment. Some of these parameters are inherited from Product level and are overridable, while others are defined here.

Apart from currencies all standard Investment features are defined in this screen which include statement policy code, product offer eligibility rule ID, beneficiary eligibility rule ID, and external reference IDs if any.

20.9.8 Insurance

This section describes the maintenances related to Insurance Account.

20.9.8.1 Define Product Group

A product group is defined for a list of products that are closely related as they function in a similar manner, belongs to a product class-product type combination, has similar marketing strategies, and has similar pricing strategies.

This maintenance requires the banker to choose the Origination workflow behavior, the linkage type and the group type, upfront. The Origination workflow behavior can be asset, liability, investment, insurance or credit card. Parameters for definition change based on this selection.

20.9.8.2 Define Insurance Product

Insurance Product screen provides the ability to capture relevant Insurance product attributes to define the Insurance product. Upon selection of the product group, the appropriate panel, namely, Home and Content Insurance, Landlord Insurance, CCI, and LMI, is enabled for capturing the details for the respective type of Insurance. The following details can be captured based on the type of Insurance:

Home and Content Insurance or Landlord Insurance

- Ability to define the Primary Cover, Sub-ordinate Cover and Standard Cover.
- Ability to configure Cover name and Description.
- Ability to capture Minimum and Maximum Term of the Policy.
- Ability to capture Minimum and Maximum Sum Insured of the Policy.
- Ability to capture Whether Deductible Applicable and default deductible amount.
- Ability to capture Perils associated with the Insurance.
- Ability to capture Benefits attached to the Insurance.
- Ability to capture List of Items.

In case of other types of Insurance, only the basic product offer details can be captured.

20.9.8.3 Define Insurance Product Offer

The Insurance product offer is created under the Insurance product. The user can set its standard features and default account preferences. The user can also select or deselect the parameters defined at the product level and configure additional parameters to define competitive product offers. Based on each type of Insurance plan, Insurance product offers are defined in the application. Each Insurance product offer has a set of eligibility rules applicable.

The following functionalities are supported as part of the Insurance product offer:

- Ability to select all currencies or a subset of the currencies for the product offer from the list selected at the product level.
- Ability to attach the applicable eligibility rules to the Insurance product offer, if required. The product
 offer eligibility rule will be checked during account origination and valid product offers will be presented.
- Ability to capture additional information and terms and conditions for availing the product offer and set an icon for the product offer. Ability to upload the related documents and maintain advertising messages as remarks. Basic details of the product offer owner can be captured as well.

20.10 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

20.11 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.

20.11.1 Bank Level Parameters

Using the GAAP Maintenance (Fast Path: AS005) page, the bank can define the GAAP codes that are used to identify separate books of accounts, according to the Generally Accepted Accounting Principles.

20.11.2 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. Using the Define Accounting Ledger (Fast Path: AS009) page, the bank can record the details of the Product Ledger, its hierarchy, GAAP linkages, and Position Accounting Preferences.

20.11.3 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 Event Accounting Class (Fast Path: AS020)
- Define Domain Category Accounting Template (Fast Path: AS016)
- Define Domain Account Role Mapping (Fast Path: AS019)
- Define Product Account Role Mapping (Fast Path: AS018)
- Define Product Accounting Template (Fast Path: AS015)
- Define Product Group Accounting Template (Fast Path: AS014)
- Define Product Group Role Mapping (Fast Path: AS017)

20.12 Branch

The following features are offered as part of Branch.

20.12.1 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.
- 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.
- 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.
- Report Request (Fast Path: 7775): This page is used to generate different ad hoc reports from the report categories by providing the required report parameters.
- Advice Report (Fast Path: 7779): This page is used to view the report and its status, for which the user has initiated the request.

20.12.2 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.
- 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.

20.13 Party

The following features are offered as part of Party.

20.13.1 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 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: PI100)
- Correspondence details, such as residence address, business address, preferred means of communication, preferred language, time zone, preferred times and modes (Fast Path: PI100)
- Contact details of a party like telephone, mobile, email. Consents to receive electronic communication, alerts, virtual calls also can be captured.
- Type of party, that is, Individual, Organization, or Trust
- Nationality and country of residence
- Details of the party's identification document such as 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, Tax statuses, party financial details, employment history
- Anti-Money Laundering characteristics of party
- Access channel preference of a party
- Party's signature and photo image (Fast Path: PI100)
- Other details regarding the party such as whether the party is CTR exempted and whether the party is an insider or related interest of an insider
- Tax residency details of party

20.13.2 Party Onboarding (Fast Path: PI048)

Addition of a party is referred as Party Onboarding. The Party Onboarding page is flexible and allows the user to capture the data in any sequence according to the data availability. The user has a facility to onboard a party by entering the bare minimum details. User can capture additional details for the party through Single

Party View (Fast Path: PI100). Every party is associated with a role such as Customer, Member, Broker, Vendor and so on. Based on the party role, certain onboarding fields may vary. Customer can be onboarded on a standalone basis. While onboarding, the ability to capture AML Consents and view last confirmation date is provided. Service Provider Onboarding (Fast Path: PI028) functionality enables onboarding of broker, introducer and other service providers.

20.13.3 Relationship Management (Fast Path: PI020)

Relationship Management enables 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. Creation of multiple business relationships between the same parties is also supported.

20.13.4 Due Diligence

Banks can maintain rules by which identity verification maintained against due diligence can be carried out. It also provides a view of due diligence and identity verification history of a party. Based on the due diligence preference selected in the Party Bank Policy, the due diligence of the party can be triggered by the user and performed once the onboarding is completed. Manual due diligence confirmation can be done with or without running a rule depending on whether a rule is selected in the Party Bank Policy under manual due diligence rule option.

20.13.5 Groups

Groups functionality enables the bank to create groups of customers who are related to each other in some way. For example, business relationships, income reliance, asset sharing and so on. By creating groups, a user can initiate group submissions and view credit exposure at a group level. Customers can be added to multiple groups. They can also be added or deleted from a group. A group itself can be deleted. Searches are also enabled for groups.

20.13.6 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. Such multiple parties IDs can be merged to retain a single party ID in the system. The party ID on the accounts are also be replaced.

20.13.7 Party Financials

Capturing financial information in definable format is supported for all party types such as Individual, Organization and Trust.

Various financial parameters (such as salary, home loan, general living expenses and so on) can be defined under different categories (such as income, expense and so on). For defining business statements, applicable parameters are grouped together to form statements such as balance sheet or profit and loss.

Capture of the following statements is supported:

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

Multiple templates for the same statement type can be created. For business customers, these statements are clubbed together under a financial template. Bank can specify which statements are to be added together. For retail customers, financial templates can be used to group together the different asset, liability, income and expense parameters. Multiple financial templates can be defined. Questionnaire can be linked to templates so that the banker can record responses to questions regarding the customer's financials.

Applicable template is resolved using rules. 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.

Capturing of financial information can be deferred by creating a separate human task for the back office team from the Capture Application flow in Origination as well as standalone flow in Party module.

Bulk upload of the financial documents can be done while capturing financial profile in the Origination flow as well as standalone flow in Party module.

20.13.8 Party Bank Policy (Fast Path: PI314)

Bank policy can be created to define various parameters related to party such as residence stability, minor age, and financial year. It also includes the following parameters:

- Preference for triggering due diligence, whether auto or user initiated
- 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 relationship manager for a party type
- Rules to derive the list of managers for Broker and Introducer
- Preference of the bank to provide access channels for member
- Option to enable or disable mandatory capture of upfront consent before data capture
- Option to default the consent values during party onboarding or keep them blank
- Option to attach rule for Manual Due Diligence
- Option to set if Resident Stability check is applicable for all products or asset and credit card only
- Option to set if FATCA/CRS capture is required during account opening and/or party onboarding

20.13.9 Single Party View (Fast Path: PI100)

All important party details can be viewed and managed from in a single page. The details include the following:

- Name
- Photo and signature

- Preferred address for communication
- Preferred contact details
- Total relationship
- Memos on the party
- Party profile
- Party relationships
- Party holdings
- Risk indicators
- Due diligence
- Notifications
- Customer requests
- Credit worthiness

Users can view, update and add data pertaining to party from the child pages within Single Party View. Also, certain Personally Identifiable Information (PII) data elements of party can be masked and tokenized for data security purpose. Role-based access (Read Only or All Access) can be configured for Profile, Snapshot and Holdings widgets.

20.13.10 CRS and FATCA

Information about other tax residency of a party and the countries in which the customer has tax liability along with the tax identification for the country can be captured. Parties who have a tax residency in US are marked as reportable under FATCA and those who have tax residency in other countries are marked as reportable under CRS. Party also provides the ability to capture the other details reportable under FATCA and CRS. These details can also be captured during account opening and party onboarding.

20.13.11 Data Privacy and Security

The following functionalities are supported as part of data privacy and security:

- Ability to mask field-wise and user-wise and tokenize (SSN only) in database.
- Ability to bulk export the Party PII data elements in standard file format for individual parties through the Request Party Information (Fast Path: PI501) page.
- Ability to delete all the Party PII data elements, purge identification documents completely from the database, and mark party and its linked entities as unsearchable (provided regulatory, geographical rules are met).
- Ability to delete certain Party PII data elements (optional attributes).

20.13.12 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.	М	N
2	Date of Birth	Date of birth of a party	М	Y
3	Birthplace	Place of birth of a party	0	Ν
4	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	М	N
5	Gender	Gender of a party	0	Y
6	Country of Citizenship	Country of citizenship of a party	С	N
7	Nationality	Nationality of a party (same as Country of Citizenship) This is a backend field and not available in UI.	0	N
8	Party Identification	Tax and Other identification details of a party	М	Y
9	Other Tax Residency Details	All FATCA (US)/CRS (Non US) details of a party	0	Y
10	First Name	First name of a party	М	N
11	Second Name	Second name of a party	0	Ν
12	Middle Name	Middle name of a party	0	Ν
13	Last Name	Last name of a party	0	Ν
14	Photographic Images	Images of party's photograph and signature	0	N
15	Login Name	Email ID or User ID or Customer ID of a party	С	Y
16	Marital Status	Marital status of a party	0	Ν
17	Mother's Maiden Name	Maiden name of a party's mother	0	Y
18	Religion	Religion of a party	0	Y
19	Ethnicity	Ethnicity details of a party	0	Y
20	Race	Race details of a party	0	Y

Table 20–2 List of Personally Identifiable Information (PII) elements

Sr. No.	Element Name	Description	Mandatory (M) / Optional (O) / Conditional / Configurable (C)	Masking
21	Blood Group	Blood group of a party	0	Ν
22	Industry	Type of industry in which a party is employed	0	Ν
23	Occupation	Occupation of a party	0	Ν
24	Languages	Preferred language of a party	0	Ν
25	Emergency Contacts	Name and contact number of emergency contact person for a party	0	N
26	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	0	Ν
27	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)	С	Y
28	All Social Network User ID	Social Network details of a party such as Linked In, Facebook, Twitter, and Hi5	0	Y
29	All Messenger User ID	Social Network Messenger details of a party such as GTalk, Yahoo, MSN, and Skype	0	Y
30	Education History	Educational details of a party such as qualification, grade, university, and so on	0	N
31	Employer Name	Name of party's employer in the party's past and current employments	0	N
32	Employee ID	Employee ID of a party in the party's past and current employments	0	N
33	Job Title / Designation	Designation of a party in the party's past and current employments	0	N
34	Gross Annual Salary	Gross annual salary of a party in the party's past and current employments	0	Y
35	Smoker	Indicator to denote that a party is a smoker or non smoker	0	N
36	Height	Height in centimeters (cms) of a party	0	Ν
37	Weight	Weight in kilograms (kgs) of a party	0	N
38	Hobbies	Hobbies and interests of a party	0	Ν

