Oracle Insurance Data Foundation Application Pack

User Guide

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Oracle Insurance Data Foundation User Guide

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Document Control

Version	Revision Date	Change Log	
Number		Feature Name	Feature Description
1.0	09-April-2020	Data Population in the Fact Group Insurance Policy Summary table	Worker's Compensation is a type of Group Insurance Contract, which offers compensation to the employees for sustaining injuries or disabilities because of their employment. There are two ways to populate the data in the Fact Group Insurance Policy Summary (FCT_GRPINS_POLICY_SUMMARY) table. They are: • The data population through the T2T_FGPS_STG_GRPINS_POLICY_SUMMAR Y, which is at the Policy Summary level. • The data population through the T2T_FGPS_STG_GRPINS_POL_BENFCIARY_ DTLS, where the data can be populated for the count at the policy or beneficiary level.
		FSI Intracompany Policy Table	The Intracompany Policy table is the Policy table that records the transactions between the legal entities of a company. In the Intracompany Policy table, to record the transactions between the companies belonging to the same group structure, the intercompany policy transactions (the policy transactions between the companies belonging to the different group structures) must be excluded. the policy transaction must qualify these two criteria to be included as an Intracompany Policy transaction in the Intracompany Policy transaction in the Intracompany Policy tsuing Entity and Party) must belong to the same
			 organization group structure. The Party must be a Beneficiary of the Policy. To qualify the above criteria, the following enhancements are added:
			 The Intracompany Policy flag. The Intercompany transactions enter the non-Fact Common Policy Summary tables. This is achieved technically by adding a filter, which is intracompany policy equals zero.
		Workers' Compensation	The following tables are added for the Workers' compensation:

Version	Revision Date	Change Log	
Number		Feature Name	Feature Description
			 T2T_FCT_EXTERNAL_INS_REFUSAL_DTLS T2T_FCT_PRIOR_INSURER_CLAIM_DTLS T2T_FGPS_STG_GRPINS_POLICY_SUMMAR Y T2T_FGPS_STG_GRPINS_POL_BENFCIARY_DTLS DIM_UNW_RATING_CLASS DIM_PREMIUM_BASIS DIM_WC_BUSINESS_LINE DIM_PREM_PLAN_TYPE Added the details of <u>Data Population in the</u> FCT_GRPINS_POLICY_SUMMARY_Table.
		Insurance Claims tables	 The Insurance Claims Subject Area is enhanced with the following attributes: Tables are added in the categories of estimation, processing, investigation, occurrence, and others. Also the policy assets tables are added. An Illustration of the Insurance Claims Process Flow Insurance Claims Process Flow Mentioned how a party medical data is linked with the claim
		Auto Insurance tables	 The Auto Insurance section is enhanced with the following attributes: Added tables for the vehicle internal and external material type, damage type, performance, and inspection. Added tables to store the driver and license details. Added an overview describing how to load the Auto Insurance tables.
		OIDF Interface with QMR 2.0.0.0.0	Removed this chapter.

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1 Preface

This chapter discusses the following topics:

- Intended Audience
- Documentation Accessibility
- Access to Oracle Support
- Related Information Sources

1.1 Intended Audience

Welcome to Release 8.0.9.0.0 of the Oracle Insurance Data Foundation User Guide.

This document is the user guide and reference guide for the Oracle Insurance Data Foundation (OIDF) Release 8.0.9.0.0, and is intended for System Administrator and all users who are instrumental in configuring and administering OIDF with Oracle Financial Services Analytical Applications Infrastructure (OFSAAI) platform. See Related Information Sources for more Oracle product information.

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

Refer to the below documents in OHC Documentation Library:

- Technical Whitepaper on Data Model Document Generation (OHC)
- Oracle Insurance Data Foundation Installation Guide Release 8.0.9.0.0 (OHC)
- OFSAAI Installation and Configuration Guide Release 8.0.9.0.0 (OHC)
- Oracle Insurance Data Foundation Runchart Release 8.0.9.0.0 (My Oracle Support)

2 Introduction to OIDF

This chapter explains about Oracle Insurance Data Foundation (OIDF), its components, its relationship with Oracle Financial Services Analytical Applications Infrastructure (OFSAAI), and the key prerequisites to run OIDF.

This chapter includes the following topics:

- Overview
- Components of OIDF
- Relationship to Oracle Financial Services Analytical Applications
- OIDF Prerequisite Components and Tools

2.1 Overview

Oracle Insurance Data Foundation (OIDF) is an analytical data warehouse platform for the Insurance industry. OIDF combines an industry data model for Financial Services along with a set of management and infrastructure tools that enables Financial Services institutions to develop, deploy, and operate analytical solutions covering key functional areas in Financial Services, including:

- Enterprise Risk Management
- Enterprise Performance Management
- Customer Insight

OIDF supports variety of insurance business segments under Direct insurance contracts namely Life Policies, Health Policies, Annuities, Property and Casualty policies and Retirement Policies and under indirect or reinsurance business segment it supports reinsurance held as well as reinsurance issued

OIDF is a comprehensive data management platform that helps Insurance Companies to manage the analytical data life cycle from sourcing to reporting, as a consistent platform and toolset.

2.2 Components of OIDF

OIDF consists of the following components, which are described in additional detail in the next chapter:

Criteria	Description
Logical Data Model (LDM)	LDM is a reference model of the Insurance domain for various types of Insurance. This model captures the business processes of a typical Insurance institution in detail.
	Logical Data Model means it cannot be readily used. The structures modeled in the OIDF LDM provide an abstract, graphical model of the Insurance industry domain using Entity-Relationship modeling. This can be considered as a detailed blueprint for organizing data within an Insurance institution. It provides a reference guide for institutions to understand the salient data related to a specific business process.
	To use the OIDF application, customers deploy OIDF Analytical Warehouse Model, which is derived from the LDM (blueprint).

Criteria	Description
OIDF Analytical Warehouse Data Model	 OIDF Analytical Warehouse Data Model is a Physical Data Model that supports data sourcing and reporting related to key analytical use cases in the Insurance industry. The Warehouse Model is a Physical Data Model, unlike the OIDF LDM, meaning that it is readily deployable, and consists of database object definitions, and additional supporting scripts. It is organized into two distinct sets of tables based on purpose: The Staging Model: This model facilitates data sourcing from the Insurance provider's internal operational systems such as Policy or Contract systems, investments, Claims systems, Master Data Management systems and so on. The Reporting Model: This model facilitates the storage of outputs from analytical tools, applications, and engines in a manner that is conducive to BI reporting. OIDF Analytical Warehouse Model is typically deployed into production via a set of management tools called the Oracle Financial Services Analytical Application Infrastructure (OFSAAI). The AAI application is a separate product, and is a prerequisite for OIDF (see Infrastructure).
Supporting Scripts	Supporting Scripts are scripts provided as part of the OIDF package for basic operations such as internal data movement between the staging and reporting areas.

2.3 Relationship to Oracle Financial Services Analytical Applications

The OIDF is very closely related to the Oracle Financial Services Analytical Applications (OFSAA) in the following ways:

- Data Model
 - OIDF Staging Model provides the complete data sourcing foundation for OFSAA applications.
 All use case or application-specific input data requirements are captured as part of the Staging Data Model. OIDF Staging Model is a combination of all staging models supplied with each OFSAA application.
 - OIDF Reporting Model provides complete reporting data model common to all the OFSAA
 Business Intelligence (BI) applications. This includes a single set of conformed dimensions and
 unified fact tables used for cross-functional reporting. OIDF Reporting Model is the superset of
 all the BI-application specific reporting models.
 - Synchronized Releases: Staging Model and Reporting Model, which are part of an OIDF release, are updated to reflect prior application-specific releases. This means that the latest release of OIDF (8.0.9.0.0) reflects all prior application releases across OFSAA from a data model perspective, with respect to Staging Model and Reporting Model.
- Infrastructure
 - The Oracle Financial Services Analytical Applications Infrastructure (OFSAAI) is the same infrastructure that is used to deploy and manage an OIDF instance.
 - The same collection of tools (OFSAAI) is used to manage a deployed instance of OIDF.

These are the tools used to manage the data lifecycle in OIDF:

- Model Upload
- Unified Analytical Metadata (UAM)
- Data Quality Framework
- T2T framework
- Mart Management Framework

2.4 OIDF Prerequisite Components and Tools

The key prerequisites for running the OIDF application are listed as follows:

Component	Provider	Purpose
Oracle Financial Services Analytical Applications Infrastructure version 8.0.9.0.0	Oracle	OFSAAI is the platform on which the OIDF application is deployed and operated. It represents OIDF 'runtime' environment, and consists of a number of tools used to manage the data lifecycle within OIDF, from sourcing to reporting*.
Oracle Database Enterprise Edition 11gR2 and 12cR1	Oracle	OIDF is certified on Oracle Database releases 11gR2 and higher.
erwin data modeler version 9.8	Computer Associates (CA)	erwin is a data modeling tool that provides a visual environment to manage the complex enterprise data environment.

^{*}OFSAAI, the infrastructure platform consists of its own prerequisites and supporting documentation.

3 Understanding OIDF

This chapter explains the background of OIDF, its functional architecture along with the differences from traditional warehouse architecture. OIDF product package consists of the Logical Data Model and Analytical Data Warehouse model. The individual components of Physical Data Model is explained in detail.

This chapter covers the following topics:

- Background
- OIDF Architecture
- <u>Differences from Traditional Warehouse Architecture</u>
- Subject Areas Organization
- OIDF Logical Data Model
- OIDF Physical Data Model
- Staging Data Model
- Reporting Data Model
- LDM Relationship to the OIDF Physical Model
- OIDF LDM Content Details
- Mapping from Logical Data Model to OIDF Staging Area

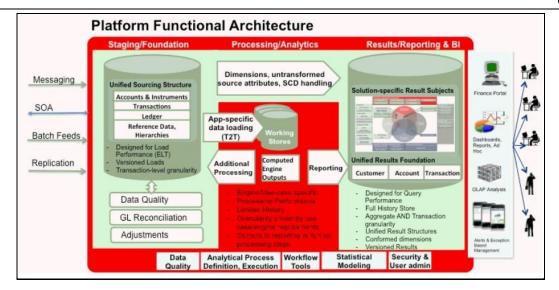
3.1 Background

It is important to note that OIDF architecture differs from 'traditional' data warehouse architecture.

OIDF was built to specifically address the key challenges of building a scalable, practical data management platform to support Insurance Analytics needs. The differences from traditional BI architecture are highlighted and explained in the following sections.

3.2 OIDF Architecture

The following figure depicts the OIDF Functional Architecture.



The OIDF architecture can be thought of as two distinct, interacting components. The dark green colored cylindrical portions denote the data repository and the red colored portion denotes the management toolkit.

- A data repository whose physical structure is given by the OIDF physical data model (here Physical Data Model = OIDF Staging + OIDF Reporting). This user guide only details the structure and organization of the data repository that is covered by the data models in the OIDF.
- A management toolkit provided by OFSAAI that is used to manage the data repository, by providing
 a collection of tools and frameworks based on a common metadata foundation. This user guide
 does not cover the details of the Analytical Application Infrastructure, as that is a separate product
 with its own documentation.

The architecture illustrates the following key concepts:

- A unified data-sourcing area for analytics: The OIDF Staging Data Model provides the basis for central, unified data-sourcing layer for a variety of analytical needs. The staging layer faces the operational (OLTP) and front office systems of an Insurance Company. It consists of tables to capture key business and operational data from these systems, which is then processed by one or more analytical engines.
- A unified reporting/consumption layer: Analytical results can be simple to complex, quantitative
 and qualitative measures of a provider's Risk, Compliance, Customer and Fund Performance. The
 OIDF Reporting data model is a dimensional data model spanning these key analytical functions. It
 forms the foundation of OFSAA Business Intelligence applications, but can clearly be used as the
 result data store for any equivalent engines and processes provided by other vendors, or custombuilt solutions. By providing a single data repository for reporting needs, this layer provides a
 foundation for departmental and cross-departmental and cross-functional reporting.
- Additionally, the schema of the reporting area is specifically built for Insurance analytics. As an
 illustration, the reporting area has a 'Run dimension' that is shared across all BI/reporting use cases.
 Similarly, the aggregation of shared measures/reporting into a common set of output structures
 (Account Summary) allows for cross-functional reporting, which is increasingly the norm in
 Insurance institutions.
- Single point of control and operation: The Oracle Financial Services Analytical Applications Infrastructure is a separate Oracle product that offers a set of tools that are built on a common

metadata foundation. These tools are used to control and manage the lifecycle of data from sourcing to reporting. There is a collection of frameworks to manage the following lifecycle steps of data within OIDF:

- Metadata Management
- Data Quality
- Data Movement
- Scheduling and runtime operations
- Security/User management
- Analytical Process Definition and Execution
- Processing Area: As explained earlier, the primary purpose of the OIDF is to serve as a container for analytical processing from sourcing to consumption. Such processing is usually delivered in the form of discrete units called analytical applications spanning different analytical use cases ranging from Policy to Claims to Fund Allocation.
- These applications consist of custom-built computational engines and numerical libraries, and may
 execute processes on the data that range from simple aggregations to complex, multi-step
 stochastic processes such as Monte-Carlo simulation.
- Hence, analytical applications place varying demands on the data infrastructure in terms of volumes and speed, and hence place different demands on data architecture. In practice, the normalized (3NF) design favored for
- Enterprise Data Warehouses often fails to be efficient or performant when it comes to analytical processing across a wide range of use cases.
- Therefore, the OIDF recognizes the need for distinct application-specific working stores, separate from the staging and reporting area.

ATTENTION

The structure of what these processing area stores is decided by the actual analytical application and engine used. The OFSAA suite of applications is organized this way, with each application managing a specific set of tables/schemas within the processing area.

The processing area tables/schemas are not part of the OIDF. This is because the OIDF is intended to be an open platform. Other analytical applications and engines can equally provision data out of OIDF by mapping their input requirements appropriately to the OIDF staging area model.

3.3 Differences from Traditional Warehouse Architecture

This table summarizes the differences of the OIDF from a traditional Data Warehouse architecture.

Component	OIDF	Traditional BI Architecture
Staging Layer	Common Staging Area (CSA) where data from source systems are staged and is implemented as database schema.	Usually a file system-based area where file-based extracts (operational images) from source systems are staged prior to loading into a target schema.
3rd Normal Form Operational Data Store/Enterprise Data Warehouse	Does not provide a physicalized model for a 3NF store. The FS LDM can be physicalized as a 3NF store if desired. Operational/fine-grained reporting will be fulfilled from the reporting area.	Notification sent to all users captured as owners and user who submitted the definition.
Data Marts/Reporting Model	Set of star schemas with conformed dimensions (Ralph Kimball approach)	Set of star schemas.

With the preceding understanding in mind, the following sections describe the data models in the OIDF in greater detail.

3.4 Subject Areas Organization

The Subject Areas are organized to support detailed level analysis related to set higher-level analytical reporting solutions.

Within the above higher-level areas, there are over 165 subject areas consisting of star schemas supporting detailed analysis. Each Subject Area typically corresponds to one or possibly more star schemas, depending on the reporting need. There are currently about 500 fact and dimension tables in the reporting area. The details of the various naming conventions used in OIDF Data Model are explained in <u>Appendix A</u>. For column-level details, see the <u>Technical Whitepaper on Data Model Document Generation</u>, which details how to extract the data dictionary from erwin section.

Table: OIDF Subject Areas Organization

Subject Area	Description
OIDF Legal Entity Details	This subject area covers the legal entity or organization's structure related tables.
OIDF Party Contacts	This subject area covers the party contact details such as party address, party phone details and email details.
OIDF Party Definition	Party here refers to any person or organization who interacts with the company. All the parties associated with insurance company under different roles like policyholder, producer, agents, issuer etc. are loaded together in this entity.
OIDF Party Identification	This subject area covers the identification details of an individual Party or organization. Identification means the action or process of identifying someone or something or the fact of being identified.

Subject Area	Description	
OIDF Party Employment	The subject area covers the employment details of an individual Party. This data applies only to Parties who are individuals. A single Party may have multiple employment details.	
OIDF Party Exam and Certificates	The subject are covers the details pertaining to the party's certification and related exams to it. An Exam is the formal verification or validation of information learned/known, typically used to satisfy a requirement for licenses, registrations or other firm education proof. Certification is formal procedure by which an accredited or authorized person or agency assesses and verifies (and attests in writing by issuing a certificate) the attributes, characteristics, quality, qualification, or status of individuals or organizations, goods or services, procedures or processes, or events or situations, in accordance with established requirements or standards.	
OIDF Party Financials	This subject area covers the financial information (Balance-Sheet, Profit and Loss statement and Ratios) of the parties. Balance sheet is prepared as of a particular date (Balance sheet creation date).	
OIDF Party Medical	This subject area covers all the medical tables related to party medical details such as party medical test details, family medical test data, and party disability details.	
OIDF Party Results	This subject area covers the party result tables such as party ratings, party party relationship, party party account relationship.	
OIDF Party Customer Results	This subject area covers OIDF Party Customer Results related tables.	
OIDF Producer and Producer Agreement	This subject area covers Producer and Producer Agreement tables.	
OIDF Insurance Contracts	This subject area covers the insurance contract tables. Contract is defined as where one party (the insurer) accepts significant insurance risk from another party (the policyholder) by agreeing to compensate the policyholder if a specified uncertain future event (the insured event) adversely affects the policyholder	
OIDF Trading and Investments	This subject area covers OIDF Trading and Investments related tables.	
OIDF Capital Borrowings	This subject area covers OIDF Capital Borrowings related tables. Capital Borrowings refers to borrowing done by Insurance company using debt instruments.	
OIDF Capital Instruments	This subject area covers the capital Instrument details, it refers to an issue of capital instrument to raise funds from market. This primarily covers equity instruments. They may or not be traded in market.	
OIDF Fixed Assets	This subject area covers OIDF Fixed Assets related tables.	
OIDF Financial Assumptions	This subject area covers the financial assumptions details. Assumption is an estimate of an uncertain variable input into a financial model, normally for the purposes of calculating premiums or benefits. This subject area covers the tables related to Insurance Assumptions such as Fact Insurance Lapse Rate Assumptions.	
OIDF Demographic Assumptions	This subject area covers the demographic assumptions details. For example, assumption relates to predicting a person's lifespan, given their age, gender, health conditions and other factors.	

Subject Area	Description	
OIDF Market Data	This subject area covers OIDF Market Data related tables.	
OIDF Payment Data	This subject area covers OIDF Payment Data related tables.	
OIDF Accounting and General Ledger	This subject area covers the accounting and general ledger tables associated with the insurance company.	
OIDF Insurance Transactions	This subject area covers OIDF Insurance Transactions related tables.	
OIDF Insurance Claims	This subject area covers OIDF Insurance Claims related tables.	
IFRS Accounting Outputs	This subject area covers the IFRS accounting related tables such as contractual service margin, homogenous risk group tables.	
OIDF Actuarial Outputs	This subject area covers OIDF Actuarial Outputs related tables.	
OIDF Solvency II	This subject area covers OIDF Solvency II related tables.	
OIDF Sales and Marketing	This subject area covers OIDF Sales and Marketing related tables.	
OIDF Underwriting Application	This subject area holds the applications processed in each period, for an analysis over time.	
OIDF Underwriting Quotes	This subject area covers the insurance quotes details. Quotes are subject to change depending on information given at time of the quote.	
OIDF Underwriting Crime Data	This subject are covers the criminal conviction details if the party is involved in any criminal activity. Criminal conviction is the outcome of a criminal prosecution which concludes in a judgment that the defendant is guilty of the crime charged.	
OIDF Underwriting Driving Violation	This subject area covers the driving violation details related to the party identifier. Driving violation is any violation of vehicle laws that is committed by the driver of a vehicle, while the vehicle is moving.	
OIDF Underwriting Life Style Activity	This subject area covers the information about a party's lifestyle activities. This section captures details surrounding the activities a party engages in that may be considered risky by insurance companies. In the Lifestyle Activity object, the more specific experience sub-objects (e.g. Aviation Experience, Racing Experience, Underwater Diving Experience, Climbing Experience, Air Sport Experience, and Foreign Travel) are optional, singly occurring and mutually exclusive.	
OIDF Commonly Used Tables	This subject area covers all the common tables such as date, country, and location.	

The list of solutions supported by Results only OIDF Subject Area are tabulated here.

Subject Area Name	Definition	
ALM	Subject Areas corresponding to Asset Liability Management (ALM).	
Regulatory Capital Calculation	Subject Area pertains to the Solvency II Regulatory Framework and its reporting requirements as specified in the framework.	
PFT	Supports reporting related to Profitability analysis, part of the Enterprise Performance Management solution area.	

Subject Area Name	Definition	
OIPI	Supports reporting requirements of Insurance Analytics.	
Economic Capital	Support for Aggregated Economic Capital Reporting based on risk assessments for Market, Credit and Operational Risk.	
GL Reconciliation	Support for reporting specific to the Oracle GL reconciliation module that is part of the OFSAA product line. This allows a reporting view of the reconciliation processes and outputs.	
CRM	Part of the Corporate Credit Risk Solution, allows reporting on Credit Limits.	
Market Risk	Support for Market Risk analytics	
IFRS 17	Supports the data requirement pertaining to the IFRS 17.	
Centralized Reporting	Supports the centralized reporting for an insurance company covering insurance life cycle activities from underwriting to Claim settlement including risk management use cases as mentioned above.	

3.5 OIDF Logical Data Model

The previous sections have discussed the components of the OIDF Physical Data Model (or the OIDF Analytical Warehouse model) – this is the actual deployable physical database model that addresses a number of analytical needs out of the box, as illustrated earlier.

The Logical Data Model is a reference data model of the Financial Services Domain, which captures the data created by the key business processes in Financial Services. A reference data model is different from the Physical Data Model in these ways.

Area	Logical Data Model	OIDF Physical Model
Purpose	Generic blueprint of the data reduced by the business processes of an Insurance Company.	Designed for analytical processing (IFRS17, Solvency, Customer Insight, Risk, Regulatory Reporting).
Format/Structure	Entity Relationship Diagrams organized into key Top Level subject areas.	Physical Tables/Columns Definitions.
Usage	Cannot be directly used – needs to be used within a physical database design step to arrive at a database schema.	Readily deployable.
Scope	All the key business processes/activities and their supporting reference data requirements.	The business and reference data required for a set of analytical use cases. However, can be extended to serve other needs.

3.6 OIDF Physical Data Model

The OIDF Physical Data Model is the primary deployed structure in the OIDF. As detailed in the architecture section, it has the following key characteristics:

- Readily Deployable: The Physical Data Model is a readily deployable physical schema. It is provided
 as an erwin data model file (for details on erwin, see http://erwin.com/products/modeler/) and
 consists of tables grouped into distinct subject areas depending on function. The tables are either
 used to gather source data (Staging Area), or as containers of outputs/results from analytical
 processing and engines for reporting purposes (Reporting Area).
- Use-case Driven: The OIDF Physical Data model is driven by a set of clearly identified analytical use cases spanning Performance, Experience, and Compliance.
- Extensible: While the OIDF Physical Data Model satisfies a very large number of analytical use cases across Insurance Contracts, Claims, Underwriting, Actuarial Assumption, Financial Assumptions, Solvency, IFRS 17 subject areas, customers can find the need to customize the model for a specific installation.

These customizations can be done in accordance with guidelines published in the Chapter "Using OIDF," section of this manual.

The OIDF Physical Data Model is divided into two primary areas:

- Staging Data Model
- Reporting Data Model

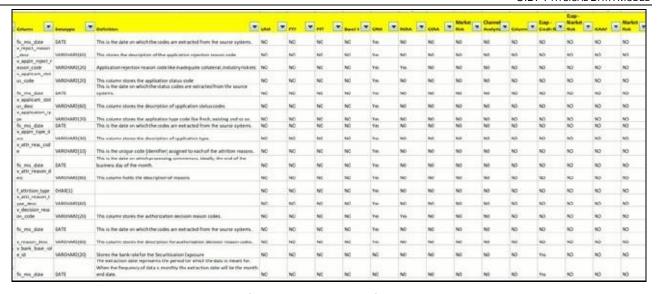
3.6.1 Staging Data Model

3.6.1.1 Overview/Design

The Common Staging Area Model (CSA) represents the point of entry of data into the OIDF. The CSA provides a simplified, unified data sourcing area for inputs required by analytical applications and engines. It consists of over 400 tables and nearly 9000 columns organized into distinct subjects. The salient features of the CSA are as follows:

- Mapping to Analytical Use Cases: Since the primary purpose of the OIDF is to be a data repository supporting analytics, each database object in the OIDF physical data model is necessarily mapped to a corresponding analytical use case.
- These mappings are captured in the data model, in the form of additional metadata called Userdefined Properties (UDPs), and can be leveraged to reduce the scope of data gathering efforts by focusing on clearly-defined end use cases such as Market Risk Analytics, and others.
- These mappings can readily be extracted into a Download Specification, which lists the data demands for a specific analytical use case. An example is shown follows:

Figure 4. Download Specification



- The Mappings can be generated from the OIDF erwin file using erwin's reporting tools.
- Schema Design: The data model of the Common Staging Area is designed to facilitate loading efficiency. This means that it is denormalized.
- The primary focus of the staging area is to efficiently deliver data from operational systems such as Policy Administration, Claims Processing and Fund Management to multiple analytical applications that process this data.
- Typically, this data is extracted from source systems and loaded into OIDF directly, or alternatively
 into a pre-defined file-based operational image area from which it is subsequently loaded into the
 OIDF schema. In a large Insurance institution, it is not unusual to have 10s to 100s of millions of
 policies, and claims.
- Standard ETL (Extract, Transform, Load) approaches can fail to address this requirement
 adequately because of the complexity imposed by the target schema. If the target schema is
 increasingly normalized, then the ETL into this schema is correspondingly more complex, requiring
 careful load ordering to prevent integrity-related load failures, as well as integrity validation prior to
 loading. Such complex ETL processing is time-consuming and is prone to failure.
- To address this, the CSA is designed to support a simplified loading process. De-normalized tables
 allow efficient data loading, and subsequent transformations can be done to verify data integrity
 through a series of data quality checks. This represents an 'ELT (Extract Load Transform)' approach
 to data sourcing, which is far more suited for an analytical data repository.
- Application-managed Referential Integrity (RI): In conjunction with the database design of the staging schema, a key feature is the management of Referential Integrity primarily in the application tier, rather than within the database. Rather than imposing foreign key relationships in the database, which could cause complex loading order dependencies, relationships between staging tables are managed by the Data Quality (DQ) framework, a toolkit within the Analytical Application Infrastructure that captures the relevant data quality checks for a specific table in the staging model. These checks include:
 - Value checks (Nulls, Value ranges, business checks on numeric fields)
 - Referential Integrity checks (which are otherwise implemented as foreign key constraints)

ATTENTION

This is also why the ER model of the staging area in erwin does not contain any relationships – the staging area is a physical data model, which is deployed using the Analytical Application Infrastructure, which manages it.

In summary – the design of the staging area data model is to allow efficient data loading for analytics. It thus has crucial differences from a general-purpose repository of operational/transactional data across an Insurance institution.

3.6.1.2 Details of the Staging Data Model

The CSA model consists of over 400 tables and nearly 9000 attributes. These tables are organized into multiple 'subjects', currently by analytical use case/solution need. However, it makes sense to first understand the staging area tables in terms of content before understanding how they map to analytical use cases.

There are two broad categories of staging data, regardless of the use case or the analytical application that requires it:

- Business Data: This set of tables captures the actual business events and the resulting state of an
 Insurance Company from those business events. The OLTP systems (or Transactional Systems)
 capture this information resulting from the execution of the provider's different business processes.
 Broadly, this information can be categorized as:
 - Events: Business transactions, whether financial or non-financial, represent business happenings (events) that are relevant for analytical purposes. For example a financial transaction by a customer on a current account is a specific event.
 - Events happen at a specific point in time, and are recorded by OLTP systems. In the staging
 area model, there are several transaction tables that capture this detail for both financial and
 non-financial transactions.
 - State: The net effect of business transactions is to change the provider's overall financial/non-financial state. This state information is typically captured by product-specific systems in a Insurance Institution.
- Reference/Master Data: Events and state refer to 'business activities' of an Insurance institution. To provide more detail on these, Insurance institution need to capture additional data that provides context for these activities. This data may be variously called as 'reference data' or 'master data', and covers various business dimensions of a given transaction or account. For example an Insurance institution has a master list of products that it sells to customers (Product Master). Similarly, it has a list of customers (Customer master). These and other lists provide context for each business transaction or account. Insurance Institution typically maintain 'Master' data for this purpose.
- With this background, the following lists the key categories of business data and reference data in the staging data model.

3.6.2 Reporting Data Model

The Reporting Data Model is the point where outputs of analytical processing are aggregated for reporting and Business Intelligence (BI) tools. Similar to the Common Staging Area being the foundation for data

provisioning to analytical applications, engines and processes, the Reporting Data Model is the common data store for the outputs of these processes.

Outputs are computed quantitative measures and Key Performance Indicators that involve simple to complex, mathematical and statistical processing using the raw data, which is performed by specialized engines and computational models. In the OIDF design, the Reporting Data Model design ensures that the historical data is maintained.

The key features of the design of the Reporting Area model are as follows:

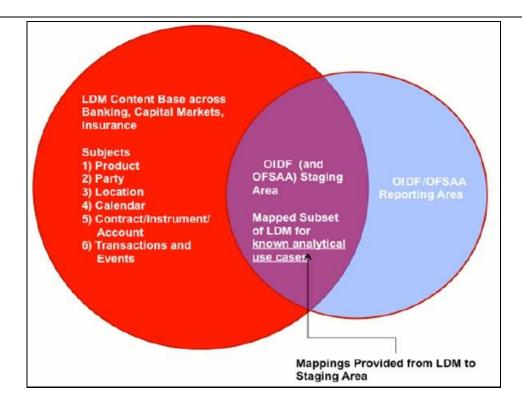
- Design: The Reporting Area data model is a dimensional data model. This means that it consists
 primarily of central fact tables (de-normalized), related to multiple dimension tables, also called a
 Star Schema. Additionally, the dimension tables are shared across the star schemas in the reporting
 mode, meaning they are Conformed Dimensions. This means that Drill-across reporting is naturally
 supported by the OIDF design.
- Additionally, in keeping with the key principle of the OIDF, the Reporting Model is organized by use
 cases to facilitate reporting and BI in a wide variety of areas.
- Support for multiple scenarios of analysis: As a result of the 2008 crisis, the Financial Services
 industry is moving towards scenario-based, forward-looking risk analysis instead of retroactive
 analysis. The reporting data model has been designed to support scenario analysis of the sort
 required by financial institutions that need to measure and report risk and performance under a
 variety of economic scenarios.
- To facilitate this, the Oracle Financial Services Advanced Analytical Infrastructure (OFSAAI) provides
 a Stress Testing framework, allowing risk analysis to be performed under a variety of known
 scenarios corresponding to different input parameter values to risk models.
- The reporting model provides support for this kind of analysis via a Run Dimension it allows analytical engines to load multiple result sets identified by scenarios, and hence permits reporting related to baseline and stress conditions in economic terms.
- Support for Cross Functional Reporting: The third critical feature of the Reporting area design is the support for cross-functional reporting.
- Typically, Business Intelligence and Reporting Solutions work off a dedicated, purpose-specific data store called a data mart. Data marts are function-specific data stores typically star schemas (for example: Marketing Data Marts, Risk Data Marts, Customer Data Mart), that provide the necessary reporting and analytics relevant to a particular business function in the Insurance Institution.
- The trend is for cross-functional analytics and reporting. Majority of emerging needs relate to the analytical problems at the intersection of the distinct areas of Risk, Performance, Customer Insight, and Compliance.

3.7 LDM Relationship to the OIDF Physical Model

The coverage of the OIDF LDM in terms of core business can be applied to:

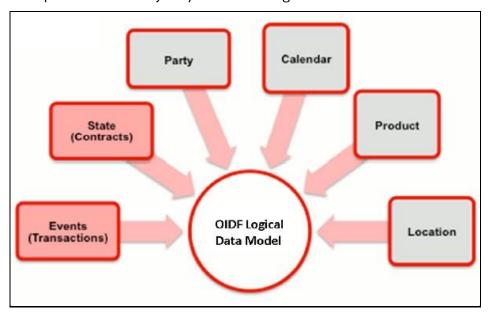
Claims

The OIDF physical data model should be seen as a deployable, physicalized subset of this reference data model for known analytical use cases spanning Risk, Experience, and Compliance, as illustrated below.



3.8 OIDF LDM Content Details

The OFS LDM is organized into a small set of high-level subject areas, each of which represents a key category of data that is produced by the business processes in an Insurance institution. The following is the representation of Key Subjects in OIDF Logical Data Model.



Within the above subject areas, the FS LDM has 800+ entities. The various naming conventions used in OIDF Logical Data Model are explained in Appendix A. For column-level details, see the Technical Whitepaper on Data Model Document Generation, which details how to extract the data dictionary from erwin section.

3.9 Mapping from Logical Data Model to OIDF Staging Area

In addition to the data dictionary and download specifications, the OIDF also provides a mapping between the relevant columns in the OIDF physical staging area model and the OIDF Logical Data Model. These mappings are currently made available as Excel spreadsheets, and part of the OIDF package.

Following are the links to excel spreadsheets. Click the corresponding spreadsheet link that you want to view.

- LDM Staging mapping Application
- LDM Staging mapping Campaign
- LDM Staging mapping Claim
- LDM Staging mapping Collateral
- LDM_Staging_mapping_Collections and Recovery
- LDM_Staging_mapping_Contract
- LDM Staging mapping Geography
- LDM Staging mapping Instrument
- LDM Staging mapping Organization
- LDM Staging mapping Party
- LDM Staging mapping Product
- LDM Staging mapping Transaction

NOTE

Column description updated as 'deprecated' is dropped from the model in the next major release.

4 Using OIDF

This chapter details on how the OIDF models are delivered and how they can be installed and configured into the required environment. The first two sections gives you an understanding of the Delivery Mechanism and OIDF Installation. The Data Dictionary and Download Specifications sections explains how the self-documenting erwin file includes the data dictionary and Download Specifications within erwin itself.

In addition, the Extending Data Model section has guidelines for customization and designing the Staging and Results Area of Physical Data Model.

This chapter includes the following topics:

- <u>Delivery Mechanism</u>
- Installing OIDF
- OIDF Supporting Documentation
- Data Dictionary
- Download Specifications
- Extending OIDF Physical Data Model

4.1 Delivery Mechanism

OIDF being a collection of data model artifacts, includes both a readily deployable model (the OIDF Physical Data Model) as well as a reference data model (the OIDF Logical Data Model). Both the data models (Physical and Logical) are delivered as erwin files. The OIDF hence requires a license of the erwin Data modeling tool.

erwin is the current and only supported modeling tool to view and edit the model. Currently, the minimum version of erwin supported is 9.8.

NOTE

OFS AAI supports data model upload for data models generated using erwin. For information on compatible versions, refer to the corresponding release Technology Matrix.

4.2 Installing OIDF

As detailed earlier, OIDF requires the Oracle Financial Services Analytical Application Infrastructure release to deploy and operate.

Refer to Oracle Insurance Data Foundation Installation Guide Release 8.0.9.0.0 (OHC) for step-wise instructions how to configure and install OIDF into an AAI instance.

4.3 OIDF Supporting Documentation

The preceding sections have provided an overview of the organization of the OIDF, and its various component data models. Appendix A, page A-1 explains the naming conventions used in OIDF data model.

The OIDF is a detailed model, with nearly 850 entities across both the Staging and Results Area in the physical data model, with another 800+ entities in the Logical Data Model.

Since it is delivered as an erwin file, all the detailed metadata for the model (Table, Column, Entity, Attribute, Relationship) definitions are embedded in the file itself. The advantage of this approach is that any site-specific customizations to OIDF can be performed within erwin, and the updated documentation is retained in the file in the form of additional metadata.

The two key detailed artifacts of OIDF documentation that can be extracted from within the erwin data model are:

- Data Dictionary
- Download Specifications

For more information on Dimension Management and AMHM, refer to the Dimension Management chapter in <u>Oracle Financial Services Analytical Applications Infrastructure 7.3 User Guide</u> and Dimension Load Procedure section in <u>Oracle Financial Services Analytical Applications Data Model Utilities 7.1 / 7.2 User Guide</u>.

4.4 Data Dictionary

The data dictionary for OIDF can be extracted from the erwin file using erwin's reporting capability, using a pre-built set of templates for data extraction.

Instructions for how to do so are provided in a separate accompanying document that provides step-bystep instructions. See the Technical Whitepaper on Data Model Document Generation, which details how to extract the data dictionary from erwin section.

4.5 Download Specifications

As detailed in the staging area section, the mapping from the Staging Data Model to use cases, called a download specification provides an efficient way to manage the sourcing of data into the OIDF staging area. This is done by mapping the staging model at a column level to use cases. This mapping information is embedded in erwin at a column level using metadata called User Defined Properties (UDPs).

The Download specifications can be extracted using pre-built templates, in a manner similar to the Data Dictionary. Instructions for how to do so are also provided in the Technical Whitepaper on Data Model Document Generation, which details how to extract the data dictionary from erwin section.

4.6 Extending OIDF Physical Data Model

Oracle Insurance Data Foundation (OIDF) Physical Data Model (PDM) design evolves as the analytical use cases covered by the OIDF and enhanced as improvements are engineered as a part of the product lifecycle. While the model satisfies a very large number of analytical use cases across Risk, Finance, Marketing, and Compliance subject areas, customers may need to customize the model for a specific

installation. These custom changes however may impact the ability of the OIDF installation to be upgraded to later versions of the product. The guidelines outlined in this section will help minimize the impact of custom changes to the model when the installation needs to be upgraded to a later version of OIDF.

This section consists of the following sub-sections:

- Customization Process Guidelines
- Staging Area Design Guidelines
- Results Area Design Guidelines
- Upgrading Data Model

4.6.1 Customization Process Guidelines

It is strongly recommended to consult OFSAA Support / Field Engineers / Consulting Staff before making any changes to the PDM for the following reasons:

Tables in the PDM common Staging Area are designed to meet the complex needs of data sourcing
for many different financial services analytical use cases and as such have a large number of
columns, and the need for the modification should be reviewed with OFSAA consultants.

The Results Area star schemas have been designed with a set of common fact tables and dimension tables to support integration of results from multiple analytical applications and any customization should be reviewed in order to ensure that the unified reporting capabilities of the model are preserved.

After a review with OFSAA field consultants, an extension to the model should first be logged as a request for product enhancement via the standard support process. This allows:

- Product support and product management teams to identify if a similar enhancement request was submitted on behalf of another customer so that a uniform Model Enhancement design recommendation can be provided to all customers.
- OIDF product management to evaluate if the enhancement request is applicable more broadly to
 other customers and if the change should in fact is to be taken as a design requirement for
 subsequent releases.

NOTE

OFS AAI supports data model upload for data models generated using erwin 7.1.x, 7.2.x, 7.3.x, 9.0.x, 9.2.x, 9.5.x, and 9.6.x, 9.7, 9.8 versions.

4.6.2 Staging Area Design Guidelines

Following are the Staging Area Design Guidelines:

- Ensure that the naming conventions as detailed in Appendix A, page A-1 section are followed.
- Entity relationships and constraints are enforced through OFSAAI data management toolkit and are not enforced via database referential integrity checks.
- The model should not be changed to enforce referential integrity checks and other data quality checks via database definitions.

- All Staging Area tables must have a column that identifies the system from where data is sourced (source system ID).
- The code columns in master data tables and tables that contain dimension data should be designed to hold alphanumeric values.
- The Domain dictionary maintains the list of attribute domains. New columns must be identified with an existing domain instead of explicitly defining column data type and valid values. See guidelines in Appendix A, page A-1 section on the use of defined Domains.
- Tables (e.g. reference or look up tables with static data) needed for only a specific application or use
 case should be a part of the application specific processing area and should not be part of the
 common Staging Area in OIDF.
- OIDF download specifications identify the tables and columns for which data needs to be sourced
 for a specific analytical use case. Any new tables and/or column should have its "APPLICATION
 USAGE" UDP set with the appropriate application value so that the generated download
 specification includes the customized column and table. The master list of UDP's are maintained as
 a central dictionary in erwin.
- All columns added or modified as a part of the customization should be marked as such:
 - The column level UDP named "CUSTOM" must be marked YES, identifying the column as a custom property.
 - The "Customization Reason" UDP should be specified. Valid values are provided as a drop down list and can be "Pending Enhancement Request" or "Specific to Customer".

The "Type of Change" UDP should be set to the appropriate type of change as provided in the drop down list (Length, Datatype, Logical Name, Description, and Addition).

4.6.3 Results Area Design Guidelines

The Results Area consists of a set of star schemas with conformed dimensions and common fact tables. Integration of results from multiple application use cases is achieved by having common fact tables for customer and account level measures. The design of the results area allows for drill-down and drill-across BI reporting, which should be preserved after customization.

Following are the Results Area Design Guidelines:

- Ensure that the naming convention for results tables and columns detailed in Appendix A, page A-1 section is followed.
- Dimensional conformance should be maintained: The same dimensional information should not be represented in different forms. In addition, dimension table design should be compatible with the slowly changing dimension process design and so should have the required columns.
- The common accounts summary fact table.
- (FCT_COMMON_POLICY_SUMMARY) consolidates measures at an account level granularity for all
 applications. Account level attributes captured from source systems in staging and those attributes
 that do not vary between runs should be part of the common accounts summary table. This enables
 integrated reporting of account information.

NOTE

Any account level application specific attributes and measures that are computed by applications should be part of the application specific account summary entities.

- The common customer summary fact table.
- (FCT_COMMON_CUSTOMER_SUMMARY) consolidates measures at a customer level granularity for all applications. Customer level attributes captured from source systems in staging and those attributes that do not vary between runs should be part of the common customer summary table. This enables integrated reporting of customer information.

NOTE

Any customer level application specific attributes and measures that are computed by applications should be part of the application specific customer summary entities.

- Aggregate Entities: Depending on performance requirements for each application, information can be reported out of aggregate entities. However, a drill through to the base entity from the aggregate entity is mandatory.
- Reporting and local currency support: Include additional attributes in the fact tables to store
 reporting and local currency equivalent of base measures. These attributes need to be computed by
 looking into the exchange rates.
- Support for full history: Any new tables in the Results area should be designed to support maintenance of full history.

4.6.4 Upgrading Data Model

The model upgrade process is achieved through the erwin Model Compare and Merge utility. Refer to erwin documentation for details on Menu options, process of comparing, and merging models.

5 Application of Data Domain Browser in OIDF

This chapter provides information about Data Domain Browser usage in the Oracle Insurance Data Foundation application.

This chapter includes the following topics:

- Required Software Licenses to Use Data Domain Browser
- Introduction to Data Domain Browser
- OIDF Subject Areas Enabled in Data Domain Browser
- Segments
- Tags

5.1 Required Software Licenses to Use Data Domain Browser

The software licenses that must be installed to access and use Data Domain Browser for OIDF application are:

- Oracle Financial Services Data Integration (OFS DI) Application Pack v8.0.7.2.0 ML release patch
 30268362 available at My Oracle Support.
- Oracle Insurance Data Foundation Pack v8.0.9.0.0 Minor release patch 30720004 available at My Oracle Support.

5.2 Introduction to Data Domain Browser

Data Domain Browser provides Data Foundation customers a User Interface to view and query the erwin data model over physical data model reports that Data Foundation provides currently. In addition, Data Domain Browser also provides all the information like physical formats along with granularity and technical details such as data type. One can view Data Domain Browser as a logical representation of Data Foundation. This equips User Interface with the following factors to provide pre-built grouping of entities and data elements to enhance search by the end-user:

- To help on how to search data model.
- To understand entity relationship.
- To guery the data model.

The features of Data Domain Browser are to help the user:

- To view huge list of entities available in Data Foundation in a pre-grouped format.
- To filter a particular entity or a set of entities using specific filter criteria.
- To view the data elements and their properties within a chosen entity.
- To search within the data elements using specific search criteria.

NOTE

For detailed information about Data Domain Browser and its User Interface, see the latest version of <u>OFS Data Integration Hub (DIH) User Guide</u>.

5.3 OIDF Subject Areas Enabled in Data Domain Browser

In reference to the data model Excel report, the Subject Area defines the information related to which Data Connector must be mapped to which source system or Product. To achieve this, populate the ADIs (Application Data Interface). Application Data Interface enables to view the logical definition of OFSAA physical entities of Staging and Result Areas. For more information, see the latest version of Data Integration Application Pack User Guide.

Out of all OIDF Subject Areas, only following are scoped in the Release 8.0.9.0.0 and this feature for the remaining Subject Areas is on roadmap:

Party Subject Area

Party refers to any person or organization that interacts with the Insurance Company, and Party attributes refer to the information elements associated with any person or organization that interacts with the Insurance Company. A Party can be a customer, issuer, guarantor, etc.

Party Subject Area consists of tables related to Party Definition, Party Contact Details, Party Identification Document, Party Medical Subject Area, Party Financial Data/Employment Attributes, Party Producer Exam, Certification, and License; Party Results, and other Party attributes such as Party type, relationship type between two Parties, Relation Role type, and Reinsurer type.

Insurance Underwriting Subject Area

Insurance Underwriting describes the process of assessing risk, ensuring that the cost of the cover is proportionate to the risks faced by the Party or the organization concerned. It evaluates risk and exposures of potential Party or organization. Insurance Company decides the coverage that the Party or organization must receive, and the premium associated with the coverage or whether to accept the risk and insure them.

When an applicant applies for insurance, the Insurance Company must look at different criteria to decide if they are going to accept the application for coverage. As a result, the Insurance Company creates and documents detailed information about the applicant and this process is called as Underwriting Application.

Insurance Underwriting Subject Area consists of Underwriting Application that contains details about product class, application type, application group, application status, rejection reason, underwriting issue, application party role map, etc. Insurance Underwriting Subject Area also consists of Insurance Quotes, quote source, source method, submission method, declination type, and reports; and for risk analysis consists of details related to risk type, risk sub-type, and underwriting product class details based on the risk factors such as criminal conviction details, crime type, driving violation of vehicle laws, and lifestyle activity details of the insurer.

Producer and Producer Agreement consists of insurance distribution level type, insurance distribution payment form, insurance license provision type, insurance solicitor type, producer appointment details, producer line of authority details, producer attrition event, producer attrition event reason, producer vested type, insurance sub channel, underwriting privilege type, producer appointment details, producer insurance distribution details, and producer line of authority details tables.

Insurance Contracts Subject Area

Insurance Contract is a contract under which one party (the insurer) accepts significant insurance risk from another party (the policyholder) by agreeing to compensate the policyholder if a specified uncertain future event (the insured event) adversely affects the policyholder.

Insurance Contracts Subject Area consists of Contracts, Coverages, Insurance Participation, Group Insurance, Policy Schedules, Loans, Funds, Policy Conversions, and Reinsurance Contracts.

Contract attributes cover contract identifier, product identifier, sum insured, origination date, purchase date, maturity date, policy status etc. The Contracts tables consists of details about different categories of contracts such as Annuity, Health Insurance, Life Insurance, Property and Casualty, Retirement, Reinsurance Contracts Held, and Reinsurance Contracts Issued.

The Coverage tables consists of details about Policy Coverage, Age Amount Product, and Embedded Options. In case of group insurance, policy coverages refers to the single aggregated benefit or rider bundled as a part of product across all group members.

The Reinsurance Contracts tables store details related to insurance reserve function, consequences of losses, tax reimbursement calculation method, basis of calculating the standard GAAP reserve, Reinsurance Contract type, insurance sub-standard policy reserve method, Reinsurance accounting basis, reserves calculation method, insurance sub-standard reserve calculation basis, basis of the contract limits and retentions applicable to the claim, reserve valuation type, level of retention on the coverage, Reinsurance business origin code, the list of all policies, a reinsurance contract held by the entity, a reinsurance contract issued by the entity, mapping between Placed Collateral and Reinsurance Contract, and mapping between Mitigant and Reinsurance Contract.

Actuarial Subject Area

Actuarial Subject Area consists of Actuarial Assumptions and Actuarial Outputs.

An Actuarial Assumption is an estimate of an uncertain variable input into a financial model, normally for the purposes of calculating premiums or benefits. Actuarial Assumptions consists of details related to the set of Actuarial Assumptions used for valuations, and Premium Rates. Two types of Actuarial Assumptions tables are Financial Assumptions tables and Demographic Assumptions tables.

Financial Assumptions consists of assumptions related to interest rates, lapse rate assumptions, benchmark details for Cost of Living Adjustments, and Premium Rate.

Demographic assumptions consists of assumptions related to mortality, disability, termination of employment, and retirement.

Actuarial Outputs consist of the Actuarial Assumed Policy Summary table, and Actuarial Cash Flows, Calculations, and Result Areas Summary tables.

Accounting and General Ledger Subject Areas

Accounting Subject Area

Insurance Policy Transactions are about accounting transactions done for a given policy. They are sourced from respective accounting systems in the Insurance Company.

Accounting Subject Area consists of Policy Transactions and Policy Commission.

General Ledger Subject Area

A General Ledger is the foundation of a financial system, which is used to store and organize financial data. General Ledgers are used to create the financial statements of a company. A General Ledger account is an account or record used to sort, store and summarize the

transactions of a company. Transactions are posted to individual sub-ledger accounts as defined by the chart of accounts of that company. A Legal Entity in the Insurance institution can maintain the same General Ledger data (either solo or consolidated) in one or more source systems.

General Ledger Subject Area consists of GL Data, GL to Management Reporting, and mappers for GL to Management Reporting Result table.

- Assets Subject Area
 - Fixed Assets

A fixed asset is a long-term tangible piece of property or equipment that a firm owns and uses in its operations to generate income. Fixed Assets consists of the Fixed Assets Details table.

Policy Assets

Policy Assets consists of the Policy Covered Asset, Policy Asset Type, Policy Asset Sub Type, and Policy Asset Valuation Type tables.

Insurance Claims Subject Area

An insurance claim is a formal request to an Insurance Company for coverage or compensation for a covered loss or policy event. The Insurance Company validates the claim and, after approval, issues payment to the insured or to an approved interested Party on behalf of the insured.

Insurance Claims consists of tables in the categories of estimation, processing, investigation, occurrence, and others.

Trading and Investments Subject Area

Trading and Investments consists of the instruments, investments, mutual funds, fund cis composition, instrument rating details, and instrument market prices tables.

5.4 Segments

Segment is Business Segment, which refers to the group of products distinctly separated from remaining businesses based on product attributes, customers, geography or market places.

If Subject Area represents vertical depth, Business Segment represents horizontal extent of functional features. As a user, when you search for a particular functionality or feature, you must look at the Subject Area. In addition, when you search for commonality across different Business Units or Departments, you must look at Business Segment.

Business Segment groups the entities across Subject Areas. For example, whereas Underwriting, Insurance Contracts, Claims, Accounting etc. are the Subject Areas; and Life Insurance, Annuity etc. are the Business Segments.

The Business Segments added till the current release are:

- Annuity Contracts
- Health Insurance Contracts
- Life Insurance Contracts
- Property and Casualty Insurance Contracts
- Retirement Contracts

- Reinsurance Contracts Held
- Reinsurance Contracts Issued

5.5 Tags

OIDF packages Subject Areas and Tags into the data model Excel report.

Tags refer to the label attached to the data element for the purpose of identifying similar data elements across entities. Therefore, tags are grouped together.

5.5.1 How Tags Help the User?

This section explains about how the Tags in Data Domain Browser help the user in exploring data model.

The Insurance Contracts components consists of Annuity Contracts, Health Insurance Contracts, Life Insurance Contracts, Property and Casualty Insurance Contracts, Retirement Contracts, Reinsurance Contracts Held, and Reinsurance Contracts Issued and these belong to the Insurance Contracts Subject Area. Therefore, under the Insurance Contracts Subject Area, these components can be considered as Segments. This represents the Business Segment relationship with its Subject Area.

Insurance Contracts components consist of tables that store Monetary Amounts. As a result, the Insurance Contracts tables that store Monetary Amounts can be grouped under a Tag named as "Contract Monetary Amounts". This represents the Business Segment relationship with its Tag.

Tags moves across Business Segments. Now, for a given Subject Area, you can search for Monetary Amounts across all Segments with the help of the "Contract Monetary Amounts" tag. Also, you can search for Monetary Amounts across all Subject Areas with any of the Insurance Contracts component as the Segment, with the help of the "Contract Monetary Amounts" tag.

6 Data Flow Process for Data Foundation

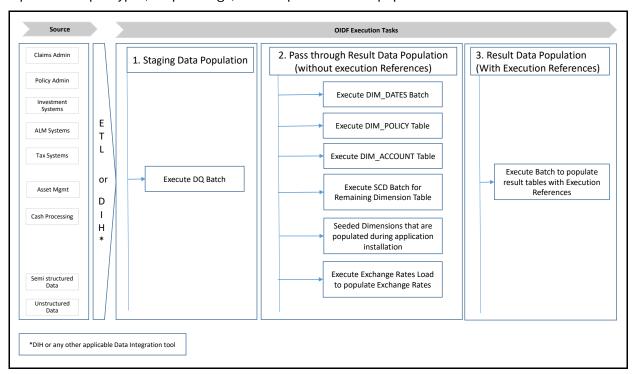
This chapter provides information about data flow process for the Data Foundation application to populate the Result tables.

This chapter includes these topics:

- <u>Technical Flow to Populate the Result Tables</u>
- Prerequisites for the Execution Processes
- Seeded Data
- Slowly Changing Dimension (SCD)
- Load Key Dimensions using AMHM
- Table to Table (T2T)

6.1 Technical Flow to Populate the Result Tables

This representative data flow diagram of the Data Foundation application illustrates its data flow stages, input and output types, output usage, and the processes that populate results.



The data flow process can be categorized into two main categories. They are:

1. Populating Stage Tables

In this process, data is populated into the Data Foundation Stage master tables and Stage tables using these sub-processes:

- a. Run Custom ETL/DIH.
- b. Execute Data Quality batches.

- 2. For more information about loading Stage tables, see the section <u>Loading OFSAA Staging Tables</u>.
- 3. Populating Result Tables
- **4.** In this process, data is populated in Dimension and Result tables using Stage tables. The sequence of sub-processes are:
 - a. Dimension Loading Process:
 - i. Populate DIM_DATES table.
 - ii. Seeded Dimensions that are populated during the installation process.
 - **iii.** Populate DIM_ACCOUNT and DIM_POLICY tables.
 - iv. Execute other SCD batches to populate corresponding Dimensions.
 - v. Load key Dimensions using AMHM.
 - **b.** Loading data into the Result tables using T2T batch execution process.

These Result tables are used by other Analytical Applications to create reports. Some of the applications are listed here:

- IFRS17
- Solvency II
- Customer Insight

6.2 Execution Processes

6.2.1 Prerequisites for the Execution Processes

After OIDF application installation is successfully complete, as a prerequisite to initiate the SCD process or T2T process, perform these steps:

NOTE

This procedure must be performed once only after a fresh installation of the application and also after installing an upgrade.

In this section, ensure that you execute the batch corresponding to the required Data Quality. To access the Run Name/Batch Name, and the order of execution, see the latest version of OIDF Run Chart.

- 1. Complete the OIDF application installation and post-installation configuration procedures successfully. For detailed procedures, see Oracle Insurance Data Foundation Application Pack Installation Guide Release 8.0.9.0.0.
- 2. Populate Data into the Stage Master Tables.

Populate data into all the Stage Master tables with all the required records by loading custom ETL/DIH.

NOTE

Data is already loaded into the OIDF Stage Master tables (see <u>Populating Stage Tables</u> in the section <u>Technical Flow to Populate the Result Tables</u>).

3. Populate the DIM_DATES table.

To populate the DIM_DATES table, see Time Dimension Transformation.

4. Execute the Data Quality (DQ) batches.

Data, required to execute a DQ, is already loaded into the OIDF Stage tables (see the section Technical Flow to Populate the Result Tables).

To execute the DQ batches, see the <u>DQ Group Execution</u> section.

6.2.2 Dimension Loading Process

Data into the Dimension tables can be loaded using one of the following processes:

- Seeded Process.
- Slowly Changing Dimension (SCD) Process.
- Loading Key Dimensions using AMHM.

6.2.3 Seeded Data

This is an automatic process wherein the Seeded data for Dimensions, which are packaged within the installer, are populated during the installation.

NOTE

To access the Seeded data for Dimensions, see the latest version of <u>OIDF Run</u> <u>Chart</u>.

6.2.4 Slowly Changing Dimension (SCD) Process

NOTE

- If you are executing the Dimension SCD Process after a fresh installation or after installing an upgrade, or when there are changes made in the Stage table data, first perform steps given in the <u>Prerequisites for the Execution Processes</u> section.
- Ensure you execute the batch corresponding to the required Dimension table. To access the Run Name/Batch Name, and the order of execution, see the latest version of <u>OIDF Run Chart</u>.
- The SKeys of the Dimension tables are used to structure the Result tables (Fact tables) for populating the data. Therefore, this process serves as the prerequisite to the T2T Loading process.
- For functional information about Dimension loading, see the chapter <u>About Dimension Loading Process</u>.

A Slowly Changing Dimension (SCD) is a dimension that stores and manages both current and historical data over a period in a data warehouse. SCDs are dimensions that contain data, which changes slowly rather than changing on a time-based regular schedule.

In the SCD process, the SCD batch execution is used to populate data in the Dimension tables.

To populate data in a Dimension table:

- 1. Execute the SCD Batch of the DIM_ACCOUNT table.
- 2. Execute the SCD Batch of the DIM_POLICY table.
- 3. Execute the <INFODOM>_DATA_FOUNDATION_SCD batch for the required Dimension table.
- 4. Verify log files and check error messages, if any.

6.2.4.1 Execute the SCD Batch of the DIM_ACCOUNT Table

To execute the SCD batch of the DIM_ACCOUNT table, perform the steps in the following section.

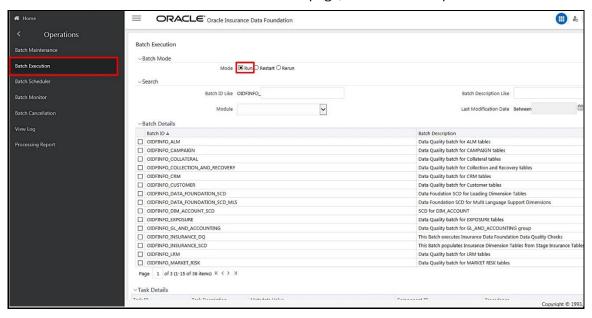
6.2.4.1.1 Execute the SCD Batch

To execute the SCD batch:

1. Navigate to the Batch Execution page.

Click **Oracle Insurance Data Foundation > Operations > Batch Execution**.

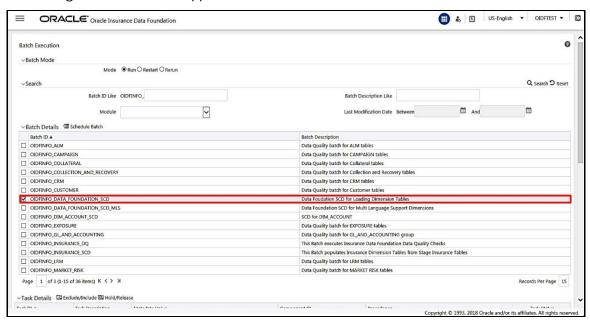
2. In the **Batch Mode** section of the *Batch Execution* page, select the **Run** option.



- **3.** Select the Batch ID.
- **4.** In the **Batch Details** section, search and select the required Batch ID:
 - For DIM_ACCOUNT table, select the Batch ID < INFODOM> DIM ACCOUNT SCD.
 - For the DIM_POLICY table, select the Batch ID < INFODOM>_INSURANCE_SCD and include only DIM_POLICY related Stage table tasks.

For all other Dimension tables, select the Batch ID < INFODOM > DATA FOUNDATION SCD.

The **Task Details** section lists the tasks corresponding to the selected Batch ID. The list consists of all the Stage tables that are mapped to Dimension tables.

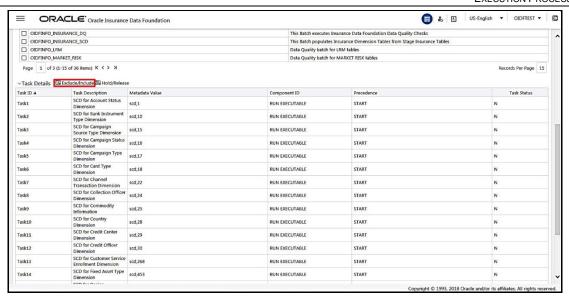


- **5.** Exclude/Include tasks from/into the SCD batch.
 - **a.** Make a note of the Metadata Value (SCD map reference number) and the Task ID for the required Dimension table.

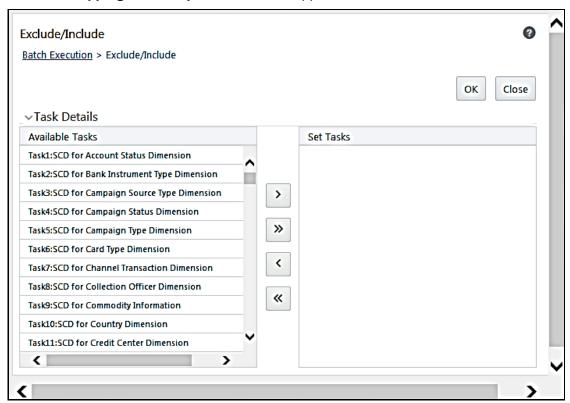
NOTE

To populate the Dimension table from its corresponding Stage Master table, use SCD packaged in OIDF with the respective Map Reference Number.

b. To exclude or include a task from or into the required SCD batch, in the **Task Details** section, click the **Exclude/Include** icon.

