Oracle Insurance Accounting Analyzer

User Guide

Release 8.1.1.2.0

September 2021

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Financial Services

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Oracle Insurance Accounting Analyzer User Guide

Document Control

Table 1: Document Version Control

Version Number	Revision Date	Change Log
1.0	September 2021	The following sections are updated for the enhancements done in the 8.1.1.2.0 release: • Enhanced the field descriptions in the Configure the Seeded Data Section. • Updated the Create a New Level of Aggregation Definition section. • Updated the Create a New Calculation Preferences Definition Section with the Import Excel file feature. • Updated the Create a New Liability Calculation Definition Section with the Execution Type drop-down field to support the Year-to-Date Feature. • Updated the Create a New Subledger Accounting Attribute Section with the Audit Trail Fields to support the Versioning feature. Additionally added the **Period-Type** field to support the YTD feature. • Updated the Delete a Subledger Attribute and Delete a Subledger Definition Sections. • Updated the Create New Subledger Definition with the *General Measurement Model Reinsurance* and *Premium Allocation Approach Reinsurance*. Added the following sections: • Added the Year-to-Date (YTD) section to support the new feature. • Added the Create a New Version of a Subledger Attribute and View a Subledger Attribute Version to support the Versioning Feature.

Table of Contents

1 About the Guide

This section provides release information for the Oracle Insurance Accounting Analyzer Application Pack and includes the following topics:

- Intended Audience
- Access to Oracle Support
- Related Information Sources
- What is new in this Release

1.1 Intended Audience

This document is intended for users of the Oracle Insurance Accounting Analyzer Application Pack.

1.2 Access to Oracle Support

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

1.3 Related Information Sources

You can access the following online documents from the Oracle Help Center (OHC) Documentation Library for Oracle Insurance Accounting Analyzer Application Pack:

- Oracle Insurance Accounting Analyzer Release Notes
- Oracle Insurance Accounting Analyzer Installation Guide
- Oracle Insurance Accounting Analyzer User Guide

You can access the OFS AAI documentation online from the OHC Documentation Library for Oracle Financial Services Analytical Applications Infrastructure:

- Oracle Financial Services Analytical Applications Infrastructure Installation and Configuration Guide
- Oracle Financial Services Analytical Applications Infrastructure User Guide

The additional documents are:

- OFSAA Licensing Information User Manual Version 8.1.1.0.0
- OFS Analytical Applications Infrastructure Security Guide
- OFSAAI FAQ Document
- OFS Analytical Applications 8.1.1.0.0 Technology Matrix
- Oracle Insurance Accounting Analyzer Security Guide Release 8.1.x
- Oracle Insurance Accounting Analyzer Cloning Guide Release 8.0.x

- Oracle Insurance Accounting Analyzer Cloning Guide Release 8.1.x
- Oracle Insurance Accounting Analyzer Technical Documents

1.4 What is New in this Release

Oracle Insurance Accounting Analyzer bundles the following new features in version 8.1.1.2.0. For detailed information about the usage of the listed features, see the respective product User Guides on OHC Documentation Library.

- **Year-to-Date (YTD)** - The Oracle Insurance Accounting Analyzer Application supports Year-to-Date Reporting irrespective of whether the Input Cash Flow or Variable Data is given on a Year-to-Date basis or an Incremental Basis. The **Execution Type** drop-down field has been added for a Liability Calculation and the **Period Type** drop-down field has been added for a Subledger Accounting Attribute to support this feature. For more information, see the *Oracle Insurance Accounting Analyzer YTD Feature Document* on MOS.
- Enhanced the LDTI and GMM Reinsurance-held Templates:
    - **LDTI:** Addition of *Opening Adjustment* and *Adjusted Opening Balance* line items to calculation templates
    - **GMM Reinsurance-held:**
        - Addition of *Change in CSM due to Gain Reversal* line item and logic
        - Addition of *Cap on Gain Component* to the *Ratios From Underlying Insurance Contracts* section of the calculation templates
- Addition of new Macros for all Reinsurance Templates:
    - **Percentage Claim Recovery** – This Macro supports the Reinsurance Recovery Percentage per Direct Insurance Cohort.
    - **Eligibility Percentage**- This Macro supports the Reinsurance Eligibility Percentage per Direct Insurance Cohort.

  For detailed information on the Macros, see the *Oracle Insurance Accounting Analyzer Macros* Document on MOS.
- Import of the seeded template in an Excel File via the **Calculation Preference** Screen is now supported. See the Create a New Calculation Preferences Definition Section.
- The Disaggregate insurance Finance Expense Feature has been enhanced for all GMM and PAA direct insurance templates. *Insurance Finance Expense (OCI)* line item has been added and the same mapped to related line items in the Disclosure Reports.
- Based on the **Consolidation Criteria** set on the **Application Configuration** Screen, the **Run Type** for creating a new Level of Aggregation Definition can be set:
    - *Computation based on Solo data* – If this value is selected, then the default Run Type is *Solo* which cannot be modified
    - *Consolidated data as Input* - If this value is selected, then the default Run Type is *Solo* but can be changed to *Consolidated*.

  For more information on using this feature, see the Configure the Seeded Data Section.

- New PAA and GMM-GI Direct Insurance Templates to support Prior Accident-Year as Prior-Period For Incremental Execution-Runs.
- **Subledger**
  - The application supports the option to execute the Direct Insurance and Reinsurance Definitions separately. Direct Insurance and Reinsurance Rules have separate definitions for Direct Insurance and Reinsurance cohorts. In the **Method** field of the **Definition Details** and **Accounting Rules** Tab, the *GMM Reinsurance* and *PAA Reinsurance* Methods are added. For more information on the Subledger Feature, see the *Oracle Insurance Accounting Analyzer Subledger Feature* Document on MOS.
  - Added seeded Accounting Rules for Acquired Contracts and Transition across methods.
  - The Subledger Accounting Attributes and Subledger standard definitions are now YTD compliant.
  - Support of versioning and Audit Trail is supported for Subledger Accounting Attributes. Multiple versions of a Subledger Accounting Attribute Mappings can be maintained and modified to maintain consistency with the CSM calculation. For more information on how to use this feature, see the View a Subledger Attribute Version Section.
- **Reporting Dashboards**
  - Disclosure Reports will be displayed based on whether the Execution Type is *YTD* or *Incremental.* The **Execution Type** filter hasbeen added to support this feature.
  - Other Comprehensive Income (OCI) related line items and mappings added to the GMM and PAA direct insurance disclosure reports
  - *Reversal of Gain Component* line item and mapping added to disclosure report for both GMM and PAA reinsurance-held.
  - Following line items and mappings added to GMM reinsurance-held disclosure: *Changes In CSM due to Gain Reversal, Changes in FCF that that do not adjust the CSM but adjust the Gain Component, Changes in FCF that that do not adjust the CSM and the Gain Component*
  - The Subledger P&L Report displays *Incremental, YTD,* and Reinsurance Data.

2 About OFSAA and OFSAA Application Packs

This section contains information about the OFSAA Application Packs.

Topics:

2.1 About Oracle Financial Services Analytical Applications (OFSAA)

In turbulent markets today, financial institutions require a better understanding of their risk-return while strengthening their competitive advantage and enhancing long-term customer value. Oracle Financial Services Analytical Applications (OFSAA) enable financial institutions to measure and meet risk-adjusted performance objectives, cultivate a risk management culture through transparency, lower the costs of compliance and regulation, and improve insight into customer behavior.

OFSAA uses industry-leading analytical methods, shared data models, and application architecture to enable integrated risk management, performance management, customer insight, and compliance management. OFSAA actively incorporates risk into decision-making, enables you to achieve a consistent view of performance, promotes a transparent risk management culture, and provides pervasive intelligence.

Oracle Financial Services Analytical Applications delivers a comprehensive, integrated suite of financial services analytical applications for both banking and insurance domains.

2.2 About Oracle Insurance Accounting Analyzer Application Pack

IFRS17 is an international norm that supersedes the current reporting standards, IFRS 4. The new standard provides users of financial statements with a new perspective of the financial accounts of insurance companies. Oracle Financial services Insurance Accounting Analyzer application enables the insurance companies to adhere to the disclosure requirements as proposed under IFRS 17 with an ability to compute Contractual Service Margin and Net Liabilities.

2.3 About Oracle Financial Services Analytical Applications Infrastructure (OFS AAI)

Oracle Financial Services Analytical Applications Infrastructure (OFS AAI) powers the Oracle Financial Services Analytical Applications family of products to perform the processing, categorizing, selection, and manipulation of data and information required to analyze, understand and report on specific performance, risk, compliance, and customer insight issues by providing a strong foundation for the entire family of Oracle Financial Services Analytical Applications across the domains of Risk, Performance, Compliance and Customer Insight.

3 Understanding Oracle Insurance Accounting Analyzer Application

This section provides information and the functional flow of the Oracle Insurance Accounting Analyzer Application.

Topics:

3.1 Introduction

Insurance companies need to identify the risks that arise from the insurance contracts along with the calculation of assets and liabilities. IFRS 4 was introduced in March 2004 and was intended to provide limited improvements to accounting for insurance contracts. IFRS 4 permitted companies to continue previous accounting practices for insurance contracts but did enhance the disclosure requirements.

IFRS17 released in May 2017, supersede the current IFRS 4 reporting standards on accounting for insurance contracts and has an effective date of 1 January 2021. The new standards provide users of financial statements a new perspective of the financial accounts of insurance companies. IFRS 17 introduces an approach that tackles some challenges in accounting for insurance contracts currently addressed inconsistently when a company applies IFRS 4. Some of the benefits of the IFRS17 are:

- IFRS 17 provides updated information about the obligations, risks, and performance of insurance contracts.
- Increased transparency in financial information reported by insurance companies will give investors and analysts more confidence in understanding the insurance industry.
- Consistent accounting for all insurance contracts based on a current measurement model.

The Oracle Insurance Accounting Analyzer application follows the IFRS 17 standard diligently and enables insurance companies to adhere to the disclosure requirements as proposed under the IFRS 17 standard, along with an ability to compute Contractual Service Margin and Net Liabilities.

The IFRS 17 standard requires insurance companies to have a consistent accounting standard for the insurance contracts that ensure timely recognition of losses in the book of accounts. Insurance companies are required to identify and report the fulfillment cash flows and contractual service margin at every reporting date, based on the current market conditions. The Oracle Insurance Accounting Analyzer application helps organizations in arriving at the insurance obligations, insurance contract liabilities reported on the balance sheet, by using different methodologies for a set of portfolios and by assessing the net liability for every insurance contract.

The IFRS 17 standard requires the entities to perform initial recognition of insurance contracts and execute periodical re-assessment of the insurance liabilities, based on the current assumption sets. The insurance liabilities are presented in every reporting period and those reflect the change in the amount since inception. The profitability of insurance contracts is amortized over the duration of the contract, based on the services provided.

One of the critical requirements of IFRS 17 is to estimate the measurements at the most granular level, rather than at the aggregated portfolio level. Groups are formed with a portfolio to reflect the

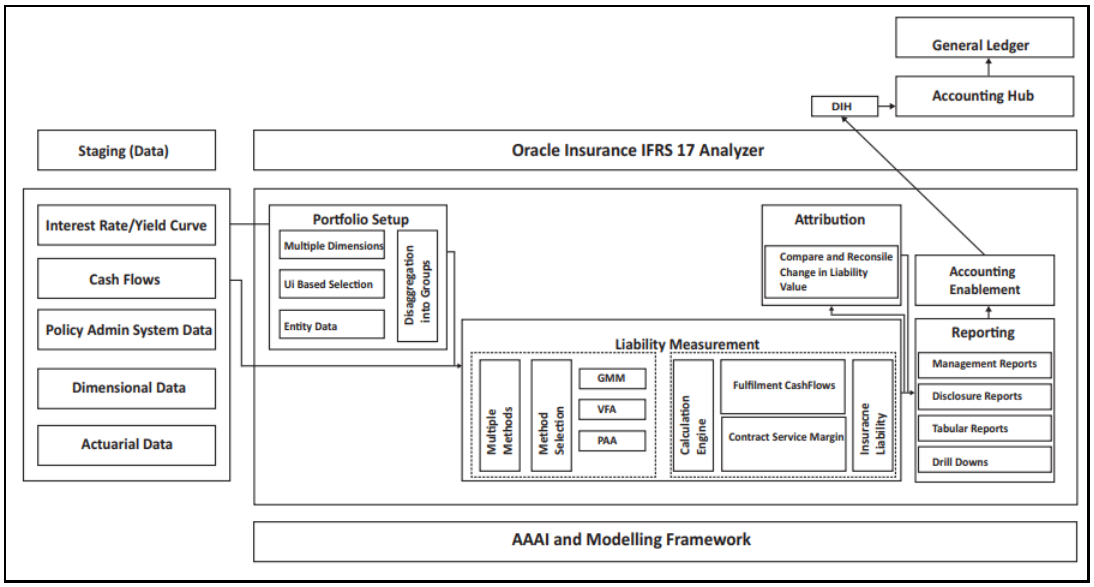
insurance contract that shares similar risks. The financial report separately displays the asset and liabilities of the groups of contracts. This primarily involves displaying the insurance and finance results separately per insurance group.

> **NOTE** By default, the financial elements dimension member code is numeric. If you require it to be an alphanumeric code, then you must follow the post-installation activities as described in the Configurations to use the Alphanumeric and Numeric Codes for **Dimension Members** section in the AAI Administration Guide. This is a one-time activity and this decision must be taken before the application is used. Changing it from numeric to alphanumeric while using the application is not supported. Note that in the case of an integrated setup, the decision for numeric and alphanumeric codes must be taken before all integrated applications are used.

3.2 Functional Flow

The following diagram depicts the functional flow of the Oracle Insurance Accounting Analyzer application:

Figure 1: The Functional Flow of the Oracle Insurance Accounting Analyzer Application



4 Exploring Oracle Insurance Accounting Analyzer Application

This chapter provides the functional as well as a business overview of Oracle Insurance Accounting Analyzer.

Topics:

4.1 Level of Aggregation

This section provides details about aggregating insurance contracts into groups.

To understand how Oracle Insurance Accounting Application features Level of Aggregation, see Level of Aggregation.

Topics:

4.1.1 Overview

IFRS 17 mandates group insurance contracts to reduce risks. This process is referred to as Risk Pooling. This grouping also helps in determining the profitability of the insurance contracts in the group.

What happens, if the insurance contracts are not grouped? At inception, the individual contracts are treated equally, and the probability of claim is also distributed equally. However, on subsequent measurements, the probability of claiming individual contracts may increase (expected cash outflows are increased) or decrease (expected cash outflows are decreased). The increase in the probability of claiming individual contracts marks a contract as onerous and is recognized immediately in the profit or loss. Also, the decrease in the probability of claiming individual contracts increases the CSM and is marked as profitable over the coverage period.

What happens, if the insurance contracts are grouped? The contracts in the groups are measured collectively and thus the change in expected cash outflows and the CSM remain unaffected (continue

to recognize over current and future coverage periods). These profits are recognized over the coverage period.

4.1.2 Identifying Portfolios of Insurance Contracts

To group the insurance contracts, as the first step the portfolios must be identified. Contracts in the same product line are expected to possess similar risks and can be managed together. Therefore, such contracts in the same product line are grouped in the same portfolio.

For example:

- Whole life insurance
- Annuities
- Car insurance

Portfolios of contracts are divided into groups of a minimum of the following:

- Onerous at initial recognition
- No risk of being onerous
- Remaining contracts in the portfolio

IFRS 17 permits these groups to be further sub-divided. For example, you can create sub-groups based on different levels of profitability.

The level at which to perform grouping assessment includes the following:

- An entity may assess a set of contracts if reasonable and supportable information enables it to conclude the contracts will be in the same group.
- Otherwise, groups are determined by considering individual contracts.
- Multiple sets or an individual contract can form a group.

> **NOTE** If the requirements of IFRS 17 are met, a group can be formed with any number of contracts or an individual contract.

4.1.3 Grouping Contracts at Initial Recognition According to Expected Profitability

Initial recognition of insurance contracts is the process of grouping together the insurance contracts that are subject to similar risks. The initial recognition is performed at the beginning of the coverage period of the group of contracts (Policy Inception). During initial recognition, an insurance contract can be part of an existing group of insurance contracts if all the contracts have similarly expected profitability at the time of initial recognition and are issued within one year.

> **NOTE** Insurance contracts that are issued more than one year apart should not be a part of the same group.

Once the initial recognition of a group of insurance contracts is completed, the carrying amount of the group at each reporting date is calculated as the sum of the liability for remaining coverage and the liability for incurred claims comprising the Fulfillment Cash Flows related to past service allocated to the group at that date.

The Liability for remaining coverage is comprised of the fulfillment cash flows allocated to the group at that date and the Contractual Service Margin (CSM) of the group at that date. CSM is the unearned profits recognized over the coverage period.

The requirements on when to recognize a group of reinsurance contracts held are different depending on whether the reinsurance contract held covers the losses of separate insurance contracts on a proportionate basis, proportionate reinsurance contracts, or the reinsurance contract held covers aggregate losses from underlying contracts over a specified amount, such as non-proportionate reinsurance contracts.

A group of proportionate reinsurance contracts held is recognized at the later of the beginning of the coverage period of the group or the initial recognition of any underlying insurance contract. This means an entity will not recognize a group of proportionate reinsurance contracts held until it has recognized at least one of the underlying insurance contracts. A group of non-proportionate reinsurance contracts held is recognized at the beginning of the coverage period of the group.

Topics

- Onerous Assessment
- Onerous Classification

4.1.3.1 Onerous Assessment

Onerous assessment includes multiple levels of processing. These include measuring an insurance contract or a set of insurance contracts at initial recognition. If they are found to be onerous, then they are marked as onerous at initial recognition. If not, the assessment to determine which of the following groups, should these contracts or group of contracts belong to, is performed:

- Remaining contracts in the portfolio.
- No significant possibility of becoming onerous at initial recognition.

Facts and circumstances can indicate if the contracts might form an onerous group even before typical initial recognition. This process is known as *Early Recognition*.

> **NOTE** Contracts can fall into different groups because of legal or regulatory constraints, based on the ability to set different prices or levels of benefit for policyholders with different characteristics. Then under IFRS 17, an entity may include these contracts in the same group, by following all other IFRS 17 grouping requirements.

4.1.3.2 Onerous Classification

The insurance contracts or cohorts onerous classification is performed in the application by checking whether the contracts are net outflow at inception. If the contracts are profitable at inception, then the CSM is projected into the future by using different assumption scenarios. For any projected period, a

loss is recognized then the contract is marked as profitable with a significant possibility of turning onerous.

4.1.4 Forming the Cohorts

IFRS 17 requirements mandate that the contracts issued more than one year apart should not be included in the same group. To achieve this, groups can be further divided as required. Each of these groups can include contracts issued over any length of time up to one year. This period does not need to be restricted or aligned with the reporting period of the entity. This requirement is known as the *Annual Cohort Requirement*.

The contracts in the cohorts can be of less than one year as well. For example, if an entity manages contracts in quarterly cohorts it could choose to have groups issued within a reporting quarter.

4.1.5 Reinsurance Contracts Held

A reinsurance contract held cannot be considered onerous by applying IFRS 17. Therefore, the requirements for dividing a portfolio into groups are modified for reinsurance contracts held. For a group of reinsurance contracts held, an insurer expects either to incur a net cost of purchasing the reinsurance or, sometimes, make a net gain from purchasing the reinsurance. Applying the grouping requirements to reinsurance contracts held, at a minimum, a portfolio is divided into the following:

A group of contracts on which there is a net gain at initial recognition if any.

1. A group of contracts on which at initial recognition there is no significant possibility of a net gain arising subsequently if any.
2. A group of remaining contracts in the portfolio if any.

For some reinsurance contracts held, applying the requirements in IFRS 17 will result in a group that comprises a single contract.

4.2 General Measurement Model (GMM)

This section provides details about the General Measurement Model. IFRS 17 introduces the General Measurement Model that provides pertinent information about the future cash flows and profitability of insurance contracts. The General Measurement Model provides a wide-ranging and intelligent structure with various features of Insurance Contracts and the opportunities to make them profitable.

Topics:

4.2.1 Overview

In IFRS, insurance contracts are grouped as profitable and onerous to make it easier for insurers to evaluate their profit or loss. Fulfillment cash flows and contractual service margin are two parameters

that are considered while calculating the liability of the remaining insurance coverage, and thereby the profit or loss.

> **NOTE** IFRS 17 requires financial institutions to update the fulfillment cash flows at each reporting date by using current estimates that are consistent with relevant market information.

4.2.2 Performing Initial Measurement

The asset or liability measurement is performed by adding the fulfillment cash flows and the contractual service margin after the initial recognition of insurance contracts.

- Fulfillment cash flows are the current estimate of amounts that the insurer expects to collect from premiums and payout for claims, benefits, and expenses, including an adjustment for the timing and risk of those cash flows.
- The contractual service margin is the expected profit for providing future insurance coverage (unearned profit).

The measurement of the fulfillment cash flows reflects the current value of any interest-rate guarantees and financial options included in the insurance contracts.

4.2.3 Performing Successive Measurements

After the initial asset or liability measurement at inception, subsequent measurements of ongoing group insurance contracts are also performed. The total liability of a group of insurance contracts is comprised of the liability of the remaining coverage and the liability for incurred claims. The liability for remaining coverage is calculated as the sum of fulfillment cash flows of the coverage to be provided in the future and the remaining CSM.

The liability for incurred claims is measured as the fulfillment cash flows for claims and expenses already incurred but not yet paid.

The fulfillment cash flows are measured again on each reporting date to reflect estimates based on current assumptions. This measurement applies the same requirements that were applied for the initial measurement. Changes in estimates of the fulfillment cash flows are reflected in profit or loss, other comprehensive income, or in some cases, the CSM is adjusted.

4.2.4 Reinsurance Contracts Held

This section provides detailed information about the Reinsurance Contracts Held feature.

Topics:

4.2.4.1 Estimates of Future Cash Flows

The amount an entity pays for a reinsurance contract held consists of the premiums it pays minus any amounts paid by the reinsurer to the entity as compensation for expenses incurred, for example, ceding commissions. The amount an entity recognizes for reinsurance contracts held can be viewed as the share of the reinsurer for the risk-adjusted expected present value of the cash flows generated by the underlying insurance contracts and a CSM that makes the initial measurement of the reinsurance asset equal to the amount the entity pays for the reinsurance contract.

Consistent assumptions are used when measuring estimates of the present value of future cash flows for a group of reinsurance contracts held and estimates of the present value of future cash flows for the group(s) of underlying insurance contracts. This includes any associated adjustments for the financial risk and the time value of money arising from the reinsurance contracts held. As a result, the cash flows used to measure the reinsurance contracts held to reflect the extent to which those cash flows depend on the cash flows of the underlying contracts that the reinsurance contract held covers.

Also, the expected present value of future cash flows includes an adjustment for the risk that the reinsurer may fail to satisfy its obligations under the reinsurance contract held. Changes in the fulfillment of cash flows that result from changes in the risk of non-performance by the reinsurer do not adjust the contractual service margin. Instead, these changes are reflected in profit or loss when they occur.

4.2.4.2 Risk Adjustment for Non-financial Risk

The requirements in IFRS 17 for risk adjustment for non-financial risk are modified for reinsurance contracts held. For reinsurance contracts held, the risk adjustment for non-financial risk represents the amount of risk being transferred by the holder of the group of reinsurance contracts to the reinsurer.

4.2.4.3 Contractual Service Margin

The contractual service margin for a reinsurance contract held represents the cost of purchasing reinsurance. This is different from the contractual service margin for underlying insurance contracts that represent unearned profit on those contracts. The cost of purchasing reinsurance is recognized as services are received under the reinsurance contract held. As an exception, if the reinsurance contract held covers events that have already occurred, the net cost at initial recognition is recognized immediately in profit or loss.

The amount an entity pays for reinsurance typically exceeds the expected present value of cash flows generated from that reinsurance plus the risk adjustment for non-financial risk. As such, the contractual service margin for a group of reinsurance contracts held at initial recognition typically represents a net cost of purchasing reinsurance.

4.3 Variable Fee Approach (VFA)

The Variable Fee Approach is applied to direct participating contracts. It is defined by three criteria and is based on policyholders sharing in the profit from an identified pool of underlying items.

Topics:

4.3.1 Overview

Variable Fee Approach (VFA) is applied to direct participating contracts. The Variable Fee Approach (VFA) is defined by these criteria, based on policyholders being entitled to a significant share in the profit from an identified pool of underlying items:

- The contractual terms specify that the policyholder participates in a share of an identified pool of underlying items.
- The entity expects to pay the policyholder an amount equal to a substantial share of the fair value returns from the underlying items.
- The entity expects a substantial proportion of any change in the amounts to be paid to the policyholder to vary with the change in the fair value of the underlying items.

A variable fee is the insurance contract liability based on the obligation for the entity to pay the policyholder an amount equal to the value of the underlying items and the net of a consideration charged for the contract.

This approach requires that changes to the estimate of the future fees an entity expects to earn from directly participating contract policyholders be adjusted against the CSM. The CSM on direct participating contracts would be recognized in profit or loss as part of the insurance service results based on the passage of time of the entity.

This flexible approach helps to mitigate accounting mismatches. This approach matches assets and liabilities. According to VFA, there is no direct impact on profit and loss. Also, CSM is being released over the contract period. In VFA, the discounting rate will be equal to the current interest rate.

4.3.2 Reinsurance Contracts Held

For reinsurance contracts held, the entity and the reinsurer do not share in the returns on underlying items and so the VFA criteria are not met, even if the underlying insurance contracts issued are VFA contracts. The contractual service margin for a group of reinsurance contracts held represents the net cost (or net gain) of purchasing reinsurance, considering the rights and obligations of the entity under the reinsurance contract. The insurer does not receive investment-related services from the reinsurer.

4.4 Premium Allocation Approach (PAA)

The Premium Allocation Approach (PAA) is similar to existing approaches for non-life insurance products. The Premium Allocation Approach only applies over the coverage period, not over the settlement period.

Topics:

4.4.1 Overview

This section defines how the contract boundary is critical to analyzing whether an insurer can use the PAA for some contracts. The PAA, or simplified approach, can be used when the contract coverage

period, including premiums included in the contract boundary, is one year or less or if the PAA produces a liability.

The first step to assess its use is to define the contract boundary and the coverage period. Many non-life insurance contracts meet the first criteria by having a coverage period of one year or less. However, contracts with longer coverage periods, such as surety, engineering, construction, or lenders' mortgage insurance will need to demonstrate they meet the second criteria.

Non-life insurers in this scenario will need to develop more complex modeling than they currently apply, requiring more data and the development of long-term assumptions. This also means insurers will present financial statements with a mix of valuation techniques, complicating the way results are analyzed and communicated.