Sr. No.	Element Name	Description	Mandatory (M) / Optional (O) / Conditional / Configurable (C)	Masking
39	Disabled	Risk indicator to denote that a party is disabled	0	Ν
40	Deceased	Risk indicator to denote that a party is deceased	0	Ν
41	Bankruptcy	Risk indicator to denote that a party is bankrupt	0	Ν
42	Title Reference Number	Title reference related details for a collateral (applicable for Property type of collateral where party is collateral owner)	0	N
43	Property Contact Details	Property Contact Details for a collateral (applicable for Property type of collateral where party is collateral owner)	0	N
44	Builder Contact Details	Builder Contact Detail for a collateral (applicable for Under Construction Property type of collateral where party is collateral owner)	0	N
45	Valuer Agent Details	Valuer Agent Details for a collateral (applicable for Property type of collateral where party is collateral owner and valuation of collateral is applicable)	0	N
46	Vehicle Identification Number	Vehicle Identification Number for the collateral (applicable for Automobile type of collateral where party is collateral owner)	0	Ν
47	Chassis Number	Chassis Number for the collateral (applicable for Automobile type of collateral where party is collateral owner)	0	Ν
48	Registration Number	Registration Number for the collateral (applicable for Automobile type of collateral where party is collateral owner)	0	N
49	Engine Number	Engine Number for the collateral (applicable for Automobile type of collateral where party is collateral owner)	0	N
50	Financial Information	Complete financial details captured for a party	С	Ν
51	Bank Account Information	All bank accounts (account ID, account type and amount) where a party is an account owner.	С	N
52	Shareholder of	List of organization names where a party is a shareholder	0	N
53	Marketing Consent	All marketing consents (including text and value)	0	N
54	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.	0	N

Sr. No.	Element Name Description		Mandatory (M) / Optional (O) / Conditional / Configurable (C)	Masking
55	All Other Consents	All consents at party level (including text and value)	М	Ν

20.13.13 Personally Identifiable Information (PII) Shared with Third Party Systems

The application shares the Party PII details with the following third party systems:

Analytics System

- The Analytics Application enables financial institutions to manage enterprise performance, risk, financial compliance and customer insight through analytical tools for various analysis and report generation.
- They primarily depend on the data supplied by various enterprise applications for the analytics. The application provides various details related to the bank, branches, customers (including Customer PII details) and accounts to such analytical systems.
- Using this analytics, the bank or financial Institution is better able feel the pulse of their business health and helps to fine tune their services and offerings to the customers

Customer Master Data Management System

- The Party module can be integrated with any customer master data management system or can work as a master data management system on its own. The customer details are first created or updated in master data management and then updated in the Party module.
- The party details (including PII details) are shared with the customer master data management system as part of customer data life cycle.
- There may be synchronous update of such data in the systems.
- Customer Relationship Management System
 - The Party module can be integrated with any customer relationship management system. The customer details are shared between the CRM system and the Party module, with updates synced up with or without a customer data management system in the middle.
 - The party details (including PII details) are shared with the customer relationship management system as part of customer data life cycle.

The list of Party PII details that are shared with these third party systems is as follows:

Sr. No.	Party PII Details	Third Party Systems		
		Analytics	Customer Master Data Management	Customer Relationship Management
1	Full Name	Ν	Y	Y

Table 20–3 List of PIIs shared with third party systems

		Third Party Systems			
Sr. No.	Party PII Details	Analytics	Customer Master Data Management	Customer Relationship Management	
2	Date of Birth	Y	Y	Y	
3	Birthplace	N	Y	Y	
4	Address	Y	Υ	Y	
5	Gender	Y	Υ	Y	
6	Country of Citizenship	Ν	Υ	Y	
7	Nationality	Y	Y	Y	
8	Party Identification	Y	Y	Y	
9	Other Tax Residency Details	Y	Y	Y	
10	First name	Y	Y	Y	
11	Second Name	Y	Y	Y	
12	Middle Name	Y	Y	Y	
13	Last Name	Y	Y	Y	
14	Photographic Images	N	Y	Y	
15	Login Name	N	Y	Y	
16	Marital Status	Y	Y	Y	
17	Mother's Maiden Name	N	Y	Y	
18	Religion	N	Y	Y	
19	Ethnicity	N	Y	Y	
20	Race	N	Y	Y	
21	Blood Group	N	Y	Y	
22	Industry	Y	Y	Y	
23	Occupation	Y	Y	Y	
24	Languages	N	Y	Y	
25	Emergency Contacts	N	Y	Y	
26	All Telephone Numbers	N	Y	Y	
27	All Email Address	N	Y	Y	
28	All Social Network User ID	N	Ν	Ν	
29	All Messenger User ID	Ν	N	Ν	

		Third Party Systems			
Sr. No.	Party PII Details	Analytics	Customer Master Data Management	Customer Relationship Management	
30	Education History	Y	Y	Y	
31	Employer Name	Y	Y	Y	
32	Employee ID	Y	Y	Y	
33	Job Title / Designation	Y	Y	Y	
34	Gross Annual Salary	Y	Y	Y	
35	Smoker	N	Y	Y	
36	Height	N	Y	Y	
37	Weight	N	Y	Y	
38	Hobbies	N	Y	Y	
39	Disabled	N	Y	Y	
40	Deceased	N	Y	Y	
41	Bankruptcy	Y	Y	Y	
42	Title Reference Number	Y	N	N	
43	Property Contact Details	N	N	N	
44	Builder Contact Detail	Ν	N	N	
45	Valuer Agent Details	Ν	N	N	
46	Vehicle Identification Number	Ν	Ν	N	
47	Chassis Number	N	N	N	
48	Registration Number	N	N	N	
49	Engine Number	N	N	N	
50	Financial Information	Y	N	N	
51	Bank Account Information	Y	N	N	
52	Shareholder of	N	N	N	
53	Marketing Consent	Y	Y	Y	
54	Electronic Communication Consent	Y	Y	Υ	
55	All Other Consents	Ν	Y	Y	

20.13.14 Customer Onboarding from Oracle Sales Cloud

Customer onboarding can be done from Oracle Sales Cloud using the Party onboarding functionality. The pages are rendered inside the Oracle Sales Cloud application as User Interface Mash Up.

20.13.15 Customer Establishment

Customer Establishment is the initiation of a new customer into the eco system of a bank. It supports onboarding a legal entity wherein there is no business arrangement or agreement with the bank (that is a customer can be onboarded without applying for a product through Origination). It aims at supporting a single point of access to customer data and providing a consolidated view of a customer across the enterprise. It provides a single platform to onboard customers across different lines of business.

With the existing productized integration of the application with Oracle Customer Hub (OCH), a list of entities that are common between OCH and the application have been identified. An OCH first pattern is followed, whereby data for common entities between OCH and the application is read from OCH. Any modifications to the party data under the common entities is updated to OCH and then to the application.

It primarily supports the following functions:

- Performing due diligence verification of a customer
- Authorization enabled servicing for existing customer information (for example, updating the address or phone numbers)
- User-friendly interface that matches the sequence of customer data capture
- Out-of-the-box integration with customer MDM (pre-integrated with Oracle Customer Hub)
- Read and update customer data
- Onboard customer
 - New to bank customer (Onboard in OCH and the application)
 - Existing customer in OCH (Onboard in the application)

20.14 Incentive

Incentive module supports calculation of broker and dealer compensation for sourcing loans. The loans are sourced by these service providers, for which bank pays them commission. Incentive module supports defining plans and plan policies for service providers.

20.14.1 Define Plan for Service Providers (Fast Path: INC01)

Through this page, the plans can be defined for service providers:

- Compensation Plan: It is defined as an agreement between bank and dealer or broker, where the bank pays compensation (commission) based on various criteria to the dealer for selling bank loans at interest rate which is higher than buy rate. Compensation is applicable for service provider dealer and broker.
- Subvention Plan: It is considered when the dealer sells the loan at lower than the buy rate. Dealer is
 responsible for paying the interest difference between the two. Subvention is applicable only when
 service provider is dealer.
- Charge Back Plan: It is recovery of excess compensation amount eligible to be paid or paid to the dealer. It is applicable only when the payment method is upfront or upfront month end. This can occur in two scenarios:
 - Early closure (Early Final Settlement)
 - Charge-off (Delinquency)

- Payback Plan: It is paying back excess subvention amount eligible to be received or received from the dealer. It is applicable only when the payment method is upfront or upfront month end. This can occur in two scenarios:
 - Early closure (Early Final Settlement)
 - Charge-off (Delinquency)

20.14.2 Maintain Plan Policy for Service Providers (Fast Path: INC02)

Through this page, plan policies can be created for service providers. The plan policy resolves the plan ID (created using INC01). Bank can use different facts for resolving plan ID. Based on the resolved plan ID, the details of the applicable plan of compensation, subvention, charge back and payback are calculated.

20.15 Limits and Collateral Management (LCM)

LCM enables the setting up of limits for various parameters in a facility and the management of collateral provided against the loan:

20.15.1 Limits Management

Following are the key features of Limits Management:

20.15.1.1 Setup Limits

Limits and Collateral Management (LCM) allows setup of one or multiple credit facilities for a customer. Limits can be set for each facility granted to a customer. The Broker or Introducer details are stamped at the Credit Facility level. The bank can set up credit facilities for various products of the bank such as Loans, Foreign exchange, Overdrafts, Trade Finance, Flexible Credit Facility that supports fixed and variable rate revolving credit accounts, and so on. The bank user can capture the limit amount and limit currency, along with limit start date, limit expiry date, date for first disbursement, date for last disbursement, credit risk score, risk grade and effective dates as applicable to the customer's credit facility. The solution supports creation of facilities of Revolving and Non-Revolving types. In case of a Revolving Type, once the repayment is made, the amount of limit will be automatically reinstated to the extent of repayment, whereas in case of Non Revolving line, the limit will not be available for further draw down. Facility start date is the account opening date when the facility is originated from Origination. Following features are supported:

- Creation of facility tree (subline under main line) is a configuration in facility category. If facility tree creation is allowed as per the configuration then within a Credit facility, several sub facilities can be defined for a product group or across a combination of product groups. Each sub facility can act as a parent facility for an additional level of sub facility, resulting in the definition of limits at multiple levels. Accounts are linked at the lowest level of limits (operating line).
- A guarantor or a cosigner to the credit facility can be captured at the credit facility.
- Concession group is a concept that can be used to provide pricing benefits. This is stored at a credit facility level.
- Multiple collaterals can be linked to the Parent Credit Facility. The LCM system computes Loan to Value ratio and stamps the same at Parent Credit Facility level.
- Capture start date and end date for draw period and also the repayment period at facility level for HELOC.

- Two methods of Loan to Value Ratio computation are supported, that is Quadrant Deduction method and Uniform LVR method. This computation factors to In Principle Approval and Internal Refinance figures. LVR determines the LTV Code. LVR and/or LTV Code are stamped at the Parent Credit Facility level.
- Treatment of senior charge of other bank is considered while calculating the LVR of the facility. If the treatment is selected as Add Charge to Exposure, then the system adds the other bank's senior charge to the exposure while calculating the LVR. If the treatment is selected as Deduct Senior Charge from Collateral, then the system deducts the other bank's senior charge from collateral during LVR calculation. This is applicable only for Uniform LVR.
- There is also a provision to set up a Periodic Fee at facility level. The loan account or CASA account can be nominated to collect the Periodic Fee at facility level.
- Risk indicators can be attached to the Credit Facility. This prevents facility modification in the event of a garnishment order, litigation or bank assessed risk.
- Credit Facilities can be monitored using available alerts and reports to track utilization and deterioration of LVR.
- Within the sanctioned limit, the flexibility to create new sublines, amend existing sublines and link or delink accounts is supported without the need to perform a fresh Origination process.
- Grace period is maintained in global parameter of renewing the facility after expiry. The system allows
 renewing the facility within configured period.
- Supervisory LTV (SLTV) Rule: SLTV is a control level LTV that places a restriction on the maximum amount that can be lent to customer against a specific category of collateral. The SLTV for the various combinations of facts can be defined as part of a rule. The rule will be attached in the Global Parameters page under the SLTV accordion. System should refer to the definition of SLTV (as part of global parameters) whenever LTV ratio calculation is done (as part of the origination process or servicing) and should be able to give a warning message thereby prompting the user to ask for additional collateral or mortgage insurance.
- An Evergreen revolving credit facility, that is the facility for which term is not defined, can be set up. A configuration to categorize a facility category as Evergreen is provided.
- Secondary Purpose of the credit facility can be amended during amending the credit facility. It is
 mandatory during creating or amending the credit facility.
- Specific collateral and charge combination can be excluded from LVR computation.