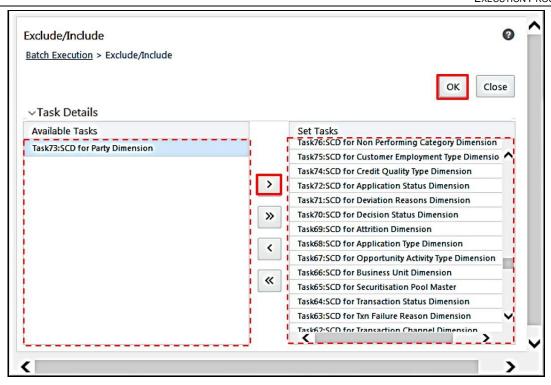


c. The Task Mapping – Exclude/Include window appears.

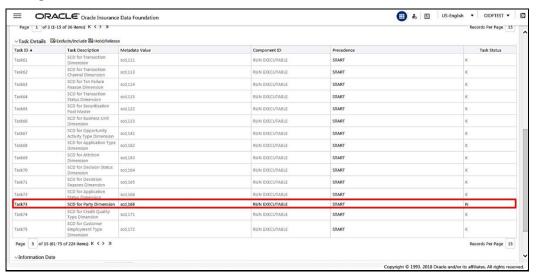


d. Include/Exclude tasks.

In the **Task Details** section, select the tasks that must be excluded from the batch execution procedure, and click > to move those tasks from the **Available Tasks** list to the **Set Tasks** list. Retain the task (Task ID noted in the earlier step) related to the currently required Dimension table in the **Available Tasks** list.



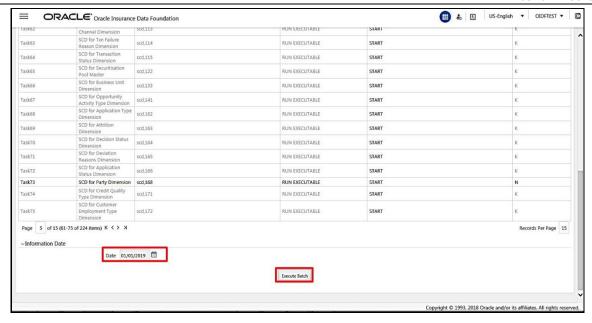
- e. Confirm task inclusion/exclusion.
 - i. To save the changes, click **OK**. The warning message: If you exclude a task, it will be skipped when executing the batch but, the precedence will not be altered. Do you want to exclude the selected task(s)? appears.
 - ii. To proceed, click OK. The Task Details list consists only of tasks present in the Available Tasks list. For example, in the following screenshot, the highlighted task is executed during batch execution.



iii.

6. Select the FIC_MIS date.

In the **Information Date** section, click the calendar icon and select required date. This date is the FIC_MIS date populated in the DIM_DATES table.



7. Execute the SCD batch.

Click **Execute Batch** to run the selected SCD batch with the selected Task:

- For DIM_ACCOUNT table, execute the Batch ID < INFODOM> DIM ACCOUNT SCD.
- For the DIM_POLICY table, execute the Batch ID <INFODOM>_INSURANCE_SCD and include only DIM_POLICY related Stage table tasks.
- For all other Dimension tables, execute the Batch ID < INFODOM> DATA FOUNDATION SCD.
- 8. Confirm the SCD batch execution.
 - **a.** A pop-up message: *Do you want to execute the batch for MIS Date <MIS_Date>*, appears. To execute the batch, click **OK**.
 - **b.** An acknowledgment message appears. Click **OK** to continue. The SCD batch is executed. As a result, data is populated in the target Dimension table.

6.2.4.2 Execute the SCD Batch of the DIM_POLICY Table

NOTE

To load data into the DIM_POLICY table, execute the SCD batch for all the corresponding stage tables.

To execute the SCD batch of the DIM_POLICY table, see the section Execute SCD Batch.

6.2.4.3 Execute the <INFODOM>_DATA_FOUNDATION_SCD Batch for the Dimension Table

NOTE

If you are executing this Dimension SCD Process after a fresh installation or after installing an upgrade, or when there are changes made in the Stage table data, first perform steps given in these procedures:

- 1. Prerequisites for the Execution Processes
- 2. Execute the SCD Batch of the DIM ACCOUNT Table
- 3. Execute the SCD Batch of the DIM POLICY Table

To execute the <INFODOM> DATA FOUNDATION SCD batch:

- 1. Verify presence of data in the Stage Master table.
- **2.** Execute the SCD batch.
- **3.** Check the execution status of the SCD batch.

6.2.4.3.1 Verify Presence of Data in the Stage Master Table

Verify if data is present in the Stage master table corresponding to the required Dimension table with all the required records.

NOTE

Data is already loaded into the OIDF Stage Master tables (see the section <u>Technical Flow to Populate the Result Tables</u>).

6.2.4.3.2 Execute the SCD Batch

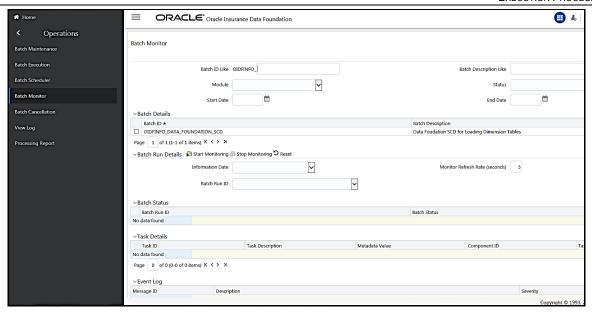
To execute the SCD batch, see the section **Execute the SCD Batch**.

6.2.4.3.3 Check the Execution Status of the SCD Batch

To check the execution status of the SCD batch:

1. Navigate to the Batch Monitor page.

Click Oracle Insurance Data Foundation > Operations > Batch Monitor.



2. Select the Batch ID < INFODOM>_DATA_FOUNDATION_SCD.

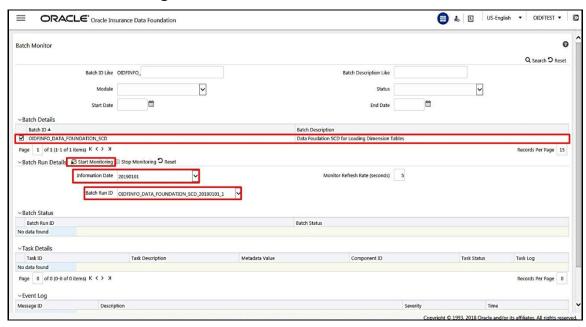
The Batch Monitor page appears on the right hand side. In the **Batch Details** section, select the Batch ID that was executed during the Execute the SCD batch step i.e., select the <INFODOM>_DATA_FOUNDATION_SCD Batch ID.

3. Select the FIC_MIS Date and Batch Run ID.

In the **Batch Run Details** section, click the **Information Date** box and select the required **FIC_MIS Date**. The SCD batch was executed on this date.

Then click the **Batch Run ID** box and select the required value.

Click the **Start Monitoring** icon.



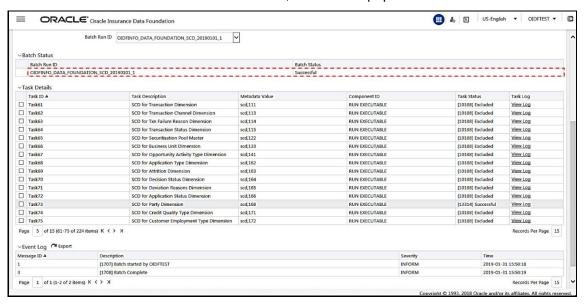
4. Check the Batch Status.

In the **Batch Monitor** page, the **Batch Status**, **Task Details**, and **Event Log** sections appear in addition to the existing details.

The types of Status messages are:

- Not Started
- Ongoing
- Failure
- Successful

When a Batch Status is indicated as Successful, valid data is populated in the Dimension table.



6.2.4.4 Verify Log Files and Check Error Messages

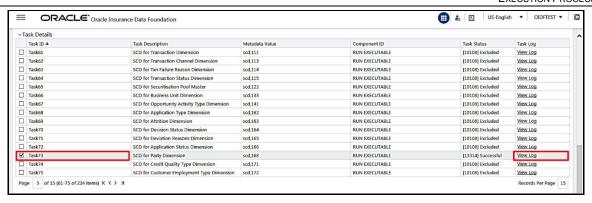
Use one of two methods to access the SCD batch execution log files in order to view the complete log generated for the SCD batch execution.

- View and download the log files from the application UI.
- View log files in the application server.

6.2.4.4.1 View and Download the Log Files from the Application UI

To view and download the log files from the application UI:

1. In the Task Details section, select the task that was executed and click View Log.



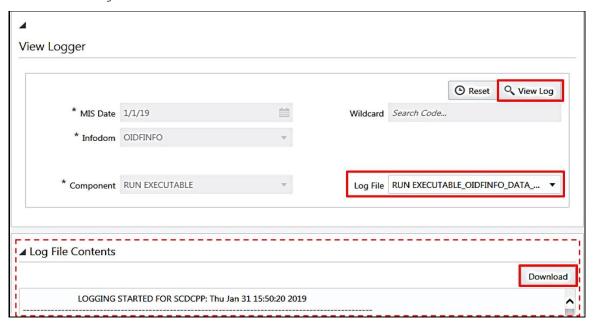
2. Select and view the log file:

The View Logger pop-window appears.

In the **Log File** box, select the required file, and then click **View Log**. The complete log file content appears in the **Log File Contents** section.

Two types of log files are generated:

- SCDCPP.log
- FICGEN.log



3. To download a copy of the log file content to the system, click **Download**.

6.2.4.4.2 View Log Files in the Application Server

To view the execution log file on the application server:

• Go to the path ftpshare/logs/<Run_Date>/<infodom>/RUN_EXECUTABLE.

NOTE

For comprehensive information on the configuration and execution of a batch, refer to the <u>Oracle Financial Services Analytical Applications</u> Infrastructure User Guide.

6.2.4.4.3 Check the Error Messages

To check the error messages:

• Open the log file present in the ftpshare/logs/<Run_Date>/<infodom>/RUN_EXECUTABLE folder for Dimension tables.

6.2.4.5 Post SCD Process

When the SCD process is complete, individual numeric Surrogate Keys are generated for each identifier associated with that Dimension table. This SKey is unique within each Dimension table. The SKeys of the Dimension table are used to structure the resulting tables (Fact tables) for populating the data.

The Dimension table is joined with the Reporting or Processing tables.

NOTE

To access the list of all Stage master tables, see the SYS_TBL_MASTER table.

To check the mapping from a Stage table column to Dimension table column, see the SYS_STG_JOIN_MASTER table using Map Reference Number.

For more information about the Dimension table loading process, see the chapter <u>About Dimension Loading Process</u>.

6.2.5 Loading Key Dimensions using AMHM

To load key Dimensions using AMHM (Attributes, Members and Hierarchy Management), refer to the Dimension Management chapter in <u>Oracle Financial Services Analytical Applications Infrastructure 7.3 User Guide</u> and Dimension Load Procedure section in <u>Oracle Financial Services Analytical Applications Data Model Utilities 7.1 / 7.2 User Guide</u>.

6.2.6 Table to Table (T2T) Loading Process

T2T batch execution process is used to load data into the Result tables.

NOTE

If you are following this T2T Process after the first ever application installation or after the upgrade installation, then first perform steps in these procedures:

- Prerequisites for the Execution Processes
- Execute the SCD_Batch_of_the_DIM_ACCOUNT table
- Execute the SCD_Batch_of_the_DIM_POLICY table

Execute the <INFODOM> DATA_FOUNDATION_SCD batch for the required Dimension table

To access the Run Name/Batch Name, and their order of execution, see the latest version of OIDF Run Chart.

For information about loading multiple load runs, see the chapter <u>Loading</u> Multiple Load Runs in OFSAA.

To load data into the Result tables using the T2T loading process:

- 1. Prerequisites for loading T2T.
- 2. Set the Run Parameters.
- 3. Save the Run Parameters.
- 4. Execute the Batch for T2T.
- 5. Check the Batch Execution Status of T2T.
- 6. Verify T2T Log Files and Check Error Messages.

6.2.6.1 Prerequisites for Loading T2T

To Resave hierarchies:

- **1.** Navigate to the *Save Metadata* page.
- **2.** To load values for the **Reporting Currency** parameter and the **Legal Entity** parameter (in the steps Set Run Default Parameters and Set Run Execution Parameters), save the following hierarchies:
 - Legal Entity Code for Run (HOIDF001)
 - Reporting Currency Code for Run (HOIDF002)
 - Legal Entity Hierarchy for Run (HOIDF003)
 - User Group Hierarchy (H GROUP)

6.2.6.2 Set the Run Parameters

In the *Run Management* page, T2T Run parameters are setup. After creating the Run parameters, T2T batch can be executed either in the **Run Management** section or in the **Batch Executio**n section.

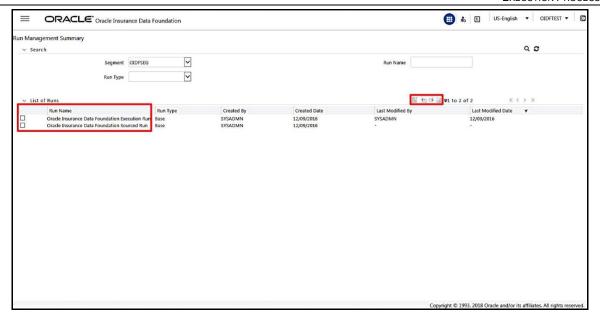
NOTE

Run Management feature is used to execute Run with parameters during the T2T process. OIDF Run consists only of T2Ts and a DT. For detailed information about the Run Management, see the chapter About Executing Run through Run Management.

To set Run parameters for a T2T batch:

1. Navigate to the *Run Management Summary* page:

Click **Oracle Insurance Data Foundation > Run Management > Run Management**. The **Run Management Summary** page appears.



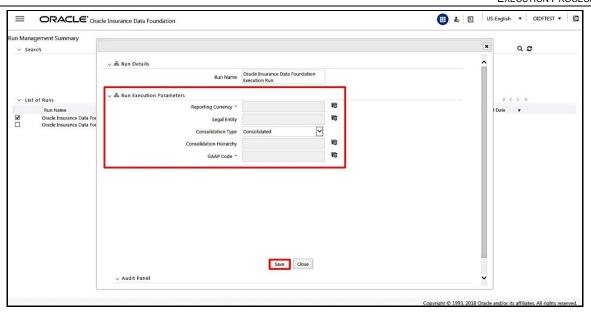
2. Select the Run Name.

In the **List of Runs** section, select the required **Run Name**. Select either **Oracle Insurance Data Foundation Execution Run** or **Oracle Insurance Data Foundation Sourced Run**.

- 3. OIDF application supports two types of Run processes.
 - Oracle Insurance Data Foundation Execution Run
 For data movement in Run enabled tables, this Run can be executed any number of times per day with each unique Run SKey.
 - Oracle Insurance Data Foundation Sourced Run
 For data movement from Stage tables to Result tables, this Run can be executed once per day, where the Result tables do not consist of Run SKey.
- 4. Set Run Default Parameters.

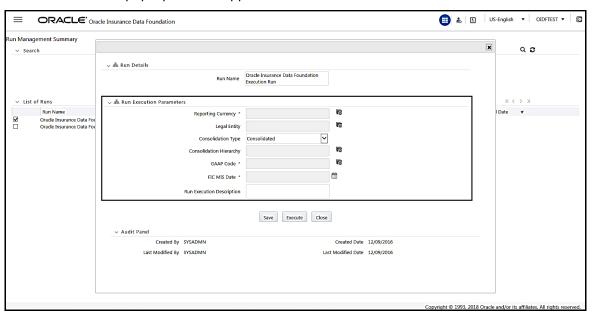
Click the **Run Default Parameters** icon. A pop-up window appears. Select required values for the following and click **Save**.

- Reporting Currency
- Legal Entity
- Consolidation Type
- Consolidation Hierarchy
- GAAP Code



5. Set Run Execution Parameters.

In the *Run Management Summary* page, for the selected **Run Name**, click the **Run Execution Parameters** icon. A pop-up window appears.



6. Select the FIC_MIS date.

The values for the fields **Reporting Currency**, **Legal Entity**, **Consolidation Type**, **Consolidation Hierarchy**, and **GAAP Code** are populated in the earlier step.

Select the required Run date using the **FIC MIS Date** calendar icon.

Type a description in the **Run Execution Description** field. Use this is the description in the *Batch Execution* page to search for required batch.

Save the Run parameters in the next procedure.

6.2.6.3 Save the Run Parameters

After configuring the required parameters, save the Run parameters.

To save the Run parameters:

- 1. In the Run Management Summary page pop-up window, click Save.
- **2.** A batch is created consisting of all the defined **Run Execution Parameters**.

6.2.6.4 Execute the Batch for T2T

After saving the Run parameters, execute the batch in the *Run Management Summary* page pop-up window or in the *Batch Execution* window.

6.2.6.4.1 Execute the Batch for T2T in Run Management Summary

To execute the batch for T2T in the *Run Management Summary* page:

- 1. In the Run Management Summary page pop-up window, click **Execute**.
- **2.** A batch consisting of all the defined Run execution parameters is created and executed immediately.
- **3.** Check the Status of the executed Run in the Batch Monitor page or in the Run Execution Summary page. For detailed information, see <u>Check the Batch Execution Status of T2T</u>.

NOTE

When executing Run through Run Management, Run Skey auto-generates and stamps against each record. The DIM_RUN table stores Run SKey.

- 4. Make a note of the Run ID and Batch ID.
- 5. To verify the T2T log files, see Verify T2T Log Files and Check Error Messages.

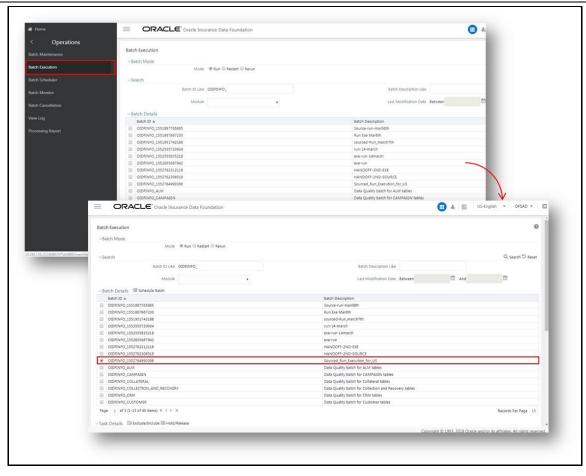
6.2.6.4.2 Execute the Batch for T2T in Batch Execution

To execute the batch for T2T in the *Batch Execution* page.

- **1.** Navigate to the *Batch Execution* page and select the required Batch ID:
 - <INFODOM> EXE RUN for the Result table that consists of Run SKey.
 - <INFODOM> SOURCED RUN for the Result table that does not consist of Run SKey.

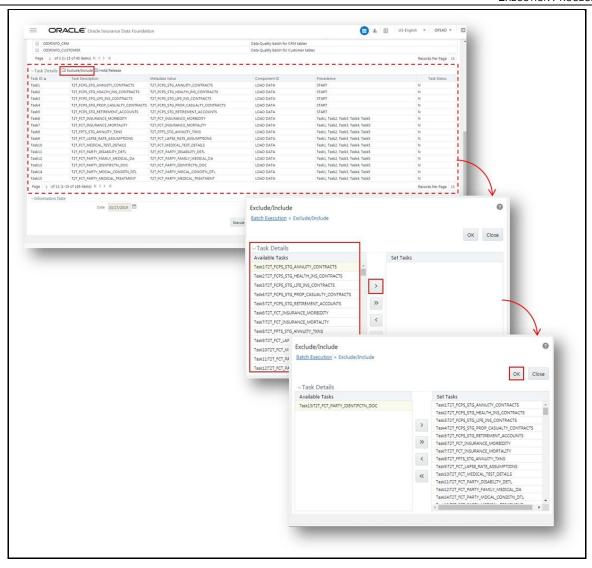
NOTE

For a detailed procedure, see **Execute the SCD batch**.



2. Exclude/Include tasks from/into the T2T batch.

A summary of the steps is shown in the following screenshots. For a detailed procedure, see <u>Exclude/Include tasks from/into the SCD batch</u>.



3. Select the **FIC_MIS** date. To execute the T2T batch, click **Execute Batch**.

NOTE

For detailed steps, see:

- 1. Select the FIC_MIS date
- 2. Execute the SCD batch
- 3. Confirm the SCD batch execution

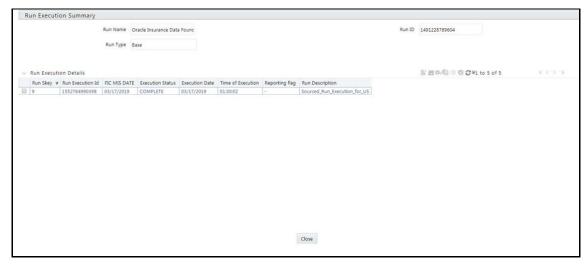


6.2.6.5 Check the Batch Execution Status of T2T

6.2.6.5.1 Check the Batch Execution Details for T2T in Run Execution Summary

To check the batch execution details for T2T that was executed in the Run Management Summary page:

- 1. Navigate to the Run Management Summary page.
- 2. Click the Run Execution Summary icon.
- **3.** The **Run Execution Summary** pop-up window appears. This section lists data related to Run SKey, Run Execution ID, FIC_MIS_DATE, Execution Status, Execution Date, Time of Execution, Reporting Flag, and Run Description parameters.



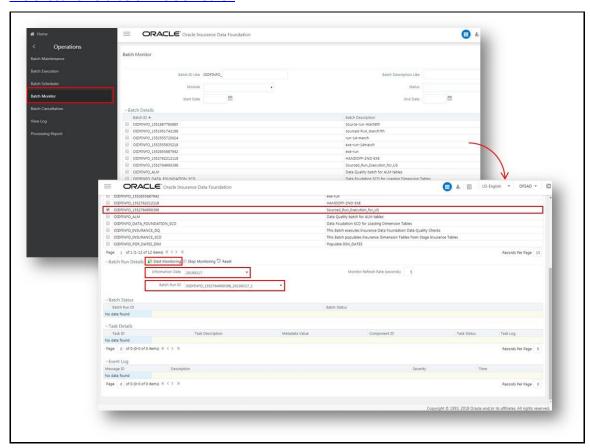
6.2.6.5.2 Check the Batch Execution Details for T2T in Batch Monitor

To check the batch execution details for T2T that was executed in the Batch Execution page:

1. Navigate to the *Batch Monitor* page and select the required Batch ID:

- <INFODOM> EXE RUN for Result table that consists of Run SKey.
- <INFODOM> SOURCED RUN for Result table that does not consist of Run SKey.
- 2. Select the required **Information Date**, **Batch Run ID**, and click the **Start Monitoring** icon.

A summary of the steps is shown in the following screenshots. For a detailed procedure, see <u>Check the execution status of the SCD batch</u>.

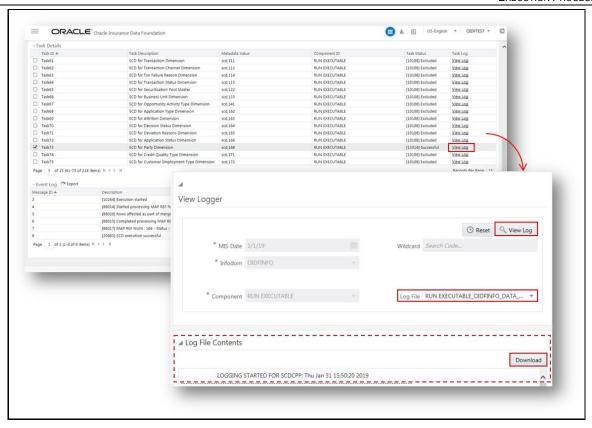


6.2.6.6 Verify T2T Log Files and Check Error Messages

A summary of the steps is shown in the following screenshots.

Two types of log files are generated:

- T2T.log
- T2TCPP.log



- To access the execution log file on the application server:
 Go to the directory ftpshare/logs/<Run Date>/<infodom>/LOAD DATA.
- To check the error messages:
 See the log file present in the ftpshare/logs/<Run_Date>/<infodom>/LOAD DATA folder for T2T.

6.2.6.7 Post T2T Process

When the T2T process is complete, data is populated in the Result tables.

NOTE

AAI_DMT_MAPPING_DETAILS table contains all the Stage, Dimension, and Fact tables. This table contains details about what source table.column level mapping must be done to the result table.column.

AAI_DMT_DEF_SOURCE_ENTITY table contains all the Expressions.

AAI_DMT_DEFINITION table contains all the Join conditions.

Each Join query must contain SKey. The join between a Dimension table and Fact table is based on the SKey.

7 Time Dimension Transformation

This chapter provides information about populating Time Dimension Transformation in the Data Foundation application and step-by-step instructions to use this section.

Business data commonly represents information as of a point in time (for example, a balance as of a point in time) or as of a particular span of time (for example, income for the month of March). The rollup of a particular balance depending on their nature could be a simple additive rollup wherein the child member balances are added up to arrive at the parent node balance (for example, Ending Balance) or non additive rollups wherein a node formula is used to specify how to rollup the child member balances (for example, 3 month rolling average).

This chapter includes the following topics:

- Overview of Time Dimension Transformation
- Prerequisites
- <u>Tables Used by the Time Dimension Population Transformation</u>
- Populating the Time Dimension Transformation
- Checking the Batch Execution Status and Verifying the Log Files

7.1 Overview of Time Dimension Transformation

The Time dimension population transformation is used to populate the DIM_DATES table with values between two dates specified by the user.

The database components, used by the transformations are:

- 1. Database function FN_DIM_DATES
- **2.** Database procedure PROC_DIM_DATES_POPULATION that is called by the function FN_DIM_DATES mentioned earlier.

7.2 Prerequisites

The following are the prerequisites for Time dimension population.

- 1. All the post install steps mentioned in the <u>OFS Analytical Applications Infrastructure User Guide</u> and the <u>Oracle Insurance Data Foundation Installation Guide</u> must be completed successfully.
- 2. Application User must be mapped to a role that has seeded batch execution function (BATPRO).
- 3. Before executing a Batch, check if the following services are running on the application server:
 - Iccserver
 - Router
 - AM Server
 - Message Server
 - OLAP Server

- **4.** For more information on how to check if the services are up and on and how to start the services if you find them not running, refer to Oracle Financial Services Analytical Applications Infrastructure User Guide.
- **5.** Batches will have to be created for executing the function. For more details, refer to section How to Define a Batch.

7.3 Tables Used by the Time Dimension Transformation

For more details on viewing the structure of earlier tables, refer to Oracle Financial Services Analytical Applications Data Model Data Dictionary or the OIDF Erwin Data Model.

7.4 Populating the Time Dimension Transformation

You can execute the function from the Operations (formerly Information Command Center (ICC) framework) module of OFSAAI.

This component for OIDF 8.0.9.0.0 has been seeded with the Batch ID <INFODOM>_DATA_FOUNDATION_SCD, which can be executed from Batch Execution section of OFSAAI. In the Parameter List, enter the Start Date and End Date. For example: '19940101', '19941231'.

NOTE

You can load DIM_DATES for a fiscal year for ONE jurisdiction at a time. However, if the dates are populating incorrectly for the selected Jurisdiction, you should revisit the values entered in the DIM_FINANCIAL_YEARS TABLE and then repopulate the DIM_DATES.

You can also define a new Batch and an underlying Task definition from the Batch Maintenance window of OFSAAI. For more information on defining a new Batch, refer to section How to Define a Batch.

To define a new task for a Batch definition:

- 1. Select the check box adjacent to the newly created Batch Name in the Batch Maintenance window.
- 2. Click Add (+) button from the Task Details grid. The Task Definition window is displayed.
- **3.** Enter the Task ID and Description.
- **4.** Select Transform Data component from the drop down list.
- **5.** Select the following from the Dynamic Parameters list:
 - **a.** Datastore Type Select the appropriate datastore type from the list.
 - **b.** Datastore Name Select the appropriate datastore name from the list.
 - c. IP address Select the IP address from the list.
 - **d.** Rule Name Select fn_DimDates from the drop down list of available transformations. (This is a seeded Data Transformation which is installed as part of the OIDF solution installer. If you don't see this in the list, contact Oracle support)
 - e. Parameter List Enter the Start Date and End Date.

- Start Date This is the starting date, from which the Transformation will populate DIM_DATES table. This date should be specified in 'YYYYMMDD' format.
- For example, '20081131'.
- End Date This is the end date, to which the Transformation will populate DIM_DATES table. This date should also be specified in 'YYYYMMDD' format.

For example, '20091231'.

- **6.** Click Save. The Task definition is saved for the selected Batch.
- **7.** Execute the batch.

You can execute a Batch definition from the Batch Execution section of OFSAAI Operations module. The function can also be executed directly on the database through SQLPLUS Details are:

Function Name: FN_DIM_DATES

Parameters: P_BATCH_RUN_ID, P_AS_OF_DATE, P_ST_DT, and P_ED_DT Sample Parameter Values: 'Batch1', '20091231', '20081131', and '20091231'

NOTE

This DT should be executed for each year for which data is present in the source table.

7.5 Checking the Batch Execution Status and Verifying Log Files

To check the SCD batch execution status of Time Dimension Transformation, follow the procedure Check the Execution Status of the SCD Batch.

To verify log files, and check the error messages (if any), follow the procedure <u>Verify Log Files and Check Error Messages</u>.

8 Loading Multiple Load Runs in OFSAA

This chapter provides information about Loading Multiple Load Runs in OFSAA in the Oracle Insurance Data Foundation application and step-by-step instructions to use this section.

This chapter includes the following topics:

- Overview
- Objective
- Design Details
- Implementation
- Loading OFSAA Staging Tables
- Post Stage Load Process
- Loading data into OFSAA Results Tables from Staging Tables

8.1 Overview

Multiple load run enables data to be loaded multiple times during the day for staggered processing of data by analytical applications. The degree of complexity of data required by analytical apps vary from one to the other, the load run ensures that the customer can process the data as soon as it is ready for an app to uptake. This reduces the turnaround time to reporting, by avoiding the 'end of day' type of processing of information as part of the original design.

NOTE

As a work around, currently you can use the following methods to load the results table using different Load Run IDs.

8.2 Objective

To optimize the end-to-end data flow and the need for intra-day reporting, institutions could load intra-day records into OFSAA. Current application can only handle one set of records per date (incremental loads are not possible).

Users must adjust and reload data (either full or partial) for the current date.

Users must adjust and reload data (either full or partial) for any of past dates.

Support incremental consumption of data from staging area.

NOTE

The load run is enabled only in the model and is '0' by default in the model. This does not impact data previously available. The enhancements to the OFSAA batch and run framework to cover all the use cases will be taken in a future release.

OIDF 8.0.9 staging model provides a flexibility to load multiple snapshots of the data in the staging tables (Product Processors). A column named n_load_run_id is introduced as part of the primary key of the product processor tables to enable this feature. However, the full fledged functionality to load and manage these snapshots will be part of the platform release at a later stage.

To leverage this design in 8.0.9 release, the below mentioned changes should be performed as a workaround to load multiple snapshot of data from staging to results tables such as Fact Common Account Summary.

For Loading multiple snapshots of data for the same FIC_MIS_DATE, the existing T2T's should be executed through the Run Rule Framework. Additionally, the load should be filtered accordingly for each load run via the run filter.

To execute this run:

- 1. Navigate to \$FIC_HOME/ficweb/webroot/conf
- 2. Edit the file: excludeURLList.cfg
- 3. Add the following entry at the end of the file: [SQLIA]./pr2

NOTE

Ensure there is no blank line in the file.

8.3 Design Details

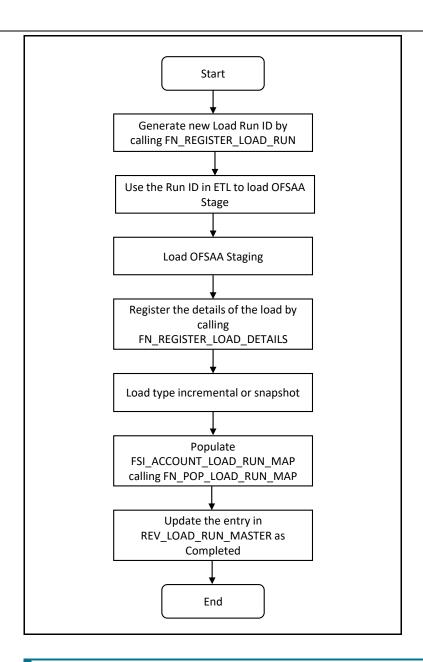
Loading of data into OFSAA can be in any of the following ways:

- ETL Tool
- OFSAA F2T
- OFSAA T2T
- OFSAA Excel upload
- OFSAA DIH

OFSAA data model includes load run identifier as part of the primary key for a set of staging tables. This enables data to be stored for multiple load runs for any date. OFSAA data model also has a table to maintain master information about load run and can be used for identifying/filtering load run during run execution within OFSAA.

8.4 Implementation

Before loading data into the staging table, you should generate a Load Run Identifier to stamp the records from the source. These records could be a complete snapshot or could be partial/incremental data too. This load run identifier can be generated by calling the function in the OFSAA atomic schema named FN_REGISTER_LOAD_RUN. The function expects some input parameters and returns a unique load run identifier back to the calling program.



NOTE

Column N_LOAD_RUN_ID should always be populated only by the value returned by FN_REGISTER_LOAD_RUN.

Function: Register Load Run (FN_REGISTER_LOAD_RUN)

Parameters: Batch ID, MIS-Date, Load Run Name, Load Run Purpose, Load Run Type

Parameters	Source of Values	Example Values
Batch ID	Auto generated if you are using OFSAA Framework	OFSOIDFINFO_20150101_1

Parameters	Source of Values	Example Values
MIS-Date	Input from Customer	01/01/2015
Load Run Name	Input from Customer	Daily EOD Load
Load Run Purpose	Input from Customer	BA/BS (Basel Advanced Approach, Basel Standard)
Load Run Type	Input from Customer	B - Base, A - Adjustments, P- Backdated Adjustments

Example:

```
Declare
```

Result number;

Begin

```
Result: = fn_register_load_run
('OFSOIDFINFO 20150101 1','20150101','OIDF LOAD','BA', 'A');
```

End;

The function registers the request in the table name rev_load_run_master and marks load as "In progress". You can use columns LOAD_RUN_NAME and LOAD_PURPOSE as per the requirement.

Column Load Type must have only the permissible value such as:

- "B Base
- "A Adjustments
- "P- Backdated Adjustments

LOAD_ RUN_ID	MIS_ DATE	LOAD_ TYPE	LOAD_ PURPOSE	START_DT_ TIME	LOAD_RUN_ NAME	BATCH_ ID	LOAD_ RUN_ STATUS
1	01-JAN- 15	А	BA	01-JAN-15	OIDF_Load	OFSOIDFI NFO_20150 101_1	In Progress

NOTE

Multiple calls to the procedure can be made to the function for given FIC_MIS_DATE. Each call will return a number which will be unique across the FIC_MIS_DATE/Extraction date. You can use this load identifier to load either one or more staging tables.

8.5 Loading OFSAA Staging Tables

After the load run ID is generated as described above, you can use the same in external ETL process to stamp the records from the source system before them loading either in one or the multiple staging tables of OFSAA Staging area.

Load strategy at a customer site falls across two categories:

- Complete Snapshot
- Incremental Snapshot

8.5.1 Complete Snapshot Load Example

For example, if there are three Loan Contract accounts in an Insurance Company system which is supposed to be loaded into OFSAA Stage Loan Contracts using the Load Run ID = 1 for Basel Standard Approach, the data after loading staging table appears as follows.

FIC_MIS_DATE	V_ACCOUNT_NUMBER	V_GAAP_CODE	N_LOAD_RUN_ID	N_EOP_BAL
01-JAN-15	LOAN1000	USGAAP	1	4066.213
01-JAN-15	LOAN1001	USGAAP	1	34538.905
01-JAN-15	LOAN1002	USGAAP	1	667.357

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NI() I I

After each load, you must run FN_REGISTER_LOAD_DETAILS function mentioned in Post Stage Load Process and Updating Load as Completed which is explained in the following sections.

To enable downstream applications to consume only the latest set of record, you must call another function named FN_POP_LOAD_RUN_MAP. This is mandatory for incremental snapshot load scenario. This function populates an intermediate processing table that keep track of latest incoming record identifier.

Function: Populate Load Run Map

Parameters: Batch ID, MIS Date, Stage Table Name, Load Run ID, Load Run Name

Parameters	Source of Values	Example Values
Batch ID	Auto generated if you are using OFSAA Framework	OFSOIDFINFO_20150101_1
MIS-Date	Input from Customer	01/01/2015
Stage Table Name	Input from Customer	STG_CASA
Load Run ID	Input from Customer	1

Parameters	Source of Values	Example Values
Load Run Name,	Input from Customer	OIDF_Load

Example:

```
Declare
Result number;
Begin
Result: =
fn_pop_load_run_map('OFSOIDFINFO_20150101_1','20150101','STG_CASA',1,'OIDF_LOAD');
END;
```

NOTE

For troubleshooting any errors while making the function calls, refer to fsi_message_log table for more details.

For the example mentioned above, records in FSI_ACCOUNT_LOAD_RUN_MAP table will appear as below:

FIC_MIS_ DATE	V_ACCOUNT_ NUMBER	V_GAAP_ CODE	N_LOAD_RUN_ ID	F_LATEST_LOAD_RUN_ FLAG
1-Jan-15	LOAN1000	USGAAP	1	Υ
1-Jan-15	LOAN1001	USGAAP	1	N
1-Jan-15	LOAN1002	USGAAP	1	N
1-Jan-15	LOAN1001	USGAAP	2	Υ
1-Jan-15	LOAN1002	USGAAP	2	Υ
1-Jan-15	LOAN1000	USGAAP	2	Υ

There may be a requirement to reload a complete snapshot of data in the OFSAA staging again. This could either be to satisfy a intraday reporting requirement, or to load corrected source records in the OFSAA staging table. The earlier design forced users to truncate staging table to accommodate the new set of date. However with the introduction of Load Run identifier concept , you can retain both set of data in the staging area and allow the downstream application choose the correct set for processing. This involves making another call to FN_REGISTER_LOAD_RUN function.

For example in the below table, LOAN1001 and LOAN1002 have some changes since the previous load and will now need be loaded again staging with a different load run identifier. Additionally, strategy is to load the complete snapshot again to staging, all the records from the source such as, both changed and unchanged records will need to stamped with the new load run identifier

STG_LOAN_CONTRACTS after load appears as follows.

FIC_MIS_ DATE	V_ACCOUNT_ NUMBER	V_GAAP_ CODE	N_LOAD_RUN_ ID	N_EOP_BAL
01-JAN-15	LOAN1000	USGAAP	1	4066.213
01-JAN-15	LOAN1001	USGAAP	1	34538.905
01-JAN-15	LOAN1002	USGAAP	1	667.357
01-JAN-15	LOAN1000	USGAAP	2	4066.213
01-JAN-15	LOAN1001	USGAAP	2	34540.000
01-JAN-15	LOAN1002	USGAAP	2	670.000

REV_LOAD_RUN_MASTER after second function call appears as follows.

LOAD_ RUN_ID	MIS_DATE	LOAD_ TYPE	LOAD_ PURPOSE	START_DT_ TIME	LOAD_RUN_ NAME	BATCH_ID	LOAD_RUN_ STATUS
1	01-JAN-15	В	ВА	01-JAN-15 13:00 PM	OIDF_Load	OFSOIDF INFO_20 150101_1	Complete
2	01-JAN-15	В	ВА	01-JAN-15 23:00 PM	Loan Corrections	OFSOIDF INFO_20 150101_2	In Progress

8.5.2 Incremental Snapshot Load Example

This scenario is applicable when source may to portions of data at different point in time, or handover only the records changed since the last load. This is contrary to example explained under the Complete snapshot load section.

The same scenario in case of incremental snapshot load appears as follows.

NOTE

Only the changed source records are stamped with the new load run identifier.

FIC_MIS_DA TE	V_ACCOUNT_NUMBE R	V_GAAP_COD E	N_LOAD_RUN_I D	N_EOP_BAL
01-JAN-15	LOAN1000	USGAAP	1	4066.213
01-JAN-15	LOAN1001	USGAAP	1	34538.905
01-JAN-15	LOAN1002	USGAAP	1	667.357
01-JAN-15	LOAN1001	USGAAP	2	34540.000
01-JAN-15	LOAN1002	USGAAP	2	670.000

LOADING OFSAA STAGING TABLES

NOTE

After each load you need to run fn_register_load_details function mentioned in Post Stage Load Process and Updating Load as Completed which is explained in the following sections.

In order to enable downstream applications to consume only the latest set of record, you need to call another function named fn_pop_load_run_map. This is mandatory in case of incremental snapshot load scenario. This function populates a intermediate processing table that keep track of latest incoming record identifier.

Function - Populate Load Run Map

Parameters - Batch ID, MIS Date, Stage Table Name, Load Run ID, Load Run Name

Parameters	Source of Values	Example Values
Batch ID	Auto generated if you are using OFSAA Framework	OFSOIDFINFO_20150101_1
MIS-Date	Input from Customer	01/01/2015
Stage Table Name	Input from Customer	STG_CASA
Load Run ID	Input from Customer	1
Load Run Name,	Input from Customer	OIDF_Load

Example:

```
Declare
Result number;
Begin
Result: =
fn_pop_load_run_map('OFSOIDFINFO_20150101_1','20150101','STG_CASA',1,'OIDF
_LOAD');
END;
```

NOTE

For troubleshooting any errors while making the function calls, refer to fsi_message_log table for more details.

For the example mentioned above, records in FSI_ACCOUNT_LOAD_RUN_MAP table appears as follows.

FIC_MIS_ DATE	V_ACCOUNT_ NUMBER	V_GAAP_CODE	N_LOAD_RUN_ ID	F_LATEST_LOAD_RUN_ FLAG
1-Jan-15	LOAN1000	USGAAP	1	Υ
1-Jan-15	LOAN1001	USGAAP	1	N
1-Jan-15	LOAN1002	USGAAP	1	N
1-Jan-15	LOAN1001	USGAAP	2	Υ
1-Jan-15	LOAN1002	USGAAP	2	Υ

8.5.3 Post Stage Load Process

Once you load the OFSAA Stage tables successfully using the load run ID which is generated from Load Run Map function, you need to perform certain post load processes in order to complete the loading.

8.5.3.1 Register Load Run Details

Once you load the OFSAA Stage tables successfully using the load run ID which is generated from Load Run Map function, you need to register the load run details by calling the following function with the load type whether it was incremental or full snap shot.

8.5.3.2 Function - Register Load Run Details

Parameters - batch ID, mis-date, load run name, load run ID, stage table name, load type

Parameters	Source of Values	Example Values
Batch ID	Auto generated if you are using OFSAA Framework	OFSOIDFINFO_20150101_1
MIS-Date	Input from Customer	01/01/2015
Stage Table Name	Input from Customer	STG_CASA
Load_Run_ld	Input from Customer	1
Load Run Name,	Input from Customer	OIDF_Load
Load Type	Input from Customer	S - Full Snap Shot I - Incremental

Example:

```
Declare
Result number; Begin
Result: =
fn_register_load_details('OFSOIDFINFO_20150101_1','20150101',
'STG_CASA',1,'OIDF_LOAD', 'I');
END;
```

This function populates a table named rev_load_run_details. The columns load type can have only 2 values, such as:

- "S Complete/Full Snapshot
- "I Incremental Snapshot

LOAD_RUN_ID	MIS_DATE	STAGE_TABLE_NAME	LOAD_TYPE
1	1-Jan-15	STG_LOAN_CONTRACTS	_

8.5.4 Updating Load as Completed

Once you complete these steps, update the status of the record inside rev_load_run_master as Completed.

```
UPDATE rev_load_run_master

SET     LOAD_RUN_STATUS = 'Completed' WHERE pMis_Date = '01-Jan-15'

AND     pLoad Run Name = 'OIDF LOAD' and LOAD RUN ID = 1;
```

8.6 Loading data into OFSAA Results Tables from Staging Tables

OFSAAI does not support load run versioning for Data Movement from Stage to Results using Batch/Run Framework. The same feature is expected as an enhancement in future release of AAI.

As a work around, currently you can use the following methods to load the results table using different Load Run IDs.

8.6.1 Complete Snapshot Load Scenario

To enable the Data Load into Results table from staging using the Load Run concept in case of Full Snap Shot, you can use the following Task Level Parameter in the T2T Filter condition and can pass the load run ID to be passed in Batch Framework or Run Framework.

For example: FCPS T2T for Stage Loan Contracts

- Modify Filter Condition inside T2T:
 - Filter Condition to be used in T2T: The highlighted condition required to be added in T2T

```
Filter : UPPER(STG_ANNUITY_CONTRACTS.v_gaap_code) = 'USGAAP' AND
STG_ANNUITY_CONTRACTS.fic_mis_date=$MISDATE AND
STG_ANNUITY_CONTRACTS.N_LOAD_RUN_ID='[LOADRUN]'
```

- Modify the Corresponding Batch Task Each Time with Load Run Idxxx
 - a. Select Batch, Task (T2T_FCPS_STG_ANNUITY_CONTRACTS)
 - b. Click Edit.
 - **c.** Add Highlighted Condition in Default Value and Save (Each Time we need to provide the Load Run ID which are supposed to use. Here in the following example, 1 is used.)

- d. [DRCY]=USD,[LOADRUN]=1
- **e.** Execute the batch after this change; it will load the Result table with the given Load Run Id Records.
- f. Modify the Corresponding Process Task of a Run Each Time with Load Run Id
- g. Select Process, Click Edit.
- **h.** Choose Components, select the Object (T2T_FCPS_STG_ANNUITY_CONTRACTS) and click Components.
- i. Click the Yellow Drop button near the T2T.
- j. Add the Highlighted Condition with the text, and Save: "DRCY", "USD", "LOADRUN", "1".
- **k.** Fire the Run after this change. It loads the Result table with the given Load Run ID Records.

8.6.2 Incremental Load Scenario

To enable the Data Load into Results table from staging using the Load Run concept in case of incremental load, you can use the following T2T join change concept in the T2T ANSI join and can use the Batch Framework or Run Framework to execute the same.

For example, FCPS T2T for Stage Annuity Contracts:

Modify Join Condition inside T2T:

Join Condition to be added in all relevant T2T

For example, STG_ANNUITY_CONTRACTS T2T join

```
INNER JOIN FSI_ACCOUNT_LOAD_RUN_MAP

ON FSI_ACCOUNT_LOAD_RUN_MAP.V_ACCOUNT_NUMBER =

STG_CASA.V_ACCOUNT_NUMBER

AND FSI_ACCOUNT_LOAD_RUN_MAP.N_LOAD_RUN_ID = STG_CASA.N_LOAD_RUN_ID AND
FSI_ACCOUNT_LOAD_RUN_MAP.FIC_MIS_DATE = STG_CASA.FIC_MIS_DATE AND
FSI_ACCOUNT_LOAD_RUN_MAP.V_GAAP_CODE = STG_CASA.V_GAAP_CODE AND
FSI_ACCOUNT_LOAD_RUN_MAP.V_GAAP_CODE = STG_CASA.V_GAAP_CODE AND
FSI_ACCOUNT_LOAD_RUN_MAP.F_LATEST_LOAD_RUN_FLAG = 'Y'
```

Execute the batch/fire the Run after the above step.

9 About Dimension Loading Process

This chapter provides information about Dimension Loading Process in the Data Foundation application.

This chapter includes the following topics:

- About the SCD Component
 - Type 1 SCDs Overwriting
 - Type 2 SCDs Creating another Dimension Record
 - Type 3 SCDs Creating a Current Value Field
- Populating Data in Dimension Table
 - Prerequisites
 - Tables Used by the SCD Component
 - Loading Dimension Tables
 - Seeded Data
 - Loading Policy Tables through Insurance SCD
 - Loading Dimension Tables through SCD
 - Loading Key Dimensions using AMHM and Hierarchy Flattening
 - Loading Data from STG_INTF Tables to DIM_INTF Tables
 - Executing the Loading Procedure using Batch Framework
 - Executing The Hierarchy Flattening Procedure using Batch Framework
 - Checking the SCD Batch Execution Status
- Supplementary Information for Dimension Loading Process
 - Improving SCD Performance
 - Handling Multiple GAAP Codes for the Same Account Number for the Same MIS Date in SCD
 - Handling Multiple GAAP Codes for the Same Account Number for the Same MIS Date in the Function

9.1 About the SCD Component

A Slowly Changing Dimension (SCD) is a dimension that stores and manages both current and historical data over time in a data warehouse. SCDs are dimensions that contain data that changes slowly, rather than changing on a time-based, regular schedule. SCD is considered and implemented as one of the most critical ETL (Extract Transform Load) task in tracking the history of dimension records. There are three types of SCDs and you can use Warehouse Builder to define, deploy, and load all three types of SCDs. They are:

- Type 1 SCDs Overwriting
- Type 2 SCDs Creating another Dimension Record
- Type 3 SCDs Creating a Current Value Field

9.1.1 Type 1 SCDs - Overwriting

The Type 1 SCD overwrites old data with new data, and therefore does not track historical data. This is useful for making changes to dimension data. This is the default type of dimension that is created. You do not need to specify any additional information to create a Type 1 SCD.

In this example, N_PRODUCT_SKEY is the surrogate key column which is a unique key for each record in the dimension table. V_PRODUCT_NAME is the product name. D_START_DATE indicates the date from which this product record is valid.

N_PRODUCT_ SK EY	V_PRODUCT_ NAME	D_START_DATE	D_END_DAT E	F_LATEST_RECORD_ INDICATOR
1	PL	5/31/2010	12/31/9999	Υ

D_END_DATE indicates the date until which this product record is valid.

F_LATEST_RECORD_INDICATOR with value 'Y', which indicates that this is the latest record in the dimension table for this product and 'N' indicates it is not. If the V_PRODUCT_NAME column is set as a Type 1 SCD column and if there is a change in the product name to 'Personal Loan' from 'PL' in the above example; in the next processing period, when SCD is executed for the new processing period, the record in the above example changes to:

N_PRODUCT_ SK EY	V_PRODUCT_ NAME	D_START_DATE	D_END_DAT E	F_LATEST_RECORD_ INDICATOR
1	Personal Loan	6/30/2010	12/31/9999	Υ

9.1.2 Type 2 SCDs - Creating another Dimension Record

The Type 2 method tracks historical data by creating multiple records for a given natural key in the dimensional tables with separate surrogate keys. With Type 2, the historical changes in dimensional data are preserved.

Therefore, a Type 2 SCD retains the full history of values. When the value of a chosen attribute changes, the current record is closed. A new record is created with the changed data values and this new record becomes the current record. Each record contains the effective time and expiration time to identify the time period between which the record was active.

In the above example for the change in product name from 'PL' to 'Personal Loan' if history has to be preserved, then the V_PRODUCT_NAME column has to be set as Type 2 when SCD is processed for the processing period and the change inserts a new record as shown in the following example:

N_PRODUCT_ SK EY	V_PRODUCT_ NAME	D_START_DATE	D_END_DAT E	F_LATEST_RECORD_ INDICATOR
1	PL	5/31/2010	12/31/9999	N

N_PRODUCT_ SK EY	V_PRODUCT_ NAME	D_START_DATE	D_END_DAT E	F_LATEST_RECORD_ INDICATOR
2	Personal Loan	6/30/2010	12/31/9999	Υ

A new record is inserted into the product dimension table with the new product name. The latest record indicator for this is set as 'Y', indicating this is the latest record for the personal loan product. The same flag for the earlier record is set to 'N'.

9.1.3 Type 3 SCDs - Creating a Current Value Field

A Type 3 SCD stores two versions of values for certain selected level attributes. Each record stores the previous value and the current value of the selected attribute.

When the value of any of the selected attributes changes, the current value is stored as the old value and the new value becomes the current value.

For more information on SCDs, see:

- Oracle Data Integrator Best Practices for a Data Warehouse at http://www.oracle.com/technetwork/middleware/data-integrator/overview/odi-bestpractices-datawarehouse-whi-129686.pdf
- Oracle® Warehouse Builder Data Modeling, ETL, and Data Quality Guide at http://docs.oracle.com/cd/E11882_01/owb.112/e10935.pdf
 http://docs.oracle.com/cd/E14072_01/owb.112/e10935.pdf

Additional online sources include:

- http://en.wikipedia.org/wiki/Slowly_changing_dimension
- http://www.oracle.com/webfolder/technetwork/tutorials/obe/db/10g/r2/owb/owb10gr2_gs/owb/lesson3/slowlychangingdime_nsions.htm
- http://www.oraclebidwh.com/2008/11/slowly-changing-dimension-scd/
- http://www.informationweek.com/news/software/bi/showArticle.jhtml?articleID=204800027&pgn o=1
- http://www.informationweek.com/news/software/bi/showArticle.jhtml?articleID=59301280

An excellent published resource that covers SCD in detail is "The Data Warehouse Toolkit: The Complete Guide to Dimensional Modeling" by Ralph Kimball and Margy Ross.

The SCDs used in Data Foundation solutions are listed in the <u>Oracle Insurance Data Foundation - SCD</u> <u>Metadata</u> spreadsheet under Technical Metadata for OIDF 8.0.9.0.0.

9.2 Populating Data in Dimension Table

Data Foundation solutions use the SCD component to handle dimensional data changes. For more details about the SCD component, see the chapter <u>Slowly Changing Dimension (SCD)</u>. For SCD procedure, see <u>Execute SCD Batch</u>.

9.2.1 Prerequisites

The SCD executable should be present under <installation home>/ficdb/bin directory. The file name is scd.

The user executing the SCD component should have execute rights on the file mentioned as prerequisite in Executing the SCD Component.

The setup tables accessed by SCD component are SYS_TBL_MASTER and SYS_STG_JOIN_MASTER.

SYS_TBL_MASTER stores the information like which is the source stage table and the target dimension tables. The source sometimes can be the database views, which can be simple or a complex view.

SYS_STG_JOIN_MASTER stores the information like which source column is mapped to which column of a target dimension table. It makes use of data base sequence to populate into surrogate key columns of dimension tables.

9.2.2 Tables Used by the SCD Component

The database tables used by the SCD component are:

- SYS_TBL_MASTER
- SYS_STG_JOIN_MASTER
- DIM <dimensionname> V

9.2.2.1 About SYS_TBL_MASTER Table

The solution installer populates one row per dimension for the seeded dimensions in the SYS_TBL_MASTER table.

Column Name	Data Type	Column Description
MAP_REF_NUM	NUMBER(3) NOT NULL	The Mapping Reference Number for this unique mapping of a Source to a Dimension Table.
TBL_NM	VARCHAR2(30) NOT NULL	Dimension Table Name.
STG_TBL_NM	VARCHAR2(30) NOT NULL	Staging Table Name.
SRC_PRTY	SRC_PRTY NUMBER(2) NULL	Priority of the Source when multiple sources are mapped to the same target.
SRC_PROC_SEQ	NUMBER(2) NOT NULL	The sequence in which the various sources for the DIMENSION is taken up for processing.
SRC_TYP	VARCHAR2(30) NULL	The type of the Source for a Dimension, that is, Transaction Or Master Source.
DT_OFFSET	NUMBER(2) NULL	The offset for calculating the Start Date based on the Functional Requirements Document (FRD).

Column Name	Data Type	Column Description
SRC_KEY	NUMBER(3) NULL	

Sample data:

This is the row put in by the solution installer for the Line of Business dimension.

Field Name	Value
MAP_REF_NUM	6
TBL_NM	DIM_LOB
STG_TBL_NM	STG_LOB_MASTER
SRC_PRTY	
SRC_PROC_SEQ	23
SRC_TYP	MASTER
DT_OFFSET	0
SRC_KEY	

NOTE

For any new dimension added, a row will have to be inserted to this table manually.

9.2.2.2 About SYS_STG_JOIN_MASTER Table

The solution installer will populate the SYS_STG_JOIN_MASTER table for the seeded dimensions.

Column Name	Data Type	Column Description
MAP_REF_NUM	NUMBER(3) NOT NULL	The Mapping Reference Number for this unique mapping of a Source to a Dimension Table.
COL_NM	VARCHAR2(30) NOT NULL	Name of the column in the Dimension Table.
COL_TYP	VARCHAR2(30) NOT NULL	Type of column. The possible values are given in the following paragraph.
STG_COL_NM	VARCHAR2(60) NULL	Name of the column in the Staging Table.
SCD_TYP_ID	NUMBER(3) NULL	SCD type for the column.

Column Name	Data Type	Column Description
PRTY_LOOKUP_ REQD_FLG	CHAR(1) NULL	Column to determine whether Lookup is required for Priority of Source against the Source Key Column or not.
COL_DATATYPE	VARCHAR2(15) NULL	The list of possible values are VARCHAR, DATE, NUMBER based on the underlying column datatype.
COL_FORMAT	VARCHAR2(15) NULL	Column format.

The possible values for column type (the COL_TYPE column) in SYS_STG_JOIN_MASTER are:

Column Type	Description
PK	Primary Dimension Value (can be multiple for a given "Mapping Reference Number")
SK	Surrogate Key
DA	Dimensional Attribute (can be multiple for a given "Mapping Reference Number")
SD	Start Date
ED	End Date
LRI	Latest Record Indicator (Current Flag)
CSK	Current Surrogate Key
PSK	Previous Surrogate Key 9.SS Source Key
LUD	Last Updated Date / Time
LUB	Last Updated By

Sample Data:

This is the row put in by the solution installer for the Line of Business dimension.

Item	Description
MAP_REF_NUM	6
COL_NM	V_LOB_CODE
COL_TYP	PK
STG_COL_NM	V_LOB_CODE
SCD_TYP_ID	
PRTY_LOOKUP_REQD_FLG	N
COL_DATATYPE	VARCHAR
COL_FORMAT	61

NOTE

For any new dimension added, the column details will have to be inserted to this table manually.

9.2.2.3 About DIM_<dimensionname>_V

The database view which SCD uses as the source.

Example:

DIM_BANDS_V

These views come as part of install for the dimensions seeded with the application.

NOTE

For any new dimension added, a view will have to be created similar to DIM_BANDS_V.

DIM_<dimensionname>: Output table to which SCD writes the dimension data. A sequence must be added for every user-defined dimension.

Example:

9.2.3 Loading Dimension Tables

Load data into the Dimension tables using one of the following suitable processes.

9.2.3.1 Seeded Data

This is an automatic process wherein the Seeded data for Dimensions, which are packaged within the installer, are populated during the installation.

NOTE

To access the Seeded data for Dimensions, see the latest version of <u>OIDF Run</u> <u>Chart</u>.

9.2.3.2 Loading Policy Tables through Insurance SCD

To execute Policy Dimension SCD batch <INFODOM>_INSURANCE_SCD, see <u>Execute the SCD Batch of the DIM_POLICY table</u>.

9.2.3.3 Loading Dimension Tables through Data Foundation SCD

To execute an SCD batch <INFODOM>_DATA_FOUNDATION_SCD for any other Dimension table, see Execute <INFODOM>_DATA_FOUNDATION_SCD batch for the required Dimension table.

NOTE

For a more comprehensive coverage of configuration and execution of a batch, see <u>Oracle Financial Services Analytical Applications Infrastructure User Guide</u>.

9.2.3.4 Loading Key Dimensions using AMHM and Hierarchy Flattening

The Dimension Loader functionality in the Data Foundation application, enables you to load Dimension tables such as DIM_ORG_UNIT, DIM_GL_ACCOUNT, DIM_COMMON_COA, DIM_PRODUCT, and DIM_ORG_STRUCTURE.

For more information, see Dimension Management chapter in <u>Oracle Financial Services Analytical Applications Infrastructure 7.3 User Guide</u> and Dimension Load Procedure section in <u>Oracle Financial Services Analytical Applications Data Model Utilities 7.1 / 7.2 User Guide</u>

9.2.3.5 Loading Data from STG_INTF Tables to DIM_INTF Tables

The following tables are part of Staging Dimension data is stored in the following set of tables:

Item	Description
STG _ <dimension>_B_INTF</dimension>	Stores leaf and node member codes within the dimension.
STG_ <dimension>_TL_INTF</dimension>	Stores names of leaf and node and their translations.
STG_ <dimension>_ATTR_INTF</dimension>	Stores attribute values for the attributes of the dimension.
STG_ <dimension>_HIER_INTF</dimension>	Stores parent-child relationship of members and nodes that are part of hierarchies.
STG_HIERARCHIES_INTF	Stores master information related to hierarchies. Data present in the above set of staging dimension tables are loaded into the below set of dimension tables.
DIM_ <dimension>_ B</dimension>	Stores leaf and node member codes within the dimension.
DIM_ <dimension>_TL</dimension>	Stores names of leaf and node and their translations.
DIM_ <dimension>_ATTR</dimension>	Stores attribute values for the attributes of the dimension.
DIM_ <dimension>_HIER</dimension>	Stores parent-child relationship of members and nodes that are part of hierarchies.
REV_HIERARCHIES	Stores hierarchy related information.
REV_HIERARCHY_LEVELS	Stores levels of the hierarchy.