The premium allocation approach assumes that no contracts are onerous at initial recognition unless facts and circumstances indicate otherwise. Assessment of whether an individual or a set of contracts belongs to those groups is based on the likelihood of changes in applicable facts and circumstances.

Longer-term non-life contracts, such as construction, engineering, and lenders' mortgage insurance, may not meet the criteria. As a result, the insurer will face additional complexity in its valuation, modeling, and associated processes. Some life insurance contracts currently using long-duration measurement models may qualify to be able to use the PAA approach, which simplifies the modeling required but may also lead to unexpected results.

4.4.2 Reinsurance Contracts Held

An entity may use the premium allocation approach to simplify the measurement of a group of reinsurance contracts held. If at the inception of the group, the entity reasonably expects that the resulting measurement would not differ materially from the measurement applying the general model or the coverage period for each contract in the group of reinsurance contracts held is one year or less.

Because groups of reinsurance contracts held are separate from groups of underlying insurance contracts, the assessment of whether a group of reinsurance contracts meets the conditions for applying the premium allocation approach may differ from the assessment of whether the group(s) of underlying contracts meet(s) those conditions.

4.5 Long Duration Contracts

A long-duration contract or long-duration targeted improvement (LDTI) is one that is generally not subject to unilateral changes in its provisions and requires the performance of various functions and services, including insurance protection, for an extended period. Examples include contracts that are non-cancellable or guaranteed renewable by the insurer, such as most term and whole life insurance and payout annuity contracts.

According to the revised guidance, the non-participating traditional insurance contracts and limited-payment contracts that are measured using the net level premium measurement approach are covered. Annual or more frequent updating of insurance assumptions is required, with the impact on the liability recognized on a retrospective catch-up basis as a separate component of benefit expense. There is no provision for adverse deviation. The net premium ratio is capped at 100%, which replaces the premium deficiency test. Contracts from different issue years will no longer be permitted to be grouped, effectively resulting in a lower level of aggregation for determining contracts in a loss position.

The discount rate is standardized to an upper-medium grade (low credit risk) fixed-income corporate instrument yield (single A) that reflects the duration characteristics of the liability rather than expected investment yields. The discount rate is required to be updated at each reporting date, with the effect of discount rate changes on the liability recorded in other comprehensive income (OCI). The contract inception date discount rate is locked in for benefit expense purposes.

For LDTI transition, the application computes the Net Premium Ratio and Benefit Ratio in the following way:

- **Net Premium Ratio**: If the transition method is *Full Retrospective*, then the net premium as on inception is computed. If the transition method is *Modified Retrospective*, then the net premium as on transition date is computed by using the net premium ratio formula that is configured against the Transition Date.
- **Benefit Ratio:** If the transition method is *Full Retrospective*, then the Benefit Ratio as on inception is computed. If the transition method chosen is modified retrospective then the Benefit Ratio as on transition date is computed by using the Benefit Ratio formula that is configured against the Transition Date.

4.6 Subledger

The sub-ledger function enables you to pass IFRS 17 compliant journal entries that are based on the results of Contractual Service Margin (CSM) calculations. The solution has seamless connectivity between the CSM engine and the sub-ledger function. The CSM results, which are available post-execution, allow you to execute the sub-ledger definitions.

The sub-ledger function picks up data from the relevant tables and passes entries by using the pre-approved accounting rules. The entries are passed only for the runs that are marked for reporting.

The sub-ledger function comes with pre-ceded IFRS 17 compliant accounting rules that are configurable and can be customized. In terms of output, the solution comes with ready-to-use reports including a journal entry report and a ledger closing balance report. Both these reports are available at the selected granularity levels.

4.7 Exchange Rate

The Exchange Rate feature supports the ability to convert the foreign currency expected cash flows or actual transactions into the functional currency by using one of the Spot Exchange Rates supported by the Oracle Insurance Accounting Analyzer Application. The user can indicate the Exchange Rate Type against each input variable in the calculation preference configuration. The application uses the Exchange Rate Type to convert the foreign currency cash flows attached to that input variable into the Functional Currency using the same rate before executing the IFRS17 computations. The application also supports viewing the IFRS17 results in different reporting currencies configured as per legal entity.

In the Subledger module, Currency Conversion is done when the currency of the Subledger definition is different from the base currency that was set during the initial configuration. The Subledger module uses the **FSI_EXCHANGE_RATES** table to use the correct Currency Exchange Rate as per the **fic_mis_date** that is used for a mapped rate source code against a Legal Entity.

4.8 Acquired Contracts

Acquired Insurance Contracts and Reinsurance held contracts in a business are treated as if they had been issued by the acquirer at the date of the transaction. The groups of contracts acquired are identified based on the level of aggregation requirements. This determines the issued CSM for Insurance Contracts and Reinsurance held contracts at the date of the transaction. For Onerous Contracts, the difference between the consideration received or paid and the fulfillment cash flows are treated differently. The application comes with the out of box logic, configured in the Calculation Preference Acquired Contracts templates to estimate the CSM and the loss as on Transaction Date for the acquired business.

The groups of contracts acquired are identified based on the level of aggregation requirements. This determines the issued CSM for Insurance Contracts and Reinsurance held contracts at the date of the transaction.

Any consideration received for the contracts is used as a proxy for premiums received. This excludes any consideration for other assets and liabilities that are acquired in the same transaction.

For contracts acquired in a business combination, the Fair Value at the Transaction Date is considered. This Fair Value is determined by using the IFRS 13 requirements, except for the requirement where the Fair Value of a financial liability with a demand feature must not be less than the amount payable on demand.

For Onerous Contracts, the difference between the consideration received or paid and the fulfillment cash flows are treated differently.

4.9 Year-To-Date (YTD)

The Oracle Insurance Accounting Analyzer Application supports Year-to-Date Reporting irrespective of whether the Input Cash Flow or Variable Data is given on a Year-to-Date basis or an Incremental Basis. This document provides detailed information on the Year-to-Date Feature. See the Oracle Insurance Accounting Analyzer Year to Date Feature document on MOS.

5 Application Workflow

This chapter provides the application workflow of various modules. This chapter includes the following sections:

5.1 Application Configuration

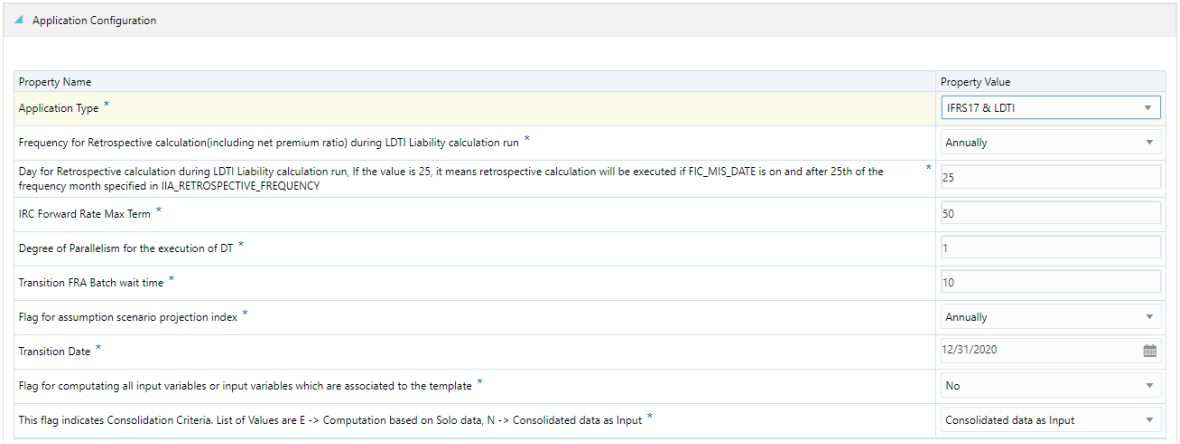
Use the application configuration screen to configure the Seeded Data in the **setup_master** table. The changes made to this table in the **Application Configuration** Window have an impact on the insurance cash flow loader, the discounting engine, and the liability calculation run.

Topics:

5.1.1 Access Application Configuration

You can access the **Application Configuration** Window by clicking the **Application Configuration** element from the left-pane in the application. When you click this element, the **Application Configuration** Window appears:

Figure 2: The Application Configuration Window



This window displays the current configuration for the seeded data in the **setup_master** table. After you modify the values in the **Application Configuration** pane, you can save your changes.

5.1.2 Configure the Seeded Data

Perform the following steps to modify the seeded data in the **Application Configuration** Window:

1. Populate the **Application Configuration** Form as tabulated.

Table 2: The Application Configuration Form

Property Name	Description
*Fields marked with an * are mandatory*	
Application Type*	Select the Application Type from the drop-down list. Available options are: • IFRS17 • LDTI • IFRS17 & LDTI Depending on the selection, only the definitions related to the selected application type will appear in the application.
Frequency for Retrospective calculation(including net premium ratio) during LDTI Liability calculation run*	Specify the frequency at which LDTI calculation run needs to be execute retrospectively for the past data. This must also be provided as an input at the same frequency. Select the required frequency from the drop-down list. Available options are: • Annually • Half Yearly • Monthly • Quarterly
Day for Retrospective calculation during LDTI Liability calculation Run, If the value is 25, it means retrospective calculation will be executed if FIC_MIS_DATE is on and after 25th of the frequency month specified in IIA_RETROSPECTIVE_FREQUENCY*	Enter a value in this field.
IRC Forward Rate Max Term*	Enter a value in this field. This is the maximum term until which the Forward Rates are computed.
Degree of Parallelism for the execution of DT*	Enter a value in this field. The value in this field indicates the Degree of Parallelism for the execution of DT.
Transition FRA Batch wait time*	Enter a value in this field.

Property Name	Description
Flag for assumption scenario projection index*	Select the required Frequency Flag from the drop-down list. Available options are: • Annually • Half Yearly • Monthly • Quarterly
Transition Date*	Use this field to specify the transition date that must be used for the Transitionary Balance Computations by using the Transition Calculation Templates Click **Calendar**  in this field and select the transition date from the calendar.
Flag for computing all input variables or input variables that are associated with the template*	Select either *Yes* or *No*. This flag indicates whether the Discounting Engine must compute all Input Variables or only the Input Variables that are referred to in the templates used in the Liability Calculation runs.

Property Name	Description
This flag indicates Consolidation Criteria. List of Values are E -> Computation based on Solo data, N -> Consolidated data as Input*	Depending on the value selected in this field, the default Run Type is displayed in the Aggregation Level Window: • **Consolidated data as Input**: If this option is selected, then the new flow of solo or consolidated is executed, where the solo or consolidated level cohorts are given as an input. Additionally, if the **Computation based on Solo Data** value is selected, then the default **Run Type** is Solo. Solo or Consolidated cohorts are identified based on the value of **n_cohort_cons_type** in **Stg_Ins_Group_Dimension_Map**. The value *0* indicates a *Solo* cohort and the value *1* indicates *Consolidated* cohorts. If the Run Type is *Solo*, then only Solo cohorts are selected for computation. If the Run Type is *Consolidated* then only Consolidated cohorts are selected for computation. • **Computation based on Solo data:** If this option is selected, then the existing flow is executed where the child-level entity linked cohorts are fetched for the group entity run. The inter-company taxations for reinsurance held are netted off. Additionally, if the Consolidated Data as Input value is selected, then the default **Run Type** is Consolidated. The value of **n_cohort_cons_type** in **Stg_Ins_Group_Dimension_Map** is not considered when this option is selected. **Note:** In the **Aggregation Level** screen, when creating a new Level of Aggregation Definition, the default **Run Type** is *Solo* and this field is disabled. In case the **Run Type** was selected as *Consolidated* for an LOA, then this field is disabled when you try to modify an LOA.
General Ledger Hierarchy pane	
General Ledger Hierarchy applicable for Subledger*	This is the Ledger Account Hierarchy that is used by the Subledger Definition Select a folder and a property value from the **Folder** and **Property Value** Columns, respectively.

2. Click **Save**.

   The configurations are saved in the **Application Configuration** Window.

5.2 Level of Aggregation

IFRS17 mandates insurance companies to recognize the group of insurance contracts that are managed together. All insurance products that share similar risks can be set together by using the

Level of Aggregation function of the Oracle Financial Services Insurance Accounting Analyzer application. This helps you to set portfolios and indicate the basis on which the underlying insurance contracts have to be grouped for measurement and reporting the estimates based on IFRS 17 requirements.

Insurance companies possess a large portfolio of contracts that have to be managed and assessed for the net liabilities. The Level of Aggregation function enables insurance companies to identify and group similar insurance contracts. The aggregation of the contractual service margin and net liability is derived from the individual contracts within the level of aggregation.

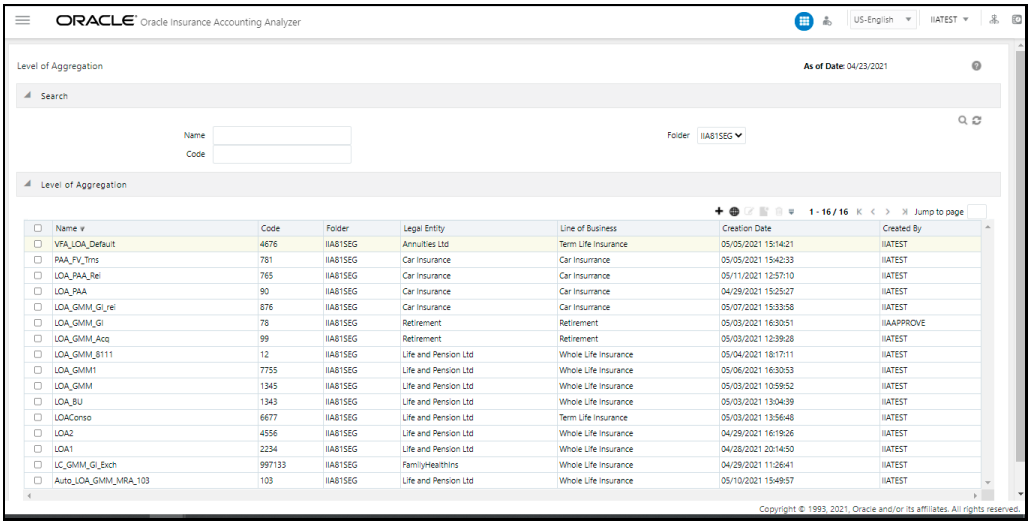
The extent to which contracts are aggregated may have a significant impact on the statement of comprehensive income of an insurance entity and its systems, processes, and data. The insurance contracts can be grouped within a legal entity and line of business, based on other parameters such as geography, year of inception, and remaining term.

Topics:

5.2.1 Access Level of Aggregation

You can access the **Level of Aggregation** Window by clicking the **Level of Aggregation** element from the left-pane in the application. When you click this element, the **Level of Aggregation** Window is displayed:

Figure 3: The Level of Aggregation Window



This window displays the existing level of aggregation definitions in the **Aggregation Summary** table. It also enables you to define a new level of aggregation, edit the existing definitions, and view the details of the existing definitions.

5.2.2 Search for Level of Aggregation Definitions

The Search feature enables you to filter the list of existing definitions and find the definitions that you require. To search for definitions, enter the keyword in the **Name** field, **Code** field, or select a folder from the drop-down list adjacent to the **Folder** field before clicking **Search**.

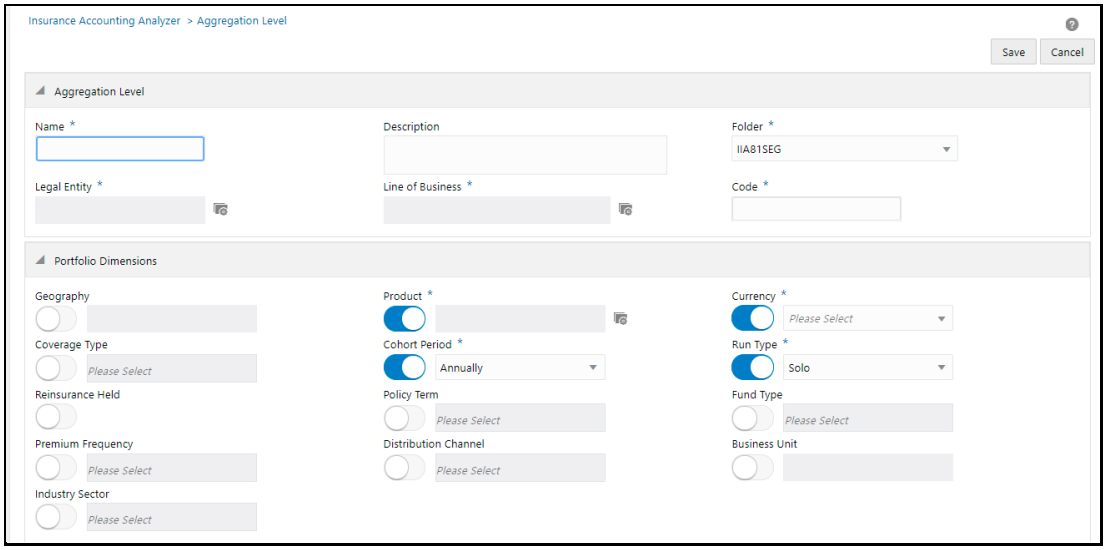
The list of level of aggregation definitions in the **Aggregation Summary** table is refreshed and the definitions that match your search criteria are displayed.

5.2.3 Create a New Level of Aggregation Definition

Perform the following steps to create a new level of aggregation definition:

1. In the **Level of Aggregation** table, click **Add** to open the **Aggregation Level** Window.

Figure 4: The Aggregation Level Window



2. Populate the **Aggregation Level** pane.

Table 3: The Aggregation Level form

Field	Description
Fields marked with asterisks (*) in the window are mandatory.	
Aggregation Level pane	
Name*	Enter a name for the Level of Aggregation Definition.
Description	Enter a short description of the Level of Aggregation Definition.
Folder*	Select a folder from the drop-down list.
Legal Entity*	Click **Hierarchy Selection** adjacent to this field. Select the required Legal Entity from the Hierarchy Selection Window. For more information, see Hierarchy Selection.

Field	Description
Line of Business*	Click **Hierarchy Selection**  adjacent to this field. Select the required Line of Business from the Hierarchy Selection Window. For more information, see Hierarchy Selection.
Code*	Enter the code for Calculation Preferences.
Portfolio Dimensions pane	
All the fields in this pane require you to enable or disable the fields using the enable or disable options.	
Geography	Click the  icon to enable this field. Click **Hierarchy Selection**  adjacent to the text field. Select the required Geography from the **Hierarchy Selection** Window. For more information, see Hierarchy Selection.
Product*	Click **Hierarchy Selection**  adjacent to this field. Select the required **Legal Entity** from the **Hierarchy Selection** Window. For more information, see Hierarchy Selection.
Currency*	Select the required currency from the drop-down list.
Coverage Type	Select the required coverage types from the drop-down list. The values in this field are seeded and come from the Staging Tables. The data is then moved to the Dimension Tables. Once these actions are completed, the values are populated in this field.
Policy Term	Select the policy term from the drop-down list. The values in this field are seeded and come from the Staging Tables. The data is then moved to the Dimension Tables. Once these actions are completed, the values are populated in this field.
Cohort Period*	Select the Cohort Period from the drop-down list and. The available options are: • Annually • Half Yearly • Quarterly • Monthly You can select the Cohort Duration based on the financial year. If the Cohort Duration is selected as *Annual*, then all the contracts which are issued within one year are grouped. For example, if the financial year starts in April, then all the contracts commencing from April to March are grouped as a single cohort.

Field	Description
Run Type	Depending on the value selected on the Application Configuration section for the **This flag indicates Consolidation Criteria. List of Values are E -> Computation based on Solo data, N -> Consolidated data as Input** field, the default Run Type is displayed: • If the *Computation based on Solo data* value was selected, then the default Run Type is *Solo* and this field is disabled. • In case the **Run Type** was selected as *Consolidated* for an LOA, then this field is disabled when you try to modify an LOA. If the *Consolidated data as Input* value was selected in the **Application Configuration** Screen, then the default **Run Type** is *Consolidated*.
Reinsurance Held	Click the  icon to enable reinsurance for the Aggregation Level.
Fund Type	Select the required fund type from the drop-down list. The values in this field are seeded and come from the Staging Tables. The data is then moved to the Dimension Tables. Once these actions are completed, the values are populated in this field.
Premium Frequency	Select the required premium frequency from the drop-down list. The values in this field are seeded and come from the Staging Tables. The data is then moved to the Dimension Tables. Once these actions are completed, the values are populated in this field.
Distribution Channel	Select the required distribution channel from the drop-down list. The values in this field are seeded and come from the Staging Tables. The data is then moved to the Dimension Tables. Once these actions are completed, the values are populated in this field.
Business Unit	Click the  icon to enable the Business Unit Dimension. Click **Hierarchy Selection**  adjacent to this field. Select the required Business Unit from the **Hierarchy Selection** Window. For more information, see Hierarchy Selection.
Industry Sector	Select the required industry sector from the drop-down list. The values in this field are seeded and come from the Staging Tables. The data is then moved to the Dimension Tables. Once these actions are completed, the values are populated in this field.

3. Click **Save**.

   The saved definition is displayed in the **Aggregation Summary** table in the **Level of Aggregation** Window.

The **Audit Trail** pane at the bottom of the Definition Window displays the **Created By**, **Creation Date**, **Last Modified By**, and **Last Modification Date** details. The **User Comments** field enables you to add additional information as a comment.

5.2.4 Edit Level of Aggregation Definition

Perform the following steps to edit a level of aggregation definition:

1. From the **Aggregation Summary** table, select the checkbox adjacent to the level of aggregation definition that you want to edit.
2. Click **Edit**, to open the **Aggregation Level** Window.
3. Update the required fields. For more information, see Create a New Level of Aggregation Definition.

   > **NOTE** You cannot modify definitions that are in *Approved* or *In Use* status.

4. Click **Save**.

   The saved definition is displayed in the **Aggregation Summary** table of the **Level of Aggregation** Window.

The **Audit Trail** pane at the bottom of the Definition Window displays the **Created By**, **Creation Date**, **last modified by**, and **Last modification date** details. The **User Comments** field enables you to add additional information as a comment.

5.2.5 View Level of Aggregation Definition

Perform the following steps to view a new level of aggregation definition:

1. From the **Aggregation Summary** Window, select the checkbox adjacent to the level of aggregation definition that you want to view.
2. Click **View**, to open the **Aggregation Level** Window.

   > **NOTE** You cannot edit the fields in View mode.

3. Click Cancel to go back to the **Aggregation Summary** Window.

5.3 Calculation Preferences

One of the core requirements of IFRS17 is to calculate the insurance liabilities in such a way that each component of the liability is segregated explicitly so that those are visible to you. For example, in the General Measurement Model, the entity is asked to distinctly provide the best estimate liability cash flows, the effect of discounting, the risk adjustment performed, and the best estimates. Further to this requirement, the entity is also required to study the movement analysis of each of these breakups between each reporting date.

As a mandate from IFRS 17, Insurance companies are required to provide the disclosures for every reporting period. IFRS 17 requires specific disclosure about the nature of risks from insurance contracts, any assumptions or judgments made, and the actual amounts recognized in the financial statements. However, IFRS 17 has specified the approach from a broader perspective which can be implemented in different ways by each organization.

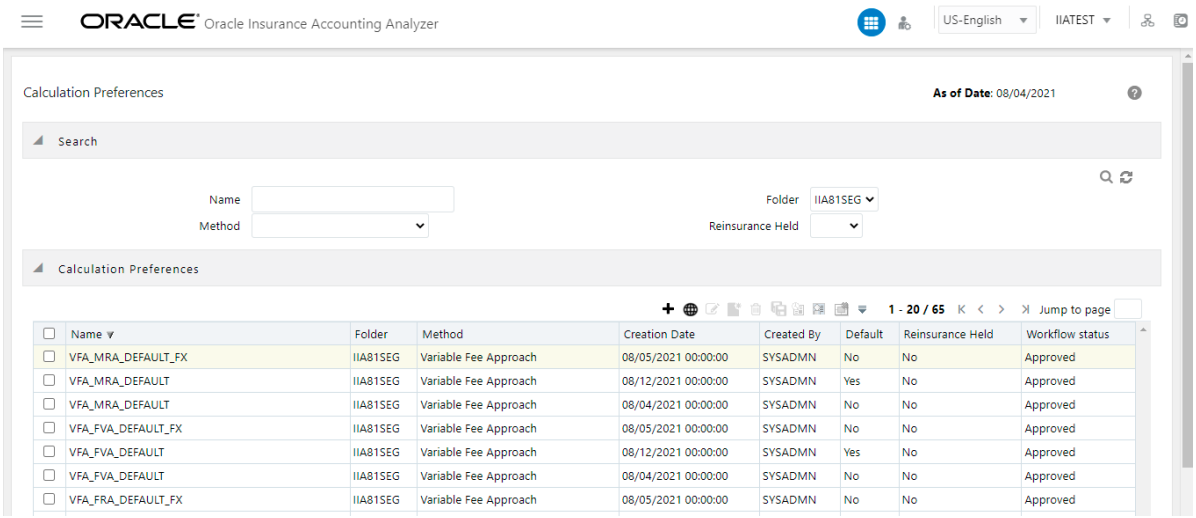
The **Calculation Preferences** Window enables insurance companies to define the required formulas to arrive at the contractual service margin, net liability, and loss components in their way, based on various parameters and variables. This provides the ability to implement the disclosure requirements according to the processes and assumptions. The application provides a default set of formulas as well.

Topics:

5.3.1 Access Calculation Preferences

You can access the **Calculation Preferences** Window by clicking the **Calculation Preferences** element from the left-hand side menu. When you click this element, the **Calculation Preferences** Window is displayed:

Figure 5: The Calculation Preferences Window



This window displays the existing calculation preferences definitions in the **Calculation Preferences** table. This window also enables you to define new calculation preferences, edit the existing definitions, and view the details of the existing definitions.

5.3.2 Search for a Calculation Preferences Definitions

The search feature enables you to filter the list of existing definitions and find the definitions that you require. To search for definitions, enter the keyword in the **Name** field or select a value from the **Folder**, **Method,** and **Reinsurance Held** drop-down lists before clicking **Search**.

The list of calculation preference definitions in the **Calculation Preferences** table is refreshed and the definitions that match your search criteria are displayed.