The above functionality is addressed in the following pages:

- Global Parameter Details (Fast Path: LCM48)
- LTV Matrix (Fast Path: LCM52)
- Borrowing Entity (Fast Path: LCMS51)

20.15.1.2 Credit Facility Review

Generally bankers analyze the behavior of the Credit Facility from time to time and also examine the relevant documents to review the conduct of the Credit Facility offered to the customer. Manual as well as automatic facility review are supported and a comprehensive information view is available to support review by the user, based on the bank's credit policies. On review, the banker may decide to extend the Credit Facility for a further period of time if required and restrict to maximum number of extensions allowed for the facility. The

reviewer may also recommend increase or decrease in the credit limit or cancellation of limit which may be referred to competent authority for decision.

Automatic Credit review can also be configured based on business rules.

Renewal of expired facilities is supported with the ability to control the charging of facility fees between the expiry and renewal of facility.

The above functionality is addressed in the Facility Review (Fast Path: LCMS19) page.

20.15.2 LCM Serve

LCM Serve is a one-stop solution which provides a single unified view of the credit facilities, collaterals, insurance policies, other types of facilities such as AUF and Temporary Excess, and the compliance status of the terms of credit (conditions and covenants). It helps the bank in performing the following functions:

- Provide a holistic view of the entities linked to the party in LCM and establish a correlation between them to help serve the customer better.
- Provide a comprehensive view of the facilities and the linked entities for prudent risk management by the bank.
- Ability to initiate relevant transactions from the LCM Serve page across all entities of LCM which include facility review or renew, credit facility maintenance, collateral valuation, collateral charge renewal, compliance of condition and covenants, manage linked insurances, and so on.
- Ability to highlight statuses that need immediate action across entities linked to the facility.
- Ability to decrease the facility amount when the credit facility certifies the following conditions:
 - Credit Facility should be revolving.
 - Sub facility creation should not be allowed.
 - Nature of facility should be None.
 - Effective limit basis should be limit amount.
 - Define Linkages
- Ability to support Progressive Disbursements as follows:
 - Ability to set disbursement requirement for the collateral using the Global Parameter Details (Fast Path: LCM48) page.
 - Ability to configure and select appropriate reason codes for modification or cancellation of payout instructions.
 - · Ability to configure and resolve inbound documents.
 - Ability to perform collateral valuation before the disbursement.
 - Ability to display origination and servicing fees for collection.
 - Ability to perform collateral disbursement at various construction stages (first or second disbursements).
 - Ability to perform single or multiple disbursements under same construction stage.
 - Ability to validate stage wise available balance before performing the disbursement.
 - Ability to persist the disbursement details in this page, when the details were maintained or captured in the Settlement Instruction BPM task.

• Ability to comply conditions that are applicable for the facility, collateral, or party in context before performing the disbursements.

The above functionality is addressed in the Limit and Collateral Management (Fast Path: LCM100) page.

20.15.3 Other features

Other features include:

- Automatic closure of Credit Facility (only Non Revolving type)
- Total of Sub Credit Facility limits should be equal to the Parent Credit Facility limit in case of Non Revolving Type of Credit Facility.
- Determination of LTV based on the Bank Value LVR or Market Value LVR of the facility
- Determination of LVR for IPA submission in Origination
- Negotiation of deferred fees at the time of collection
- Charging of fees for processing Temporary Excess Limits and Advance against Unclear Funds
- Accrual of Periodic Facility Fees
- Report generation of credit extended to insiders and tracking of exposure of related interest of insiders. Such exposures can be validated against the insider threshold maintained by the bank. There is also a capability to validate the exposure of executive officer and the related party of executive officer with the minimum of Executive Officer Credit Threshold or Executive Officer Credit Limit amount maintained in the Bank Policy (Fast Path: CS26) page.
- Computation of available equity in Origination.
- Identification of an account as secure or unsecured.
- Capability to store the LVR even if it is calculated by the external system.
- Hand off of limit data to the common staging area during the End Of Day process.
- Ability to capture details of external credit facility that are available in the legacy system and share the same collateral details to Origination.
- Ability to display the external credit facility details and collateral details that are used to compute the market and bank LVR. This functionality is applicable only if the LVR Calculation Method is set as Residual Collateral Value Allocation.
- Ability to reduce the term deposit amount less from the numerator as well as denominator, if term deposit is linked to the Family Guarantee type of collateral. This improves the LVR and reduce the instance of additional LMI needed to be provided by the customer to secure a loan. This functionality is applicable only if the LVR Calculation Method is set as Residual Collateral Value Allocation.

20.15.4 Collateral Management

Collateral refers to the asset obtained by the bank to secure a loan or advance. This is done to mitigate the risk of default by the borrower. Banks also use the value of the collateral to ascertain the amount of funds that could be advanced to the borrower. Collaterals are of various types such as Property, Vehicles, Marketable Securities, Deposits, Business Assets and so on. Additionally, less prevalent collaterals like Water, Vehicle License, Industry Business Value, Non-Financial agreement, Intangible assets, Bullion, Aircraft, Artwork, Financial Agreement and Undertaking are also supported.

20.15.4.1 Capture Collateral Details

Various collateral types, collateral categories and sub-categories can be defined. There are various preferences which can be defined at the collateral category level for example, hair cut percentage to arrive at bank value, whether valuation and title search are applicable, whether charge creation is required, and so on. There is also an ability in the solution to identify Low Risk Collaterals and perform check on the identified set of liquid assets. Additionally, the banker can also define if collateral address is mandatory, optional or not required for a given collateral type, as part of the business configuration.

After defining the collateral types and categories, the details required for setting up a collateral record such as collateral description, estimated market value, ownership details, address details, notice days for expiry of collateral can be captured. The collateral description is defaulted to collateral type. In case, address is applicable for a collateral, the collateral description is populated with address. Certificate of title details can be captured on a separate tab during collateral creation process. Optional additional details specific to the collateral type or category can also be captured for example, for a property type of collateral, details such as number of rooms, year of construction, date of purchase, dimensions of the property, project name, property contact details can be captured. Similarly for guarantee type of collaterals, the guarantor name and supporting guarantee collateral when the guarantor is onboarded in the application as a party. System also has the capability to change the collateral sub category during collateral update process for Guarantee and Indemnity type of collaterals, if collateral sub category is applicable.

Multiple charge types can be set-up for a collateral category, with any one as default. Charge details applicable to the collateral such as charge type, priority, and so on can also be captured including other bank charges. In cases where the charge of the collateral is held by other banks, a deed of priority can be generated to capture the priority of charge and obtain the consent of other banks holding a stake on the collateral. There is an ability to capture the consent for subsequent mortgage while capturing an own bank charge if any higher priority charges of other banks are present for the same collateral. The registered dealing number of the other lender's mortgage over the collateral can be recorded.

The solution has the ability to perform dedupe of a collateral record on each tab of collateral and supports configuration of Probable Match criterion for dedupe (any one or more of the dedupe parameters can be selected for checking probable match).

The solution also offers the ability to maintain Risk Indicators for collaterals, with an option to define actions on risk indicators such as Prevent Release of Collateral, Prevent Discharge of Collateral, and so on.

The solution also has the ability to provide a view of all the facilities, sub-facilities and accounts linked to a given collateral, either directly or indirectly.

The solution also has the ability to trigger a reason code based approval when user delinks a supporting collateral from Guarantee and Indemnity collateral.

When a charge is created on collateral by any bank of the enterprise, then that charge can be used by other banks in the enterprise, as the charge in such collateral is in favor of the enterprise.

Other features include:

- Term deposits and savings account with other banks can be linked to a Deposit type of collateral.
- Documents in support of collateral can be uploaded and linked.
- Creation of a General Securities Agreement and capture of the underlying assets that constitute to the General Securities Agreement.
- Capturing of Guarantee Arrangement Type for collateral type Guarantee and Indemnity.
- Capturing of License state and type for Liquor and Vehicle licenses.

- Ability to change collateral sub-category during collateral modifications for Property type of collaterals.
- Ability to increase or decrease the bank haircut value during collateral creation process to an extent of haircut variance range maintained in collateral category preference. Once the collateral is created, bank haircut cannot be amended during the update process.
- Ability to capture details of under construction property like the construction start date, land value, entity responsible for constructing on the property, that is Owner, Owner Builder, or Builder.
 - Owner: The collateral owner is constructing the property. Owner can appoint a contractor and get the construction done.
 - Owner Builder: The collateral owner is also a licensed builder and completes the construction through the owner's company.
 - Builder: A builder is appointed to complete the construction.
- Capture additional details for the builder like contact person details and the builder's account details.
- Service to pass the maximum construction period to account configuration in Origination for direct collaterals which are marked as Under Construction.
- Ability to capture number of bathrooms for Property collateral type and all categories except Water Property.
- Ability to capture at collateral level that customer has given verbal payment authority to proceed with the subsequent or all future disbursements.
- Ability to capture the effective date from which the builder, owner builder, or registered owner builder has taken over or assigned with the construction work.
- Ability to display an indicator to show the current builder.
- Ability to view all the builders added for future reference.
- Ability to retain the information related to Under Construction details, Construction Stage details, or Verbal Payment Authority field, if at least single disbursement is performed.
- Ability to deselect the Under Construction option, even if single disbursement is performed.

20.15.4.2 Collateral Perfection

The charge recorded on collateral may require stamping and/or registration with the relevant authorities for the bank to have a statutory right over the collateral in case of default by the customer. Ability to record registration details for the charge on collateral is provided. Multiple charges can be combined and registered under a single charge registration number. An outbound document can be generated as a part of Charge Creation.

For every charge type, a Charge Registration Renewal Frequency can be configured. A charge renewal date is established from the Charge Registration Date. A continuation statement can be generated x days prior to the charge renewal date.

When collateral is returned to the borrower, the collateral record can be marked as Released or Discharged. The release of collateral is affected online. The collateral record can also be closed and the charge released. A termination statement can be sent to customer.

Bank can configure if the due diligence checks (such as KYC, AML) need to be verified for the collateral owners of the selected collateral. This check will be done before initiating collateral perfection.

Ability is provided to interact with DMS module through the Inbound document policy for identifying the documents to be resolved for the respective collateral entities. Additionally ad hoc documents can also be

uploaded through the inbound document panel. There is also an ability to interact with DMS module through the outbound document policy for identifying the recipients and the documents to be dispatched to the respective recipients related to the collateral.

The above functionality is addressed in the Perfection Capture (Fast Path: LCM022) page.

20.15.4.3 Collateral Valuation

The bank undertakes the process of collateral valuation to ascertain the estimated fair market value of the collateral provided by the customer. The hair-cut percentage can be applied to the assessed value of the collateral to arrive at Bank Value and to calculate the Loan to Value Ratio. Policy deviations, if any, can be lodged as part of the valuation process. Collaterals can be Non Market Based or Market Based.

20.15.4.3.1 Valuation Process for Non-Market Based Collaterals

The valuation for non market based collaterals is generally carried out by the valuation agencies. The process of valuation may be either automatic or manual. There is a collateral category level flag to configure the default valuation mode (automatic or manual) for a collateral category.

The rules to determine the number of valuations required for given collateral and valuation agency can be defined based on various attributes of collateral such as Collateral Value, Location of Collateral, Loan Value, Valuation Type, and so on.

After initiation of the request for valuation, the banker may send an amendment or cancellation request to the valuation agency for any reason.

The banker can also raise the enquiry or questions in relation to a completed valuation report if any by initiating a separate request to the valuation agency.

20.15.4.3.2 Valuation Process for Market Based Collaterals

The customers can offer marketable securities as collateral to back the credit facilities offered by the bank. The collateral value is derived based on the number and the price of the securities provided by the customers.

The latest prices for the market based collateral or securities can be obtained periodically from various sources such as Stock Exchanges, Bloomberg or Reuters, and so on and can be updated against the securities. Issuer based limits can also be maintained to limit the exposure to the securities issued by a certain issuer.

The valuation process for market based collaterals can be categorized in two types:

Schedule Valuation

In this case, the valuation of securities is carried out based on the frequency defined for the collaterals to which the securities are linked.

Ad hoc Valuation

Under this method, the banker can perform the valuation of a particular security at any point in time, if the banker feels that a particular security is very volatile and an ad hoc valuation is necessary to correctly reflect the collateral value. This ad hoc valuation is conducted over and above the Schedule Valuation. This ad hoc valuation can also be termed as a Forced Revaluation.