For more information on viewing the structure of staging tables, see the <u>Oracle Financial Services</u> <u>Analytical Applications Data Model Data Dictionary</u>.

Staging tables are present for all key dimensions that are configured within the OFSAAI framework. The Dimension IDs used for key dimensions are:

Dimension ID	Dimension Table	Staging Tables
1	DIM_ORG_UNIT	STG_ORG_UNIT_**_INTF
2	DIM_GL_ACCOUNT	STG_GL_**_INTF
3	DIM_COMMON_COA	STG_COMMON_COA_**_INTF
4	DIM_PRODUCT	STG_PRODUCTS_**_INTF
5	DIM_ORG_STRUCTURE	STG_LEGAL_ENTITY_**_INTF

9.2.3.6 Executing the Loading Procedure using Batch Framework

The batch for Key Dimension Loader can be executed by executing the task (Task for Loading Data from DRM) present in the seeded batch <infodom>_DATA_FOUNDATION_SCD.

Below are the input parameters:

- pDIMENSIONID: This is the dimension ID.
- pSynchFlag: This parameter is used to identify if a complete synchronization of data between staging and fusion table is required. The default value is 'Y'.

For more details, refer to Dimension Loaders Section, in Chapter - Data Loaders, in the <u>Oracle Financial Services Analytical Applications Data Model Utilities Guide</u>.

9.2.3.7 Executing The Hierarchy Flattening Procedure using Batch Framework

The batch for Dimension Hierarchy flattening can be executed by executing the task (DT for DRM Dimension Hierarchy Flattening) present in the seeded batch <infodom>_DATA_FOUNDATION_SCD.

Below are the input parameters:

- pDIMENSIONID: This is the dimension ID.
- pHierarchyld: Enter the Hierarchy ID. If all the hierarchies belonging to a dimension are to be processed, then provide NULL as the parameter value. Else, provide the System Identifier of the hierarchy that must be transformed.

For more details, refer to Hierarchy Transformation Section, in Chapter 4 Data Loaders, of the <u>Oracle Financial Services Analytical Applications Data Model Utilities Guide</u>.

9.2.4 Checking the SCD Batch Execution Status

To check the SCD batch execution status, see Verify log files and check error messages, if any.

9.3 Supplementary Information for Dimension Loading Process

Following are the supplementary information required for Dimension loading process.

9.3.1 Improving SCD Performance

SCD performance can be improved by providing hints and session alter statements. This requires the presence of the following four columns in SYS_TBL_MASTER:

- merge_hint
- select_hint
- session_enable_statement
- session_disable_statement

These columns are present in the OFSAAI versions 7.3.2.4.0 and above. If these have to be used in OFSAAI versions 7.3.2.2.0 or 7.3.2.3.0, execute the following SQL queries:

```
ALTER TABLE SYS_TBL_MASTER ADD MERGE_HINT VARCHAR2(255)

ALTER TABLE SYS_TBL_MASTER ADD SELECT_HINT VARCHAR2(255)

ALTER TABLE SYS_TBL_MASTER ADD SESSION_ENABLE_STATEMENT VARCHAR2(255)

ALTER TABLE SYS_TBL_MASTER ADD SESSION_DISABLE_STATEMENT VARCHAR2(255)

ALTER TABLE SYS_TBL_MASTER ADD SESSION_DISABLE_STATEMENT VARCHAR2(255)
```

During upgrade to OFSAAI 7.3.2.4.0, ensure to backup SYS_TBL_MASTER table and to drop the preceding four columns, if these scripts are executed in any of the OFSAAI versions prior to 7.3.2.4.0. Otherwise, an upgrade to OFSAAI 7.3.2.4.0 may throw an error, since the columns exist.

For improving performance, hints for the MERGE query, which is generated internally by the SCD, can be provided under MERGE_HINT. The following session alters can be mentioned in the SESSION_ENABLE_STATEMENT and SESSION_DISABLE_STATEMENT columns.

- **1.** SESSION_ENABLE_STATEMENTs are executed before the MERGE in the SCD and SESSION_DISABLE_STATEMENTs are executed after the SCD MERGE.
- 2. Since all the tasks under the SCD batch for DIM_ACCOUNT works on the same target, the SESSION_DISABLE_STATEMENTs in SYS_TBL_MASTER cannot be provided when tasks are executed. In this case, there can be a separate SQL file to contain all the SESSION_DISABLE_STATEMENTs to be executed once after all the tasks in the SCD are done. The SESSION_DISABLE_STATEMENT will hold a null in SYS_TBL_MASTER table.
- **3.** SESSION_ENABLE_STATEMENTs are required to be mentioned only for the first task in the batch. Here the target is the same for all the tasks under a batch. In case any of the tasks are to be executed separately, then the SESSION_ENABLE_STATEMENTs should be mentioned for any one of the tasks which is included in the batch for the execution.
- MERGE_HINT and SESSION_ENABLE_STATEMENT are in SYS_TBL_MASTER.

NOTE For illustration, Account Dimension is considered.

Table Name	Stage Table Name	Merge Hint	Session Enable Statement
DIM_ACCOUNT	STG_LOAN_CONTRACTS_V	/*+ parallel(DIM_ACCOUNT,10) */	"alter session enable parallel dml query", "alter table DIM_ACCOUNT nologging parallel 10"

- **5.** Execute all the tasks in parallel. This may cause N_RCV_LEG_ACCT_SKEY to have an incremental value as compared to N_ACCT_SKEY.
- **6.** Execute the SQL file with all the SESSION_DISABLE_STATEMENTs, after the successful completion of the SCD batch.
- **7.** After the DIM_ACCOUNT table is populated using this approach, you cannot use the initial approach (FN_POPDIMACCOUNT) as this will lead to Skey conflict.
- **8.** Ensure that you have set the value of the sequence SEQ_DIM_ACCOUNT_SCD as max (value of SKey in DIM_ACCOUNT) +1, before moving from old to new approach.
- **9.** The F_LATEST_RECORD_INDICATOR for an existing DIM_ACCOUNT data already loaded by the function must be updated to 'Y' before running the SCD, failing which a new SKey may get generated for the same account number.
- **10.** SCD execution occurs based on the GAAP code, which is configured in SETUP_MASTER table. These are introduced to tackle the scenario of multiple GAAP codes. Whether or not there exist multiple GAAP codes, SETUP_MASTER must be manually configured as follows:

V_COMPONENT_CODE	V_COMPONENT_DESC	V_COMPONENT_VALUE
DEFAULT_GAAP	DEFAULT_GAAP	USGAAP

Where V_COMPONENT_VALUE must be manually populated with the required GAAP code. For all other GAAP codes, ensure to update SETUP_MASTER manually before running DIM_ACCOUNT SCD.

9.3.2 Handling Multiple GAAP Codes for the Same Account Number for the Same MIS Date in SCD

NOTE

For illustration, Account Dimension is considered.

When multiple GAAP codes exist for the same account number for the same MIS date, configure the SETUP_MASTER table manually as mentioned in the preceding section:

V_COMPONENT_VALUE will hold the GAAP code for which the SCD must be executed.

If there are different GAAP codes for two distinct account numbers for the same MIS date, then the SCD has to be executed for each GAAP code by changing the V_COMPONENT_VALUE manually in

SETUP_MASTER table. The SETUP_MASTER table should have only one record WHERE V_COMPONENT_DESC = 'DEFAULT_GAAP'.

9.3.3 Handling Multiple GAAP Codes for the Same Account Number for the Same MIS Date in the Function

NOTE

For illustration, Account Dimension is considered.

For FN_POPDIMACCOUNT function, you have to create views and use these views instead of the tables in the FSI_DIM_ACCOUNT_SETUP_DETAILS table. For Product Processors having GAAP code as part of the Primary Key, create a view on the table with filter on the GAAP code as:

where V_GAAP_CODE = (SELECT V_COMPONENT_VALUE FROM SETUP_MASTER WHERE V_COMPONENT_DESC = 'DEFAULT_GAAP')

Use this view under TABLE_NAME in FSI_DIM_ACCOUNT_SETUP_DETAILS table. If there are different GAAP codes for two distinct account numbers for the same MIS date, then the function has to be executed for each GAAP code by changing the V_COMPONENT_VALUE manually in SETUP_MASTER table. The SETUP_MASTER table should have only one record WHERE V_COMPONENT_DESC ='DEFAULT_GAAP'.

NOTE

If STG_OPTION_CONTRACTS is loaded for two MIS dates, and FN_POPDIMACCOUNT is executed, then all records irrespective of the MIS date will get loaded. To resolve this, remove the expression under SQL_TEXT in FSI_DIM_ACCOUNT_SETUP_DETAILS for STG_OPTION_CONTRACTS and use the same expression to create a view and use this view as the TABLE_NAME in FSI_DIM_ACCOUNT_SETUP_DETAILS..

10 Account Dimension Table

This chapter provides information about Account Dimension loading process in the Data Foundation application.

This chapter includes the following topics:

- About Account Dimension Table
- About SCD Process for Populating Account Dimension Table
- About <INFODOM>_DIM_ACCOUNT_SCD Batch
- Deploying Account Dimension Table on Hive
- Populating Account Dimension Table

The account is where an insurer deposits premiums from policies it underwrites and from which that Insurance Company funds day-to-day operations of the business.

10.1 About Account Dimension Table

The mapping details for the Account Dimension (DIM_ACCOUNT) tables are given here.

Map Reference Number	Source View Name	Logical Source View Name
190	STG_BORROWING_V	Stage Borrowing View
350	STG_CUSTODIAL_ACCOUNTS_V	Stage Custodial Accounts View
465	STG_FORWARDS_V	Stage Forwards View
195	STG_FUTURES_V	Stage Futures View
197	STG_GUARANTEES_V	Stage Guarantees View
198	STG_INVESTMENTS_V	Stage Investments View
201	STG_LOAN_CONTRACTS_V	Stage Loan Contracts View
351	STG_MANAGED_INV_ADV_V	Stage Managed Investment Account View
202	STG_MM_CONTRACTS_V	Stage Money Market Contracts View
203	STG_MUTUAL_FUNDS_V	Stage Mutual Funds View
205	STG_OPTION_CONTRACTS_V	Stage Option Contracts View
341	STG_PAYMENT_SETTLEMENT_ACCT_V	Stage Payment Settlement Account View
206	STG_REPO_CONTRACTS_V	Stage Repurchase Contracts View
354	STG_SPEND_OBLIGATIONS_V	Stage Spend Obligations View
208	STG_SWAPS_CONTRACTS_V	Stage Swaps Contracts View
210	STG_TRUSTS_V	Stage Trusts View

All the above-mentioned Product Processor tables are mutually exclusive in terms of functionality. Therefore, V_ACCOUNT_NUMBER or V_CONTRACT_CODE (Primary Key of each Product Processor) must also have mutually exclusive values across all the tables. The same account number cannot be part of multiple Product Processor tables.

10.2 About SCD Process for Populating Account Dimension Table

The SCD population in DIM_ACCOUNT table generates individual numeric Surrogate Keys for every account number with an additional leg skey. Below are the columns that are loaded during SCD population:

- V_ACCOUNT_NUMBER
- N_ACCT_SKEY
- N_RCV_LEG_ACCT_SKEY
- FIC_MIS_DATE

This approach replaces the function load in which the table DIM_ACCOUNT is getting loaded through the function, FN_POPDIMACCOUNT. This loads the above mentioned columns into DIM_ACCOUNT table. Here, the sources are the different product processor tables present in the solution, which are configured in FSI_DIM_ACCOUNT_SETUP_DETAILS table.

10.2.1 About <INFODOM>_DIM_ACCOUNT_SCD Batch

Batch <INFODOM>_DIM_ACCOUNT_SCD is introduced with multiple tasks under it.

These tasks represent their corresponding SCD processes where different product processors are the source and DIM_ACCOUNT is the target. The MAP_REF_NUMs mentioned in the following table are introduced into SYS_TBL_MASTER table, and subsequently into SYS_STG_JOIN_MASTER.

Depending on the requirement by an application, a task can be excluded or included from the batch execution.

10.3 Deploying Account Dimension Table on Hive

All RDBMS related Account Dimension table can also be deployed on Hive (Stage and Results on Hive).

10.4 Populating Account Dimension Table

To populate data into Account Dimension table through SCD process, see <u>Execute the SCD Batch of the DIM_ACCOUNT table</u>.

NOTE

You can also follow this SCD process to populate data into any Hive related Account Dimension table.

For supplementary information about populating data in Dimension table, see the section <u>Supplementary</u> <u>Information for Dimension Loading Process</u> in the chapter <u>About Dimension Loading Process</u>.

11 Policy Dimension Table

This chapter provides information about Policy Dimension and its loading process in the Oracle Insurance Data Foundation application.

This chapter includes the following topics:

- About Policy Dimension Table
- About SCD Process for Populating Policy Dimension Table
- About <INFODOM>_INSURANCE_SCD Batch
- Deploying Policy Table on Hive
- Populating Policy Dimension Table

Policy is the legal document issued by an Insurance Company (Insurer) to a policyholder (Insured) which states the terms and conditions of the insurance coverage.

The policy dimension table stores list of all policies issued by the insurer.

11.1 About Policy Dimension Table

The mapping details for the Policy Dimension (DIM_POLICY) tables are given here.

Map Reference Number	Source Table Name	Logical Stage Table Name
224	STG_PROP_CASUALTY_CONTRACTS_V	Stage Property Casualty Contracts View
401	STG_LIFE_INS_CONTRACTS_V	Stage Life Insurance Contracts View
402	STG_HEALTH_INS_CONTRACTS_V	Stage Health Insurance Contracts View
403	STG_ANNUITY_CONTRACTS_V	Stage Annuity Contracts View
634	STG_RETIREMENT_ACCOUNTS_V	Stage Retirement Accounts View
674	STG_REINSURANCE_CNTRCTS_ISSUED	Stage Reinsurance Contracts Issued
675	STG_REINSURANCE_CONTRACTS_HELD	Stage Reinsurance Contracts Held

11.2 About SCD Process for Populating Policy Dimension Table

The SCD process for DIM_POLICY table generates individual numeric Surrogate Keys for every policy code. These columns are loaded during SCD process:

- V_POLICY_CODE
- N_POLICY_SKEY
- FIC_MIS_DATE
- V_PRODUCT_PROCESSOR_NAME
- V_PROD_CODE

V_ENTITY_CODE

This approach replaces the function load in which the table DIM_POLICY is getting loaded through the function, FN_POPDIMPOLICY. This loads the above mentioned columns into DIM_POLICY table. Here, the sources are the different product processor tables present in the solution, which are configured in FSI_DIM_POLICY_SETUP_DETAILS table.

11.2.1 About <INFODOM>_INSURANCE SCD Batch

Batch <INFODOM>_INSURANCE_SCD has been introduced with 30 tasks under it.

These tasks represent the corresponding SCD processes where different product processors are the source and DIM_POLICY is the target. MAP_REF_NUMs 224, 401, 402, and 403 are introduced into SYS_TBL_MASTER table, and subsequently into SYS_STG_JOIN_MASTER.

Depending on the requirement by an application, a task can be excluded or included from the batch execution.

11.3 Deploying Policy Dimension Table on Hive

All RDBMS related Policy Dimension table can also be deployed on Hive (Stage and Results on Hive).

11.4 Populating Policy Dimension Table

To populate data into Policy Dimension table through the SCD process, see <u>Execute the SCD Batch of the DIM_POLICY table</u>.

NOTE

You can also follow this SCD process to populate data into any Hive related Policy Dimension table.

For supplementary information about populating data in Dimension table, see the section <u>Supplementary Information for Dimension Loading Process</u> in the chapter <u>About Dimension Loading Process</u>.

About Executing Run through Run Management

12.1 Introduction

Starting from 8.0.3.1.0 release, we are packaging two out-of-the-box Runs for data loading. Same can be executed through the Run Management screen. The following are the two runs that are packaged as part of the installer.

- Oracle Insurance Data Foundation Sourced Run: This Run can be executed once per day for Data Movement from Staging Area to Results Area for Non-RUN SKEY tables.
- Oracle Insurance Data Foundation Execution Run: This Run can be executed any number of times per day with each unique RUN SKEY for Data Movement in Run enabled tables.

NOTE

To access the Run Name and Task details, see the latest version of OIDE Run Chart

12.2 Summary and Details Page

After navigating to the Run Management page, a summary window is displayed showing all the defined Runs. By selecting a Run or by using search criteria, you can control the set of Runs that are displayed. This window displays the list of runs defined in the Run Rule Framework (RRF) except those with Immediate Execution Option Yes in the grid.

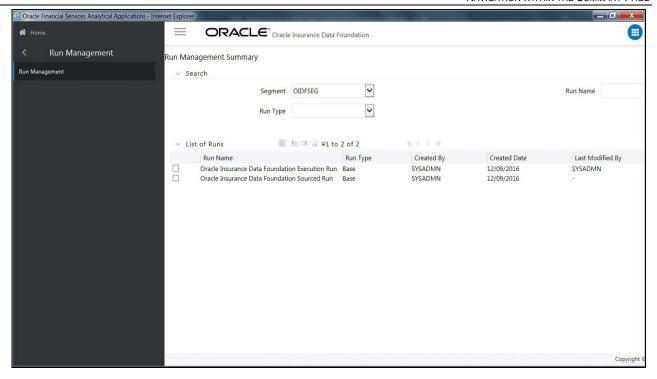
12.3 Navigation within the Summary Page

When you first navigate to the Run Management summary window, the Runs defined in the RRF are presented in a summary grid. The Run Management summary window consists of two sections:

- Search
- List of Runs

12.3.1 Search Section

Among other properties, each Run possesses a segment, a Run Name, and a Run Type. You can search on any of these properties in the Search section.



List of Runs Section 12.3.2

The List of Runs section presents a grid containing the Runs that meet your search criteria. This summary grid offers several icons that allow you to perform different functions when a Run is selected.

To select a Run, click the check box in the first column of the grid.

Field Name	Field Description
View	Selecting a single row out of the grid enables the View icon. Clicking the View icon allows you to view the detailed definition of a Run on a read-only basis. The View icon is only enabled when a single Run is selected.
Run Default Parameters	Selecting a single row out of the grid enables you to define the default parameters of a Run.
Run Execution Parameters	Selecting a single row out of the grid enables you to define the execution parameters of a Run.
Run Execution Summary	Selecting a single row out of the grid enables you to view the status of the Run executed in the Run Execution parameters window.

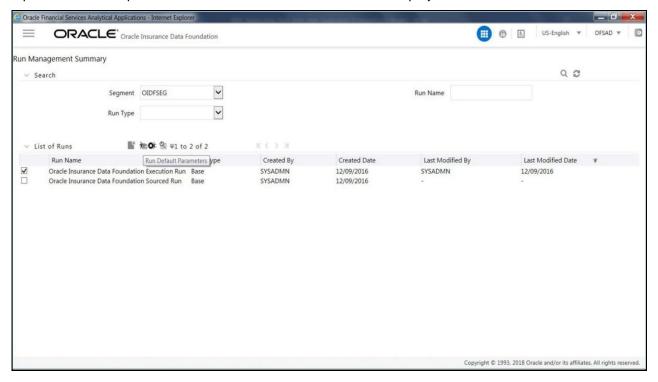
List of Runs Summary Grid 12.3.3

The following columns categorize each Run in the summary grid:

Field Name	Field Description
Run Name	Displays the short name of the Run.
Run Type	Displays the type of Run, Simulation or Baseline Run.
Created By	Displays the name of the User who defined the Run.
Creation Date	Displays the date on which the Run was created.
Last Modified By	Displays the name of the user who has performed any modifications to the Original Run details.
Last Modified Date	Displays the date on which the Original Run details were modified.

12.3.4 Navigation within Run Default Parameters Window

Click the Run Default Parameters icon on the navigation bar of the Run Management Summary Window to input the Run level parameters. The Run Parameters window is displayed.



NOTE

To modify or view the parameters, the Modify Run Parameters role should be mapped to that relevant user profile.

This window consists of two sections Run Details and Run Execution Parameters.

12.3.4.1 Run Details Section

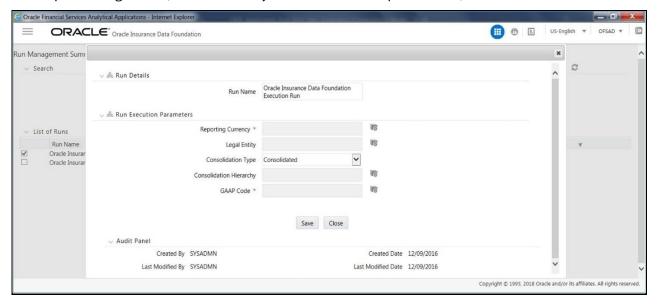
This section displays the name of the Run which is a read-only value.

Run Execution Parameters Section 12.3.4.2

In this section you can update the following:

Field Name	Field Description
Reporting Currency	Reporting Currency Code parameter is used for calculation of amounts in Reporting Currency during Data Population.
Legal Entity	Legal Entity Code parameter is used for identifying the legal entity, which is used for the Run.
Consolidation Type	Consolidation Type parameter is used for selecting legal entities on a solo or consolidation basis. In a solo run, only the selected legal entity will be used. In a consolidated run, along with the selected legal entity, all its child legal entities are also used.
Consolidation Hierarchy	Legal Entity Hierarchy is used for selecting the required hierarchy for the consolidated run. This parameter is not required for solo run.

Before proceeding further, to ensure that you do not lose the updated data, click the Save button



NOTE

To get the values for Reporting Currency parameter and Legal Entity parameter, you need to save the following hierarchies under Save Metadata window:

- Legal Entity Code for Run (HOIDF001)
- Reporting Currency Code for Run (HOIDF002)
- Legal Entity Hierarchy for Run (HOIDF003)
- User Group Hierarchy (H_GROUP)

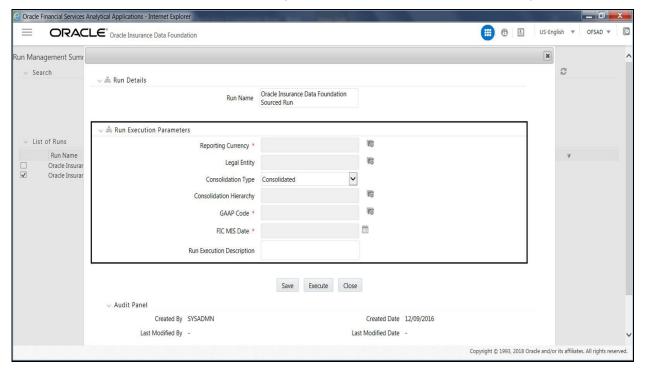
NOTE

For further details on Save Hierarchy, see Oracle Financial Services Advanced Analytical Applications Infrastructure Application Pack 8.0.9.0.0 on OHC.

The values selected for reporting currency and Legal entity for the selected Run will be shown as the default selected value in the Run Execution Parameters screen.

12.3.5 Navigation within Run Execution Parameters Window

Click the Run Execution Parameters icon on the navigation bar of the Run Management Summary window. The Run Execution Parameter window allows you to enter and save the Run execution parameters.



The Run Execution Parameters window consists of two sections Run Details and Run Execution Parameters.

12.3.5.1 Run Details Section

This section displays the name of the Run which is a read-only value.



12.3.5.2 Run Execution Parameters Section

The following Run execution parameters can be updated:

Field Name	Field Description
Reporting Currency	Reporting Currency Code parameter is used for calculation of amounts in Reporting Currency during Data Population.
Legal Entity	Legal Entity Code parameter is used for identifying the legal entity, which is used for the Run.
FIC MIS Date	Enter the extraction date in this field.
Run Execution Description	Enter a longer description of the Run.

NOTE	 To get the values for Reporting Currency parameter and Lega Entity parameter, you need to save the following hierarchies under Save Metadata window: 	al
	 Legal Entity Code for Run (HOIDF001) 	
	 Reporting Currency Code for Run (HOIDF002) 	

By clicking the Save button; a batch with the defined Run execution parameters is created. The batch created can be executed from the Batch Execution window.

By clicking the Execute button, a batch with the defined Run execution parameters is created and executed immediately. Status of the executed run can be seen in Batch Monitor screen or Run Execution Summary window.

NOTE	For further details on Save Hierarchy and Batch Execution, see Oracle
	Financial Services Advanced Analytical Applications Infrastructure
	Application Pack 8.0.9.0.0 on OHC. To execute a Run, the execute run role
	should be mapped to your user profile. Currently, the users mapped under
	Admin or Operator User Groups automatically have this role

12.3.6 Navigation within Run Execution Summary Page

Select a Run from the Run Management Summary page and click the Run Execution Summary icon to display the Run Execution Summary window where the following sections are displayed.



This window consists of the two sections, Run Execution Summary and Run Execution Details.

12.3.6.1 Run Execution Summary Section

The Run Execution Summary displays the following details:

Field Name	Field Description
Run Name	Displays the name of the Run.
Run Type	Displays the type of Run, baseline or Simulation.
Run ID	Displays the Run Execution ID.

12.3.6.2 Run Execution Details Section

The Run Execution Details section presents a grid containing all of the executions of Run and status of a particular execution of the Run. The menu bar in this grid offers several icons that allow you to perform different functions when a Run Execution is selected. To select a Run Execution, click the check box in the first column of the grid. More than one Run Execution can be selected at a time but this will cause some of the icons to become disabled.

Field/Icon Name	Usage
Parameter details	Click this icon to view the Run execution and Run default parameter details in read-only mode.
Сору	Click Copy icon, to copy the parameters as defined in the Run Execution Parameter window to create a new batch.
Execute	Click Execute icon to trigger the batch which has been created from the Run Execution Parameter window. The status of the triggered batch is displayed. In the Execution Summary page, multiple selections of the execution ids are available to trigger a batch.
Request Report Flag	To request for a Report Flag, select a Run Execution ID in the Run Execution Summary page and click the Request for Reporting Execution icon. A dialog box will appear for you to input your comments. Click Submit and the status of this

Field/Icon Name	Usage
	Run is displayed in the Report Flag section. Only a successful execution can be requested for reporting. For the selected Run and Execution date, there can be only one reporting flag.
Override Report Flag	Any reporting execution can be overwritten with another execution. Select a successfully triggered batch in the Run Execution Summary page. The Override Report Flag icon is enabled, if an execution is already marked as a Report Flag. You can override the execution by updating your comments. This should be approved by the approver and the procedure is similar to the procedure detailed in the Approve Report Flag section.
Approve Report Flag	After submitting the Reporting Run in the earlier section, the Approve Report Flag icon is enabled. On clicking the icon a dialog box with the User Comments and Approver Comments is displayed. The Approver can update the comments in the Approver Comments field and then click the Approve or Reject button accordingly.

12.3.6.3 Run Execution Grid

The Run Execution Details displays the following details:

Field name	Field Description
Run Skey	Displays the Run Skey of an individual execution.
Run Execution ID	Displays the execution ID of the Run.
FIC MIS DATE	Enter the extraction date in this field.
Execution Status	Displays the status of the execution which is failed or complete.
Execution Date	Displays the date when the Run was executed.
Time of Execution	Displays the time when the Run was executed.

13 Legal Entity Consolidation

13.1 Introduction

The reporting entity may be a part of an Insurance Company that consists of multiple legal entities such as parent or child entities (subsidiaries) under its name. User can select the entity for which processing must be done. In addition, whether a 'Solo' or 'Consolidation' execution must be done using the Run Execution screen. However, if it is executed using RRF execution then these options must be setup using the rule 'Capital Consolidation Level Selection' in the process 'CAPITAL_CONSOLIDATION'.

CAPITAL_CONSOLIDATION is the first process to be added in all the Runs defined through Run Rule Framework except the ones for staging data population. Run Management screen selects this process by default.

ATTENTION

All the following sections are applicable also to Stage and Results on Hive.

13.1.1 Run Parameters Assignment

Run Management Framework in the product allows the reporting Insurance Company to define and execute a Run by selecting a combination of parameters capital computation.

The rule 'Run Definition User Defined Run Param Assignment' is used to assign the run parameters in case of a run executed through Run Rule Framework. However, if the execution is through Run Management, the parameters are populated based on the run defined in the run definition screen.

13.2 Consolidation Procedures

The Consolidation procedures are as follows:

- Combine items of assets, liabilities, equity, income, expenses, and cash flows of the parent with those of its subsidiaries.
- Offset (eliminate) the carrying amount of the investment of the parent in each subsidiary and the
 equity portion of the parent of each subsidiary (IFRS 3 Business Combinations explain how to
 account for any related goodwill).
- Eliminate in full intra group assets and liabilities, equity, income, expenses and cash flows that relates to transactions between entities of the group (profits or losses resulting from intra group transactions that are recognized in assets, such as inventory and fixed assets, are eliminated in full).

In the preceding list, the first and third points are partly handled in the consolidation process, second is accounting idea output, which is provided in General Ledger as a part of Stage General Ledger data inputs

13.3 Types of Consolidation

The types of Consolidation are as follows:

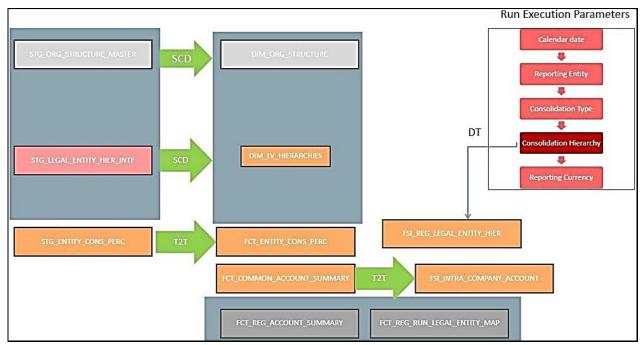
• Simple Aggregation: Aggregate across entities without any elimination.

- Full Consolidation: Aggregate and eliminate intra group transactions.
- Proportionate Consolidation: Aggregate and eliminate intra group transactions and balances reflecting consolidation percentage owned by parent in subsidiary.

13.4 Consolidation Activities

Scope of Consolidation is the list of Entities that participate in consolidation. Legal Entity Structure is looked through Organization Structure Dimension. This stores parent-child relationship and is stored only once. When moving the data, Legal Entity can move related entities to processing/reporting area. Legal structure is finalized once, and this structure only stores one parent-child relationship.

This is the Data Flow diagram of Legal Entity consolidation activities.



13.5 Legal Entity Tables

This section provides information about Insurance Legal Entity population tables in the Oracle Insurance Data Foundation application and step-by step instructions to use this section.

This section includes the following topics:

- About Legal Entity Dimension Tables
- About Legal Entity T2T (Result Table)
- Deploying Legal Entity Tables on Hive
- Populating Legal Entity Dimension Tables
- Populating Legal Entity T2T Result Tables

13.5.1 About Legal Entity Dimension Tables

For information about the introduction to Legal Entity and the purpose of the Legal Entity tables, see Introduction.

Legal Entity Dimension table names and their description are given here.

Logical Dimension Table Name	Dimension Table Description
Legal Proceeding Status Dimension	This table stores the legal proceeding status codes for the customer along with the descriptions for each status code.
Legal Entity Group Dimension	This table stores the list of all the defined Legal Entity groups in an organization structure.
Legal Reporting Dimension	This table stores the legal reporting hierarchy in an organization. The lowest level of the hierarchy is the booking transit and the highest level is the whole Insurance Company.

The mapping details for the Legal Entity Dimension tables are given here.

Map Reference Number	Source Table Name	Logical Stage Table Name	Dimension Table Name	Logical Dimension Table Name
269	STG_LEGAL_PROCE DING_STS_MASTER	Stage Legal Proceeding Status Master	DIM_LEGAL_PROCE DING_STATUS	Legal Proceeding Status Dimension
452	STG_LEGAL_ENTITY	Stage Legal Entity	DIM_LEGAL_ENTIT	Legal Entity Group
	_GROUP_MASTER	Group Master	Y_GROUP	Dimension
58	STG_LEGAL_ENTITY	Stage Legal Entity	DIM_LEGAL_REPOR	Legal Reporting
	_MASTER	Master	TING	Dimension

13.5.2 About Legal Entity T2T (Result Table)

Legal Entity T2T and its description is given here.

Source Table Name	Logical Stage Table Name	Fact Table Name	Logical Fact Table Name	T2T Name
STG_LEGAL_ENTI TY_DETAILS	Stage Legal Entity Details	FCT_LEGAL_ENTITY _DETAILS	Fact Legal Entity Details	T2T_FCT_LEGAL_EN TITY_DETAILS

13.6 Deploying Legal Entity Tables on Hive

All RDBMS related Legal Entity Dimension and Result tables can also be deployed on Hive (Stage and Results on Hive).

NOTE

In general, Stage and Result tables are also supported in Hive. However, there are some exceptions. For a list of tables that are not supported in Hive, see <u>List of Unsupported T2Ts</u>.

13.7 Populating Legal Entity Dimension Tables

Follow this SCD process to populate data into any Legal Entity Dimension table:

NOTE

You can also follow this SCD process to populate data into any Hive-related Legal Entity Dimension table.

- 1. To populate data into any Legal Entity Dimension table, execute the SCD batch. For a detailed procedure, see Slowly Changing Dimension (SCD) Process.
- **2.** To check the SCD batch execution status of a Legal Entity Dimension table, follow the procedure Check the Execution Status of the SCD Batch.
- **3.** To verify log files, and check the error messages (if any), follow the procedure <u>Verify Log Files and Check Error Messages</u>.

13.8 Populating Legal Entity T2T Result Table

Follow this T2T process to populate data into any Legal Entity T2T Result table:

NOTE

You can also follow this T2T process to populate data into any Hive-related Legal Entity T2T Result table.

- **1.** To populate data into any Legal Entity T2T Result table, execute the batch for T2T. For a detailed procedure, see:
 - a. Prerequisites for loading T2T.
 - **b.** Set the Run Parameters.
 - c. Save the Run Parameters.
 - **d.** Execute the Batch for T2T.
- **2.** To check the T2T batch execution status of the Legal Entity Result table, follow the procedure Check the Batch Execution Status of T2T.

3. To verify log files, and check the error messages (if any), follow the procedure Verify To and Check Error Messages.	
3. To verify log files, and check the error messages (if any), follow the procedure Verify T2	
and Check Error Messages.	
and Check Error Messages.	z i Lug Files

14 Exchange Rates Tables

This chapter provides information about Exchange Rates tables in the Data Foundation application and step-by step instructions to use this section.

This chapter includes the following topics:

- Handling Alternate Currency
- About Exchange Rates T2T (Result Table)
- Deploying Exchange Rates Tables on Hive
- Populating Exchange Rates T2T Result Table

The Exchange Rates table stores the list of all exchange rates for all types of currency. This is a standalone table.

The purpose of the Exchange Rate table is to offer the value of one currency in relation to another currency.

Handling Alternate Currency:

Exchange Rates is supplied by the customers in downloadable format. The applications may require the information in a different format. The current Exchange Rates population is enhanced to store the following variations:

- Inverse Rate: When the exchange rate information of two currencies are provided for a base and a counter currency, the inverse rates if not available is derived and populated.
- Triangulation Rate: When exchange rate information of two pairs are available as part of download, with a common currency in each of the pair, exchange rate for currencies not common as part of the download pair is derived and populated.

14.1 About Exchange Rates T2T (Result Table)

Exchange Rates T2T and its description is given here.

T2T Name	T2T Description
T2T_FSI_EXCHANGE_RATES	This T2T stores history of the exchange rates between two currencies.

The mapping details for the Exchange Rates T2T is given here.

NOTE

Ensure to verify and load data into the STG_EXCHANGE_RATE_HIST table using the Table to Table (T2T) component of Oracle Financial Services Analytical Applications Infrastructure (OFSAAI) framework.

Source Table Name	Logical Stage Table Name	Fact Table Name	Logical Fact Table Name	T2T Name
VW_FSI_RATE_TRI	FSI Rate	FSI_EXCHANGE_RA	FSI Exchange Rates	T2T_FSI_EXCHANGE_
ANGULATION	Triangulation View	TES		RATES

14.2 Deploying Exchange Rates Tables on Hive

All RDBMS related Exchange Rates Result table can also be deployed on Hive (Stage and Results on Hive).

NOTE

In general, Stage and Result tables are also supported in Hive. However, there are some exceptions. For a list of tables that are not supported in Hive, see <u>List of Unsupported T2Ts</u>.

14.3 Populating Exchange Rates T2T Result Table

Follow this T2T process to populate data into Exchange Rates T2T Result table:

NOTE

You can also follow this T2T process to populate data into any Hive related Exchange Rates T2T Result table.

FSI_EXCHANGE_RATES table must be loaded prior loading any of the Account Summary tables.

- 1. To populate data into Exchange Rates T2T Result table, execute the batch for T2T. For a detailed procedure, see:
 - a. Prerequisites for loading T2T.
 - **b.** Set the Run Parameters.
 - c. Save the Run Parameters.
 - **d.** Execute the Batch for T2T.
- **2.** To check the T2T batch execution status of the Exchange Rates Result tables, follow the procedure Check the Batch Execution Status of T2T.
- **3.** To verify log files, and check the error messages (if any), follow the procedure <u>Verify T2T Log Files</u> and <u>Check Error Messages</u>.

15 Party Subject Area

This chapter provides information about Party Dimension loading process and populating various Party Attributes Results tables in the Oracle Insurance Data Foundation application.

This chapter includes the following topics:

- Overview
- Party Dimension
- Party Definition
- Party Contact Details
- Party Identification Document
- Party Medical Attributes
- Party Financial Data/Employment Attributes
- Party Producer Exam, Certification, and License
- Party Results
- Other Party Attributes
- Populating Party related Dimension Tables
- Populating Party related T2T Result Tables

15.1 Overview

Party refers to any person or organization that interacts with the Insurance Company while Party Attributes refers to information elements associated with any person or organization that interacts with the Insurance Company.

Correspondingly, Party tables can be classified into Party Dimension tables and Party T2T tables. The Party Dimension tables store the history of a Party, and different types of Party T2Ts store the history of a Party specific to the attributes.

15.2 Party Dimension Table

Party Dimension table stores history of a Party. A Party here can be a customer, issuer, guarantor, etc.

NOTE

Party Dimension table must be populated before populating any other Party related Dimension table.

Following are the two customer based dimensions that are used across various OFSAA applications for their processing and reporting requirements:

- DIM_PARTY
- DIM CUSTOMER

In the current release, data is sourced from STG_PARTY_MASTER to the above Dimension tables.

To address the Bug 20486362 - SCD TO POPULATE DIM_CUSTOMER FROM STG_PARTY_MASTER TO BE ADDED, a new SCD (MAP_REF_NUM = 335) was introduced in OIDF release 8.0.1.0.0 to load DIM_CUSTOMER using STG_PARTY_MASTER and STG_PARTY_ROLE_MAP as the source. Customers, who use applications that have a dependency on DIM_PARTY, are advised to use this SCD instead of SCD-32. Execute batch DIM_CUSTOMER_SCD_PARTY to populate DIM_CUSTOMER using STG_PARTY_MASTER and STG_PARTY_ROLE_MAP as the source. SCD-32 is planned to be deprecated in a future release.

15.2.1 Using Stage Party Master to Load Party Dimension

The Party Master table contains information related to a person or an organization that is a party to Insurance Company. Party refers to customer, issuer, guarantor, etc. This table holds the master list of parties across all the roles and their details such as name, age, education, profession, gender, etc.

Party ID: Party identifier is a code that identifies whether the Party ID provided for a party is an organization identifier or a private identifier.

The mapping details to load to the Party Dimension table from the Stage Party Master table is given here.

Map Reference	Source Table	Logical Stage Table	Dimension Table	Logical Dimension Table Name
Number	Name	Name	Name	
117	STG_PARTY_MAST ER	Stage Party Master	DIM_PARTY	Party Dimension

15.2.2 Using Stage Party Type Master to Load Party Type Dimension

The Party Type Master table contains information related to type of the Party that may be an Individual, an Insurance Company, a Corporate - Small, a Corporate - Medium, a State Government, and a Sovereign etc.

Party ID: Party identifier is a code that identifies whether the Party ID provided for a party is an organization identifier or a private identifier.

The mapping details to load to the Party Dimension Type table from the Stage Party Type Master table is given here.

Map Reference Number	Source Table Name	Logical Stage Table Name	Dimension Table Name	Logical Dimension Table Name
180	STG_PARTY_TYPE _MASTER	Stage Party Type Master	DIM_PARTY_TYPE	Party Dimension Type

15.2.3 Using Stage Party Role Map to Populate Party Role Map T2T (Result Table)

NOTE Load STG_PARTY_ROLE_MAP with all customer records and Party Role must be 'CUSTOMER'.

The Party Role Map table stores information related to different roles that are played by a Party. Roles here refers to Beneficiary, Producer, Agent, Issuer etc. If same party plays multiple roles, one needs to update party role map entity continuing with same record in stage party master with or without role specific data addition.

The mapping details to populate the Party Role Map T2T is given here.

Source Table Name	Logical Stage Table Name	Fact Table Name	Logical Fact Table Name	T2T Name
STG_PARTY_RO LE_MAP	Stage Party Role Map	FCT_PARTY_ROLE_ MAP	Fact Party Role Map	T2T_FCT_PARTY_ROL E_MAP

15.3 Party Definition Tables

Party Definition consists of the details related to Party such as Annual Income, Primary Source of Wealth, and Probability of Default Percentage, etc.

The purpose of Party Definition tables is to store personal information of a Party to check whether the premium is paid on a regular basis with no default on the payments, and the coverage is as per the income calculation of the Party.

15.3.1 About Party Definition T2Ts (Result Tables)

Party Definition T2T consists of the Party and Party Probability of Default details.

Party Definition T2Ts and their description are given here.

T2T Name	T2T Description
T2T_FCT_PARTY_DETAILS	This T2T stores information related to Party such as Annual Income, and Primary Source of Wealth, etc.
T2T_FCT_PARTY_PD_DETAILS	This T2T stores the probability of default values as of given date for all relevant party.

The mapping details for the Party Definition T2Ts are given here.

Source Table Name	Logical Stage Table Name	Fact Table Name	Logical Fact Table Name	T2T Name
STG_PARTY_DE TAILS	Stage Party Details	FCT_PARTY_DETAILS	Fact Party Details	T2T_FCT_PARTY_DETAILS
STG_PARTY_PD _DETAILS	Stage Party Probability of Default Details	FCT_PARTY_PD_D ETAILS	Fact Party Probability of Default Details	T2T_FCT_PARTY_PD_DET AILS

NOTE

The FSI_PARTY_STD_PARTY_TYPE_MAP table has been added for mapping purposes, if the customer so desires. This table stores Party Standard Party Type mapping details.

15.4 Party Contact Details Tables

Party Contact Details consists of details about phone, email, and address.

The purpose of these tables is that the Party contact data can be used in KYC document related tables.

15.4.1 About Party Contact Details Dimension Tables

Party Contact Details Dimension table names and their description are given here.

Logical Dimension Table Name	Dimension Table Description
Phone Dimension	This table stores the master phone details.
Address Dimension	This table stores the master address details.
Email Dimension	This table stores the master email details.
Contact Dimension	This table stores the list of contacts imported by the Insurance Company.
Email Address Purpose Type Dimension	This table stores the email address purpose, or usage, of this address relative to this customer.
Phone Purpose Type Dimension	This table stores the phone purpose type, or usage, of this phone relative to this account.

The mapping details for the Party Contact Details Dimension tables are given here.

Map Reference Number	Source Table Name	Logical Stage Table Name	Dimension Table Name	Logical Dimension Table Name
345	STG_PHONE_MASTER	Stage Phone Master	DIM_PHONE	Phone Dimension

Map Reference Number	Source Table Name	Logical Stage Table Name	Dimension Table Name	Logical Dimension Table Name
346	STG_ADDRESS_MAST ER	Stage Address Master	DIM_ADDRESS	Address Dimension
347	STG_EMAIL_MASTER	Stage Email Master	DIM_EMAIL	Email Dimension
144	STG_CONTACT_MAST ER	Stage Contact Master	DIM_CONTACT	Contact Dimension
667	STG_EMAIL_ADRS_PR P_TYPE_MASTER	Stage Email Address Purpose Type Master	DIM_EMAIL_ADRS _PRP_TYPE	Email Address Purpose Type Dimension
668	STG_PHONE_PURPOS E_TYPE_MASTER	Stage Phone Purpose Type Master	DIM_PHONE_PURP OSE_TYPE	Phone Purpose Type Dimension

15.4.2 About Party Contact T2Ts (Result Tables)

Party Contact Details T2Ts and their description are given here.

T2T Name	T2T Description
T2T_FCT_PARTY_PHONE_MAP	This T2T stores the Party phone details.
T2T_FCT_PARTY_ADDRESS_MAP	This T2T stores the Party address details.
T2T_FCT_PARTY_EMAIL_MAP	This T2T stores the Party email details.

The mapping details for the Party Contact Details T2Ts are given here.

Source Table Name	Logical Stage Table Name	Fact Table Name	Logical Fact Table Name	T2T Name
STG_PARTY_PHO	Stage Party Phone	FCT_PARTY_PHON	Fact Party Phone	T2T_FCT_PARTY_PHO
NE_MAP	Map	E_MAP	Map	NE_MAP
STG_PARTY_ADD	Stage Party Address	FCT_PARTY_ADDR	Fact Party Address	T2T_FCT_PARTY_ADD
RESS_MAP	Map	ESS_MAP	Map	RESS_MAP
STG_PARTY_EMA	Stage Party Email	FCT_PARTY_EMAI	Fact Party Email	T2T_FCT_PARTY_EMAI
IL_MAP	Map	L_MAP	Map	L_MAP

15.5 Party Identification Document Tables

The Party Identification Document contains identification details of an individual Party. Identification means the action or process of identifying someone or something, or the fact of being identified.

The purpose of Party Identification Document tables is that the data from these tables can be used in the Know Before You Owe related tables.

15.5.1 About Party Identification Document Dimension Tables

Party Identification Document Dimension table names and their description are given here.

Logical Dimension Table Name	Dimension Table Description
Document Type Dimension	This table stores the list of all types of documents that are required by the insurance company for an account. The document types can be those specified by the Insurance Company or those required for the process in the Insurance Company.
Document Sub Type Dimension	The table stores the document sub type. Sample values: If the document type is visa then the sub type is student or tourist visa.

The mapping details for the Party Identification Document Dimension tables are given here.

Map Reference	Source Table	Logical Stage	Dimension Table	Logical Dimension Table Name
Number	Name	Table Name	Name	
457	STG_DOCUMENT_T	Stage Document	DIM_DOCUMENT_TY	Document Type
	YPE_MASTER	Type Master	PE	Dimension
553	STG_DOCUMENT_S	Stage Document	DIM_DOCUMENT_SU	Document Sub Type
	UB_TYPE_MASTER	Sub Type Master	B_TYPE	Dimension

15.5.2 About Party Identification Document T2T (Result Table)

Party Identification Document T2T and its description is given here.

T2T Name	T2T Description
T2T_FCT_PARTY_IDENTIFCTN_DOC	This T2T stores identification details of an individual Party. Identification means the action or process of identifying someone or something, or the fact of being identified.

The mapping details for the Party Identification Document T2T is given here.

Source Table Name	Logical Stage Table Name	Fact Table Name	Logical Fact Table Name	T2T Name
STG_PARTY_IDEN TIFICATION_DOC	Stage Party Identification Document	FCT_PARTY_IDENTIF ICATION_DOC	Fact Party Identification Document	T2T_FCT_PARTY_IDEN TIFCTN_DOC

15.6 Party Medical Attributes Tables

Party Medical Subject Area covers information elements pertaining to medical treatment or test or conditions.

The purpose of the Party Medical attributes tables is to cover detail medical history of applicant or policyholder and use the data in either underwriting or continuing the existing insurance coverage.

15.6.1 About Party Medical Attributes Dimension Tables

Party Medical Attributes Dimension table names and their description are given here.

Logical Dimension Table Name	Dimension Table Description
Medical Test Type Dimension	This table stores the medical test details that the Party has undergone. A medical test is a kind of medical procedure performed to detect, diagnose, or monitor diseases, disease processes, susceptibility, and determine a course of treatment. It is related to clinical chemistry and molecular diagnostics, and the procedures are typically performed in a medical laboratory.
Medical Treatment Type Dimension	This table stores details of the different types of medical treatment a Party has undergone due to illness, accidents or any medical emergency. Medical treatment means the management and care of a patient to combat disease or disorder.
Party Medical Condition Type Dimension	This table stores the medical condition type details of the Party if that Party is suffering from any health issues. The medical condition types are used to describe the condition of a patient (that is, their clinical status) in a hospital.
	Sample values: TUMORBENIGN, TUMORMALIGNANT, TUMOR, AAA, etc.
Medical Test Status Dimension	This table stores the medical test status details of a Party. Sample values: ACKNOWLEDGED, ADD, APPROVED, CANCELLED, COMPLETED, WARNING, etc.
Medical Test Result Type Dimension	This table stores the medical test result type details. Sample values: ANEG, APOS, ABNEG, ABPOS, ABNORMAL, AMBER, CLOTTED, etc.
Medical Test Reference Range Dimension	This table stores details about the medical test reference range codes. Sample values: MAXVALUE, MINVALUE.
Medical Condition Status Dimension	This table stores the medical condition status details. Sample values: COMPLETED, ONGOING, PENDING, RECOVERED, etc.
Medical Condition Cause Type Dimension	This table stores details about the medical condition cause type. Sample values: ANXIETY, CAFFEINE, FAMDEATH, etc.
Lab Test Remarks Dimension	This table stores the lab test remarks that are general classification of the remarks. Sample values: HIGH, LOW, NORMAL.
Laboratory Kit Type Dimension	This table stores the laboratory kit type details.

Logical Dimension Table Name	Dimension Table Description
	Sample values: BLOOD, BLUR, ORAL, etc.
Substance Usage Type Dimension	This table stores the substance type details if the Party is in usage of any substances.
Family Illness Type Dimension	This table stores the family illness type, if the Party has any illness that is connected to his/her family background. Sample Values: BLOOD PRESSURE, HEART ATTACK, DIABETES.
Disability Reason Dimension	This table stores the disability reason as to why the party is disabled. Sample values: DTA, FI.
Disability Type Dimension	This table stores the details of the type of disability caused to the Party due to the medical complaints or accidents or family illness. Sample values: LTC, LTD, STD, STC.
Individual Smoking History Dimension	This table stores the individual smoking history, which indicates the history of tobacco use of a client. Sample values: CURRENT, NEVER, PRIOR, OTHER, UNKNOWN.

The mapping details for the Party Medical Attributes Dimension tables are given here.

Map reference number	Source Table Name	Logical Stage Table Name	Dimension Table Name	Logical Dimension Table Name
477	STG_MEDICAL_TES T_TYPE_MASTER	Stage Medical Test Type Master	DIM_MEDICAL_TEST _TYPE	Medical Test Type Dimension
478	STG_MED_TREATM ENT_TYPE_MASTE R	Stage Medical Treatment Type Master	DIM_MEDICAL_TREA TMENT_TYPE	Medical Treatment Type Dimension
479	STG_PARTY_MED_ CNDN_TYPE_MAST ER	Stage Party Medical Condition Type Master	DIM_PARTY_MEDICA L_CNDTN_TYPE	Party Medical Condition Type Dimension
482	STG_MEDICAL_TES T_STATUS_MASTE R	Stage Medical Test Status Master	DIM_MEDICAL_TEST _STATUS	Medical Test Status Dimension
563	STG_MED_TEST_RS LT_TYPE_MASTER	Stage Medical Test Result Type Master	DIM_MED_TEST_RES ULT_TYPE	Medical Test Result Type Dimension
564	STG_MED_TEST_RE F_RANGE_MASTER	Stage Medical Test Reference Range Master	DIM_MED_TEST_REF _RANGE	Medical Test Reference Range Dimension
565	STG_MED_CONDTN _STATUS_MASTER	Stage Medical Condition Status Master	DIM_MED_CONDTN_ STATUS	Medical Condition Status Dimension
566	STG_MED_CNDTN_ CAUS_TYPE_MAST ER	Stage Medical Condition Cause Type Master	DIM_MED_CONDTN_ CAUSE_TYPE	Medical Condition Cause Type Dimension

Map reference	Source Table	Logical Stage Table	Dimension Table	Logical Dimension Table Name
number	Name	Name	Name	
481	STG_LAB_TEST_RE	Stage Lab Test	DIM_LAB_TEST_REM	Lab Test Remarks
	MARKS_MASTER	Remarks Master	ARKS	Dimension
561	STG_LABORATORY _KIT_TYPE_MASTE R	Stage Laboratory Kit Type Master	DIM_LABORATORY_ KIT_TYPE	Laboratory Kit Type Dimension
480	STG_SUBSTANC_US AGE_TYPE_MASTE R	Stage Substance Usage Type Master	DIM_SUBSTANCE_U SAGE_TYPE	Substance Usage Type Dimension
476	STG_FAMILY_ILLNE	Stage Family Illness	DIM_FAMILY_ILLNES	Family Illness Type
	SS_TYPE_MASTER	Type Master	S_TYPE	Dimension
473	STG_DISABILITY_RE	Stage Disability	DIM_DISABILITY_RE	Disability Reason
	ASON_MASTER	Reason Master	ASON	Dimension
474	STG_DISABILITY_TY PE_MASTER	Stage Disability Type Master	DIM_DISABILITY_TY PE	Disability Type Dimension
562	STG_IND_SMOKING _HISTORY_MASTER	Stage Individual Smoking History Master	DIM_IND_SMOKING_ HISTORY	Individual Smoking History Dimension

15.6.2 About Party Medical Attributes T2T (Result Tables)

Party Medical Attributes T2Ts and their description are given here.

NOTE

The Claim Identifier column is added to the tables FCT_PARTY_MEDICAL_CONDITN_DTLS, FCT_PARTY_MEDICAL_TREATMENTS, and FCT_PARTY_DISABILITY_DETAILS to link the Party Medical attributes to the Insurance Claims.

T2T Name	T2T Description
T2T_FCT_MEDICAL_TEST_DETAILS	This T2T stores the medical test details of a Party.
T2T_FCT_PARTY_SUBS_USAGE_DTLS	This T2T stores the substance usage details of a Party, if the party is in usage of any of the tobacco, alcohol or harmful substance that leads to the medical complaints or conditions.
T2T_FCT_PARTY_FAMILY_MEDICAL_DA	This T2T stores the family medical data of a Party. The data is about medical history of the family members if any specific illness is present among most of the members.
T2T_FCT_PARTY_MDCAL_CONDITN_DTL	This T2T stores the medical enquiry details or medical condition details of a Party on a given date. These are the details from questionnaire asked by insurance agents mostly at time of underwriting or deemed necessary during life of policy as per policy terms and conditions.

T2T Name	T2T Description
T2T_FCT_PARTY_MEDICAL_TREATMENT	This T2T stores the medical treatment details of a Party, which informs if the Party is either undergoing or has undergone any medical treatment due to any medical conditions or accidents or family illness.
T2T_FCT_PARTY_DISABILITY_DETL	This T2T stores the Party disability details.

The mapping details for the Party Medical Attributes T2T is given here.

Source Table Name	Logical Stage Table Name	Fact Table Name	Logical Fact Table Name	T2T Name
STG_MEDICAL_T EST_DETAILS	Stage Medical Test Details	FCT_MEDICAL_TES T_DETAILS	Fact Medical Test Details	T2T_FCT_MEDICAL_TES T_DETAILS
STG_PARTY_SUB STANCE_USAGE_ DTLS	Stage Party Substance Usage Details	FCT_PARTY_SUBST ANCE_USAGE_DTLS	Fact Party Substance Usage Details	T2T_FCT_PARTY_SUBS_ USAGE_DTLS
STG_PARTY_FAM ILY_MEDICAL_DA TA	Stage Party Family Medical Data	FCT_PARTY_FAMIL Y_MEDICAL_DATA	Fact Party Family Medical Data	T2T_FCT_PARTY_FAMIL Y_MEDICAL_DA
STG_PARTY_MED ICAL_CONDITN_D TLS	Stage Party Medical Condition Details	FCT_PARTY_MEDIC AL_CONDITN_DTLS	Fact Party Medical Condition Details	T2T_FCT_PARTY_MDCA L_CONDITN_DTL
STG_PARTY_MED ICAL_TRTMNTS_ DTLS	Stage Party Medical Treatments Details	FCT_PARTY_MEDIC AL_TREATMENTS	Fact Party Medical Treatments Details	T2T_FCT_PARTY_MEDIC AL_TREATMENT
STG_PARTY_DISA BILITY_DETAILS	Stage Party Disability Details	FCT_PARTY_DISABI LITY_DETAILS	Fact Party Disability Details	T2T_FCT_PARTY_DISABI LITY_DETL

15.7 Party Financial Data/Employment Attributes Tables

Party Financial Data/Employment Attributes contain details related to the profession of a Party.

15.7.1 About Party Financial Data/Employment Attributes Dimension Tables

Party Financial Data/Employment Attributes Dimension table names and their description are given here.

Logical Dimension Table Name	Dimension Tables Description
Profession Dimension	This table stores the master list of all customer professions.
Profession Sub Type Dimension	This table stores the profession sub type.

Logical Dimension Table Name	Dimension Tables Description
	Sample value: Orthodontist.

The mapping details for the Party Financial Data/Employment Attributes Dimension tables are given here.

Map Reference Number	Source Table Name	Logical Stage Table Name	Dimension Table Name	Logical Dimension Table Name
334	STG_PROFESSION_M ASTER	Stage Profession Master	DIM_PROFESSION	Profession Dimension
676	STG_PROFESSION_SU B_TYPE_MASTER	Stage Profession Sub Type Master	DIM_PROFESSION_S UB_TYPE	Profession Sub Type Dimension

About Party Financial Data/Employment Attributes T2T (Result Table)

Party Financial Data/Employment Attributes T2T and its description is given here.

T2T Name	T2T Description
T2T_FCT_PARTY_EMPLOYMENT_DETAI LS	This T2T stores the employment details of an individual Party. This data applies only to Parties who are individuals. A single Party may consist of multiple employment details.

The mapping details for the Party Financial Data/Employment Attributes T2T is given here.

Source Table Name	Logical Stage Table Name	Fact Table Name	Logical Fact Table Name	T2T Name
STG_PARTY_EMPL	Stage Party	FCT_PARTY_EMPL	Fact Party	T2T_FCT_PARTY_EMP
OYMENT_DETAILS	Employment Details	OYMENT_DETAILS	Employment Details	LOYMENT_DETAILS

15.8 Party Producer Exam, Certification, and License Tables

An Insurance Producer (also called an agent or insurance broker) means any person (individual, corporation, association, partnership, etc.) who or which is licensed to solicit, negotiate, or sell insurance. There are different categories of insurance and a producer must be licensed in each category he or she wishes to transact business.

Purpose of the Party Producer Exam, Certification, and License tables is to assess eligibility of the Producer by evaluating the type of exam and its results, certifications completed, and license obtained by the Producer.

15.8.1 About Party Producer Exam, Certification, and License Dimension Tables

Party Producer Exam, Certification, and License Dimension table names and their description are given here.

Logical Dimension Table Name	Dimension Table Description
Producer Dimension	This table stores producer details.
Producer Status Dimension	This table stores the Producer status if the Party is a Producer.
Producer Agent Dimension	This table stores producer details who is an insurance agent.
Examination Dimension	This table stores the static fields of the Examination. An Exam is the formal verification or validation of information learned/known, typically used to satisfy a requirement for licenses, registrations or other firm education proof.
Exam Type Dimension	This table stores the exam type.
	Sample values: CEGP, LLQPB.
Insurance Exam Status Dimension	This table stores the status of the insurance license exam attempted by the Party.
Certification Dimension	This table stores the static fields of the Certification. Certification is formal procedure by which an accredited or authorized person or agency assesses and verifies (and attests in writing by issuing a certificate) the attributes, characteristics, quality, qualification, or status of individuals or organizations, goods or services, procedures or processes, or events or situations, in accordance with established requirements or standards.
Insurance License Dimension	This table stores the license related details of the Party as declared by the respective authorities of the insurance institutions. Here, license refers to the certificate or the document itself that confers permission to engage in insurance activity.
Insurance License Class Type Dimension	This table stores the Insurance License Class Type. Sample values: AGNCY, INDPART.
Insurance License Status Dimension	This table contains the license status of the Party who has applied for license or who has given exam.

The mapping details for the Party Producer Exam, Certification, and License Dimension tables are given here.