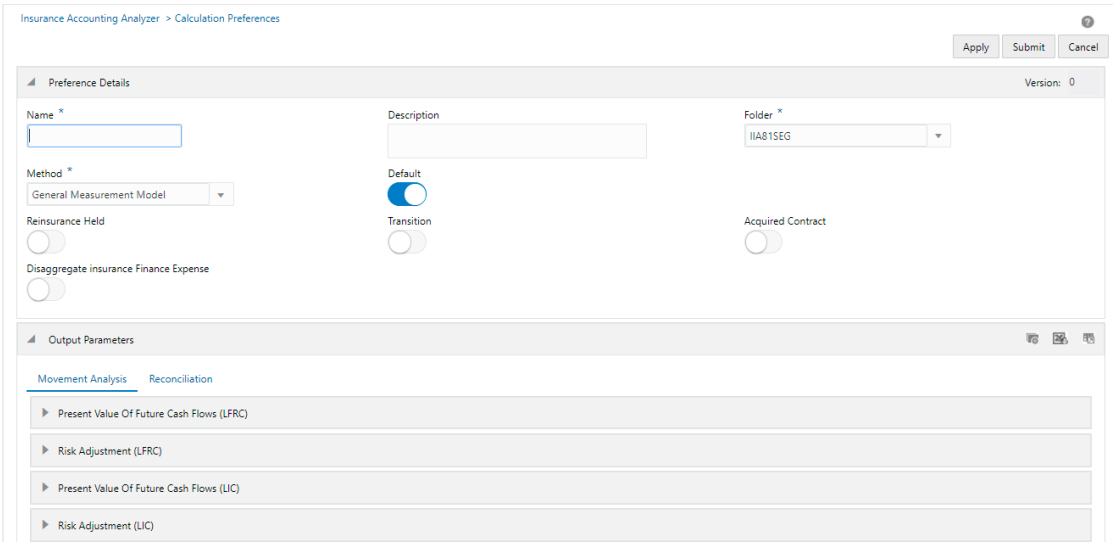
5.3.3 Create a New Calculation Preferences Definition

Perform the following steps to create a new Calculation Preference Definition:

> **NOTE** You must complete mapping the financial element and transaction type to the Cash Flow type as part of the process for calculating the Input Variables. For more information, see Dimension Management and Batch Execution.

1. In the **Calculation Preference** Window, click **Add** + to open the **Calculation Preferences** Window.

Figure 6: The Calculation Preferences Window



2. Populate the **Preferences Details** Pane as described in the following table.

Table 4: The Preference Details Pane

Field	Description
Name	Enter a name for the Calculation Preference Definition.
Description	Enter a short description of the Calculation Preference Definition.
Folder	Select a folder from the drop-down list.
Method	Select a method from the drop-down list. The application supports the following methods: • General Measurement Model • Long Duration Contracts • Premium Allocation Approach • Variable Fee Approach
Default	Click the slider  to mark the definitions as default. This slider is enabled by default. **Note**: For Insurance Contracts, ensure that there is one default definition present per folder and per method. In the case of Reinsurance, this criterion is updated as per folder, per Reinsurance Type, and Method.
Reinsurance Held	Click the slider  to enable the **Reinsurance Held** Feature. On enabling this option, the **Reinsurance Type** Field appears.

Field	Description
Transition	Click the slider  to enable the **Transition Method** drop-down list.
Acquired Contract	Click the slider  to enable acquired contracts for the Calculation Preference Definition. **Note:** This field is not available if the Calculation Method is *Long Duration Contracts* or if the Transition Method is not *Full Retrospective*.
Reinsurance Type	Select the type of Reinsurance Contract from the drop-down list. Available Options are: • Prospective • Retrospective **Note:** This field is displayed only if you have enabled the **Reinsurance Held O**ption.
Transition Method	Select the Transition Method from the drop-down list. Available options for the GMM, PAA, and VFA methods are: • Fair Value Approach • Full Retrospective • Modified Retrospective Available methods for the LDTI method are: • Full Retrospective * • Modified Retrospective** ** On selecting the **Full Retrospective** Method, you can execute the retrospectively roll forward rates based on the user-provided dates*. *** On selecting the Modified Retrospective Method, you can configure the opening balance formula and this formula is used to compute the balance.* **Note:** This field is displayed only if you have enabled the **Transition** Option.

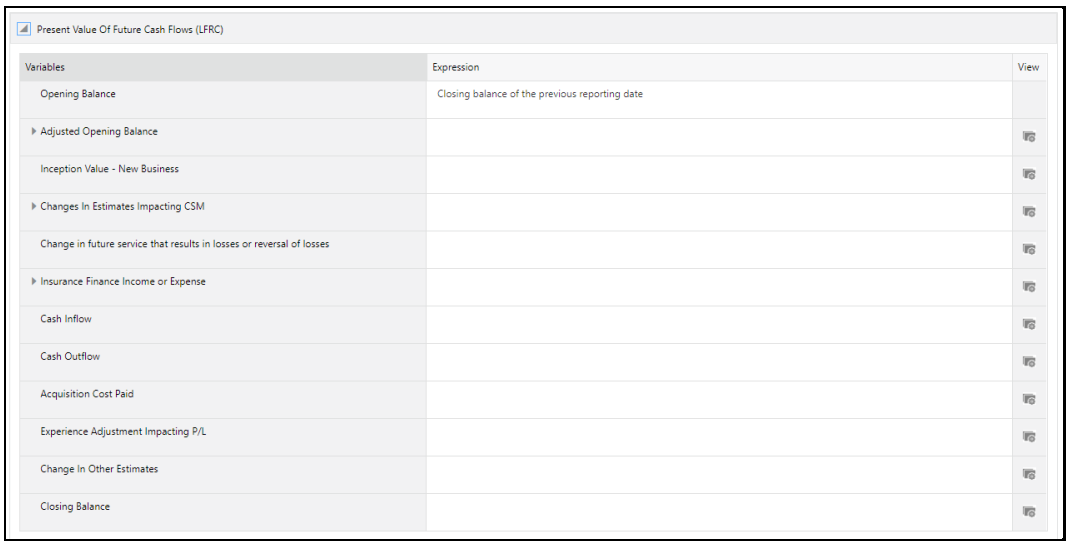
Field	Description
Disaggregate insurance Finance Expense	Click the slider  if you want to disaggregate insurance finance expenses. When you enable this option, the **Disaggregate Type** Field is enabled. **Note**: This field is available only if you have selected the **General Measurement Model M**ethod from the **Method** drop-down list. After copying a default template where the **Disaggregate insurance finance or expense Field** is disabled, ensure that the **Disaggregate insurance finance or expense Field** is not enabled because the validation of the template will fail. This is because the output variables specific to Disaggregate insurance finance or expense feature will be present in the expressions. Therefore, the correct approach in this case would be to copy a default template where **Disaggregate insurance finance or expense** is enabled by default.
Disaggregate insurance Finance Expense For Liability For Incurred claims	Click the slider  if you want to Disaggregate Insurance Finance Expenses. When you enable this option, the **Disaggregate Type** Field is enabled. **Note**: This field is available only if you have selected the **Premium Allocation Approach** method from the **Method** drop-down list.
Disaggregate Type	Select the Disaggregate Type from the drop-down list. **Note**: This field is available only if you have selected the **General Measurement Model M**ethod and enabled the **Disaggregate insurance Finance Expense** Field or the **Premium Allocation Approach** Method and enabled **Disaggregate Insurance Finance Expense For Liability For Incurred claims** from the **Method** drop-down list.
Include Risk Adjustment	Click the slider  to include the risk adjustment. **Note**: This field is available only if you selected the **General Measurement Model** in the **Method** field and have enabled the **Disaggregate insurance Finance Expense** Field.
Limited Payment Contract	Click the slider  if you want to enable a limited payment contract. **Note:** This field is available only if you have selected **Long-Duration Contracts** from the **Method** drop-down list.

3. The **Output Parameters** pane displays the output parameters for the method that you have selected in the **Preference Details** pane. In this example, we are using the **General Measurement Model** Method with the **Present Value of Future Cash Flows (LFRC)** Pane in the **Movement Analysis** tab as an example:

> **NOTE** You can choose an output parameter in any sequence that you require and can also view the same.

a. The **Present Value of Future Cash Flows (LFRC)** Pane contains the following variables:

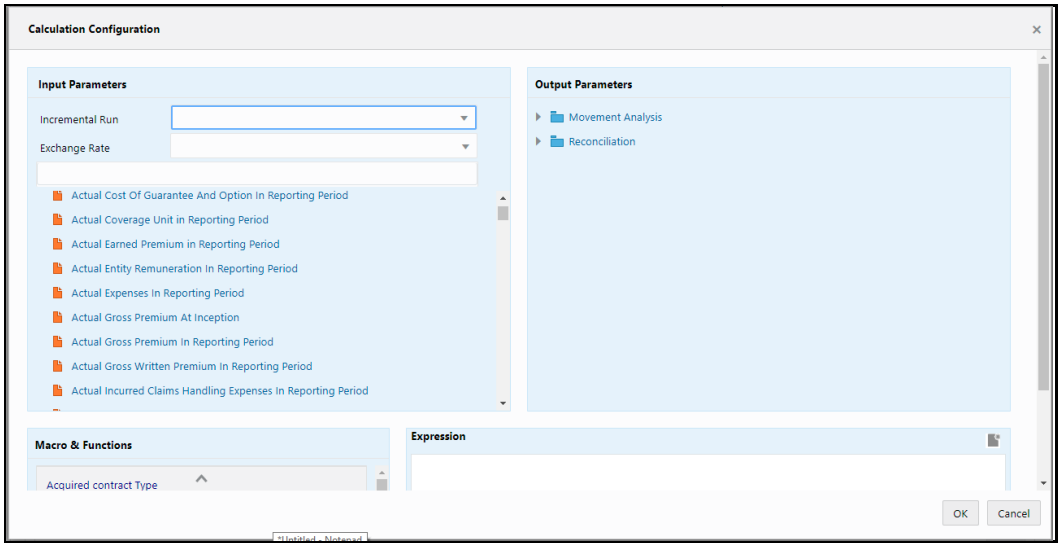
Figure 7: The Present Value of Future Cash Flows (LFRC) Pane



b. Click **Expression Builder**  adjacent to the **Output Parameters** Pane to open the **Calculation Configuration** Window.

Except for other macros that are variables, Interest Accretion Macros are functions and only accepts one pair of opening and closing parenthesis. For example, *(-10 *B - C + D + E)* or precisely *[Interest Accretion Using Locked In Rate]([A]+10*[B{Credit Risk}])* is accepted, while *((-10 *B) – C + D + E)* is not. If a formula has been modified in an application outside of the IAA Application, first paste the modified formula in Notepad++ and then change the encoding to ANSI and check the formula for any special characters before copying and pasting it back into the IAA Application.

Figure 8: The Expression Window



c. In the **Incremental Run** drop-down list, select an Incremental Run. You can link an Input Variable to multiple assumptions for a single expression. The available options are:

- Closing Position

- Credit Risk
- Current Accident Year Current Accident Period
- Current Accident Year Prior Accident Period
- Economic Assumptions
- Economic Experience
- Experience Adjustment-Lapse
- Experience Adjustment-Morbidity
- Experience Adjustment-Mortality
- Experience Adjustment-Others
- Future Inflation Assumption
- Lapse Assumption
- Market Volatility
- Morbidity Assumption
- Mortality Assumption
- New Business
- Non Economic Experience
- Non Economic Assumptions
- Opening Adjustment
- Opening Position
- Other Future Assumptions

d. In the **Exchange Rate** drop-down list, select an Exchange Rate. The available options are:

- Average Exchange Rate
- Closing Exchange Rate
- Opening Exchange Rate
- Transaction Date Exchange Rate

e. In the **Input Parameters** pane, select the required Input Parameters from the list to populate the **Expression** Pane.

f. In the **Output Parameters** pane, select the required output parameters from the list to populate the **Expression** Pane.

g. In the **Macro & Functions** pane, select the required Macros and Functions. Click the **Previous**  icon to toggle between the list of Macros and Functions.
For more information about Macros, see the **Oracle Financial Services Insurance Accounting Analyzer Macros** Document on MOS.

h. After you have built your Expression, click **OK**.

The expression appears in the text field of the **Output Parameter**.

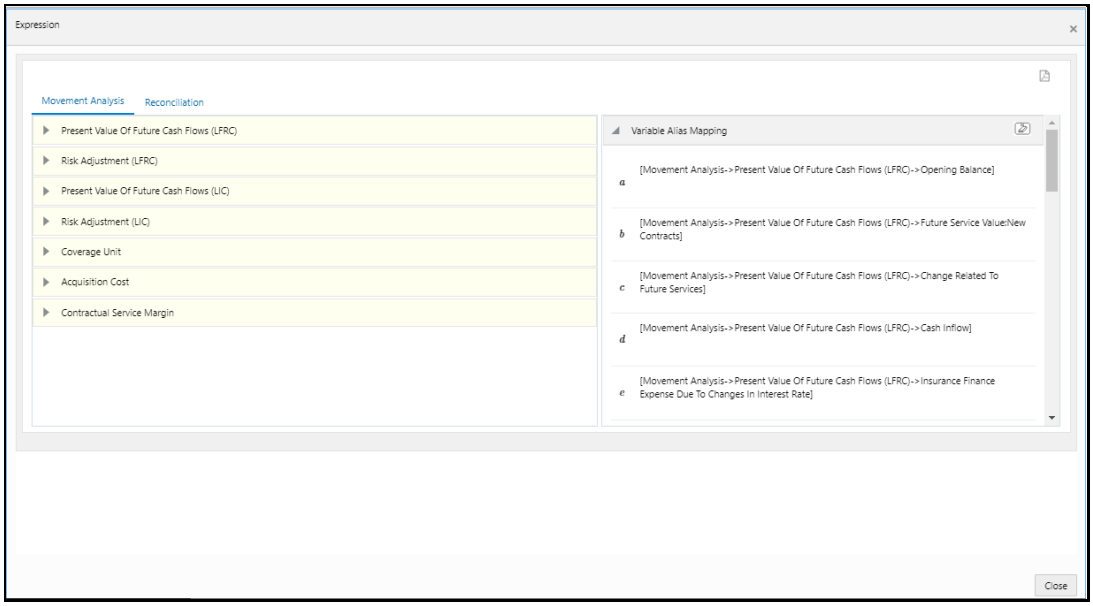
i. Additionally, click the **Download** icon to download the expressions in an Excel file.

j. Click **Import** if you want to import formulae from an Excel file.

> **NOTE** A new Excel file must be used with the worksheets for the sections used in the application, for example, *Movement Analysis* and *Reconciliation*. Under each worksheet, the names of the subsections, for example, *Present Value of Future Cash Flows (LFRC)*. Each line item, for example, *Opening Balance*, under each subsection, should exactly match the values on the application.

4. In the **Output Parameters** pane, click **View** to open the **Expression** Window.

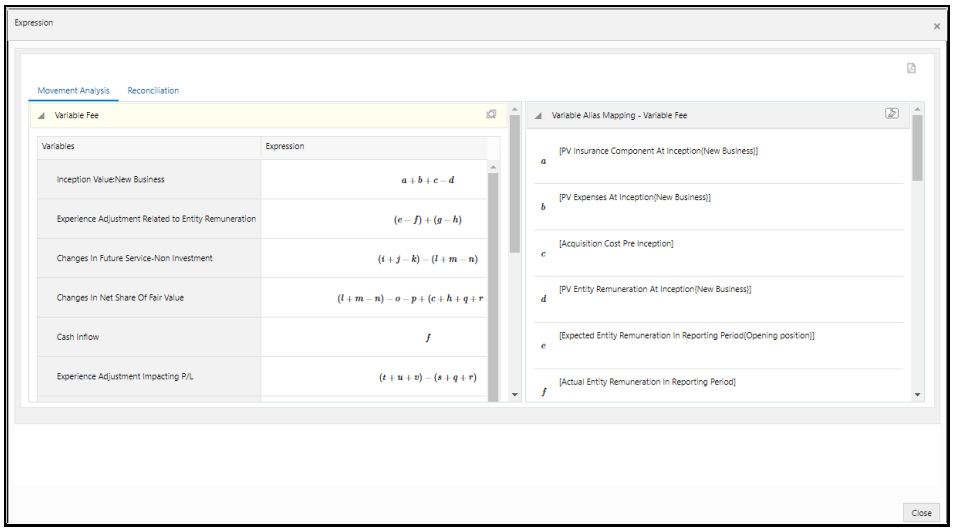
Figure 9: The Expression Window



5. In the **Expression** Window, you can perform the following actions:

- Select the required output parameter to view the expressions in the **Movement Analysis** and **Reconciliation** Tabs in the form of a mathematical formula.

Figure 10: The Expression Window with the Variable Expanded for Viewing the Formula



- Select an Expression, and then click **Show Formula for this Section**  to view the formula for the Expression.
- The **Variable Alias Mapping** pane displays the full value for each character and symbol. You can click **Clear Filter**  to clear the filter.
- In the upper-right corner of this window, you can click **Download**  to download all the expressions in this window in a PDF format to your local system.

For the complete list of the Output Parameters, see the Output Parameters Section.

6. After configuring the Output Parameters, click **Apply** and then click **Submit**.

   The saved definition is displayed in the **Calculation Preferences** table on the **Calculation Preferences** Window.

The **Audit Trail** pane at the bottom of the Definition Window displays the **Created By**, **Creation Date**, **last modified by**, and **Last modification date** details. The **User Comments** field enables you to add additional information as a comment.

5.3.4 Edit a Calculation Preferences Definition

Perform the following steps to edit a calculation preference definition:

> **NOTE** You cannot modify the definitions that are in an *Approved* or *Use* status or customized templates. For customized templates, perform the steps mentioned in the Create a New Version of a Calculation Preference Definition.

1. In the **Calculation Preference** table, select the checkbox adjacent to the calculation preference definition that you want to edit.
2. Click **Edit** , to open the **Calculation Preferences** Window.

3. Update the required fields. For more information, see Create a New Calculation Preferences Definition.
4. Click **Save**.

   The saved definition is displayed in the **Calculation Preferences Summary** table of the **Calculation Preferences** Window.

The **Audit Trail** pane at the bottom of the Definition Window displays the **Created By**, **Creation Date**, **last modified by**, and **Last modification date** details. The **User Comments** field enables you to add additional information as a comment.

5.3.5 View a Calculation Preferences Definition

Perform the following steps to create a new calculation preference definition:

1. From the **Calculation Preferences Summary** Window, select the checkbox adjacent to the calculation preference definition you want to view.
2. Click **View**, to open the **Calculation Preference** Window.

> **NOTE** You cannot edit any of the fields in *View* mode.

3. Click **Cancel** to go back to the **Calculation Preferences Summary** Window.

5.3.6 View the History of a Calculation Preference Definition

Perform the following steps to view the history of a new calculation preference definition:

1. From the **Calculation Preferences** Window, select the checkbox adjacent to the calculation preference definition you want to view the version history of the template.
2. Click **Version History**, to open the **Version History** Window.

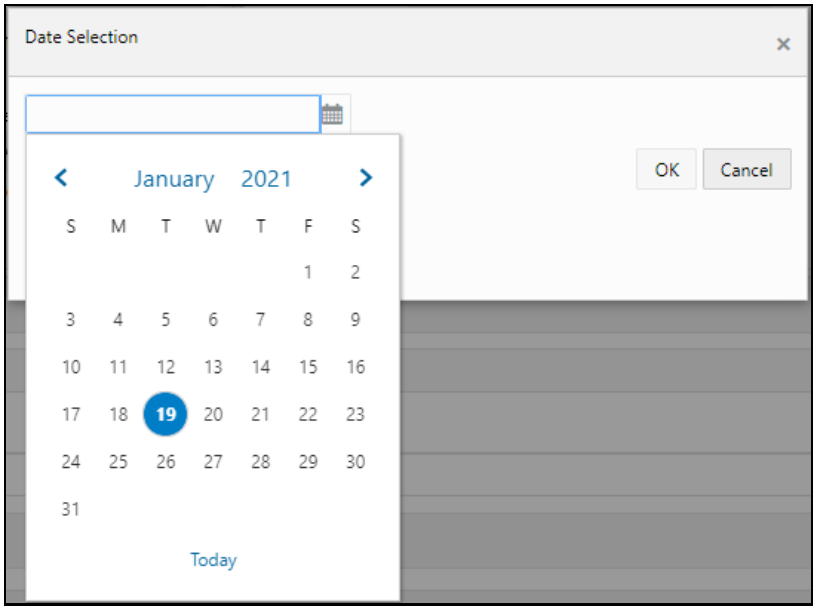
Figure 11: The Version History Window

3. Select the Version and click **Make Active** to activate a calculation preference for a given date. The **Make Active** button is only enabled if the template contains the same *Effective Date* for different versions.

> **NOTE** You can only activate one calculation preference definition for a given date. For example, you have created three calculation preference definitions for the dates *01-Jan-2021, Calculation01*, *Calculation02*, and *Calculation03*. If you activate *Calculation01*, then the other versions will be inactive. the other versions will be inactive.
>
> If the definition contains different effective dates then the latest date will be active

4. Click **Details Version**  to view the details of the calculation preference definition.
5. Click **Execute** to open the **Date Selection** Window.

Figure 12: The Date Selection Window



6. In the calendar, select the required date, and then click **OK**. The definition goes to a *Draft* state. The editable fields can be modified
7. After modifying the required fields, click **OK** to send the definition for approval.
8. After the definition is approved, it can be used for the CSM runs.
9. Click **Cancel** to return to the **Calculation Preference Summary** Window.

Only approved definitions are used in a liability calculation definition.

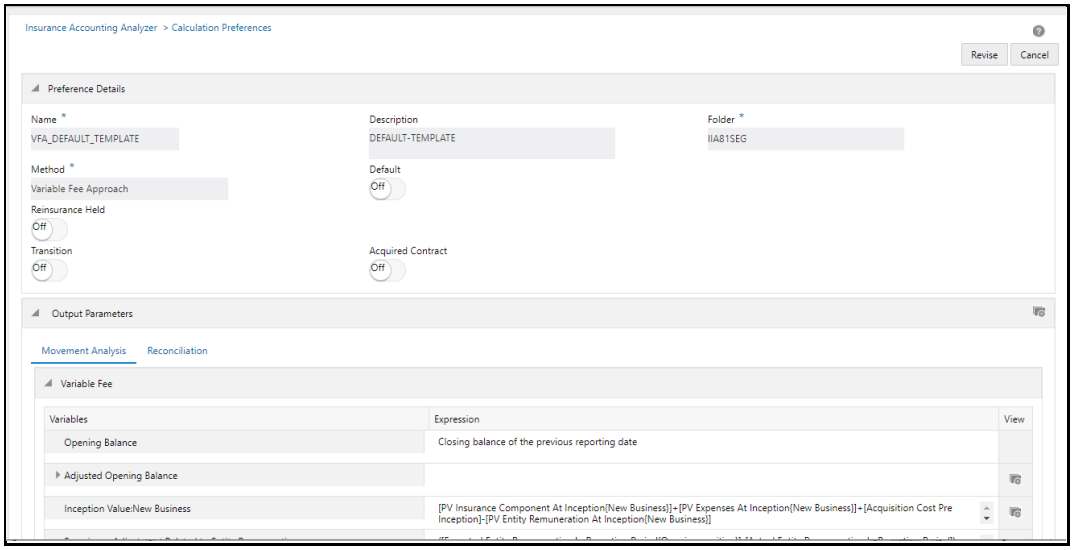
5.3.7 Create a New Version of a Calculation Preference Definition

Perform the following steps to create a new version of a calculation preference definition that contains out-of-box templates:

> **NOTE** These steps are only applicable for default-customized templates.

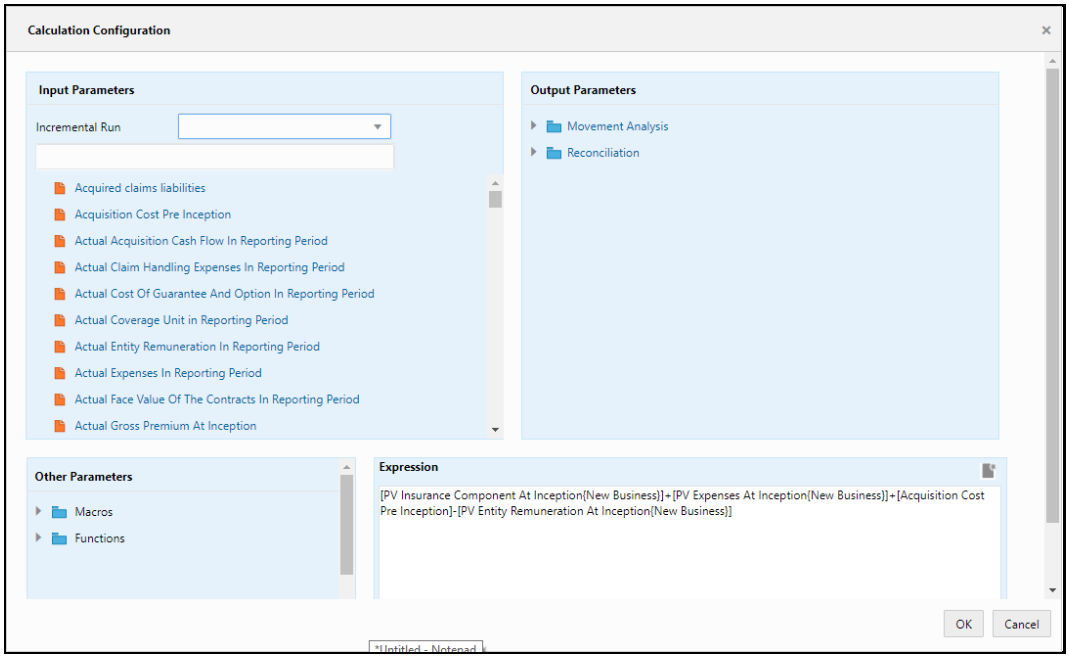
1. From the **Calculation Preferences Summary** Window, select the checkbox adjacent to the calculation preference definition you want to revise.
2. Click **Create New Version**, to open the **Calculation Preference** Window.