Other features related to valuation include:

 Workflow enabled valuation process. Separate sequential tasks to be created for request details, report capture, verification, and so on.

- Ability to set minimum number of valuations required for the collateral rule.
- Ability to manually select valuers, in addition to existing capability of system derived valuers (based on valuer preference).
- Ability to check receipt of mandatory documents required for valuation or availability of contact details
 of person related to property (such as real estate agent, broker and so on) to automate a valuation
 request task.
- Ability to re-trigger valuation requests for cases where ordering of valuation has failed.
- Ability to amend valuation report. Verification is made mandatory even for online valuation report.
- Ability to automatically cancel a valuation request to ensure that valuation costs are minimized because of various events such as:
 - Withdrawal of submission
 - Removal of collaterals attached to a submission
- Ability to report overdue revaluations and revaluate collaterals based on predefined tolerance.
- Initiate valuation of proposed subdivided or consolidated collaterals.
- Ad hoc revaluation of a single or group of collaterals through a single page.
- Ability to collect preconfigured fees from customer, as a part of standalone valuation request capture.
- A valuation report can be shared with the customer.
- Ability to configure a rule as part of Valuer Preferences (Fast Path: LCM037) page, to maintain the list
 of documents required to perform a particular valuation type.
- Ability to display reason code and description for various valuation statuses such as Delayed, Cancelled, and Failed received from valuation vendor.
- Ability to raise valuation query and receive response from an external interface for both Approved and Rejected reports.
- Ability to default a valuation type (for example, Appraisal or Evaluation) for a Property collateral which is offered as security by linking a rule using the Global Parameter Details (Fast Path: LCM48) page. The rule will get evaluated in the Collateral Valuation Process (Fast Path: LCM063) page, if there no valuation type provided by the external interface.
- Ability to ignore the valuation report for specific valuation type by not updating the collateral market value.
- Ability to send updated collateral details to external credit decision system against each of the valuation records based on the valuation type used for the respective valuation record.

20.15.4.4 Title Search

Title search is a process of establishing the rightful or legal owner of the collateral offered by the borrower. It is also expected to reveal any existing encumbrance or lien on the collateral. It is usually carried out for Property type of collateral. Title search is carried out by an attorney, specialized agency or a title insurance company. Lending institutions usually ensure that the title search process on the collateral submitted by the borrower is duly completed before the disbursement of any funds.

Maintenance of empanelled title search agencies is supported. The user can choose the specific agent while initiating title search.

Initiation, amendment and cancelation, capture of report and its verification is supported as part of the Title Search process.

The solution offers the bank to maintain title search agencies empanelled to carry out the title search and allows the user to choose specific agents to complete the process.

The application supports the user to initiate a request for title search, amend an initiated request or cancel an initiated request capturing the search reports and verification.

Other features related to title search include:

- Workflow enabled title search process. Separate sequential tasks to be created for request details, report capture, verification, and so on.
- Ability to manually select title search agents, in addition to existing capability of system derived agents (based on title search agent preference set in the Title Search Agent Preference (Fast Path: LCM040) page).
- Ability to amend the title search report. Verification is made mandatory even for online title search report.
- Ability to order automated online title search as part of collateral capture during the origination process.
- Ability to reorder subsequent title search based on the report details captured as part of the initial title search.
- Ability to automate title verification process based on title verification rules written as part of Rule Author framework.

20.15.4.5 Conditions or Covenants

Conditions are stipulations and constraints, recorded in a contract, to restrict the usage of funds, in order to ensure proper utilization of funds for the specified purpose and to adhere to a stipulated schedule.

Conditions are categorized as follows, based on the point of time at which these conditions are to be complied with:

- Preliminary Conditions
- Precedent Conditions
- Subsequent Conditions

A **Preliminary Condition** is the one that must be satisfied before an account can be created. If the condition is not complied with, the workflow is to be stopped before an account can be created. The tracking of compliance to Preliminary Condition is to be handled manually. Example: License or permission for starting a business.

A **Condition Precedent** is the one that must occur after account creation but before the loan funds can be disbursed. Example: Disbursement of the loan at multiple stages of construction.

A **Condition Subsequent** is the one that must occur post loan disbursement, but only once in the life time of the loan. The start date and the end date of the event can be defined in the system while defining a condition subsequent. Example: Physical verification of stocks, inspection of Plant and Machinery or progress of work.

Covenants are clauses or stipulations in an agreement that requires one party, to do or refrain from doing certain things. The purpose of a covenant is to assist the lender to ensure that the health of loan facilities does not deteriorate suddenly or unexpectedly before maturity.

Banks usually add covenants to a loan contract in order to accomplish the following objectives:

- Maintain acceptable loan quality
- Keep adequate cash flow
- Preserve equity in a borrowing entity with a known weakness in its capital structure as a measure to overcome this weakness
- Keep an updated picture of the borrower's financial performance and status

The application allows the user to capture the following types of covenants:

- Financial: This refers to a level that a borrower is required to maintain in key financial ratios such as, minimum quick and current ratios (liquidity), minimum return on assets and return on equity (profitability), minimum equity, minimum working capital and maximum debt to worth (leverage).
- Reporting: Covenants of reporting type, for example, periodic financial reports every quarter or change in key management personnel.
- Undertaking: Covenants of undertaking type, for example, will not enter into new businesses without the consent of the bank.

Conditions or Covenants can be grouped together through definition of Condition or Covenant Category. This is not mandatory. However, it will be mandatory only when the bank wants to administer a Condition or Covenant Policy and then attach conditions returned from the condition policy to a Lending submission.

Condition or Covenant Policy Definition can be used by the bank to determine which Condition or Covenant Categories can be applied on the basis of pre defined business rules. The Condition or Covenant policy is linked to one of the Entity linkage levels (Party, Collateral, and Facility). All required business rules are configured under a single Condition or Covenant Policy for each of the entity linkage level. Based on the pre-defined business rules, bank can administer its condition or covenant policy to apply conditions or covenants on a lending submission. This need not be mandatory maintenance but is provided as part of the core functionality of the product.

All conditions or covenants applicable for a lending submission are resolved by solution automatically through administering a condition or covenant policy, during credit assessment. The resolution of applicable conditions or covenants is done at Loan submission level. The conditions or covenants thus returned are discussed with the customer and documented in the Lending Submission for approval. When condition or covenant policy is not administered, user can also link conditions or covenants manually to entities in a Lending submission.

Conditions or Covenants can also be defined as Internal or External to restrict the visibility.

External means that the conditions or covenants view to be made available to the customer and also to be printed on the Term sheet which is sent to the customer. If the Condition or Covenant is not complied by due date (including grace days), the compliance status is marked as overdue and the Condition or Covenant is treated as Breached. The count of days of overdue will start from the due date. If the Condition or Covenant is waived subsequently, a letter of waiver can be sent to the customer.

Internal means that the condition or covenant is only for the bank's internal consumption and not to be printed on the Term sheet. These conditions or covenants can also be referred as Silent Conditions or Covenants. If the silent Condition or Covenant is not complied by due date (including grace days), the compliance status is marked as overdue but the Condition or Covenant is not treated as Breached. However, the count of days of overdue will start from the due date. If the Condition or Covenant is waived subsequently, letter of waiver will not be generated.

The linkage of conditions or covenants can be done through the following modes:

- **External**: The External Condition or Covenant mode is used only when the condition or covenant is populated through an external system input.
- **Derived**: The Derived Condition or Covenant mode is used when derived through an inbuilt logic maintained.
- Manual: The Manual Condition or Covenant mode is used when the user captures a condition or covenant manually during Lending Submission.

The following maintenances are supported:

- Setup of Condition or Covenant
- Setup of Condition or Covenant Category
- Setup of Condition or Covenant Policy
- Creation of Non Standard Conditions or Covenants
- Editing of Variable text for Standard Conditions or Covenants

The above functionality is addressed in the following pages:

- Condition\Covenant Code Definition (Fast Path: LCMS03)
- Define Conditions\Covenants Category (Fast Path: LCM15)
- Define Conditions\Covenants Policy (Fast Path: LCM12)

20.15.4.6 Data Privacy and Security

The following features are supported as part of data privacy and security:

- Ability to purge the following details of a customer's record from Collateral perspective:
 - For Property type of Collateral:
 - Information on the title of the property is deleted.
 - Information on the Property Contact Details, Builder Contact Details (for under construction property) and Valuer Agent Details (which are part of valuation of collateral) is deleted.
 - For Automobile type of Collateral: The following fields are deleted:
 - Chassis Number
 - Engine Number
 - Registration Number
 - Vehicle Identification Number
- Ability to mask the following Personally Identifiable Information (PII) from Collateral perspective based on configuration:
 - Property Contact Information: Email ID
 - Builder Contact Information: Email ID
 - Lessor and Lessee Details: Email ID and Date of Birth

20.15.5 Insurance

Insurance refers to an arrangement by which a company undertakes to provide a guarantee of compensation for specified loss, damage, illness, or death in return for payment of a specified premium.

Insurance is a special type of contract between an Insurance company and its client in which the insurance company agrees that on the happening of certain events the Insurance Company will either make a payment to its client or meet certain costs.

For example, in a car insurance policy, the insurance company agrees that if the car is damaged, the insurance company will pay the cost of repairing it. Under an Income protection policy, the insurance company agrees that if its client is unable to work, the insurance company will pay its client an agreed amount.

There are various types of Insurance available in the market, such as Life Insurance, Property Insurance, Health Insurance, Auto Insurance, Consumer Credit Insurance, Lenders Mortgage Insurance, and so on.

The following types of Insurances are supported.

- Debt Insurance: Debt Insurance refers to the Insurance taken to cover the default on the loans or advances taken by the borrower. Debt Insurance is of two types:
 - Lenders Mortgage Insurance: Lenders Mortgage Insurance (LMI) is insurance that protects the lender in the event that the borrower defaults on the home loan. It is paid as a one off insurance premium or fee when the loan is advanced. LMI is only applicable if the loan poses a high risk to the bank. This is generally because the bank lends the borrower a very high percentage of the value of the Collateral.

LMI insurance offsets losses in the case where the mortgagor is not able to repay the loan and the lender is not able to recover its costs after foreclosure and sale of the mortgaged property. LMI is essential particularly where the loan to value ratio is high (the bank has taken additional risk as part of such lending).

Lender mortgage insurance start date is updated as account opening date in the case of OD and the first disbursement date in the case of loan. The start date of the LMI policy is updated only when the start date does not come from the insurance provider or manually captured.

LVR percentage of the facility at the time of creation of LMI policy is stored in insurance and displayed in the origination process when the LMI data is retrieved.

LMI protects the bank against loss when:

- A customer defaults on his or her loan.
- The sale of collateral provided by the customer does not fully clear the amount owed to the bank.

LMI is insisted mandatorily by the banks when the loan to value ratio increases beyond the prescribed percentage.

• **Consumer Credit Insurance**: Consumer Credit Insurance (CCI) is designed to protect a consumer's ability to meet their credit product repayments in the event of their death, permanent disablement, or loss of income through injury, illness or involuntary unemployment.

Example:

- Jane takes out a Principal and Interest Loan for \$350,000 and a ANZ Mortgage Protect Policy at the same time. A few years later, she is killed in a car accident and her estate makes a claim. The amount on the Policy Schedule is \$284,626. However, the Loan Amount is only \$264,582. ANZ is paid \$264,582 to cover the Loan and \$20,044 is paid to Jane's estate.
- Barry takes out a Line of Credit for \$350,000 and a Common Wealth Bank's Mortgage Protect policy. He dies of a heart attack and his estate makes a claim. The Life Cover amount on the Policy Schedule is \$350,000 but the Loan Amount is less - \$264,582.
 Common Wealth Bank is paid \$264,582 against the Loan and \$85,418 to Barry's estate.

The lender may offer the borrower, the opportunity to take out CCI at the time they approve the loan, and the premium may be included in the amount that is being borrowed. The borrower is expected to pay the premium and the interest thereon as part of the regular loan installments.

Issuing the policy during the origination process amend only when the facility amount is increased and single borrower has not opted policy before.