Map Reference	Source Table	Logical Stage Table	Dimension Table	Logical Dimension Table Name
Number	Name	Name	Name	
412	VW_STG_PARTY_M ASTER_PRODUCER	Stage Party Master Producer View	DIM_PRODUCER	Producer Dimension

Map Reference Number	Source Table Name	Logical Stage Table Name	Dimension Table Name	Logical Dimension Table Name
413	VW_STG_PARTY_M ASTER_PROD_AGE NT	Stage Party Master Producer Agent View	DIM_PRODUCER_A GENT	Producer Agent Dimension
559	STG_PRODUCER_ST ATUS_MASTER	Stage Producer Status Master	DIM_PRODUCER_ST ATUS	Producer Status Dimension
475	STG_CERTIFICATIO N_MASTER	Stage Certification Master	DIM_CERTIFICATIO N	Certification Dimension
554	STG_EXAMINATION _MASTER	Stage Examination Master	DIM_EXAMINATION	Examination Dimension
560	STG_EXAM_TYPE_ MASTER	Stage Exam Type Master	DIM_EXAM_TYPE	Exam Type Dimension
555	STG_INS_EXAM_ST ATUS_MASTER	Stage Insurance Exam Status Master	DIM_INS_EXAM_ST ATUS	Insurance Exam Status Dimension
557	STG_INSURANCE_LI CENSE_MASTER	Stage Insurance License Master	DIM_INSURANCE_LI CENSE	Insurance License Dimension
556	STG_INS_LICENS_C LS_TYPE_MASTER	Stage Insurance License Class Type Master	DIM_INS_LICENSE_ CLASS_TYPE	Insurance License Class Type Dimension
558	STG_INS_LICENSE_ STATUS_MASTER	Stage Insurance License Status Master	DIM_INSURANCE_LI CENSE_STATUS	Insurance License Status Dimension

15.8.2 About Party Producer Exam, Certification, and License T2T (Result Tables)

Party Producer Exam, Certification, and License T2T names and their description are given here.

T2T Name	T2T Description
T2T_FCT_PARTY_EXAM_DETAILS	This T2T stores the details pertaining to the certification and related exams of the Party. An Exam is the formal verification or validation of information learned/known, typically used to satisfy a requirement for licenses, registrations or other firm education proof.
T2T_FCT_PARTY_CERTIFICATE_DTLS	This T2T stores the certification details of the Party. Certification is formal procedure by which an accredited or authorized person or agency assesses and verifies (and attests in writing by issuing a certificate) the attributes, characteristics, quality, qualification, or status of individuals or organizations, goods or services, procedures or processes, or events or situations, in accordance with established requirements or standards. In case of insurance this refers to insurance licentiate and other accreditations.

T2T Name	T2T Description
T2T_FCT_PRDR_AGENT_LICENSE_DETAILS	This T2T stores the Producer License Details of the Party. There are different categories of insurance and a producer must be licensed in each category he or she wishes to transact business.

The mapping details for the Party Producer Exam, Certification, and License T2Ts are given here.

Source Table Name	Logical Stage Table Name	Fact Table Name	Logical Fact Table Name	T2T Name
STG_PARTY_EXAM	Stage Party Exam	FCT_PARTY_EXAM_	Fact Party Exam	T2T_FCT_PARTY_EXA
_DETAILS	Details	DETAILS	Details	M_DETAILS
STG_PARTY_CERTI	Stage Party	FCT_PARTY_CERTIFI CATE_DTLS	Fact Party	T2T_FCT_PARTY_CER
FICATE_DTLS	Certificate Details		Certificate Details	TIFICATE_DTLS
STG_PRDR_AGENT _LICENSE_DETAIL S	Stage Producer Agent License Details	FCT_PRDR_AGENT_L ICENSE_DETAILS	Fact Producer Agent License Details	T2T_FCT_PRDR_AGEN T_LICENSE_DETAILS

15.9 Party Results Tables

Party Results consists of the details related to Party such as Annual Income, and Primary Source of Wealth, etc.

15.9.1 About Party Results Dimension Tables

Party Results Dimension table names and their description are given here.

Logical Dimension Table Name	Remarks
Customer Type Dimension	This table stores the master list of customer type details.
	Sample values: OUR, OTH.
Credit Rating Dimension	This table stores credit rating information.

The mapping details for the Party Results Dimension tables are given here.

Map Reference	Source Table	Logical Stage Table	Dimension Table	Logical Dimension Table Name
Number	Name	Name	Name	
418	STG_PARTY_TYPE_	Stage Party Type	DIM_CUSTOMER_TYP	Customer Type
	MASTER	Master	E	Dimension

Map Reference	Source Table	Logical Stage Table	Dimension Table	Logical Dimension Table Name
Number	Name	Name	Name	
466	STG_CREDIT_RATIN G_MASTER	Stage Credit Rating Master	DIM_CREDIT_RATING	Credit Rating Dimension

15.9.2 About Party Results T2T (Result Table)

Party Results T2T and its description is given here.

T2T Name	T2T Description
T2T_FCT_PARTY_DETAILS	This T2T stores information related to Party such as Annual Income, and Primary Source of Wealth, etc.

The mapping details for the Party Results T2T is given here.

Source Table Name	Logical Stage Table Name	Fact Table Name	Logical Fact Table Name	T2T Name
STG_PARTY_DE TAILS	Stage Party Details	FCT_PARTY_DETAILS	Fact Party Details	T2T_FCT_PARTY_DETAIL S

15.10 Other Party Attributes Tables

This section consists of details about other Party attribute tables.

15.10.1 About Other Party Attributes Dimension Tables

Other Party Attributes Dimension table names and their description are given here.

Logical Dimension Table Name	Dimension Table Description
Party Type Dimension	This table stores Party type information. The Party may be an individual, Corporate - Small, Corporate - Medium, State Government, Sovereign etc.
Party Relationship Type Dimension	This table stores the relationship types defined by the Insurance Company. This table is used to determine the relationship type between two Parties. This can also be used for relationship type between an entity and a Party.
Relation Role Type Dimension	This table stores the Relation Role type details. Sample values: ORIGINATOR, PERFORMER, RECIPIENT, TARGET, etc.

Logical Dimension Table Name	Dimension Table Description
Reinsurer Type Dimension	This table stores the list of types of reinsurers and generated from stage party type master which holds all the party types at one place.

The mapping details for the Other Party Attributes Dimension tables are given here.

Map Reference Number	Source Table Name	Logical Stage Table Name	Dimension Table Name	Logical Dimension Table Name
180	STG_PARTY_TYPE _MASTER	Stage Party Type Master	DIM_PARTY_TYPE	Party Type Dimension
382	STG_PARTY_RELT NSHP_TYPE_MAS TER	Stage Party Relationship Type Master	DIM_PARTY_RELATI ONSHIP_TYPE	Party Relationship Type Dimension
483	STG_RELATION_R OLE_TYPE_MASTE R	Stage Relation Role Type Master	DIM_RELATION_ROL E_TYPE	Relation Role Type Dimension
597	STG_REINSURER_T YPE_MASTER	Stage Reinsurer Type Master	DIM_REINSURER_TY PE	Reinsurer Type Dimension

15.10.2 About Other Party Attributes T2Ts (Result Tables)

Other Party Attributes T2T and its description is given here.

T2T Name	T2T Description
T2T_FCT_PARTY_DETAILS	This T2T stores the details pertaining to a Party.
T2T_FCT_PARTY_PARTY_RELATIONS HIP	This T2T stores the details about relationship between the Parties.
T2T_FCT_PARTY_RATING_DETAILS	This T2T stores the rating details of the customer or counterparty or guarantor, etc.
T2T_FCT_PARTY_ACCOUNT_ROLE_M AP	This T2T stores the details of role played by the Party against an account.
T2T_FCT_ACCOUNT_RATING_DETAIL S	This T2T stores the account rating details from multiple sources.

The mapping details for the Other Party Attributes T2T is given here.

Source Table Name	Logical Stage Table Name	Fact Table Name	Logical Fact Table Name	T2T Name
STG_PARTY_DETA ILS	Stage Party Details	FCT_PARTY_DETAILS	Fact Party Details	T2T_FCT_PARTY_DET AILS
STG_PARTY_PART	Stage Party Party	FCT_PARTY_PARTY	Fact Party Party	T2T_FCT_PARTY_PAR TY_RELATIONSHIP
Y_RELATIONSHIP	Relationship	_RELATIONSHIP	Relationship	
STG_PARTY_RATI	Stage Party Rating	FCT_PARTY_RATIN	Fact Party Rating	T2T_FCT_PARTY_RAT ING_DETAILS
NG_DETAILS	Details	G_DETAILS	Details	
STG_PARTY_ACCO	Stage Party	FCT_PARTY_ACCO	Fact Party Account	T2T_FCT_PARTY_ACC
UNT_ROLE_MAP	Account Role Map	UNT_ROLE_MAP	Role Map	OUNT_ROLE_MAP
STG_ACCOUNT_R	Stage Account	FCT_ACCOUNT_RA	Fact Account Rating	T2T_FCT_ACCOUNT_
ATING_DETAILS	Rating Details	TING_DETAILS	Details	RATING_DETAILS

15.11 Deploying Party Related Tables on Hive

All RDBMS related Party related Dimension and Result tables can also be deployed on Hive (Stage and Results on Hive).

NOTE

In general, Stage and Result tables are also supported in Hive. However, there are some exceptions. For a list of tables that are not supported in Hive, see <u>List of Unsupported T2Ts</u>.

15.12 Populating Party Related Dimension Tables

Follow this SCD process to populate data into any Party related Dimension table:

NOTE

You can also follow this SCD process to populate data into any Hive related Party Dimension table.

- **1.** To populate data into any Party related Dimension table, execute the SCD batch. For a detailed procedure, see <u>Slowly Changing Dimension (SCD) Process</u>.
- **2.** To check the SCD batch execution status of a Party related Dimension table, follow the procedure Check the Execution Status of the SCD Batch.
- **3.** To verify log files, and check the error messages (if any), follow the procedure <u>Verify Log Files and Check Error Messages</u>.

15.13 Populating Party Related T2T Result Tables

Follow this T2T process to populate data into any Party related T2T Result table:

NOTE

You can also follow this T2T process to populate data into any Hive related Party T2T Result table.

- **1.** To populate data into any Party related T2T Result table, execute the batch for T2T. For a detailed procedure, see:
 - a. Prerequisites for loading T2T.
 - **b.** Set the Run Parameters.
 - c. Save the Run Parameters.
 - **d.** Execute the Batch for T2T.
- **2.** To check the T2T batch execution status of the Party related Result tables, follow the procedure Check the Batch Execution Status of T2T.
- **3.** To verify log files, and check the error messages (if any), follow the procedure <u>Verify T2T Log Files</u> and <u>Check Error Messages</u>.

16 Product Tables

This chapter provides information about Product tables in the Oracle Insurance Data Foundation application.

This chapter includes the following topics:

- About Product Dimension Table
- <u>Deploying Product Tables on Hive</u>
- Populating Product Dimension Tables

Product tables are used to load product details that the customer has opted for.

16.1 About Product Dimension Tables

Product Dimension table names and their description are given here.

Logical Dimension Table Name	Remarks
Product Dimension	This table stores the details of all the products (existing and stopped) offered by the Insurance Company.
Product Category Dimension	This table stores details about loan product category.
Product Type Dimension	This table stores details about loan product type.
Product Feature Dimension	This table stores the product feature details.

The mapping details for the Product Dimension tables are given here.

Map Reference Number	Source Table Name	Logical Stage Table Name	Dimension Table Name	Logical Dimension Table Name
78	STG_PRODUCT_MAS TER	Stage Product Master	DIM_PRODUCT	Product Dimension
83	STG_PRODUCT_CAT EGORY_MASTER	Stage Product Category Master	DIM_PRODUCT_CA TEGORY	Product Category Dimension
85	STG_PRODUCT_TYP E_MASTER	Stage Product Type Master	DIM_PRODUCT_TY PE	Product Type Dimension
128	DIM_PRODUCT_V	Product Dimension View	DIM_PRODUCT	Product Dimension
151	STG_PRODUCT_FEA TURE_MASTER	Stage Product Feature Master	DIM_PRODUCT_FE ATURE	Product Feature Dimension

NOTE

The FSI_PROD_STD_PROD_TYPE_MAP table has been added for mapping purposes, if the customer so desires. This table stores Product Standard Product Type mapping details.

16.2 Deploying Product Tables on Hive

All RDBMS related Product Dimension and Result tables can also be deployed on Hive (Stage and Results on Hive).

NOTE

In general, Stage and Result tables are also supported in Hive. However, there are some exceptions. For the list of tables that are not supported in Hive, see <u>List of Unsupported T2Ts</u>.

16.3 Populating Product Dimension Tables

Follow this SCD process to populate data into Product Dimension tables:

NOTE

You can also follow this SCD process to populate data into Hive related Product Dimension tables.

- **1.** To populate data into any Product Dimension table, execute the SCD batch. For a detailed procedure, see <u>Slowly Changing Dimension (SCD) Process</u>.
- **2.** To check the SCD batch execution status of a Product Dimension table, follow the procedure <u>Check the Execution Status of the SCD Batch.</u>
- **3.** To verify log files, and check the error messages (if any), follow the procedure <u>Verify Log Files and Check Error Messages</u>.

17 Insurance Underwriting Entities

This chapter provides information about Insurance Underwriting entities in the Oracle Insurance Data Foundation application and step-by step instructions to use this section.

This chapter includes the following topics:

- Insurance Underwriting Application Tables
- About Insurance Underwriting Application Dimension Tables
- About Insurance Underwriting Application T2Ts (Result Tables)
- Insurance Underwriting Quotes Tables
- About Insurance Underwriting Quotes Dimension Tables
- About Insurance Underwriting Quotes T2Ts (Result Tables)
- Insurance Underwriting Tables for Risk Analysis
- About Insurance Underwriting Dimension Tables for Risk Analysis
- About Insurance Underwriting T2T (Result Table) for Risk Analysis
- Party Criminal Conviction Tables
- About Party Criminal Conviction Dimension Table
- About Party Criminal Conviction T2T (Result Table)
- Party Driving Violation Tables
- About Party Driving Violation Dimension Tables
- About Party Driving Violation T2T (Result Table)
- Party Lifestyle Activity Tables
- About Party Lifestyle Activity Dimension Tables
- About Party Lifestyle Activity T2T (Result Table)
- Deploying Insurance Underwriting Tables on Hive
- Populating Insurance Underwriting Dimension Tables
- Populating Insurance Underwriting T2T Result Tables

Insurance Underwriting describes the process of assessing risk, ensuring that the cost of the cover is proportionate to the risks faced by the Party or the organization concerned. It evaluates risk and exposures of potential Party or organization. Insurance Company decides the coverage the Party or organization must receive, and the premium associated with the coverage or whether to accept the risk and insure them.

17.1 Insurance Underwriting Application Tables

When an applicant applies for insurance, the Insurance Company must look at different criteria to decide if they are going to accept the application for coverage. As a result, the Insurance Company creates and documents detailed information about the applicant and this process is called as Underwriting Application.

17.1.1 About Insurance Underwriting Application Dimension Tables

Insurance Underwriting Application Dimension table names and their remarks are given here.

Logical Dimension Table Name	Remarks
Underwriting Product Class Dimension	This table stores identification details of the underwriting class and its respective name or names. Underwriting class is carrier specific nomenclature representing the underwriting groups or products or risks in a given organization.
Application Dimension	This table stores the underwriting application details.
Application Type Dimension	This table stores the application type details such as fresh, existing, and enhancements.
Application Group Dimension	This table stores the underwriting application group details. Application group can contain one or more applications.
Application Status Dimension	This table stores the master list of application status such as processing, cancelled by customer, outstanding, outstanding from restructuring, etc.
Document Submission Status Dimension	This table stores the list of various status that a document can have. Document once submitted to an Insurance Company contains different status such as Pending, Received, Mailed for approval, Received Back, Under Processing, Approved, etc.
Rejection Reason Dimension	This table stores all the rejection reasons given by prospects for not buying a product or service.
Application Reject Reasons Dimension	This table stores the list of rejection reasons possible when processing an application.
Application Decision Event Dimension	This table stores the details of the outcome of all decision events for the individual application. During the process of underwriting, an application goes through various stages such as personal identity verification, address verification, employment verification, etc.
Underwriting Model Type Dimension	This table stores the list of all types of underwriting model types.
Underwriting Element Dimension	This table stores the classification details of insurance policy underwriting related to tobacco usage. Sample values: BLENDED, NONSMOKER, SMOKER, TOBACCO, etc.
Insurance Underwriting Issue Type Dimension	This table stores the Insurance Underwriting issue type details for a policy. For example Full Underwriting, Mass Underwriting, Reduced Underwriting, Simplified Underwriting, etc. Sample values: OTHER, UNKNOWN, AVIATION, PERCOVERAGE, etc.
Insurance Underwriting Issue Sub Type Dimension	This table stores the Insurance Underwriting issue sub type details for a policy. This table provides additional details about the type of underwriting that was applied to the coverage. Sample values: OTHER, UNKNOWN, FULLMED, NONMED, PARAMED.

The mapping details for the Insurance Underwriting Application Dimension tables are given here.

Map Reference Number	Source Table Name	Logical Stage Table Name	Dimension Table Name	Logical Dimension Table Name
523	STG_UNW_PRODUC T_CLASS_MASTER	Stage Underwriting Product Class Master	DIM_UNW_PRODUC T_CLASS	Underwriting Product Class Dimension
664	STG_APPLICATIONS	Stage Applications	DIM_APPLICATION	Application Dimension
162	STG_APPL_TYPE_M ASTER	Stage Application Type Master	DIM_APPLICATION_ TYPE	Application Type Dimension
665	STG_APPLICATION_ GROUP_MASTER	Stage Application Group Master	DIM_APPLICATION_ GROUP	Application Group Dimension
166	STG_APPL_STATUS _MASTER	Stage Application Status Master	DIM_APPLICATION_S TATUS	Application Status Dimension
673	STG_DOC_SUBMISS N_STATUS_MASTE R	Stage Document Submission Status Master	DIM_DOC_SUBMISSI ON_STATUS	Document Submission Status Dimension
93	STG_REJECTION_R EASON_MASTER	Stage Rejection Reason Master	DIM_REJECTION_RE ASON	Rejection Reason Dimension
3	STG_APPL_REJECT _REASON_MASTER	Stage Application Reject Reasons Master	DIM_APPLICATION_ REJECT_REASONS	Application Reject Reasons Dimension
666	STG_APPLN_DECISI ON_EVNT_MASTER	Stage Application Decision Event Master	DIM_APPLN_DECISIO N_EVNT	Application Decision Event Dimension
409	STG_UNDRWRTNG_ MDL_TYPE_MASTE R	Stage Underwriting Model Type Master	DIM_UNDERWRITING _MODEL_TYPE	Underwriting Model Type Dimension
522	STG_UNDERWRITIN G_ELMNT_MASTER	Stage Underwriting Element Master	DIM_UNDERWRITING _ELEMENT	Underwriting Element Dimension
238	STG_UNDERWRITE R_MASTER	Stage Underwriter Master	DIM_UNDERWRITER	Underwriter Dimension
725	STG_INS_UNW_ISS UE_TYPE_MASTER	Stage Insurance Underwriting Issue Type Master	DIM_INS_UNW_ISSU E_TYPE	Insurance Underwriting Issue Type Dimension
726	STG_INS_UNW_ISS UE_STYPE_MASTER	Stage Insurance Underwriting Issue Sub Type Master	DIM_INS_UNW_ISSU E_STYPE	Insurance Underwriting Issue Sub Type Dimension

About Insurance Underwriting Application T2Ts (Result Tables) 17.1.2

Insurance Underwriting Application T2Ts and their description are given here.

T2T Name	T2T Description
T2T_FCT_APPLICATION	This T2T stores the applications processed in each period, for an analysis over time.
T2T_FCT_APPLICATION_GROUP	This T2T stores the Application Group details. Application group can consist of one or more applications. In general, insurance underwriting team creates the application group.
T2T_FCT_APPLICATION_DOCUMENT	This T2T stores the documents submitted by the applicant. Underwriters may ask multiple verification documents from those seek to cover the risk with insurance company. All such documentary evidences are stored in this entity.
T2T_FCT_APPLICATION_DOC_MAP	This T2T stores the details of the document associated with the application and the status of the document such as a document is approved or rejected.
T2T_FCT_APPLICATION_EVENT_DEC	This T2T stores details of the outcome of all decision events for the individual application. During the process of underwriting, an application goes through various stages such as personal identity verification, address verification, employment verification, etc.
T2T_FCT_APPLICATIONS_DEVIATION	This T2T stores the application deviation details.
T2T_FCT_APPLICNS_DOC_PRINT_LOG	This T2T stores the history of documents printed at origination. Multiple documents can be printed for the loan at origination.
T2T_FCT_APPLN_GROUP_EVENT_DEC	This T2T stores details of the outcome of all decision events for an Application Group. During the process of underwriting, an application goes through various stages like personal identity verification, address verification, employment verification, etc.
T2T_FCT_APPLN_PARTY_ROLE_MAP	This T2T stores mapping details of an application to multiple roles played by a party. A party can be primary applicant, coapplicant, Guarantor, Nominee etc.
T2T_FCT_EXTERNAL_INS_REFUSAL_DTLS	Stores the external insurance refusal details of the Party or the Applicant if any other carrier has refused this Applicant or Party.
T2T_FCT_PRIOR_INSURER_CLAIM_DTLS	Stores the prior insurer claim details of the Applicant or the Party.

The mapping details for the Insurance Underwriting Application T2Ts are given here.

Source Table Name	Logical Stage Table Name	Fact Table Name	Logical Fact Table Name	T2T Name
STG_APPLICATIO NS	Stage Applications	FCT_APPLICATION	Fact Applications	T2T_FCT_APPLICATION
STG_APPLICATIO N_GROUP	Stage Application Group	FCT_APPLICATION _GROUP	Fact Application Group	T2T_FCT_APPLICATION_G ROUP

Source Table Name	Logical Stage Table Name	Fact Table Name	Logical Fact Table Name	T2T Name
STG_APPLICATIO N_DOCUMENT	Stage Application Document	FCT_APPLICATION _DOCUMENT	Fact Application Document	T2T_FCT_APPLICATION_D OCUMENT
STG_APPLICATIO N_DOCUMENT_M AP	Stage Application Document Map	FCT_APPLICATION _DOCUMENT_MA P	Fact Application Document Map	T2T_FCT_APPLICATION_D OC_MAP
STG_APPLICATIO N_EVENT_DECISI ON	Stage Application Event Decision	FCT_APPLICATION _EVENT_DECISION	Fact Application Event Decision	T2T_FCT_APPLICATION_E VENT_DEC
STG_APPLICATIO NS_DEVIATION	Stage Applications Deviation	FCT_APPLICATION S_DEVIATION	Fact Applications Deviation	T2T_FCT_APPLICATIONS_ DEVIATION
STG_APPLICATIO NS_DOC_PRINT_ LOG	Stage Applications Document Print Log	FCT_APPLICATION S_DOC_PRINT_LO G	Fact Applications Document Print Log	T2T_FCT_APPLICNS_DOC_ PRINT_LOG
STG_APPLN_GRO UP_EVENT_DECIS ION	Stage Application Group Event Decision	FCT_APPLN_GRO UP_EVENT_DECISI ON	Fact Application Group Event Decision	T2T_FCT_APPLN_GROUP_ EVENT_DEC
STG_APPLN_PAR TY_ROLE_MAP	Stage Application Party Role Map	FCT_APPLN_PART Y_ROLE_MAP	Fact Application Party Role Map	T2T_FCT_APPLN_PARTY_ ROLE_MAP
STG_EXTERNAL_I NS_REFUSAL_DT LS	Stage External Insurance Refusal Details	FCT_EXTERNAL_I NS_REFUSAL_DTL S	Fact External Insurance Refusal Details	T2T_FCT_EXTERNAL_INS_ REFUSAL_DTLS
STG_PRIOR_INSU RER_CLAIM_DTL S	Stage Prior Insurer Claim Details	FCT_PRIOR_INSUR ER_CLAIM_DTLS	Fact Prior Insurer Claim Details	T2T_FCT_PRIOR_INSURER _CLAIM_DTLS

Insurance Underwriting Quotes Tables 17.2

An insurance quote is an estimate of what an applicant's rate can be with a potential Insurance Company. Quotes are subject to change depending on how much information an applicant gives at the time of the quote. The more forthcoming an applicant is with information, the more accurate is their insurance quote.

About Insurance Underwriting Quotes Dimension Tables 17.2.1

Insurance Underwriting Quotes Dimension table names and their remarks are given here.

Logical Dimension Table Name	Remarks
Quote Source Dimension	This table stores the description of the source of the quote. For example, Producing Agency, Producing Agent, Customer, etc.

Logical Dimension Table Name	Remarks
Quote Source Method Dimension	This table stores the description of the source method of the quotes.
	For example, Turbo rater, quick quote, etc.
Quote Submission Method Dimension	This table stores details of different methods from which the Insurance Company receives the quote.
	For example, mail, fax, internet, etc.
Quote Declination Type Dimension	This table stores all types of quote declinations.
	For example, Rates too high, Billing Plan, Fraud and Bankruptcy, Uninsurable Risks, Age of Building, etc.

The mapping details for the Insurance Underwriting Quotes Dimension tables are given here.

Map Reference	Source Table	Logical Stage Table	Dimension Table	Logical Dimension Table Name
Number	Name	Name	Name	
251	STG_QUOTE_SOUR CE	Stage Quote Source	DIM_QUOTE_SOUR CE	Quote Source Dimension
252	STG_QUOTE_SOUR	Stage Quote Source	DIM_QUOTE_SOUR	Quote Source
	CE_METHOD	Method	CE_METHOD	Method Dimension
253	STG_QUOTE_SUBM	Stage Quote	DIM_QUOTE_SUBMI	Quote Submission
	ISSION_METHOD	Submission Method	SSION_METHOD	Method Dimension
250	STG_QUOTE_DECLI	Stage Quote	DIM_QUOTE_DECLI	Quote Declination
	NATION_TYPE	Declination Type	NATION_TYPE	Type Dimension

17.2.2 About Insurance Underwriting Quotes T2Ts (Result Tables)

Insurance Underwriting Quotes T2Ts and their description are given here.

T2T Name	T2T Description
T2T_FCT_INSURANCE_QUOTES	This T2T stores all the quote related attributes and measures.
T2T_FCT_INSURANCE_QUOTE_REPORTS	This T2T stores report related information for each quote.

The mapping details for the Insurance Underwriting Quotes T2Ts are given here.

Source Table Name	Logical Stage Table Name	Fact Table Name	Logical Fact Table Name	T2T Name
STG_INSURANCE_Q	Stage Insurance	FCT_INSURANCE_Q	Fact Insurance	T2T_FCT_INSURANCE_Q
UOTES	Quotes	UOTES	Quotes	UOTES

Source Table Name	Logical Stage Table Name	Fact Table Name	Logical Fact Table Name	T2T Name
STG_INSURANCE_Q	Stage Insurance	FCT_INSURANCE_Q	Fact Insurance	T2T_FCT_INSURANCE_Q
UOTE_REPORTS	Quote Reports	UOTES_REPORTS	Quote Reports	UOTE_REPORTS

17.3 Insurance Underwriting Tables for Risk Analysis

Insurance Company determines and asses the risk for itself when offering insurance to an insurer through Underwriting process. Lesser the risk, lesser the cost to an insurer.

17.3.1 About Insurance Underwriting Dimension Tables for Risk Analysis

Underwriting Dimension table names (for Risk Analysis) and their remarks are given here.

Logical Dimension Table Name	Remarks
Underwriting Risk Sub Type Dimension	This table stores the underwriting sub risk type. Sample values: Preferred, Rated, Substandard, Standard, Uninsurable etc.
Underwriting Risk Type Dimension	This table stores the underwriting risk type. Sample values: best, better, worse, worst, other, unknown.
Underwriting Rating Class Dimension	Stores the underwriting class code details. The source of this list includes various bureaus, insurers, and other state manuals or rating organization. The National Council on Compensation Insurance (NCCI) for Workers' Compensation state-specific manuals or other state rating organizations are the source of this code list.
	Sample values: 8010, 8018, 8008, 8044, 9083, and so on.

The mapping details for the Underwriting Dimension tables (for Risk Analysis) are given here.

Map Reference	Source Table	Logical Stage Table	Dimension Table	Logical Dimension Table Name
Number	Name	Name	Name	
524	STG_UNW_RISK_SU	Stage Underwriting	DIM_UNW_RISK_SU	Underwriting Risk Sub
	B_TYPE_MASTER	Risk Sub Type Master	B_TYPE	Type Dimension
525	STG_UNW_RISK_TY	Stage Underwriting	DIM_UNW_RISK_TY	Underwriting Risk
	PE_MASTER	Risk Type Master	PE	Type Dimension
785	STG_UNW_RATING_	Stage Underwriting	DIM_UNW_RATING_	Underwriting Rating
	CLASS_MASTER	Rating Class Master	CLASS	Class Dimension

17.3.2 About Insurance Underwriting T2T (Result Table) for Risk Analysis

Underwriting T2T and its description is given here.

T2T Name	T2T Description
T2T_FCT_UNW_PRODUCT_CLASS_DETAILS	This T2T stores the underwriting class product details. It provides life product allowed issue limitations based on the underwriting risk properties including gender, age, tobacco usage, underwriting class, and face/coverage amount.

The mapping details for the Underwriting T2T table is given here

Source Table Name	Logical Stage Table Name	Fact Table Name	Logical Fact Table Name	T2T Name
STG_UNW_PROD UCT_CLASS_DET AILS	Stage Underwriting Product Class Details	FCT_UNW_PRODUC T_CLASS_DETAILS	Fact Underwriting Product Class Details	T2T_FCT_UNW_PRO DUCT_CLASS_DETAI LS

17.3.3 Party Criminal Conviction Tables

Party Criminal Conviction is the outcome of a criminal prosecution, which concludes in a judgment that the defendant is guilty of the crime(s) charged.

17.3.3.1 About Party Criminal Conviction Dimension Table

Party Criminal Conviction Dimension table name and its remarks is given here.

Logical Dimension Table Name	Remarks
Crime Type Dimension	This table stores the crime type if the Party is involved in any criminal activity.

The mapping details for the Party Criminal Conviction Dimension table is given here.

Map Reference	Source Table	Logical Stage	Dimension Table	Logical Dimension Table Name
Number	Name	Table Name	Name	
550	STG_CRIME_TYPE_ MASTER	Stage Crime Type Master	DIM_CRIME_TYPE	Crime Type Dimension

17.3.3.2 About Party Criminal Conviction T2T (Result Table)

Party Criminal Conviction T2T and its description is given here.

T2T Name	T2T Description
T2T_FCT_CRIMINAL_CONVICTION_DTLS	This T2T stores the criminal conviction details if the Party is involved in any criminal activity.

The mapping details for the Party Criminal Conviction T2T is given here.

Source Table Name	Logical Stage Table Name	Fact Table Name	Logical Fact Table Name	T2T Name
STG_CRIMINAL_C ONVICTION_DTL S	Stage Criminal Conviction Details	FCT_CRIMINAL_CO NVICTION_DTLS	Fact Criminal Conviction Details	T2T_FCT_CRIMINAL_CO NVICTION_DTLS

17.3.4 Party Driving Violation Tables

Party Driving Violation is the violation of specific Road and Motor vehicle laws, by the driver (Party) of a vehicle. This information is collected for the purpose of either underwriting or continuing a suitable insurance coverage.

17.3.4.1 About Party Driving Violation Dimension Tables

Party Driving Violation Dimension table names and their remarks are given here.

Logical Dimension Table Name	Remarks
Driving violation type dimension	This table stores master list of driving violation type.
Driving Violation Charge Category Dimension	This table stores the driving violation charge category details. Sample values: Felony, Misdemeanor, Other, Unknown.

The mapping details for the Party Driving Violation Dimension tables are given here.

Map Reference Number	Source Table Name	Logical Stage Table Name	Dimension Table Name	Logical Dimension Table Name
551	STG_DRIVIN_VIOLAT N_TYPE_MASTER	Stage Driving Violation Type Master	DIM_DRIVING_VIOLAT ION_TYPE	Driving Violation Type Dimension

Map Reference Number	Source Table Name	Logical Stage Table Name	Dimension Table Name	Logical Dimension Table Name
552	STG_DVIOLTN_CHR GE_CTGRY_MASTER	Stage Driving Violation Charge Category Master	DIM_DVIOLTN_CHRG E_CTGRY	Driving Violation Charge Category Dimension

17.3.4.2 About Party Driving Violation T2T (Result Table)

Party Driving Violation T2T and its description is given here.

T2T Name	T2T Description
T2T_FCT_DRIVING_VIOLATION_DTLS	This T2T stores the driving violation details related to the party identifier.

The mapping details for the Party Driving Violation T2T is given here.

Source Table Name	Logical Stage Table Name	Fact Table Name	Logical Fact Table Name	T2T Name
STG_DRIVING_VI	Stage Driving	FCT_DRIVING_VIOL	Fact Driving	T2T_FCT_DRIVING_VI
OLATION_DTLS	Violation Details	ATION_DTLS	Violation Details	OLATION_DTLS

17.3.5 Party Lifestyle Activity Tables

Lifestyle Activity covers physical activities of the Party such as auto racing, aviation, boat racing, mountain climbing, para scuba diving and many more, which may be considered as risky by the insurance company.

The Lifestyle Activity tables store the details of particular Lifestyle Activities of the Party.

Lifestyle Activity tables can be mainly classified into Lifestyle Activity Details and its specific subcategories.

17.3.5.1 About Party Lifestyle Activity Dimension Tables

Party Lifestyle Activity Dimension table names and their remarks are given here.

Logical Dimension Table Name	Remarks
Life Style Activity Type Dimension	This table stores the details of life style activity type. Sample values: AUTORACE, AVIATION, BOATRACE, BOXING, RUGBY, FORTRAVEL, MILITARY, ROCKCLIMB, DIVE, etc.
Life Style Activity Dimension	This table stores the details about lifestyle activity of a Party, its start date and end date.

Logical Dimension Table Name	Remarks
Life Style Activity Violation Dimension	This table stores the information regarding life style activity violation.
Life Style Activity Violation Type Dimension	This table stores the Life Style Activity violation type. Sample values: FAA Equipment violation, license suspension, other.
Life Style Activity Aircraft Type Dimension	This table stores master list of type of the aircraft flown for the activity. Aircraft Type is used to specify the type of aircraft. If all the aircrafts are of the same Aircraft Type, then the type must be specified in the Aircraft Type on aviation experience. Sample vales: bomber, Attack, Experimental, fighter, etc.
Life Style Activity Air Sports Type Dimension	This table stores the different types of equipment used for the climbing activity. Sample values: Slings, Nuts, Tricams, SLCD=Spring-Loaded camming Devices, Bolts, Pitons, Skyhooks.
Life Style Activity Air Sports Balloon Type Dimension	This table stores the balloon type used for any air sports experience. Sample values: Air, Gas, Other.
Life Style Activity Aviation Highest Qualification Level Dimension	This table stores the highest qualification level achieved in aviation by the Party. Samples values: Commercial License, Instructors License, Instrument Rated, etc.
Life Style Activity Aviation Type Dimension	This table stores the Aviation Type details. It is used to specify the type of aviation when it applies to all the aircraft flown by the client. If the Aviation Type varies by Aircraft, then the type must be specified in each individual Aircraft object instead. Sample values: Commercial, Military, other, private, unknown.
Life Style Activity Aviation Certificate Type Dimension	This table stores the aviation certificate type details. Sample values: single engine, sea, instrument rating, multi engine, land, other.
Life Style Activity Craft Certificate Type Dimension	This table stores the craft certificate type. Sample values: airplane, glider, lighter than air, other, powered lift, rotorcraft, unknown.
Life Style Activity Peril Type Dimension	This table stores the Life Style Activity Peril type details. Sample values: Dare-Devil Activities, Exhibitions, Exploration, Other, Unknown, Record Setting Activities, Rescue, Stunts.
Life Style Activity Climbing Type Dimension	This table stores the details of different types of climbing activity. Sample values: traditional, top-rope, sport, lead, bouldering, solo, aid.
Life Style Activity Medical Certificate Restriction Type Dimension	This table stores the details of medical certificate restriction type, defines the types of restrictions or constraints that may apply to a medical certificate. Sample values: other, restricted, special issue, unknown.
Life Style Activity Military Organization Type Dimension	This table stores the type of military organization the Party is part of.

Logical Dimension Table Name	Remarks
	Sample values: air force, army, coast guard, marines, national guards, navy, others.
Life Style Activity Safety Equipment Used Type Dimension	This table stores the details of different types of safety equipment used during the activity. Sample values: Head and Neck Restraints, Onsite Medical Personnel, Other, Roll Cages, Unknown.
Life Style Activity Equipment Assembly Dimension	This table stores the details of equipment assembly. Sample values: Factory Assembled, home Assembled, Home build, other.
Life Style Activity Flying Purpose Dimension	This table stores the details of purpose for flying. Sample values: Advertising, Aerobatics, Agricultural, Combat, Flight surgeon, etc.
Life Style Activity Climbing Equipment Type Dimension	This table stores the details of different types of equipment used for the climbing activity. Sample values: Slings, Nuts, Tricams, SLCD=Spring-Loaded camming Devices, Bolts, Pitons, Skyhooks.
Life Style Activity Current Military Status Dimension	This table stores the details of current military status. Sample values: Active Duty, Active Reserve, Inactive, Retired, etc.
Life Style Activity Race Track Type Dimension	This table stores the details of different race tract type. Sample values: Closed Course Inland, Closed Course Ocean, Drag, Hill climb, etc.
Life Style Activity Racing Vehicle Type Dimension	This table stores the details of type of racing vehicles. Sample values: Automobile, Boat, Motorcycle, Other, Snowmobile, Unknown.
Life Style Activity Class Of Competition Type Dimension	This table stores the racing competitions class type details. Sub list values, where specified, correspond to the type of vehicle specified in the Vehicle Type property. Sample Values: Formula 1, Cross country, Dirt track, Hill climbs, Ice racing, etc.
Life Style Activity Surface Type Dimension	This table stores the surface type details the race was primarily performed on. Sample values: Clay, dirt, ice, paved, sand, water, other, unknown.
Life Style Activity Travel Purpose Type Dimension	This table stores the travel type purpose details. Sample values: Business, miscellaneous, Education, Employment, Family Visit, Volunteer Work, etc.
Life Style Activity Travel Transportation Mode Dimension	This table stores the dominant mode of travel details while in the foreign country. Sample values: automobile, common carrier air, ship, etc.
Life Style Activity Underwater Diving Type Dimension	This table stores the diving type details. Samples values: Scuba, skin diving, snorkeling, hookah, hard hat.
Life Style Activity Underwater Dive Training Type Dimension	This table stores the master list of professionally recognized diving certifications and training courses.

Logical Dimension Table Name	Remarks
Life Style Activity Underwater Dive Location Type Dimension	This table stores the details of dive location type, the environments, which apply to this Underwater Diving experience. Sample values: Coastal Waters, Deep Sea, Lakes, etc.
Life Style Activity Underwater Dive Purpose Type Dimension	This table stores the underwater dive purpose details. Sample values: Abalone, Cave, Cavern diving, Exploration, Free Diving, etc.
Life Style Activity Underwater Diving Equipment Type Dimension	This table stores the diving equipment type details. Sample values: closed circuit, wet suit, etc.
Season Type Dimension	This table stores the season type details. Sample values: fall, other, unknown, spring, summer, winter.
Terrain Type Dimension	This table stores the aviation certificate type details. Sample values: single engine, sea, instrument rating, multi engine, land, other.

The mapping details for the Party Lifestyle Activity Dimension tables are given here.

Map Reference Number	Source Table Name	Logical Stage Table Name	Dimension Table Name	Logical Dimension Table Name
501	STG_LSA_TYPE_ MASTER	Stage Life Style Activity Type Master	DIM_LIFESTYLE_AC TIVITY_TYPE	Life Style Activity Type Dimension
527	STG_LSA_AIRSPO RTS_EXP_DETL_V	Stage Life Style Activity Airsports Experience Details View	DIM_LIFESTYLE_AC TIVITY	Life Style Activity Dimension
528	STG_LSA_AVIATI ON_EXP_DETAILS _V	Stage Life Style Activity Aviation Experience Details	DIM_LIFESTYLE_AC TIVITY	Life Style Activity Dimension
530	STG_LSA_COMPE TITION_DTLS_V	Stage Life Style Activity Competition Details	DIM_LIFESTYLE_AC TIVITY	Life Style Activity Dimension
531	STG_LSA_MILITA RY_EXP_DETAILS _V	Stage Life Style Activity Military Experience Details	DIM_LIFESTYLE_AC TIVITY	Life Style Activity Dimension
532	STG_LSA_RACING _EXPRNCE_DTLS_ V	Stage Life Style Activity Racing Experience Details View	DIM_LIFESTYLE_AC TIVITY	Life Style Activity Dimension
533	STG_LSA_UW_DI VNG_EXP_DETAIL S_V	Stage Life Style Activity Underwater Diving Experience Details View	DIM_LIFESTYLE_AC TIVITY	Life Style Activity Dimension
534	STG_LSA_FORGN _TRVEL_EXP_DTL S_V	Stage Life Style Activity Foreign Travel Experience Details View	DIM_LIFESTYLE_AC TIVITY	Life Style Activity Dimension
502	STG_LSA_VIOLAT ION_MASTER	Stage Life Style Activity Violation Master	DIM_LSA_VIOLATIO N	Life Style Activity Violation Dimension

Map Reference Number	Source Table Name	Logical Stage Table Name	Dimension Table Name	Logical Dimension Table Name
503	STG_LSA_VIOLAT ION_TYPE_MAST ER	Stage Life Style Activity Violation Type Master	DIM_LSA_VIOLATIO N_TYPE	Life Style Activity Violation Type Dimension
505	STG_LSA_AIRCRA FT_TYPE_MASTE R	Stage Life Style Activity Aircraft Type Master	DIM_LSA_AIRCRAF T_TYPE	Life Style Activity Aircraft Type Dimension
506	STG_LSA_AIRSPO RTS_TYPE_MAST ER	Stage Life Style Activity Air Sports Type Master	DIM_LSA_AIRSPOR TS_TYPE	Life Style Activity Air Sports Type Dimension
507	STG_LSA_AS_BAL LOON_TYPE_MA STER	Stage Life Style Activity Air Sports Balloon Type Master	DIM_LSA_AS_BALL OON_TYPE	Life Style Activity Air Sports Balloon Type Dimension
508	STG_LSA_AVIATI ON_HQL_MASTE R	Stage Life Style Activity Aviation Highest Qualification Level Master	DIM_LSA_AVIATION _HQL	Life Style Activity Aviation Highest Qualification Level Dimension
509	STG_LSA_AVIATI ON_TYPE_MASTE R	Stage Life Style Activity Aviation Type Master	DIM_LSA_AVIATION _TYPE	Life Style Activity Aviation Type Dimension
510	STG_LSA_AVITN_ CRTF_TYPE_MAS TER	Stage Life Style Activity Aviation Certificate Type Master	DIM_LSA_AVIATN_ CERTF_TYPE	Life Style Activity Aviation Certificate Type Dimension
511	STG_LSA_CERT_C RAFT_TYPE_MAS TER	Stage Life Style Activity Craft Certificate Type Master	DIM_LSA_CERT_CR AFT_TYPE	Life Style Activity Craft Certificate Type Dimension
512	STG_LSA_PERIL_ TYPE_MASTER	Stage Life Style Activity Peril Type Master	DIM_LSA_PERIL_TY PE	Life Style Activity Peril Type Dimension
513	STG_LSA_CLIMBI NG_TYPE_MASTE R	Stage Life Style Activity Climbing Type Master	DIM_LSA_CLIMBING _TYPE	Life Style Activity Climbing Type Dimension
515	STG_LSA_MED_C ERTR_TYPE_MAS TER	Stage Life Style Activity Medical Certificate Restriction Type Master	DIM_LSA_MED_CER TR_TYPE	Life Style Activity Medical Certificate Restriction Type Dimension
516	STG_LSA_MILTRY _ORG_TYPE_MAS TER	Stage Life Style Activity Military Organization Type Master	DIM_LSA_MILITARY _ORG_TYPE	Life Style Activity Military Organization Type Dimension
517	STG_LSA_SAFET Y_EQP_TYPE_MA STER	Stage Life Style Activity Safety Equipment Used Type Master	DIM_LSA_SAFETY_ EQP_TYPE	Life Style Activity Safety Equipment Used Type Dimension
518	STG_LSA_EQUIP MT_ASSMBLY_M ASTER	Stage Life Style Activity Equipment Assembly Master	DIM_LSA_EQUIPME NT_ASSEMBLY	Life Style Activity Equipment Assembly Dimension

Map Reference Number	Source Table Name	Logical Stage Table Name	Dimension Table Name	Logical Dimension Table Name
519	STG_LSA_FLYING _PURPOSE_MAST ER	Stage Life Style Activity Flying Purpose Master	DIM_LSA_FLYING_P URPOSE	Life Style Activity Flying Purpose Dimension
535	STG_LSA_CLMBN G_EQP_TYPE_MA STER	Stage Life Style Activity Climbing Equipment Type Master	DIM_LSA_CLMBNG_ EQPMNT_TYPE	Life Style Activity Climbing Equipment Type Dimension
536	STG_LSA_CUR_MI LITRY_STS_MAST ER	Stage Life Style Activity Current Military Status Master	DIM_LSA_CUR_MILI TRY_STS	Life Style Activity Current Military Status Dimension
537	STG_LSA_RACE_T RACK_TYPE_MAS TER	Stage Life Style Activity Race Track Type Master	DIM_LSA_RACE_TR ACK_TYPE	Life Style Activity Race Track Type Dimension
538	STG_LSA_RACE_ VHCL_TYPE_MAS TER	Stage Life Style Activity Racing Vehicle Type Master	DIM_LSA_RACE_VH CL_TYPE	Life Style Activity Racing Vehicle Type Dimension
539	STG_LSA_RACN_ CLS_COMPTN_M ASTER	Stage Life Style Activity Class Of Competition Type Master	DIM_LSA_RACN_CL S_OF_COMPTN	Life Style Activity Class Of Competition Type Dimension
540	STG_LSA_SURFA CE_TYPE_MASTE R	Stage Life Style Activity Surface Type Master	DIM_LSA_SURFACE _TYPE	Life Style Activity Surface Type Dimension
541	STG_LSA_TRAVE L_PUR_TYPE_MA STER	Stage Life Style Activity Travel Purpose Type Master	DIM_LSA_TRAVEL_ PUR_TYPE	Life Style Activity Travel Purpose Type Dimension
542	STG_LSA_TRAVE L_TM_MASTER	Stage Life Style Activity Travel Transportation Mode Master	DIM_LSA_TRAVEL_ TM	Life Style Activity Travel Transportation Mode Dimension
543	STG_LSA_UW_DI VING_TYPE_MAS TER	Stage Life Style Activity Underwater Diving Type Master	DIM_LSA_UW_DIVI NG_TYPE	Life Style Activity Underwater Diving Type Dimension
544	STG_LSA_UW_DV _TRNG_TYPE_MA STER	Stage Life Style Activity Underwater Dive Training Type Master	DIM_LSA_UW_DV_T RNG_TYPE	Life Style Activity Underwater Dive Training Type Dimension
545	STG_LSA_UW_DV E_LOC_TYPE_MA STER	Stage Life Style Activity Underwater Dive Location Type Master	DIM_LSA_UW_DVE_ LOC_TYPE	Life Style Activity Underwater Dive Location Type Dimension
546	STG_LSA_UWDIV E_PUR_TYPE_MA STER	Stage Life Style Activity Underwater Dive Purpose Type Master	DIM_LSA_UWDIVE_ PUR_TYPE	Life Style Activity Underwater Dive Purpose Type Dimension

Map Reference Number	Source Table Name	Logical Stage Table Name	Dimension Table Name	Logical Dimension Table Name
547	STG_LSA_UWDV NG_EQP_TYPE_M ASTER	Stage Life Style Activity Underwater Diving Equipment Type Master	DIM_LSA_UWDVNG _EQP_TYPE	Life Style Activity Underwater Diving Equipment Type Dimension
515	STG_LSA_MED_C ERTR_TYPE_MAS TER	Stage Life Style Activity Medical Certificate Restriction Type Master	DIM_LSA_MED_CER TR_TYPE	Life Style Activity Medical Certificate Restriction Type Dimension
548	STG_SEASON_TY PE_MASTER	Stage Season Type Master	DIM_SEASON_TYPE	Season Type Dimension
549	STG_TERRIAN_TY PE_MASTER	Stage Terrain Type Master	DIM_TERRIAN_TYP E	Terrain Type Dimension

About Party Lifestyle Activity T2T (Result Table) 17.3.5.2

Party Lifestyle Activity T2Ts and their description are given here.

T2T Name	T2T Description
T2T_FCT_LIFESTYLE_ACTIVITY_DETAILS	This T2T stores the lifestyle activities details of a Party. This section captures details surrounding the activities a Party engages in, that may be considered risky by the Insurance Companies.
T2T_FCT_LSA_AIRSPORTS_EXP_DETAILS	This T2T stores the air sports experience details of a Party. It includes ballooning, hang gliding, parachuting and ultra lite experience.
T2T_FCT_LSA_COMPETITION_DTLS	This T2T stores the details of various life style activities competitions.
T2T_FCT_LSA_FORGN_TRAVEL_EXP_DTLS	This T2T stores foreign travel or foreign residence experience details of a Party.
T2T_FCT_LSA_MILITARY_EXP_DETAILS	This T2T stores the military experience details of a Party.
T2T_FCT_LSA_RACING_EXPERIENCE_DTLS	This T2T stores the racing experience details of a Party.
T2T_FCT_LSA_UW_DIVING_EXP_DETAILS	This T2T stores the underwater-diving experience details of a Party.
T2T_FCT_LSA_AVIATION_EXP_DETAILS	This T2T stores aviation experience details of a Party that may be flying or operating of aircraft.
T2T_FCT_LSA_CLIMIBING_EXP_DTLS	This T2T stores the climbing experience details of a Party.

The mapping details for the Party Lifestyle Activity T2Ts are given here.

Source Table Name	Logical Stage Table Name	Fact Table Name	Logical Fact Table Name	T2T Name
STG_LIFESTYL E_ACTIVITY_DE TAILS	Stage Lifestyle Activity Details	FCT_LIFESTYLE_ ACTIVITY_DETAIL S	Fact Lifestyle Activity Details	T2T_FCT_LIFESTYLE_ACTIVI TY_DETAILS
STG_LSA_AIRS PORTS_EXP_DE TAILS	Stage Life Style Activity Airsports Experience Details	FCT_LSA_AIRSPO RTS_EXP_DETAIL S	Fact Life Style Activity Airsports Experience Details	T2T_FCT_LSA_AIRSPORTS_E XP_DETAILS
STG_LSA_COM PETITION_DTL S	Stage Life Style Activity Competition Details	FCT_LSA_COMPE TITION_DTLS	Fact Life Style Activity Competition Details	T2T_FCT_LSA_COMPETITIO N_DTLS
STG_LSA_FOR GN_TRAVEL_E XP_DTLS	Stage Life Style Activity Foreign Travel Experience Details	FCT_LSA_FORGN _TRAVEL_EXP_D TLS	Fact Life Style Activity Foreign Travel Experience Details	T2T_FCT_LSA_FORGN_TRAV EL_EXP_DTLS
STG_LSA_MILIT ARY_EXP_DET AILS	Stage Life Style Activity Military Experience Details	FCT_LSA_MILITA RY_EXP_DETAILS	Fact Life Style Activity Military Experience Details	T2T_FCT_LSA_MILITARY_EX P_DETAILS
STG_LSA_RACI NG_EXPERIENC E_DTLS	Stage Life Style Activity Racing Experience Details	FCT_LSA_RACING _EXPERIENCE_DT LS	Fact Life Style Activity Racing Experience Details	T2T_FCT_LSA_RACING_EXP ERIENCE_DTLS
STG_LSA_UW_ DIVING_EXP_D ETAILS	Stage Life Style Activity Underwater Diving Experience Details	FCT_LSA_UW_DI VING_EXP_DETAI LS	Fact Life Style Activity Underwater Diving Experience Details	T2T_FCT_LSA_UW_DIVING_ EXP_DETAILS
STG_LSA_AVIA TION_EXP_DET AILS	Stage Life Style Activity Aviation Experience Details	FCT_LSA_AVIATI ON_EXP_DETAILS	Fact Life Style Activity Aviation Experience Details	T2T_FCT_LSA_AVIATION_EX P_DETAILS
STG_LSA_CLIM BING_EXP_DTL S	Stage Life Style Activity Climbing Experience Details	FCT_LSA_CLIMBI NG_EXP_DTLS	Fact Life Style Activity Climbing Experience Details	T2T_FCT_LSA_CLIMIBING_E XP_DTLS

17.4 Deploying Insurance Underwriting Tables on Hive

All RDBMS related Insurance Underwriting Result tables can also be deployed on Hive (Stage and Results on Hive).

NOTE

In general, Stage and Result tables are also supported in Hive. However, there are some exceptions. For a list of tables that are not supported in Hive, see <u>List of Unsupported T2Ts</u>.

17.5 Populating Insurance Underwriting Dimension Tables

Follow this SCD process to populate data into any Insurance Underwriting Dimension table:

NOTE

You can also follow this SCD process to populate data into any Hive related Insurance Underwriting Dimension table.

- **1.** To populate data into any Insurance Underwriting Dimension table, execute the SCD batch. For a detailed procedure, see <u>Slowly Changing Dimension (SCD) Process</u>.
- **2.** To check the SCD batch execution status of an Insurance Underwriting Dimension table, follow the procedure Check the Execution Status of the SCD Batch.
- **3.** To verify log files, and check the error messages (if any), follow the procedure <u>Verify Log Files and Check Error Messages</u>.

17.6 Populating Insurance Underwriting T2T Result Tables

Follow this T2T process to populate data into any Insurance Underwriting T2T Result table:

NOTE

You can also follow this T2T process to populate data into any Hive related Insurance Underwriting T2T Result table.

- 1. To populate data into any Insurance Underwriting T2T Result table, execute the batch for T2T. For a detailed procedure, see:
 - a. Prerequisites for loading T2T.
 - **b.** Set the Run Parameters.
 - c. Save the Run Parameters.
 - **d.** Execute the Batch for T2T.
- **2.** To check the T2T batch execution status of the Insurance Underwriting Result tables, follow the procedure Check the Batch Execution Status of T2T.
- To verify log files, and check the error messages (if any), follow the procedure <u>Verify T2T Log Files</u> and <u>Check Error Messages</u>.

18 Insurance Contracts Tables

This chapter provides information about Insurance Contracts tables such as Common Policy Summary tables, Reinsurance Contract Held tables, Reinsurance Contract Issued tables, other Reinsurance tables, Insurance Coverage tables, Insurance Policy and Fund tables, and Policy Schedules tables in the Oracle Insurance Data Foundation application.

This chapter includes the following topics:

- How to Load Insurance Contracts in OIDF?
 - Direct Insurance Contract Structure
 - Reinsurance Contracts
- Contract Tables
 - Common Policy Summary Tables
 - Assumed Policy Summary Tables
 - Annuity Tables
 - Long Duration Contracts Table
- Coverage Tables
 - Embedded Options Tables
 - Riders and Coverage Options Tables
- Insurance Participation Tables
- Supplemental Data
 - Group Beneficiary Tables
 - Policy Schedules Table
 - Policy and Fund Tables
 - Policy Loans Tables
 - Policy Conversion Table
- Reinsurance Contracts Tables
- Deploying Insurance Contracts Tables on Hive
- Populating Insurance Contracts Dimension Tables
- Populating Insurance Contracts T2T Result Tables

Accounting standards defines insurance contract as a contract under which one party (the insurer) accepts significant insurance risk from another party (the policyholder) by agreeing to compensate the policyholder if a specified uncertain future event (the insured event) adversely affects the policyholder.

18.1 How to Load Insurance Contracts in OIDF?

18.1.1 Direct Insurance Contract Structure

Direct Insurance Contracts								
DIRECT INSURANCE CONTRACT TYPE	Policy/ Contract	Policy Coverages	Participation Details	Group Insurance	Policy Funds	Policy Loans	Policy Conversions	Policy Schedule
Entities	Product Processors	Coverage, Coverage Basis Details	Insurance Participation Details	Group Beneficiary Details	Policy Fund, Policy Fund Allocation	Loan Contracts	Policy Conversion Details	Insurance Policy Schedules
Applicability:	Although							
Life	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Annuity	Yes	Yes	Yes	NA	Yes	Yes	Yes	Yes
Health	Yes	Yes	Yes	Yes	NA	NA	Yes	Yes
Property and Casualty	Yes	Yes	Yes	NA	NA	NA	NA	NA
Retirement	Yes	Yes	Yes	NA	Yes	NA	NA	NA

This diagram elaborates the OIDF design for Direct Insurance Contracts. The base contract is loaded in the contract table, and coverages or riders are loaded to the coverages tables. One policy can contain more than one coverage. Depending on the applicability, a policy can consist of a fund associated with it and/or a loan associated with it.

To load an Insurance Contract in OIDF:

- 1. The key components in contract structure are Product, Party, and Contract itself. Under contract component, the user must choose one of the Product Processors from Life, Annuity, Property and Casualty, Retirement and Health.
- Load Policy Coverages with Product Processor for multiple benefits or coverages.
- **3.** Some contracts such as Annuity requires funds where market risk is with the policyholder. Load this information to Policy Funds. This is an optional step and is dependent on the product structure.
- **4.** Some contracts specify adhoc or varying Policy Schedules such as Credit Life Insurance, varying premium policies etc., where sum insured and premium amounts vary depending on the outstanding debt or other criteria. In such cases, customer can choose to load Policy Schedules in Stage Policy Schedules.
- 5. In case of Group Insurance Contracts, the contract between the insurance provider and a company or group must be stored in either Life, Health, or applicable product processor. Stage Group Insurance Beneficiary Details holds details of each member such as individual limits, individual usage, and identifiers such as card numbers, annual and per condition deductibles. Another type of Group Insurance Contracts is the Worker's Compensation, which offers compensation to the employees for sustaining injuries or disabilities because of their employment. There are two ways to populate the data in the Fact Group Insurance Policy Summary table. They are:

- The data population through the T2T_FGPS_STG_GRPINS_POLICY_SUMMARY, which is at the Policy Summary level.
- The data population through the T2T_FGPS_STG_GRPINS_POL_BENFCIARY_DTLS, where the
 data can be populated for the count at the policy or beneficiary level.
- **6.** For loans issued under a given policy, load contracts into one of the Insurance product processor, and load every loan contract issued under a given policy to stage loan contracts. Refer to the section Policy Loans.
- Contracts, which are convertible from one insurance product to another with or without changing
 the insurance carrier, require additional conversion details. For more details, refer to Policy
 Conversion.

In OIDF, Direct Insurance Contracts comprise of following important components:

- Contract
- Coverage
- Supplemental Data
- Policy and Funds
- Policy Loans
- Policy Conversion
- Insurance Participation

In OIDF, Reinsurance is also a part of Contracts.

Party, which means beneficiary, producer and agent, underwriter etc., are expected to be created and available for reference in the Party set of tables based on the related role. For details, see Party Subject Area chapter.

18.1.1.1 Contract

Contract attributes cover contract identifier, product identifier, sum insured, origination date, purchase date, maturity date, policy status etc. A group insurance contract must also be stored in one of the relevant tables mentioned below.

Contracts, as defined earlier, is a record in one of the following stage tables, called as a product processor comprising of a set of attributes relevant to a particular Insurance Contract. They are outputs sourced from policy administration systems.

This is the list of entities covered under Direct and Indirect Insurance, or Reinsurance Contracts to elaborate OIDF design for Insurance Contracts:

Source Logical Table Name	Source Table Name
Stage Annuity Contracts	STG_ANNUITY_CONTRACTS
Stage Health Insurance Contracts	STG_HEALTH_INS_CONTRACTS
Stage Life Insurance Contracts	STG_LIFE_INS_CONTRACTS
Stage Property and Casualty Contracts	STG_PROP_CASUALTY_CONTRACTS

Source Logical Table Name	Source Table Name
Stage Retirement Accounts	STG_RETIREMENT_ACCOUNTS
Stage Reinsurance Contracts Held	STG_REINSURANCE_CONTRACTS_HELD
Stage Reinsurance Contracts Issued	STG_REINSURANCE_CNTRCTS_ISSUED

For the list of tables and the mapping details, see **Contract Tables**.

18.1.1.2 Coverage

Coverage is an individual contractual obligation incurred by the contract provider. Aggregation of all such obligations within the terms and conditions defined must be equal to contractual liability of a contract. Consider these two examples:

- A Life Insurance contract offering a normal death benefit, accidental death benefit and critical illness benefits to the insured.
- An Auto Insurance policy with auto liability, medical payment liability, personal injury protection and third party liability.

In the above example, a single row is created in life insurance contract entity and property and casualty insurance contract entity. And the policy coverage entity stores three rows for life insurance contract and four rows for auto insurance contracts. In many insurance contracts, certain coverages, known as riders, are optional, and some are bundled as a part of contract itself. All such coverages must be stored in stage policy coverages. Different coverages may have effective dates having different maturity period and may have varying different terms and conditions limiting to the main contract. Stage Policy Coverage entity allows the end user to handle this flexibility. In case of group insurance, policy coverages refers to the single aggregated benefit or rider bundled as a part of product across all group members.

Riders or optional benefits must be loaded as coverages in Oracle Insurance Data Foundation. Coverage option or a component, which is dependent on the existence and continuation on another component and its effect/attributes is limited to a specific parent, then it must be modeled as a Coverage. Therefore, this relationship defines an association between the Coverage Option and its parent, where if the parent lapses or is no longer in effect for any reason, the Coverage Option under it also lapses/terminates/ends.

For the list of tables and mapping details, see <u>Coverage Tables</u>.