Figure 13: The Calculation Preference Definition Window



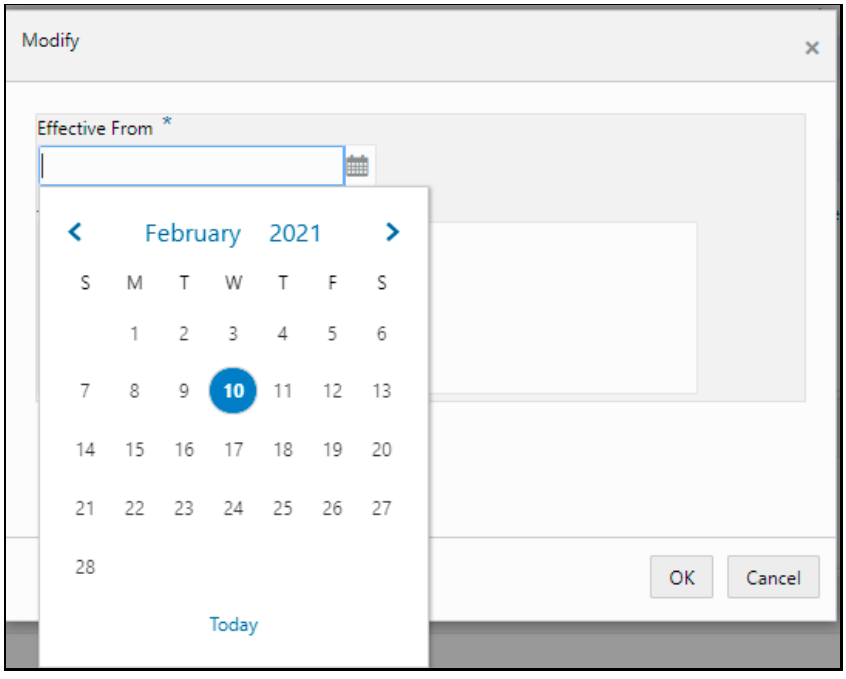
3. Click **Expression Builder** adjacent to the Output Parameter to open the **Calculation Configuration** Window.

Figure 14: The Calculation Configuration Window



4. Modify the formula as required and then click **OK**.
5. Click **Modify** to open the **Modify** Window.

Figure 15: The Modify Window



6. In the calendar, select the required date. The execution date must be less than or equal to the **FIC_MIS** date. The definition goes to a *Draft* state. The editable fields can be modified
7. After modifying the required fields, click **OK** to send the definition for approval.

8. After the definition is approved, run the CSM runs. The definition ID in the **Audit Trail** section is updated with the new version ID.
9. Click **Submit** to send the definition for approval.

5.3.8 Copy a Calculation Preferences Definition

Perform the following steps to copy a calculation preference definition:

1. In the **Calculation Preference Summary** table, select the checkbox adjacent to the calculation preference definition that you want to copy.
2. Click **Copy,** to open the **Save As** Window.
3. Enter values in the **Name**, **Description**, and **Folder** fields.
4. Click **Save**.

   The saved definition is displayed in the **Calculation Preferences Summary** table on the **Calculation Preferences** Window.

You can further edit the definition and submit it for approval.

The **Audit Trail** pane at the bottom of the Definition Window displays the **Created By**, **Creation Date**, **last modified by**, and **Last modification date** details. The **User** C**omments** field enables you to add additional information as a comment.

5.3.9 Retire Calculation Preferences Definition

Perform the following steps to disable unwanted calculation preference definition:

1. In the **Calculation Preference Summary** table, select the checkbox adjacent to the **Calculation Preference** definition you want to retire.
2. Click **Retire**, to open the **Calculation Preference Summary Details** Window.
3. Update the required **Output Parameters**.
4. Click **Retire**.

   The retired definition is displayed in the **Calculation Preferences Summary** table of the **Calculation Preferences** Window.

The Workflow status of the retired definition changes to *Retired*.

The **Audit Trail** pane at the bottom of the definition Window displays the **Created By**, **Creation Date**, **last modified by**, and **Last modification date** details. The **User** C**omments** field enables you to add additional information as a comment.

5.4 Liability Calculations

The liability arising from insurance contracts under IFRS 17 has to be considered in the books of accounts. The net liability is calculated by using the present value of the cash flows of the contract, risk adjustment, and assumption. The computation logic configured in the calculation templates linked to the liability run will be used for computing the IFRS17 estimates including the roll forward. (add the write up here) The liability calculations allow you to set up the level of aggregations, the assumptions,

and the method that will be considered for the calculation of the net liability for each of the contracts under the level of aggregation. This can be performed once the level of aggregation and assumptions are created. The same run can be executed for each reporting period, which calculates the CSM, net liabilities, and so on, for the respective reporting period.

After setting up the level of aggregation, the assumption set per level of aggregation, and calculation preference, you can execute the calculation for all the selected levels of aggregations selected per calculation method. The liability calculation is triggered and the output is generated and then used to generate the IFRS17 reports.

You can provide multiple scenarios for performing the IFRS17 executions. Each scenario can be marked as either a base scenario or what-if analysis or scenario for onerous classification.

The base scenario will be used for calculating the actual results on the execution date. The onerous classification scenarios are used for calculating the onerous classification at inception. The what-if analysis will be used in calculating the IFRS17 liability trends for the current period and future periods that will, in turn, be used for comparison and other management purposes. The calculation results from the base scenario will be used for accounting.

Topics:

5.4.1 Map a User to a User Group to Approve the Liability Calculation

Before you approve a liability calculation definition, perform the following user role mappings and approvals:

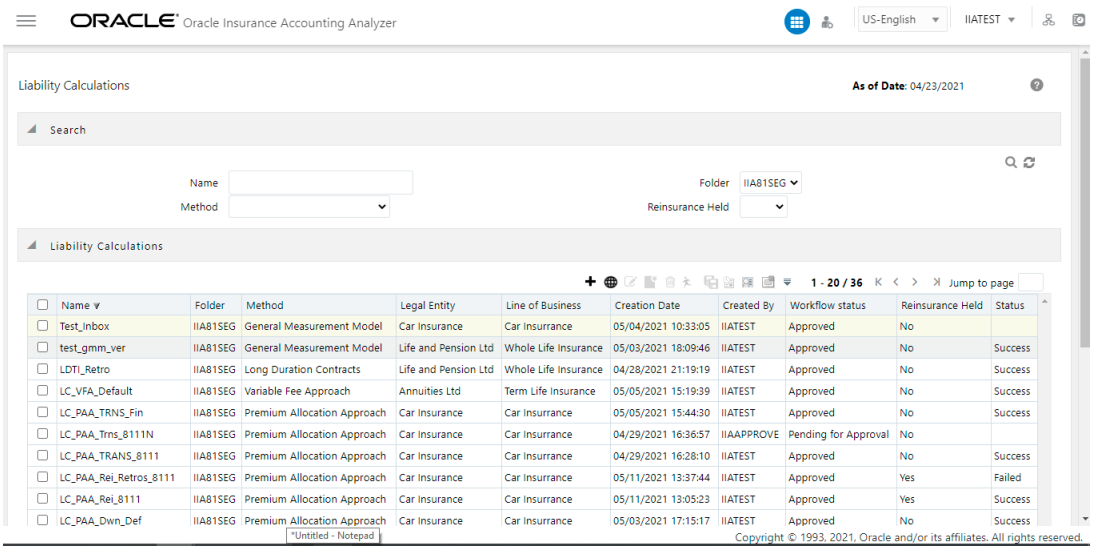
1. Log in as a System Administrator.
2. Navigate to **Identity Management**, then **Security Management**, then **User Administrator**, and then **User Maintenance**.
3. Create two new user definitions, one for the login user, *User 1*, and one for approving the liability calculation, *User 2*. For more information, see the **User Maintenance** section in the OFS Analytical Applications Infrastructure User Guide.
4. Log in as a System Authorizer.

5. Navigate to **Identity Management**, then **Security Management**, then **User Administrator**, and then **User Authorization.**
6. Authorize the user, *User 1*, that you created in **Step 3**. For more information about authorizing a user, see the **User Authorization** section in the OFS Analytical Applications Infrastructure User Guide.
7. Log in as a System Administrator.
8. Navigate to **Identity Management,** then **Security Management**, then **User Administrator**, and then **User User Group Map**.
9. Map the user, *User 2*, that was created to approve the liability calculation to the ***IIA Application Approver Group***. For more information about mapping a user to a user group, see the **User User Group Map** section in the OFS Analytical Applications Infrastructure User Guide.
10. Log in as a System Authorizer.
11. Authorize the mappings that you performed in **Step 9**. For more information about authorizing a user, *User 2*, see the **User Authorization** section in the OFS Analytical Applications Infrastructure User Guide.

5.4.2 Access Liability Calculations

You can access the **Liability Calculations** Window by clicking the **Liability Calculations** element from the left-hand side menu. When you click this element, the **Liability Calculations** Window is displayed:

Figure 16: The Liability Calculation Window



This window displays the existing liability calculation definitions in the Liability Calculations Summary table. This window also enables you to define new liability calculations, edit the existing definitions, and view the details of the existing definitions.

5.4.3 Search for Liability Calculation Definitions

The search feature enables you to filter the list of existing definitions and find the definitions that you require. To search for definitions, enter the keyword in the **Name** field or select a value from the **Folder**, **Method,** and **Reinsurance Held** drop-down lists before clicking **Search**.

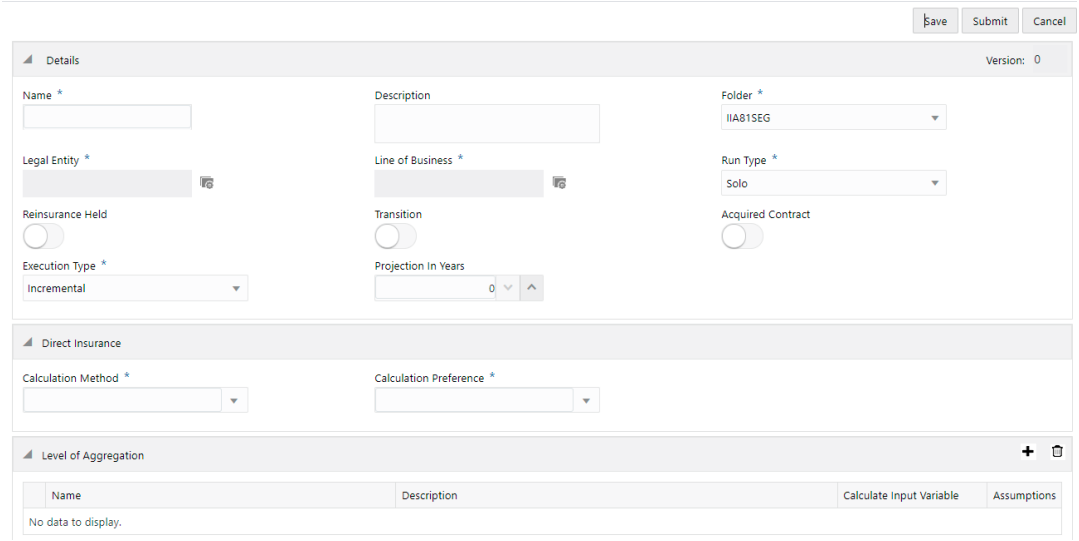
The list of liability calculation definitions in the **Liability Calculations Summary** table is refreshed and the definitions that match your search criteria are displayed.

5.4.4 Create New Liability Calculation Definition

Perform the following steps to create a new Liability Calculation Definition:

1. In the **Liability Calculations** table, click **Add**  to open the **Liability Calculation** Window.

Figure 17: The Liability Calculation Window



2. Populate the **Liability Calculation Definition P**ane.

Table 5: The Liability Calculation Definition Pane

Field	Description
Details pane	
Name	Enter a name for the Liability Calculation Definition.
Description	Enter a short description of the Liability Calculation Definition.
Folder	Select a folder from the drop-down list.
Legal Entity	Click **Hierarchy Selection**  adjacent to this field. Select the required Legal Entity from the **Hierarchy Selection** Window. For more information, see Hierarchy Selection.

Field	Description
Line of Business	Click **Hierarchy Selection**  adjacent to this field. Select the required Legal Entity from the **Hierarchy Selection** Window. For more information, see Hierarchy Selection.
Run Type	Select a Run type from the drop-down list. The available options are: • Solo • Consolidated
Reinsurance Held	Click the  icon to enable the **Reinsurance Held** Feature. When enabled, the **Transition** and **Include Retrospective Reinsurance** Fields appear.
Transition	Click the  icon to enable the **Transition** Feature. On enabling this option, the **Transition Method** and **Transition Calculation Preference** drop-down lists are displayed in the **Direct Insurance** Pane.
Acquired Contract	Click the  icon to enable the Acquired Contract for the Liability Calculation Definition. If enabled, then an additional template for direct insurance for a selected method can be chosen; one for *Reinsurance Held* and one for *Full Retrospective*.
Execution Type*	Select either *Incremental* or *YTD*. For more information on the YTD feature, see the YTD Feature Document on MOS. **Note**: Once a definition is saved, the Execution Type cannot be changed.
Projection In Years	Enter the number of years for which the data must be projected. When you add a value in this field, the **Projection Frequency** field appears. **Note:** This field only appears if the **Reinsurance Held** field is enabled.
Projection Frequency	Select a Projection Frequency from the drop-down list. The available projection frequencies are: • Annually • Half Yearly • Monthly • Quarterly **Note:** This field is available only if you entered a value in the **Projection in Years** Field.
Direct Insurance Pane	

Field	Description
Calculation Method	Select a method from the drop-down list. The available methods are: • General Measurement Model • Long Duration Contracts • Premium Allocation Approach • Variable Fee Approach
Calculation Preference	Select a value from the drop-down list.
Acquired Contract Calculation Preference	Select a value from the drop-down list. **Note**: This field is displayed only if you have enabled the **Acquired Contract** Option.
Transition Method	Select the type of transition method from the drop-down list. The available options are: • Fair Value Approach • Full Retrospective* • Modified Retrospective ** If the **Reinsurance Held** feature is enabled and the **Transition Method** is Full Retrospective for the Calculation Preference that is used, then the **Transition Method** must be Full Retrospective. This is to support templates that are using Reinsurance Macros and require the results of the underlying insurance.* *Out-of-Box Reinsurance Full Retrospective templates use Reinsurance Macros. Hence, if these templates are used, then the Direct **Transition Method** must be **Full Retrospective**.* **Note**: This field is displayed only if you have enabled the **Transition** Option.
Transition Calculation Preference	Depending on the method that you selected in the **Insurance Contract Calculation Method** field, the **Transition Calculation Method** field is populated with the required values. Select the type of Transition Calculation Preference from the drop-down list. **Note**: This field is displayed only if you have enabled the **Transition** Option.
Include Retrospective Reinsurance	Click the  icon to enable the **Retrospective Reinsurance Contract** Pane. **Note:** This field is available only if you enabled the **Reinsurance Held** Field.
Prospective Reinsurance Contract This pane is available only if you enabled the **Reinsurance Held F**ield.	

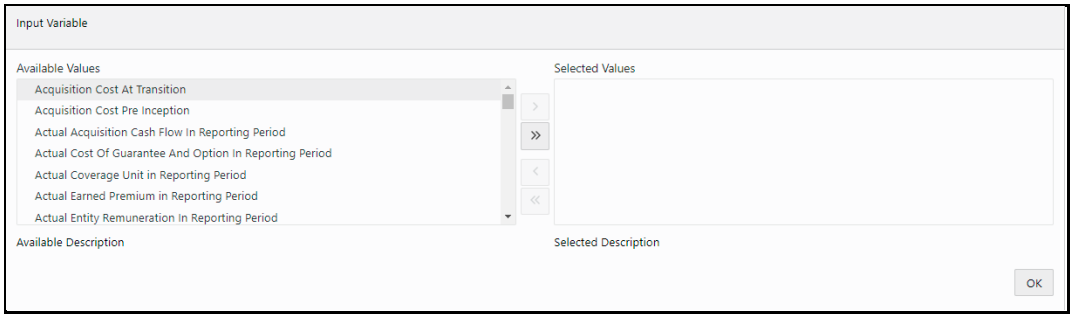
Field	Description
Calculation Method	Select a method from the drop-down list. The available methods are: • General Measurement Model • Long Duration Contracts • Premium Allocation Approach • Variable Fee Approach
Calculation Preference	Select a value from the drop-down list.
Acquired Contract Calculation Preference	Select a value from the drop-down list. **Note**: This field is displayed only if you have enabled the **Acquired Contract** Option.
Transition Method	Select the type of transition method from the drop-down list. The available options are: • Fair Value Approach • Full Retrospective • Modified Retrospective If the **Full Retrospective** Method is selected and the **Acquired Contract** Feature is enabled, then for Direct Insurance two Acquired Contract Templates are Configurable, one for regular use and one for transition. **Note**: This field is displayed only if you have enabled the **Transition** Option.
Transition Calculation Preference	Depending on the method that you selected in the **Insurance Contract Calculation Method** field, the **Transition Calculation Method** field is populated with the required values. Select the type of Transition Calculation Preference from the drop-down list. **Note**: This field is displayed only if you have enabled the **Transition** Option.
Retrospective Reinsurance Contract Pane. This pane is available only if you enabled the **Include Retrospective Reinsurance** Field.	
Calculation Method	Select a method from the drop-down list. The available methods are: • General Measurement Model • Premium Allocation Approach
Calculation Preference	Select a value from the drop-down list.
Acquired Contract Calculation Preference	Select a value from the drop-down list. **Note**: This field is displayed only if you have enabled the **Acquired Contract** Option.

Field	Description
Transition Method	Select the type of transition method from the drop-down list. The available options are: • Fair Value Approach **Note**: This field is displayed only if you have enabled the **Transition** Option.
Transition Calculation Preference	Depending on the method that you selected in the **Insurance Contract Calculation Method** field, the **Transition Calculation Method** Field is populated with the required values. Select the type of Transition Calculation Preference from the drop-down list. **Note**: This field is displayed only if you have enabled the **Transition** Option.

3. In the **Level of Aggregation** Pane, click **Add** and select the required level of aggregation definitions from the **Level of Aggregation** list. For more information, see Level of Aggregation.
4. If you want to delete a Level of Aggregation from the **Level of Aggregation** Pane, select the required Level of Aggregation and then click the **Delete** icon.
5. Click the **View Variables** icon to open the **Input Variable** Window.

   This icon is only available if the Oracle Insurance Accounting Analyzer Application is integrated with the Oracle Financial Services Profitability Management Pack (OFS PFT).

Figure 18: The Input Variable Window

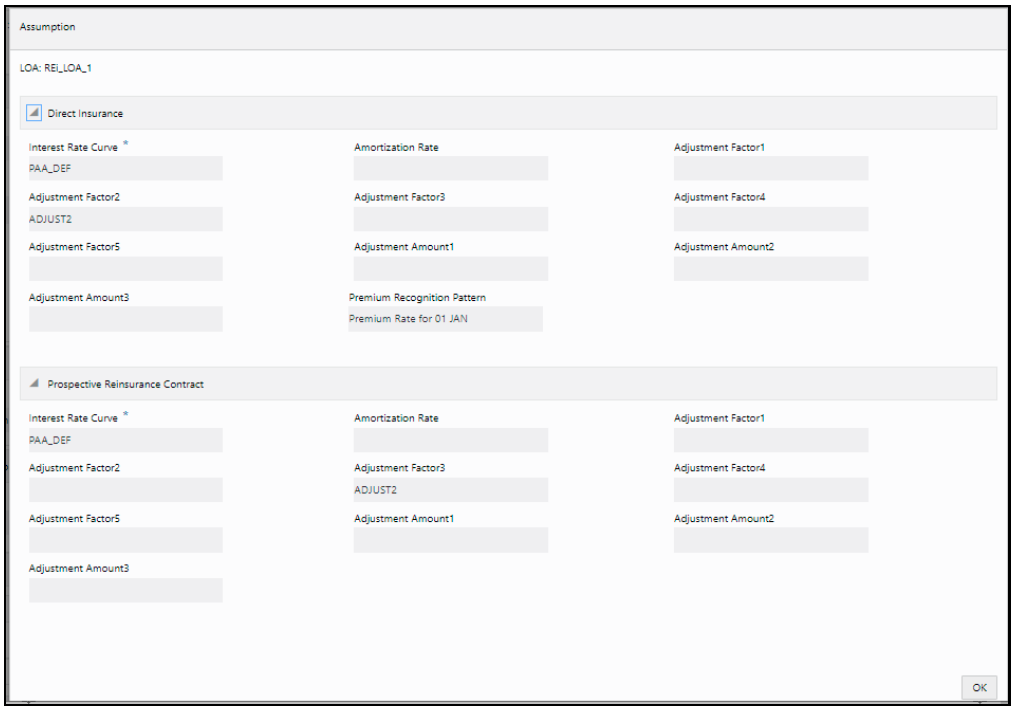


6. In the **Available Values** Section, select a value and then click the **Move** icon to include it in the **Selected Values** Section.
7. Click **OK**.
8. In the **Calculate Input Variable** Column, against the required LOA, you select one of the following options from the drop-down list:
   - Compute Expected and Actual
   - Compute Actual
   - Compute Expected

- Download Expected and Actual

9. In the **Assumptions** Column, click **Launch Hierarchy** adjacent to the LOA to open the **LOA Assumptions and the Rates** Window.

Figure 19: The Assumptions Window



10. Populate the **LOA Assumptions and the Rates Window** Form.

Table 6: The LOA Assumptions and the Rates Window

Field	Description
Direct Insurance and *Prospective Reinsurance Contract* Panes	
Interest Rate Curve	Select an Interest Rate curve from the drop-down list.
Amortization Rate	Select an Amortization Rate from the drop-down list.
Adjustment Factor 1	Select an Adjustment Factor from the drop-down list.
Adjustment Factor 2	Select an Adjustment Factor from the drop-down list.
Adjustment Factor 3	Select an Adjustment Factor from the drop-down list.
Adjustment Factor 4	Select an Adjustment Factor from the drop-down list.
Adjustment Factor 5	Select an Adjustment Factor from the drop-down list.
Adjustment Amount 1	Select an Adjustment Factor amount from the drop-down list.
Adjustment Amount 2	Select an Adjustment Factor amount from the drop-down list.
Adjustment Amount 3	Select an Adjustment Factor amount from the drop-down list.

Field	Description
Premium Recognition Pattern	Select a Premium Recognition Pattern from the drop-down list. **Note**: This field appears in the **Direct Insurance** Pane. This field is available only if you selected the **Premium Allocation Approach** Method in the **Insurance Contract Calculation Method** Field.
Transition Configuration Pane	
Initial Recognition Date	Click **Calendar**  in this field and select the Initial Recognition Date from the Calendar.

11. Click **OK**.
12. Click **Save** and then click **Submit**.

    The saved definition is displayed in the **Aggregation Summary** Table on the **Level of Aggregation** Window.
13. Click **Submit**.
14. For more information about OFS PFT, see Oracle Financial Services Profitability Management Pack User Guide.

    The **Audit Trail** Pane at the bottom of the Definition Window displays the **Created By**, **Creation Date**, **last modified by**, and **Last modification date** details. The **User** C**omments** field enables you to add additional information as a comment.

5.4.5 Edit Liability Calculation Definition

Perform the following steps to edit a liability calculation definition:

1. In the **Liability Calculations Summary** table, select the checkbox adjacent to the liability calculation definition you want to edit.
2. Click **Edit,** to open the **Liability Calculations Edit** Window.
3. Update the required fields. For more information, see Create a New Liability Calculation Definition.
4. Click **Save**.

   The saved definition is displayed in the **Liability Calculations Summary** table of the **Liability Calculations** Window.

The **Audit Trail** pane at the bottom of the definition Window displays the **Created By**, **Creation Date**, **last modified by**, and **Last modification date** details. The **User** C**omments** field enables you to add additional information as a comment.

5.4.6 View Liability Calculation Definition

Perform the following steps to view liability calculation definitions:

1. In the **Liability Calculations Summary** Window, select the checkbox adjacent to the **Liability Calculation** definition you want to view.

2. Click **View**  , to open the **Liability Calculations** Window.

> **NOTE** You cannot edit any of the fields in *View* mode.

3. Click **Cancel** to go back to the **Liability Calculations Summary** Window.

5.4.7 Approve a Liability Calculation

Perform the following steps to approve a liability calculation:

> **NOTE** Only users that are mapped to the *IIA Application Approver Group* can approve a Liability Calculation. For more information, see Create and Map a User to the Liability Calculation Roles and Groups.

1. Log in as a user that is mapped to the ***IIA Application Approver Group.***
2. In the **Liability Calculations Summary** Window, select the checkbox adjacent to the **Liability Calculation** definition you want to view.

> **NOTE** You can approve only liability calculations that are in the *Pending for Approval* status.

3. Click **View**  , to open the **Liability Calculations** Window.
4. Click **Approve**.
5. In the pop-up Window, in the **Give your comments** pane, enter a justification in the **Justification** field.
6. Click **Approve**.

   The status of the selected liability calculation now appears as *Approved*.

5.4.8 View the History of a Liability Calculation Definition

Perform the following steps to view the history of a new liability calculation definition:

1. From the **Liability Calculations** Window, select the checkbox adjacent to the liability calculation definition that you want to view the version history of.
2. Click **Version History**  , to open the **Version History** Window.

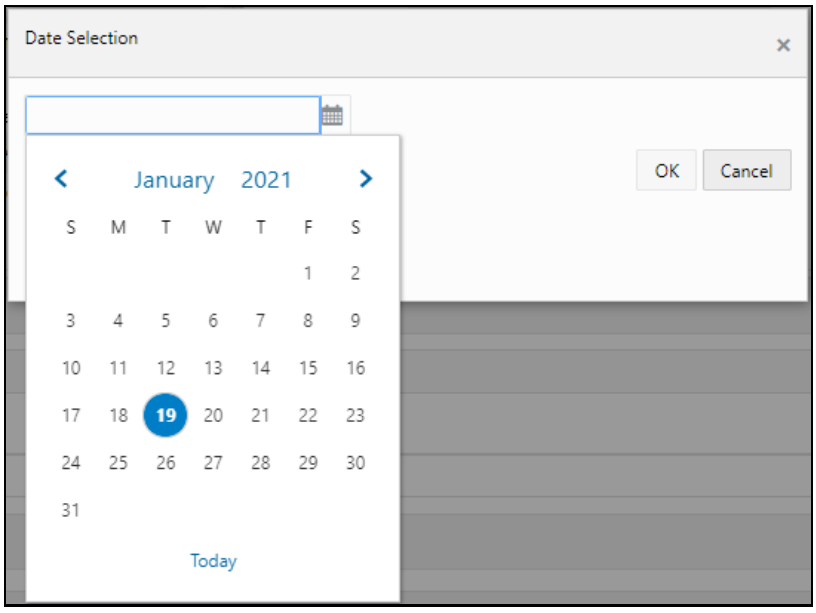
Figure 20: The Version History Window

3. Select the Version and click **Make Active** to activate a liability calculation for a given date.

> **NOTE** You can only activate one liability calculation definition for a given date. For example, you have created three liability calculation definitions for the dates *01-Jan-2021, LC01*, *LC02*, and *LC03*. If you activate *LC01*, the other versions will be inactive.
>
> If the definition contains different effective dates then the latest date will be active.

4. Click the **Details** icon to open the **Liability Calculations** page.
5. Click **Execute** to open the **Date Selection** Window.

Figure 21: The Date Selection Window



6. In the calendar, select the required date, and then click **OK**. The definition goes to a *Draft* state. The editable fields can be modified

7. After modifying the required fields, click **OK** to send the definition for approval.
8. After the definition is approved, it can be used for the CSM runs.
9. Click **Cancel** to return to the **Liability Calculation Summary** Window.