- Asset Insurance: The bank may also require that the collaterals provided by the borrower be adequately insured against loss or damage of any kind. This is called Asset Insurance. For example, in case of a loan secured by a mortgage on the residential property, insurance may be taken on the property. Similarly, if stock or inventory has been provided as security for a facility, the insurance can cover the goods (and in some cases the warehouse as well). If there is a default by the customer and at the same time there is a loss or damage to the property or stock, the bank can recover the money from the insurance proceeds. There are four types of asset insurance:
 - Flood Disaster Protection Insurance: It is generally used to protect the Property type of collateral which is located in flood area.
 - Asset Insurance Others: It can be linked to any type of collateral for insuring it.
 - Home and Content Insurance: It protects the items in homes with the Home and Contents Insurance policy.
 - Landlord Insurance: It is an insurance policy that covers a property owner from financial losses connected with rental properties. The policy covers the building with the option of insuring any contents that belong to the landlord that are inside.

The following functionality is supported as part of Insurance Management:

- Linkage of Insurance Policy to Facility, Collateral, or Party: The solution supports linkage of Insurance Policy primarily to the Borrowing Entity and secondary linkage to Facility or Collateral.
- Support to Origination: The solution supports Origination through services for issuing Insurance Policy (LMI or CCI).
- CCI Policy Servicing: The solution supports issuance and servicing of CCI Policy from the standalone Insurance module. The functionality like Issuance, Opt-in, Opt-out, Change of Nominated Account, Cancellation, Suspension and amendments to the CCI Policies are supported.

The above functionality is addressed in the following pages:

- Service Provider Onboarding (Fast Path: PI028)
- Insurance Linkage Details (Fast Path: LCM09)
- Define Insurance Offer (Fast Path: PM057)

21 Australia Localization Features

This chapter describes the key features of Oracle Banking Enterprise Originations for Australia localization.

21.1 Key Features

Key features supported by Oracle Banking Enterprise Originations for Australia localization are as follows:

- Farm Management Deposit Accounts (Origination): Following are key enhancements to Originations to support FMDA:
 - Origination of FMDA Savings account is supported.
 - Origination of FMDA Term Deposit account is supported.
- Ability to capture ANZSIC and ASCO codes for account holders during origination.
- Ability to capture Australia-specific tax codes (TFN or Exemption code, ABN, ARBN or ACN) and related validations.
- Ability to capture tax beneficiary details is enabled during origination.
- Ability to capture of Non Australian Address for Current Address type for all party types.
- Ability to integrate with external interface for identity verification as part of Know Your Customer regulatory step.
- The Borrower Combination Type and Secondary Purpose facts are created by Origination and Common Account module. These facts are used to configure National Consumer Credit Protection (NCCP) rules (Regulated or Unregulated).
- The following labels in the product are renamed in Australia localization.

Table 21–1 Australia Localization Labels

Label Name in Product	Label Name in AU Localization	Remarks
Quick Refinance	Fast Refinance	Task Name
Quick Refinance Details	Fast Refinance Details	Panel Name
Institution ID	BSB	Field Name
Reference Number	Fast Refinance Reference Number	Field Name
Cancel Quick Refinance	Cancel Fast Refinance	Button name

- Due to the amendments of the Victorian State Taxation Acts Bill 2015, an increase in the rates of stamp duty is being imposed on the purchase and holding of Victorian residential real estate by foreign purchasers. The Owner Percentage and Foreign Purchaser along with Owners can be captured in Property panel. These facts are sent to pricing to derive or identify if there is any additional stamp duty to be charged or collected.
- First Home Owners Grant (FHOG): This is applicable when the customer is buying a property for the first time. The subsidy amount and reference number can be captured in the solution.

- Low Doc: For selected products, the lists of documents are less than the actual list of doc. For example, income statement, P&L statements may not be available for personal loans and some home loan. Low Doc is used for document submission and verification.
- Self Managed Superannuation Funds (SMSF): Support for trust for SMSF.
- Waived Origination Fees: The banks can define the period in years to display the waived origination fees in Loan Product Preference as per the regulatory requirement and based on the configuration, system displays waived origination fees for unregulated loans which are closed within N years.
- Credit Decisioning: Ability to interact with external credit decision interface for obtaining a credit decision. Credit Application Decisioning provides the ability for real-time credit decision for customers with lending requirements. The solution aims towards:
 - Providing an automated solution for Credit decisions by processing every loan application through the decision engine
 - Pre-population and assisted credit memorandum completion where required
 - · Customer centric decisioning capability
 - Sourcing data from Credit Bureaus to support the Application Decisioning
- Application Fraud Check: Ability to interface with external system and receive responses on the suspected applications. Application Fraud detection is applicable for lending products and is necessary to protect the bank against fraudulent attempts to obtain access funds.
- Personal Property Securities Register (PPSR) is a register where details of security interests in personal property (Collateral) can be registered and searched in Australia. During origination, the hooks to call external interface are available to support the following:
 - Registration if interest on PPSR
 - Release of registered interest on PPSR
 - Modification of a registered interest on PPSR
- Address Verification: The address validation is available based on Australian Address Capture Standard. The customer on-boarding and origination capabilities integrate seamlessly with external interface to ensure users perform their own online address verification before submitting their contact details as per Australian Address Capture standards.
- Lender's Mortgage Insurance:
 - Ability to interface with external Lenders Mortgage Insurance system. For interfacing with the external system, Origination hands off required data to Insurance module, which in turn interacts with the external system through the interface layer. Data received from an external system is stored in Insurance and displayed in origination processes by Origination module.
 - Capability to display Lenders Mortgage Insurance (LMI) and Consumer Credit Insurance (CCI) quote amounts. For LMI details, a call is made to the LMI interface to get the details as part of Funding table.
 - The human task called Lender Mortgage Insurance is created to manage interaction with external system for the creation of insurance policy within Oracle Banking. For LMI details, a call is made to the LMI interface.
- Party module supports interface requirements with respect to KYC. These changes are applicable in Manual Identity Verification (MIV) task consumed during origination.

- Quick Refinance (Fast Refinance):
 - Ability to interface with external system for performing Quick Refinance.
 - The Quick Refinance human task is created if any of the facilities require a Quick Refinance. From this task, the processing of quick refinance can be initiated. By clicking Initiate, a call is made to the interface to get the Quick Refinance details.
 - Settlement for Quick Refinance: When Quick Refinance is applicable; settlement amount with Outgoing Financial Institution (OFI) is settled through the settlement task. OFI account details are displayed, settlement is performed and shortfall validation is done. Outbound statuses such as Certified for Settlement and Settled are sent to the external quick refinance system. For quick refinance details, a call is made to the quick refinance interface to get the details.
- Ability to interface with external system for performing the application fraud check.
- Ability to interface with external system for performing credit assessment for lending and overdraft applications.
- The document upload service can also be consumed by other external systems for enabling inbound document upload.
- The solution has data sufficiency to interface with external systems of physical documents storage.
 Additionally, it exposes services for upload of documents that have been rescanned.
- Ability to integrate with external interface to register the collaterals once the settlement is completed.
- Ability to hide insider details and CTR details in the party train stop of application form.
- Ability to enable the capture of dependents name, date of birth and relationship with applicant in the party train stop of application form for lending products.
- Ability to have a placeholder to display text along with the electronic communication consent that is being captured for email as part of the contacts.
- Ability to capture consent for bureau call made during credit assessment in the party train stop. A
 bureau enquiry cannot be executed until an applicant has provided their privacy consent. Banker needs
 to record applicant privacy consent for both existing party and new party present in the submission.
 This information is obtained for every submission and persisted at application level only.
- Ability to capture information about the entity carrying out the construction work for an under construction collateral property. The entity can either be an Owner Builder or a Builder.

22 Australia Localization Features of Core Components

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

22.1 Common Services

The features are as follows:

- The common address taskflow has the capability to integrate with external address verification systems. The address taskflow also presents the Australian address fields to the users for capturing a structured address or unstructured address or a PO Box type of address. The address is shown as a single line in View mode.
- Support for capture of Australian date format and telephone number format is provided.

22.2 Valuation Service

The features are as follows:

- Ability to integrate with external valuation system for property valuation for Australia region.
- Ability to interface with external title search service provider for title search, to fetch the title details of a
 property.
- Ability to interface with external credit assessment service provider for credit assessment. The
 integration with the external interface is triggered from four touch points, which are Borrowing Power
 Calculator, Key Indicators, Submit of Application Form, and Valuation Assessment.

22.2.1 Electronic Settlement

The ability to interact with external electronic settlement interface through various API calls to perform electronic settlement of funds and lodgement of property is supported.

22.3 Party Information

The features are as follows:

- Ability to interface with the external interfaces to complete the KYC Verification for a party.
- Ability to stop displaying the document type in the list for reinitiating Active KYC whenever KYC is received as Unconfirmed for Active KYC.
- Ability to perform a passive KYC verification for a party and also to perform an active verification using identification documents on failure of passive verification. System has the ability to interface with external systems for both the verifications.
- Ability to search a party using ABN and ACN parameters

- Ability to initiate a bureau request for a customer after choosing the respective credit bureau provider and respective service code from the View Bureau Reports page.
- Ability to capture the following details while onboarding a party:
 - ABN number for all party types (Individual, Organization and Trust)
 - TFN number and Tax Exemption codes
 - Other Identification types such as Australian Registered Body Number (ARBN) and Australian Company Number (ACN)
 - ANSZIC and ASCO codes (optional for party type Individual)
 - ANSZIC code (mandatory for party type Organization and Trust)
 - MFAA License, MFAA Expiry, FBAA License and FBAA Expiry for broker
- Hooks are provided for interfacing with external systems to verify ABN and TFN that have been captured for a party.

22.3.1 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.	М	Ν
2	Date of Birth	Date of birth of a party	М	Y
3	Birthplace	Place of birth of a party	0	Ν
4	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	М	N
5	Gender	Gender of a party	0	Y
6	Country of Citizenship	Country of citizenship of a party	С	Ν
7	Nationality	Nationality of a party (same as Country of Citizenship) This is a backend field and not available in UI.	0	Ν
8	Party Identification	Tax and Other identification details of a party	М	Y
9	Other Tax Residency	All FATCA (US)/CRS (Non US) details of a party	0	Y

Table 22–1 List of Personally Identifiable Information (PII) elements

Sr. No.	Element Name	Description	Mandatory (M) / Optional (O) / Conditional / Configurable (C)	Masking
	Details			
10	First Name	First name of a party	М	N
11	Second Name	Second name of a party	0	Ν
12	Middle Name	Middle name of a party	0	Ν
13	Last Name	Last name of a party	0	Ν
14	Photographic Images	Images of party's photograph and signature	0	N
15	Login Name	Email ID or User ID or Customer ID of a party	С	Y
16	Marital Status	Marital status of a party	0	Ν
17	Mother's Maiden Name	Maiden name of a party's mother	0	Y
18	Religion	Religion of a party	0	Y
19	Ethnicity	Ethnicity details of a party	0	Y
20	Race	Race details of a party	0	Y
21	Blood Group	Blood group of a party	0	N
22	ANZSIC	Type of industry in which a party is employed	0	N
23	ASCO	Occupation of a party	0	Ν
24	Languages	Preferred language of a party	0	Ν
25	Emergency Contacts	Name and contact number of emergency contact person for a party	0	N
26	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	0	N
27	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)	С	Y
28	All Social Network User ID	Social Network details of a party such as Linked In, Facebook, Twitter, and Hi5	0	Y
29	All Messenger User ID	Social Network Messenger details of a party such as GTalk, Yahoo, MSN, and Skype	0	Y
Sr. No.	Element Name	Description	Mandatory (M) / Optional (O) / Conditional / Configurable (C)	Masking
------------	-------------------------------------	---	---	---------
30	Education History	Educational details of a party such as qualification, grade, university, and so on	0	N
31	Employer Name	Name of party's employer in the party's past and current employments	0	N
32	Employee ID	Employee ID of a party in the party's past and current employments	0	N
33	Job Title / Designation	Designation of a party in the party's past and current employments	0	N
34	Gross Annual Salary	Gross annual salary of a party in the party's past and current employments	0	Y
35	Smoker	Indicator to denote that a party is a smoker or non smoker	0	N
36	Height	Height in centimeters (cms) of a party	0	N
37	Weight	Weight in kilograms (kgs) of a party	0	N
38	Hobbies	Hobbies and interests of a party	0	N
39	Disabled	Risk indicator to denote that a party is disabled	0	N
40	Deceased	Risk indicator to denote that a party is deceased	0	N
41	Bankruptcy	Risk indicator to denote that a party is bankrupt	0	N
42	Title Reference Number	Title reference related details for a collateral (applicable for Property type of collateral where party is collateral owner)	0	N
43	Property Contact Details	Property Contact Details for a collateral (applicable for Property type of collateral where party is collateral owner)	0	N
44	Builder Contact Details	Builder Contact Detail for a collateral (applicable for Under Construction Property type of collateral where party is collateral owner)	0	N
45	Valuer Agent Details	Valuer Agent Details for a collateral (applicable for Property type of collateral where party is collateral owner and valuation of collateral is applicable)	0	N
46	Vehicle Identification Number	Vehicle Identification Number for the collateral (applicable for Automobile type of collateral where party is collateral owner)	0	N
47	Chassis Number	Chassis Number for the collateral (applicable for Automobile type of collateral where party is collateral owner)	0	N
48	Registration	Registration Number for the collateral (applicable	0	N