18.1.1.2.1 Guaranteed Benefits and Embedded Options

Guaranteed Benefits

Guaranteed Benefits is a component of insurance policy or contract, which provides for either part of the full benefit amount is guaranteed by the Insurer.

Examples for illustration (These examples are not limited to this illustration):

• Scenario 1: On death during the policy term, the nominee receives a guaranteed lump sum payout with an option to convert it into monthly income for 10 years. On death of the Life Insured during the Policy Term, lump sum Death Benefit equal to Guaranteed Sum Assured on Death (GSAD) is payable to the nominee.

Scenario 2: On retirement, the plan may pay out in monthly payments throughout the lifetime of the
employee, or as a lump sum payment. If the employee dies, some plans distribute any remaining
benefits to the beneficiaries of the employee.

Embedded Options

An Embedded Option is a special condition attached to an Insurance Contract, which gives the policy holder or the issuer the right to perform a specified action at some point in the future. An Embedded Option is an inseparable part of an Insurance Contract, and therefore, it cannot trade by itself. However, it can affect the value of the Insurance Contract of which it is a component.

To separate an Embedded Option from Insurance Contract, the following conditions must be met:

- The economic characteristics and risks of the Embedded Option are not closely related to the economic characteristics and risks of the host (the remaining Insurance Contract).
- A separate instrument with the same terms as the Embedded Option meets the definition of an Option.
- The contract, which is not measured at fair value with changes in fair value recognized in profit or loss.

Examples for illustration (These examples are not limited to this illustration):

- Example 1: A Death Benefit that is linked to equity prices payable only on death (and not on surrender or maturity), or the greater of the unit value of an investment and a guaranteed amount.
 - In this scenario, the existing benefit, which is Death Benefit option, is in the contract and is linked to the market. Therefore, Embedded Option is not separated and it falls under IFRS 17.
- Example 2: An option to take a Life-Contingent Annuity at a guaranteed rate.
 - In this scenario, the existing benefit is given out as an additional benefit option to the contract in the form of Embedded Option. This benefit is not separated from the Insurance Contracts.
- Example 3: A minimum annuity payment, if the annuity payments are linked to the investment returns. Additionally, the guarantee is related only to Life-Contingent Payments, or the policyholder can choose to receive a Life-Contingent Payment or a fixed amount of payments at predetermined terms.
 - In this scenario, the minimum annuity payment, which is made by the insured is periodically linked to the investment returns of the contract with an additional benefit option to the contract as an Embedded Option. Therefore, it is not separated from the Insurance Contracts.

Both Guaranteed Benefits and Embedded Options must be loaded to stage policy coverages covering specific attributes such as Guarantee Type, Option Dates etc. For the list of tables and mapping details, see <u>Embedded Options Tables</u>.

18.1.1.3 Insurance Participation

When multiple carriers share the insurance risk, it is called as Insurance Participation. In OIDF, load the participation data to Stage Insurance Participation Details. In this participation entity, Contract Code refers to Insurance Contract.

For the list of tables and mapping details, see <u>Insurance Participation Tables</u>.

18.1.1.4 Supplemental Data

Supplemental Data refers to the additional and contextual information applicable to only certain specific insurance contracts. This consists of group insurance details, policy schedules, policy funds, policy loans and policy conversions.

18.1.1.4.1 Group Policies

A group insurance contract is one which is agreed between insurance company and entity which sponsors the policy. This contract must be stored in one of the seven product processors. However, in general stage life insurance and stage health insurance, contracts will be referred in most of the use cases of group insurance.

Details of members of group insurance are stored in stage group insurance beneficiary details. This entity holds details of each member such as individual limits, individual usage, and identifiers such as card numbers, annual and per condition deductibles. In cases where such details are not available, aggregated numbers must be loaded in main contract entities. For the list of tables and mapping details, see Group Beneficiary Tables.

18.1.1.4.2 Policy Schedules

Policy Schedules refers to the agreed non-linear premium and benefit schedules associated with the insurance contracts. For the list of tables and mapping details, see <u>Policy Schedules Table</u>.

18.1.1.4.3 Policy and Funds

This holds investment of funds data of a given insurance contract where market risk of investment rests with Policyholder. There are two entities: policy fund details and policy fund allocation. Policy Funds provide funds-wise investment snapshot in time when policy fund allocation provide changes over time. When there is technically no restriction as these entities are connected by policy code to the main contract table, they are most commonly applicable to annuity contracts, life insurance contracts and retirement accounts. For the list of tables and mapping details, see <u>Policy and Funds Tables</u>.

18.1.1.4.4 Policy Loans

Some insurance policies allow policyholders to borrow from policy accumulations in terms of loans as per terms and conditions laid in the contract. Such loans are considered as a contract by itself in OIDF and must be loaded in stage loan contracts. This entity holds policy identifiers to link multiple loans taken under a given insurance policy. For the list of tables and mapping details, see Policy Loans Tables.

18.1.1.4.5 Policy Conversion

Policy Conversion refers to the privileged provisions provided in insurance contract whereby a policyholder to convert a term policy to a permanent policy that provides insurance for the rest of life.

For the list of tables and mapping details, see Policy Conversion Table.

18.1.2 Reinsurance Contracts

Reinsurance contract refers to an insurance contract issued by one entity (the reinsurer) to compensate another entity for claims arising from one or more insurance contracts issued by that other entity (underlying insurance contracts). Reinsurance Contracts consists of two types of contracts:

- Reinsurance Contracts Issued: This is a contract entered into by a reinsurance company when they sell the reinsurance contract to an insurance company. Often, this is called as a reinsurance contract written by a specific reinsurer to differentiate between purchased and sold.
- Reinsurance Contracts Held: This is a contract entered into by an insurance company when they purchase reinsurance contract to mitigate the claims or losses.

Reinsurance Contracts Issued and Held

Reinsurance Contracts Issued and Held are depicted through the following diagram.

REINSURANCE CONTRACT TYPE	Policy/ Contract	Policy Coverages	Participation Details	Collateral Placed	Collateral Received	Underlying Contracts	Contract Dimension
Entities	Applicable Product Processor	Coverage, Coverage Basis Details	Insurance Participation Details	Reinsurance Issued Placed Collateral Map Placed Collateral	Reinsurance Held Mitigants Map, Mitigants	Respective Direct Insurance Contract Product Processors	Key Contract Dimension *Policy: On Books *Assumed Policy: Not on Books
Applicability							
Reinsurance Held	Yes	Yes	Yes	NA	Yes	Life, Health, P&C, Annuity, Retirement	Direct Contracts: Policy Reinsurance Contract: Policy
Reinsurance Issued	Yes	Yes	Yes	Yes	NA	Life, Health, P&C, Annuity, Retirement	Direct Contract: Assumed Policy Reinsurance Contract: Policy

For the list of tables and mapping details, see Reinsurance Contracts Tables.

18.1.2.1 Reinsurance Contracts

Reinsurance Contract structure consists of a set of entities, primarily Direct Contracts, Assumed Contracts, Reinsurance Contract, Collateral Placed, Collateral Received, Participation Contracts. This is the representative diagram of Reinsurance Contract and its entities.

		Reinsurance Held		
Contract Type	Stage Entity	Result Entity	Key Contract Dimension	Differentiator
Direct Written Policies	Stage Life Insurance Contracts	Fact Common Policy Summary	Policy Dimension	
	Stage Property and Casulaty Contracts			
	Stage Health insurance Contracts			Direct Or Assumed Insurance Indicator = Direct
	Stage Annuity Contracts			Direct Or Assumed insurance indicator – Direct
	Stage Retirement Contracts			
	Stage Policy Coverages	Fact Policy Coverages	Coverage Dimension	
Reinsurance Contract	Stage Reinsurance Contract Held	Fact Reinsurance Contract Held	Policy Dimension	
	Stage Reinsurance Held Mitigant Map	Fact Reinsurance Held Mitigant Map	Policy and Mitigant Dimension	
Participation Details	Stage Insurance Participation Details	Fact Insurance Participation Details		
Cash flow - Direct Policies	Stage Insurance Policy Cash Flow	Fact Insurance Policy Cash Flow		
Cash flow - RI Held	Stage Insurance Policy Cash Flow	Fact Insurance Policy Cash Flow		
		Reinsurance Issued		
	Stage Entity	Result Entity	Key Contract Dimension	Differentiator
Assumed Policies	Stage Life Insurance Contracts	Fact Assumed Policy Summary	Assumed Policy Dimension	
	Stage Property and Casulaty Contracts			
i.	Stage Health insurance Contracts			Direct Or Assumed Insurance Indicator =
	Stage Annuity Contracts			Assumed
). 	Stage Retirement Contracts			
	Stage Policy Coverages	Fact Policy Coverages	Coverage Dimension	
Reinsurance Contract	Stage Reinsurance Contract Issued	Fact Reinsurance Contract Issued	Policy Dimension	
	Stage Reinsurance Issued Placed Collateral Map	Fact Reinsurance Issued Placed Collateral Map	Policy and Placed Collateral Dimension	
Participation Details	Stage Insurance Participation Details	Fact Insurance Participation Details		
Cash flow - Assumed Policies*	Stage Assumed Policy Cash Flow	Fact Assumed Policy Cash Flow		
Cash flow - RI Issued	Stage Insurance Policy Cash Flow	Fact Insurance Policy Cash Flow		

Reinsurance Contract entities are explained in the following sections.

18.1.2.1.1 Direct Insurance Contracts

In case of Reinsurance Held, Direct Insurance Contracts are those, which are on the books of insurance carrier and covered through given reinsurance contract. These Direct Contracts are loaded through same insurance contracts structure, as mentioned earlier. They are product processors for Life, Health, Annuity, Retirement, and Property and Casualty contracts. However, Direct and Assumed Indicator in each product processor must be marked as D to convey that they are on the books.

For the list of tables and mapping details, see Common Policy Summary Tables.

18.1.2.1.2 Assumed Insurance Contracts

In case of Reinsurance Issued, Reinsurance Contract is on the books of the carrier whereas insurance contracts covered belongs to another carrier. These underlying Insurance Contracts must be loaded through same insurance contracts structure as mentioned earlier. They are product processors for Life, Health, Annuity, Retirement, and Property and Casualty contracts. However, Direct and Assumed Indicator in each product processor must be marked as A to convey that they are not on the books and are assumed ones.

For the list of tables and mapping details, see <u>Assumed Policy Summary Tables</u>.

18.1.2.1.3 Reinsurance Contracts

Reinsurance Contracts, as mentioned above earlier, must be loaded to Stage Reinsurance Contracts Issued or Stage Reinsurance Contracts Held. Underlying Direct Insurance Contracts, which are on the book or marked as D for Direct in Direct/Assumed Indicator, are moved to Policy Dimension. In addition, those, which are not on the book or marked as A for Assumed in Direct/Assumed Indicator, are moved to Assumed Policy Dimension to differentiate contracts effectively.

For the list of tables and mapping details, see Reinsurance Contracts Tables.

18.1.2.1.4 Reinsurance Participation

When multiple reinsurers come together to share the insurance risk, said contract becomes eligible for Reinsurance Participation. OIDF holds this data in Stage Insurance Contract Participation Details. In this participation entity, Contract Code refers to Reinsurance Contract.

For the list of tables and mapping details, see <u>Insurance Participation Tables</u>.

18.1.2.1.5 Reinsurance Issued Placed Collateral

In case of reinsurance contracts Issued, reinsurance carrier provides the collateral to insurance companies for safety. This is called as Reinsurance Issued Placed Collateral. OIDF provides a map entity to map a given Reinsurance Contract and collateral placed. Actual investment contracts, which are placed as collateral can be loaded to investment product processors such as Stage Investment or Stage Money Market Contracts and/or Stage Placed Collateral depending on whether investment assets have been transferred as actual physical transfer or not.

For the list of tables and mapping details, see About Reinsurance Contracts T2Ts (Result Tables).

18.1.2.1.6 Reinsurance Held Mitigants

In case of Reinsurance Contracts Held, insurance carrier holds the collateral provided by reinsurance companies for safety. This is called as Reinsurance Held Mitigants. OIDF provides a map entity to map a given reinsurance contract and collateral received or mitigants.

For the list of tables and mapping details, see About Reinsurance Contracts T2Ts (Result Tables).

18.2 Contract Tables

18.2.1 Common Policy Summary Tables

Common Policy Summary stores the detailed information elements of insurance policies directly written or issued by insurance company.

18.2.1.1 About Common Policy Summary Dimension Tables

Common Policy Summary Dimension table name and its remarks is given here. Common Policy Summary is also a part of Policy Dimension table (DIM_POLICY). For description about Policy Dimension, see the chapter Policy Dimension Table.

Logical Dimension Table Name	Remarks
Policy Dimension	This table stores the list of all policies issued by the insurer.
Insurance Notice Type Dimension	This table stores the details of type of the notice sent. Sample values are OTHER, UNKNOWN, CONFIRM, PREM1, etc.
Insurance Sponsoring Plan Type Dimension	This table stores the type of sponsored benefit plan to which this holding belongs. Sample values are OTHER, UNKNOWN, ESLTC, and SEWBP.
Policy Status Reason Dimension	This table stores the details of policy reason for status.

Logical Dimension Table Name	Remarks
	Sample values are OTHER, UNKNOWN, APPEAL, APPDECLINE, BACKPROC, etc.
Policy Exchange Reason Dimension	This table stores the Exchange Reason Code details. It is used only when a single exchange reason is required. For multiple reasons for the exchange, use Exchange Reason aggregate. Sample values: OTHER, UNKNOWN, BROKERSDIR, COMM, FEES, etc.
Policy Replacement Type Dimension	This table stores the details of proposed policy replacement type and reflects in aggregate the replacement types of all existing contracts that will be replaced.
	Sample values: OTHER, UNKNOWN, BOTH, EXTERNAL, FINPURCH, GROUPCONV, etc.
Premium Offset Status Dimension	This table stores the details about premium offset status. In situations where a Premium Offset Method is specified, this is the status of that method.
	Sample values: REQACT, NONE, REQINACT, UNKNOWN, and OTHER.
Non Forfeiture Provision Type Dimension	This table stores the details of Non Forfeiture Provision type. The various ways in which a policy owner may apply the cash value of a life insurance policy if the policy lapses.
	Sample values: ANNRID, APLANNRID, APLEXTTERM, OTHER, etc.
Insurance Test Type Dimension	The table stores the details of life insurance test type. Sample values: CVTEST, DEFRACVTEST, GPTEST, and TEFRAGPEST.
Tax Rebate Exchange Type Dimension	This table stores the details of tax rebate exchange type. Sample values: IRREVOC, OTHER, REVOC, etc.
Grandfathered Tax Regulation Type Dimension	This table stores the details of Grandfathered Tax Regulation Type, and specifies if a policy or contract are grandfathered under certain tax regulations.
	Sample values: DEFRA, ROTHIRA, TAMRA, NO, OTHER, and UNKNOWN.
Premium Basis Dimension	Stores the details of the Premium Basis. An insurance premium is based on the type and amount of risk, or exposure, involved in operating a business.
	Sample values: 1000CubicMeters, 1000Liters, ADMIS, AREA, Basic, Building, Court, and so on.
Worker Compensation Business Line Dimension	Stores the details of the Worker's Compensation business line.

The mapping details for the Common Policy Summary Dimension tables are given here. Common Policy Summary is also a part of Policy Dimension table (DIM_POLICY). For mapping information about Policy Dimension, see the chapter <u>Policy Dimension Table</u>.

Map Reference Number	Source Table Name	Logical Stage Table Name	Dimension Table Name	Logical Dimension Table Name
224	STG_PROP_CASUAL TY_CONTRACTS_V	Stage Property Casualty Contracts View	DIM_POLICY	Policy Dimension
401	STG_LIFE_INS_CONT RACTS_V	Stage Life Insurance Contracts View	DIM_POLICY	Policy Dimension
402	STG_HEALTH_INS_C ONTRACTS_V	Stage Health Insurance Contracts View	DIM_POLICY	Policy Dimension
403	STG_ANNUITY_CON TRACTS_V	Stage Annuity Contracts View	DIM_POLICY	Policy Dimension
634	STG_RETIREMENT_A CCOUNTS_V	Stage Retirement Accounts View	DIM_POLICY	Policy Dimension
685	STG_INS_NOTICE_T YPE_MASTER	Stage Insurance Notice Type Master	DIM_INS_NOTICE_TY PE	Insurance Notice Type Dimension
686	STG_INS_SPON_PLA N_TYPE_MASTER	Stage Insurance Sponsoring Plan Type Master	DIM_INS_SPON_PLA N_TYPE	Insurance Sponsoring Plan Type Dimension
687	STG_POLICY_STATU S_RSN_MASTER	Stage Policy Status Reason Master	DIM_POLICY_STATU S_RSN	Policy Status Reason Dimension
691	STG_POL_EXCHANG E_REASON_MASTER	Stage Policy Exchange Reason Master	DIM_POL_EXCHANG E_REASON	Policy Exchange Reason Dimension
692	STG_POL_REPLACE MNT_TYPE_MASTER	Stage Policy Replacement Type Master	DIM_POL_REPLACE MNT_TYPE	Policy Replacement Type Dimension
730	STG_PREM_OFFSET_ STATUS_MASTER	Stage Premium Offset Status Master	DIM_PREM_OFFSET_ STATUS	Premium Offset Status Dimension
732	STG_NONFOREFT_P ROV_TYPE_MASTER	Stage Non Forfeiture Provision Type Master	DIM_NONFOREFT_P ROV_TYPE	Non Forfeiture Provision Type Dimension
734	STG_INSURANCE_TE ST_TYPE_MASTER	Stage Insurance Test Type Master	DIM_INSURANCE_TE ST_TYPE	Insurance Test Type Dimension
735	STG_TAX_REBATE_E X_TYPE_MASTER	Stage Tax Rebate Exchange Type Master	DIM_TAX_REBATE_E X_TYPE	Tax Rebate Exchange Type Dimension

Map Reference Number	Source Table Name	Logical Stage Table Name	Dimension Table Name	Logical Dimension Table Name
736	STG_GF_TAX_REGLT N_TYPE_MASTER	Stage Grandfathered Tax Regulation Type Master	DIM_GF_TAX_REGLT N_TYPE	Grandfathered Tax Regulation Type Dimension
780	STG_PREMIUM_BASI S_MASTER	Stage Premium Basis Master	DIM_PREMIUM_BASI S	Premium Basis Dimension
786	STG_WC_BUSINESS_ LINE_MASTER	Stage Worker Compensation Business Line Master	DIM_WC_BUSINESS_ LINE	Worker Compensation Business Line Dimension

18.2.1.2 About Common Policy Summary T2T (Result Table)

NOTE In the Fact Common Policy Summary tables, if the value of

V_DIRECT_ASSUMED_RI_IND is D or NULL or any other value apart from A, then Fact Common Policy Summary T2Ts are populated. Here, D is Direct Contracts, and A is Assumed Contracts.

Common Policy Summary T2Ts and their description are given here.

T2T Name	T2T Description
T2T_FCPS_STG_ANNUITY_CONTRACTS	This T2T captures the details of annuity contracts, which are defined as a written agreement between a financial institution and a customer outlining obligations of each Party in an annuity coverage agreement.
T2T_FCPS_STG_HEALTH_INS_CONTRAC TS	This T2T stores details of policy related to health insurance contracts.
T2T_FCPS_STG_LIFE_INS_CONTRACTS	This T2T stores details of policy related to life insurance contracts.
T2T_FCPS_STG_PROP_CASUALTY_CON TRACTS	This T2T stores details of policy related to property and casualty contracts.
T2T_FCPS_STG_RETIREMENT_ACCOUN TS	This T2T stores details of policy related to retirement accounts.

Common Policy Summary T2Ts and their description are given here.

Source Table Name	Logical Stage Table Name	Fact Table Name	Logical Fact Table Name	T2T Name
STG_ANNUITY_C	Stage Annuity	FCT_COMMON_P	Fact Common	T2T_FCPS_STG_ANNUIT
ONTRACTS	Contracts	OLICY_SUMMARY	Policy Summary	Y_CONTRACTS
STG_HEALTH_IN	Stage Health	FCT_COMMON_P	Fact Common	T2T_FCPS_STG_HEALTH _INS_CONTRACTS
S_CONTRACTS	Insurance Contracts	OLICY_SUMMARY	Policy Summary	
STG_LIFE_INS_C	Stage Life Insurance	FCT_COMMON_P	Fact Common	T2T_FCPS_STG_LIFE_INS
ONTRACTS	Contracts	OLICY_SUMMARY	Policy Summary	_CONTRACTS
STG_PROP_CASU ALTY_CONTRAC TS	Stage Property Casualty Contracts	FCT_COMMON_P OLICY_SUMMARY	Fact Common Policy Summary	T2T_FCPS_STG_PROP_C ASUALTY_CONTRACTS
STG_RETIREMEN	Stage Retirement	FCT_COMMON_P	Fact Common	T2T_FCPS_STG_RETIREM ENT_ACCOUNTS
T_ACCOUNTS	Accounts	OLICY_SUMMARY	Policy Summary	

18.2.2 Assumed Policy Summary Tables

Assumed Policy Summary stores the detailed information elements of insurance policies that are not directly written or issued by the insurance company. In the Contracts table, if the value of Direct Assumed Indicator column is A, then Fact Assumed Policy Summary tables are populated.

NOTE

In the Contracts tables, if the value of V_DIRECT_ASSUMED_RI_IND is A, then Fact Assumed Policy Summary T2Ts are populated. Here, A is Assumed Contracts.

18.2.2.1 About Assumed Policy Summary Dimension Tables

Assumed Policy Summary Dimension table name and its remarks are given here. Assumed Policy Summary is also a part of Assumed Policy Dimension table (DIM_ASSUMED_POLICY).

Logical Dimension Table Name	Remarks
Assumed Policy Dimension	This table stores the assumed policy details.

The mapping details for the Assumed Policy Summary Dimension tables are given here. Assumed Policy Summary is also a part of Assumed Policy Dimension table (DIM_ASSUMED_POLICY).

Map Reference	Source Table	Logical Stage Table	Dimension Table	Logical Dimension Table Name
Number	Name	Name	Name	
616	VW_STG_LIFE_INS_	Stage Life Insurance	DIM_ASSUMED_POLI	Assumed Policy
	CONTRACTS	Contracts View	CY	Dimension

Map Reference	Source Table	Logical Stage Table	Dimension Table	Logical Dimension Table Name
Number	Name	Name	Name	
617	VW_STG_HEALTH_I	Stage Health Insurance	DIM_ASSUMED_POLI	Assumed Policy
	NS_CONTRACTS	Contracts View	CY	Dimension
618	VW_STG_ANNUITY	Stage Annuity	DIM_ASSUMED_POLI	Assumed Policy
	_CONTRACTS	Contracts View	CY	Dimension
619	VW_STG_RETIREME	Stage Retirement	DIM_ASSUMED_POLI	Assumed Policy
	NT_ACCOUNTS	Accounts View	CY	Dimension
620	VW_STG_PROP_CA SUALTY_CONTRAC TS	Stage Property Casualty Contracts View	DIM_ASSUMED_POLI CY	Assumed Policy Dimension

18.2.2.2 About Assumed Policy Summary T2Ts (Result Tables)

Assumed Policy Summary T2Ts and their description are given here.

T2T Name	T2T Description
T2T_FAPS_STG_ANNUITY_CONTRACTS	This T2T stores annuity contracts details, which are defined as a written agreement between a financial institution and a customer outlining the obligations of each Party in an annuity coverage agreement.
T2T_FAPS_STG_HEALTH_INS_CONTRACTS	This T2T stores details of policy related to health insurance contracts.
T2T_FAPS_STG_LIFE_INS_CONTRACTS	This T2T stores the details of policy related to life insurance contracts.
T2T_FAPS_STG_PROP_CASUALTY_CONTRAC TS	This T2T stores details of policy related to property and casualty contracts.
T2T_FAPS_STG_RETIREMENT_ACCOUNTS	This T2T stores investment details of retirement savings, which is used by individuals to earn and earmark funds.

Assumed Policy Summary T2Ts and their description are given here.

Source Table Name	Logical Stage Table Name	Fact Table Name	Logical Fact Table Name	T2T Name
STG_ANNUITY_C ONTRACTS	Stage Annuity Contracts	FCT_ASSUMED_PO LICY_SUMMARY	Fact Assumed Policy Summary	T2T_FAPS_STG_ANNUITY _CONTRACTS
STG_HEALTH_IN S_CONTRACTS	Stage Health Insurance Contracts	FCT_ASSUMED_PO LICY_SUMMARY	Fact Assumed Policy Summary	T2T_FAPS_STG_HEALTH_I NS_CONTRACTS

Source Table Name	Logical Stage Table Name	Fact Table Name	Logical Fact Table Name	T2T Name
STG_LIFE_INS_C ONTRACTS	Stage Life Insurance Contracts	FCT_ASSUMED_PO LICY_SUMMARY	Fact Assumed Policy Summary	T2T_FAPS_STG_LIFE_INS_ CONTRACTS
STG_PROP_CASU ALTY_CONTRAC TS	Stage Property Casualty Contracts	FCT_ASSUMED_PO LICY_SUMMARY	Fact Assumed Policy Summary	T2T_FAPS_STG_PROP_CA SUALTY_CONTRACTS
STG_RETIREMEN T_ACCOUNTS	Stage Retirement Accounts	FCT_ASSUMED_PO LICY_SUMMARY	Fact Assumed Policy Summary	T2T_FAPS_STG_RETIREME NT_ACCOUNTS

18.2.3 Annuity Tables

Annuity tables store the details of annuity contracts, which are defined as a written agreement between a financial institution and a customer outlining obligations of each Party in an annuity coverage agreement.

18.2.3.1 About Annuity Dimension Tables

Annuity Dimension table names and their remarks are given here.

Logical Dimension Table Name	Remarks
Annuity Payout Type Dimension	This table stores the details of annuity payout type. Sample values: FIX, VAR, etc.
Annuity Type Dimension	This table stores the details of annuity type for the policies. Sample values: LOA, LAPC, LAGT, JSA.

The mapping details for the Annuity Dimension tables are given here.

Map Reference Number	Source Table Name	Logical Stage Table Name	Dimension Table Name	Logical Dimension Table Name
702	STG_ANNUITY_PAY OUT_TYPE_MASTE R	Stage Annuity Payout Type Master	DIM_ANNUITY_PAY OUT_TYPE	Annuity Payout Type Dimension
703	STG_ANNUITY_TYP E_MASTER	Stage Annuity Type Master	DIM_ANNUITY_TYPE	Annuity Type Dimension

18.2.4 Long Duration Contracts Table

Long Duration Contracts (principally life and annuity contracts) table stores the calculation of the liability of future policy benefits, a simplified amortization method for deferred acquisition costs, recording market risk benefits at fair value, and enhanced disclosures.

18.2.4.1 About Long Duration Contracts Dimension Table

Long Duration Contracts Dimension table name and its remarks are given here.

Logical Dimension Table Name	Remarks
Insurance Guarantee Type Dimension	This table stores the details of Insurance guarantee type.

The mapping details for the Long Duration Contracts Dimension table are given here.

Map Reference	Source Table	Logical Stage Table	Dimension Table	Logical Dimension Table Name
Number	Name	Name	Name	
701	STG_INS_GUARANT EE_TYPE_MASTER	Stage Insurance Guarantee Type Master	DIM_INS_GUARANTE E_TYPE	Insurance Guarantee Type Dimension

18.3 Coverage Tables

The Policy Coverage table stores the list of all coverages and amounts set by the Insurer.

18.3.1 About Policy Coverage Dimension Tables

Policy Coverage Dimension table names and their remarks are given here.

Logical Dimension Table Name	Remarks
Insurance Age Amount Product Dimension	This table stores the details of insurance age amount product code. This table is used to define any age ranges supported, and minimum or maximum amounts, units or percentages that are available for that particular age range. The minimum and maximum ages represented in the collection of Age Amount Products at this level must follow certain defined rules.
Age Amount Product Measure Dimension	This table stores the details of Age Amount Product Measures.

The mapping details for the Policy Coverage Dimension tables are given here.

Map Reference Number	Source Table Name	Logical Stage Table Name	Dimension Table Name	Logical Dimension Table Name
727	STG_INS_AGE_AMT _PRODUCT_MASTE R	Stage Insurance Age Amount Product Master	DIM_INS_AGE_AMT_ PRODUCT	Insurance Age Amount Product Dimension
728	STG_AGE_AMT_PR OD_MESR_MASTER	Stage Age Amount Product Measure Master	DIM_AGE_AMT_PRO D_MESR	Age Amount Product Measure Dimension

18.3.2 About Policy Coverage T2T (Result Table)

Policy Coverage T2Ts and their description are given here.

T2T Name	T2T Description
T2T_FCT_POLICY_COVERAGES	This T2T stores policy coverages details. A policy can have multiple coverages.
T2T_FCT_POLICY_COVERG_BASIS_DTL	This T2T stores the coverage basis value for a given policy.
T2T_FCT_INS_AGE_AMT_PRODUCT_DEF	This T2T stores the details of Insurance Age Amount Product. This table is used to define any age ranges supported, and minimum or maximum amounts, units or percentages that are available for that particular age range. The minimum and maximum ages represented in the collection of Age Amount Products at this level must follow certain defined rules.
T2T_FCT_INS_AGE_AMT_PRODUCT_TABLE	This table stores the details of Insurance Age Amount Product. This table is used to define any age ranges supported, and minimum or maximum amounts, units or percentages that are available for that particular age range. This table hold the values defined as per the insurance age amount product definition table.

The mapping details for the Policy Coverage T2Ts are given here.

Source Table Name	Logical Stage Table Name	Fact Table Name	Logical Fact Table Name	T2T Name
STG_POLICY_CO VERAGES	Stage Policy Coverages	FCT_POLICY_COV ERAGES	Fact Policy Coverages	T2T_FCT_POLICY_COVER AGES
STG_POLICY_CO VERG_BASIS_DTL	Stage Policy Coverage Basis Detail	FCT_POLICY_COV ERG_BASIS_DTL	Fact Policy Coverage Basis Detail	T2T_FCT_POLICY_COVER G_BASIS_DTL
STG_INS_AGE_A MT_PRODUCT_D EF	Stage Insurance Age Amount Product Definition	FCT_INS_AGE_AM T_PRODUCT_DEF	Fact Insurance Age Amount Product Definition	T2T_FCT_INS_AGE_AMT_ PRODUCT_DEF

Source Table Name	Logical Stage Table Name	Fact Table Name	Logical Fact Table Name	T2T Name
STG_INS_AGE_A MT_PRODUCT_T ABLE	Stage Insurance Age Amount Product Table	FCT_INS_AGE_AM T_PRODUCT_TABL E	Fact Insurance Age Amount Product Table	T2T_FCT_INS_AGE_AMT_ PRODUCT_TABLE

18.3.3 Embedded Options Tables

18.3.3.1 About Embedded Options T2T (Result Table)

Embedded Options T2T and its description is given here.

T2T Name	T2T Description
T2T_FCT_EMBEDDED_OPTIONS_SCHEDULE	This T2T stores the details of schedule embedded options of interest rate instruments. An embedded option is an inseparable part of another instrument and does not trade on its own.

The mapping details for the Embedded Options T2T is given here.

Source Table Name	Logical Stage Table Name	Fact Table Name	Logical Fact Table Name	T2T Name
STG_EMBEDDED_ OPTIONS_SCHEDU LE	Stage Embedded Options Schedule	FCT_EMBEDDED_OP TIONS_SCHEDULE	Fact Embedded Options Schedule	T2T_FCT_EMBEDDE D_OPTIONS_SCHED ULE

18.4 Insurance Participation Tables

18.4.1 Using Stage Party Insurance Policy Role Map T2T (Result Table)

NOTE Load STG_PARTY_INS_POLICY_ROLE_MAP with all customer records and Party Role must be 'CUSTOMER'.

The Party Insurance Policy Role Map table stores information related to different policies that are taken by a Party.

The mapping details to populate the Party Insurance Policy Role Map T2T is given here.

Source Table Name	Logical Stage Table Name	Fact Table Name	Logical Fact Table Name	T2T Name
STG_PARTY_INS _POLICY_ROLE_ MAP	Stage Party Insurance Policy Role Map	FCT_PARTY_INS_P OLICY_ROLE_MAP	Fact Party Insurance Policy Role Map	T2T_FCT_PARTY_INS_ POLICY_ROLE_MAP

18.4.2 About Insurance Participation T2T (Result Table)

Insurance Participation T2T and its description is given here.

T2T Name	T2T Description
T2T_FCT_INSURANCE_PARTCPTN_DTLS	This T2T stores the details of multiple insurers who come together to provide reinsurance to Insurance Company. Their respective details of sharing and participation is stored in this table.

The mapping details for the Insurance Participation T2T is given here.

Source Table Name	Logical Stage Table Name	Fact Table Name	Logical Fact Table Name	T2T Name
STG_INSURANCE _PARTCPTN_DTL S	Stage Insurance Participation Details	FCT_INSURANCE_ PARTCPTN_DTLS	Fact Insurance Participation Details	T2T_FCT_INSURANCE_P ARTCPTN_DTLS

18.5 Supplemental Data

Supplemental Data refers to the additional and contextual information applicable to only certain insurance contracts. This consists of primarily two information sets namely group insurance details and policy schedules.

18.5.1 Group Beneficiary Tables

Group Insurance refers to insurance that covers a defined group of people, such as employees of a company or members of a particular profession, typically against illness or death.

18.5.1.1 About Group Beneficiary Dimension Table

Group Beneficiary Dimension table names and their remarks are given here.

Logical Dimension Table Name	Remarks
Beneficiary Dimension	This table stores beneficiary details.

The mapping details for the Reinsurance Contracts Dimension tables are given here.

Map Reference	Source Table	Logical Stage	Dimension Table	Logical Dimension Table Name
Number	Name	Table Name	Name	
672	STG_PARTY_MAS TER	Stage Party Master	DIM_BENEFICIARY	Beneficiary Dimension

18.5.1.2 About Group Policy Beneficiary T2Ts (Result Tables)

The Group Policy Beneficiary T2Ts with description are as follows.

T2T Name	T2T Description
T2T_FCT_GRPINS_POL_BENFCIARY_DTLS	Stores group insurance policy beneficiary details.
T2T_FGPS_STG_GRPINS_POLICY_SUMMARY	Stores the Group Insurance plan details.
T2T_FGPS_STG_GRPINS_POL_BENFCIARY_DT LS	Stores the count of the beneficiaries based on the value in the source flag column.

The mapping details for the Group Policy Beneficiary T2Ts are as follows.

Source Table Name	Logical Stage Table Name	Fact Table Name	Logical Fact Table Name	T2T Name
STG_GRPINS_PO L_BENFCIARY_DT LS	Stage Groupings Policy Beneficiary Details	FCT_GRPINS_POL_ BENFCIARY_DTLS	Fact Groupings Policy Beneficiary Details	T2T_FCT_GRPINS_POL_ BENFCIARY_DTLS
STG_GRPINS_PO LICY_SUMMARY	Stage Group Insurance Policy Summary	FCT_GRPINS_POLI CY_SUMMARY	Fact Group Insurance Policy Summary	T2T_FGPS_STG_GRPINS _POLICY_SUMMARY
STG_GRPINS_PO L_BENFCIARY_DT LS	Stage Groupings Policy Beneficiary Details	FCT_GRPINS_POLI CY_SUMMARY	Fact Group Insurance Policy Summary	T2T_FGPS_STG_GRPINS _POL_BENFCIARY_DTLS

18.5.1.2.1 Data Population in the FCT_GRPINS_POLICY_SUMMARY Table

The two ways to populate the data in the FCT_GRPINS_POLICY_SUMMARY table are:

- The data population through the T2T_FGPS_STG_GRPINS_POLICY_SUMMARY, which is at the Policy Summary level.
- The data population through the T2T_FGPS_STG_GRPINS_POL_BENFCIARY_DTLS. The data can be populated for the count at the policy or beneficiary level.

Source_Table_Name	Source_Col_Name	Target_Table_Name	Target_Col_Name
	f_employee_wfh_flag		N_No_Of_Employess_Wfh
	f_attrorneys_present_flag		N_No_Of_Attorneys
	f_emp_exempt_frm_plan_flag		N_No_Of_Exempt_Employees
	f_emp_non_exempt_frm_plan_flag		N_No_Of_Non_Exempt_Employees
	f_employee_work_abroad_flag		N_No_Of_Employees_Abroad
	f_employee_work_local_loc_flag		N_No_Of_Employees_Local
	f_Employment_Contract_flag		N_No_Of_Employment_Contracts
	f_Full_time_employee_flag		N_Total_No_Of_Ft_Employees
	f_indpndt_contractors_flag		N_No_Of_Indpndt_Contractors
	f_Leased_employee_flag		N_No_Of_Leased_Employees
tg_Grpins_Pol_Benfciary_Dtls	f_Non_Profssnl_Emplyees_flag	Ect Grains policy summary	N_No_Of_Non_Profssnl_Emplyees
itg_drpins_For_beniciary_bus	f_Officers_present_flag	Fct_Grpins_policy_summary	N_No_Of_Officers
	f_part_time_employee_flag		N_Total_No_Of_Pt_Employees
	f_Partners_present_flag		N_No_Of_Partners
	f_Principals_present_flag		N_No_Of_Principals
	f_Profssnl_Emplyees_flag		N_No_Of_Profssnl_Emplyees
	f_Resigned_employee_flag		N_No_Of_Resigned_Employees
	f_Seasonal_employee_flag		N_No_Of_Seasonal_Employees
	f_Temporary_employee_flag		N_No_Of_Temporary_Employees
	f_Terminated_employee_flag		N_No_Of_Terminated_Employees
	f_Unionized_employee_flag		N_No_Of_Unionized_Employees
	f_Volunteer_employee_flag		N_No_Of_Volunteer_Employees

This is an illustration of data population in the FCT_GRPINS_POLICY_SUMMARY table:

Input							
Table Name	STG_GRPINS IARY_DTLS	S_POL_BENFC	STG_GRPINS _POLICY_SU MMARY	STG_LIFE_IN TS	IS_CONTRAC	STG_HEALTI RACTS	H_INS_CONT
Column Name	V_ACCOU NT_NUMB ER	F_EMPLOYE E_WFH_FLA G	V_GROUP_IN S_POLICY_ID	V_ACCOU NT_NUMB ER	V_GROUP_ POLICY_ID	V_ACCOU NT_NUMB ER	V_GROUP_ POLICY_ID
Policy 1	Life001	Υ	Oracle001	Life001	Oracle001	-	-
Policy 2	Life002	Υ	Oracle001	Life002	Oracle001	-	-
Policy 3	Health001	N	Oracle002	-	-	Health001	Oracle002
Policy 4	Health002	Υ	Oracle002	-	-	Health002	Oracle002

Input:

For each Policy, the data for the input column

STG_GRPINS_POL_BENFCIARY_DTLS.V_ACCOUNT_NUMBER is retrieved from the source column (Policy type) STG_LIFE_INS_CONTRACTS. V_ACCOUNT_NUMBER or

STG_HEALTH_INS_CONTRACTS.V_ACCOUNT_NUMBER, based on the Policy ID column V_GROUP_INS_POLICY_ID.

The total count of different policies is retrieved from different source columns STG_LIFE_INS_CONTRACTS.V_GROUP_POLICY_ID and STG_HEALTH_INS_CONTRACTS. V_GROUP_POLICY_ID into the input column STG_GRPINS_POLICY_SUMMARY.V_GROUP_INS_POLICY_ID.

	Output	
Table Name	STG_GRPINS_POLICY_SUMMARY	FCT_GRPINS_POLICY_SUMMARY
Column Name	V_GROUP_INS_POLICY_ID	N_NO_OF_EMPLOYESS_WFH
Summation of	Oracle001	2
WFH employees (only Y)	Oracle002	1

Output:

For the data in the input column STG_GRPINS_POL_BENFCIARY_DTLS.V_ACCOUNT_NUMBER, when the flag STG_GRPINS_POL_BENFCIARY_DTLS.F_EMPLOYEE_WFH_FLAG is Y then the counter N_NO_OF_EMPLOYESS_WFH increments by 1 in the target column FCT_GRPINS_POLICY_SUMMARY.N_NO_OF_EMPLOYESS_WFH for different Policy IDs V_GROUP_INS_POLICY_ID.

For example:

Input:

For Policy 1, the data Life001 for the input column (STG_GRPINS_POL_BENFCIARY_DTLS.V_ACCOUNT_NUMBER) is retrieved from the source column STG_LIFE_INS_CONTRACTS. V_ACCOUNT_NUMBER (Life001), based on the Policy ID Oracle001 (STG_LIFE_INS_CONTRACTS.V_GROUP_INS_POLICY_ID). This procedure is repeated for Policy 2, Policy 3, and Policy 4.

The total count (1+1+0+1) of different policies (Policy 1, Policy 2, Policy 3, and Policy 4) is retrieved from different source columns Oracle001 (STG_LIFE_INS_CONTRACTS.V_GROUP_POLICY_ID) and Oracle002 (STG_HEALTH_INS_CONTRACTS.V_GROUP_POLICY_ID) into the input column STG_GRPINS_POLICY_SUMMARY.V_GROUP_INS_POLICY_ID (Oracle001, Oracle001, O, Oracle002).

Output:

For data (Life001, Life002, Health001, Health002) in the input column (STG_GRPINS_POL_BENFCIARY_DTLS.V_ACCOUNT_NUMBER), when the flag (STG_GRPINS_POL_BENFCIARY_DTLS.F_EMPLOYEE_WFH_FLAG) is Y, then the counter (N_NO_OF_EMPLOYESS_WFH) increments by 1 in the target column FCT_GRPINS_POLICY_SUMMARY.N_NO_OF_EMPLOYESS_WFH (2+1) for different Policy IDs V_GROUP_INS_POLICY_ID (Oracle001, Oracle002).

18.5.2 Policy Schedules Table

Policy Schedules refers to the agreed non-linear premium and benefit schedules associated with the insurance contracts. For example, step up Annuity Contracts, and Term Life Insurance, where benefits are increasing or decreasing with remaining term of contract. Agreed schedules can be stored in this entity.

18.5.2.1 About Policy Schedules T2T (Result Table)

Policy Schedules T2T and its description is given here.

T2T Name	T2T Description
T2T_FCT_POLICY_SCHEDULES	This T2T stores the details of policy schedules. Policy Schedules refer to the premium and sum insured for each policy year until policy maturity. This is used in case of increasing or decreasing the benefit or Premium payments associated with a policy.

The mapping details for the Policy Schedules T2T is given here.

Source Table Name	Logical Stage Table Name	Fact Table Name	Logical Fact Table Name	T2T Name
STG_POLICY_SC	Stage Policy	FCT_POLICY_SCH	Fact Policy	T2T_FCT_POLICY_SCHE DULES
HEDULES	Schedules	EDULES	Schedules	

18.5.3 Policy and Funds Tables

Policy Funds refers to the investment made by policyholder as part of insurance contract and significant market risk is borne by policyholder.

18.5.3.1 About Policy and Funds T2T (Result Table)

Policy and Funds T2Ts and their description are given here.

T2T Name	T2T Description
T2T_FCT_POLICY_FUNDS	This T2T stores the policy wise fund details. This covers units invested for each fund, total amount invested (current value of investment as of today), etc.
T2T_FCT_POLICY_FUND_ALLOCATION	This T2T stores the investment allocation for a given policy, fund and investment bucket combination. Investment amount is allocated to different funds and during different time period, which is stored in this entity. This covers premium amount invested in each bucket, running total premium, and cash surrender value for each bucket.

The mapping details for the Policy and Funds T2Ts are given here.

Source Table Name	Logical Stage Table Name	Fact Table Name	Logical Fact Table Name	T2T Name
STG_POLICY_FUND S	Stage Policy Funds	FCT_POLICY_FUN DS	Fact Policy Funds	T2T_FCT_POLICY_FUN DS
STG_POLICY_FUND _ALLOCATION	Stage Policy Fund Allocation	FCT_POLICY_FUN D_ALLOCATION	Fact Policy Fund Allocation	T2T_FCT_POLICY_FUN D_ALLOCATION

18.5.4 Policy Loans Tables

Some insurance policies allow policyholders to take the loans based on amount accumulated till date as per terms and conditions laid in the contract. Such loans are considered as a contract by itself in OIDF and must be loaded in stage loan contracts. This entity holds policy identifiers to link multiple loans taken under a given insurance policy.

Network of loan entities cover Stage Loan Contracts, Stage Mitigants, Stage Account Mitigant Map, Stage Account Write off Details, Stage Account Recovery details.

18.5.4.1 About Policy Loans T2T (Result Table)

Policy Loans T2T and its description is given here.

T2T Name	T2T Description
T2T_FLAS_STG_LOAN_CONTRACTS	This T2T stores the details of loans. This table includes mortgage, and vehicle loans.
T2T_STG_LOANS_CAS	This T2T stores the details of loans lent by the Insurance Company to its customers.

The mapping details for the Policy Loans is given here.

Source Table Name	Logical Stage Table Name	Fact Table Name	Logical Fact Table Name	T2T Name
STG_LOAN_CON TRACTS	Stage Loan Contracts	FCT_LOAN_ACCO UNT_SUMMARY	Fact Loan Account Summary	T2T_FLAS_STG_LOAN_C ONTRACTS
STG_LOAN_CON TRACTS	Stage Loan Contracts	FCT_COMMON_A CCOUNT_SUMMA RY	Fact Common Account Summary	T2T_STG_LOANS_CAS

18.5.5 Policy Conversion Table

This table is used to store the policy details when converting one policy to another. The policy can be converted from one to multiple policies or multiple to one policy. An insurance policy with this type of provision allows the insured to switch to a different type of policy.

18.5.5.1 About Policy Conversion T2T (Result Table)

Policy Conversion T2T and its description is given here.

T2T Name	T2T Description
T2T_FCT_POLICY_CONVERSION_DETAILS	This T2T stores the details of conversion policies. If the policy is converted from one to multiple, or vice versa.

Policy Conversion T2T and its description is given here.

Source Table Name	Logical Stage Table Name	Fact Table Name	Logical Fact Table Name	T2T Name
STG_POLICY_CO NVERSION_DETA ILS	Stage Policy Conversion Details	FCT_POLICY_CONV ERSION_DETAILS	Fact Policy Conversion Details	T2T_FCT_POLICY_CONVE RSION_DETAILS

18.6 Reinsurance Contracts Tables

A reinsurance contract is defined as an insurance contract issued by one entity (the reinsurer) to compensate another entity for claims arising from one or more insurance contracts issued by that other entity. The requirements for the assessment of significant insurance risk in a reinsurance contract are the same as for an insurance contract. However, a reinsurance contract transfers significant insurance risk if it transfers substantially all of the insurance risk resulting from the insured portion of the underlying insurance contract, even if it does not expose the reinsurer to the possibility of a significant loss.

18.6.1 About Reinsurance Contracts Dimension Tables

Reinsurance Contracts Dimension table names and their remarks are given here.

Logical Dimension Table Name	Remarks
Insurance Reserve Function Method Dimension	This table stores the method used to calculate reserves and defines the mortality function used to calculate reserves and net premium for valuation. Sample values: OTHER, UNKNOWN, RESERVFUNCFCL, RESERVFUNCFUL.

Logical Dimension Table Name	Remarks		
Consequence Of Loss Dimension	This table stores the code that identifies consequences of losses. Sample values: Acid burns, Amputation, Blindness, etc.		
Tax Reimbursement Calculation Method Dimension	This table stores the Tax Reimbursement Calculation Method Code details and the information about the method for calculating the portion of the Premium Taxes reimbursed to the direct insurer. Sample values: OTHER, UNKNOWN, REINPREMTXRM12.		
Insurance Reserve Calculation Basis Dimension	This table stores the Insurance Reserve Calculation Basis Code details, in which, basis is used in calculating the standard GAAP reserve. Sample value: OTHER.		
Reinsurance Contract Type Dimension	This table stores the Reinsurance Contract Type details. Sample values: DIP is Direct Insurance Policy , RC is Reinsurance Contract , FC is Facultative Contract , etc.		
Insurance Sub Standard Policy Reserve Method Dimension	This table stores the Insurance Sub Standard Policy Reserve Method Code details, a code list from Life Reinsurance Activity Report LREACT UGP, UPP, etc. Describes the actuarial methodology used to calculate the substandard policy reserves. For example, Net Level.		
Reinsurance Accounting Basis Dimension	This table stores the Reinsurance accounting basis details, which specifies the basis of accounting for the contract. Sample values: Accident Year, Accounting Year, Calendar Year, Underwriting Year, etc.		
Insurance Reserve Calculation Method Dimension	This table stores the information about the reserves calculation method on this coverage and is used by valuation programs to find the correct reserves for this coverage. Sample values: OTHER, UNKNOWN, RESVMETHYT is 1 or 5 Year Preliminary Term.		
Insurance Sub Standard Reserve Calculation Basis Dimension	This table stores the Insurance Sub Standard Reserve Calculation Basis Code details. The substandard GAAP reserve factor is applied to the amount indicated to calculate the substandard GAAP reserve amount. Sample values: OTHER, UNKNOWN, etc.		
Contract Limit Retention Basis Dimension	This table stores the code identification details of the basis of the contract limits and retentions applicable to the claim that is reported. Sample values: Per accident, Per event, Per occurrence, Per location, etc.		
Insurance Reserve Valuation Type Dimension	This table stores Reserve Valuation Type details. Sample values: OTHER, UNKNOWN, RESVALTPCAM is Canadian Modified CANMOD, etc.		
Insurance Retention Level Type Dimension	This table stores the Insurance Retention Level Type details and the level of retention on the coverage. Sample values: OTHER, UNKNOWN, RETNLEVRNF is Full proportional, RETNLEVRFR is Full retention, etc.		

Logical Dimension Table Name	Remarks
Reinsurance Business Origin Dimension	This table stores the Reinsurance Business Origin Code details, in which, codes specify whether the contract was directly or indirectly ceded. Sample values: Cession, Retrocession, Coinsurance, Direct insurance.
Policy Dimension	This table stores the list of all policies issued by the insurer.

The mapping details for the Reinsurance Contracts Dimension tables are given here.

Map Reference Number	Source Table Name	Logical Stage Table Name	Dimension Table Name	Logical Dimension Table Name
621	STG_INS_RES_FUN C_MTHD_MASTER	Stage Insurance Reserve Function Method Master	DIM_INS_RES_FUNC _MTHD	Insurance Reserve Function Method Dimension
622	STG_CONSEQUENC E_OF_LOSS_MASTE R	Stage Consequence Of Loss Master	DIM_CONSEQUENCE _OF_LOSS	Consequence Of Loss Dimension
623	STG_TAX_REIMB_C AL_MTHD_MASTER	Stage Tax Reimbursement Calculation Method Master	DIM_TAX_REIMB_CA L_MTHD	Tax Reimbursement Calculation Method Dimension
624	STG_INS_RES_CAL_ BASIS_MASTER	Stage Insurance Reserve Calculation Basis Master	DIM_INS_RES_CAL_B ASIS	Insurance Reserve Calculation Basis Dimension
625	STG_RI_CONTRACT _TYPE_MASTER	Stage Reinsurance Contract Type Master	DIM_RI_CONTRACT_ TYPE	Reinsurance Contract Type Dimension
626	STG_INS_SS_POL_R ES_MTHD_MASTER	Stage Insurance Sub Standard Policy Reserve Method Master	DIM_INS_SS_POL_RE S_MTHD	Insurance Sub Standard Policy Reserve Method Dimension
627	STG_RI_ACCOUNTI NG_BASIS_MASTER	Stage Reinsurance Accounting Basis Master	DIM_RI_ACCOUNTIN G_BASIS	Reinsurance Accounting Basis Dimension
628	STG_INS_RES_CAL_ MTHD_MASTER	Stage Insurance Reserve Calculation Method Master	DIM_INS_RES_CAL_ MTHD	Insurance Reserve Calculation Method Dimension
629	STG_INS_SS_RES_B ASIS_MASTER	Stage Insurance Sub Standard Reserve Calculation Basis Master	DIM_INS_SS_RES_BA SIS	Insurance Sub Standard Reserve Calculation Basis Dimension

Map Reference Number	Source Table Name	Logical Stage Table Name	Dimension Table Name	Logical Dimension Table Name
630	STG_CL_RETENTN_ BASIS_MASTER	Stage Contract Limit Retention Basis Master	DIM_CL_RETENTN_B ASIS	Contract Limit Retention Basis Dimension
631	STG_INS_RES_VAL N_TYPE_MASTER	Stage Insurance Reserve Valuation Type Master	DIM_INS_RES_VALN _TYPE	Insurance Reserve Valuation Type Dimension
632	STG_INS_RETN_LE VEL_TYPE_MASTER	Stage Insurance Retention Level Type Master	DIM_INS_RETN_LEV EL_TYPE	Insurance Retention Level Type Dimension
633	STG_RI_BUSINESS_ ORIGIN_MASTER	Stage Reinsurance Business Origin Master	DIM_RI_BUSINESS_O RIGIN	Reinsurance Business Origin Dimension
674	STG_REINSURANCE _CNTRCTS_ISSUED	Stage Reinsurance Contracts Issued	DIM_POLICY	Policy Dimension
675	STG_REINSURANCE _CONTRACTS_HEL D	Stage Reinsurance Contracts Held	DIM_POLICY	Policy Dimension

18.6.2 About Reinsurance Contracts T2Ts (Result Tables)

Reinsurance Contracts T2Ts and their description are given here.

T2T Name	T2T Description
T2T_FCT_REINSURANCE_CONTRTS_HLD	This T2T stores all the attributes of a reinsurance contract held by the entity.
T2T_FCT_REINSURANCE_CONTRTS_ISS	This T2T stores all the attributes of a reinsurance contract issued by the entity.
T2T_FCT_RI_ISSUED_PLCD_COLL_MAP	This T2T stores the mapping between Placed Collateral and Reinsurance Contract. Reinsurers provide security to Insurance Company to make sure that they are adequately covered.
T2T_FCT_RI_HELD_MITIGANT_MAP	This T2T stores the mapping between Mitigant and Reinsurance Contract. Reinsurers provide security to Insurance Company to ensure that they are adequately covered.

The mapping details for the Reinsurance Contract T2Ts are given here.

Source Table Name	Logical Stage Table Name	Fact Table Name	Logical Fact Table Name	T2T Definition Name
STG_REINSURAN CE_CONTRACTS_ HELD	Stage Reinsurance Contracts Held	FCT_REINSURANCE_ CONTRACTS_HELD	Fact Reinsurance Contracts Held	T2T_FCT_REINSURAN CE_CONTRTS_HLD
STG_REINSURAN CE_CNTRCTS_ISS UED	Stage Reinsurance Contracts Issued	FCT_REINSURANCE_ CNTRCTS_ISSUED	Fact Reinsurance Contracts Issued	T2T_FCT_REINSURAN CE_CONTRTS_ISS
STG_RI_ISSUED_ PLACED_COLL_M AP	Stage Reinsurance Issued Placed Collateral Map	FCT_RI_ISSUED_PLA CED_COLL_MAP	Fact Reinsurance Issued Placed Collateral Map	T2T_FCT_RI_ISSUED_ PLCD_COLL_MAP
STG_RI_HELD_MI TIGANT_MAP	Stage Reinsurance Held Mitigant Map	FCT_RI_HELD_MITIG ANT_MAP	Fact Reinsurance Held Mitigant Map	T2T_FCT_RI_HELD_MI TIGANT_MAP

18.7 Deploying Insurance Contracts Tables on Hive

All RDBMS related Insurance Contracts Result tables can also be deployed on Hive (Stage and Results on Hive).

NOTE

In general, Stage and Result tables are also supported in Hive. However, there are some exceptions. For a list of tables that are not supported in Hive, see <u>List</u> of <u>Unsupported T2Ts</u>.

18.8 Populating Insurance Contracts Dimension Tables

Follow this SCD process to populate data into any Insurance Contracts Dimension table:

NOTE

You can also follow this SCD process to populate data into any Hive related Insurance Contracts Dimension table.

- **1.** To populate data into any Insurance Contracts Dimension table, execute the SCD batch. For a detailed procedure, see <u>Slowly Changing Dimension (SCD) Process</u>.
- **2.** To check the SCD batch execution status of an Insurance Contracts Dimension table, follow the procedure Check the Execution Status of the SCD Batch.
- **3.** To verify log files, and check the error messages (if any), follow the procedure <u>Verify Log Files and Check Error Messages</u>.

18.9 Populating Insurance Contracts T2T Result Tables

Follow this T2T process to populate data into any Insurance Contracts T2T Result table:

NOTE

You can also follow this T2T process to populate data into any Hive related Insurance Contracts T2T Result table.

- **1.** To populate data into any Insurance Contracts T2T Result table, execute the batch for T2T. For a detailed procedure, see:
 - a. Prerequisites for loading T2T.
 - **b.** Set the Run Parameters.
 - c. Save the Run Parameters.
 - d. Execute the Batch for T2T.
- **2.** To check the T2T batch execution status of the Insurance Contracts Result tables, follow the procedure Check the Batch Execution Status of T2T.
- **3.** To verify log files, and check the error messages (if any), follow the procedure <u>Verify T2T Log Files</u> and <u>Check Error Messages</u>.

19 FSI Intracompany Policy Table

This chapter details the FSI Intracompany Policy table in the Oracle Insurance Data Foundation application and contains the following topics:

- About Intracompany Policy Table
- Criteria to Qualify as an Intracompany Policy Transaction
- Analyze Different Policy Transaction Scenarios to Qualify as an Intracompany Policy Transaction
- Run-enabled and Non Run-enabled Tables
- Consolidation Procedures in the Intracompany Policy Table
- About FSI Intracompany Policy T2T (Result Table)
- Deploying FSI Intracompany Policy Table on Hive
- Populating FSI Intracompany Policy T2T Result Table

19.1 About Intracompany Policy Table

The Intracompany Policy table is the Policy table that records the transactions between the legal entities of a company. In the Intracompany Policy table, to record the transactions between the companies belonging to the same group structure, the intercompany policy transactions (the policy transactions between the companies belonging to the different group structures) must be excluded.

19.2 Criteria to Qualify as an Intracompany Policy Transaction

To exclude an intercompany policy transaction from the Intracompany Policy table, the F_INTRAGROUP_EXP_IND flag is used in the Fact Common Policy Summary table. If the F_INTRAGROUP_EXP_IND flag is set to Y, it indicates that the two companies belong to same organization structure and the corresponding policy transactions are then included in the Intracompany Policy Entity. The remaining transactions are not considered as the intracompany transactions.

Now, the policy transaction must qualify these two criteria to be included as an Intracompany Policy transaction in the Intracompany Policy table:

- Both companies (the Policy issuing Entity and Party) must belong to the same organization group structure.
- The Party must be a Beneficiary of the Policy.

When the two criteria are met by a policy transaction, only then in the Fact Common Policy Summary table, the F_INTRAGROUP_EXP_IND flag is set to Y; and the policy transaction is added as a record in the FSI_INTRA_COMPANY_POLICY table.

19.3 Analyze Different Policy Transaction Scenarios to Qualify as an Intracompany Policy Transaction

There are different scenarios to analyze a policy transaction between two companies. This analysis decides whether the policy transaction qualifies as an Intracompany Policy transaction.

The policy transaction scenarios are explained using these tables:

- Life Insurance Contracts table:
 - Stage Life Insurance Contracts (STG_LIFE_INS_CONTRACTS): This table consists of the Policy issuing Entity and the issued Policy ID.
 - Fact Common Policy Summary (FCT COMMON POLICY SUMMARY): This table consists of the Policy issuing Entity, issued Policy ID, and the Intracompany Policy Flag.
- Party Insurance Policy Role Map (FCT PARTY INS POLICY ROLE MAP): This table consists of the list of Parties mapped to the issued Policy as a Party Role (Beneficiary, Agent, Underwriter, and so on).
- Organization Structure Dimension (DIM_ORG_STRUCTURE): This table is used to determine whether the Policy issuing Entity and its Party have the same Parent or the same organization group structure. When the Policy issuing Entity and its Party are a part of the same organization group structure, it is called as Intracompany.

The policy transaction scenarios are as follows:

Scenario 1: When the Policy issuing Entity and its Party belong to the same organization group structure, and the Party Role is a Beneficiary, then the Intracompany Policy flag is set to Y.

Stage Life Insurance Contracts/Fact Common Policy			5.000 St. 10 St.	Party Insurance Policy Role Map			Organization Structure Dimension			
	n !: .:n	Summary		(2) ==	(FCT_PARTY_INS_POLICY_ROLE_MAP)			(DIM_ORG_STRUCTURE)		
Entity ID	Policy ID	Product	Intracompany Policy Flag (F_INTRAGROUP_EX P_IND)	Policy ID	Party ID	Party Role ID (V_PARTY_INS URANCE_POLI CY_ROLE)	Entity ID	Parent ID		
А	Policy1	Term Life	Y	Policy1	A1	Beneficiary	A1	А		
В	Policy2	Whole Life	N	Policy1	B1	Underwriter	B1	A		
С	Policy3	Term Life	N	Policy2	C1	Agent	B2	В		
D	Policy4	Whole Life	N	Policy2	C2	Beneficiary	C1	A		
E	Policy5	Term Life	N	Policy3	C3	Agent	C2	С		
		•		Policy3	E1	Beneficiary				

In the illustration Scenario 1, observe the following:

- a. In the Stage Life Insurance Contracts table, refer to Policy1. A is the Policy issuing Entity, which owns Policy1.
- **b.** Verify whether the Party associated with the Policy1 is a Beneficiary or not. Refer to the Party Insurance Policy Role Map table. The V_PARTY_INSURANCE_POLICY_ROLE column lists the Party Roles associated with Policy1. Two Party Roles are associated with Policy1, namely, A1 and B1. A1 is a Beneficiary, however, B1 is an Underwriter as depicted in the V_PARTY_INSURANCE_POLICY_ROLE column.
- c. Refer to the DIM_ORG_STRUCTURE table to see if the Beneficiary and the Policy issuing Entity are a part of the same organization group structure. As highlighted in the illustration, A1 associated with the Beneficiary and the Entity A are a part of the same organization group structure. Therefore, the Intracompany group structure flag is set to Y.
- d. Therefore, in the Fact Common Policy Summary table, the Intracompany Policy Flag (F_INTRAGROUP_EXP_IND) column value is set to Y.