5.4.9 Create a new Version of a Liability Calculation Definition

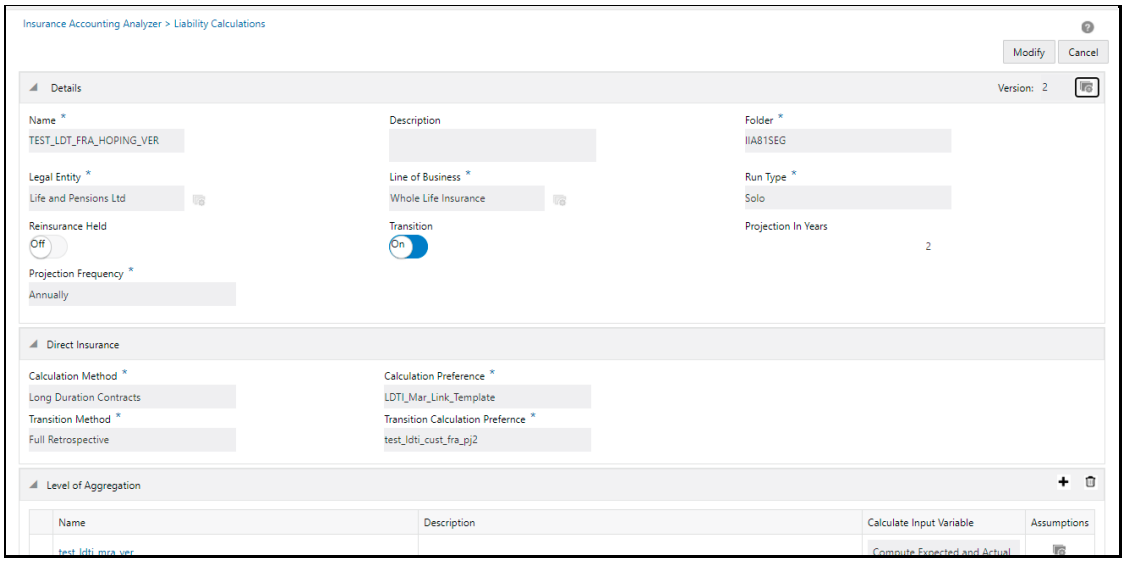
Perform the following steps to create a new version of a liability definition:

> **NOTE** You can only revise liability definitions that contain templates.

1. From the **Liability Calculations** Window, select the checkbox adjacent to the liability calculation that you want to revise.

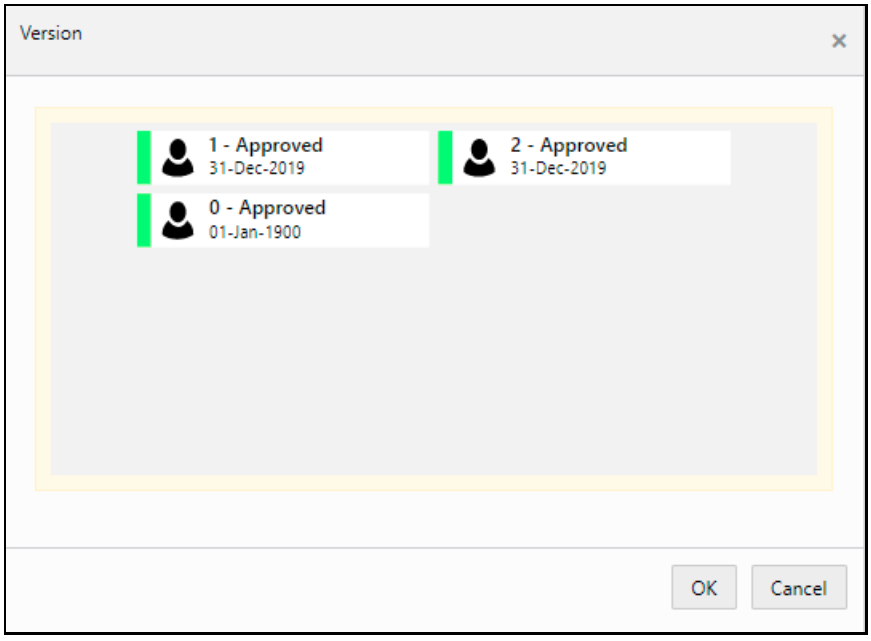
2. Click **Create New Version**  , to open the **Liability Calculation** Window.

Figure 22: The Liability Calculation Window



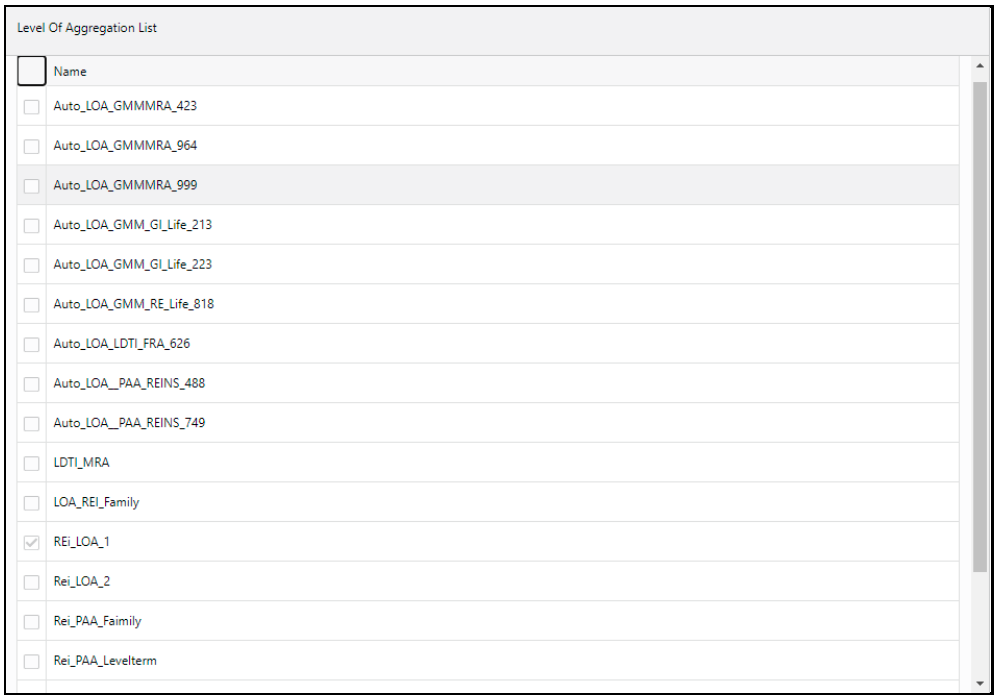
3. The details pane contains the version number of the liability calculation definition. Additionally, click the **View Version**  icon to view the versions and status of the liability calculation definition.

Figure 23: The Version Window



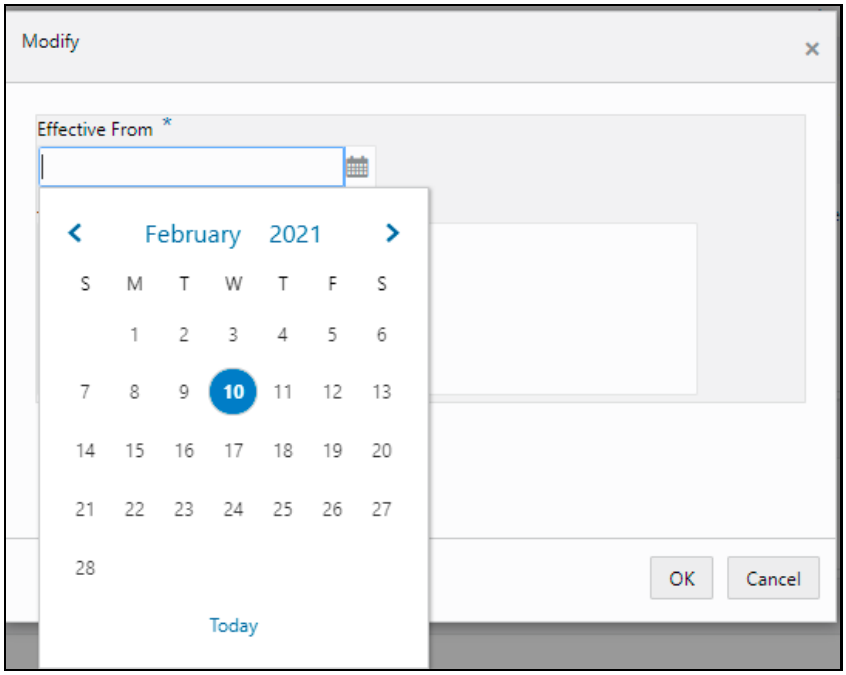
4. Click the **Add** icon to open the **Level of Aggregation List** Window.

Figure 24: The Level of Aggregation List Window



5. Select the required LOA and then click **OK**.
6. Click **Modify** to open the **Modify** Window.

Figure 25: The Modify Window



7. In the calendar, select the required date. The execution date must be less than the **FIC_MIS** date. The definition goes to a *Draft* state. The editable fields can be modified
8. After modifying the required fields, click OK to send the definition for approval.
9. After the definition is approved, it can be used for the CSM runs. The definition ID in the **Audit Trail** section is updated with the new version ID.
10. Click **OK**.

5.4.10 Run Liability Calculation Definition

Perform the following steps to run the liability calculation definition:

> **NOTE** You can run only Approved definitions.

1. In the **Liability Calculations Summary** table, select the checkbox adjacent to the **Liability Calculation** definition that you want to run.
2. In the **Date Selection** Window, use the calendar icon to select the required date in the **Date** field.
3. In the **Liability Calculation** - **View** Window, click **OK**.

   The selected **Liability Calculation** definition is marked for execution.

There is no restriction on the execution frequency of the run. The projection frequency is provided while configuring the run. For example, the execution date is 15th January 2018 and the projection frequency is quarterly, the actual data is calculated on 15th January and the CSM projection is performed on 15th April, 15th July, and so on.

If you want to compare the projections of two runs, the actual execution frequency of those two runs should be the same to get the desired results.

5.4.11 Copy Liability Calculation Definition

Perform the following steps to use an existing definition to create a new liability calculation definition:

1. In the **Liability Calculation Summary** table, select the checkbox adjacent to the liability calculation definition that you want to copy.
2. Click **Copy** to open the Save As Window.
3. Enter values in the **Name** and **Description** fields.
4. Click **Save**.

   The saved definition is displayed in the **Liability Calculation Summary** table on the **Liability Calculation** Window. You can further edit the definition and submit it for approval.

The **Audit Trail** pane at the bottom of the definition Window displays the **Created By**, **Creation Date**, **last modified by**, and **Last modification date** details. The **User** C**omments** field enables you to add additional information as a comment.

5.4.12 Retire Liability Calculation Definition

Perform the following steps to disable unwanted liability calculation definitions:

1. In the **Liability Calculations Summary** table, select the checkbox adjacent to the **Liability Calculation** definition that you want to retire.

   > **NOTE** You cannot retire the definitions in *Success* or *Failed* statuses.

2. Click **Retire**, to open the **Liability Calculations Summary Details** Window.
3. Update the required level of aggregation details.
4. Click **Retire**.

   The retired definition is displayed in the **Liability Calculations Summary** table on the **Liability Calculations** Window.

   The Workflow status of the retired definitions is changed to *Retired*.

The **Audit Trail** pane at the bottom of the Definition Window displays the **Created By**, **Creation Date**, **last modified by**, and **Last modification date** details. The **User** C**omments** field enables you to add additional information as a comment.

5.5 Variable Maintenance

There are different input and output variables used in the formula for calculating net liabilities and CSM. These variables differ based on the approach selected or assumptions made. In the standard product, the variables that are needed for the formula are defined. However, new variables can be created by using the **Variable Maintenance** Window for different financial elements.

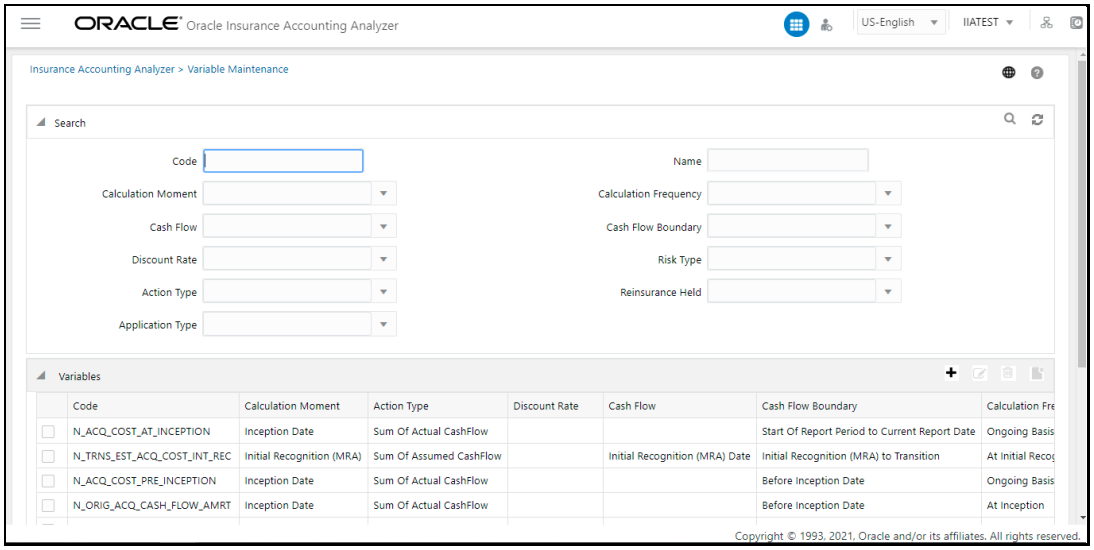
> **NOTE** The ready-to-use variables cannot be modified or deleted. Only unused newly created variables can be deleted.

Topics:

5.5.1 Access Variable Maintenance

You can access the **Variable Maintenance** Window by clicking the **Variable Maintenance** element from the left-hand side menu. When you click this element, the **Variable Maintenance** Window is displayed:

Figure 26: The Variable Maintenance Window



This window displays the existing variables in the Variables table. The variables are listed in the ascending order of their code values. This window also enables you to create new variables.

5.5.2 Search for a Variable

The Search feature enables you to filter the list of existing definitions and find the definitions that you require. To search for definitions, select the required values from the fields, also select the application type from the **Application Type** field to view only *IFRS17* or *LDTI* variables, and click **Search**.

The list of variables in the **Variables** table is refreshed and the variables that match your search criteria are displayed.

> **NOTE** You can create variables only from the first window.

5.5.3 Create a New Variable for IFRS17

Perform the following steps to create new variables for IFRS17:

> **ATTENTION** When creating out-of-box variables, use the word '*frm*' instead of '*from*'. If a custom template contains the word 'from' then you will encounter an error when creating a new version of a calculation preference definition.

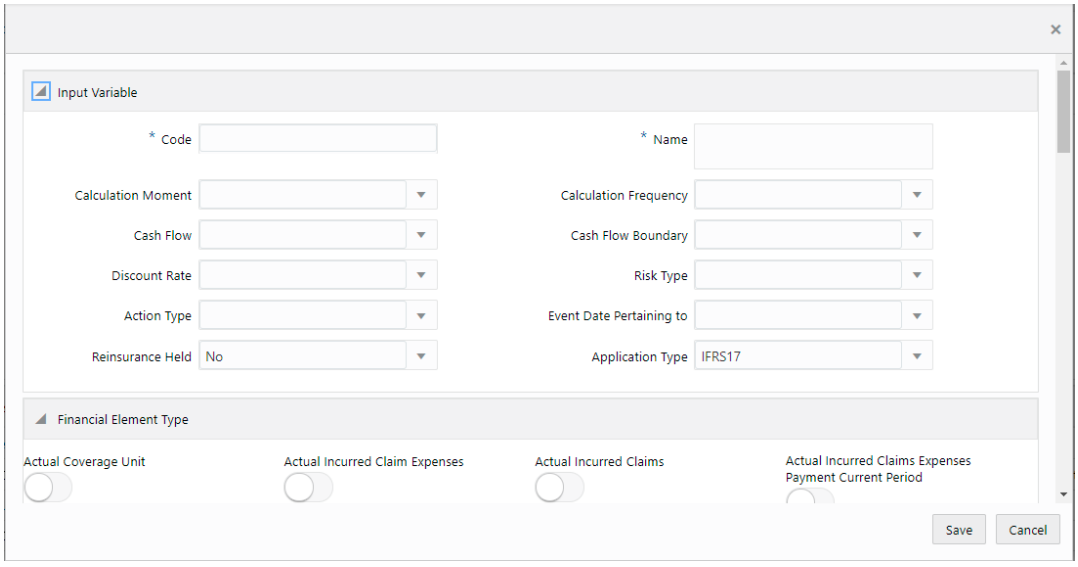
ATTENTION Before you create a new variable from the **Variable Maintenance** screen, you must add the corresponding direct and re-insurance variable columns in the following tables in the Erwin Data Model:

1. For direct insurance variables, add the corresponding variable column into the following tables:
   - FSI_INS_CONTRACT_INPUT_DETAIL
   - FSI_INS_GROUP_INPUT_DETAIL
   - FCT_INS_ACSTVAL_DIRCONT_DTLS

     FCT_INS_ACSTVAL_DIRGROUP_DTLS
2. For re-insurance input variables, add the corresponding variable column into the following tables:
   - FSI_RI_CONTRACT_INPUT_DETAIL
   - FSI_RI_GROUP_INPUT_DETAIL
   - FCT_INS_ACSTVAL_RICONT_DTLS
   - FCT_INS_ACSTVAL_RIGROUP_DTLS
3. Upload the Erwin Data Model.

1. In the **Variables** table, click **Add**  to open the **New Variable** Window.

Figure 27: The New Variable Window



2. Populate the **Input Variable** form.

Table 7: The Input Variable pane

Field	Description
Code	Enter a code for the variable. The code must be alphanumeric and must begin with an alphabet. The value in the Code field must be the same as the physical column name. Also, custom column names must be created with less than 30 characters.
Name	Enter a name for the variable.
Calculation Moment	Select a calculation moment from the drop-down list. The available options are: • End Of Report Period* • Inception Date • Initial Recognition (MRA) • Ongoing Basis • Start of Report Period* • Transition Date
Cash Flow	Select a cash flow from the drop-down list. The available options are: • Current Report Date • Inception Date • Initial Recognition (MRA) Date • Start of Report Period • Transition Date
Calculation Frequency	Select a calculation frequency from the drop-down list. The available options are: • At Inception • At Initial Recognition • At Transition • Ongoing Basis
Discount Rate	Select a discount rate from the drop-down list. The available options are: • Current Report Date • Inception Date • Incurred Claim Date • Locked in Date • Start of Report Date • Transition Rate

Field	Description
Cash Flow Boundary	Select a cash flow boundary from the drop-down list. The available options are: • At Current Report Date • At Start of Report Date • At Transition • Before Inception Date • Current Report Date Onwards • Inception Date Onwards • Inception Date to Current Report Date • Inception Date to Current Report Date • Inception Date to Start Of Report Period • Initial Recognition (MRA) to Transition • On and Before Inception Date • Start of Report Period Onwards • Start of Report Period to Current Report Date • Transition Date Onwards
Action Type	Select an action type from the drop-down list. The available options are: • PV of Actual Cash Flow* • PV of Assumed Cash Flow* • Sum of Actual Cash Flow • Sum of Assumed Cash Flow
Event Date Pertaining to	Select an action type from the drop-down list. The available option is: • Prior to Current Reporting Period
Risk Type	Select a risk type from the drop-down list. The available options are: • Expired • Unexpired
Reinsurance Held	Select yes or no from the drop-down list.
Application Type	Select an application type from the drop-down list. The available options are: • IFRS17 • LDTI

*Note the following conditions for the disallowed cash-flow boundaries for the following calculation moments and action types:

Calculation Moment	Action Type	Disallowed cash-flow boundaries
Start Of Report Period	PV Of Actual CashFlow	• Inception Date Onwards

Field	Description	
End Of Report Period	PV Of Assumed CashFlow	• Inception Date to Start Of Report Period • Inception Date to Current Report Date • Start Of Report Period Onwards (Only if the value in the Calculation Moment is *End Of Report Period*) • Start Of Report Period to Current Report Date (Only if the value in the • Calculation Moment is *End Of Report Period*) • On and Before Inception

3. Under the **Financial Element Type** pane, click the  icon to enable the required cash flow types. For more information on the available financial element types, see List of Financial Element Types.
4. Click **Save**.

   The saved definition is displayed in the **Variables** table on the **Variable Maintenance** Window.

5.5.4 Create a New Variable for LDTI

Perform the following steps to create new variables for LDTI:

ATTENTION When creating out-of-box variables, use the word '*frm*' instead of '*from*'. If a custom template contains the word 'from' then you will encounter an error when creating a new version of a calculation preference definition.

ATTENTION Before you create a new variable from the **Variable Maintenance** screen, you must add the corresponding direct and re-insurance variable columns in the following tables in the Erwin Data Model:

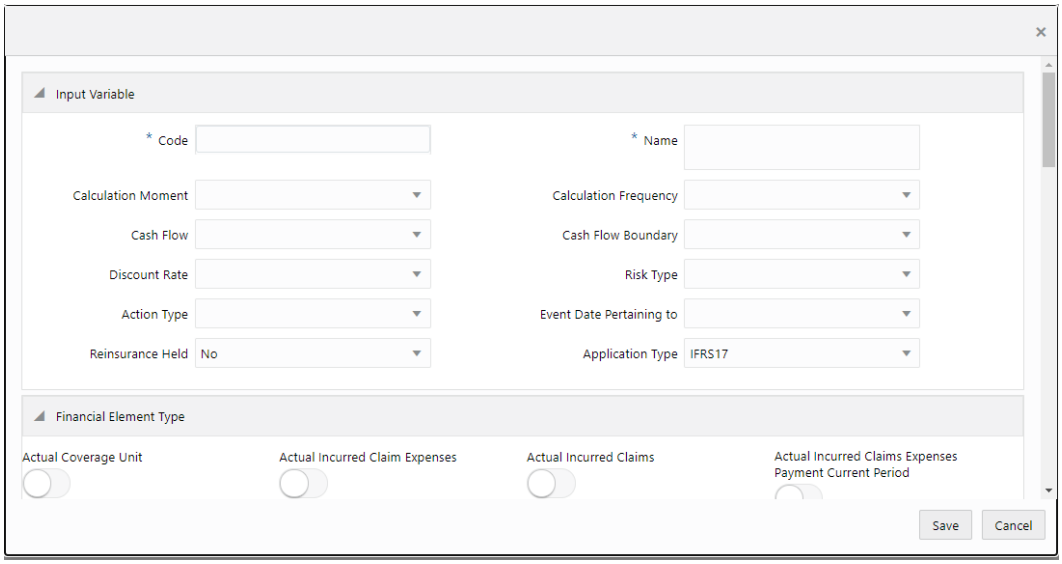
1. For direct insurance variables, add the corresponding variable column into the following tables:
   - FSI_LDTI_CONTRACT_INPUT_DETAIL
   - FSI_LDTI_GROUP_INPUT_DETAIL
   - FCT_LDTI_ACSTVAL_DIRCONT_DTLS
   - FCT_LDTI_ACSTVAL_DIRGROUP_DTLS
2. For re-insurance input variables, add the corresponding variable column into the following tables:

- FSI_LDTI_RI_CNTRT_INPUT_DETAIL
- FSI_LDTI_RI_GROUP_INPUT_DETAIL
- FCT_LDTI_ACSTVAL_RICONT_DTLS
- FCT_LDTI_ACSTVAL_RIGROUP_DTLS

3. Upload the Erwin Data Model.

1. In the **Variables** table, click **Add** + to open the **New Variable** Window.

Figure 28: The New Variable Window



2. Populate the **Input Variable** form.

Table 8: The Input Variable pane

Field	Description
Code	Enter a code for the variable. The code must be alphanumeric and must begin with an alphabet. The value in the Code field must be the same as the physical column name. Also, custom column names must be created with less than 30 characters.
Name	Enter a name for the variable.
Calculation Moment	Select a calculation moment from the drop-down list. The available options are: • End Of Report Period* • Inception Date • Initial Recognition (MRA) • Ongoing Basis • Start of Report Period* • Transition Date

Field	Description
Cash Flow	Select a cash flow from the drop-down list. The available options are: • Current Report Date • Inception Date • Initial Recognition (MRA) Date • Start of Report Period • Transition Date
Calculation Frequency	Select a calculation frequency from the drop-down list. The available options are: • At Inception • At Initial Recognition • At Transition • Ongoing Basis
Discount Rate	Select a discount rate from the drop-down list. The available options are: • Current Report Date • Inception Date • Incurred Claim Date • Locked in Date • Start of Report Date • Transition Rate
Cash Flow Boundary	Select a cash flow boundary from the drop-down list. The available options are: • At Current Report Date • At Start of Report Date • At Transition • Before Inception Date • Current Report Date Onwards • Inception Date Onwards • Inception Date to Current Report Date • Inception Date to Current Report Date • Inception Date to Start Of Report Period • Initial Recognition (MRA) to Transition • On and Before Inception Date • Start of Report Period Onwards • Start of Report Period to Current Report Date • Transition Date Onwards

Field	Description
Action Type	Select an action type from the drop-down list. The available options are: • PV of Actual Cash Flow* • PV of Assumed Cash Flow* • Sum of Actual Cash Flow • Sum of Assumed Cash Flow
Event Date Pertaining to	Select an action type from the drop-down list. The available option is: • Prior to Current Reporting Period
Risk Type	Select a risk type from the drop-down list. The available options are: • Expired • Unexpired
Reinsurance Held	Select yes or no from the drop-down list.
Application Type	Select an application type from the drop-down list. The available options are: • IFRS17 • LDTI

*Note the following conditions for the disallowed cash-flow boundaries for the following calculation moments and action types:

Calculation Moment	Action Type	Disallowed cash-flow boundaries
Start Of Report Period	PV Of Actual CashFlow	• Inception Date Onwards • Inception Date to Start Of Report Period • Inception Date to Current Report Date • Start Of Report Period Onwards (Only if the value in the Calculation Moment is *End Of Report Period*) • Start Of Report Period to Current Report Date (Only if the value in the • Calculation Moment is *End Of Report Period*) • On and Before Inception
End Of Report Period	PV Of Assumed CashFlow	

3. Under the **Financial Element Type** pane, click the  icon to enable the required cash flow types. For more information on the available financial element types, see List of Financial Element Types.
4. Click **Save**.

   The saved definition is displayed in the **Variables** table on the **Variable Maintenance** Window.