Sr. No.	Element Name	Description	Mandatory (M) / Optional (O) / Conditional / Configurable (C)	Masking
	Number	for Automobile type of collateral where party is collateral owner)		
49	Engine Number	Engine Number for the collateral (applicable for Automobile type of collateral where party is collateral owner)	0	N
50	Financial Information	Complete financial details captured for a party	С	N
51	Bank Account Information	All bank accounts (account ID, account type and amount) where a party is an account owner.	С	N
52	Shareholder of	List of organization names where a party is a shareholder	0	N
53	Marketing Consent	All marketing consents (including text and value)	0	N
54	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.	0	N
55	All Other Consents	All consents at party level (including text and value)	М	N

22.3.2 Personally Identifiable Information (PII) Shared with Third Party Systems

The application shares the Party PII details with the following third party systems:

- Due Diligence System
 - Due Diligence solution enables banks to perform Know Your Customer (KYC) checks for all the customers in the bank.
 - The Party module shares the customer details (including PII details) with the third party system for checking due diligence status of a party.
 - Based on the checks run in the third party system, the party status is updated and maintained in the application.
- Business Number (BN) Search
 - Business number of a party is captured for all the types of party such as organization, trust or individual (self-employed) as part of customer onboarding or maintenance in Party module.
 - The application shares the party information (including PII details) with the third party system as part of business number verification process.

Credit Decision System

- Oracle Banking Originations interacts with external credit decision interface for obtaining realtime credit decision for customers with lending requirements
- The application shares the loan, collateral and party information (including PII details) with the external credit decision system for credit approval processing as part of lending application origination.

Fraud Assessment System

- Oracle Banking Originations interacts with the fraud assessment system as part of credit decision process.
- The application shares the party information (including PII details) with the external fraud assessment system for fraud check of all the parties in submission.

Digital Settlement System

- Digital settlement process handles property and funds settlement as part of lending applications origination process.
- The application shares the party (including PII details), collateral information with the external digital settlement system to complete the digital settlement lodgement and processing

Property Valuation System

- Oracle Banking Limits and Collateral Management interacts with the third party valuation system to determine the valuation type and valuation amount for the collaterals linked to the facility to determine the valuation sufficiency.
- The application shares the facility, collateral and party information (including PII details) with the external valuation system for determining the collateral value.

Property Title Search Vendor

- Oracle Banking Limits and Collateral Management interacts with the third party title search vendor to trigger a new or retrieve an existing title search report for the collaterals linked to the facility for establishing the rightful or legal owner of the collateral offered by the borrower and reveal any existing encumbrance or lien on the collateral.
- The application shares the collateral and party information (including PII details) with the external title search vendor for title search processing.

Quick Refinance System

- Oracle Banking Originations interacts with Quick Refinance system to process the settlement. When Quick Refinance is applicable, settlement amount with an Outgoing Financial Institution (OFI) is settled through the external quick refinance system.
- The application shares the account and party information (including PII details) with the external quick refinance system to complete fund settlement faster.

The list of Party PII details that are shared with these third party systems is as follows:

		Third Party Systems							
S r. N o.	Party PII Details	Due Diligen ce	Busine ss Numbe r Search	Credit Decisi on	Fraud Assessm ent	Digital Settlem ent	Propert y Valuati on	Proper ty Title Searc h	Fast Refinan ce
1	Full Name	N	N	N	Y	Y	Y	Y	Y
2	Date of Birth	Y	N	Y	Y	N	N	N	N
3	Birthplace	N	N	N	N	N	N	N	N
4	Address	Υ	N	Y	Y	Ν	Y	Ν	Ν
5	Gender	Υ	N	N	Y	Ν	N	Ν	Ν
6	Country of Citizenship	Y	N	Y	Y	N	N	N	N
7	Nationality	N	N	N	Y	N	N	N	N
8	Party Identification	N	N	N	Y	N	N	N	N
9	Other Tax Residency Details	N	N	N	N	N	N	N	N
10	First Name	Y	N	N	Y	N	Y	N	N
11	Second Name	N	N	N	N	N	N	N	N
12	Middle Name	Y	N	N	Y	N	N	N	N
13	Last Name	Y	N	N	Y	N	Y	N	N
14	Photographi c Images	N	N	N	N	N	N	N	N
15	Login Name	N	N	N	Y	N	N	N	Ν
16	Marital Status	N	N	Y	Y	N	N	N	N
17	Mother's Maiden Name	N	N	N	N	N	N	N	N
18	Religion	N	N	N	N	N	N	N	N
19	Ethnicity	N	N	N	N	N	N	N	N
20	Race	N	N	N	N	N	N	N	N
21	Blood Group	N	N	N	N	N	N	N	N
22	ANZSIC	Ν	Ν	Ν	Y	Ν	N	N	Ν

Table 22–2 List of PIIs shared with third party systems

		Third Party Systems								
S r. N o.	Party PII Details	Due Diligen ce	Busine ss Numbe r Search	Credit Decisi on	Fraud Assessm ent	Digital Settlem ent	Propert y Valuati on	Proper ty Title Searc h	Fast Refinan ce	
23	ASCO	Y	N	Y	Y	N	N	N	N	
24	Languages	N	N	N	N	N	N	N	N	
25	Emergency Contacts	N	N	N	N	N	N	N	N	
26	All Telephone Numbers	Y	N	N	Y	N	Y	N	N	
27	All Email Address	Y	N	N	Y	N	Y	N	N	
28	All Social Network User ID	N	N	N	N	N	N	N	N	
29	All Messenger User ID	N	N	N	N	N	N	N	N	
30	Education History	N	N	N	Y	N	N	N	N	
31	Employer Name	Υ	N	Y	Y	N	N	N	N	
32	Employee ID	N	N	Y	N	N	N	N	Ν	
33	Designation	N	N	N	Y	N	N	N	Ν	
34	Gross Annual Salary	N	N	N	Y	N	N	N	Ν	
35	Smoker	N	N	N	N	N	N	N	Ν	
36	Height	N	N	N	N	N	N	N	Ν	
37	Weight	N	N	N	N	N	N	N	Ν	
38	Hobbies	N	N	N	N	N	N	N	Ν	
39	Disabled	N	N	N	N	N	N	N	Ν	
40	Deceased	Ν	N	N	N	Ν	N	N	Ν	
41	Bankruptcy	N	N	Ν	Y	N	N	Ν	Ν	
42	Title Reference Number	N	N	N	Y	Y	Y	Y	Y	

					Third Party	y Systems			
S r. N o.	Party PII Details	Due Diligen ce	Busine ss Numbe r Search	Credit Decisi on	Fraud Assessm ent	Digital Settlem ent	Propert y Valuati on	Proper ty Title Searc h	Fast Refinan ce
43	Property Contact Details	N	N	N	N	N	Y	N	Y
44	Builder Contact Detail	N	N	N	N	N	Y	N	N
45	Valuer Agent Details	N	N	N	N	N	Y	N	N
46	Vehicle Identification Number	N	N	N	N	N	N	N	N
47	Chassis Number	N	N	N	N	N	N	N	N
48	Registration Number	N	N	N	N	N	N	N	N
49	Engine Number	N	N	N	N	N	N	N	N
50	Financial Information	N	N	Y	Y	N	N	N	Y
51	Bank Account Information	N	N	N	Y	N	N	N	Y
52	Shareholder of	N	N	N	N	N	N	N	N
53	Marketing Consent	N	N	N	Y	N	N	N	N
54	Electronic Communicat ion Consent	N	N	N	Y	N	N	N	N
55	All Other Consents	N	N	Y	Y	N	N	N	N

23 US Localization Features

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

23.1 Key Features

Key features supported by Oracle Banking Enterprise Originations for US localization are as follows:

- Ability to capture Mortgage Loan Originator details for the loans classified as Residential Mortgage Loan and HELOC. The MLO details captured are printed on the Offer Letter generated for the customer.
- As guided by Regulation Z, whenever the HELOC limit is decreased while amending the application, then the ability to capture whether the request was initiated by customer or bank is provided. If the request is initiated by bank, then a notice with change in terms and conditions should be sent to the customer.
- Ability to fetch vehicle details from external interface is provided.
- Ability to capture the ethnicity, race, martial status, gender and age for GMI reporting for specific product types.
- Ability to execute the Regulation Z rule defined in Origination Preferences and store the Regulation Z applicability at facility. This check is performed in Capture Application and again during Create Offer stage. The outcome of the rule executed during Create Offer prevails.
- Ability to generate and dispatch documents or disclosures at various stages using the regulatory document framework.
- Ability to resolve verification type if a collateral of Property type has been marked for environmental clearance.
- Ability to generate various regulatory disclosures for the US market as part of Capture Application submission, Create Offer and Create Account.
- Ability to check for accounts within the application which are covered under MLA (MLA Covered: Yes) as part of Accept Offer task. A warning message appears stating to revalidate the status for covered borrower under MLA.
- In Structure Solution for ODLOC account, only one account can be added and configured.
- Ability to originate investment accounts under various retirement plans such as traditional, ROTH, SEP, KEOGH, HSA with underlying deposit accounts (Deposit or Saving).
- Ability to capture and validate applicant, beneficiary details for investment accounts.
- Ability to preform Deposit origination (CASA or TD).
- Ability to capture mandatory documents and optional documents for inbound documents.
- Ability to perform manual debit assessment of CASA accounts.
- Ability to generate a rejection letter in case an application rejected as part of the debit assessment process.
- Ability to record an acceptance from the customer.
- Ability to meet the manual debit assessment functionality for deposit products in application tracker.

- Ability to mandatorily capture reasons for cancellation of submission and application.
- Ability to identify the account as MLA covered based on service member active duty.
- Ability to capture CRA address account-wise for CRA reporting.
- Ability to identify the HELOC transaction as High Cost Mortgage.
- Ability to configure Applicant Eligibility Rule and link to the product group. Banker can configure the allowed combination of party types and maximum number of applicants allowed for the product group as part of this framework.
- While originating ODLOC product, a checking account with overdraft protection facility is needed. If the customer does not have a checking account or if checking product is not selected in the landing page along with ODLOC product, then the a warning message is displayed to the banker.
- Ability to support expiry date display and extension, and reject offer functionality through the Deposit Accept Offer task.
- Interface with external systems:
 - Checking Account Origination:
 - Integration with Equifax using their scoring mode applicable for Checking Account verification to arrive at debit decision. Storage of applicable bureau report within Party module.
 - Handling of Referred decision for debit bureau check through Manual Debit Assessment task.
 - Employment and Income Verification:
 - Integration with Equifax through The Work Number (TWN) to obtain employment and income information of applicant based on registered employers with Equifax.
 - Readable report of the employment and income information received from Equifax.
 - Manual verification of stated employment and income vis-à-vis electronic information received enables to speed up verification process.
 - Valuation:
 - Integration with Equifax through Property Data & Analytics (PD&A) to obtain recommended value along with owner and lien information for residential property type of collateral. This is available within the Collaterals step of the application form.
 - This value is then also used for the SLTV calculation within the application form capture process to identify Available Equity within the Property, particularly in HELOC applications.
 - Credit Decision:
 - Integration with Equifax to perform Credit Assessment for multiple product multiple applicant combinations.
 - Ability to consider Ability To Pay computation performed in external system and provision necessary information to perform these computations.
 - Ability to handle or process credit decision for multiple applicants in an application as well as multiple applications in a submission.