Therefore, the this Policy contract between these two companies is included in the Intracompany Policy table.

Scenario 2: When the Policy issuing Entity and its Party belong to the same organization group structure, and the Party Role is not a Beneficiary, then the Intracompany Policy flag is set to N.

Stage I	ife Insuran	ce Contracts/F Summary	act Common Policy	The second second		licy Role Map ICY_ROLE_MAP)		n Structure Dimension PRG_STRUCTURE)
Entity ID	Policy ID	Product	Intracompany Policy Flag (F_INTRAGROUP_EX P_IND)	Policy ID	Party ID	Party Role ID (V_PARTY_INS URANCE_POLI CY_ROLE)	Entity ID	Parent ID
А	Policy1	Term Life	Υ	Policy1	A1	Beneficiary	A1	А
В	Policy2	Whole Life	N	Policy1	B1	Underwriter	B1	A
С	Policy3	Term Life	N	Policy2	C1	Agent	B2	В
D	Policy4	Whole Life	N	Policy2	C2	Beneficiary	C1	Α
E	Policy5	Term Life	N	Policy3	C3	Agent	C2	С
				Policy3	E1	Beneficiary		*

In the illustration Scenario 2, observe the following:

- a. In the Stage Life Insurance Contracts table, refer to Policy1. A is the Policy issuing Entity, which owns Policy1.
- **b.** Verify whether the Party associated with the Policy1 is a Beneficiary or not. Refer to the Party Insurance Policy Role Map table. The V_PARTY_INSURANCE_POLICY_ROLE column lists the Party Roles associated with Policy1. Two Party Roles are associated with Policy1, namely, A1 and B1. A1 is a Beneficiary, however, B1 is an Underwriter as depicted in the V_PARTY_INSURANCE_POLICY_ROLE column.
- c. Refer to the DIM_ORG_STRUCTURE table. The Party B1 and the Entity A are a part of the same organization group structure. Therefore, the Intracompany group structure flag is set to Y.
- **d.** However, the Party Role is an Underwriter. As a result, in the Fact Common Policy Summary table, the Intracompany Policy Flag (F_INTRAGROUP_EXP_IND) column value is set to N.

Therefore, the Policy transactions between these two companies are excluded from the Intracompany Policy table.

Scenario 3: When the Party Role is a Beneficiary, and the Policy issuing Entity and its Party belong to different organization group structures, then the Intracompany Policy flag is set to N.

Stage I	ife Insuran	ce Contracts/F Summary	act Common Policy	The second second second second		licy Role Map ICY_ROLE_MAP)		Structure Dimension RG_STRUCTURE)
Entity ID	Policy ID	Product	Intracompany	Policy ID	Party ID	Party Role ID	Entity ID	Parent ID
			Policy Flag			(V_PARTY_INS		
			(F_INTRAGROUP_EX			URANCE_POLI		
			P_IND)			CY_ROLE)		
Α	Policy1	Term Life	Y	Policy1	A1	Beneficiary	A1	Α
В	Policy2	Whole Life	N	Policy1	B1	Underwriter	B1	Α
С	Policy3	Term Life	N	Policy2	C1	Agent	B2	В
D	Policy4	Whole Life	N	Policy2	C2	Beneficiary	C1	A
E	Policy5	Term Life	N	Policy3	C3	Agent	C2	С
		•		Policy3	E1	Beneficiary		10

In the illustration Scenario 3, observe the following:

- **a.** In the Stage Life Insurance Contracts table, refer to Policy2. B is the Policy issuing Entity, which owns Policy2.
- **b.** Verify whether the Party associated with the Policy2 is a Beneficiary or not. Refer to the Party Insurance Policy Role Map table. The V_PARTY_INSURANCE_POLICY_ROLE column lists the Party Roles associated with Policy2. Two Party Roles are associated with Policy2, namely, C1 and C2. C1 is an Agent and C2 is a Beneficiary as depicted in the V_PARTY_INSURANCE_POLICY_ROLE column.
- **c.** Refer to the DIM_ORG_STRUCTURE table to see if the Beneficiary and the Policy issuing Entity are a part of the same organization group structure. As highlighted in the illustration, C2 associated with the Beneficiary and the Entity B are a part of the different organization group structures. Therefore, the Intracompany group structure flag is set to N.
- **d.** Therefore, in the Fact Common Policy Summary table, the Intracompany Policy Flag (F_INTRAGROUP_EXP_IND) column value is set to N.

The Policy transactions between these two companies is not intracompany and therefore, not added to the Intracompany Policy table.

19.4 Run-enabled and Non Run-enabled Tables

These are the descriptions for the Run-enabled and Non Run-enabled tables:

- Run-enabled tables: The Oracle Insurance Data Foundation Execution Run can be executed any number of times per day with each unique Run SKey for data movement in the Run-enabled tables.
- Non Run-enabled tables: The Oracle Insurance Data Foundation Sourced Run can be executed once per day for Data Movement from Staging Area to Results Area for Non Run SKey tables.

NOTE

The records that enter the FSI_INTRA_COMPANY_POLICY table must not be entered into any other Run-enabled tables. The process mentioned for the Intracompany identification and consolidation will not be as expected unless processing or reporting application refers and reflect the same as required in the application specific metadata. The same principle also applies to the customized metadata.

19.5 Consolidation Procedures in the Intracompany Policy Table

The supported Consolidation procedures applicable to the Intracompany Policy tables are as follows:

- Simple Aggregation
- Full Consolidation
- Proportionate Consolidation

NOTE

For complete information about the Consolidation procedures supported in the OIDF application, see the Legal Entity Consolidation chapter.

This is a use case representation for the Consolidation procedure types:

Stage Life	Insurance Cor	ntracts/Fact Cor	mmon Policy Sum	mary			ance Policy Role Map NS_POLICY_ROLE_MAP)	DIM_OI	RG_STRUCTURE		Shareholding Percentage of
Entity ID	Policy ID	Product		Intracompany Policy Flag (F_INTRAGROU P_EXP_IND)		Policy ID	Party ID	Entity ID	Parent ID		Entity ID
Α	Policy1	Term Life	1000	Υ		Policy1	A1	A1	А		100%
В	Policy2	Whole Life	2000	N		Policy1	B1	B1	A		100%
С	Policy3	Term Life	3000	N		Policy2	C1	B2	В		100%
D	Policy4	Whole Life	4000	N		Policy2	C2	C1	A		100%
E	Policy5	Term Life	5000	N		Policy3	C3	C2	С		50%
				0	-	Policy3	E1	D1	С		22
						Policy4	D1	E1	D		
Ledger for Insurance	Liabilities A							in		**	~
Simple Aggregation	15000				Stage Life	e Insurance Cor	ntracts Policies bought	FSI Intracom	oany Policies		
Full Consolidation	14000	0			Entity ID	Policy ID	Product	Entity ID	Policy ID	Product	Sum Insured
Proportionate Consolidation	11500				В	Policy2	Whole Life	А	Policy1	Term Life	1000

The pictorial representation is explained in the following sections.

Simple Aggregation 19.5.1

In a Simple Aggregation consolidation procedure, all the account transactions in an entity are aggregated. The entity can be a Parent or Child.

The following logic is used for a Simple Aggregation consolidation procedure:

- 1. Identify the list of entities to be added based on the organization structure. In the illustration, refer to the DIM_ORG_STRUCTURE table. For the consolidation of Entity A, the child entities are A, B, C, D, and E.
- 2. Aggregate both the Accounts and the General Ledger transactions. The aggregation of the General Ledger transactions is the addition of General Ledgers of the entities in the list.
 - In the illustration, refer to the Stage Life Insurance Contracts/Fact Common Policy Summary table and the Sum Insured column. Add the Sum Insured amount of the entities A, B, C, D, and E. The total amount is 15000 for the Simple Aggregation in Entity A.
- This process does not identify the intragroup transactions. As a result, the intragroup transactions are also included.

Full Consolidation 19.5.2

In a Full Consolidation procedure, all the account transactions in an entity are aggregated and the Intergroup transactions are eliminated. This is repeated for each entity involved and the results are added.

The following logic is used for a Full Consolidation procedure:

1. Identify the list of entities to be added based on the organization structure.

In the illustration, refer to the DIM_ORG_STRUCTURE table. For the consolidation of Entity A, the child entities are A, B, C, D, and E.

2. Aggregate both the Accounts and the General Ledger transactions.

In the illustration, refer to the Stage Life Insurance Contracts/Fact Common Policy Summary table and the Sum Insured column. Add the Sum Insured amount of the entities A, B, C, D, and E. The total amount is 15000.

3. Exclude all the Intragroup transactions.

In the illustration, refer to the FSI Intracompany Policies table. The transaction between the entities A and A1 is considered as intragroup transaction. Therefore, exclude the Sum Insured of Entity A (Sum Insured=1000) from the total amount. The new total amount is 14000 for the Full Consolidation in Entity A.

4. Repeat steps 2 and 3 for each entity.

19.5.3 Proportionate Consolidation

In a Proportionate Consolidation procedure, the account transactions for each Entity (performing Simple Aggregation) are added. To this, the share of profits and expenses in the Entity, where the entity holds the stake are added. Then the Intergroup transactions are eliminated.

The following logic is used for a Proportionate Consolidation procedure:

- 1. Identify the list of entities to be added based on the organization structure.
 - In the illustration, refer to the DIM_ORG_STRUCTURE table. For the consolidation of Entity A, the child entities are A, B, C, D, and E.
- 2. When one entity holds a stake in another entity, follow these steps:
 - When the Balance Sheet is prepared for the Parent entity, follow these steps:
 - i. Multiply each of the Account and the General Ledger transaction with the percentage that the Parent entity holds as a stake in the Child entity.
 - In the illustration, refer to the Shareholding Percentage of Entity ID table. Entity A holds 100% stake in A, B, C, and D, and 50% stake in E. Therefore, the resultant amounts are 1000, 2000, 3000, 4000, and 2500 respectively.
 - ii. Aggregate the Accounts and the General Ledger transaction results from the previous step.
 The summation of the amount from the previous step is 12500.
 - When the Balance Sheet is prepared for the Child entity, follow these steps:
 - **i.** Multiply each of the Account and the General Ledger transaction with the percentage that the Child entity holds as a stake in its own company.
 - ii. Aggregate the Accounts and the General Ledger transaction results from the previous step.
- **3.** Exclude all the intragroup transactions.

In the illustration, refer to the FSI Intracompany Policies table. The transaction between the entities A and A1 is considered as intragroup transaction. Therefore, exclude the Sum Insured of Entity A (Sum Insured=1000) from the amount in the previous step. The new total amount is 11500 for the Proportionate Consolidation in Entity A.

19.6 About FSI Intracompany Policy T2T (Result Table)

The FSI Intracompany Policy T2T and its description is as follows.

T2T Name	T2T Description
T2T_FSI_INTRA_COMPANY_POLICY	Stores details of all the intracompany policy transactions.

The mapping details for the FSI Intracompany Policy is as follows.

Source Table Name	Logical Stage Table Name	Fact Table Name	Logical Fact Table Name	T2T Name
STG_ANNUITY_C	Stage Annuity	FCT_COMMON_POLI	Fact Common	T2T_FSI_INTRA_COMPA
ONTRACTS	Contracts	CY_SUMMARY	Policy Summary	NY_POLICY
STG_HEALTH_IN	Stage Health	FCT_COMMON_POLI	Fact Common	T2T_FSI_INTRA_COMPA
S_CONTRACTS	Insurance Contracts	CY_SUMMARY	Policy Summary	NY_POLICY
STG_LIFE_INS_C	Stage Life Insurance	FCT_COMMON_POLI	Fact Common	T2T_FSI_INTRA_COMPA
ONTRACTS	Contracts	CY_SUMMARY	Policy Summary	NY_POLICY
STG_PROP_CASU ALTY_CONTRAC TS	Stage Property Casualty Contracts	FCT_COMMON_POLI CY_SUMMARY	Fact Common Policy Summary	T2T_FSI_INTRA_COMPA NY_POLICY
STG_RETIREMEN	Stage Retirement	FCT_COMMON_POLI	Fact Common	T2T_FSI_INTRA_COMPA
T_ACCOUNTS	Accounts	CY_SUMMARY	Policy Summary	NY_POLICY

19.7 Deploying FSI Intracompany Policy Table on Hive

All RDBMS-related FSI Intracompany Policy Result table can also be deployed on Hive (Stage and Results).

NOTE

In general, the Stage and Result tables are also supported in Hive. However, there are a few exceptions. For the list of tables that are not supported in Hive, see the <u>List of Unsupported T2Ts</u> section.

19.8 Populating FSI Intracompany Policy T2T Result Table

The T2T process to populate data into any FSI Intracompany Policy T2T Result table is as follows:

NOTE

You can also follow this T2T process to populate data into any Hive-related FSI Intracompany Policy T2T Result table.

- 1. To populate data into any FSI Intracompany Policy T2T Result table, execute the batch for T2T. For a detailed procedure, see the following sections:
 - Prerequisites for loading T2T
 - **b.** Set the Run Parameters
 - c. Save the Run Parameters
 - **d.** Execute the Batch for T2T
- 2. To check the T2T batch execution status of the FSI Intracompany Policy Result table, follow the procedure in the Check the Batch Execution Status of T2T section.
- 3. To verify the log files and check the error messages (if any), follow the procedure in the Verify T2T Log Files and Check Error Messages section.

20 Producer and Producer Agreement Tables

This chapter provides information about Insurance Producer and Producer Agreement tables in the Oracle Insurance Data Foundation application.

This chapter includes the following topics:

- About Producer and Producer Agreement Dimension Tables
- About Producer and Producer Agreement T2Ts (Result Tables)
- Deploying Producer and Producer Agreement Tables on Hive
- Populating Producer and Producer Agreement Dimension Tables
- Populating Producer and Producer Agreement T2T Result Tables

Insurance Producer refers to a person or a firm that must be licensed under the respective laws of the land to sell, solicit, or negotiate Insurance Contracts.

Agreement means a formal agreement between an Insurance firm and an Insurance Producer on the lines of authority specified in the agreement to sell, negotiate or solicit the Insurance products with prospective customers. In some companies, an agent must also be appointed for selling particular products.

Insurance license is an authority to sell, solicit or negotiate particular Insurance products and awarded by jurisdiction specific insurance regulatory authority to Insurance Producers whereas producer agreements are between producers and insurance firms. Availability of valid insurance license is a pre-requisite of the producer agreements. There are two types of agreements:

- Producer Agreements: This can be between producers, or producer and carrier. Basic components
 of Producer agreements are Producer and Carrier. Producer Agreement specify distribution details
 along with product types. Essentially, one Producer Agency handles multiple individual Producers
 on behalf of carrier, where individual Producers are not appointed by carrier is what is excluded
 from this.
- Carrier Appointments: This is about direct appointment by insurance carrier or appointment by producer agency. Basic components of Carrier Appointments are Carrier, Producer Agreement identifier and Appointment Identifier. If said appointment is through producer agency or agreement, then end user must populate Producer Identifier. For direct appointments, producer agreement identifier can be chosen not be populated. Carrier appointments specify distribution details along with product types and other details. However, it is expected that when carrier appointments are done as part of producer agreement, then distribution and product types are within the allowed values as per producer agreement.

Producer and Producer Appointment tables store the details related to Producer, Producer Agreements, Carrier Appointments, and license, which covers both the use cases mentioned above. Producer Appointments and Agreements are used to track down the sales.

To determine the eligibility of a Producer, the Examinations and Certifications are used. For more information, see <u>Party Producer Exam, Certification, and License Tables</u>.

These are the Producer and Producer Agreement entities:

• Stage Producer Appointment Details loads the Producer Appointment details. The appointment collection represents the various appointments between the agent and various companies. The appointment may be to an insurance company carrier, or can be used for appointments to

- distributors. Appointments are assigned to each Producer by each company by jurisdiction. In some companies, an agent also must be appointed for selling particular products.
- Stage Producer Insurance Distribution Details loads the Insurance distribution details. It may be
 used with Carrier Code as entity recognition for referencing the associated Insurance Distribution
 Agreement.
- Stage Producer Line of Authority Details loads the individual lines of authority, which are required to offer this product for sale.

20.1 About Producer and Producer Agreement Dimension Tables

Producer and Producer Agreement Dimension table names and their remarks are given here.

Logical Dimension Table Name	Remarks
Insurance Distribution Level Type Dimension	This table stores the type of area, where the producer can distribute or is appointed for selling the insurance products. Sample values: AREA, BRANCH, OTHER, UNKNOWN, CLIENTSEGMENT, etc.
Insurance Distribution Payment Form Dimension	This table stores the Insurance Distribution Payment Form details. Sample values: CASH, CASHIERSCHK, CERTIFIEDCHK, etc.
Insurance License Provision Type Dimension	This table stores the insurance License Provision Type Code details. Sample values: OTHER, UNKNOWN, PERM, TEMP, etc.
Insurance Solicitor Type Dimension	This table stores the insurance solicitor type details. This information is used in situations where a producer hierarchy involves separate individuals for soliciting and writing policies. These individuals can also be Brokers, General Agents, etc., which is indicated via the Producer Appointment Type. There are licensing and appointment needs for each level of the hierarchy, as well as differences in the way compensation is handled and the names that appear on the contract. Sample values: OTHER, UNKNOWN, ADHERENT, and DRNONCOMM.
Insurance Producer Appointment Dimension	This table stores the Insurance Producer Appointment details.
Insurance Line Of Authority Dimension	This table stores the Insurance Line of Authority details.
Producer Attrition Event Dimension	This table stores the list of producer attrition event, reason for the status of the Producer or Producer Appointment as of the Producer Attrition Reason Date. Sample values: OTHINSCARRIER, MARRIAGE, NEWPOSITION, OTHEREMP, ILLNESS, INCAPACITY, etc.
Producer Attrition Event Reason Dimension	This table stores the list of Producer Attrition Reason code.

Logical Dimension Table Name	Remarks
	Sample values: OTHER, UNKNOWN, ACTIVE, REJECTED, INACTIVE, PENDING, SERVONLY, and TRANSFEROUT.
Producer Vested Type Dimension	This table stores the list of Producer vested type code. Sample values: FULL, NONE, OTHER, and UNKNOWN.
Insurance Sub Channel Dimension	This table stores details of the type of Insurance Distribution sub channel. Sample values: OTHER, UNKNOWN, FP, GA, MGA, and PPGA.
Underwriting Privilege Type Dimension	This table stores the details of level of underwriting authority granted to Producers. Sample values: OTHER, UNKNOWN, NORMAL, and SUPERIOR.

The mapping details for the Producer and Producer Agreement Dimension tables are given here.

Map Reference Number	Source Table Name	Logical Stage Table Name	Dimension Table Name	Logical Dimension Table Name
713	STG_INS_DSTBTN_ LVL_TYPE_MASTER	Stage Insurance Distribution Level Type Master	DIM_INS_DSTBTN_L VL_TYPE	Insurance Distribution Level Type Dimension
714	STG_INS_DIS_PAY MNT_FORM_MAST ER	Stage Insurance Distribution Payment Form Master	DIM_INS_DIS_PAYM NT_FORM	Insurance Distribution Payment Form Dimension
715	STG_INS_LCNS_PR VSN_TYPE_MASTE R	Stage Insurance License Provision Type Master	DIM_INS_LCNS_PRV SN_TYPE	Insurance License Provision Type Dimension
716	STG_INS_SOLICITO R_TYPE_MASTER	Stage Insurance Solicitor Type Master	DIM_INS_SOLICITOR _TYPE	Insurance Solicitor Type Dimension
717	STG_PRDCR_APPT MNT_DETAILS	Stage Producer Appointment Details	DIM_INSURANCE_PR DCR_APPT	Insurance Producer Appointment Dimension
718	STG_PRODUCER_L OA_DETAILS	Stage Producer Line Of Authority Details	DIM_INS_LINE_OF_A UTHORITY	Insurance Line Of Authority Dimension
719	STG_PRDCR_ATTR N_EVENT_MASTER	Stage Producer Attrition Event Master	DIM_PRDCR_ATTRN _EVENT	Producer Attrition Event Dimension
720	STG_PRDCR_ATTR N_REASON_MASTE R	Stage Producer Attrition Event Reason Master	DIM_PRDCR_ATTRN _REASON	Producer Attrition Event Reason Dimension
721	STG_PRDCR_VESTE D_TYPE_MASTER	Stage Producer Vested Type Master	DIM_PRDCR_VESTE D_TYPE	Producer Vested Type Dimension

Map Reference	Source Table	Logical Stage Table	Dimension Table	Logical Dimension Table Name
Number	Name	Name	Name	
722	STG_INS_SUB_CHA	Stage Insurance Sub	DIM_INS_SUB_CHAN	Insurance Sub
	NNEL_MASTER	Channel Master	NEL	Channel Dimension
723	STG_UNW_PRIVILE GE_TYPE_MASTER	Stage Underwriting Privilege Type Master	DIM_UNW_PRIVILEG E_TYPE	Underwriting Privilege Type Dimension

20.2 About Producer and Producer Agreement T2Ts (Result Tables)

Producer and Producer Agreement T2Ts and their description are given here.

T2T Name	T2T Description
T2T_FCT_PRDCR_APPTMNT_DETAILS	This T2T stores the Producer Appointment details. The appointment collection represents the various appointments between the agent and various companies. The appointment may be to an insurance company carrier, or can be used for appointments to distributors. For example, MGAs and National Accounts have similar processes for appointments. Appointments are assigned to each Producer by each company by jurisdiction. In some companies, an agent also must be appointed for selling particular products.
T2T_FCT_PRDCR_INS_DISTRBTION_DTLS	This table stores the Insurance distribution details. It may be used with Carrier Code as entity recognition for referencing the associated Insurance Distribution Agreement.
T2T_FCT_PRODUCER_LOA_DETAILS	This table stores the individual lines of authority, which are required to offer this product for sale.

Producer and Producer Agreement T2Ts and their description are given here.

Source Table Name	Logical Stage Table Name	Fact Table Name	Logical Fact Table Name	T2T Name
STG_PRDCR_APP TMNT_DETAILS	Stage Producer Appointment Details	FCT_PRDCR_APPT MNT_DETAILS	Fact Producer Appointment Details	T2T_FCT_PRDCR_APPTM NT_DETAILS
STG_PRDCR_INS_ DISTRBTION_DTL S	Stage Producer Insurance Distribution Details	FCT_PRDCR_INS_DI STRBTION_DTLS	Fact Producer Insurance Distribution Details	T2T_FCT_PRDCR_INS_DIS TRBTION_DTLS

Source Table Name	Logical Stage Table Name	Fact Table Name	Logical Fact Table Name	T2T Name
STG_PRODUCER_ LOA_DETAILS	Stage Producer Line Of Authority Details	FCT_PRODUCER_L OA_DETAILS	Fact Producer Line Of Authority Details	T2T_FCT_PRODUCER_LOA _DETAILS

20.3 Deploying Producer and Producer Agreement Tables on Hive

All RDBMS related Producer and Producer Agreement Result tables can also be deployed on Hive (Stage and Results on Hive).

NOTE In general, Stage and Result tables are also supported in Hive. However, there are some exceptions. For a list of tables that are not supported in Hive, see <u>List of Unsupported T2Ts</u>.

20.4 Populating Producer and Producer Agreement Dimension Tables

Follow this SCD process to populate data into any Producer and Producer Agreement Dimension table:

NOTE You can also follow this SCD process to populate data into any Hive related Producer and Producer Agreement Dimension table.

- **1.** To populate data into any Producer and Producer Agreement Dimension table, execute the SCD batch. For a detailed procedure, see <u>Slowly Changing Dimension (SCD) Process</u>.
- **2.** To check the SCD batch execution status of a Producer and Producer Agreement Dimension table, follow the procedure <u>Check the Execution Status of the SCD Batch</u>.
- **3.** To verify log files, and check the error messages (if any), follow the procedure <u>Verify Log Files and Check Error Messages</u>.

20.5 Populating Producer and Producer Agreement T2T Result Tables

Follow this T2T process to populate data into Producer and Producer Agreement T2T Result tables:

NOTE

You can also follow this T2T process to populate data into any Hive related Producer and Producer Agreement T2T Result table.

- 1. To populate data into Producer and Producer Agreement T2T Result table, execute the batch for T2T. For a detailed procedure, see:
 - a. Prerequisites for loading T2T.
 - **b.** Set the Run Parameters.
 - **c.** Save the Run Parameters.
 - **d.** Execute the Batch for T2T.
- 2. To check the T2T batch execution status of the Producer and Producer Agreement Result tables, follow the procedure Check the Batch Execution Status of T2T.
- 3. To verify log files, and check the error messages (if any), follow the procedure Verify T2T Log Files and Check Error Messages.

21 Common Account Summary Tables

This chapter provides information about Common Account Summary tables in the Oracle Insurance Data Foundation application such as Asset and other Account Summary, Trading and Investment, Instruments Contracts, and Capital and Borrowings, and step-by-step instructions to use this section.

This chapter includes the following topics:

- Abstract
- Trading and Investments Table
- About Trading and Investments T2T (Result Table)
- <u>Instruments Contracts Tables</u>
- About Instruments Contracts Dimension Tables
- About Instruments Contracts T2T (Result Table)
- Capital and Borrowings Tables
- About Capital and Borrowings T2Ts (Result Tables)
- Other Common Account Summary Tables
- Abstract of Common Account Summary Result Tables
- Deploying Common Account Summary Tables on Hive
- Populating Common Account Summary Dimension Tables
- Populating Common Account Summary T2T Result Tables

21.1 Abstract

For an Insurance company this entity stores account covering their exposures to Trading, Investment as well as Loans.

OIDF Subject Area of Trading and Investment refers to the significant portion of assets of the Insurance Company. Trading and Investment Subject Area comprise of following types of entities:

- <u>Contracts</u>: Investment Contracts refers to a contract or transaction or scheme where entity invest
 money either on its own behalf or on behalf of their clients with expectation of profit from sale or
 holding of such investment.
- <u>Instrument</u>: Tradable investments use instrument with ISIN/CUSIP/Other known identifiers. Instrument definition most commonly is published by issuer of instrument, which can be another public or private or government entity or stock exchange.

Investment contracts refers to a contract or transaction or scheme where entity invest money either on its own behalf or on behalf of their clients with expectation of profit from sale or holding of such investment. Capital Instruments also make use of same relevant instrument set of tables.

Contracts

OIDF has different entities known as product processors to hold variety of instrument types. Given below is the list of trading and investment product processors.

Instruments

Instrument refers to an issue or derivative contract which is tradable in market. Over the counter contracts are considered as instruments. Thus Government bonds, municipal bonds, future contracts, option contracts and excludes forwards, swap contracts etc. Multiple contracts in product processor entities mentioned above can have same instrument traded.

Following table explains need of creating an instrument before populating the contract for a given product processor.

Product Processor	A record in instrument contract master and dimension is required?
Stage Investments	Yes for Exchange Traded Contracts.
Stage MM Contracts	Yes for Exchange Traded Contracts.
Stage Futures	Yes
Stage Option Contracts	Yes
Stage Credit Derivatives	Yes for Exchange Traded Contracts.
Stage Fx Contracts	No
Stage Forwards	No
Stage Mutual Funds	Yes
Stage Commodities	Yes for Exchange Traded Contracts.

21.2 Trading and Investments Contract Tables

21.2.1 Instruments Tables

21.2.1.1 About Instruments Dimension Tables

Instruments Dimension table names and their description are given here.

Logical Dimension Table Name	Dimension Table Description
Instruments Contracts Dimension	This table stores data related to contracts and instruments in the market and their details such as Effective Date, Maturity Date, Face Value, Day Convention, Strike, etc.
Geography Dimension	This table stores the distinct list of all geographical locations, where any of the transaction channels of the Insurance Company are located.

The mapping details for the Instruments Dimension tables are given here.

Map Reference Number	Source Table Name	Logical Stage Table Name	Dimension Table Name	Logical Dimension Table Name
69	STG_INSTRUMEN T_CONTRACT_M ASTER	Stage Instrument Contract Master	DIM_INSTRUMENT_ CONTRACT	Instrument Contract Dimension
64	STG_GEOGRAPH Y_MASTER	Stage Geography Master	DIM_GEOGRAPHY	Geography Dimension

21.2.1.2 About Instruments T2T (Result Table)

Instruments Contracts T2Ts and their description are given here.

T2T Name	T2T Description
T2T_STG_MM_CAS	This T2T stores the details of Money Market contract. For example: Certificates of Deposit (CDs), U.S. Treasury bills, commercial paper, municipal notes, federal funds, etc. The money market is used by a wide array of participants, from a company raising money by selling commercial paper into the market to an investor purchasing CDs as a safe place to park money for the short term.
T2T_STG_OPTIONS_CAS	This T2T stores records of call and put options that are bought (long) or sold (short) by the customer.
T2T_STG_FUTURES_CAS	This T2T stores the details of Futures contract.
T2T_STG_FORWARDS_CAS	This T2T stores the details of Forwards contract.
T2T_STG_CREDIT_DERIVATIVES_CAS	This T2T stores the details of Credit Derivatives contract.
T2T_STG_COMMODITIES_CAS	This T2T stores the details of Commodities contract.
T2T_STG_SWAPS_CONTRACTS_CAS	This T2T stores the details of swaps contract.
T2T_STG_FX_CONTRACTS_CAS	This T2T stores the details of Foreign Exchange contracts.
T2T_STG_GUARANTEES_CAS	This T2T stores the guarantees issued by the Insurance Company to its customers.

The mapping details for the Instruments T2T are given here.

Source Table Name	Logical Stage Table Name	Fact Table Name	Logical Fact Table Name	T2T Name
STG_MM_CONTRA CTS	Stage Money market Contracts	FCT_COMMON_ACC OUNT_SUMMARY	Fact Common Account Summary	T2T_STG_MM_CAS
STG_OPTION_CON TRACTS	Stage Option contracts	FCT_COMMON_ACC OUNT_SUMMARY	Fact Common Account Summary	T2T_STG_OPTIONS_ CAS

Source Table Name	Logical Stage Table Name	Fact Table Name	Logical Fact Table Name	T2T Name
STG_FUTURES	Stage Futures	FCT_COMMON_ACC OUNT_SUMMARY	Fact Common Account Summary	T2T_STG_FUTURES_ CAS
STG_FORWARDS	Stage Forwards	FCT_COMMON_ACC OUNT_SUMMARY	Fact Common Account Summary	T2T_STG_FORWARD S_CAS
STG_CREDIT_DERI	Stage Credit	FCT_COMMON_ACC	Fact Common	T2T_STG_CREDIT_D
VATIVES	Derivatives	OUNT_SUMMARY	Account Summary	ERIVATIVES_CAS
STG_COMMODITIE	Stage Commodities	FCT_COMMON_ACC	Fact Common	T2T_STG_COMMODI
S		OUNT_SUMMARY	Account Summary	TIES_CAS
STG_SWAPS_CON	Stage Swap	FCT_COMMON_ACC	Fact Common	T2T_STG_SWAPS_C
TRACTS	Contracts	OUNT_SUMMARY	Account Summary	ONTRACTS_CAS
STG_GUARANTEE	Stage Guarantees	FCT_COMMON_ACC	Fact Common	T2T_STG_GUARANT
S		OUNT_SUMMARY	Account Summary	EES_CAS

21.2.2 About Trading and Investments Contract T2Ts (Result Tables)

Trading and Investments Contract T2Ts and their description is given here.

T2T Name	T2T Description
T2T_STG_INVESTMENTS_CAS	This T2T stores the details of investment contract. For example: Government and Municipal Bonds, Covered/Secured Bonds, Corporate Bonds, etc.
T2T_STG_MUTUAL_FUNDS_CAS	This T2T stores the details of Mutual Funds contract.
T2T_FCT_FUND_CIS_COMPOSITION	This T2T stores the composition details of the Investment Funds.
T2T_FCT_INSTRUMENT_RATING_DETAILS	This T2T stores the rating of trading instruments including Mitigant that are tradable.
T2T_FCT_INSTRUMENT_MARKET_PRICES	This T2T stores relevant information about breach/penalty levied by the regulator in respect of- Domestic Regulatory Liquidity requirements (CRR and SLR) for all branches including overseas branches.

The mapping details for the Trading and Investments Contract T2Ts are given here.

SOURCE TABLE NAME	Logical Stage Table Name	Fact Table Name	Logical Fact Table Name	T2T Name
STG_INVESTMENT	Stage Investments	FCT_COMMON_AC	Fact Common	T2T_STG_INVESTMEN
S		COUNT_SUMMARY	Account Summary	TS_CAS

SOURCE TABLE NAME	Logical Stage Table Name	Fact Table Name	Logical Fact Table Name	T2T Name
STG_MUTUAL_FU	Stage Mutual Funds	FCT_COMMON_AC	Fact Common	T2T_STG_MUTUAL_FU
NDS		COUNT_SUMMARY	Account Summary	NDS_CAS
STG_FUND_CIS_C	Stage Fund CIS	FCT_FUND_CIS_CO	Fact Fund CIS	T2T_FCT_FUND_CIS_C
OMPOSITION	Composition	MPOSITION	Composition	OMPOSITION
STG_INSTRUMENT	Stage Instrument	FCT_INSTRUMENT_	Fact Instrument	T2T_FCT_INSTRUMEN
_RATING_DETAILS	Rating Details	RATING_DETAILS	Rating Details	T_RATING_DETAILS
STG_INSTRUMENT	Stage Instrument	FCT_INSTRUMENT_	Fact Instrument	T2T_FCT_INSTRUMEN T_MARKET_PRICES
_MARKET_PRICES	Market Prices	MARKET_PRICES	Market Prices	

For information about Instrument Options, see <u>Guaranteed Benefits and Embedded Options</u> and <u>Embedded Options Tables</u>.

21.3 Capital and Borrowings Tables

Capital and Borrowings pertains to the capital and borrowings part of balance sheet of a financial institution. It covers capital instruments such as Equity and Debt along with non-retail borrowings done by financial institutions.

21.3.1 About Capital and Borrowings T2Ts (Result Tables)

Capital and Borrowings T2Ts and their description are given here.

T2T Name	T2T Description
T2T_FCT_CAP_INSTR_POSITIONS	This T2T stores the regulatory position of capital instruments and details of treatment to capital instrument under I and III regulations.
T2T_FCT_CAP_INSTR_TXNS	This T2T stores the transactions on the capital instruments. The entity stores settled and unsettled transactions differentiated by mnemonic codes. It also stores the transactions that are settled with cash or with other means such as securities.
T2T_FCT_INSTR_PROPOSED_TXNS	This T2T stores the proposed set of instruments that will be transacted by the Insurance Company.
T2T_STG_BORROWING_COMMITMENT_TXNS	This T2T stores all the transaction records of Borrowing Commitment Contracts

The mapping details for the Capital and Borrowings T2Ts are given here.

Source Table Name	Logical Stage Table Name	Fact Table Name	Logical Fact Table Name	T2T Name
STG_CAP_INSTR_P OSITIONS	Stage Capital Instrument Positions	FCT_CAP_INSTR_P OSITIONS	Fact Capital Instrument Positions	T2T_FCT_CAP_INSTR _POSITIONS
STG_CAP_INSTR_T XNS	Stage Capital Instrument Transactions	FCT_CAP_INSTR_T XNS	Fact Capital Instrument Transactions	T2T_FCT_CAP_INSTR _TXNS
STG_INSTR_PROP OSED_TXNS	Stage Instrument Proposed Transactions	FCT_INSTR_PROPO SED_TXNS	Fact Instrument Proposed Transactions	T2T_FCT_INSTR_PR OPOSED_TXNS
STG_BORROWING _COMMITMENT_T XNS	Stage Borrowing Commitment Transactions	FCT_COMMON_AC COUNT_SUMMARY	Fact Common Account Summary	T2T_STG_BORROWI NG_COMMITMENT_ TXNS

21.4 Other Common Account Summary Tables

Other Common Account Summary T2Ts and their description, and T2T mapping details are given here. The target table is Fact Common Account Summary (FCT_COMMON_ACCOUNT_SUMMARY).

Source Table Name	Logical Stage Table Name	T2T Name	T2T Description
STG_BORROWING_C	Stage Borrowing	T2T_STG_BORROWING	This T2T stores the details of borrowing commitment contract.
OMMITMENTS	Commitments	_COMMITMENTS_CAS	
STG_REPO_CONTRA	Stage Reporting	T2T_STG_REPO_CONT	This T2T stores the details of repurchase contracts.
CTS	Contracts	RACTS_CAS	
STG_CUSTODIAL_AC COUNTS	Stage Custodial Accounts	T2T_STG_CUSTODIAL_ ACCOUNTS_CAS	This T2T stores the details of all accounts held in a custodial capacity.
STG_MANAGED_INV	Stage Managed	T2T_STG_MANAGED_I	This T2T stores the details of all managed investment account and other services.
_ADV	Investment Advances	NV_ADV_CAS	

21.5 Abstract of Common Account Summary Result Tables

Customer account level data from the Oracle Financial Services Analytical Applications (OFSAA) staging product processor tables must be consolidated into a standardized relational Business Intelligence (BI) data model. This consolidation is done to have all the staging product processor table data in a single Fact table. The Common Account Summary tables data can be used for building cubes, which allow rollup of data for a dimension or a combination of dimensions. This relational BI model consists of the following vertically partitioned Common Account Summary tables that are organized by application subject area.

The preceding Common Account Summary tables are part of data model but there are no seeded T2T definitions available to populate these tables. T2T processes must be custom configured to populate these tables to use measures defined on these tables for reporting.

21.6 Deploying Common Account Summary Tables on Hive

All RDBMS related Common Account Summary Dimension and Result tables can also be deployed on Hive (Stage and Results on Hive).

NOTE

In general, Stage and Result tables are also supported in Hive. However, there are some exceptions. For a list of tables that are not supported in Hive, see $\underline{\text{List}}$ of Unsupported T2Ts.

21.7 Populating Common Account Summary Dimension Tables

Follow this SCD process to populate data into any Common Account Summary Dimension table:

NOTE

You can also follow this SCD process to populate data into any Hive related Common Account Summary Dimension table.

- **1.** To populate data into any Common Account Summary Dimension table, execute the SCD batch. For a detailed procedure, see <u>Slowly Changing Dimension (SCD) Process</u>.
- **2.** To check the SCD batch execution status of an Common Account Summary Dimension table, follow the procedure <u>Check the Execution Status of the SCD Batch</u>.
- **3.** To verify log files, and check the error messages (if any), follow the procedure <u>Verify Log Files and Check Error Messages</u>.

21.8 Populating Common Account Summary T2T Result Tables

NOTE

Ensure to load FCT_COMMON_ACCOUNT_SUMMARY and FSI_EXCHANGE_RATES tables prior to loading any of the other Account Summary tables.

Ensure to manually configure the SETUP_MASTER table with required GAAP_CODEs before executing Account Summary Population T2Ts. For an account, load only one GAAP_CODE to Fact Common Account Summary table. By default, OIDF installer seeds the following entry into SETUP_MASTER. When executing through batch, the RUNSkey is defaulted to -1.

Follow this T2T process to populate data into any Common Account Summary T2T Result table:

NOTE

You can also follow this T2T process to populate data into any Hive related Common Account Summary T2T Result table.

- **1.** To populate data into any Common Account Summary T2T Result table, execute the batch for T2T. For a detailed procedure, see:
 - a. Prerequisites for loading T2T.
 - **b.** Set the Run Parameters.
 - c. Save the Run Parameters.
 - d. Execute the Batch for T2T.
- **2.** To check the T2T batch execution status of the Common Account Summary Result tables, follow the procedure Check the Batch Execution Status of T2T.
- **3.** To verify log files, and check the error messages (if any), follow the procedure <u>Verify T2T Log Files</u> and <u>Check Error Messages</u>.

22 Loan Account Summary Tables

This chapter provides information about Loan Account Summary tables in the Oracle Insurance Data Foundation application and step-by-step instructions to use this section.

This chapter includes the following topics:

- About Loan Account Summary T2T (Result Table)
- Deploying Loan Account Summary Tables on Hive
- Populating Loan Account Summary T2T Result Tables

Loan Account Summary provides the detailed report of insurance transactions done.

Loan Account in Insurance is used, when an insured takes a loan against his/her policy. The policy code is used to track the loan and its outstanding amount for the reporting if the policy is closed, and then decided how to treat the loan.

22.1 About Loan Account Summary T2T (Result Table)

Loan Account Summary T2T and its description is given here.

T2T Name	T2T Description
T2T_FLAS_STG_LOAN_CONTRACTS	This T2T stores the details of loan contracts. This table includes mortgage, and vehicle loans.

The mapping details for the Loan Account Summary T2T is given here.

Source Table Name	Logical Stage Table Name	Fact Table Name	Logical Fact Table Name	T2T Name
STG_LOAN_CON	Stage Loan	FCT_LOAN_ACCOU	Fact Loan Account	T2T_FLAS_STG_LOAN_
TRACTS	Contracts	NT_SUMMARY	Summary	CONTRACTS

22.2 Deploying Loan Account Summary Tables on Hive

All RDBMS related Loan Account Summary Result can also be deployed on Hive (Stage and Results on Hive).

NOTE

In general, Stage and Result tables are also supported in Hive. However, there are some exceptions. For a list of tables that are not supported in Hive, see <u>List of Unsupported T2Ts</u>.

22.3 Populating Loan Account Summary T2T Result Tables

Follow this T2T process to populate data into any Loan Account Summary T2T Result tables:

NOTE

You can also follow this T2T process to populate data into any Hive related Loan Account Summary T2T Result table.

- **1.** To populate data into any Loan Account Summary T2T Result table, execute the batch for T2T. For a detailed procedure, see:
 - a. Prerequisites for loading T2T.
 - **b.** Set the Run Parameters.
 - c. Save the Run Parameters.
 - **d.** Execute the Batch for T2T.
- **2.** To check the T2T batch execution status of the Loan Account Summary Result tables, follow the procedure Check the Batch Execution Status of T2T.
- To verify log files, and check the error messages (if any), follow the procedure <u>Verify T2T Log Files</u> and <u>Check Error Messages</u>.

Fiduciary Services Investment Summary Population

This chapter provides information about Fiduciary Services Investment Summary Population in the Oracle Insurance Data Foundation application and step-by-step instructions to use this section.

This chapter includes the following topics:

- About Fiduciary Services Investment Summary T2T (Result Table)
- Deploying Fiduciary Services Investment Summary Result Tables on Hive
- <u>Populating Fiduciary Services Investment Summary T2T Result Tables</u>

A fiduciary is responsible for managing the assets of another person, or of a group of people. The fiduciary is expected to manage the assets for the benefit of the customer. The customer can open a trust account that may have different investments that the person may do. The customer may have different assets under the trust such as Investments, Mutual Funds, etc. Therefore, in these T2Ts the target table is loaded only with those records, which are of fiduciary service type, which is identified using Parent Account Number in each Product Processor table.

23.1 About Fiduciary Services Investment Summary T2T (Result Table)

Fiduciary Services Investment Summary T2T and its description is given here.

T2T Name	T2T Description
T2T_FFSIS_STG_CUSTODIAL_ACCOUNTS	This T2T stores the details of all accounts held in a custodial capacity.
T2T_FFSIS_STG_INVESTMENTS	This T2T stores the details of investment contract.
T2T_FFSIS_STG_MANAGED_INV_ADV	This T2T stores details of all managed investment account and other services.
T2T_FFSIS_STG_MUTUAL_FUNDS	This T2T stores details of all mutual funds contracts.
T2T_FFSIS_STG_TRUSTS	This T2T stores the details of the trusts account.

The mapping details for the Fiduciary Services Investment Summary T2Ts are given here.

Source Table Name	Logical Stage Table Name	Fact Table Name	Logical Fact Table Name	T2T Name
STG_CUSTODIA L_ACCOUNTS	Stage Custodial Accounts	FCT_FIDUCIARY_ SERV_INVST_SU MM	Fact Fiduciary Services Investment Summary	T2T_FFSIS_STG_CUSTODIAL _ACCOUNTS

Source Table Name	Logical Stage Table Name	Fact Table Name	Logical Fact Table Name	T2T Name
STG_INVESTME NTS	Stage Investments	FCT_FIDUCIARY_ SERV_INVST_SU MM	Fact Fiduciary Services Investment Summary	T2T_FFSIS_STG_INVESTMEN TS
STG_MANAGED _INV_ADV	Stage Managed Investment Advances	FCT_FIDUCIARY_ SERV_INVST_SU MM	Fact Fiduciary Services Investment Summary	T2T_FFSIS_STG_MANAGED_ INV_ADV
STG_MUTUAL_F UNDS	Stage Mutual Funds	FCT_FIDUCIARY_ SERV_INVST_SU MM	Fact Fiduciary Services Investment Summary	T2T_FFSIS_STG_MUTUAL_F UNDS
STG_TRUSTS	Stage Trusts	FCT_FIDUCIARY_ SERV_INVST_SU MM	Fact Fiduciary Services Investment Summary	T2T_FFSIS_STG_TRUSTS

23.2 Deploying Fiduciary Services Investment Summary Result Tables on Hive

All RDBMS related Fiduciary Services Investment Summary Result tables can also be deployed on Hive (Stage and Results on Hive).

NOTE

In general, Stage and Result tables are also supported in Hive. However, there are some exceptions. For a list of tables that are not supported in Hive, see <u>List of Unsupported T2Ts</u>.

23.3 Populating Fiduciary Services Investment Summary T2T Result Tables

Follow this T2T process to populate data into Fiduciary Services Investment Summary T2T Result tables:

NOTE

You can also follow this T2T process to populate data into any Hive related Fiduciary Services Investment Summary T2T Result table.

- **1.** To populate data into any Fiduciary Services Investment Summary T2T Result table, execute the batch for T2T. For a detailed procedure, see:
 - a. Prerequisites for loading T2T.
 - **b.** Set the Run Parameters.
 - **c.** Save the Run Parameters.
 - **d.** Execute the Batch for T2T.

- **2.** To check the T2T batch execution status of the Fiduciary Services Investment Summary Result tables, follow the procedure Check the Batch Execution Status of T2T.
- **3.** To verify log files, and check the error messages (if any), follow the procedure <u>Verify T2T Log Files and Check Error Messages</u>.

24 Mitigants Results Tables

This chapter provides information about Mitigants Results Tables in the Oracle Insurance Data Foundation application and step-by-step instructions to use this section.

This chapter includes the following topics:

- About Mitigants Results T2Ts (Result Tables)
- Deploying Mitigants Results Tables on Hive
- Populating Mitigants Results T2T Result Tables

Mitigant means to reduce loss of life and property by reducing the impact of undesirable events.

The purpose of Mitigants Results table is to store the list of actions to be taken to reduce the impact of undesirable events.

24.1 About Mitigants Results T2Ts (Result Tables)

Mitigants Results T2Ts and its description is given here.

T2T Name	T2T Description
T2T_FCT_MITIGANTS	This T2T stores consolidated data of all Mitigants and their details.
T2T_FCT_ACCOUNT_MITIGANT_MAP	This T2T stores account to Mitigant mapping details. This T2T stores more than one Mitigant to be mapped to an account.

The mapping details for the Mitigants Results T2Ts are given here.

Source Table Name	Logical Stage Table Name	Fact Table Name	Logical Fact Table Name	T2T Name
STG_MITIGANTS	Stage Mitigants	FCT_MITIGANTS	Fact Mitigants	T2T_FCT_MITIGANTS
STG_ACCOUNT_ MITIGANT_MAP	Stage Account Mitigant Map	FCT_ACCOUNT_MI TIGANT_MAP	Fact Account Mitigant Map	T2T_FCT_ACCOUNT_M ITIGANT_MAP

24.2 Deploying Mitigants Results Tables on Hive

All RDBMS related Mitigants Results can also be deployed on Hive (Stage and Results on Hive).

NOTE

In general, Stage and Result tables are also supported in Hive. However, there are some exceptions. For a list of tables that are not supported in Hive, see <u>List of Unsupported T2Ts</u>.

24.3 Populating Mitigants Results T2T Result Tables

Follow this T2T process to populate data into any Mitigants Results T2T Result tables:

NOTE

You can also follow this T2T process to populate data into any Hive related Mitigants Results T2T Result table.

- **1.** To populate data into any Mitigants Results T2T Result table, execute the batch for T2T. For a detailed procedure, see:
 - a. Prerequisites for loading T2T.
 - **b.** Set the Run Parameters.
 - c. Save the Run Parameters.
 - d. Execute the Batch for T2T.
- **2.** To check the T2T batch execution status of the Mitigants Result tables, follow the procedure Check the Batch Execution Status of T2T.
- **3.** To verify log files, and check the error messages (if any), follow the procedure <u>Verify T2T Log Files</u> and <u>Check Error Messages</u>.

25 Placed Collateral Tables

This chapter provides information about Placed Collateral Result tables in the Oracle Insurance Data Foundation application and step-by-step instructions to use this section.

This chapter includes the following topics:

- About Placed Collateral Dimension Tables
- About Placed Collateral T2Ts (Result Tables)
- Deploying Placed Collateral Tables on Hive
- Populating Placed Collateral Dimension Tables
- Populating Placed Collateral T2T Result Tables

Financial Institutions place collateral in derivative transactions, reinsurance issued or similar use cases where risk of obligations not being served by reporting entity are perceived high and are secured by seeking agreed collateral in lieu to reduce the risk. Therefore, Placed Collateral refers to the collateral placed by reporting entity to other entities. The Mitigant reflect collateral received and collateral placed functions exactly opposite as of Mitigant.

In Data Foundation, assets hold on book and collateral placed are treated differently. For example, assume a use case where Insurance Company has purchased a lot of Government securities with market value of 10 Million USD. When they write a reinsurance contract, Insurance Company has sought a collateral comprising of a government securities worth 4 million USD. In this case, stage investments holds a data reflecting 6 million USD, whereas stage placed collateral holds data of 4 million USD.

25.1 About Placed Collateral Dimension Tables

Placed Collateral Dimension table names and their description are given here.

Logical Dimension Table Name	Remarks
Placed Collateral Dimension	This table stores the details of master collaterals that are placed by the Insurance entity with other Insurance entities in order to secure its borrowings.

The mapping details for the Placed Collateral Dimension table is given here.

Map Reference Number	Source Table Name	Logical Stage Table Name	Dimension Table Name	Logical Dimension Table Name
202	STG_PLACED_COLL	Stage Placed	DIM_PLACED_COLL	Placed Collateral
	ATERAL_MASTER	Collateral Master	ATERAL	Dimension

25.2 About Placed Collateral T2Ts (Result Tables)

Placed Collateral T2Ts and their description are given here.

T2T Name	T2T Description
T2T_FCT_PLACED_COLLATERAL	This T2T stores the details of collateral which are placed against an account.
T2T_FCT_ACCT_PLACED_COLL_MAP	This T2T stores account to placed collateral mapping details. It is an intersection table to denote that a placed collateral can be used in multiple accounts and an account contains multiple collaterals.
T2T_FCT_RI_ISSUED_PLCD_COLL_MAP	This T2T stores the mapping between Placed Collateral and Reinsurance Contract. Reinsurers provide security to Insurance Company to make sure that they are adequately covered.

The mapping details for the Placed Collateral T2Ts are given here.

Source Table Name	Logical Stage Table Name	Fact Table Name	Logical Fact Table Name	T2T Name
STG_PLACED_CO LLATERAL	Stage Placed Collateral	FCT_PLACED_COLL ATERAL	Fact Placed Collateral	T2T_FCT_PLACED_COL LATERAL
STG_ACCT_PLAC ED_COLL_MAP	Stage Account Placed Collateral Map	FCT_ACCT_PLACED _COLL_MAP	Fact Account Placed Collateral Map	T2T_FCT_ACCT_PLACE D_COLL_MAP
STG_RI_ISSUED_ PLACED_COLL_M AP	Stage Reinsurance Issued Placed Collateral Map	FCT_RI_ISSUED_PL ACED_COLL_MAP	Fact Reinsurance Issued Placed Collateral Map	T2T_FCT_RI_ISSUED_P LCD_COLL_MAP

25.3 Deploying Placed Collateral Tables on Hive

All RDBMS related Placed Collateral Dimension and Result tables can also be deployed on Hive (Stage and Results on Hive).

NOTE

In general, Stage and Result tables are also supported in Hive. However, there are some exceptions. For a list of tables that are not supported in Hive, see <u>List of Unsupported T2Ts</u>.

25.4 Populating Placed Collateral Dimension Tables

Follow this SCD process to populate data into any Placed Collateral Dimension table:

NOTE

You can also follow this SCD process to populate data into any Hive related Placed Collateral Dimension table.

- **1.** To populate data into any Placed Collateral Dimension table, execute the SCD batch. For a detailed procedure, see <u>Slowly Changing Dimension (SCD) Process</u>.
- **2.** To check the SCD batch execution status of a Placed Collateral Dimension table, follow the procedure Check the Execution Status of the SCD Batch.
- **3.** To verify log files, and check the error messages (if any), follow the procedure <u>Verify Log Files and Check Error Messages</u>.

25.5 Populating Placed Collateral T2T Result Tables

Follow this T2T process to populate data into any Placed Collateral T2T Result table:

NOTE

You can also follow this T2T process to populate data into any Hive related Placed Collateral T2T Result table.

- **1.** To populate data into any Placed Collateral T2T Result table, execute the batch for T2T. For a detailed procedure, see:
 - a. Prerequisites for loading T2T.
 - **b.** Set the Run Parameters.
 - **c.** Save the Run Parameters.
 - d. Execute the Batch for T2T.
- **2.** To check the T2T batch execution status of the Placed Collateral Result tables, follow the procedure Check the Batch Execution Status of T2T.
- To verify log files, and check the error messages (if any), follow the procedure <u>Verify T2T Log Files</u> and <u>Check Error Messages</u>.

26 Transactions and Accounting Tables

This chapter provides information about Insurance Policy Transactions tables in the Oracle Insurance Data Foundation application.

This consists of primarily two sections. Policy Transactions generated out policy life cycle accounting events and policy commission which are specific to producer or agents business and are generated out of underwriting and some period in policy life cycle. However they are not expected to overlap with policy transactions which excludes any producer or agent specific transactions.

This chapter includes the following topics:

- About Insurance Policy Transactions Dimension Tables
- About Insurance Policy Transactions T2Ts (Result Tables)
- Policy Commission Tables
- <u>Deploying Insurance Policy Transactions Tables on Hive</u>
- Populating Insurance Policy Transactions Dimension Tables
- Populating Insurance Policy Transactions T2T Result Tables

Insurance Policy Transactions are about accounting transactions done for a given policy. They are sourced from respective accounting systems in the Insurance Company.

The purpose of Insurance Policy Transactions tables is to store attributes pertaining to policy transactions related data on an 'as-is' basis received from the source system for further operation reporting. OIDF holds for every product processor or contract table, one transaction table.

26.1 About Insurance Policy Transactions Dimension Tables

Insurance Policy Transaction Dimension table names and their description are given here.

Logical Dimension Table Name	Remarks	
Policy Transaction Type Dimension	This table stores the details of various types of policy transactions.	
Premium Offset Method Dimension	This table stores the details about premium offset method. One option is called Premium Offset Plan or POP. Sample values: AUTOPREMPYMT, LOAN, NETOFFSET, NONE, PARTIAL, etc.	
Premium Suspense Reason Dimension	This table stores the details of Premium Suspense Reason code and documents the reason behind the premium suspense amount recorded in Premium Suspense Amount. Sample values: BALDUE, LOANINT, MULTIPLE, PREM, and PREMREFUND.	

The mapping details for the Insurance Policy Transaction Dimension tables are given here.

Map Reference Number	Source Table Name	Logical Stage Table Name	Dimension Table Name	Logical Dimension Table Name
693	STG_ANNUITY_TXN S	Stage Annuity Transactions	DIM_POLICY_TXN_ TYPE	Policy Transaction Type Dimension
694	STG_HEALTH_INS_P OLICY_TXNS	Stage Health Insurance Policy Transactions	DIM_POLICY_TXN_ TYPE	Policy Transaction Type Dimension
695	STG_LIFE_INS_POLIC Y_TXNS	Stage Life Insurance Policy Transactions	DIM_POLICY_TXN_ TYPE	Policy Transaction Type Dimension
696	STG_PROP_CASU_P OLICY_TXNS	Stage Property and Casualty Policy Transactions	DIM_POLICY_TXN_ TYPE	Policy Transaction Type Dimension
697	STG_RETIREMENT_A CCOUNTS_TXNS	Stage Retirement Account Transactions	DIM_POLICY_TXN_ TYPE	Policy Transaction Type Dimension
698	STG_REINSURANCE_ ISSUED_TXNS	Stage Reinsurance Issued Transactions	DIM_POLICY_TXN_ TYPE	Policy Transaction Type Dimension
699	STG_REINSURANCE_ HELD_TXNS	Stage Reinsurance Held Transactions	DIM_POLICY_TXN_ TYPE	Policy Transaction Type Dimension
729	STG_PREM_OFFSET_ METHOD_MASTER	Stage Premium Offset Method Master	DIM_PREM_OFFSET _METHOD	Premium Offset Method Dimension
731	STG_PREM_SUSP_RE ASON_MASTER	Stage Premium Suspense Reason Master	DIM_PREM_SUSP_R EASON	Premium Suspense Reason Dimension

26.2 About Insurance Policy Transactions T2Ts (Result Tables)

Insurance Policy Transactions T2Ts and their description are given here.

T2T Name	T2T Description
T2T_FCT_POLICY_TRANSACTIONS_HLD	This T2T stores the reinsurance held transaction details.
T2T_FCT_POLICY_TRANSACTIONS_ISS	This T2T stores the reinsurance issued transaction details.
T2T_FPT_STG_RETIREMENT_ACCOUNTS_ TXNS	This T2T stores retirement accounts transactions.
T2T_FPT_STG_PROP_CASU_POLICY_TXNS	This T2T stores the transaction details for property and casualty policy.
T2T_FPT_STG_LIFE_INS_POLICY	This T2T stores the transaction details for life insurance policy.
T2T_FPT_STG_HEALTH_INS_TXNS	This T2T stores the transaction details for a health insurance policy.

T2T Name	T2T Description
T2T_FPT_STG_ANNUITY_TXNS	This T2T stores transactions details for annuity contracts.

The mapping details for the Insurance Policy Transactions T2Ts are given here.

Source Table Name	Logical Stage Table Name	Fact Table Name	Logical Fact Table Name	T2T Name
STG_REINSURANCE	Stage Reinsurance	FCT_POLICY_TRA	Fact Policy	T2T_FCT_POLICY_TR
_HELD_TXNS	Held Transactions	NSACTIONS	Transactions	ANSACTIONS_HLD
STG_REINSURANCE	Stage Reinsurance	FCT_POLICY_TRA	Fact Policy	T2T_FCT_POLICY_TR
_ISSUED_TXNS	Issued Transactions	NSACTIONS	Transactions	ANSACTIONS_ISS
STG_RETIREMENT_ ACCOUNTS_TXNS	Stage Retirement Accounts Transactions	FCT_POLICY_TRA NSACTIONS	Fact Policy Transactions	T2T_FPT_STG_RETIRE MENT_ACCOUNTS_T XNS
STG_PROP_CASU_P	Stage Property Casualty Policy Transactions	FCT_POLICY_TRA	Fact Policy	T2T_FPT_STG_PROP_
OLICY_TXNS		NSACTIONS	Transactions	CASU_POLICY_TXNS
STG_LIFE_INS_POLI	Stage Life Insurance	FCT_POLICY_TRA	Fact Policy	T2T_FPT_STG_LIFE_I
CY_TXNS	Policy Transactions	NSACTIONS	Transactions	NS_POLICY
STG_HEALTH_INS_ POLICY_TXNS	Stage Health Insurance Policy Transactions	FCT_POLICY_TRA NSACTIONS	Fact Policy Transactions	T2T_FPT_STG_HEALT H_INS_TXNS
STG_ANNUITY_TXN	Stage Annuity	FCT_POLICY_TRA	Fact Policy	T2T_FPT_STG_ANNUI
S	Transactions	NSACTIONS	Transactions	TY_TXNS

26.3 Policy Commission Tables

Policy Commission refers to the compensation for the sale of policies to Producers or Agents. This compensation can be a percentage of premium paid through Agents to Insurance Companies. Many insurance carriers base this commission on various criteria such as Coverage, the product and the marketing methods. A standard commission is a specific dollar amount or percentage commission on the premium set at the time of or advance of the purchase, renewal, and placement or servicing of a particular insurance policy as applicable. Therefore, Commissions are payable to Producers or agents for bringing the business to the Insurance Company. Here, the Insurance policies cover all types of Insurance Contracts for which services are used.