5.5.5 Edit a Variable

Perform the following steps to edit variables:

1. In the **Variables** table, select the checkbox adjacent to the **Variable** that you want to edit.
2. Click **Edit,** to open the **Variable** Window.
3. Update the required fields. For more information, see Create a New Variable.
4. Click **Save**.

   The saved definition is displayed in the **Variables** table of the **Subledger Definition Summary** Window.

5.5.6 View a Variable

Perform the following steps to view variables:

1. In the **Variables** table, select the checkbox adjacent to the variable that you want to view.
2. Click **View**, to open the Variables Window.
3. Click **Cancel** to go back to the **Variables** Window.

5.5.7 Delete a Variable

Perform the following steps to delete a variable:

1. In the **Variables** table, select the checkbox adjacent to the variable that you want to delete.
2. Click **Delete**.
3. Click **Yes**.

The selected variables are removed from the **Variable Maintenance** Window.

> **NOTE** When you delete a variable, you must delete them in the corresponding columns and tables that are added in the Erwin data model.

5.6 Subledger Attributes

The Subledger Attributes feature allows users to enter new or edit or delete existing accounting attribute mappings into the system. The feature has an interface that provides the users with an exhaustive list of input and output variables to choose from and create formulae with the two in the expression box. Once the accounting mappings are created, the users can use those in creating accounting attributes in the subledger definitions.

Topics:

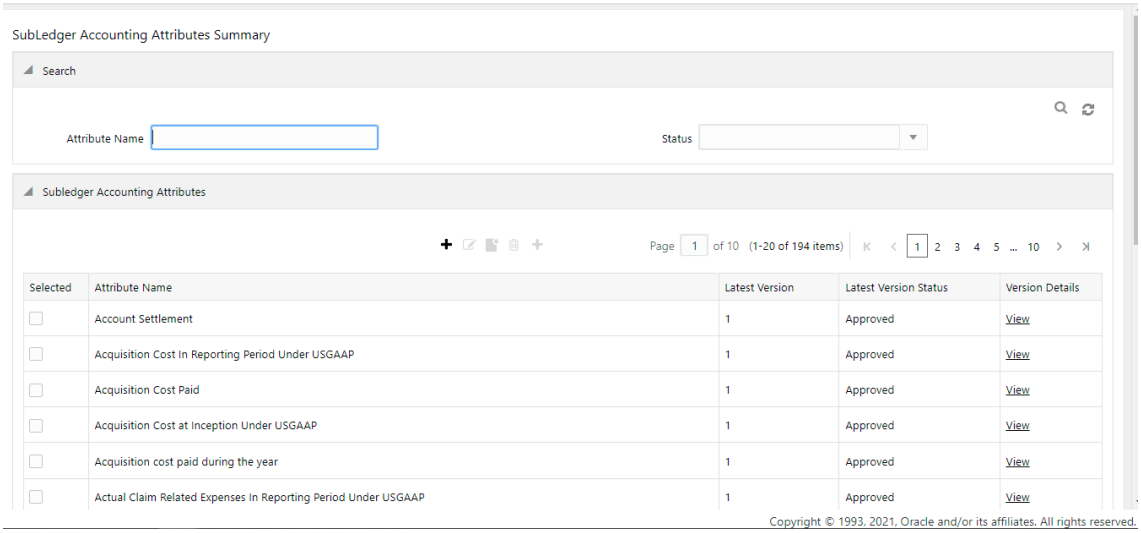
- Access Subledger Attributes
- Search for Subledger Accounting Attributes
- Create a New Subledger Accounting Attribute

- Edit a Subledger Attribute
- View a Subledger Attribute
- Delete a Subledger Attribute

5.6.1 Access Subledger Attributes

You can access the **Subledger Attributes** Window by clicking the **Subledger Attributes** element from the left-hand side menu. When you click this element, the **Subledger Accounting Attributes Summary** Window is displayed:

Figure 29: The Subledger Accounting Attributes Summary Window

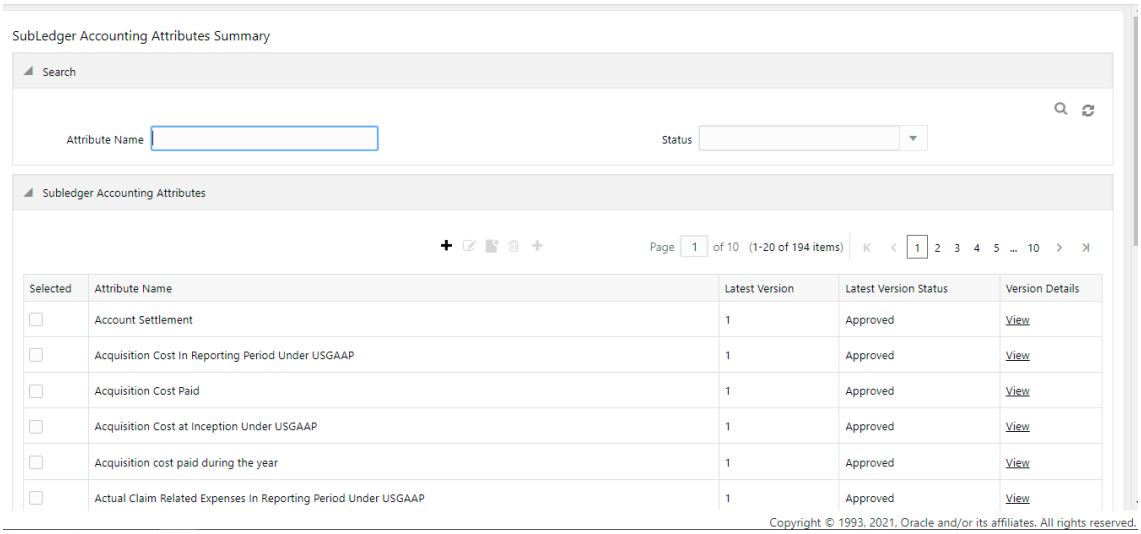


This window displays the existing sub-ledger attributes in the **Subledger Accounting Attributes** pane. This window also enables you to define new sub-ledger accounting attributes, edit the existing attributes, and view the details of existing attributes.

5.6.2 Search for Subledger Accounting Attributes

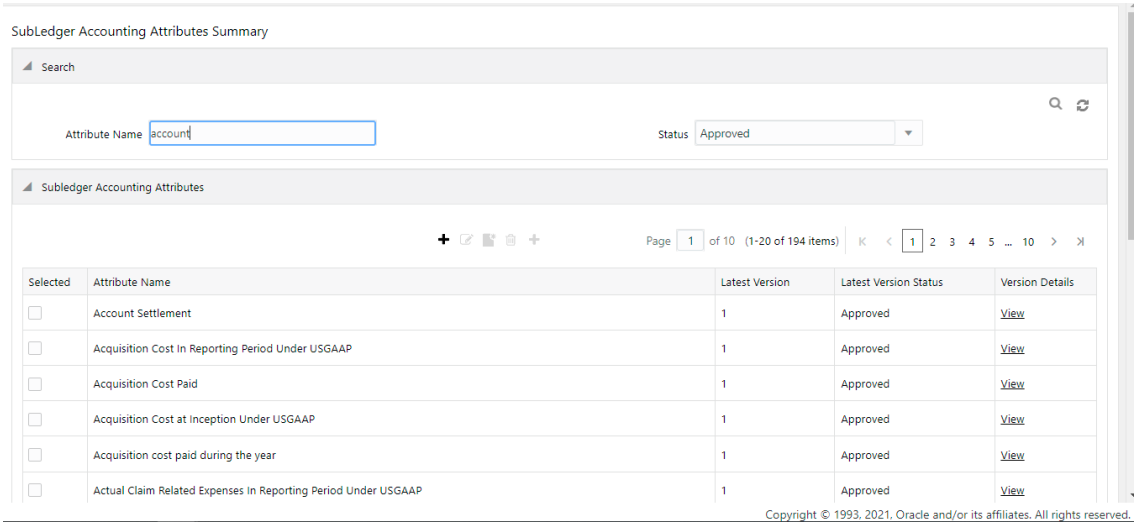
The **Search** feature enables you to filter the list of existing definitions and find the definitions that you require.

Figure 30: The Subledger Accounting Attributes Summary Window



To search for an attribute name, enter an attribute and debit or credit source name in the **Attribute Name** and **Debit/Credit Source Name** fields respectively, and click **Search**.

Figure 31: The Subledger Accounting Attributes Search Results



The list of sub-ledger accounting attributes in the **Subledger Accounting Attributes** pane is refreshed and the attributes that match your search criteria are displayed.

5.6.3 Create a New Subledger Accounting Attribute

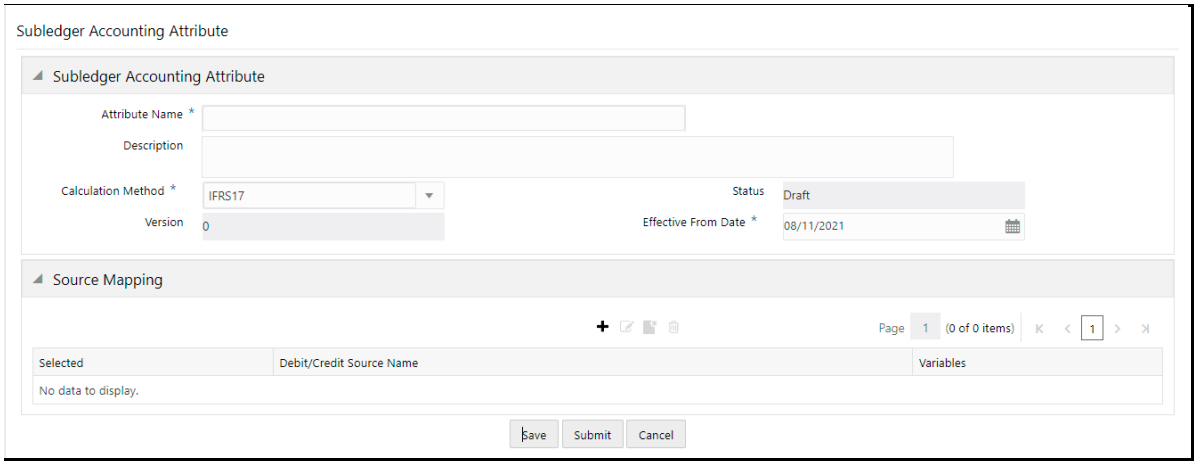
The Subledger Attributes feature enables you to create new subledger accounting attributes. Ensure that the same source name is not used for two source mappings. Also, when creating a new attribute, use a unique name. If the name of an existing attribute is used, then you might encounter upgrade issues.

> **NOTE** For executing Subledger Definition when using versioned attributes the **fic_mis_date** must be between the **Effective From Start** and **Effective to Date**.

Perform the following steps to create new sub-ledger definitions:

1. In the **Subledger Accounting Attributes** pane, click **Add** + to open the **Subledger Accounting Attribute** Window.

Figure 32: The Subledger Accounting Attributes Window



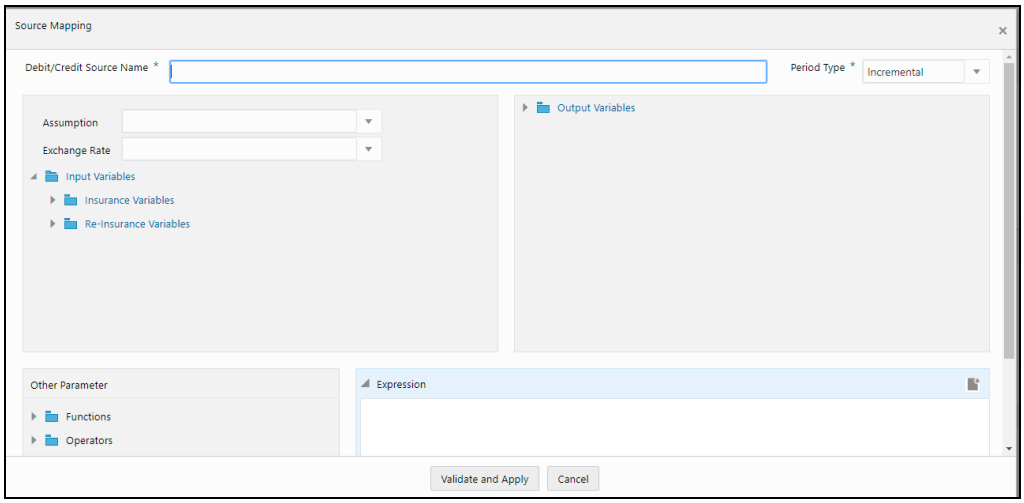
2. Populate the **Subledger Accounting Attribute** form as tabulated.

Table 9: The Subledger Accounting Attribute pane

Field	Description
Attribute Name*	Enter a name for the Subledger Attribute. This is a mandatory field.
Description	Enter a description for the Subledger Attribute.
Calculation Method*	Select either *IFRS17* or *LDTI*. Depending on this selection, only Subledger Attributes about the selected Calculation Method appear in the Subleder Feature. This is a mandatory field.
Status	Displays the status of the Subledger Attribute. The status is always *Draft* by default when the Subledger Attribute is being created.
Version	For a newly created Subledger Attribute, the value is *0*. Every time a Subledger Attribute is modified and saved, this value is updated.
Effective From Date*	Select a date by clicking the Calendar icon to set the date from when the Subledger Accounting Attribute will be effective.

3. In the **Source Mapping** pane, click **Add** + to open the **Source Mapping** Window.

Figure 33: The Source Mapping Window



4. Populate the **Source Mapping** form as tabulated.

Table 10: The Source Mapping pane

Field	Description
Debit/Credit Source Name*	Enter a name for the Debit or Credit Source. This is a mandatory field.
Period Type*	Select a value from the drop-down field: • Incremental • YTD This is a mandatory field. **Note**: Once a definition is saved, the Execution Type cannot be changed.
Assumption	Select an Assumption from the drop-down list. The available Assumptions are: • Closing Position • Credit Risk • Current Accident Year Current Accident Period • Current Accident Year Prior Accident Period • Economic Assumptions • Economic Experience • Experience Adjustment – Lapse • Experience Adjustment – Morbidity • Experience Adjustment – Mortality • Experience Adjustment – Others • Future Inflation Assumption • Lapse Assumption • Market Volatility • Morbidity Assumption • Mortality Assumption • New Business • Non Economic Assumptions • Non Economic Experience • Opening Adjustment • Opening Position • Other Future Assumptions If no assumption is selected, then the default value is *Others* to the system.
Exchange Rate	Select an Exchange Rate from the drop-down list. The available options are: • Average Exchange Rate • Closing Exchange Rate • Opening Exchange Rate • Transaction Date Exchange Rate
Input Variables	Select the required Input Variables from the list to populate the **Expression** pane.

Field	Description
Output Variables	Select the required Output Variables from the list to populate the **Expression** pane.
Functions	Select the required Functions from the drop-down list. The available Functions are: • AND • ABS • Case • Floor • Greatest • Least • MOD • OR
Operators	Select the required Operators from the drop-down list. The available Operators are: • Equal • Greater Than • Minus • Less Than • Plus

5. Click **Validate and Apply**.
   If you have not entered a value in the Debit/Credit Source Name field or added values in the **Expression** field, then an error message appears.
6. Click **Save** in the **Accounting Attribute Definition** Window.

5.6.4 Edit a Subledger Attribute

Perform the following steps to edit a subledger attribute:

1. In the **Subledger Accounting Attributes** table, select the checkbox adjacent to the subledger attribute that you want to edit.
2. Click **Edit**, to open the **Subledger Accounting Attributes** Window.
3. Update the required fields. For more information, see Create a New Subledger Accounting Attribute.
4. Click **Save**.
5. The saved attribute is displayed in the **Subledger Accounting Attributes** pane on the **Subledger Accounting Attributes Summary** Window**.**

5.6.5 Create a New Version of a Subledger Attribute

Perform the following steps to add a new version of a Subledger Attribute:

1. On the **Subledger Accounting Attributes** pane, select the desired Subledger Attribute and click **New Version**, to open the Subledger Accounting Attribute Window.
2. Modify the **Effective From Date** Field.
3. In the **Source Mapping** Pane, modify or add a new source mapping.
4. Click **Save** and then click **Submit**.

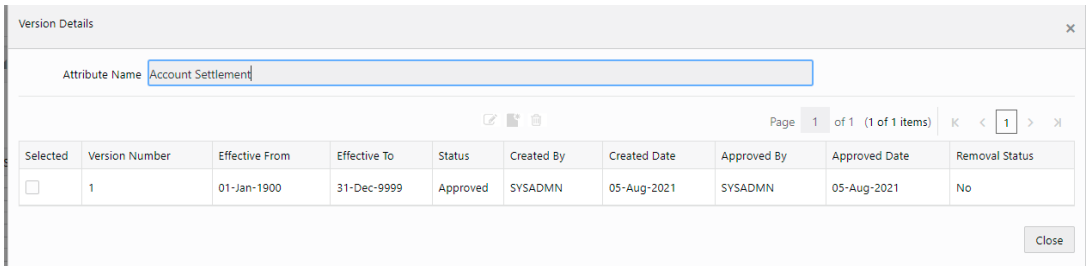
   A new version of the Subledger Attribute is created.

5.6.6 View a Subledger Attribute Version

Perform the following steps to view the version of a Subledger Attribute:

1. On the **Subledger Accounting Attributes** pane, in the **Version Details** column, click **View** to open the **Version Details** Window.

Figure 34: The Source Mapping Window



2. Click the **Selected Column** to select the Subledger Definition. The **Edit**, **View** and **Delete** buttons are enabled.
3. Click **Edit** if you want to modify the Definition.
4. Click **View** to view the Definition.
5. Additionally, click **Delete** to delete the version of the Definition.

5.6.7 View a Subledger Attribute

Perform the following steps to view a Subledger Attribute:

1. In the **Subledger Accounting Attributes** table, select the checkbox adjacent to the Subledger attribute that you want to view.
2. Click **View**  , to open the **Subledger Accounting Attributes** Window.
3. Click **Cancel** to go back to the **Subledger Accounting Attributes Summary** Window.

5.6.8 Delete a Subledger Attribute

Only Subledger attributes that are not used by a subledger definition are available for deletion. If you try to delete a subledger attribute that is used by a subledger definition, then an error message appears indicating the same. Perform the following steps to delete a subledger attribute:

> **NOTE** Subledger Accounting Attribute versions that have been approved by the Checker can be deleted.

1. In the **Subledger Accounting Attributes** table, select the checkbox adjacent to the Subledger attribute that you want to view.
2. Click **Delete**.
3. Click **Yes**.

The selected Subledger Attributes are deleted.

5.7 Subledger

The granular level of data stored in the sub-ledger can be used to generate the accounting entries. It uses data along with implied allocations from expenses, taxes, investment income, and so on. The sub-ledger generates bookings and reports to feed out to general ledgers, management reporting, and analysis tools. By maintaining detailed data and handling complex calculations and reconciliations, it takes stress off general ledgers. Note that the application only picks up data from the base insurance scenario that is marked for reporting. This scenario is set on the Liability Calculation screen, for more information see the Create a Liability Calculation Definition section. The application also picks up more than one set of data per LOA for sub-ledger processing. This allows for GL consolidation, cloud migration, and provides the accuracy and suitability of ledger data.

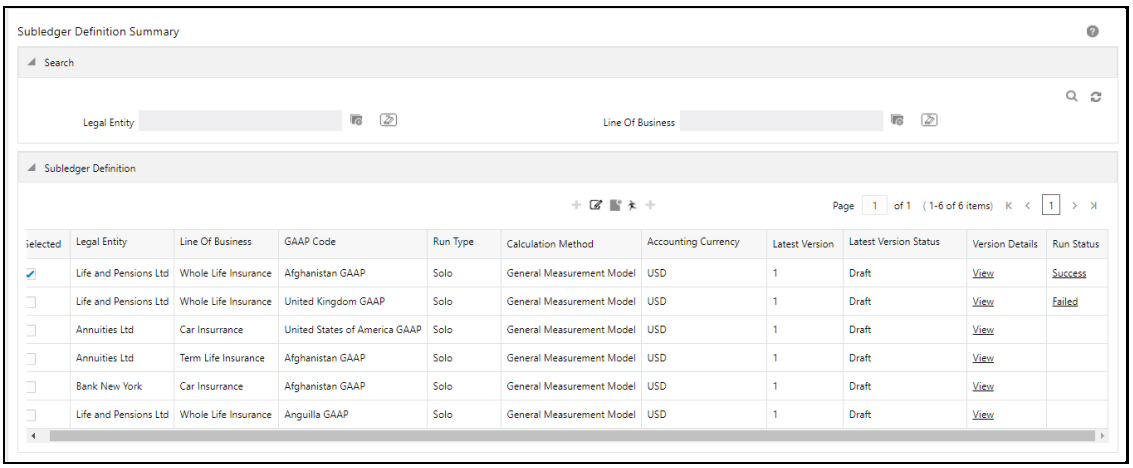
Subledger supports currency conversion. To enable or use this feature, the user must select the currency as reporting currency while creating the Subledger definition. Please note that the system should also have the currency rate for the currency conversion as per the **fic_mis_date** before calling the sub-ledger run to add the journal balances as per the selected reporting currency.

Topics:

5.7.1 Access Subledger

You can access the **Subledger** Window by clicking the **Subledger** element from the left-hand side menu. When you click this element, the **Subledger** Window is displayed:

Figure 35: The Subledger Definition Summary Window

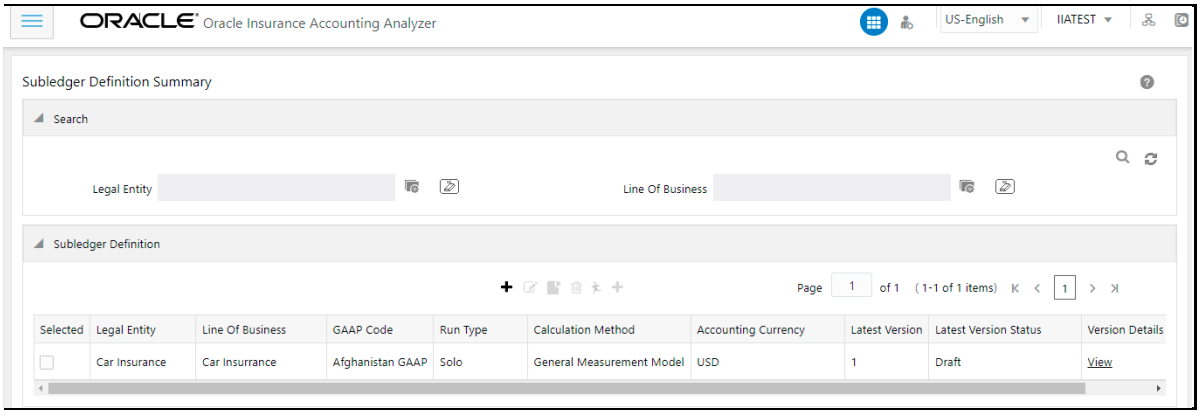


This window displays the existing sub-ledger definitions in the **Subledger Definition** pane. This window also enables you to define a new sub-ledger, edit the existing definitions, view the details of the existing definition, run the definitions, and create new versions of the existing definitions.

5.7.2 Search for Subledger Definitions

The **Search** feature enables you to filter the list of existing definitions and find the definitions that you require.

Figure 36: The Subledger Definition Search Results



To search for definitions, select the required items from the **Legal Entity** and **Line Of Business** fields, and click **Search**.

The list of sub-ledger definitions in the **Subledger Definition** table is refreshed and the definitions that match your search criteria are displayed.

5.7.3 Map the Subledger Roles and Groups

Before you create Subledger definitions, performed the following user role and group mappings and approvals:

1. Log in as a System Administrator.

2. Navigate to **Identity Management**, then **Security Management**, then **User Administrator**, and then **User Maintenance**.
3. Add a new user definition. For more information, see the **User Maintenance** section in the OFS Analytical Applications Infrastructure User Guide.
4. Log in as a System Authorizer.
5. Navigate to **Identity Management**, then **Security Management**, then **User Administrator**, and then **User Authorization.**
6. Authorize the user that you created in step 3. For more information about authorizing a user, see the User Authorization section in the OFS Analytical Applications Infrastructure User Guide.
7. Log in as a System Administrator.
8. Navigate to **Identity Management,** then **Security Management**, then **User Administrator**, and then **User User Group Map**.
9. Map the user to the *IIA Application Approver Group* and *IIA Application Analyst Group*. For more information about mapping a user to a user group, see the **User User Group Map** section in the OFS Analytical Applications Infrastructure User Guide.
10. Navigate to **Identity Management**, then **Security Management**, then **User Administrator**, and then **User Group Role Map.**
11. Map the User Group *UGIIAANALYST* to *Sub Ledger Maker*, and then map the User Group *UGIIAAPPROVER* to *Sub Ledger Checker*. For more information about mapping a user group, see the **User Group Role Map** section in the OFS Analytical Applications Infrastructure User Guide.
12. Log in as a System Authorizer.
13. Authorize the mappings that you performed in step 11. For more information about authorizing a user, see the **User Authorization** section in the OFS Analytical Applications Infrastructure User Guide.

> **NOTE** You can use the same user that you created in the preceding steps for performing actions in the Subledger Manual Adjustment feature.

5.7.4 Create New Subledger Definition

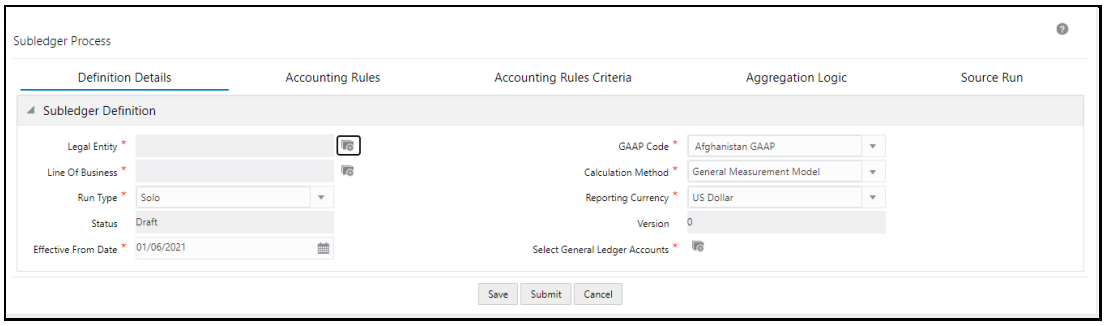
> **NOTE** When creating a Subledger definition with a Subledger Attribute, it can only be created with an *Approved* Subledger Attribute.

Perform the following steps to create new sub-ledger definitions:

NOTE If you want to import definitions created by you, then see the Object Migration section in the OFS Analytical Applications Infrastructure User Guide.