- Ability to store requisite bureau report for an applicant (party) within Party module.
 Scores returned along with scoring models enabled in Equifax to be also stored in Party module.
- Vehicle Valuation
 - Integration with Kelley Blue Book (KBB) to fetch Vehicle details for a user car based on VIN and zip code.
 - The document upload service can also be consumed by other external systems for enabling inbound document upload.
 - The solution has data sufficiency to interface with external systems of physical documents storage. Additionally, it exposes services for upload of documents that have been rescanned.
- Ability to generate Offer Letter for deposit accounts for the following scenarios:
 - If the customer accepts the Downsell offer
 - If the customer accepts the Upsell offer.
- Ability to print a reference number in the footer of the deposit offer letter document. This number is to
 aid the banker to ensure that the customer has signed and returned the latest version of the offer
 document.
- Ability to do the following in the Debit Assessment process:
 - A technical configuration at bank-level is provided to configure the debit assessment either at application-level or at applicant-level.
 - In case of application-level configuration, the origination flow post debit assessment is driven by the application level decision taken by the user in the Manual Debit Assessment task.
 - In case of applicant-level configuration, the origination flow post debit assessment is driven by the application-level outcome that is automatically derived based on the applicant level decisions taken by the user. If the user decision is not favorable for opening the account for one or more applicants, then there is provision to proceed with account opening by removing the applicants from the application.
 - An Adverse Action Notice or Decline Letter can be generated and dispatched to applicants who
 have been declined, or whose assessment outcome is Downsell.
- Ability to re-initiate the call to the interface using the Repair Task For Deposit Account task when the call to debit bureau fails (technical failure).
- Ability to complete an application where a joint applicant is not present:
 - If debit assessment is configured for the product group, debit bureau checks are triggered for the applicants that are present during application form submission.
 - If the debit check is approved for all the applicants that are present, then the account is created only for these applicants.
 - If the debit check is not approved for all the applicants that are present, then the Manual Debit Assessment task is created so that the user can take a decision on whether to go ahead with account creation or not with all the applicants.

- Debit assessment for joint applicants that are not present, is triggered once the joint applicant is added from the Joint Application Form.
 - If the debit check decision is Approved, then the joint applicant is added to the account.
 - If the debit check decision is Declined, then the joint applicant is not added to the account.
 - If the debit check decision is Referred, or Downsell, or Upsell, the Manual Debit Assessment task is generated. The decision to add the applicant or not can be made in the task.

23.2 SME Lending

Oracle Banking Enterprise Originations supports the following US-specific features offered for Small and Medium Enterprises (SME) Lending products.

23.2.1 Small Business Administration (SBA) Loans and Line of Credit (LOC)

Small Business Administration Loan, also known as SBA loan, is a loan that is partially guaranteed by the government (SBA), which eliminates some of the risk for the financial institution granting the loan. SBA is not the lender but they guarantee the loan that the financial institution extends to small businesses. In the event of payment default, the SBA reimburses the financial institution to the extent of the guarantee.

SBA 504 is a form of government guaranteed loan, which is used for long-term financing. The 504 program works by distributing the loan among three parties. The business owner puts a minimum of 10%, a conventional lender (typically a bank) puts up 50%, and a Certified Development Company (CDC) puts up the remaining 40%. Certified Development Companies are established under the 504 code as non-profit corporations set up to support economic growth in their local areas.

Oracle Banking Enterprise Originations supports application processing of business loan and line of credit, with exception to some SBA specific requirements as detailed below as assumptions:

Assumptions:

- The party to the application must always be an existing party. No new party can be onboarded through the application form.
- The party to the application must be an Organization or Trust. Individual parties cannot apply for SBA loan or line of credit.
- Only new application can be processed. Amendment of applications is not supported.
- Any change in party details must be done through the Single Party View (Fast Path: PI100) page.

The relevant steps that are applicable for Small Business Administration Loans are depicted following diagram.



Figure 23–1 Small Business Administration Loans Origination Flow

In addition to the existing functionality of originating accounts through the application form, the features supported for SBA loans are mentioned in detail below.

23.2.1.1 Capture Application

The SBA loan specific features supported in the steps of the application form are mentioned below. The other steps and processes remain the same for SBA loans.

23.2.1.1.1 Step 1 Product

The summary of product details is as follows:

- Ability to allow selection of SBA or CDC to get the loan processed either as a government guaranteed loan or none, if the loan application is to be processed as normal loan.
- Ability to check the eligibility of the party (organization or trust) for government guaranteed loan (guaranteed by SBA or CDC) upfront. The upfront eligibility check includes:
 - Organization belongs to the eligible industry.
 - Organization meets SBA's definition of Small enterprise.
 - Organization is constituted as For Profit.
- Ability to resolve and capture responses of Primary Applicant, Joint Applicant, Guarantor, Affiliates to the party questionnaire based on the government guarantor, that is, if guarantor is SBA, system displays additional questions specific to SBA.
- Ability to resolve and capture SBA specific questionnaire on selection of offer.
- Ability to mandate addition of another organization or trust as joint applicant or guarantor, if Primary Applicant is an Eligible Passive Company (EPC).
- Ability to auto create owners as Guarantors whose ownership share is in excess of certain percentage (Example 20% or above individually or when added with their spouse) for application processed as SBA application.

 Ability to add both the owner and spouse as Guarantors, if the share owned individually is more than 5% and jointly is more than 20%.

23.2.1.1.2 Step 2 Party

SBA loan or line of credit can be processed only for existing party and any change in party details should be done through the Single Party View (Fast Path: PI100) page, and not as part of the Capture Application process.

The summary of party details is as follows:

- Ability to validate that the ownership details are captured in full, that is the sum of ownership share should be 100%.
- Ability to resolve and capture the questionnaire for affiliates.

23.2.1.1.3 Step 3 Bundles

Since bundle is not applicable for SBA loan, this step should be skipped.

23.2.1.1.4 Step 4 Collaterals

The summary of collateral details is as follows:

- Collateral is mandatory for SBA loan or line of credit.
- Existing functionality of linking existing collateral continues for SBA loan or line of credit.
- Ability to automatically create a Personal Guarantee collateral of Unlimited type for the guarantor added as part of the Product step.
- Ability to automatically create a Bank and Government Guarantee collateral. For SBA loan, Bank and Government Guarantee collateral type and Government Guarantee category is auto created.
- The value of the collateral is the guarantee percentage approved by the SBA. It is expressed in percentage only.
- The guarantee is calculated based on the requested amount and exposure of the business including affiliates.
- SBA has defined a matrix for the guarantee percentage. Rules can be configured as the matrix, and based on the loan amount and rule defined, system derives the guarantee percentage and defaults in the Bank and Government Guarantee collateral.

23.2.1.1.5 Step 5 Funding

The summary of funding details is as follows:

- Guarantee fee should be configured as part of Funding template.
- Guarantee fee has to be charged as part of the application. Such fees are displayed in a separate panel called Guarantee Fees within the Outlay section of the Funds Table. This fee is always deferred and deducted as part of disbursement fund. It cannot be capitalized or collected during the application processing.
- As part of the funds table, ability to modify the amount for calculated amount, that is negotiation of fee is provided.

23.2.1.1.6 Step 6 Review

The summary of review details is as follows:

- Ability to displays a message stating that the applicant is eligible for Government Guaranteed Loan, in cases where the applicant was eligible for Government Guaranteed Loan but opted to process the application as normal term loan or line of credit.
- Ability to perform all validations required to process the government guaranteed loan or line of credit.
- Ability to resolve the SBA specific documents and mandatory printing of the documents before submitting the application.

23.2.1.2 Credit Assessment

The existing features of Credit Assessment are applicable for SBA loan and line of credit. Based on the internal credit assessment:

- If the application is approved, the Government Guarantee Interface Task is created.
- If the application is approved with down sell, the Downsell task is created and on acceptance, Government Guarantee Interface Task is created.
- If the application is referred for manual credit decision, the Government Guarantee Interface Task is created on manual approval.
- If the application is rejected, the Decline Offer task is created and rejection letter is issued.

23.2.1.3 Government Guarantor Interface Task

The Government Guarantor Interface Task is created post approval of Credit Assessment.

- This is a submission level task and is created only where the application is a government guaranteed and guarantor is SBA.
- System calculates the guarantee fee and provides the facility to capture the guarantee fee payment details.
- SBA applications have to be approved by SBA. So this task provides the ability to trigger an interface with SBA. A facility to re-trigger the task on failure of initial interface call is also supported.
- Usually, the Verification, Valuation and Structure Solution tasks are created post approval of credit assessment. For SBA Loan applications, these tasks are created post SBA approval.

23.2.2 Business Line Of Credit (LOC)

Oracle Banking Enterprise Originations supports the following feature for the Business LOC:

Ability to make capturing party details mandatory or optional in the Party step based on the type of
products being applied. For example, in the case of business line of credit, it is mandatory that the
owners of the business should be of age 18 years and above, and should be US Citizens or Permanent
Residents.

24 US Localization Features of Core Components

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

24.1 Content

The following feature is supported in Content:

24.1.1 Interface with Third Party Systems

Interfaces have been built with Equifax as part of US localization to support the following:

- Getting debit bureau report and debit bureau decision
- Checking due diligence status of a party
- Getting employment and income report as part of electronic verification

24.2 Party Information

The following are the key features in Party:

24.2.1 Customer Onboarding

The following capabilities are supported:

- Capture of other details such as the party being a service member or service member dependent and capture of the percentage for voluntary backup withholding.
- Capture of US specific tax identification details and related documents.
- Identification of a party as disabled or not.
- Identification of whether COPPA consent is obtained from the parents for kids below age of 13.

24.2.2 Party Bank Policy

The ability to configure parameters for COPPA consent age, expiry of W8 BEN, and number of days to display the address change alert is supported.

24.2.3 Interface with Third Party Systems

The following capabilities are supported:

Due Diligence:

Base capability to integrate with third party system to perform electronic verification of Due Diligence and Identity Verification Type extended in US localization to perform Identity Verification and OFAC

checks for a party post on-boarding process or significant events, such as Address Change. This integration is done through Equifax Inter Connect with data sources, such as eIDcompare and CDC OFAC, for KYC and OFAC respectively.

Capability to integrate with an address verification service provider for the address taskflow is also present.

Standalone Credit Bureau Pull:

Base capability to fetch credit bureau report for a party in standalone mode without context of Origination has been extended for Equifax integration. System will have the capability to initiate a request to Equifax, fetch the credit bureau report and store it in readable form within the Party module. Party module has the ability to pass data to generate various reports such as:

- Opt-in and opt-out status from receiving commercial communication, electronic communication, and fax communication.
- Parents' consent on behalf of minor child for sharing the personal information.