There are two Policy Commission entities. They are, Commission Details and Commission Transactions.

Stage Policy Commission Details refers to as of date picture of various commission events for a
given policy, coverage and commission event type. To arrive at producer or agent level summary
one needs to aggregate over given policy for all or specific commission event type. Source of this
information is expected to be a underwriting or producer management systems.

• Stage Policy Commission Transactions holds the set of individual transactions incurred or paid for a given policy. Source of this information is expected to be accounting systems.

26.3.1 About Policy Commission Dimension Tables

Policy Commission Dimension table names and their remarks are given here.

Logical Dimension Table Name	Remarks
Commission Type Dimension	This table stores general type or category of the commission details. Sample values: ADV, COMM, DEBT, DEFCOMM, DEFOVER, ERA, ERAOVRD, etc.
Commission Basis Type Dimension	This table stores the commission basis type, and specifies what rate category is applied to this commission. Sample values: ANNTYPAYOUTAMT, ASSVAL, ASSVALCHG, COMMPREM, COI, FLAT, FUNDPREM, etc.
Commission Event Type Dimension	This table stores the commission event type, and the event that triggers generating a commission. Sample values: ANNIVPOL, CHGSTATUS, APLPREM, SUBMITTED, etc.
Commission Payment Status Dimension	This table stores the current status of a commission payment details. Sample values: ACTIVE, CANCELLED, COMPLETE, NOTDONE, HISTORY, PENDING, SUSPENDED, VOID, OTHER, and UNKNOWN.
Commission Transaction Type Dimension	This table stores the Commission transaction type details. Sample values: ADJ, BONUS, CHRGPAYBLE, CHRGEARNED, COMMEARNED, etc.
Transaction Process Event Type Dimension	This table stores the type of processing this event represents. Sample values: ORIG, OTHER, REAPPLY, REVERSAL, and UNKNOWN.
Insurance Producer Appointment Dimension	This table stores the Insurance Producer Appointment details.
Commission Option Type Dimension	This table stores the details of commission option selected for the policy. The commission description, which correlates to the commission code or compensation plan, which the original writing agents choose to be compensated by when the policy was sold.
	Sample values: OTHER, UNKNOWN, NOTRL, etc.

The mapping details for the Policy Commission Dimension tables are given here.

Map Reference	Source Table	Logical Stage Table	Dimension Table	Logical Dimension Table Name
Number	Name	Name	Name	
706	STG_COMMISION_T	Stage Commission	DIM_COMMISION_T	Commission Type
	YPE_MASTER	Type Master	YPE	Dimension
707	STG_COMMN_BASI	Stage Commission	DIM_COMMN_BASIS	Commission Basis
	S_TYPE_MASTER	Basis Type Master	_TYPE	Type Dimension
708	STG_COMMN_EVN	Stage Commission	DIM_COMMN_EVNT	Commission Event
	T_TYPE_MASTER	Event Type Master	_TYPE	Type Dimension
709	STG_COMMN_PYM NT_STATUS_MAST ER	Stage Commission Payment Status Master	DIM_COMMN_PYMN T_STATUS	Commission Payment Status Dimension
710	STG_COMMN_TRA NS_TYPE_MASTER	Stage Commission Transaction Type Master	DIM_COMMN_TRAN S_TYPE	Commission Transaction Type Dimension
711	STG_TXN_PROC_EV NT_TYPE_MASTER	Stage Transaction Process Event Type Master	DIM_TXN_PROC_EV NT_TYPE	Transaction Process Event Type Dimension
712	STG_COMMN_OPTI	Stage Commission	DIM_COMMN_OPTIO	Commission Option
	ON_TYPE_MASTER	Option Type Master	N_TYPE	Type Dimension

26.3.2 About Policy Commission T2Ts (Result Tables)

Policy Commission T2Ts and their description are given here.

T2T Name	T2T Description
T2T_FCT_POLICY_COMMISSION_DETLS	This T2T stores the policy commission details.
T2T_FCT_POLICY_COMMISSION_TXNS	This T2T stores the policy commission transaction details.

Policy Commission T2Ts and their description are given here.

Source Table Name	Logical Stage Table Name	Fact Table Name	Logical Fact Table Name	T2T Name
STG_POLICY_CO MMISSION_DETA ILS	Stage Policy Commission Details	FCT_POLICY_COM MISSION_DETAILS	Fact Policy Commission Details	T2T_FCT_POLICY_COMMI SSION_DETLS
STG_POLICY_CO MMISSION_TXNS	Stage Policy Commission Transactions	FCT_POLICY_COM MISSION_TXNS	Fact Policy Commission Transactions	T2T_FCT_POLICY_COMMI SSION_TXNS

26.4 Deploying Insurance Policy Transactions Tables on Hive

All RDBMS related Insurance Policy Transactions Result tables can also be deployed on Hive (Stage and Results on Hive).

NOTE

In general, Stage and Result tables are also supported in Hive. However, there are some exceptions. For a list of tables that are not supported in Hive, see <u>List of Unsupported T2Ts</u>.

26.5 Populating Insurance Policy Transactions Dimension Tables

Follow this SCD process to populate data into any Insurance Policy Transaction Type Dimension table:

NOTE

You can also follow this SCD process to populate data into any Hive related Insurance Policy Transaction Type Dimension table.

- To populate data into any Insurance Policy Transaction Type Dimension table or Policy Commission Dimension table, execute the SCD batch. For a detailed procedure, see <u>Slowly Changing Dimension</u> (<u>SCD</u>) <u>Process</u>.
- **2.** To check the SCD batch execution status of an Insurance Policy Transaction Type Dimension table or Policy Commission Dimension table, follow the procedure Check the Execution Status of the SCD Batch.
- **3.** To verify log files, and check the error messages (if any), follow the procedure <u>Verify Log Files and Check Error Messages</u>.

26.6 Populating Insurance Policy Transactions T2T Result Tables

NOTE

As a prerequisite, ensure to load DIM_STD_TRANSACTION_TYPE seeded table.

Follow this T2T process to populate data into Insurance Policy Transactions T2T Result tables:

NOTE

You can also follow this T2T process to populate data into any Hive related Insurance Policy Transactions T2T Result table.

- **1.** To populate data into Insurance Policy Transactions T2T Result table, execute the batch for T2T. For a detailed procedure, see:
 - a. Prerequisites for loading T2T.
 - **b.** Set the Run Parameters.
 - c. Save the Run Parameters.
 - **d.** Execute the Batch for T2T.
- **2.** To check the T2T batch execution status of the Insurance Policy Transactions Result tables, follow the procedure Check the Batch Execution Status of T2T.
- **3.** To verify log files, and check the error messages (if any), follow the procedure <u>Verify T2T Log Files and Check Error Messages</u>.

General Ledger Data and Management Reporting Tables

This chapter provides information about GL Data and GL to Management Reporting tables in the Data Foundation application.

This chapter includes these topics:

- About GL Data T2T (Result Table)
- About GL to Management Reporting T2T (Result Table)
- About Mapper for GL to Management Reporting Result Table
- Maintaining Mappers for GL to Management Reporting Result Table
- Prerequisites for Mapper Maintenance
- Possible Mapping Combinations
- Mapping Combinations at Child Hierarchy Level
- One-to-One mapping with or without Debit Credit Indicator
- Many-to-One mapping with or without Debit Credit Indicator
- Many-to-Many mapping with or without Debit Credit Indicator
- Mapping Combinations at Parent and Child Hierarchy Level
- One Parent to One Reporting Line Code mapping with or without Debit Credit Indicator
- Many Parents to One Reporting Line Code with or without Debit Credit Indicator
- Many Parents to Many Reporting Line Codes with or without Debit Credit Indicator
- Mapping Combinations at Parent Hierarchy Level without Descendants
- Mapping Combinations at Parent Hierarchy Level by Removing one or more Descendants
- Performing Multiple Sets of Mapping Combinations
- Loading Mapper Maintenance from Backend
- Deploying GL to Management Reporting Result Tables on Hive
- Populating GL to Management Reporting T2T Result Tables

A General Ledger is the foundation of a financial system, which is used to store and organize financial data. General Ledgers are used to create the financial statements of a company. A General Ledger account is an account or record used to sort, store and summarize the transactions of a company. Transactions are posted to individual sub-ledger accounts as defined by the chart of accounts of that company. A Legal Entity in the Insurance institution can maintain the same General Ledger data (either solo or consolidated) in one or more source systems.

In OIDF, Stage GL Data stores summarized data at primary granularity of General Ledger whereas various transaction tables store the individual transactions. OFSAA suite of applications expect the consolidation of General Ledger data occurring in the financial systems, and OIDF entities are loaded after consolidation.

27.1 About GL Data T2T (Result Table)

The purpose of GL Data tables is to keep track of its financial transactions and to prepare financial reports. Each account is a unique record that summarizes each type of asset, liability, equity, revenue, and expense.

GL Data T2T and its description is given here.

T2T Name	T2T Description
T2T_FCT_GL_DATA	This table stores the transactional Data for GL Repline Code.

The mapping details for the GL Data T2T is given here.

Source Table	Logical Stage	Target Table	Logical Fact	T2T Definition Name
Name	Table Name	Name	Table Name	
STG_GL_DATA	Stage General Ledger Data	FCT_GL_DATA	Fact General Ledger Data	T2T_FCT_GL_DATA

27.2 About GL to Management Reporting T2T (Result Table)

The purpose of GL to Management Reporting tables is to provide a detailed description of every general ledger account and the transactions that make up the balance in that account. The general ledger holds all the financial information used to create the income statement and balance sheet reports, and serves several main purposes in the financial operation of the business.

GL to Management Reporting T2T and its description is given here.

T2T Name	T2T Description
T2T_FCT_MGMT_REPORTING_STG_GL_D ATA	This T2T stores management reporting data related to organization and product profitability, income statement and balance sheet.

The mapping details for the GL to Management Reporting T2T is given here.

Source Table Name	Mapper Table Name	Target Table Name	T2T Definition Name
STG_GL_DAT	MAP_GL_CODE_REP_L	FCT_MGMT_REPORTIN G	T2T_FCT_MGMT_REPORTING_STG_GL
A	INE		_DATA

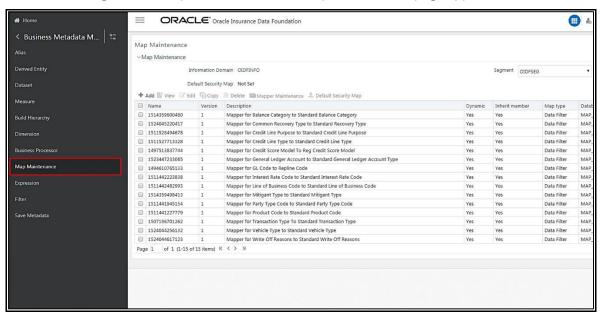
27.3 About Mapper for GL to Management Reporting Result Table

The Fact Management Reporting table uses reporting line codes, which are OFSAA specific values that represent each line item of reporting requirements. On the other hand, the Stage GL Data table uses the General Ledger Codes. These General Ledger Codes are user specific values that represent each General Ledger Code of the user data records. Map GL Codes to Reporting Line Codes and then load the Fact Management Reporting target table. You can maintain these mappings through the Map Maintenance component of OFSAAI.

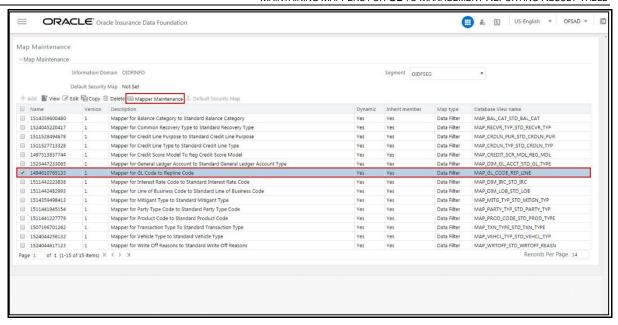
27.4 Maintaining Mappers for GL to Management Reporting Result Table

To maintain Mappers through the Map Maintenance component of OFSAAI:

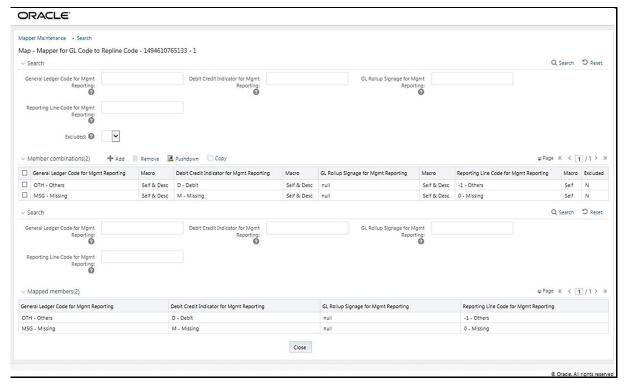
1. Go to OFSAAI > Oracle Insurance Data Foundation > Unified Analytical Metadata > Business Metadata Management > Map Maintenance. The Map Maintenance page appears.



2. Select the mapper record Mapper for GL Code to Repline Code and then click the Mapper Maintenance icon.



3. The Mapper Maintenance page appears. The GL Codes OTH and MSG are out-of-the-box mappings. You can maintain the remaining mappings according to the user specific values.



27.4.1 Prerequisites for Mapper Maintenance

Perform these prerequisite steps for maintaining Mappers:

1. Through the SCD process, load the GL Dimension table.

- **2.** In the Metadata Resave section, resave these hierarchies:
 - HMGMT001 General Ledger Code for Mgmt Reporting
 - HMGMT002 Debit Credit Indicator for Mgmt Reporting
 - HMGMT003 GL Rollup Signage for Mgmt Reporting
 - HMGMT004 Reporting Line Code for Mgmt Reporting

27.4.2 Possible Mapping Combinations

There are four types of mapping combinations. They are:

- Mapping combinations at child hierarchy level.
- Mapping combinations at parent and child hierarchy level.
- Mapping combinations at parent hierarchy level without Descendants.
- Mapping combinations at parent hierarchy level by removing one or more Descendants.

27.4.2.1 Mapping Combinations at Child Hierarchy Level

The mapping combinations for the General Ledger Code for Mgmt Reporting hierarchy at child member level (individual nodes) are:

- One-to-One mapping with or without Debit Credit Indicator.
- Many-to-One mapping with or without Debit Credit Indicator.
- Many-to-Many mapping with or without Debit Credit Indicator.

The procedures for mapping combinations are:

27.4.2.1.1 One-to-One mapping with or without Debit Credit Indicator

To map one GL Code to one Reporting Line Code, use the Mapper Maintenance utility. In this utility, select one member in the General Ledger Code for Mgmt Reporting hierarchy, select one member in the Debit Credit Indicator hierarchy with the value Debit or Credit or Missing, and select one member in the Reporting Line Code hierarchy. As a result, during the T2T process, the corresponding data from the Stage GL Data table for the selected GL Code loads into the Fact Management Reporting table.

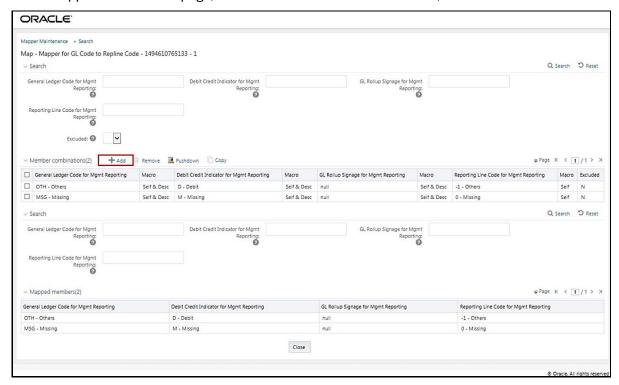
NOTE

The conditions for the Debit Credit Indicator column values in the Stage GL Data table are:

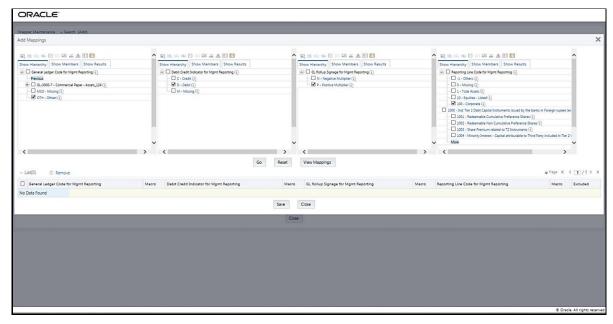
- The value must be M, when you map GL Code to the Missing (MSG) member. If nothing is mapped, the system automatically sets value to M.
- The value must be D, when you map GL Code to the Debit member.
- The value must be C, when you map GL Code to the Credit member.

To perform One-to-One mapping with or without Debit Credit Indicator:

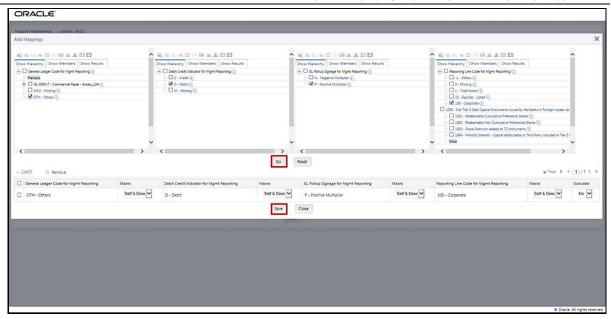
1. In the Mapper Maintenance page, in the Member combinations section, click Add.



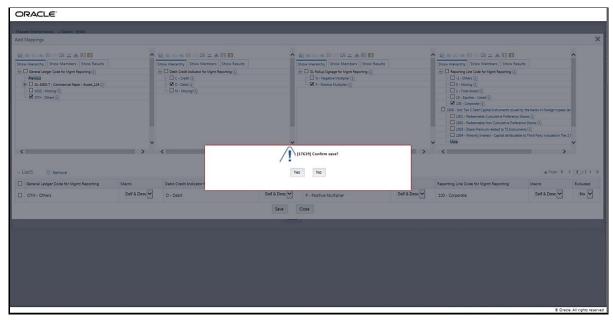
2. The Add Mappings pop-up page appears. For illustration, select the member of the General Ledger Code for Mgmt Reporting hierarchy OTH - Others, and the member of the Debit Credit Indicator for Mgmt Reporting hierarchy D - Debit to map to the member of the Reporting Line Code for Mgmt Reporting hierarchy 100 - Corporate with the member of the GL Rollup Signage for Mgmt Reporting hierarchy P - Positive Multiplier.



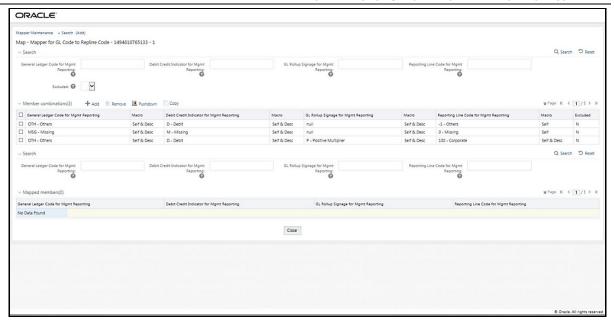
3. To map the members, click Go. The list of mapped members appear at the bottom. To save the mappings, click Save.



4. An acknowledgement pop-up message appears. To confirm saving the mapping, click Yes.



5. The mapped member combinations are listed in the Mapper Maintenance page.



27.4.2.1.2 Many-to-One mapping with or without Debit Credit Indicator

To map multiple GL Codes to one Reporting Line Code, use the Mapper Maintenance utility. In this utility, select two or more members in the General Ledger Code for Mgmt Reporting hierarchy, select one member in the Debit Credit Indicator hierarchy with the value Debit or Credit or Missing, and select one member in the Reporting Line Code hierarchy. As a result, during the T2T process, the corresponding data from the Stage GL Data table, for the selected GL Codes, are aggregated and then loaded into the Fact Management Reporting table.

NOTE

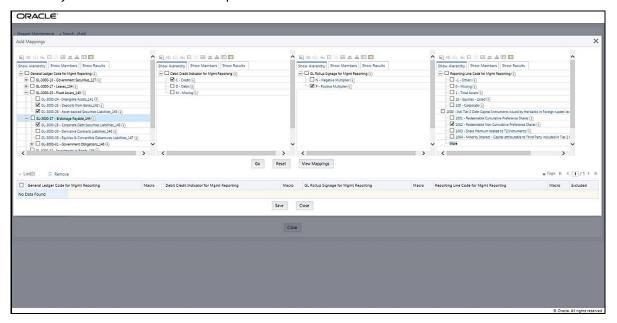
In the T2T process, in the Stage GL Data table, the GL Code aggregation takes place in all the Measure columns that are associated with the Primary Keys. The conditions for the Debit Credit Indicator column values in the Stage GL Data table are:

- The value must be M, when you map GL Code to the Missing (MSG) member. If nothing is mapped, the system automatically sets value to M.
- The value must be D, when you map GL Code to the Debit member.
- The value must be C, when you map GL Code to the Credit member.

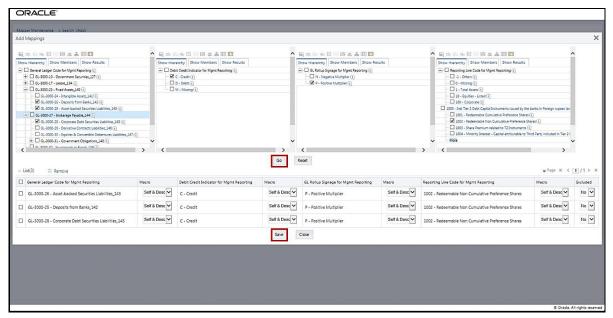
To perform Many-to-One mapping with or without Debit Credit Indicator:

- 1. In the Mapper Maintenance page, in the Member combinations section, click Add.
- 2. The Add Mappings pop-up page appears. For illustration, select the child members of the General Ledger Code for Mgmt Reporting hierarchy, GL-3000-26 Asset-backed Securities Liabilities_143 and GL-3000-28 Corporate Debt Securities Liabilities_145, and the member of the Debit Credit

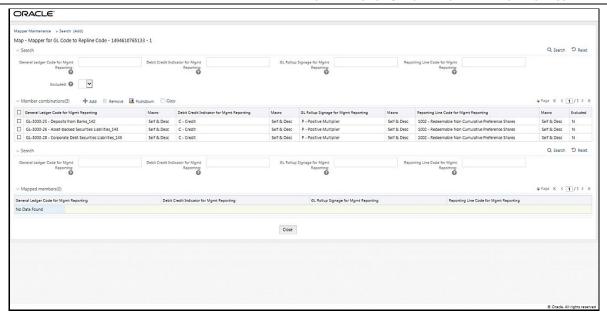
Indicator for Mgmt Reporting hierarchy, C - Credit to map to the Reporting Line Code hierarchy member 1002 - Redeemable Non Cumulative Preference Shares with the GL Rollup Signage hierarchy member P - Positive Multiplier.



3. To map the members, click Go. The list of mapped members appear at the bottom. To save the mappings, click Save.



- 4. An acknowledgement pop-up message appears. To confirm saving the mappings, click Yes.
- **5.** The mapped member combinations are listed in the Mapper Maintenance page.



27.4.2.1.3 Many-to-Many mapping with or without Debit Credit Indicator

To map multiple GL Codes to multiple Reporting Line Codes, use the Mapper Maintenance utility. In this utility, select two or more members in the General Ledger Code for Mgmt Reporting hierarchy, select one member in the Debit Credit Indicator hierarchy with the value Debit or Credit or Missing, and select two or more members in the Reporting Line Code hierarchy. As a result, during the T2T process, the corresponding data from the Stage GL Data table, for the selected GL Codes, are aggregated and then loaded into the Fact Management Reporting table.

NOTE

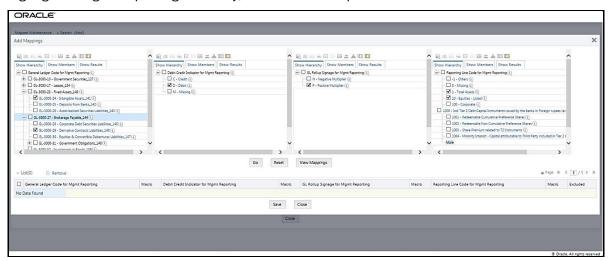
In the T2T process, in the Stage GL Data table, the GL Code aggregation takes place in all the Measure columns that are associated with the Primary Keys. The conditions for the Debit Credit Indicator column values in the Stage GL Data table are:

- The value must be M, when you map GL Code to the Missing (MSG) member. If nothing is mapped, the system automatically sets value to M.
- The value must be D, when you map GL Code to the Debit member.
- The value must be C, when you map GL Code to the Credit member.

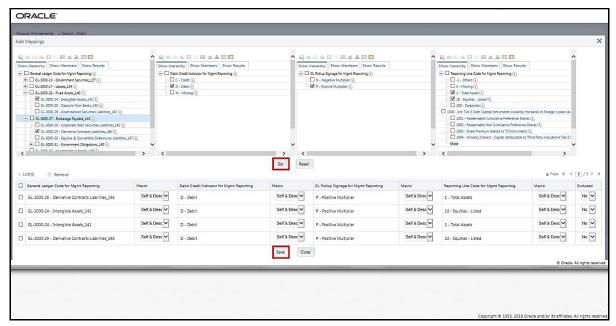
To perform Many-to-Many mapping with or without Debit Credit Indicator:

- 1. In the Mapper Maintenance page, in the Member combinations section, click Add.
- 2. The Add Mappings pop-up page appears. For illustration, select the child members of the General Ledger Code for Mgmt Reporting hierarchy, GL-3000-24 Intangible Assets_141 and GL-3000-29 Derivative Contracts Liabilities_145, and the member of the Debit Credit Indicator for Mgmt Reporting hierarchy, D Debit to map to the child members of the Reporting Line Code for Mgmt

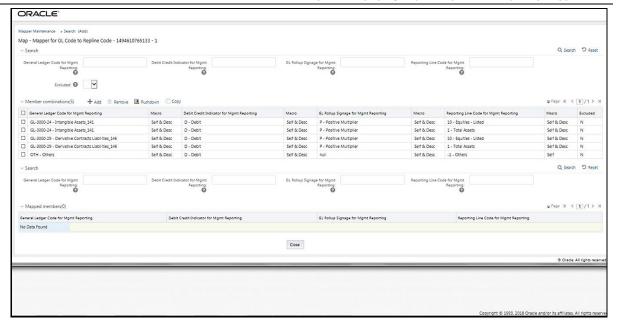
Reporting hierarchy, 1 - Total Assets and 10 - Equities Listed with the member of the GL Rollup Signage for Mgmt Reporting hierarchy, P - Positive Multiplier.



3. To map the members, click Go. The list of mapped members appear at the bottom. To save the mappings, click Save.



- **4.** An acknowledgement pop-up message appears. To confirm saving the mappings, click Yes.
- 5. The mapped member combinations are listed in the Mapper Maintenance page.



27.4.2.2 Mapping Combinations at Parent and Child Hierarchy Level

The mapping combinations for the General Ledger Code for Mgmt Reporting hierarchy maintained as Parent-Child hierarchy are:

- One Parent to One Reporting Line Code mapping with or without Debit Credit Indicator.
- Many Parents to One Reporting Line Code mapping with or without Debit Credit Indicator.
- Many Parents to Many Reporting Line Codes mapping with or without Debit Credit Indicator.

The procedures for mapping combinations as Parent-Child hierarchy are:

27.4.2.2.1 One Parent to One Reporting Line Code mapping with or without Debit Credit Indicator

To map one parent GL Code to one Reporting Line Code, use the Mapper Maintenance utility. In this utility, select one parent GL Code, select one member in the Debit Credit Indicator hierarchy with the value Debit or Credit or Missing, and select one member in the Reporting Line Code hierarchy. As a result, during the T2T process, the corresponding data from the Stage GL Data table, for the selected parent GL Codes and their descendants, are aggregated and then loaded into the Fact Management Reporting table.

NOTE

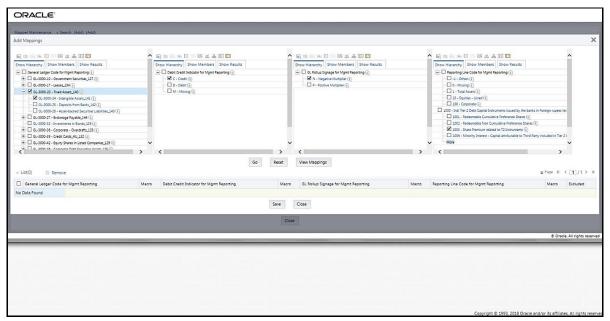
In the T2T process, in the Stage GL Data table, the aggregation of parent GL Codes and their descendants take place in all the Measure columns that are associated with the Primary Keys. The conditions for the Debit Credit Indicator column values in the Stage GL Data table are:

- The value must be M, when you map GL Code to the Missing (MSG) member. If nothing is mapped, the system automatically sets value to M.
- The value must be D, when you map GL Code to the Debit member.

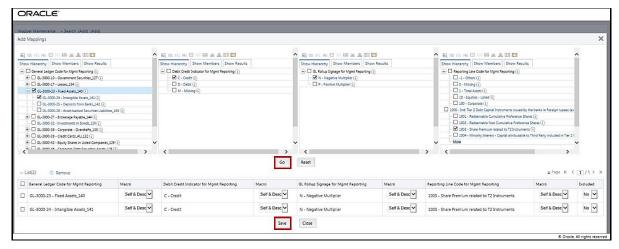
 The value must be C, when you map GL Code to the Credit member.

To perform One Parent to One Reporting Line Code mapping with or without Debit Credit Indicator:

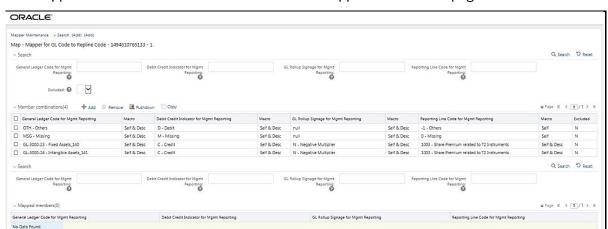
- 1. In the Mapper Maintenance page, in the Member combinations section, click Add.
- 2. The Add Mappings pop-up page appears. For illustration, select one parent member of the General Ledger Code for Mgmt Reporting hierarchy, GL-3000-23 Fixed Assets_140 and its child member GL-3000-24 Intangible Assets_141, and the member of the Debit Credit Indicator for Mgmt Reporting hierarchy C Credit to map to the member of the Reporting Line Code for Mgmt Reporting hierarchy 1003 Share Premium related to T2 Instruments with the member of the GL Rollup Signage for Mgmt Reporting hierarchy N Negative Multiplier.



3. To map the members, click Go. The list of mapped members appear at the bottom. To save the mappings, click Save.



4. An acknowledgement pop-up message appears. To confirm saving the mappings, click Yes.



5. The mapped member combinations are listed in the Mapper Maintenance page.

27.4.2.2.2 Many Parents to One Reporting Line Code with or without Debit Credit Indicator

To map multiple parent GL Codes to one Reporting Line Code, use the Mapper Maintenance utility. In this utility, select two or more parent GL Codes, select one member in the Debit Credit Indicator hierarchy with the value Debit or Credit or Missing, and select one member in the Reporting Line Code hierarchy. As a result, during the T2T process, the corresponding data from the Stage GL Data table, for the selected parent GL Codes and their descendants, are aggregated and then loaded into the Fact Management Reporting table.

NOTE

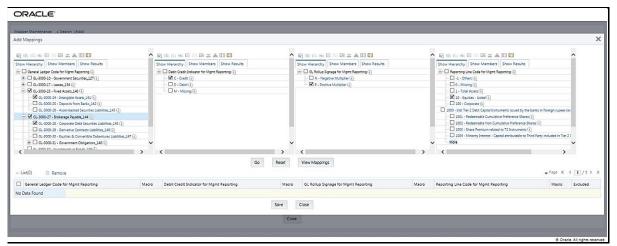
In the T2T process, in the Stage GL Data table, the aggregation of parent GL Codes and their descendants take place in all the Measure columns that are associated with the Primary Keys. The conditions for the Debit Credit Indicator column values in the Stage GL Data table are:

- The value must be M, when you map GL Code to the Missing (MSG) member. If nothing is mapped, the system automatically sets value to M.
- The value must be D, when you map GL Code to the Debit member.
- The value must be C, when you map GL Code to the Credit member.

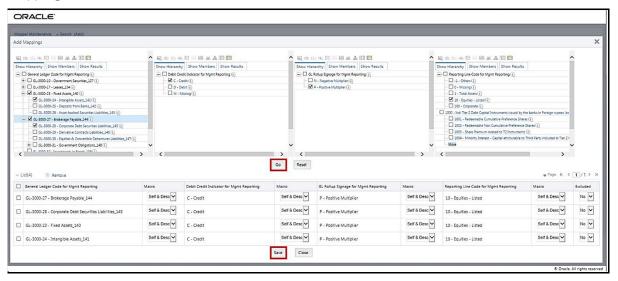
To perform Many Parents to One Reporting Line Code mapping with or without Debit Credit Indicator:

- 1. In the Mapper Maintenance page, in the Member combinations section, click Add.
- 2. The Add Mappings pop-up page appears. For illustration, select parent members of the General Ledger Code for Mgmt Reporting hierarchy, GL-3000-23 Fixed Assets_140 and GL-3000-27 Brokerage Payable_144, and their child members GL-3000-24 Intangible Assets_141 and GL-3000-28 Corporate Debt Securities Liabilities_145 respectively, and the member of the Debit Credit Indicator for Mgmt Reporting hierarchy C Credit to map to the member of the Reporting

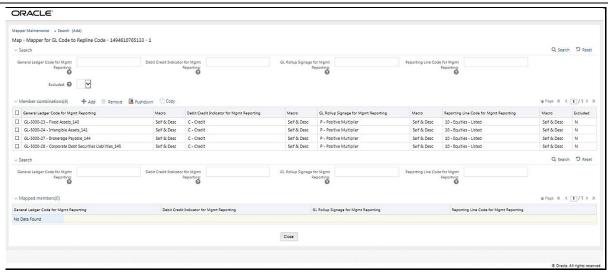
Line Code for Mgmt Reporting hierarchy 10 – Equities - Listed with the member of the GL Rollup Signage for Mgmt Reporting hierarchy P - Positive Multiplier.



3. To map the members, click Go. The list of mapped members appear at the bottom. To save the mappings, click Save.



- **4.** An acknowledgement pop-up message appears. To confirm saving the mappings, click Yes.
- 5. The mapped member combinations are listed in the Mapper Maintenance page.



27.4.2.2.3 Many Parents to Many Reporting Line Codes with or without Debit Credit Indicator

To map multiple parent GL Codes to multiple Reporting Line Codes, use the Mapper Maintenance utility. In this utility, select two or more parent GL Codes, select one member in the Debit Credit Indicator hierarchy with the value Debit or Credit or Missing, and select two or more members in the Reporting Line Code hierarchy. As a result, during the T2T process, the corresponding data from the Stage GL Data table, for the selected parent GL Codes and their descendants, are aggregated and then loaded into the Fact Management Reporting table.

NOTE

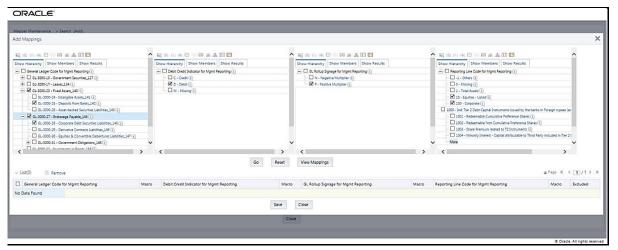
In the T2T process, in the Stage GL Data table, the aggregation of parent GL Codes and their descendants take place in all the Measure columns that are associated with the Primary Keys. The conditions for the Debit Credit Indicator column values in the Stage GL Data table are:

- The value must be M, when you map GL Code to the Missing (MSG) member. If nothing is mapped, the system automatically sets value to M.
- The value must be D, when you map GL Code to the Debit member.
- The value must be C, when you map GL Code to the Credit member.

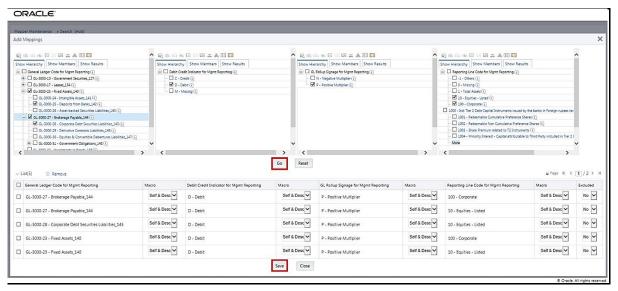
To perform Many Parents to Many Reporting Line Codes mapping with or without Debit Credit Indicator:

- 1. In the Mapper Maintenance page, in the Member combinations section, click Add.
- 2. The Add Mappings pop-up page appears. For illustration, select parent members of the General Ledger Code for Mgmt Reporting hierarchy, GL-3000-23 Fixed Assets_140 and GL-3000-27 Brokerage Payable_144, and their child members GL-3000-24 Intangible Assets_141 and GL-3000-28 Corporate Debt Securities Liabilities_145 respectively, and the member of the Debit Credit Indicator for Mgmt Reporting hierarchy C Credit to map to the members of the Reporting

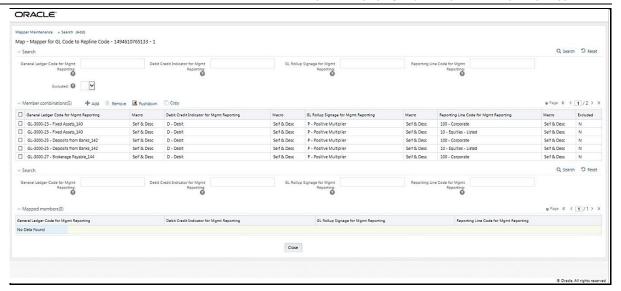
Line Code for Mgmt Reporting hierarchy 10 – Equities - Listed and 100 – Corporate with the member of the GL Rollup Signage for Mgmt Reporting hierarchy P - Positive Multiplier.



3. To map the members, click Go. The list of mapped members appear at the bottom. To save the mappings, click Save.



- **4.** An acknowledgement pop-up message appears. To confirm saving the mappings, click Yes.
- 5. The mapped member combinations are listed in the Mapper Maintenance page.



27.4.2.3 Mapping Combinations at Parent Hierarchy Level without Descendants

This section explains about the mapping combinations for the General Ledger Code for Mgmt Reporting hierarchy at Parent level hierarchy without Descendants (child members).

To map one parent GL Code without Descendants to one or more Reporting Line Codes, use the Mapper Maintenance utility. In this utility, select one parent GL Code, select one member in the Debit Credit Indicator hierarchy with the value Debit or Credit or Missing, and select one or more members in the Reporting Line Code hierarchy. Then for the GL hierarchy, select Self in the Macro column. As a result, during the T2T process, the corresponding data from the Stage GL Data table, for the selected parent GL Code, is aggregated and then loaded into the Fact Management Reporting table.

NOTE

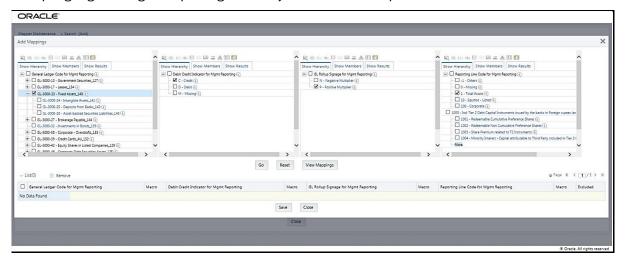
In the T2T process, in the Stage GL Data table, the aggregation of parent GL Code takes place in all the Measure columns that are associated with the Primary Keys. The conditions for the Debit Credit Indicator column values in the Stage GL Data table are:

- The value must be M, when you map GL Code to the Missing (MSG) member. If nothing is mapped, the system automatically sets value to M.
- The value must be D, when you map GL Code to the Debit member.
- The value must be C, when you map GL Code to the Credit member.

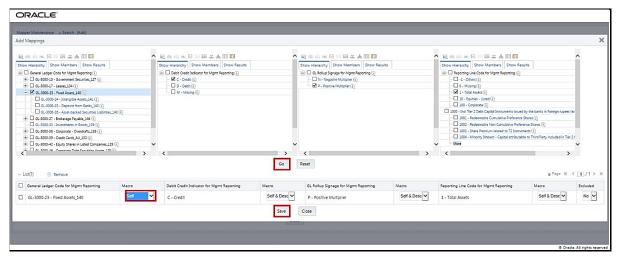
To perform One Parent to One or Many Reporting Line Codes mappings without Descendants:

- 1. In the Mapper Maintenance page, in the Member combinations section, click Add.
- 2. The Add Mappings pop-up page appears. For illustration, select one parent member of the General Ledger Code for Mgmt Reporting hierarchy GL-3000-23 Fixed Assets_140, and the member of the Debit Credit Indicator for Mgmt Reporting hierarchy C Credit to map to the member of the

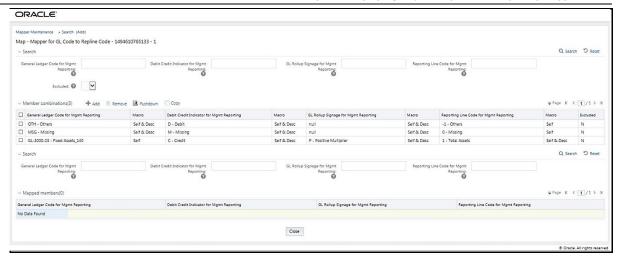
Reporting Line Code for Mgmt Reporting hierarchy 1 – Total Assets with the member of the GL Rollup Signage for Mgmt Reporting hierarchy P - Positive Multiplier.



3. To map the members, click Go. The list of mapped member appears at the bottom. To exclude the Descendants of the GL Code from the mapping, in the Macro column, select Self. To save the mappings, click Save.



- 4. An acknowledgement pop-up message appears. To confirm saving the mappings, click Yes.
- **5.** The mapped member combinations are listed in the Mapper Maintenance page with the Macro value of GL Code as Self.



27.4.2.4 Mapping Combinations at Parent Hierarchy Level by Removing one or more Descendants

This section explains about the mapping combinations for the General Ledger Code for Mgmt Reporting hierarchy at Parent level hierarchy by removing one or more Descendants (child members).

To map one parent GL Code to one or more Reporting Line Codes by removing one or more Descendants, use the Mapper Maintenance utility. In this utility, select one parent GL Code with one or more Descendants, select one member in the Debit Credit Indicator hierarchy with the value Debit or Credit or Missing, and select one or more members in the Reporting Line Code hierarchy. Then for the GL hierarchy, in the Macro column, select Self & Descendants and in the Excluded column, select either Yes to exclude or No to include the Descendants from mapping. As a result, during the T2T process, the corresponding data from the Stage GL Data table, for the selected parent GL Code and its descendants, is aggregated and then loaded into the Fact Management Reporting table.

NOTE

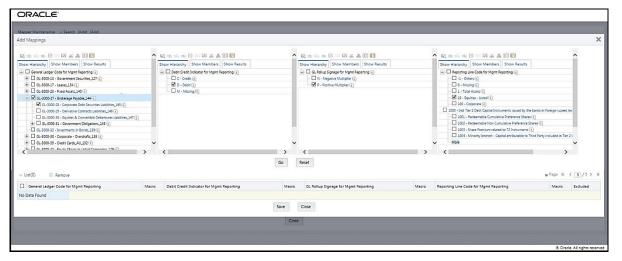
In the T2T process, in the Stage GL Data table, the aggregation of parent GL Code and its descendants take place in all the Measure columns that are associated with the Primary Keys. The conditions for the Debit Credit Indicator column values in the Stage GL Data table are:

- The value must be M, when you map GL Code to the Missing (MSG) member. If nothing is mapped, the system automatically sets value to M.
- The value must be D, when you map GL Code to the Debit member.
- The value must be C, when you map GL Code to the Credit member.

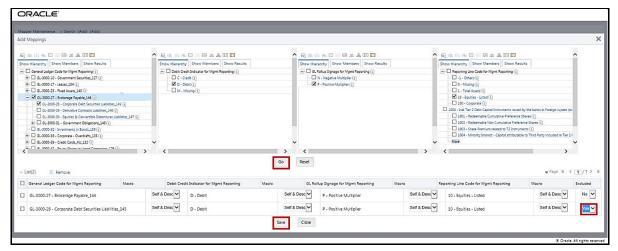
To perform One Parent to One or Many Reporting Line Codes mapping by removing one or more GL Code Descendants:

1. In the Mapper Maintenance page, in the Member combinations section, click Add.

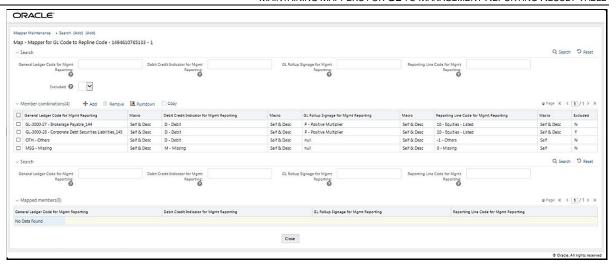
2. The Add Mappings pop-up page appears. For illustration, select one parent member of the General Ledger Code for Mgmt Reporting hierarchy GL-3000-27 – Brokerage Payable_144 and its child member (Descendant) GL-3000-28 – Corporate Debt Securities Liabilities_145, and the member of the Debit Credit Indicator for Mgmt Reporting hierarchy D - Debit to map to the member of the Reporting Line Code for Mgmt Reporting hierarchy 10 – Equities - Listed with the member of the GL Rollup Signage for Mgmt Reporting hierarchy P - Positive Multiplier.



3. To map the members, click Go. The list of mapped members appear at the bottom. To exclude the Descendant of the GL Code from the mapping, in the Macro column, select Self & Descendants, and in the Excluded column, select Yes. To save the mappings, click Save.



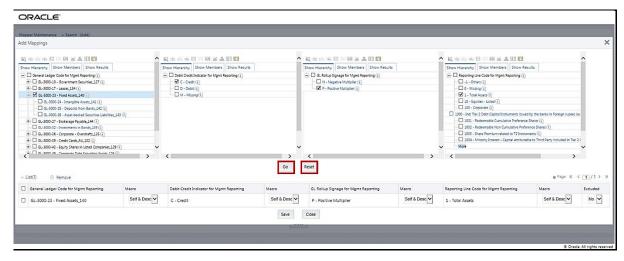
- **4.** An acknowledgement pop-up message appears. To confirm saving the mappings, click Yes.
- **5.** The mapped member combinations are listed in the Mapper Maintenance page with the Macro value of GL Code as Self.



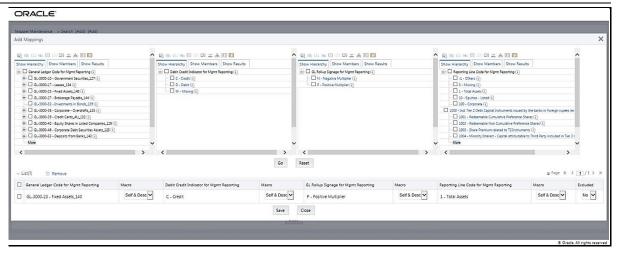
27.4.3 Performing Multiple Sets of Mapping Combinations

To perform mapping more than one time in the Add Mappings page, use the Reset functionality. To perform this procedure:

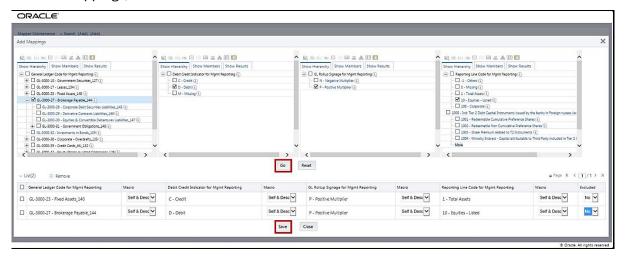
- 1. In the Mapper Maintenance page, in the Member combinations section, click Add.
- 2. The Add Mappings pop-up page appears. For illustration, select one parent member of the General Ledger Code for Mgmt Reporting hierarchy, GL-3000-23 Fixed Assets_140, and the member of the Debit Credit Indicator for Mgmt Reporting hierarchy C Credit to map to the member of the Reporting Line Code for Mgmt Reporting hierarchy 1 Total Assets with the member of the GL Rollup Signage for Mgmt Reporting hierarchy P Positive Multiplier. To map the members, click Go. The list of mapped members appear at the bottom. To initiate mapping of another set of member combinations, click Reset.



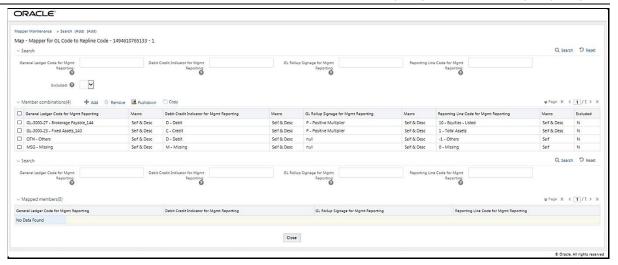
3. The mapping selections clear.



4. For illustration, select parent member of the General Ledger Code for Mgmt Reporting hierarchy, GL-3000-27 – Brokerage Payable_144, and the member of the Debit Credit Indicator for Mgmt Reporting hierarchy D - Debit to map to the member of the Reporting Line Code for Mgmt Reporting hierarchy 10 – Equities - Listed with the member of the GL Rollup Signage for Mgmt Reporting hierarchy P - Positive Multiplier. To map this set of member combinations, click Go. To save the mappings, click Save.



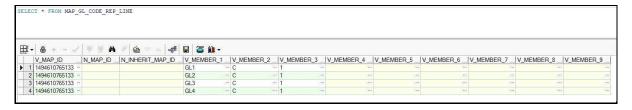
- **5.** An acknowledgement pop-up message appears. To confirm saving the mappings, click Yes.
- **6.** Both set of mapped member combinations are listed in the Mapper Maintenance page.



27.5 Loading Mapper Maintenance from Backend

In this illustration, load the MAP_GL_CODE_REP_LINE table in the Atomic schema with the V_MAP_ID value as 194610765133, and load these column values:

- V_MEMBER_1 = GL Code (values from DIM_GL_ACCOUNT.V_GL_ACCOUNT_CODE).
- V_MEMBER_2 = Debit Credit Indicator (values must be C or D or M).
- V_MEMBER_3 = Reporting Line Code (values from DIM_REP_LINE.N_REP_LINE_CD).



NOTE

These values are real business key columns and not display codes.

27.6 Deploying GL Data and GL to Management Reporting Result Tables on Hive

All RDBMS related GL Data and GL to Management Reporting Result tables can also be deployed on Hive (Stage and Results on Hive).

NOTE

In general, Stage and Result tables are also supported in Hive. However, there are some exceptions. For a list of tables that are not supported in Hive, see <u>List of Unsupported T2Ts</u>.

27.7 Populating GL Data and GL to Management Reporting T2T Result Tables

Follow this T2T process to populate data into GL Data and GL to Management Reporting T2T Result tables:

NOTE

You can also follow this T2T process to populate data into any Hive related GL to Management Reporting T2T Result table.

- 1. To populate data into any GL Data and GL to Management Reporting T2T Result tables, execute the batch for T2T. For a detailed procedure, see:
 - a. Prerequisites for loading T2T.
 - **b.** Set the Run Parameters.
 - c. Save the Run Parameters.
 - **d.** Execute the Batch for T2T.
- **2.** To check the T2T batch execution status of the GL Data and GL to Management Reporting Result tables, follow the procedure Check the Batch Execution Status of T2T.
- To verify log files, and check the error messages (if any), follow the procedure <u>Verify T2T Log Files</u> and <u>Check Error Messages</u>.

28 Insurance Claims Tables

This chapter details the Insurance Claims tables in the Oracle Insurance Data Foundation application and includes the following topics:

- About Insurance Claims
- About Insurance Claims Dimension Tables
- About Insurance Claims T2Ts Result Tables
- Deploying Insurance Claims Tables on Hive
- Populating Insurance Claims Dimension Tables
- Populating Insurance Claims T2T Result Tables

28.1 About Insurance Claims

An insurance claim is a formal request to an Insurance Company for coverage or compensation for a covered loss or policy event. The Insurance Company validates the claim and, after approval, issues payment to the insured or to an approved interested Party on behalf of the insured.

The OIDF application sources data from the claim systems after the claim is generated.

The Claims tables store the claim process performed to date including the claim dates, status, and amounts.

The following table depicts the difference between the Statutory Insurance and the Non-statutory Insurance:

Statutory Insurance	Non-statutory Insurance
This is a type of insurance, which the insured is required to buy under a country, state, or federal law.	This is a type of insurance, which is up to the buyer to purchase or not.

28.1.1 An Illustration of the Insurance Claims Process Flow

This section contains an illustration of the Insurance Claims process flow in chronological order.

This is an example of the Insurance Claims process after the fire occurrence in a technology park.

Assume that, in a Tier I city, in a technology park, in a company building of four floors, there is a fire incident on the second floor. Due to the extent of the fire, the building has collapsed into its underground parking area. As a result, there are damages and destruction caused to the equipment and furniture inside the building, a few injured people, and a few fire-related deaths. In addition, the vehicles inside the building parking area are damaged or destroyed. During the building collapse, the adjacent building is damaged. As the collapsed building, the adjacent damaged building, and the technology park are insured, they apply for the Insurance Claim for recovery.

The Insurance Company checks their reserve and the details of the Insured. The Insurance Company Assessor is sent to the collapsed building location to assess the extent of damage and destruction in detail. The Assessor analyzes the fire incident location, the injured and the deceased lives. Then the

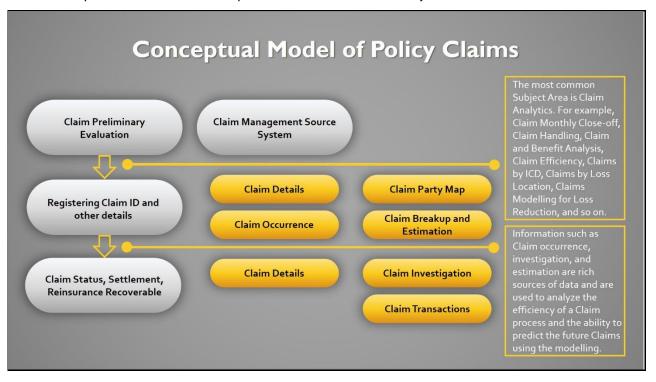
Assessor creates a detailed report, which also includes the damage due to the water used to put out the fire and the disabilities caused. The Assessor cross-verifies the report with the Insurance Policy terms. All these damages, destructions, and loss of lives are caused due to one fire incident. For an incidence to be an occurrence, there must be common traits across multiple claims, same date, same location, and then the traits are grouped together for future use. The insurer can set aside a calculated amount of money for a similar incidence that can occur the next time.

Even though the Insurance Company focuses on completing the claims process on time, there can be possible flaws in the process due to human error or undiscovered reasons. For example, the Nominee is not the Beneficiary, or an employee was not even in the incident premises, however, that employee was hurt outside due to some other reason and is claimed as injured by the insured company, and so on.

Based on the assessment of the policy terms, report, and claim terms, the claim is processed or rejected.

28.1.2 Insurance Claims Process Flow

This is the representation of the conceptual model of Insurance Policy Claims.



The process flow of an Insurance Policy Claim is as follows:

- 1. A Claim is created and the data is stored in the Claim Dimension table.
- **2.** The claim policy map is used to store the relationship between the claim and the policy for which it is created. The mapping details are stored in the Claim Party Map table.
- **3.** The details of a claim from the policyholder, the amount paid by the insurer and the summary of the claim's transactions to date are stored in the Claim Details table.
- **4.** The insurer must conduct the claim investigation. The insurer obtains information to evaluate an insurance claim. The investigators look for evidence whether a claim is legitimate or illegitimate. The investigation details are stored in the Claim Investigation Details table.

- **5.** After the claim investigation is complete, the claim amount is estimated and the claim breakup is done. The claim breakup is where an insurer sets aside a claim amount for a policy.
- **6.** The transactions related to a claim is stored in the Claims Transactions table.

NOTE

The Claim Identifier column is added to the tables FCT_PARTY_MEDICAL_CONDITN_DTLS, FCT_PARTY_MEDICAL_TREATMENTS, and FCT_PARTY_DISABILITY_DETAILS to link the party medical attributes to the insurance claims.

28.2 About Insurance Claims Dimension Tables

The Insurance Claims Dimension table names and their description are as follows.

Logical Dimension Table Name	Dimension Table Description
Dimension Claim Refusal Reason	Stores the list of all the reasons for which a claim can be refused by the entity.
Dimension Claim Status	Stores the list of all status codes and descriptions that are applicable for a claim transaction.
Claim Dimension	Stores the list of all claims.
Catastrophe Events Dimension	Stores the catastrophic event details for a claim.
Claim Referral Reason Dimension	Stores different referral reasons for a claim.
Claim Feature Status Dimension	Stores the status of a claim, based on which various calculations change.
Claim Reopening Reason Type Dimension	Stores the reopening reason type. Sample values: R1 - Mathematical or computational mistake, R2 - Inaccurate data entry, D0 - Changes in service date, E0 - Change in patient status, and so on.
Premium Plan Type Dimension	Stores the premium plan type details. Sample values: AUDIT and EST.
Claim Handling Type Dimension	Stores the claim handling type details. This table is used to specify the situations, where claim handling can differ based on the claim amount, underwriting needs or other extenuating circumstances, or at the request of the claimant. Sample values: OTHER, UNKNOWN, ACCELERATED, COMPLEX, EXPRESS, and STANDARD.
Claim Investigation Dimension	Stores the Claim Investigation details. The claims investigation is a process in which the insurance companies, insurance examiners, or investigators obtain information to evaluate an insurance claim. The investigators look for evidence whether a claim is legitimate or illegitimate.
Claim Loss Type Dimension	Stores the codes that identify the type of loss that occurred. This table uses the Loss Kind code list.

Logical Dimension Table Name	Dimension Table Description
	Sample values: Fire, Flood, Hail, Lightning, Other, Theft, and WNDST.
Claim Outside Authority Condition Dimension	Stores the codes that define the outside authority conditions applicable to the claim. This table uses the Outside Authority Condition code list. Sample values: DC, DU, EG, LI, SU, and WP.
Claim Occurrence Dimension	Stores the Claim Occurrence. An Occurrence policy covers claims made for injuries sustained during the life of an insurance policy, even if the claim is filed after the policy is canceled/lapsed. The policy must be active when the incident occurred. An Occurrence is an event that can result in the filing of an insurance claim.
Claim Offer Dimension	Stores details of the offer given on a claim.
Claim Risk Category Dimension	Stores the category details of the claim risk. This table is used to specify the situations, where the claim risk category may be based on various criteria such as the claim amount, the manner of loss, length of the time policy is in force, contestability or other investigative issues, and many other factors. Sample values: OTHER, UNKNOWN, HIGH, LOW, and MEDIUM.
Claim Status Reason Dimension	Stores details of the claim status reason. This table provides additional details about the reason for the current claim status. Sample values: ACTIVEREVIEW, ADDINVEST, BACKPROC, INVALIDBENE, LITIGATION, RECOVERED, and so on.
Claim Type Dimension	Stores details of the types of claims types. Sample values: DEATH, DISMEMBERMENT, DISABILITY, ILLNESS, and UNEMPLOYMENT.
Claim Cause Of Loss Dimension	Stores details of the cause of the loss or the peril triggering the loss for a claim. Sample values: fire, flood, sprinkler leakage, and so on.
Claim Investigation Reason Dimension	Stores details of the claim investigation reason. This table is used to identify the aspect of the claim that leads the submitter to doubt the validity of a claim and refer the claim for further investigation. The source of this code list is the National Insurance Crime Bureau (NICB). Sample values: FL and SFL.
Claim Occurrence Type Dimension	Stores details of the claim occurrence type. Sample values: accident, incident, loss, occurrence, injury, and illness.
Claim Review Reason Dimension	Stores details of the reason for which the claim review took place. These reasons are appended at the end of the review. Sample values: OTHER, UNKNOWN, INITAL, SCHED, and UNSCHED.
Claim Submission Method Dimension	Stores details of the means through which the claimant informs the Insurance Company of any loss. Sample values: Internet, Call, Mail, and so on.
Hazard Risk Level Dimension	Stores code details of the Hazard Risk Level. Sample values: 1, 2, 3, and 4.