1. In the **Subledger Definition** pane, click **Add** to open the **Subledger Process** Window.

Figure 37: The Subledger Process Window



2. Populate the **Subledger Definition** pane in the **Definition Details** tab.

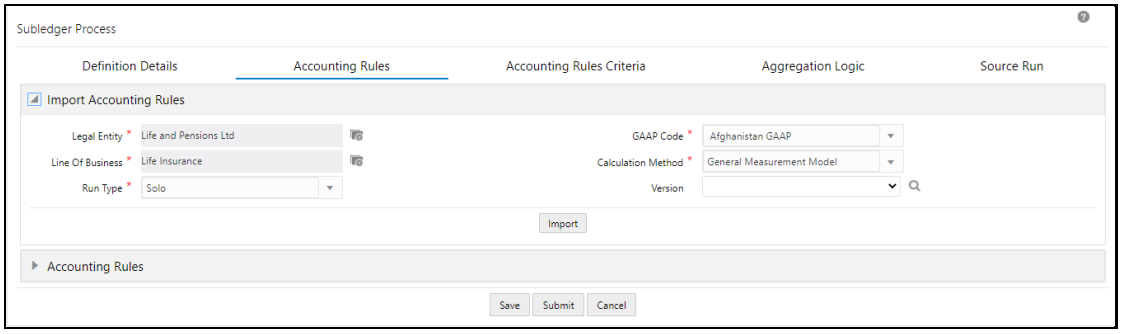
Table 11: The Subledger Definition pane

Field	Description
Fields marked with asterisks (*) in the window are mandatory.	
Legal Entity*	Click **Hierarchy Selection** adjacent to this field. Select the required **Legal Entity** from the **Hierarchy Selection** Window. For more information, see Hierarchy Selection.
GAAP Code*	Select a GAAP Code from the drop-down list.
Line of Business*	Click **Hierarchy Selection** adjacent to this field. Select the required **Legal Entity** from the **Hierarchy Selection** Window. For more information, see Hierarchy Selection.
Calculation Method	Select a calculation method from the drop-down list. The available methods are: • General Measurement Model • General Measurement Model Reinsurance • Long Duration Contracts • Premium Allocation Approach • Premium Allocation Approach Reinsurance • Variable Fee Approach
Status	This field is not editable and is in the *Draft* status when a Subledger Definition is being created.
Run Type	Select either **Solo** or **Consolidated** from the drop-down list.
Reporting Currency	Select a currency from the drop-down list.

Field	Description
Version	When creating a definition, the version is set to 0. You cannot change this value.
Effective From Date	Select an effective date from the **Calendar** icon.
Select General Ledger Accounts	Click **Hierarchy Selection** to select a value from the following fields: **Note**: You must create the members and hierarchies in the **Member** and **Hierarchy Maintenance** Window to populate data in this field. For more information about creating members and hierarchies, see the OFS Analytical Applications Infrastructure User Guide. • **Hierarchy Folder**: Select a hierarchy folder from the drop-down. • **Hierarchy**: Select a hierarchy from the drop-down. • **Members**: Add or remove members from the **Selected Members** pane. By default, all accounts will appear in this list.

3. Click **Save**.
4. Select the **Accounting Rules** tab.

Figure 38: The Accounting Rules Tab



5. Populate the **Import Accounting Rules** pane in the **Accounting Rules** tab.

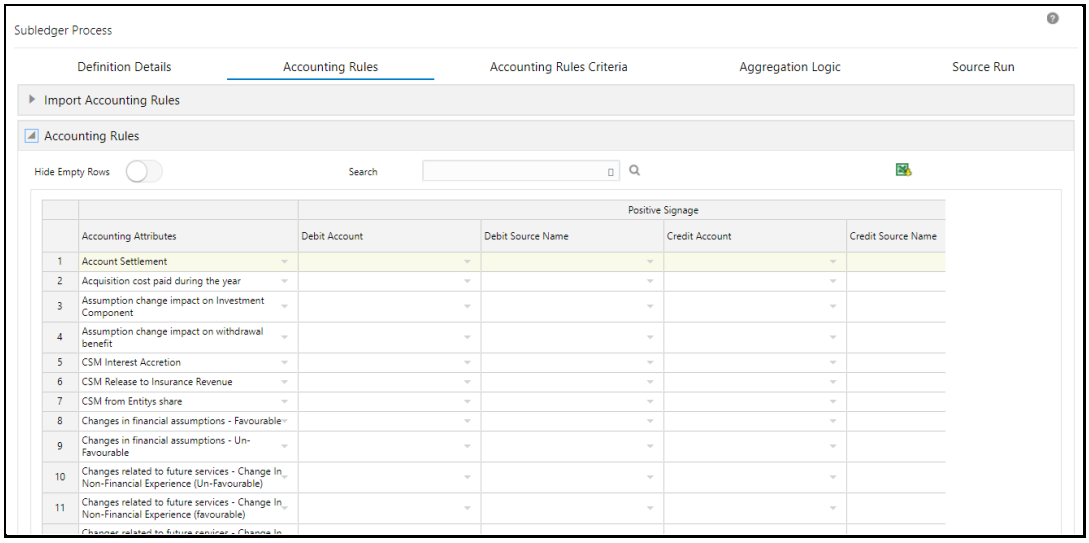
Table 12: The Import Accounting Rules Pane

Field	Description
Fields marked with asterisks (*) in the window are mandatory.	
Legal Entity*	Click the **Hierarchy Selection** adjacent to this field. Select the required **Legal Entity** from the **Hierarchy Selection** Window. For more information, see Hierarchy Selection.
GAAP Code*	Select a **GAAP Code** from the drop-down list.
Line of Business*	Click **Hierarchy Selection** adjacent to this field. Select the required **Legal Entity** from the **Hierarchy Selection** Window. For more information, see Hierarchy Selection.

Field	Description
Calculation Method*	Select a calculation method from the drop-down list. The available methods are: • General Measurement Model • General Measurement Model Reinsurance • Long Duration Contracts • Premium Allocation Approach • Premium Allocation Approach Reinsurance • Variable Fee Approach
Run Type*	Select either **Solo** or **Consolidated** from the drop-down list.
Version*	When creating a definition, the version is set to 0. You cannot change this value.

6. On the **Accounting Rules** page, select the drop-down arrow to expand the table.

Figure 39: The Accounting Rules Tab with the Expanded Accounting Rules Pane



7. Populate the **Accounting Rules** pane.

Table 13: The Accounting Rules pane

Field	Description
Hide Empty Rows	Click **Enable**  if you want to hide empty rows. When enabled, the empty rows in the Accounting Rules table are hidden.
Accounting Attributes	Select an attribute from the drop-down list.
Debit Account	Select a debit account from the drop-down list.
Debit Source Account	Select a credit account from the drop-down list.

Field	Description
Credit Account	Select a debit account from the drop-down list.
Credit Source Account	Select a credit account from the drop-down list.
Modify Accounts for Opposite Signage	Select this checkbox if you want to modify accounts for opposite signage.
Journal Comments	Enter the required journal comments for the sub-ledger.
Workflow Comments	Enter the required workflow comments for the sub-ledger.

The pane allows you to perform the following actions:

- Insert a new row before
- Insert a new row after
- Delete selected rows
- Copy
- Export the entries into an Excel spreadsheet that is automatically downloaded into your system.

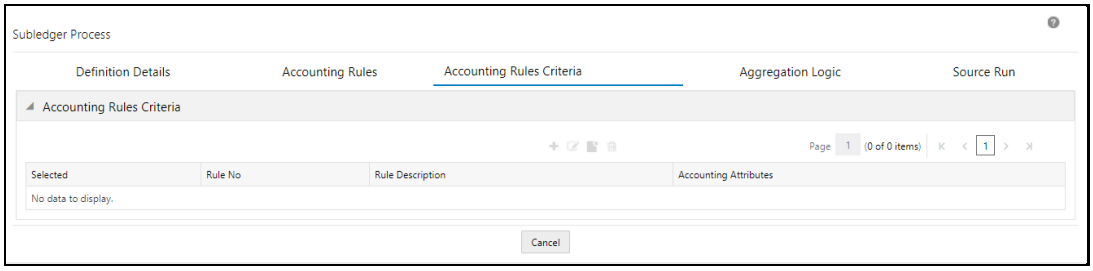
8. If you want to view the information about the GL accounts and account attributes, in the upper-right corner of the table, click the  icon to download the Excel file.
9. Additionally, click **Export Accounting Rules**  to download the Excel file on your system.
   a. Fill the Excel file with the required data.
   b. Copy the data from Excel and paste it into the respective columns in the **Copy Accounting Rules** pane.

> **NOTE** You must ensure the following:
>
> - The data in the columns in the application must exactly match the data as per the columns in the **Accounting Rules** Excel. If the rules data was not added correctly, then the system will give you a validation error and you must add the rules data correctly in the corresponding columns in the application.
> - Your system must contain the same GL entries as per the entries in the **Debit Account** column in the **Accounting Rules** Excel. If you copy and paste a GL entry that your system does not contain from Excel into the **Debit Account** column in the application, then the system will not validate it.

10. Click **Save**.

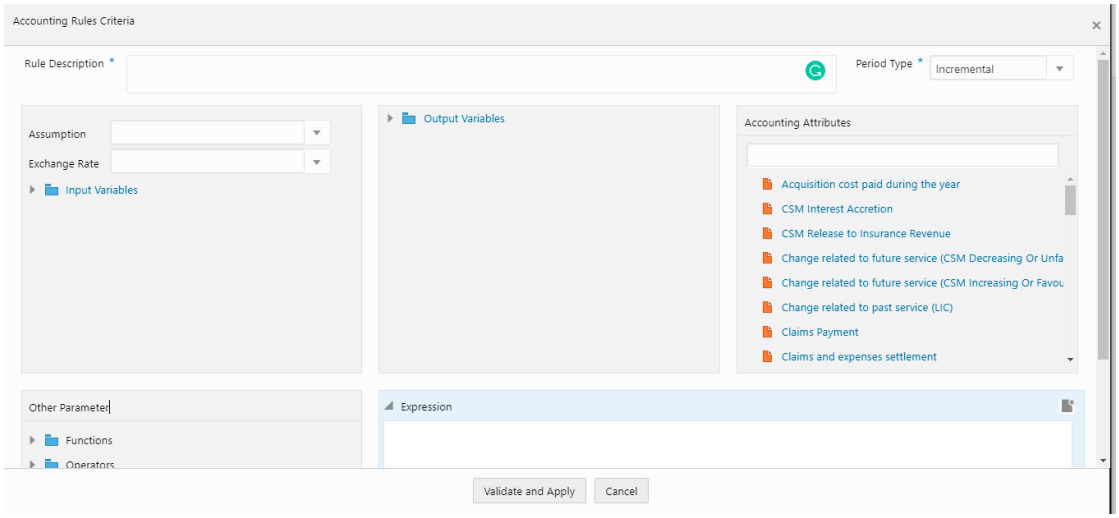
11. Click the **Accounting Rules Criteria** tab.

Figure 40: The Accounting Rules Criteria tab



12. Click **Add**  to open the **Accounting Rules Criteria** Window.

Figure 41: The Accounting Rules Criteria Window



a. In the **Assumptions** drop-down list, select an assumption. You can link an input variable to multiple assumptions for a single expression. The available options are:

- Closing Position
- Credit Risk
- Current Accident Year Accident Period
- Current Accident Year Prior Accident Period
- Economic Assumptions
- Economic Experience
- Experience Adjustment – Lapse
- Experience Adjustment – Morbidity
- Experience Adjustment – Mortality
- Experience Adjustment – Others
- Future Inflation Assumption
- Lapse Assumption

- Market Volatility
- Morbidity Assumption
- Mortality Assumption
- New Business
- Non Economic Assumptions
- Non-Economic Experience
- Opening Adjustment
- Opening position
- Other Future Assumptions

b. In the **Period Type** drop-down list, select either *Incremental* or *YTD*.

Note: Once a definition is saved, the Execution Type cannot be changed.

c. In the **Input Variables** pane, select the required input variables from the list to populate the **Expression** pane.

d. In the **Output Variables** pane, select the required output variables from the list to populate the **Expression** pane.

e. In the **Accounting Attributes** pane, select the required accounting attribute from the list to populate the **Expression** pane.

f. In the **Other Parameters** pane, select the required functions and operators. The following are the available functions and operators:

- Functions
  - AND
  - ABS
  - Case
  - Floor
  - Greatest
  - Least
  - MOD
  - OR
- Operators
  - Greater than
  - Plus
  - Minus
  - Less Than
  - Equal

g. After you have built your Expression, click **Validate and Apply**.

13. Click **OK**.

    The condition is added to the accounting attribute.

> **NOTE** A condition can be mapped to multiple attributes but an accounting attribute can be mapped only to a single condition. For example, you have created Condition A and Condition B. You have mapped Condition A to Accounting Attributes A1, A2, and A3. But the same accounting attributes cannot be mapped to Condition B.

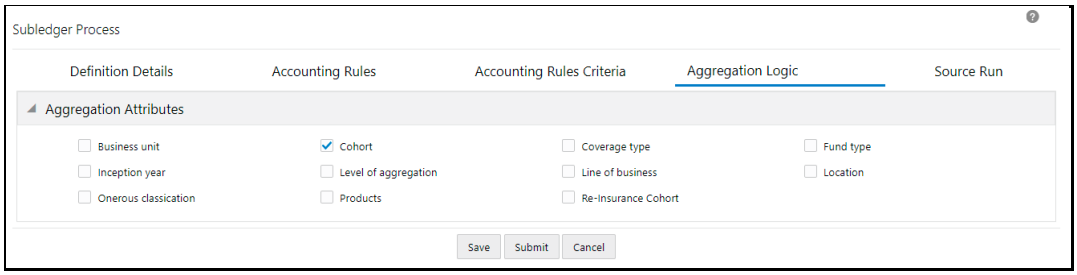
14. Click the **Aggregation Logic** tab.

    The **Aggregation Attributes** tab is displayed and contains the **Cohort**, **Coverage type**, **Inception year**, **Level of aggregation**, **Line of business**, **Location**, **Onerous classification**, and **Products attributes**.

    This tab allows you to aggregate the results and pass journal entries at a chosen consolidated level. Consolidated entries might give added insights into the impact of changes on the chosen grouping.

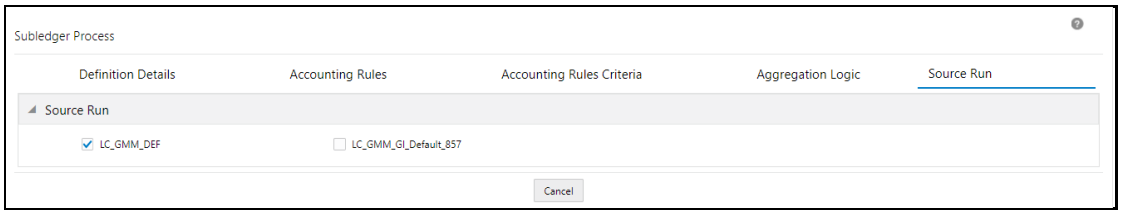
> **NOTE** Only those credit and debit general ledgers total balances that are associated with an accounting attribute are checked and added to the journal entry. This ensures that only balanced journal entries are passed. If there is an imbalance between the accounting attributes, then the accounting attributes general ledger balances will not be passed to the journal entries.

Figure 42: The Aggregation Logic Tab



15. Select the checkbox(s) adjacent to the required attributes.
16. Click **Save**.
17. Click the **Source Run** tab.

Figure 43: The Source Run Tab



18. Select the required source runs. This is the list of CSM or Liability Calculation runs that have been executed. The source runs that appear in this tab, depending on the values that you

selected in the **Legal Entity**, **Line of Business**, **Calculation Method**, **Run Type**, fields in the **Definition Details** tab

19. Click **Save**.
20. If you want to send it to the approver then click **Submit**.

    After a subledger definition has been submitted for approval, you cannot modify any fields. You can modify the fields only if the Approver has rejected the subledger definition.

The **Audit Trail** pane at the bottom of the Definition Window displays the **Created By**, **Creation Date**, **last modified by**, and **Last modification date** details. The U**ser** C**omments** field enables you to add additional information as a comment.

5.7.5 Edit a Subledger Definition

Perform the following steps to edit subledger definitions:

1. In the **Subledger Definition** table, select the checkbox adjacent to the subledger definition that you want to edit.
2. Click **Edit**, to open the **Subledger Process** Window.
3. Update the required fields. For more information, see Create a New Subledger Definition.
4. Click **Save**.

   The saved definition is displayed in the **Subledger Definition** table on the **Subledger Definition Summary** Window.

The **Audit Trail** pane at the bottom of the definition Window displays the **Created By**, **Creation Date**, **last modified by**, and **Last modification date** details. The U**ser** C**omments** field enables you to add additional information as a comment.

5.7.6 View a Subledger Definition

Perform the following steps to view subledger definitions:

1. In the **Subledger Definition** Window, select the checkbox adjacent to the **Subledger** definition that you want to view.
2. Click **View**  , to open the **Subledger Process** Window.
3. Click **Cancel** to go back to the **Subledger Definition** Window.

5.7.7 Execute a Subledger Definition

Perform the following steps to execute subledger definitions:

1. In the **Subledger Definition** table, select the checkbox adjacent to the subledger definition that you want to run.
2. Click **Run**, to open the **Execute** Window.

Figure 44: The Execute Window

3. In the **Date Selection** Window, click the **Calendar** icon and select a date.
4. In the **Version no** field, enter a version of the definition that you want to execute.
5. In the **Execution Description** field, enter a description.
6. Click **Execute**.

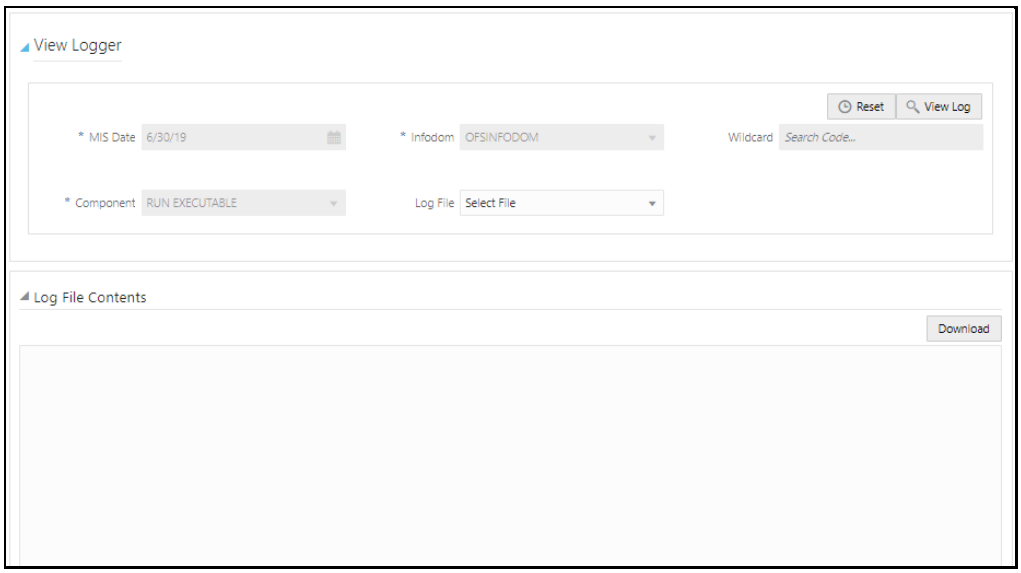
   The selected **Subledger** definition is marked for execution.

5.7.8 View a Subledger Error Log

The subledger error logs can be viewed from the **Batch Monitor** screen from **Common Object Maintenance** and the **Subledger Definition Summary** page**.** To view the subledger error log from the **Batch Monitor** screen, see the OFS AAI User Guide. Perform the following steps to view subledger error logs from the **Subledger Definition Summary** page:

1. On the **Subledger Definition Summary** page, in the **Run Status** column, select the status link corresponding to the sub-ledger definition that you want to view the error log for. The View Logger Window appears.

Figure 45: The View Logger Window



2. Click the **Log File** drop-down list to select a log file.

3. Click **View Log** to populate the **Log File Components** pane.
4. Additionally, you can click **Download** if you want to download the selected log file.
5. Click **Close** to go back to the **Subledger Definition** Window.

5.7.9 Finalize a Subledger Run

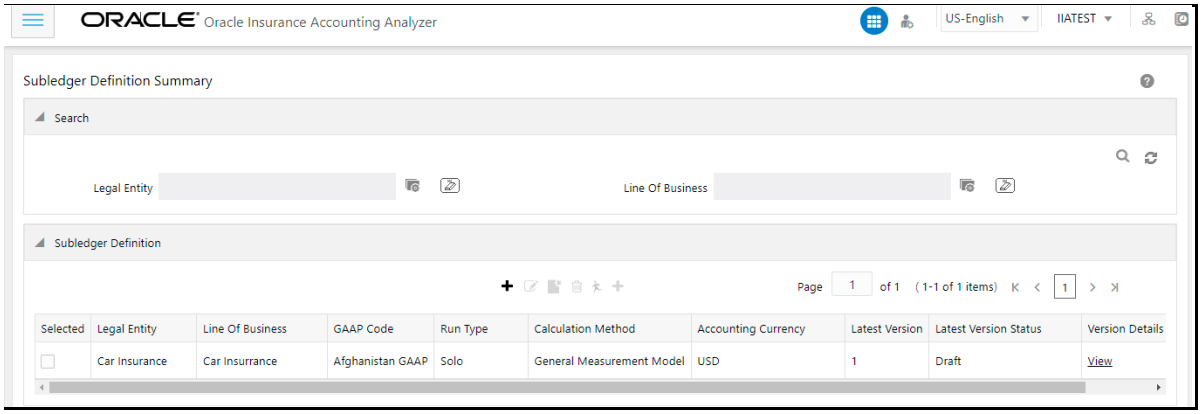
Finalizing a subledger run enables you to conclude the journal entries of the associated base run and manual adjustment run. You cannot finalize a run more than once. Before finalizing a subledger run; run the base subledger and approve it, then approve and run the subledger manual adjustment (if any), then finalize the approval through the maker and checker process. Note that a Subledger Manual Adjustment definition can only be modified before the run is finalized.

To finalize a **Subledger** run from the **Subledger Definition Summary** Window, perform the following steps:

> **NOTE** You cannot finalize a subledger run that contains imbalanced journals.

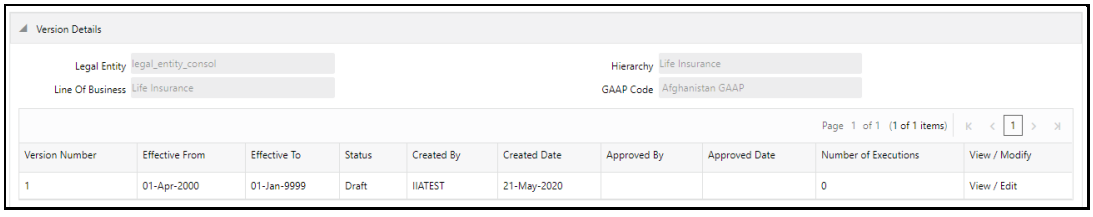
1. Log in as a Maker.
2. In the **Subledger Definition** table, select the subledger definition that you want to send for approval to finalize.

Figure 46: The Subledger Definition Pane



3. In the **Version Details** column, click **View** to open the **Version Details** pane.

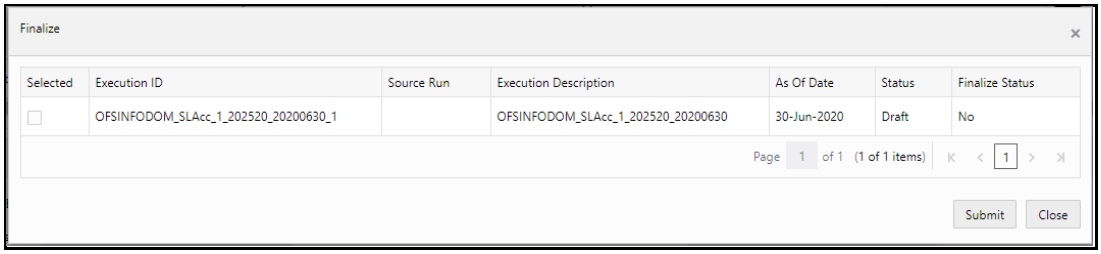
Figure 47: The Version Details Pane



4. In the **Number of Executions** column, click the link to open the **Finalize** pane.

The number in the **Number of Executions** column corresponds to the number of sources runs that you selected in the Source Run Tab of the Subledger Process page. The run is picked from the most recent FIC MIS date.

Figure 48: The Finalize Pane



5. In the **Selected** column, select the check box adjacent to the sub-ledger run that you want to send for approval, and then click **Submit**.

   The selected sub-ledger run is sent for approval.

6. After the Subledger Approver has approved the sub-ledger run for finalization, repeat steps **2**, **3**, and **4**.

7. In the **Selected** column, select the check box adjacent to the sub-ledger run that you want to finalize, and then click **Finalize**.

   A message appears, confirming that the version was successfully finalized. You can also download the .txt file containing the imbalanced journals for a selected date.

5.7.10 Create a New Version of the Subledger Definition

Perform the following steps to create a new version of an existing subledger definition:

1. In the **Subledger Definition** table, select the checkbox adjacent to the subledger definition that you want to edit.
2. Click **New Version**, to open the **Subledger Process** Window.

   NOTE You can create new versions only for the Approved definitions.

3. Update the required fields. For more information, see Create New Subledger Definition.

   NOTE The Effective From Date of the new version should be greater than the latest version Effective From Date or execution date of a finalised run.

4. Click **Save**.

   The saved definition is displayed in the **Subledger Definition** table of the **Subledger Definition Summary** Window.

5.7.11 Delete a Subledger Definition

Perform the following steps to delete a Subledger Definition:

> **NOTE** A Subledger definition can only be deleted when the definition is in the *Draft* or *Rejected* or *Pending for Approval* state.

1. In the **Subledger Definition Summary** table, select the checkbox adjacent to the Subledger Definition that you want to view.
2. Click **Delete**.
3. Click **Yes**.

The selected Subledger Definitions are deleted.