24.2.4 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.	М	N
2	Date of Birth	Date of birth of a party	М	Y
3	Birthplace	Place of birth of a party	0	Ν
4	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	М	N
5	Gender	Gender of a party	0	Y
6	Country of Citizenship	Country of citizenship of a party	С	Ν
7	Nationality	Nationality of a party (same as Country of Citizenship) This is a backend field and not available in UI.	0	Ν
8	Party Identification	Tax and Other identification details of a party	М	Y
9	Other Tax Residency	All FATCA (US)/CRS (Non US) details of a party	0	Y

Table 24–1 List of Personally Identifiable Information (PII) elements

Sr. No.	Element Name	Description	Mandatory (M) / Optional (O) / Conditional / Configurable (C)	Masking
	Details			
10	First Name	First name of a party	М	Ν
11	Second Name	Second name of a party	0	Ν
12	Middle Name	Middle name of a party	0	Ν
13	Last Name	Last name of a party	0	Ν
14	Photographic Images	Images of party's photograph and signature	0	N
15	Login Name	Email ID or User ID or Customer ID of a party	С	Y
16	Marital Status	Marital status of a party	0	N
17	Mother's Maiden Name	Maiden name of a party's mother	0	Y
18	Religion	Religion of a party	0	Υ
19	Ethnicity	Ethnicity details of a party	0	Υ
20	Race	Race details of a party	0	Y
21	Blood Group	Blood group of a party	0	N
22	NAICS	Type of industry in which a party is employed	0	N
23	Occupation	Occupation of a party	0	N
24	Languages	Preferred language of a party	0	N
25	Emergency Contacts	Name and contact number of emergency contact person for a party	0	N
26	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	0	N
27	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)	С	Y
28	All Social Network User ID	Social Network details of a party such as Linked In, Facebook, Twitter, and Hi5	0	Y
29	All Messenger	Social Network Messenger details of a party	0	Y

Sr. No.	Element Name	Description	Mandatory (M) / Optional (O) / Conditional / Configurable (C)	Masking
	User ID	such as GTalk, Yahoo, MSN, and Skype		
30	Education History	Educational details of a party such as qualification, grade, university, and so on	0	N
31	Employer Name	Name of party's employer in the party's past and current employments	0	N
32	Employee ID	Employee ID of a party in the party's past and current employments	0	N
33	Job Title / Designation	Designation of a party in the party's past and current employments	0	N
34	Gross Annual Salary	Gross annual salary of a party in the party's past and current employments	0	Y
35	Smoker	Indicator to denote that a party is a smoker or non smoker	0	N
36	Height	Height in centimeters (cms) of a party	0	Ν
37	Weight	Weight in kilograms (kgs) of a party	0	N
38	Hobbies	Hobbies and interests of a party	0	Ν
39	Disabled	Risk indicator to denote that a party is disabled	0	Ν
40	Deceased	Risk indicator to denote that a party is deceased	0	Ν
41	Bankruptcy	Risk indicator to denote that a party is bankrupt	0	Ν
42	Title Reference Number	Title reference related details for a collateral (applicable for Property type of collateral where party is collateral owner)	0	Ν
43	Property Contact Details	Property Contact Details for a collateral (applicable for Property type of collateral where party is collateral owner)	0	N
44	Builder Contact Details	Builder Contact Detail for a collateral (applicable for Under Construction Property type of collateral where party is collateral owner)	0	N
45	Appraiser Agent Details	Appraiser Agent Details for a collateral (applicable for Property type of collateral where party is collateral owner and valuation of collateral is applicable)	0	N
46	Vehicle Identification Number	Vehicle Identification Number for the collateral (applicable for Automobile type of collateral where party is collateral owner)	0	N
47	Chassis Number	Chassis Number for the collateral (applicable for Automobile type of collateral where party is collateral owner)	0	N

Sr. No.	Element Name	Description	Mandatory (M) / Optional (O) / Conditional / Configurable (C)	Masking
48	Registration Number	Registration Number for the collateral (applicable for Automobile type of collateral where party is collateral owner)	0	N
49	Engine Number	Engine Number for the collateral (applicable for Automobile type of collateral where party is collateral owner)	0	N
50	Financial Information	Complete financial details captured for a party	С	N
51	Bank Account Information	All bank accounts (account ID, account type and amount) where a party is an account owner.	С	N
52	Shareholder of	List of organization names where a party is a shareholder	0	N
53	Marketing Consent	All marketing consents (including text and value)	0	N
54	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.	0	N
55	All Other Consents	All consents at party level (including text and value)	М	N
56	Disability (for Retirement Accounts)	Indicator to denote if party is disabled or not	0	N
57	Disability By	Disability from birth or for a particular period	0	Ν
58	Start Date	Start date of the disability period	0	Ν
59	End Date	End date of the disability period	0	N

24.2.5 Personally Identifiable Information (PII) Shared with Third Party Systems

The application shares the Party PII details with the following third party systems:

- Due Diligence System
 - Due Diligence solution enables banks to perform Know Your Customer (KYC) and Office of Foreign Assets Control (OFAC) checks for all the customers in the bank.
 - The Party module shares the customer details (including PII details) with the third party system for checking due diligence status of a party.

Credit Decision System

- Oracle Banking Originations interacts with external credit decision interface for obtaining realtime credit decision for customers with lending requirements
- The application shares the loan, collateral and party information (including PII details) with the external credit decision system for credit approval processing as part of lending application origination.

Credit Bureau Check

- Oracle Banking Originations interacts with the credit bureau system as part of credit decision process.
- The application shares the party information (including PII details) with the external credit bureau system to initiate or retrieve credit information, reports to support application decisioning for all the parties in submission.

Debit Bureau Check

- Oracle Banking Originations interacts with the debit bureau system as part of debit decision process.
- The application shares the party information (including PII details) with the external debit bureau system to initiate or retrieve information, reports to support application decisioning for all the parties in submission.

Electronic Verification

- Oracle Banking Originations interacts with the external verification system as part of electronic verification process.
- The application shares the party information (including PII details) with the external verification system to perform employment verification for all the parties in application.

Property Valuation System

- Oracle Banking Limits and Collateral Management interacts with the third party valuation system to determine the valuation type and valuation amount for the property type of collaterals linked to the facility to determine the valuation sufficiency.
- The application shares the facility, collateral and party information (including PII details) with the external valuation system for determining the collateral value.

The list of Party PII details that are shared with these third party systems is as follows:

Table 24–2 List of PIIs shared with third party systems

		Third Party Systems						
Sr. No.	Party PII Details	Due Diligence	Credit Decision	Credit Bureau Check	Debit Bureau Check	Electronic Verification	Valuation	
1	Full Name	N	N	N	N	N	Ν	
2	Date of Birth	Y	Y	Y	Y	Y	N	
3	Birthplace	N	N	N	N	N	N	
4	Address	Y	Y	Y	Y	Y	Y	

	Party PII Details	Third Party Systems						
Sr. No.		Due Diligence	Credit Decision	Credit Bureau Check	Debit Bureau Check	Electronic Verification	Valuation	
5	Gender	Y	Y	Y	Y	Y	Ν	
6	Country of Citizenship	N	N	N	N	N	N	
7	Nationality	N	N	N	N	N	N	
8	Party Identification	Y	Y	Y	Y	Y	N	
9	Other Tax Residency Details	N	N	N	N	N	N	
10	First Name	Y	Y	Y	Y	Y	N	
11	Second Name	N	N	N	N	N	N	
12	Middle Name	Y	Y	Y	Y	Y	N	
13	Last Name	Y	Y	Y	Y	Y	Ν	
14	Photographic Images	N	N	N	N	N	N	
15	Login Name	N	N	N	N	N	N	
16	Marital Status	Y	Y	Y	Y	Y	N	
17	Mother's Maiden Name	N	N	N	N	N	N	
18	Religion	N	N	N	N	N	N	
19	Ethnicity	N	N	N	N	N	N	
20	Race	N	N	N	N	N	N	
21	Blood Group	N	N	N	N	N	N	
22	NAICS	N	N	N	N	N	Ν	
23	Occupation	N	Ν	Ν	N	Ν	Ν	
24	Languages	N	Ν	Ν	N	Ν	Ν	
25	Emergency Contacts	N	N	N	N	N	N	
26	All Telephone Numbers	Y	Y	Y	Y	Y	N	
27	All Email Address	Y	Y	Y	Y	Y	Ν	
28	All Social Network User ID	N	N	N	N	N	N	
29	All Messenger User ID	N	N	N	N	N	N	

	Party PII Details	Third Party Systems							
Sr. No.		Due Diligence	Credit Decision	Credit Bureau Check	Debit Bureau Check	Electronic Verification	Valuation		
30	Education History	N	N	N	N	N	N		
31	Employer Name	N	N	N	N	N	N		
32	Employee ID	N	Ν	Ν	N	Ν	Ν		
33	Job Title / Designation	N	N	N	N	N	N		
34	Gross Annual Salary	N	Y	N	N	N	N		
35	Smoker	N	N	N	N	N	N		
36	Height	N	N	N	N	N	N		
37	Weight	N	N	N	N	N	N		
38	Hobbies	N	N	N	N	N	N		
39	Disabled	N	N	N	N	N	N		
40	Deceased	N	N	N	N	N	N		
41	Bankruptcy	N	Ν	Ν	N	Ν	Ν		
42	Title Reference Number	N	N	N	N	N	N		
43	Property Contact Details	N	N	N	N	N	N		
44	Builder Contact Detail	N	N	N	N	N	N		
45	Valuer Agent Details	N	N	N	N	N	N		
46	Vehicle Identification Number	N	N	N	N	N	Y		
47	Chassis Number	N	N	N	N	N	N		
48	Registration Number	N	N	N	N	N	N		
49	Engine Number	N	N	N	N	N	N		
50	Financial Information	N	N	N	N	N	N		
51	Bank Account Information	N	N	N	N	N	N		
52	Shareholder of	N	N	N	N	N	N		

	Party PII Details	Third Party Systems					
Sr. No.		Due Diligence	Credit Decision	Credit Bureau Check	Debit Bureau Check	Electronic Verification	Valuation
53	Marketing Consent	N	N	N	N	N	Ν
54	Electronic Communication Consent	N	N	N	N	N	N
55	All Other Consents	N	N	N	N	N	N
56	Disability (for Retirement Accounts)	N	N	N	N	N	N
57	Disability By	N	N	N	N	N	Ν
58	Start Date	N	N	N	N	N	N
59	End Date	N	N	N	N	N	N

24.3 Product Manufacturing

The following are the key features in Product Manufacturing:

- An Identifier at product group level can be configured to indicate if Mortgage Loan Originator information is required to be captured as part of Loan Application Form, in case of new and amend lending.
- Ability is provided to indicate whether the product is covered under the Military Lending Act, if the
 product and party qualify for the Military Lending Act.
- It can be configured whether capturing of CRA Address is applicable or not during Origination account configuration. When checked, the taskflow for capturing address type and selection of address is displayed during account configuration for Loans and OD as part of Origination process. This address is used for CRA reporting and is maintained at account level along with other Regulatory Codes information.
- It can be configured whether Government Monitoring Information is required to be captured or not. If it is configured as Yes, then as part of Origination, the GMI reporting fields such as ethnicity, race, gender of the applicants need to be captured. This is applicable only for HELOC type of products.
- It can be configured whether the Annual Percentage Rate is applicable for the product or not. The
 annual percentage rate is a measure of the cost of credit, expressed as a yearly rate, which relates the
 amount and timing of value received by the consumer to the amount and timing of payments made.
 APR provides borrowers with a bottom-line number which they can easily compare to rates charged by
 other potential lenders.
- Cancellation period before the disbursement of the loan can be defined.
- Offer type can be defined and selected for creating a CASA, TD or Loan offer.
- For CASA offer, it can be configured whether Courtesy Pay is applicable or not. If it is applicable, then Courtesy Pay amount and currency can be defined.

24.4 Collateral Management

The following are the key features in Collateral Management:

- Interface with Automated Valuation Model (AVM): As part of integration with Equifax, the capability to interface with AVM is supported as part of the collateral management.
- The interfacing ability is available as part of collateral creation and collateral update, both as part of application capture the Collaterals stage in Origination module and the Collateral Details (Fast Path: LCMS08) page in Limits and Collateral Management module.
- As part of collateral creation or update, an interface call can be triggered to AVM to fetch the following collateral details:
 - AVM Value: It includes the market value, the range of the market value and the confidence score for the market value as quoted by AVM.
 - Lien details and collateral owners.
 - Property information.
- The details obtained from the AVM interface are available at the collateral level for manual reconciliation and reference.
- Ability to record payment and refund of fee under Government Guarantee collateral for Small Business Administration loans.
- Ability to capture Flood Determination as valuation type.
- Ability to record the Real Estate zone offered as collateral and validate whether the last updated zone is within the validity stated under the Collateral Category Preference (Fast Path: LCM07) page as per regulation.
- Ability to indicate whether a Residential Real Estate offered as collateral is Complex and decide its valuation type (Evaluation or Appraisal) to be carried out as per regulation.

24.5 Insurance Management

The following are the key features in Insurance Management:

- Ability to indicate availability of Force Placed Insurance in the Insurance Linkage Details (Fast Path: LCM09) page.
- Ability to record the Force Placed Insurance premium collection as either billed to customer or added to the loan balance.
- Ability to record the endorsement details in plan linkage page.

24.6 Common Services

The common address taskflow has the capability to integrate with external address verification systems. The address taskflow presents address fields to the users for capturing an address. The address is shown as a single line in View mode.