5.8 Subledger Manual Adjustment

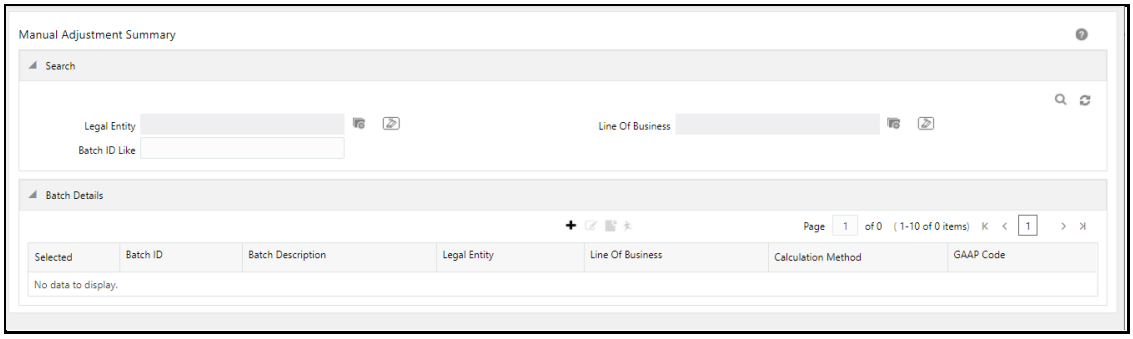
The **Subledger Manual Adjustment** enables you to update the batch details of approved **Subledger** definitions. Complete all the Manual Adjustment tasks before finalizing a subledger definition as a Subledger Manual Adjustment definition can only be modified before the run is finalized.

Topics:

5.8.1 Access Subledger Manual Adjustment

You can access the **Subledger Manual Adjustment** Window by clicking the **Subledger Manual Adjustment** element from the left-hand side menu. When you click this element, the **Manual Adjustment Summary** Window is displayed:

Figure 49: The Manual Adjustment Summary Window



This window displays the existing **Subledger Manual Adjustment** definitions in the **Batch Details** table. This window also enables you to define the new **Subledger Manual Adjustment Definition**, edit the existing definitions, view the details of the existing definition, and run the definitions.

5.8.2 Search for Subledger Manual Adjustment Definitions

The **Search** feature enables you to filter the list of existing definitions and find the definitions that you require. To search for definitions, enter the required keywords in the **Legal Entity**, **Line Of Business**, and **Batch ID Like** fields, and click **Search**.

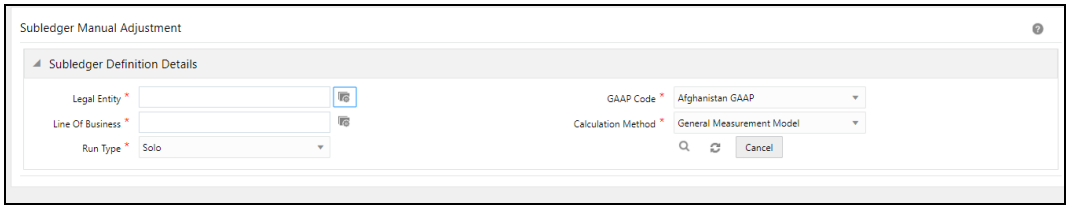
The list of subledger manual adjustment definitions in the **Batch Details** table is refreshed and the definitions that match your search criteria are displayed.

5.8.3 Create New Subledger Manual Adjustment Definition

Perform the following steps to create new subledger manual adjustment definitions:

1. In the **Subledger Manual Adjustment** table, click **Add**, to open the **Subledger Manual Adjustment** Window.

   Figure 50: The Subledger Manual Adjustment Window

2. Populate the **Subledger Definition Details** pane.

Table 14: The Subledger Definition Details pane

Field	Description
Fields marked with asterisks (*) in the window are mandatory.	
Hierarchy Folder	Select a folder from the drop-down list.
Legal Entity	Click **Hierarchy Selection** adjacent to this field. Select the required **Legal Entity** from the **Hierarchy Selection** Window. For more information, see Hierarchy Selection.
Line of Business	Click **Hierarchy Selection** adjacent to this field. Select the required **Legal Entity** from the **Hierarchy Selection** Window. For more information, see Hierarchy Selection.
GAAP Code	Click the drop-down list adjacent to this field and select a **GAAP Code**.
Calculation Method	Click the drop-down list adjacent to this field. The available methods are: • General Measurement Model • Long Duration Contracts • Premium Allocation Approach • Variable Fee Approach
Run Type	Click the drop-down list adjacent to this field and select the option either **Solo** or **Consolidated**.

3. Click the **Search** icon.
4. Click the drop-down list adjacent to the **Reporting Currency** field and select a currency.
5. Click the drop-down list adjacent to the **Status** field and select a status.
6. Click the calendar icon adjacent to the **FIC MIS** Date field and select a date from the calendar.

   All the executions performed on the selected date are displayed in the **Execution ID** dropdown.
7. Click the drop-down list adjacent to the **Execution ID** field and select an execution ID.
8. Click **Submit**.
9. Click **Save**.

5.8.4 Edit a Subledger Manual Adjustment Definition

Perform the following steps to edit subledger manual adjustment definitions:

1. From the **Batch Details** table, select the checkbox adjacent to the **Subledger Manual Adjustment** definition you want to edit.
2. Click **Edit**. To open the **Subledger Manual Adjustment** Window.

3. Update the required fields. For more information, see Create a New Subledger Manual Adjustment Definition.
4. Click **Save**.

   The saved definition is displayed in the **Batch Details** table on the **Manual Adjustment Summary** Window.

5.8.5 View a Subledger Manual Adjustment Definition

Perform the following steps to view subledger manual adjustment definitions:

1. In the **Batch Details** Window, select the checkbox adjacent to the subLedger manual adjustment definition that you want to view.
2. Click **View** to open the **Subledger Manual Adjustment** Window.

   This window displays the aggregation attributes and accounting rules details as well.
3. Click **Cancel** to go back to the **Batch Details** Window.

5.8.6 Run Subledger Manual Adjustment Definition

Perform the following steps to run subledger manual adjustment definitions:

1. In the **Batch Details** table, select the checkbox adjacent to the **Subledger Manual Adjustment**.
2. Click **Run**.

Figure 51: The Execute Window

3. In the **Execution** Window, enter the start date in the **Start Date** field.
4. In the **Execution Description** field, enter a description.
5. Click **Execute**.

The selected subledger manual adjustment definition is marked for execution.

6 Oracle Insurance Accounting Analyzer Reports

The Oracle Financial Services Insurance Accounting Analyzer application includes pre-packaged reports, which cater to disclosure requirements under IFRS 17. It also includes reports, which are created to help management in strategic decisions. All the disclosure reports can be exported to different formats like PDF, CSV, Excel, and so on. Dedicated Disclosure Reports

The IFRS 17 guidelines lay specific emphasis on the disclosure of key financial data while keeping the scope open on what constitutes an appropriate disclosure. The Application has a range of disclosure reports to track the Movement Analysis, Reconciliations, and Statement of Accounts. For detailed information on the reports in the application, see the Oracle Insurance Accounting Analyzer Reports document on MOS.

7 Annexure – Technical Details

This section contains information about the technical details in the Oracle Insurance Accounting Analyzer Application.

Topics:

7.1 Discounting Engine Interest Rates Decimal Values

When computing interest rates in the discounting engine, the Excel used for computing the interest rates contains a precision of 15 places after the decimal. However, the application stores the value with a precision of 6 places after the decimal.

For example;

The value of the interest rate in your excel is *0.233294437146026*, however, the application will store this value as *0.233294*.

7.2 Discounting Engine Cash Flows Decimal Values

When computing cash flows in the discounting engine, the Excel used for computing the cash flows contains a precision of 15 places after the decimal. However, the application computes the values with a precision of 31 paces after the decimal.

For example;

For a cash flow amount of 591032.98, if the discounting is done for 6 months considering the rate for every term as *0.233294*, the discounted value calculated by the application will be *582827.04705118010102285504979509 52* whereas the value calculated in excel will be *582827.0457552210000*.

Hence, for a sufficiently large value of Cash Flow amount, there might be a difference in excel calculated value and value calculated by application

.

8 Appendix

After you perform any action in the discounting engine or the liability calculations, all the logging details are stored in, the FSI_IIA_DEBUG_MESSAGE_LOG table in the atomic schema and you can view the logging details. The following are the logging details for this process:

- **Log File Name :** DISCOUNTING_[INFODOM NAME]_INPUT_VARIABLE_CALC_[LC OBJECT_ID]_[EXECUTION_DATE]_1_Task1
- **Log File Path :** /scratch/ofsaifrs/OFSAHOME/ftpshare/logs

  (This path is configured by using the OFSAALogger.xml file that is present in the $FIC_DB_HOME/conf directory)

You can also view or download the Log File by navigating to **Common Object Maintenance**, then **Operations**, and then **Batch Monitor**.

9 List of Financial Element Types

This section provides a list of the financial element types that are available in the **Oracle Insurance Accounting Analyzer** application. For more information, see the Create a New Variable section.

- Actual Coverage Unit
- Actual Incurred Claim Expenses
- Actual Incurred Claims
- Actual Incurred Claims Expenses Payment Current Period
- Actual Incurred Claims Expenses Payment Prior Period
- Actual Incurred Claims Expenses Prior Period
- Actual Incurred Claims Payment Current Period
- Actual Incurred Claims Payment Prior Period
- Actual Incurred Claims Prior Period
- Actual Reinsurance Coverage Unit
- Annuity Payout
- Assumed Incurred Claim Expense
- Assumed Incurred Claims
- Assumed Payout Incurred Claim Expense
- Assumed Payout Incurred Claims
- Bonus
- CSM
- Carry Over Transition Estimate
- Claim Related Expenses
- Claims Outstanding
- Contractual Face Value
- Coverage Unit
- Earned Premium
- Entity Remuneration
- Estimated Liability
- Estimated Losses
- Estimated cash Inflow
- Excess Payout
- Expense Charges
- Fair Value

- Finance Expense
- Finance Income
- General Claim Payout
- General Claims
- Gross Premium
- Incurred Claims Current Period
- Incurred Claims Expenses Current Period
- Incurred Claims Expenses Prior Period
- Incurred Claims Prior Period
- Initial Expense
- Investment Income
- Investment-Linked Insurance Event Payout
- Investment Linked Maturity Payout
- Investment Linked Payout
- Investment Linked Withdrawal Payout
- Maintenance And Fixed Expense
- Maturity Payout
- Morbidity Charges
- Morbidity Claim Payout
- Mortality Charges
- Mortality Claim Payout
- Net Premium
- Option and Guarantee Cost
- Other Charges
- Policy Cancellation
- Profit Sharing
- Recoveries
- Reinsurance Ceding Commission
- Reinsurance Claim Recoverable
- Reinsurance Coverage Unit
- Reinsurance Credit Risk
- Reinsurance Expense
- Reinsurance Fair Value
- Reinsurance Incurred Claims Expenses Prior Period

- Reinsurance Investment Component
- Reinsurance Investment Component
- Reinsurance Premium
- Reinsurance Profit Commission
- Reinsurance Recoverable Prior Period
- Reinsurance Recovery Current Period Period
- Reinsurance Recovery Prior Period
- Reinsurance Risk Adjustment
- Reinsurance Risk Adjustment For Incurred Claims
- Reinsurance Risk Adjustment For Prior Claims
- Reserve
- Return On Policyholder Fund
- Risk Adjustment
- Risk Adjustment For Incurred Claims
- Risk Adjustment Incurred Claim Current Period
- Risk Adjustment Incurred Claim Prior Period
- Risk Margin
- Risk Margin For Incurred Claims
- Sales Inducement Cost
- Shareholder Remuneration
- Surrender Charges
- Surrender Payouts
- Tax Payable
- Top Up Premium
- Unit Fund Return

10 Increasing the Cohort ID length

If you want the cohort ID to accept more than 20 characters, you must manually increase the column length in the following tables and columns.

Erwin Data Model Tables and Columns

You must manually increase the column length in the following tables and columns in the Erwin data model. You must also upload the Erwin data model after you make these changes.

Table 15: The Tables and Column names to be altered in the Erwin Data Model:

Table	Column
stg_ins_cohort_assumed_cfs	v_ri_cohort_id
stg_ins_cohort_actuals	v_ri_cohort_id
FSI_RI_GROUP_INPUT_DETAIL	v_ri_group_code
stg_ins_group_dimension_map	v_ri_group_code
stg_ins_group_dimension_map	V_GROUP_CODE
stg_cohort_master	V_COHORT_ID
dim_cohort	V_COHORT_ID
fsi_ins_group_input_detail	GROUP_CODE
fsi_ri_group_input_detail	GROUP_CODE
STG_INS_COHORT_ASSUMED_CFS	V_COHORT_ID
STG_INS_COHORT_ACTUALS	V_COHORT_ID

Script Tables and Columns

You must manually increase the column length in the following tables and columns in the script:

Table 16: The Tables and Column names to be altered in the Erwin Data Model

Table	Column
FSI_IFRS17_GROUP_OUTPUT	GROUP_CODE
fsi_ifrs17_group_projections	GROUP_CODE
FSI_IFRS17_GROUP_ONEROUS_DTLS	GROUP_CODE
FSI_IFRS17_RI_GROUP_ONEROUS	GROUP_CODE
FSI_IFRS17_RI_GROUP_OUTPUT	GROUP_CODE
fsi_ins_group_cash_flows	group_id
fsi_ins_group_cash_flows	RI_GROUP_ID

11 References

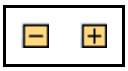
This section covers the following topics:

11.1 Hierarchy Selection

When you have selected the **Filter Type** as **Hierarchy**, define the **Filter** conditions by doing the following in the **Hierarchy Selection** Window:

1. From the drop-down list, select the required **Dimension**.
2. From the drop-down list, select the associated **Hierarchy**. In the **Hierarchy More** Window. You can click **More** to search for a specific **Hierarchy**.
3. Select any combination of rollup points and leaf (last descendant child) values.
4. In the **New** - **Filter Details** Window you can perform the following:

Table 17: The Icons in the New-Filter Details Window

Field	Description
	Click this button to search for a hierarchy member using **Dimension Member Alphanumeric Code**, **Dimension Member Numeric Code**, **Dimension Member Name**, or **Attribute** and by keying in Matching **Values** in the **Search** dialog.
	Use these icons to expand or collapse the members under a node.
	Use these icons to expand a branch or collapse a branch.
	Use these icons to focus or unfocus a selected node except the root node.
	Use these icons to toggle the display of **Numeric Code** or **Alphanumeric** code at the left of the nodes, right of the nodes, or to hide.

5. Use the following buttons to select or deselect the members:

Table 18: The Buttons in the New-Filter Details Window

Field	Description
	Move the selected members to the **Selected Members** pane.
	Move all the members to the **Selected Members** pane.

Field	Description
	Deselect a member selected in the **Selected Members** pane.
	Deselect all the selected members.

6. Click **OK** to save the member selection.

12 Band Maintenance

This section covers the following topics:

12.1 Access Band Maintenance

You can access the **Band Maintenance** Window by clicking the **Band Maintenance** element under the **Common Object Maintenance** menu from the left-hand side menu. When you click this element, the **Band Maintenance** Window appears:

Figure 52: The Band Maintenance Window

This window displays the existing **Band Type** definitions with the details such as **Band Type**, **Created By**, **Creation Date**, **Last Modified By**, and **Last Modification Date Calculation** definitions in the **Band Maintenance** pane. This window also enables you to define new **Band Definition**, edit the existing definitions, and view the details of the existing definitions.

12.2 Search for Band Definitions

The **Search** feature enables you to filter the list of existing definitions and find the definitions that you require. To search for definitions, enter the keyword in the Band Type field and click Search.

The list of **Band Type** definitions in the **Band Maintenance** table is refreshed and the definitions that match your search criteria appear.

12.3 Create a New Band Definition

Perform the following steps to create a new **Band** definition, perform the following steps:

1. From the **Band Type** table, click **Add**, to open the **Band Dimension Definition** Window.

Figure 53: The Band Dimension Definition Window

2. Click the drop-down list adjacent to the **Band Type** field and select a **Band Type** from the available list.
3. Enter the **Band Range** by clicking **Add** + in the **Band Range Details** table.
4. Enter the **From** and **To** values for all the band ranges. You can optionally enter descriptions for all the ranges.

   You can also select the checkbox adjacent to a **Band Range** and click **Delete** to remove an existing **Band Range**.
5. Click **Save** to save the definition.

   The saved definition is displayed in the **Band Maintenance** table of the **Band Maintenance** Window.

The **Audit Trail** pane at the bottom of the definition window displays the **Created By**, **Creation Date**, **last modified by**, and **Last modification date** details. The U**ser** C**omments** field enables you to add additional information as a comment.

12.4 Edit Band Definition

Perform the following steps to edit an existing Band definition:

1. Select the check box adjacent to the **Band** definition you want to edit, from the **Band Maintenance** table.
2. Click **Edit** to open the **Band Maintenance** Window.
3. Update the required fields. For more information, see Create a New Band Definition.
4. Click **Save**.

   The saved definition is displayed in the **Band Maintenance** table of the **Band Maintenance** Window.

The **Audit Trail** pane at the bottom of the definition window displays the **Created By**, **Creation Date**, **last modified by**, and **Last modification date** details. The U**ser** C**omments** field enables you to add additional information as a comment.

12.5 View Band Definition

Perform the following steps to view an existing Band definition:

1. Select the checkbox adjacent to the Band definition you want to view, from the **Band Maintenance** table.
2. Click **View**.

   The **Band** - **View** Window is displayed with the definition details.

> **NOTE** You cannot edit any of the fields in **View** mode.

13 Dimension Management

Dimension Management within the Infrastructure system facilitates you to categorize data into a single object as a Member; define levels and aggregate data to form the Hierarchy, and distinguish each member by defining the required Attributes. For detailed information about dimension management, see the section on **Dimension Management** in the Oracle Financial Services Analytical Applications Infrastructure User Guide. This section covers the following topics:

- Access Dimension Management
- Adding a Member Definition
- Map the Financial Element or Transaction Type to the Cash Flow Type

13.1 Access Dimension Management

You can access the **Dimension Management** Window by selecting it under the **Common Object Maintenance** menu from the left pane of the application.

13.2 Adding a Member Definition

You can add a member to a dimension by providing it with either a numeric or an alphanumeric code. If you are providing an alphanumeric code, then see the **Adding Member Definition** section in the Oracle Financial Services Analytical Applications Infrastructure User Guide.

13.3 Map the Financial Element or Transaction Type to the Cash Flow Type

Mapping the **Financial Element** or the **Transaction Type** to the **Cash Flow Type** is a pre-requisite task before you can execute the **Data Loader** batch to move assumed cash flows and actual transaction data of policies or cohorts to the processing tables.

You can either use the pre-configured dimension member of the **Cash Flow** type or create your own. For more information, see the section on **Dimension Management** in the Oracle Financial Services Analytical Applications Infrastructure User Guide.

Topics:

- Map the Financial Element to the Cash Flow Type
- Map the Transaction Type to the Cash Flow Type

13.3.1 Map the Financial Element to the Cash Flow Type

Perform the following steps to map the financial element to the cash flow type:

1. Navigate to **Common Object Maintenance**, select **Dimension Management**, and then select **Member**.
2. Click **Add**.
3. In the **Dimension** drop-down, select **Financial Element**.

4. Enter values in the **Alphanumeric Code**, **Numeric Code**, and **Name** fields. Additionally, you can also select the **Generate Code** icon to automatically generate a unique numeric code.
5. In the **Member Attributes** field, in the **Cash** flow type drop-down, select the required member attribute.
6. Click **Save**.

13.3.2 Map the Transaction Type to the Cash Flow Type

Perform the following steps to map the transaction type to the cash flow type:

1. Navigate to **Common Object Maintenance**, select **Dimension Management**, and then select **Member**.
2. Click **Add**.
3. In the **Dimension** drop-down, select **Transaction** Type.
4. Enter values in the **Alphanumeric Code**, **Numeric Code**, and **Name** fields. Additionally, you can also select the **Generate Code** icon to automatically generate a unique numeric code. For more information, see Oracle Financial Services Analytical Applications Infrastructure User Guide.
5. In the **Member Attributes** field, in the **Cash Flow Type** drop-down, select the required member attribute.
6. Click **Save**.

14 Batch Execution

Batch Execution refers to the process of initiating a Batch for current processing. When you submit a batch for execution, a series of commands are sent to the database concerning the defined component parameters. This, in turn, returns an array of update counts (required value definitions) when the commands are executed successfully. For detailed information about batch executions, see the section on **Batch Execution** in the Oracle Financial Services Analytical Applications Infrastructure User Guide.

This chapter contains information about how to run or execute the batches required in the Oracle Insurance Accounting Analyzer application.

Topics:

14.1 Access Batch Execution

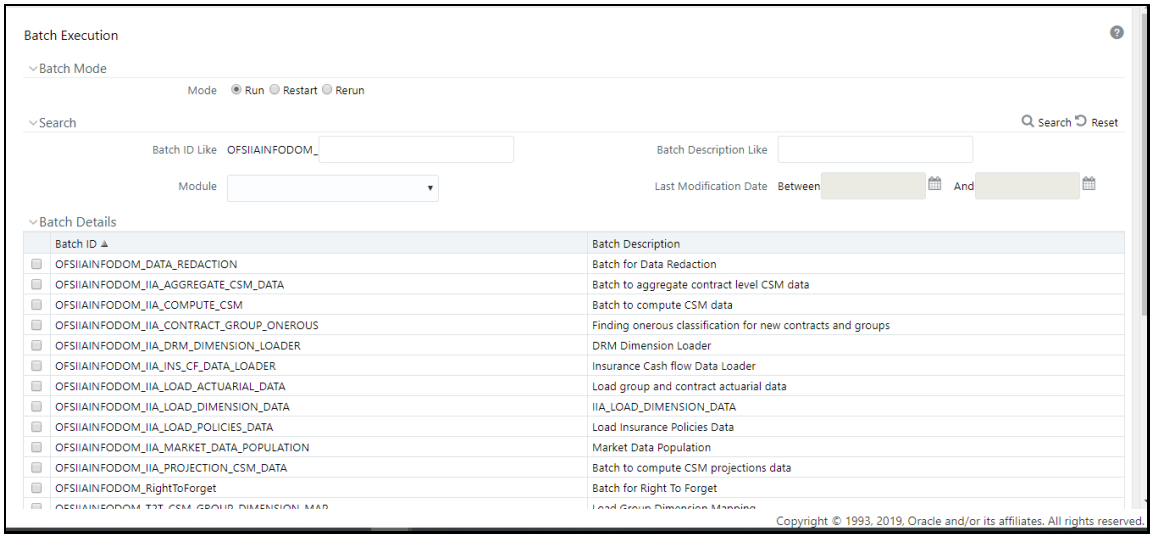
You can access the **Batch Execution** Window by navigating to **Common Object Maintenance**, select **Operations**, and then select **Batch Execution** from the left- pane of the Oracle Insurance Accounting Analyzer application

14.2 Run or Execute the Batches

Perform the following steps to execute a batch in the **Batch Execution** Window:

1. In the **Batch Mode** pane, select **Run** to open the **Batch Details** pane.

Figure 54: The Batch Details Pane



2. Select the checkbox adjacent to the **Batch ID** that has to be executed. You must execute the following batches in the sequence specified in the following table:

Table 19: The Sequence to execute the Batches

Execution Order	Run Name or Batch Id
1	<INFODOM>_IIA_DRM_DIMENSION_LOADER
2	<INFODOM>_IIA_LOAD_DIMENSION_DATA After you load this batch, to map the insurance scenario number used in your STG table to the required insurance scenario type, you must perform the following steps: 1. Navigate to **Common Object Maintenance**, select **Dimension Management**, and then **Member**. 2. In the **Dimension** drop-down, select **Insurance Scenario** and then click **Edit**. **Figure 55: Example of the Insurance Scenario dimension screen**  3. Map the Insurance Scenario with the required Insurance Scenario Type Attribute. 4. Click **Save**. The Insurance Scenario is mapped with the Insurance Scenario Type Attribute. After you complete the preceding steps, continue executing the following batches.
3	<INFODOM>_T2T_CSM_GROUP_DIMENSION_MAP
4	<INFODOM>_IIA_INS_CF_DATA_LOADER
5	<INFODOM>_IIA_LOAD_POLICIES_DATA
6	<INFODOM>_IIA_MARKET_DATA_POPULATION
7*	<INFODOM>_INPUT_VARIABLE_CALC_<LIABILITY_CALCULATION_ID> This batch only appears in the Batch Execution screen once a Liability Calculation Definition is created in the application.
8*	<INFODOM>_IIA_CALCULATION_<LIABILITY_CALCULATION_ID> This batch only appears in the Batch Execution screen once a Liability Calculation Definition is created in the application.

NOTE If your template contains multiple FIC_MIS_DATEs, then the batches **<INFODOM>_INPUT_VARIABLE_CALC_<LIABILITY_CALCULATION_ID>** and **<INFODOM>_IIA_CALCULATION_<LIABILITY_CALCULATION_ID>** must be executed in the following sequence:

- For the first FIC_MIS_DATE, execute the **<INFODOM>_INPUT_VARIABLE_CALC_<LIABILITY_CALCULATION_ID>** batch and then the corresponding FIC_MIS_DATE **<INFODOM>_IIA_CALCULATION_<LIABILITY_CALCULATION_ID>** batch.
- If the OFS PFTI application has been installed, then for the first FIC_MIS_DATE, execute the **<INFODOM>_INPUT_VARIABLE_CALC_<LIABILITY_CALCULATION_ID> and then trigger the allocation rule for the same FIC_MIS_DATE**
- For the second FIC_MIS_DATE, execute the second FIC_MIS_DATE **<INFODOM>_INPUT_VARIABLE_CALC_<LIABILITY_CALCULATION_ID>** batch and then execute corresponding second FIC_MIS_DATE **<INFODOM>_IIA_CALCULATION_<LIABILITY_CALCULATION_ID>** batch.
- If the LC contains versions, the original batch is applicable for both (**<INFODOM>_INPUT_VARIABLE_CALC_<LIABILITY_CALCULATION_ID>** and **<INFODOM>_IIA_CALCULATION_<LIABILITY_CALCULATION_ID>**) all versions.

3. In the **Batch Details** pane, click **Schedule Batch** to define a new batch or modify a pre-defined **Batch Schedule**.

   For more information, see the **Batch Scheduler** section in the Oracle Financial Services Analytical Applications Infrastructure User Guide.

4. In the **Task Details** toolbar, click **Exclude or Include** to exclude or include a task, or click **Hold or Release** to hold or release a task before executing the batch.

   For more information, see the **Modify Task Definitions** of a **Batch** section in the Oracle Financial Services Analytical Applications Infrastructure User Guide.

5. Specify the **Information Date** (mandatory) by clicking the calendar icon. The specified date is recorded for reference.

NOTE You can also modify the required task parameters of the selected Batch and include the changes during the Batch Rerun. For more information, see the Specify Task Details in the Oracle Financial Services Analytical Applications Infrastructure User Guide.

6. Click **Execute Batch** and then select **OK** to confirm the batch execution.

An information dialog appears indicating that the batch execution was successful. Repeat steps 2 to 6 for all the batches mentioned in step 2.

OFSAA Support

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