Logical Dimension Table Name	Dimension Table Description
Hazard Risk Override Type Dimension	Stores code details of the Hazard Grade Override. This is a shorthand representation of the risk average degree assigned by a Rater or Underwriter to the standard Hazard Grade Code. Sample values: degree1, degree2, and degree3.
Human Body Parts Dimension	Stores details of the injured human body parts. Sample values: Eye, Nose, Legs, Hands, and so on.
Injury Nature Type Dimension	Stores details of the injury nature type. Sample values: NoPhysicalInjury, Amputation, AnginaPectoris, Inflammation, PoisoningGeneral, and so on.
Investigation Status Reason Dimension	Stores details of the Investigation Status Reason. Sample values: IDF, NAIC1, NAIC2, PKEY1, PKEY2, POL1, SYSU, UREQ, and so on.
Liability Loss Control Event Dimension	Stores details of the code that signifies the Loss Control Event category. Here, the event is the occurrence categorization that initiates the claim and uses the Liability Loss Control Event code list. Sample values: 100-PremisesHousekeeping, 200-OperationsFailureOfEquipment, 300-DefectiveProductOrWork, 410-Libel, and so on.
Policy Asset Sub Type Dimension	Stores details of the asset subtype of a policy. Sample values: AerationFan, AerBinHeaters, AerDuctwork, BalerSquare, and so on.
Policy Asset Valuation Type Dimension	Stores details of the code that identifies the method used to determine the policy asset value. This table uses the ValuationMethod code list. Sample values: Appraisal, CompSale, and SaleRec.
Policy Covered Asset Dimension	Stores details of the assets covered in the policy.
Policy Asset Type Dimension	Stores details of the type of asset covered in the policy. The types of policy assets are Real Estate, Equipment, Automobiles, and so on. The type under the movable category includes automobiles, and so on. The type under the immovable category includes real estate, equipment, and so on.
Risk Qualifier Type Dimension	Stores details of the risk qualifier type that is either applicable or not for the insurance. Sample values: APT, AR, BB, CNT, DP, ED, MT, and so on.
International Statistical Classification Of Diseases Dimension	Stores classification details of the international statistics of diseases. The ICD is the International Statistical Classification of Diseases and Related Health Problems. The ICD is a medical classification list maintained by the World Health Organization (WHO). The list contains codes for diseases, signs, and symptoms, abnormal findings, complaints, social circumstances, and external causes of injury or diseases.
Claim Basis Dimension	Stores the code that signifies the basis for the claim, where the claim relates to the Coverage Kind of Loss payment. This table uses the Liability Claim Basis code list. Sample values: Contractual Liability, Negligence, Nuisance, Strict Liability, Vicarious Liability, and Voluntary Payments.

Logical Dimension Table Name	Dimension Table Description
Claim Estimate Type Dimension	Stores details of the type of claim estimate that is being provided. Sample values: OTHER, UNKNOWN, INITIALESTCOST, INITIALESTDURATION, REVISEDESTCOST, and REVISEDESTDURATION.

The mapping details for the Insurance Claims Dimension tables are as follows.

Map Reference Number	Source Table Name	Logical Stage Table Name	Dimension Table	Logical Dimension Table Name
233	STG_CLAIM_REFU SAL_REAS_MASTE R	Stage Claim Refusal Reason Master	DIM_CLAIM_REFU SAL_REASON	Dimension Claim Refusal Reason
234	STG_CLAIM_STAT US_MASTER	Stage Claim Status Master	DIM_CLAIM_STAT US	Dimension Claim Status
239	STG_CLAIM_DETAI	Stage Claim Details	DIM_CLAIM	Claim Dimension
241	STG_CATASTROP HE_EVENTS_MAST ER	Stage Catastrophe Events Master	DIM_CATASTROP HE_EVENTS	Catastrophe Events Dimension
242	STG_CLAIM_REFE RRAL_REAS_MAST ER	Stage Claim Referral Reason	DIM_CLAIM_REFE RRAL_REASON	Claim Referral Reason Dimension
605	STG_CLAIM_FEAT URE_STTS_MASTE R	Stage Claim Feature Status Master	DIM_CLAIM_FEAT URE_STATUS	Claim Feature Status Dimension
648	STG_CLM_REOPE N_RSN_TYPE_MAS TER	Stage Claim Reopening Reason Type Master	DIM_CLM_REOPEN _RSN_TYPE	Claim Reopening Reason Type Dimension
784	STG_PREM_PLAN_ TYPE_MASTER	Stage Premium Plan Type Master	DIM_PREM_PLAN_ TYPE	Premium Plan Type Dimension
787	STG_CLAIM_HAND LING_TYPE_MAST ER	Stage Claim Handling Type Master	DIM_CLAIM_HAND LING_TYPE	Claim Handling Type Dimension
788	STG_CLAIM_INVES TIGATION_DTLS	Stage Claim Investigation Details	DIM_CLAIM_INVES TIGATION	Claim Investigation Dimension
789	STG_CLAIM_LOSS _TYPE_MASTER	Stage Claim Loss Type Master	DIM_CLAIM_LOSS_ TYPE	Claim Loss Type Dimension
790	STG_CLAIM_OA_C ONDITION_MASTE R	Stage Claim Outside Authority Condition Master	DIM_CLAIM_OA_C ONDITION	Claim Outside Authority Condition Dimension
791	STG_INS_OCCURR ENCE_DETAILS	Stage Insurance Occurrence Details	DIM_CLAIM_OCCU RRENCE	Claim Occurrence Dimension

Map Reference Number	Source Table Name	Logical Stage Table Name	Dimension Table	Logical Dimension Table Name
792	STG_CLAIM_OFFE R_MASTER	Stage Claim Offer Master	DIM_CLAIM_OFFE R	Claim Offer Dimension
793	STG_CLAIM_RISK_ CATEGORY_MAST ER	Stage Claim Risk Category Master	DIM_CLAIM_RISK_ CATEGORY	Claim Risk Category Dimension
794	STG_CLAIM_STAT US_REASON_MAS TER	Stage Claim Status Reason Master	DIM_CLAIM_STAT US_REASON	Claim Status Reason Dimension
795	STG_CLAIM_TYPE _MASTER	Stage Claim Type Master	DIM_CLAIM_TYPE	Claim Type Dimension
796	STG_CLM_CAUSE_ OF_LOSS_MASTER	Stage Claim Cause Of Loss Master	DIM_CLM_CAUSE_ OF_LOSS	Claim Cause Of Loss Dimension
797	STG_CLM_INVSTG N_REASON_MAST ER	Stage Claim Investigation Reason Master	DIM_CLM_INVSTG N_REASON	Claim Investigation Reason Dimension
798	STG_CLM_OCCR_T YPE_MASTER	Stage Claim Occurrence Type Master	DIM_CLM_OCCR_T YPE	Claim Occurrence Type Dimension
799	STG_CLM_REVIEW _REASON_MASTE R	Stage Claim Review Reason Master	DIM_CLM_REVIEW _REASON	Claim Review Reason Dimension
800	STG_CLM_SUBMS N_METHOD_MAST ER	Stage Claim Submission Method Master	DIM_CLM_SUBMS N_METHOD	Claim Submission Method Dimension
801	STG_HAZARD_RIS K_LEVEL_MASTER	Stage Hazard Risk Level Master	DIM_HAZARD_RIS K_LEVEL	Hazard Risk Level Dimension
802	STG_HAZ_RISK_O VRDE_TYPE_MAST ER	Stage Hazard Risk Override Type Master	DIM_HAZ_RISK_O VRDE_TYPE	Hazard Risk Override Type Dimension
803	STG_HUMAN_BOD Y_PARTS_MASTER	Stage Human Body Parts Master	DIM_HUMAN_BOD Y_PARTS	Human Body Parts Dimension
804	STG_INJURY_NAT URE_TYPE_MASTE R	Stage Injury Nature Type Master	DIM_INJURY_NAT URE_TYPE	Injury Nature Type Dimension
805	STG_INVSTGN_ST AT_REASON_MAS TER	Stage Investigation Status Reason Master	DIM_INVSTGN_ST AT_REASON	Investigation Status Reason Dimension
806	STG_LIAB_LOSS_C TRL_MASTER	Stage Liability Loss Control Event Master	DIM_LIAB_LOSS_C TRL	Liability Loss Control Event Dimension

Map Reference Number	Source Table Name	Logical Stage Table Name	Dimension Table Name	Logical Dimension Table Name
807	STG_POL_ASSET_ SUB_TYPE_MASTE R	Stage Policy Asset Sub Type Master	DIM_POL_ASSET_ SUB_TYPE	Policy Asset Sub Type Dimension
808	STG_POL_ASSET_ VAL_TYPE_MASTE R	Stage Policy Asset Valuation Type Master	DIM_POL_ASSET_ VAL_TYPE	Policy Asset Valuation Type Dimension
809	STG_POL_COV_AS SET_MASTER	Stage Policy Covered Asset Master	DIM_POL_COV_AS SET	Policy Covered Asset Dimension
810	STG_POLICY_ASSE T_TYPE_MASTER	Stage Policy Asset Type Master	DIM_POLICY_ASSE T_TYPE	Policy Asset Type Dimension
811	STG_RISK_QUALIFI ER_TYPE_MASTER	Stage Risk Qualifier Type Master	DIM_RISK_QUALIFI ER_TYPE	Risk Qualifier Type Dimension
812	STG_INT_CLSFCTN _DISEASE_MASTE R	Stage International Statistical Classification Of Diseases Master	DIM_INT_CLASSIFI CTION_DISEASES	International Statistical Classification Of Diseases Dimension
813	STG_CLAIM_BASIS _MASTER	Stage Claim Basis Master	DIM_CLAIM_BASIS	Claim Basis Dimension
814	STG_CLAIM_ESTI MATE_TYPE_MAS TER	Stage Claim Estimate Type Master	DIM_CLAIM_ESTIM ATE_TYPE	Claim Estimate Type Dimension

28.3 About Insurance Claims T2Ts Result Tables

The Insurance Claims T2Ts and their descriptions are as follows.

NOTE

The Claim Identifier column is added to the FCT_PARTY_MEDICAL_CONDITN_DTLS, FCT_PARTY_MEDICAL_TREATMENTS, and FCT_PARTY_DISABILITY_DETAILS tables to link the Party Medical attributes to the Insurance Claims.

T2T Name	T2T Description
T2T_FCT_CLAIM_DETAILS	Stores all the attributes of a policy claims paid until date along with the summary of transactions.
T2T_FCT_CLAIM_CLAIMANT_MAPPING	Stores the details of all the claimants involved in a claim process.
T2T_FCT_CLAIM_TRANSACTIONS	Stores all the transactions related to claims reported with the entity.

T2T Name	T2T Description
T2T_FCT_INS_OCCURRENCE_DETAILS	Stores the insurance occurrence details. An Occurrence Policy covers claims made for injuries sustained during the life of an insurance policy, even if the claim is filed after the policy is canceled. An occurrence is an event that can result in the filing of an insurance claim.
T2T_FCT_CLAIM_PARTY_MAP	Stores the mapping information between the Claim, Party, and Insurance.
T2T_FCT_CLAIM_INVESTIGATION_DTLS	Stores the Claim Investigation details. The claims investigation is a process in which the insurance companies, insurance examiners, or investigators obtain information to evaluate an insurance claim. The investigators look for evidence whether a claim is legitimate or illegitimate.
T2T_FCT_CLAIM_BREAK_UP_DETAILS	Stores reserve details of the claim break up. A claims reserve is the money set aside by the insurance companies to pay the policyholders, who have filed or are expected to file legitimate claims on their policies. Insurers use the fund to pay out incurred claims that are yet to be settled.
T2T_FCT_POL_COV_ASSET_DTLS	Stores details of the assets covered in the policy.

The mapping details for the Insurance Claims T2T are as follows.

Source Table Name	Logical Stage Table Name	Fact Table Name	Logical Fact Table Name	T2T Name
STG_CLAIM_DET AILS	Stage Claim Details	FCT_CLAIM_DETAIL S	Fact Claim Details	T2T_FCT_CLAIM_DETAI LS
STG_CLAIM_CLAI MANT	Stage Claim Claimant	FCT_CLAIM_CLAIMA NT_MAPPING	Fact Claim Claimant Mapping	T2T_FCT_CLAIM_CLAIM ANT_MAPPING
STG_CLAIM_TXN S	Stage Claim Transactions	FCT_CLAIM_TRANSA CTION	Fact Claim Transaction	T2T_FCT_CLAIM_TRANS ACTIONS
STG_INS_OCCUR RENCE_DETAILS	Stage Insurance Occurrence Details	FCT_INS_OCCURREN CE_DETAILS	Fact Insurance Occurrence Details	T2T_FCT_INS_OCCURRE NCE_DETAILS
STG_CLAIM_PAR TY_MAP	Stage Claim Party Map	FCT_CLAIM_PARTY_ MAP	Fact Claim Party Map	T2T_FCT_CLAIM_PARTY _MAP
STG_CLAIM_INVE STIGATION_DTLS	Stage Claim Investigation Details	FCT_CLAIM_INVESTI GATION_DTLS	Fact Claim Investigation Details	T2T_FCT_CLAIM_INVES TIGATION_DTLS
STG_CLAIM_BRE AK_UP_DETAILS	Stage Claim Break Up Reserve Details	FCT_CLAIM_BREAK_ UP_DETAILS	Fact Claim Break Up Reserve Details	T2T_FCT_CLAIM_BREAK _UP_DETAILS

Source Table Name	Logical Stage Table Name	Fact Table Name	Logical Fact Table Name	T2T Name
STG_POL_COV_A SSET_DTLS	Stage Policy Covered Asset Details	FCT_POL_COV_ASSE T_DTLS	Fact Policy Covered Asset Details	T2T_FCT_POL_COV_ASS ET_DTLS

28.4 Deploying Insurance Claims Tables on Hive

All RDBMS related Insurance Claims Dimension and Result tables can also be deployed on Hive (Stage and Results on Hive).

NOTE

In general, Stage and Result tables are also supported in Hive. However, there are a few exceptions. For the list of tables that are not supported in Hive, see the <u>List of Unsupported T2Ts</u> section.

28.5 Populating Insurance Claims Dimension Tables

The SCD process to populate data into any Insurance Claims dimension table is as follows:

NOTE

You can also follow this SCD process to populate data into any Hive-related Insurance Claims dimension table.

- **1.** To populate data into any Insurance Claims Dimension table, execute the SCD batch. For a detailed procedure, see the <u>Slowly Changing Dimension (SCD) Process</u> section.
- **2.** To check the SCD batch execution status of an Insurance Claims Dimension table, follow the procedure in the Check the Execution Status of the SCD Batch section.
- **3.** To verify the log files and check the error messages (if any), follow the procedure in the <u>Verify Log Files and Check Error Messages</u> section.

28.6 Populating Insurance Claims T2T Result Tables

The T2T process to populate data into any Insurance Claims T2T Result table is as follows:

NOTE

You can also follow this T2T process to populate data into any Hive-related Insurance Claims T2T Result table.

- **1.** To populate data into any Insurance Claims T2T Result table, execute the T2T batch. For a detailed procedure, see the following sections :
 - a. Prerequisites for loading T2T

- **b.** Set the Run Parameters
- c. Save the Run Parameters
- **d.** Execute the T2T Batch
- **2.** To check the T2T batch execution status of the Insurance Claims Result tables, follow the procedure in the Check the Batch Execution Status of T2T section.
- **3.** To verify the log files and check the error messages (if any), follow the procedure in the <u>Verify T2T Log Files and Check Error Messages</u> section.

29 Actuarial Assumptions Tables

This chapter provides information about Insurance Actuarial Policy Summary, Mortality and Morbidity tables, and various Insurance Lapse Rate Assumptions Result tables in the Oracle Insurance Data Foundation Application.

This chapter includes the following topics:

- Actuarial Assumptions Dimension Tables
- Financial Assumptions Tables
 - Interest Rate Curve Dimension Table
 - Insurance Lapse Rate Assumptions Table
 - Insurance Cost of Living Adjustments Table
 - Premium Rate Tables
- Demographic Assumptions Tables
 - Insurance Mortality and Morbidity Tables
- Deploying Actuarial Assumptions Tables on Hive
- Populating Actuarial Assumptions Dimension Tables
- Populating Actuarial Assumptions T2T Result Tables

An actuarial assumption is an estimate of an uncertain variable input into a financial model, normally for the purposes of calculating premiums or benefits.

29.1 Actuarial Assumptions Dimension Tables

Actuarial Assumption Dimension table names and their description are given here.

Logical Dimension Table Name	Remarks
Actuarial Assumption Dimension	This table stores the name of the set of Actuarial Assumptions used for valuations. While Actuarial valuation code can remain same, parameters for the same can change for different valuation dates.
Premium Rate Dimension	This table stores the details of Premium rate. Premium tables provide premium rate for a given premium basis amount.

The mapping details for the Actuarial Assumption Dimension tables are given here.

Map Reference Number	Source Table Name	Logical Stage Table Name	Dimension Table Name	Logical Dimension Table Name
683	STG_ACTUARIAL _ASSUMPTN_M ASTER	Stage Actuarial Assumption Master	DIM_ACTUARIAL_ ASSUMPTN	Actuarial Assumption Dimension
733	STG_PREMIUM_ RATE_TABLE_M ASTER	Stage Premium Rate Master	DIM_PREMIUM_RA TE_TABLE	Premium Rate Dimension

There are two types of Insurance Actuarial Assumptions tables:

- Financial Assumptions tables
- Demographic Assumptions tables

29.2 Financial Assumptions Tables

Financial assumptions evaluates the projected benefits of Party or organization in a certain plan. These financial assumptions include assumptions about interest rates, and lapse rate assumptions.

• Insurance Lapse Rate Assumptions

Insurance Lapse Rate is the rate at which insurance policy terminates because of the failure in premium payment by the policyholder. The Insurance Lapse Rate Assumptions table stores the insurance lapse rates to be used for assessment of insurance policies. The lapse rate group code binds multiple lapse rates under one heading.

The purpose of the Insurance Lapse Rate Assumptions table is that the Insurers can set premiums which results in high or low-priced product.

• Interest Rate Curve (IRC)

Interest Rate Curve is a line that plots the interest rates, at a set point in time, of bonds having equal credit quality but differing maturity dates.

Financial Assumptions includes Insurance Lapse Rate Assumptions and Interest Rate Curve (IRC).

29.2.1 Interest Rate Curve Tables

29.2.1.1 About Interest Rate Curve Dimension Table

Interest Rate Curve Dimension table name and its description is given here.

Logical Dimension Table Name	Remarks
Interest Rate Curve Dimension	This table stores the interest rate curve definitions.

The mapping details for the Interest Rate Curve Dimension tables is given here.

Map Reference	Source Table	Logical Stage	Dimension Table	Logical Dimension Table
Number	Name	Table Name		Name
246	STG_IRCS	Stage Interest Rate Curve	DIM_IRC	Interest Rate Curve Dimension

29.2.2 Insurance Lapse Rate Assumptions Table

29.2.2.1 About Insurance Lapse Rate Assumptions T2T (Result Table)

Insurance Lapse Rate Assumptions T2T and its description is given here.

T2T name	T2T Description
T2T_FCT_LAPSE_RATE_ASSUMPTIONS	This T2T stores the insurance lapse rates, which is used for valuation of insurance policies. This T2T stores the lapse rate group code that binds multiple lapse rates under one heading.

The mapping details for the Insurance Lapse Rate Assumptions T2T is given here.

Source Table Name	Logical Stage Table Name	Fact Table Name	Logical Fact Table Name	T2T Name
STG_INSURANCE	Stage Insurance	FCT_LAPSE_RATE _ASSUMPTIONS	Fact Lapse Rate	T2T_FCT_LAPSE_RATE_A
_LAPSE_R ATES	Lapse Rates		Assumptions	SSUMPTIONS

29.2.3 Insurance Cost of Living Adjustment Tables

The Insurance Cost of Living Adjustment Dimension table is used to determine the retirement, annuity or other similar benefits. The methodology identifies a benchmark and based on benchmark movements, adjustment of living costs are published either by the government agency or the insurer.

29.2.3.1 About Insurance Cost of Living Adjustment Dimension Table

Insurance Cost of Living Adjustment Dimension table name and its description are given here.

Logical Dimension Table Name	Remarks
Cost of Living Adjustment Dimension	This table stores the code and benchmark details for Cost of Living Adjustments definition.

The mapping details for the Insurance Cost of Living Adjustment Dimension tables are given here.

Map Reference	Source Table	Logical Stage	Dimension Table	Logical Dimension Table
Number	Name	Table Name	Name	Name
682	STG_COLA_ADJ USTMENT_MAS TER	Stage Cost of Living Adjustment Master	DIM_COLA_ADJUS TMENT	Cost of Living Adjustment Dimension

29.2.3.2 About Insurance Cost of Living Adjustment T2T (Result Table)

Insurance Cost of Living Adjustment T2T and its description are given here.

T2T name	T2T Description
T2T_FCT_COLA_ADJUSTMENT_SCHEDUL E	This T2T stores the Cost of Living Adjustments for a given COLA definition and year of adjustment details. They are used to determine the retirement, annuity or similar other benefits.

The mapping details for the Insurance Cost of Living Adjustment T2T are given here.

Source Table Name	Logical Stage Table Name	Fact Table Name	Logical Fact Table Name	T2T Name
STG_COLA_ADJU STMENT_SCHED ULE	Stage Cost of Living Adjustment Schedule	FCT_COLA_ADJUS TMENT_SCHEDUL E	Fact Cost of Living Adjustment Schedule	T2T_FCT_COLA_ADJUST MENT_SCHEDULE

29.2.4 Premium Rate Tables

When a person applies for a Life Insurance policy, their insurance company examines the results of their physical examination, their family health history, and lifestyle to determine if they fit into one of their standard categories or classifications.

For example, different types of categories are:

- Preferred Select: This classification usually refers to the very healthy. In order to qualify for this
 level, you need to have a normal weight and height as well as no family factors that could lead to an
 early death. This category enjoys the lowest premiums and may also be called Preferred Elite or
 Preferred Plus.
- Standard Plus: These applicants are still in great health but a medical or lifestyle factor prevents them from qualifying for a Preferred Select. Being overweight, having high blood pressure or cholesterol issues could be the culprit.
- Standard: This is for everyone who is average when it comes to heath. They have a normal life expectancy and could have weight issues or a parent that died early.

- Preferred Smoker: If you are a smoker who would normally fall into the preferred select category, this is where you will fall. Smokers will always pay more for life insurance so be prepared for a higher premium.
- Standard Smoker: A smoker who would fall into the standard category if they didn't smoke will be placed in this category.

When the Life Insurance applicant does not fit into one of the standard rating categories due to a health issue, risky occupation, or an adventurous lifestyle (think skydivers, rock climbers etc.), they may end up with a table rating. Such records are categorized and stored in Premium Rate tables.

For information on how the risk factors affects the Insurance Underwriting of a Life Insurance applicant, see <u>Insurance Underwriting Tables for Risk Analysis</u>.

29.2.4.1 About Premium Rate Dimension Table

Premium Rate Dimension table name and its remarks are given here.

Logical Dimension Table Name	Remarks
Premium Rate Dimension	This table stores the details of Premium rate. Premium tables provide premium rate for a given premium basis amount.

The mapping details for the Premium Rate Dimension table is given here.

Map Reference	Source Table	Logical Stage Table	Dimension Table	Logical Dimension Table Name
Number	Name	Name	Name	
733	STG_PREMIUM_RA TE_TABLE_MASTE R	Stage Premium Rate Master	DIM_PREMIUM_RAT E_TABLE	Premium Rate Dimension

29.2.4.2 About Premium Rate T2T (Result Table)

Premium Rate T2T name and its description are given here.

T2T Name	T2T Description
T2T_FCT_PREMIUM_RATE_TABLE_DTLS	This T2T stores the Premium Rate table details.

The mapping details for the Premium Rate T2T is given here.

Source Table Name	Logical Stage Table Name	Fact Table Name	Logical Fact Table Name	T2T Name
STG_PREMIUM_R ATE_TABLE_DTL S	Stage Premium Rate Table Details	FCT_PREMIUM_RA TE_TABLE_DTLS	Fact Premium Rate Table Details	T2T_FCT_PREMIUM_RAT E_TABLE_DTLS

29.3 Demographic Assumptions Tables

Demographic assumptions evaluates the projected benefits of all the party or organization in a certain plan. These demographic assumptions include assumptions about mortality, disability, termination of employment, and retirement.

Demographic Assumptions includes:

Insurance Mortality

The Insurance Mortality is the amount charged by the Insurer for delivering the guaranteed Sum Assured on premature death of the policyholder.

The purpose of the Insurance Mortality table is to store the sum charged every year by the Insurer to the policyholder to deliver the life cover.

Insurance for Morbidity

Morbidity on insurance terms is the insurance coverage provided by the insurer to the policyholder for the specified illness of the policyholder.

29.3.1 Insurance Mortality and Morbidity Tables

29.3.1.1 About Insurance Mortality and Morbidity Dimension Tables

Insurance Mortality and Morbidity Dimension table names and their description are given here.

Logical Dimension Table Name	Remarks
Insurance Morbidity Dimension	This table stores the morbidity rates. It is a statistical table used by actuaries in determining the incidence of illnesses and accidents and the longevity of the disability resulting there from. This is used in computing policy premiums and reserves.
Insurance Mortality Dimension	This table stores the mortality table required for insurance carriers. A 'Mortality Table' is the one that shows the rate of deaths occurring in a defined population during a selected time interval, or survival from birth to any given age. Statistics included in the mortality table show the probability of a person's death before their next birthday based on their age. Also known as period table, this is based on the mortality experience of a population during a relatively short period of time.
Insurance Mortality Multiplier Dimension	This table stores the mortality multipliers' names. Multipliers are generally calculated to reflect more accurate estimation of

Logical Dimension Table Name	Remarks
	mortality depending on growth in population and given rate of return.

The mapping details for the Insurance Mortality and Morbidity Dimension tables is given here.

Map Reference	Source Table	Logical Stage	Dimension Table	Logical Dimension Table
Number	Name	Table Name	Name	Name
424	STG_INS_MORBI	Stage Insurance	DIM_INS_MORBIDI	Insurance Morbidity
	DITY_MASTER	Morbidity Master	TY	Dimension
425	STG_INS_MORT	Stage Insurance	DIM_INS_MORTALI	Insurance Mortality
	ALITY_MASTER	Mortality Master	TY	Dimension
684	STG_INS_MORT ALITY_MULT_M ASTER	Stage Insurance Mortality Multiplier Master	DIM_INS_MORTALI TY_MULTIPLIER	Insurance Mortality Multiplier Dimension

29.3.1.2 About Insurance Mortality and Morbidity T2Ts (Result Tables)

Insurance Mortality and Morbidity T2Ts and their description are given here.

T2T Name	T2T Description
T2T_FCT_INSURANCE_MORTALITY	This T2T stores the sum charged every year by the Insurer to the policyholder to deliver the life cover.
T2T_FCT_INSURANCE_MORBIDITY	This T2T stores details of morbidity rates, which is actual age, survival probabilities etc., related to particular mortality tables.
T2T_FCT_INS_MORTALITY_MULT_DT LS	This T2T stores the mortality multipliers. Multipliers are generally calculated to reflect more accurate estimation of mortality depending on growth in population and given rate of return.

The mapping details for the Insurance Mortality and Morbidity T2Ts are given here.

Source Table Name	Logical Stage Table Name	Fact Table Name	Logical Fact Table Name	T2T Name
STG_INSURANCE	Stage Insurance	FCT_INSURANCE_	Fact Insurance	T2T_FCT_INSURANCE_M
_MORTALITY	Mortality	MORTALITY	Mortality	ORTALITY
STG_INSURANCE	Stage Insurance	FCT_INSURANCE_	Fact Insurance	T2T_FCT_INSURANCE_M
_MORBIDITY	Morbidity	MORBIDITY	Morbidity	ORBIDITY

Source Table Name	Logical Stage Table Name	Fact Table Name	Logical Fact Table Name	T2T Name
STG_INS_MORTA LITY_MULT_DTL S	Stage Insurance Mortality Multiplier Details	FCT_INS_MORTAL ITY_MULT_DTLS	Fact Insurance Mortality Multiplier Details	T2T_FCT_INS_MORTALIT Y_MULT_DTLS

29.4 Deploying Actuarial Assumptions Tables on Hive

All RDBMS related Actuarial Assumptions Result tables (Insurance Lapse Rate Assumptions, Mortality, and Morbidity Result tables) can also be deployed on Hive (Stage and Results on Hive).

NOTE

In general, Stage and Result tables are also supported in Hive. However, there are some exceptions. For a list of tables that are not supported in Hive, see <u>List of Unsupported T2Ts</u>.

29.5 Populating Actuarial Assumptions Dimension Tables

Follow this SCD process to populate data into any Actuarial Assumptions Dimension table:

NOTE

You can also follow this SCD process to populate data into any Hive related Actuarial Assumptions Dimension table.

- **1.** To populate data into any Actuarial Assumptions Dimension table, execute the SCD batch. For a detailed procedure, see <u>Slowly Changing Dimension (SCD) Process</u>.
- **2.** To check the SCD batch execution status of an Actuarial Assumptions Dimension table, follow the procedure Check the Execution Status of the SCD Batch.
- **3.** To verify log files, and check the error messages (if any), follow the procedure <u>Verify Log Files and Check Error Messages</u>.

29.6 Populating Actuarial Assumptions T2T Result Tables

Follow this T2T process to populate data into any Actuarial Assumptions T2T Result table (Insurance Lapse Rate Assumptions, Interest Rate Curve, Cost of Living Adjustments, Mortality, and Morbidity Result tables):

NOTE

You can also follow this T2T process to populate data into any Hive related Actuarial Assumptions T2T Result table.

- **1.** To populate data into any Actuarial Assumptions T2T Result table, execute the batch for T2T. For a detailed procedure, see:
 - a. Prerequisites for loading T2T.
 - **b.** Set the Run Parameters.
 - **c.** Save the Run Parameters.
 - **d.** Execute the Batch for T2T.
- **2.** To check the T2T batch execution status of the Actuarial Assumptions Result tables, follow the procedure Check the Batch Execution Status of T2T.
- **3.** To verify log files, and check the error messages (if any), follow the procedure <u>Verify T2T Log Files and Check Error Messages</u>.

30 Actuarial Output Tables

This chapter provides information about Actuarial Outputs such as Actuarial Cash Flows, Calculations, and Result Areas in the Oracle Insurance Data Foundation application.

This chapter includes the following topics:

- About Actuarial Assumed Policy Summary
- About Actuarial Cash Flows, Calculations, and Result Areas Summary Tables
- About Financial Element Dimension Table
- About Insurance Scenario Dimension Table
- About Insurance Vintage Dimension Table
- About Fact Insurance Policy Cash Flow T2T (Result Table)
- Deploying Actuarial Cash Flows, Calculations, and Result Areas Summary Tables on Hive
- Populating Actuarial Cash Flows, Calculations, and Result Areas Summary Dimension Tables
- Populating Actuarial Cash Flows, Calculations, and Result Areas Summary T2T Result Tables

30.1 About Actuarial Assumed Policy Summary

The Actuarial Assumed Policy Summary table stores the cash flow of all the reinsurance policies in an aggregated level for the purpose of reporting the summary. The result table is:

FCT_ACT_ASSUMED_POLICY_SMMRY

For the Fact Actuarial Assumed Policy Summary table, the data is sourced from the Actuarial engine.

30.2 About Actuarial Cash Flows, Calculations, and Result Areas Summary Tables

Actuarial Cash Flows, Calculations, and Result Areas Summary tables store attributes pertaining to insurance cash flows, calculations, and Result Areas related data on an 'as-is' basis received from the source system. The data is populated in the following Dimension tables through Seeded Data. Dimension table names and their description are given here.

Dimension Table Name	Logical Dimension Table Name	Remarks
DIM_ONEROUS_CLASSIFICATI ON	Onerous Classification Dimension	This is the Seeded dimension table for the onerous classification of the contract at Homogenous risk level. Sample values: ONEROUS, POSO, REMANINGCONTRACTS.
DIM_INS_ACCTG_VAL_APPRO ACH	Insurance Accounting Valuation Approach Dimension	This is the Seeded dimension table for Insurance Accounting Valuation Approach. Sample values: BBA, VFA, PAA.

Dimension Table Name	Logical Dimension Table Name	Remarks
DIM_INS_RISK_EXPIRY_STATU S	Insurance Risk Expiry Status Dimension	This is the Seeded dimension table for Insurance Risk Expiry Status. Samples values: EXPIRED, UNEXPIRED.

The following tables are direct results populated from processing or actuarial engines:

Fact Table Name	Logical Fact Table Name	Fact Table Description
FCT_ACTUARIAL_POLICY_SU MMARY	Fact Actuarial Policy Summary	This table stores the cash flow of all the individual policy in an aggregated level for reporting the summary. These are the resulting tables, which contains calculations.
FCT_INS_HRG_CASH_FLOW	Fact Insurance Homogeneous Risk Group Cash Flow	This table stores the cash flow estimates at Homogeneous Risk Group level for insurance policy group.
FCT_INS_HRG_CASH_FLOW_S UMMARY	Fact Insurance Homogeneous Risk Group Cash Flow Summary	This table stores the cash flow estimates at Homogeneous Risk Group summary level of Homogenous Risk Group.

30.2.1 About Financial Element Dimension Table

Insurance Financial Element Dimension table name and its description is given here.

Logical Dimension Table Name	Remarks
DIM_INS_FINANCIAL_ELEMENT	This table stores Insurance financial elements details.
	Sample values: Outflow Sum Insured, Outflow Expected Benefits, Outflow Expected Expense, etc.

The mapping details for the Insurance Financial Element Dimension table is given here.

Map Reference Number	Source Table Name	Logical Stage Table Name	Dimension Table Name	Logical Dimension Table Name
487	STG_INS_FINANCIAL _ELMNT_MASTER	Stage Insurance Financial Element Master	DIM_INS_FINAN CIAL_ELEMENT	Insurance Financial Element Dimension

30.2.2 About Insurance Scenario Dimension Table

Insurance Scenario Dimension table name and its description is given here.

Logical Dimension Table Name	Remarks
DIM_INSURANCE_SCENARIO	This table stores different scenario or assumption that can affect the calculation of cash flow.
	Sample values: Adverse, Severely Adverse, etc.

The mapping details for the Insurance Financial Element Dimension table is given here.

Map Reference	Source Table	Logical Stage	Dimension Table	Logical Dimension Table
Number	Name	Table Name	Name	Name
486	STG_INS_SCE NARIO_MAST ER	Stage Insurance Scenario Master	DIM_INSURANCE_SCE NARIO	Insurance Scenario Dimension

30.2.3 About Insurance Vintage Dimension Table

Insurance Vintage Dimension table name and its description is given here.

Logical Dimension Table Name	Remarks
DIM_INSURANCE_VINTAGE	This table stores Insurance Vintage associated with each process. Vintage refers to period of origination or first premium paid or major change on contract terms and conditions. This is a custom defined table. The end user can store monthly, yearly, half-yearly, quarterly values or as required. Sample values: Q1YYYY, Q2YYYY, M1YYYY, etc.

The mapping details for the Insurance Financial Element Dimension table is given here.

Map Reference Number	Source Table Name	Logical Stage Table Name	Dimension Table Name	Logical Dimension Table Name
485	STG_INSURANCE_VI	Stage Insurance	DIM_INSURANCE_VI	Insurance Vintage
	NTAGE_MASTER	Vintage Master	NTAGE	Dimension

30.2.4 About Fact Insurance Policy Cash Flow T2T (Result Table)

Fact Insurance Policy Cash Flow T2T and its description is given here.

T2T Name	T2T Description
T2T_FCT_INS_POLICY_CASH_FLOW	This T2T stores the cash flow estimates at a policy level.
T2T_FCT_INS_ASUM_POLICY_CSHFLW	This T2T stores the cash flow estimates at a policy level. It captures the details for assumed policies.

The mapping details for the Fact Insurance Policy Cash Flow T2T is given here.

Source Table Name	Logical Stage Table Name	Fact Table Name	Logical Fact Table Name	T2T Name
STG_INS_POLICY_ CASH_FLOW	Stage Insurance Policy Cash Flow	FCT_INS_POLICY_ CASH_FLOW	Fact Insurance Policy Cash Flow	T2T_FCT_INS_POLICY_ CASH_FLOW
STG_INS_ASSUM_ POLICY_CASH_FL OW	Stage Insurance Assumed Policy Cash Flow	FCT_INS_ASSUM_ POLICY_CASH_FL OW	Fact Insurance Assumed Policy Cash Flow	T2T_FCT_INS_ASUM_P OLICY_CSHFLW

30.3 Deploying Actuarial Cash Flows, Calculations, and Result Areas Summary Tables on Hive

All RDBMS related Actuarial Cash Flows, Calculations, and Result Areas Summary Tables Dimension and Result tables can also be deployed on Hive (Stage and Results on Hive).

NOTE

In general, Stage and Result tables are also supported in Hive. However, there are some exceptions. For a list of tables that are not supported in Hive, see <u>List of Unsupported T2Ts</u>.

30.4 Populating Actuarial Cash Flows, Calculations, and Result Areas Summary Dimension Tables

Follow this SCD process to populate data into any Actuarial Cash Flows, Calculations, and Result Areas Summary Tables Dimension table:

NOTE

You can also follow this SCD process to populate data into any Hive related Actuarial Cash Flows, Calculations, and Result Areas Summary Dimension table.

1. To populate data into any Actuarial Cash Flows, Calculations, and Result Areas Summary Tables Dimension table, execute the SCD batch. For a detailed procedure, see Slowly Changing Dimension (SCD) Process.

- 2. To check the SCD batch execution status of any Actuarial Cash Flows, Calculations, and Result Areas Summary Tables Dimension table, follow the procedure Check the Execution Status of the SCD
 Batch.
- **3.** To verify log files, and check the error messages (if any), follow the procedure <u>Verify Log Files and Check Error Messages</u>.

30.5 Populating Actuarial Cash Flows, Calculations, and Result Areas Summary T2T Result Tables

Follow this T2T process to populate data into any Actuarial Cash Flows, Calculations, and Result Areas Summary T2T Result table:

NOTE

You can also follow this T2T process to populate data into any Hive related Actuarial Cash Flows, Calculations, and Result Areas Summary T2T Result table.

- **1.** To populate data into any Actuarial Cash Flows, Calculations, and Result Areas Summary T2T Result table, execute the batch for T2T. For a detailed procedure, see:
 - a. Prerequisites for loading T2T.
 - **b.** Set the Run Parameters.
 - **c.** Save the Run Parameters.
 - d. Execute the Batch for T2T.
- **2.** To check the T2T batch execution status of the Actuarial Cash Flows, Calculations, and Result Areas Summary Result tables, follow the procedure Check the Batch Execution Status of T2T.
- To verify log files, and check the error messages (if any), follow the procedure <u>Verify T2T Log Files</u> and <u>Check Error Messages</u>.

31 Common Customer Summary Tables

This chapter provides information about Common Customer Summary tables in the Data Foundation application and step-by-step instructions to use this section.

This chapter includes the following topics:

- About Dimension Tables that Loads Common Customer Summary T2T
- About T2Ts (Result Tables) that Loads Common Customer Summary T2T
- About Common Customer Summary T2T (Result Table)
- Deploying Common Customer Summary Tables on Hive
- Populating Common Customer Summary T2T Result Tables

Common Customer Summary table stores attributes pertaining to customer related data on an 'as-is' basis received from the source system. Customer balances are derived from account summary. Customer relationship table derives the relationship between accounts and customers. Common customer summary data is populated for all the active customers in customer dimension.

31.1 About Dimension Tables that Loads Common Customer Summary T2T

Common Customer Summary Dimension table names and their description are given here.

Logical Dimension Table Name	Dimension Table Description
Channel Dimension	This table stores the master list of all unique codes that denote channels through which customers can be acquired.
Education Dimension	This table stores the details of education master information of a customer.
Geography Dimension	This table stores the distinct list of all geographical locations, where any of the transaction channels of the Insurance Company are located.
Industry Dimension	This table stores industry information.
Account Management Dimension	This table stores the organization hierarchy details across the management.
Migration Reasons Dimension	This table stores reasons for deviation.
Vintage Dimension	This table stores vintage definitions.
Customer Dimension	This table stores the list of the customers and counterparties, and their attributes of an organization
Profession Dimension	This table stores the master list of all customer professions.
Marital Status Dimension	This table stores customer marital status details.
Customer Type Dimension	This table stores the master list of customer types.
Credit Rating Dimension	This table stores credit rating information.

The mapping details for the Common Customer Summary Dimension tables are given here.

Map Reference Number	Source Table Name	Logical Stage Table Name	Dimension Table Name	Logical Dimension Table Name
21	STG_SALES_CHANN EL_MASTER	Stage Sales Channel Master	DIM_CHANNEL	Channel Dimension
40	STG_CUST_EDUCATI ON_MASTER	Stage Customer Education Master	DIM_EDUCATION	Education Dimension
47	STG_GEOGRAPHY_M ASTER	Stage Geography Master	DIM_GEOGRAPHY	Geography Dimension
51	STG_INDUSTRY_MA STER	Stage Industry Master	DIM_INDUSTRY	Industry Dimension
62	STG_ACCOUNT_MG MT_MASTER	Stage Account Management Master	DIM_MANAGEMEN T	Account Management Dimension
68	STG_MIGRATION_RE ASON_MASTER	Stage Migration Reason Master	DIM_MIGRATION_ REASONS	Migration Reasons Dimension
116	STG_VINTAGE_MAS TER	Stage Vintage Master	DIM_VINTAGE	Vintage Dimension
335	VW_STG_PARTY_MA STER_CUST	Stage Party Master Customer View	DIM_CUSTOMER	Customer Dimension
344	STG_PROFESSION_M ASTER	Stage Profession Master	DIM_PROFESSION	Profession Dimension
389	STG_MARITAL_STAT US_MASTER	Stage Marital Status Master	DIM_MARITAL_ST ATUS	Marital Status Dimension
418	STG_PARTY_TYPE_ MASTER	Stage Party Type Master	DIM_CUSTOMER_ TYPE	Customer Type Dimension
466	STG_CREDIT_RATIN G_MASTER	Stage Credit Rating Master	DIM_CREDIT_RATI NG	Credit Rating Dimension

31.2 About T2Ts (Result Tables) that Loads Common Customer Summary T2T

T2T for Common Customer Summary and its description is given here.

T2T Name	T2T Description
T2T_FCT_PARTY_RATING_DETAILS	This T2T stores the rating details of the Customer or Counterparty or Guarantor etc.

T2T Name	T2T Description
T2T_FCT_PARTY_FINANCIALS	This T2T stores the financial information (Balance Sheet, Profit and Loss statement, and Ratios) of the parties like Customer and Guarantor.

The mapping details for T2Ts to load Common Customer Summary is given here.

Source Table Name	Logical Stage Table Name	Fact Table Name	Logical Fact Table Name	T2T Name
STG_PARTY_RATI	Stage Party	FCT_PARTY_RATI	Fact Party Rating	T2T_FCT_PARTY_RATING_
NG_DETAILS	Rating Details	NG_DETAILS	Details	DETAILS
STG_PARTY_FIN	Stage Party	FCT_PARTY_FINA	Fact Party Financials	T2T_FCT_PARTY_FINANCI
ANCIALS	Financials	NCIALS		ALS

31.3 About Common Customer Summary T2T (Result Table)

Common Customer Summary T2T and its description is given here.

T2T Name	T2T Description
T2T_FCT_COMMON_CUSTOMER	This T2T stores different attributes pertaining to raw customer data received from the source system.

The mapping details for the Common Customer Summary T2T is given here.

Source Table Name	Logical Stage Table Name	Fact Table Name	Logical Fact Table Name	T2T Name
STG_CUSTOMER _DETAILS	Stage Customer	FCT_COMMON_CUST	Fact Common	T2T_FCT_COMMON_CU
	Details	OMER_SUMMARY	Customer Summary	STOMER

31.4 Deploying Common Customer Summary Tables on Hive

All RDBMS related Common Customer Summary Result table can also be deployed on Hive (Stage and Results on Hive).

NOTE

In general, Stage and Result tables are also supported in Hive. However, there are some exceptions. For a list of tables that are not supported in Hive, see <u>List of Unsupported T2Ts</u>.

31.5 Populating Common Customer Summary T2T Result Tables

Follow these steps to populate data in Common Customer Summary T2T Result tables:

- 1. Prerequisites.
- 2. Populating Common Customer Summary T2T Result Tables.

31.5.1 Prerequisites

To load the resultant tables required for Common Customer Summary T2T, follow these steps:

- 1. Populating Dimension Tables to Load Common Customer Summary T2T.
- 2. Populating T2Ts to Load Common Customer Summary T2T.
- 3. Populating Other Tables to Load Common Customer Summary T2T.

31.5.1.1 Populating Dimension Tables to Load Common Customer Summary T2T

For Dimension mapping details for this section, see <u>About Dimension Tables that Loads Common</u> <u>Customer Summary T2T</u>. Follow this SCD process to populate data into any Dimension tables that are used to load Common Customer Summary T2Ts:

NOTE

You can also follow this SCD process to populate data into any Hive related Common Customer Summary Dimension table.

- 1. To populate data into any Dimension table (required to load Common Customer Summary T2T), execute the SCD batch. For a detailed procedure, see <u>Slowly Changing Dimension (SCD) Process</u>.
- **2.** To check the SCD batch execution status of a Dimension table (required to load Common Customer Summary T2T), follow the procedure <u>Check the Execution Status of the SCD Batch</u>.
- **3.** To verify log files, and check the error messages (if any), follow the procedure <u>Verify Log Files and Check Error Messages</u>.

31.5.1.2 Populating T2Ts to Load Common Customer Summary T2T

For T2T mapping details for this section, see <u>About T2Ts (Result Tables) that Loads Common Customer Summary T2T</u>. Follow this T2T process to populate data into any T2T that is required to load data into Common Customer Summary T2T:

- 1. To populate data into any Common Customer Summary T2T Result table, execute the batch for T2T. For a detailed procedure, see:
 - a. Prerequisites for loading T2T.
 - **b.** Set the Run Parameters.
 - c. Save the Run Parameters.

- **d.** Execute the Batch for T2T.
- **2.** To check the T2T batch execution status of the Common Customer Summary Result tables, follow the procedure <u>Check the Batch Execution Status of T2T</u>.
- **3.** To verify log files, and check the error messages (if any), follow the procedure <u>Verify T2T Log Files</u> and <u>Check Error Messages</u>.

31.5.1.3 Populating Other Tables to Load Common Customer Summary T2T

Load these tables with data:

DIM_BANDS

To follow Dimension loading process, see <u>Populating Dimension Tables to Load Common Customer Summary T2T</u>.

DIM_GENDER

To follow Dimension loading process, see <u>Populating Dimension Tables to Load Common Customer</u> Summary T2T.

FCT_COMMON_ACCOUNT_SUMMARY

For mapping details, see <u>Other Common Account Summary Tables</u> and <u>Common Policy Summary T2T Tables</u>.

To follow T2T process, see Populating T2Ts to Load Common Customer Summary T2T.

31.5.2 Populating Common Customer Summary T2T Result Tables

Follow T2T process to populate data into any Common Customer Summary T2T Result table:

NOTE

You can also follow this T2T process to populate data into any Hive related Common Customer Summary T2T Result table.

For T2T mapping details for this section, see <u>About Common Customer Summary T2T (Result Table)</u>. To follow the T2T process, see <u>Populating T2Ts to Load Common Customer Summary T2T</u>.

32 Auto Insurance Tables

This chapter details the Auto Insurance tables in the Oracle Insurance Data Foundation application.

This chapter contains the following topics:

- About Auto Insurance Dimension Tables
- About Auto Insurance T2T Result Tables
- Deploying Auto Insurance Tables on Hive
- Populating Auto Insurance Dimension Tables
- Populating Auto Insurance T2T Result Tables

Auto Insurance tables store details of the policy related to the auto insurance contracts. The OIDF application supports auto insurance contracts for individual vehicles and a fleet of vehicles.

To load an Auto Insurance Contract in OIDF, follow these steps:

- 1. The key components in the Auto Insurance Contract structure are the details related to the vehicle, inspection, inspection report, driver, driver's license, and the Contract itself. Under the Contract component, the user must choose the Property and Casualty Product Processor.
- **2.** Based on the Policy ID, load Dimensions for the vehicle, and the type of the vehicle body, seat belt, engine, lease, tyre, interior material, and the vehicle purpose.
- 3. Inspection is done based on whether the policy is new or if it must be renewed, or is it a claim request. The policy renewal is additionally based on the extent of the vehicle damage. Now, load the vehicle inspection details. If a vehicle is exempt from inspection, then load the Vehicle Inspection Exempt Reason Dimension with the reasons for exemption. The inspection progress must be monitored and therefore, load the vehicle inspection status details.
- **4.** The vehicle inspection details and the vehicle inspection status are used to rate the vehicle. Load the vehicle rating information.
- 5. Load the Driver Dimension details.
- 6. Load the driver license and driver's license status details.
- 7. Use the mapping table to find the relationship between the claim, driver, and vehicles.
- **8.** Use the mapping table to find the relationship between the policy, driver, and vehicles.

32.1 About Auto Insurance Dimension Tables

The Auto Insurance dimension table names with description are as follows.

Logical Dimension Table Name	Dimension Table Description
Vehicle Dimension	Stores the vehicle details included in the policies and claims.
Vehicle Body Type Dimension	Stores the vehicle body type details. There are different sets of values for different types of vehicles. For example, values can be a two-door sedan, two-door hatchback, five-door sedan, and so on.

Logical Dimension Table Name	Dimension Table Description
Vehicle Rating Dimension	Stores the vehicle rating details. Even when the vehicle ratings are prepared internally, they are handled through a common underwriter or rating agencies.
Vehicle Tonage Capacity Dimension	Stores the tonnage capacity ratings details. For different jurisdictions, there are different ratings and groupings of tonnage capacity.
Vehicle Seat Belt Type Dimension	Stores the seat belt details available in the vehicle. Sample values: Active, None, PassBoth, PassDrv, and SeatAir.
Vehicle Damage Type Dimension	Stores the nature or type of vehicle damage as provided by the inspection conducting party. Sample values: BUMPF, RFELF, RFERF, RGRIL, RHOOD, ROOF, and so on.
Vehicle Engine Type Dimension	Stores the engine type details. Sample values: D, E, G, H, N, O, P, TD, and TG.
Vehicle Lease Type Dimension	Stores the ownership or leased status details of the vehicle. Sample values: L, N, and O.
Vehicle Purpose Dimension	Stores the code details that identify the predominant use of the vehicle. Sample values: AC, BU, CL, CM, COM, CP, DC, DO, DU, DW, E, FH, FM, G, OT, PL, PS, and so on.
Vehicle Tyre Type Dimension	Stores the code details that identify the tyre suitable for the vehicle. Sample values: Basic, Discount, and Surcharged.
Driver Dimension	Stores the basic details of the vehicle driver such as name, date of birth, gender, and so on.
Driver License Dimension	Stores the license and eligibility details of the driver with the type of goods in the carriage.
Driving License Status Dimension	Stores the license status details of the driver. Sample values: A, N, P, AP, and T.
Insurance Driver Status Dimension	Stores the insurance driver status code details. Sample values: DD, E, N, and U.
Inspection Status Dimension	Stores the code details that indicate the vehicle inspection status. Sample values: 3 is inspection completed on a timely basis, damage; 4 is inspection not completed on a timely basis resulting in a gap in coverage, damage, and so on.
Vehicle Inspection Exempt Reason Dimension	Stores the code details that indicate the reason the vehicle was exempt from inspection. Sample values: A is a new vehicle from a dealer with a bill of sale or RMV1, B if the Applicant qualifies as an existing customer, and so on.

Logical Dimension Table Name	Dimension Table Description
Vehicle Interior Material Type Dimension	Stores the code details that indicate the material type used in the vehicle.
	Sample values: CLOTH, LEATH, OT, and VINYL.
Vehicle Operator Experience Dimension	Stores the code details that describe the experience required for the vehicle operators or drivers.
	Sample values: NOLL, NONE, NPLL, and POLL.
Vehicle Performance Type Dimension	Stores the code details that indicate the vehicle performance level.
	Sample values: BASIC, H, INMDT, P, and S.

The mapping details for the Auto Insurance dimension tables are as follows.

Map Reference Number	Source Table Name	Logical Stage Table Name	Dimension Table Name	Logical Dimension Table Name
256	STG_VEHICLE_M ASTER	Stage Vehicle Master	DIM_VEHICLE	Vehicle Dimension
688	STG_VEHICLE_B ODY_TYPE_MAS TER	Stage Vehicle Body Type Master	DIM_VEHICLE_B ODY_TYPE	Vehicle Body Type Dimension
689	STG_VEHICLE_R ATING_MASTER	Stage Vehicle Rating Master	DIM_VEHICLE_R ATING	Vehicle Rating Dimension
690	STG_VEH_TONA GE_CAPACITY_ MASTER	Stage Vehicle Tonage Capacity Master	DIM_VEHICLE_T ONAGE_CAPACI TY	Vehicle Tonage Capacity Dimension
774	STG_VEH_SEAT_ BELT_TYPE_MA STER	Stage Vehicle Seat Belt Type Master	DIM_VEH_SEAT_ BELT_TYPE	Vehicle Seat Belt Type Dimension
775	STG_VEHICLE_D AMAGE_TYPE_ MASTER	Stage Vehicle Damage Type Master	DIM_VEHICLE_D AMAGE_TYPE	Vehicle Damage Type Dimension
776	STG_VEHICLE_E NGINE_TYPE_M ASTER	Stage Vehicle Engine Type Master	DIM_VEHICLE_E NGINE_TYPE	Vehicle Engine Type Dimension
777	STG_VEHICLE_L EASE_TYPE_MA STER	Stage Vehicle Lease Type Master	DIM_VEHICLE_L EASE_TYPE	Vehicle Lease Type Dimension
778	STG_VEHCILE_P URPOSE_MASTE R	Stage Vehicle Purpose Master	DIM_VEHICLE_P URPOSE	Vehicle Purpose Dimension

Map Reference Number	Source Table Name	Logical Stage Table Name	Dimension Table Name	Logical Dimension Table Name
779	STG_VEHICLE_T YRE_TYPE_MAS TER	Stage Vehicle Tyre Type Master	DIM_VEHICLE_T YRE_TYPE	Vehicle Tyre Type Dimension
765	STG_PARTY_MA STER	Stage Party Master	DIM_DRIVER	Driver Dimension
766	STG_DRIVER_LIC ENSE_MASTER	Stage Driver License Master	DIM_DRIVER_LIC ENSE	Driver License Dimension
767	STG_DRIVING_LI C_STATUS_MAS TER	Stage Driving License Status Master	DIM_DRIVING_LI C_STATUS	Driving License Status Dimension
768	STG_INS_DRIVE R_STATUS_MAS TER	Stage Insurance Driver Status Master	DIM_INS_DRIVE R_STATUS	Insurance Driver Status Dimension
769	STG_INSPECTIO N_STATUS_MAS TER	Stage Inspection Status Master	DIM_INSPECTIO N_STATUS	Inspection Status Dimension
770	STG_VEH_INSP_ EXMPT_RSN_M ASTER	Stage Vehicle Inspection Exemption Reason Master	DIM_VEH_INSP_ EXMPT_RSN	Vehicle Inspection Exempt Reason Dimension
771	STG_VEH_INTRR _MAT_TYPE_MA STER	Stage Vehicle Interior Material Type Master	DIM_VEH_INTRR _MAT_TYPE	Vehicle Interior Material Type Dimension
772	STG_VEH_OPER ATR_EXPRNCE_ MASTER	Stage Vehicle Operator Experience Master	DIM_VEH_OPER ATR_EXPRNCE	Vehicle Operator Experience Dimension
773	STG_VEH_PERF RMANCE_TYPE_ MASTER	Stage Vehicle Performance Type Master	DIM_VEH_PERF RMANCE_TYPE	Vehicle Performance Type Dimension

32.2 About Auto Insurance T2T Result Tables

The Auto Insurance T2Ts with description are as follows.

T2T Name	T2T Description
T2T_FCT_CLAIM_DRIVER_VEHICLE_MAP	Stores the relationship details between the claim, driver, and vehicles.

T2T Name	T2T Description
T2T_FCT_POLICY_DRIVER_VEHICLE_MAP	Stores the relationship details between the policy, driver, and vehicles.
T2T_FCT_POLICY_VEHICLE_RATING_DTL S	Stores the vehicle rating details. Even when the vehicle ratings are prepared internally, they are handled through a common underwriter or rating agencies.
T2T_FCT_DRIVER_LICENSE_DETAILS	Stores the basic details of the vehicle driver.
T2T_FCT_DRIVER_DETAILS	Stores the license details of the driver.
T2T_FCT_VEHICLE_DETAILS	Stores the vehicle details.
T2T_FCT_VEHICLE_INSPECTION_DETAILS	Stores the vehicle inspection details for the purpose of insurance renewal, cancellation, or for any claims made.

The mapping details for the Auto Insurance T2Ts are as follows.

Source Table Name	Logical Stage Table Name	Fact Table Name	Logical Fact Table Name	T2T Name
STG_CLAIM_DR IVER_VEHICLE_ MAP	Stage Claim Driver Vehicle Map	FCT_CLAIM_DRIVE R_VEHICLE_MAP	Fact Claim Driver Vehicle Map	T2T_FCT_CLAIM_DRI VER_VEHICLE_MAP
STG_POLICY_D RIVER_VEHICLE _MAP	Stage Policy Driver Vehicle Map	FCT_POLICY_DRIV ER_VEHICLE_MAP	Fact Policy Driver Vehicle Map	T2T_FCT_POLICY_DRI VER_VEHICLE_MAP
STG_POLICY_V EHICLE_RATIN G_DTLS	Stage Policy Vehicle Rating Details	FCT_POLICY_VEHI CLE_RATING_DTL S	Fact Policy Vehicle Rating Details	T2T_FCT_POLICY_VE HICLE_RATING_DTLS
STG_DRIVER_D ETAILS	Stage Driver Details	FCT_DRIVER_DET AILS	Fact Driver Details	T2T_FCT_DRIVER_DE TAILS
STG_DRIVER_LI CENSE_DETAIL S	Stage Driver License Details	FCT_DRIVER_LICE NSE_DETAILS	Fact Driver License Details	T2T_FCT_DRIVER_LIC ENSE_DETAILS
STG_VEHICLE_ DETAILS	Stage Vehicle Details	FCT_VEHICLE_DET AILS	Fact Vehicle Details	T2T_FCT_VEHICLE_D ETAILS
STG_VEHICLE_I NSPECTION_DE TAILS	Stage Vehicle Inspection Details	FCT_VEHICLE_INS PECTION_DETAILS	Fact Vehicle Inspection Details	T2T_FCT_VEHICLE_IN SPECTION_DETAILS

32.3 Deploying Auto Insurance Tables on Hive

All the RDBMS-related Auto Insurance Dimension tables and Auto Insurance Result tables can also be deployed on Hive (Stage and Results on Hive).

NOTE

In general, Stage and Result tables are also supported in Hive. However, there are a few exceptions. For the list of tables that are not supported in Hive, see the <u>List of Unsupported T2Ts</u> section.

32.4 Populating Auto Insurance Dimension Tables

The SCD process to populate data into any Auto Insurance dimension table is as follows:

NOTE

You can also follow this SCD process to populate data into any Hive-related Auto Insurance dimension table.

- **1.** To populate data into any Auto Insurance dimension table, execute the SCD batch. For a detailed procedure, see the <u>Slowly Changing Dimension (SCD) Process</u> section.
- **2.** To check the SCD batch execution status of an Auto Insurance dimension table, follow the procedure in the <u>Check the Execution Status of the SCD Batch</u> section.
- **3.** To verify the log files and check the error messages (if any), follow the procedure in the <u>Verify Log Files and Check Error Messages</u> section.

32.5 Populating Auto Insurance T2T Result Tables

The T2T process to populate data into any Auto Insurance T2T Result tables is as follows:

NOTE

You can also follow this T2T process to populate data into any Hive-related Auto Insurance T2T Result table.

- 1. To populate data into any Auto Insurance T2T Result table, execute the batch for T2T. For a detailed procedure, see the following sections:
 - a. Prerequisites for loading T2T
 - **b.** Set the Run Parameters
 - c. Save the Run Parameters
 - d. Execute the Batch for T2T
- **2.** To check the T2T batch execution status of the Auto Insurance Result tables, follow the procedure in the Check the Batch Execution Status of T2T section.
- 3. To verify the log files and check the error messages (if any), follow the procedure in the <u>Verify T2T</u> Log Files and Check Error Messages section.

33 Credit Score Model and Probability of Default Model Tables

This chapter provides information about Credit Score Model and Probability of Default Model tables in the Data Foundation application and step-by-step instructions to use this section.

This chapter includes the following topics:

- About Credit Score Model and Probability of Default Model T2Ts (Result Tables)
- Staging Data Expectation for Credit Score Model
- About Mapper for Credit Score Model to Regulatory Credit Score Model
- Maintenance of Mapper for Credit Score Model to Regulatory Credit Score Model
- Prerequisites for Mapper Maintenance
- Possible Mapping Combinations
- One-to-One Mapping
- Many-to-One Mapping
- Loading Mapper Maintenance through Backend
- Deploying Credit Score Model and Probability of Default Model Tables on Hive
- Populating Credit Score Model and Probability of Default Model T2T Result Tables

33.1 About Credit Score Model and Probability of Default Model T2Ts (Result Tables)

Credit Score Model and Probability of Default Model T2Ts and their description are given here.

T2T Name	T2T Description
T2T_FCT_ACCT_CREDIT_SCORE_DETAILS	This T2T stores the details of the credit score of account throughout its lifetime.
T2T_FCT_SERV_ACCT_CREDIT_SCORE_DTL	This T2T stores the details of the credit score of serviced account throughout its lifetime.
T2T_FCT_PARTY_PD_DETAILS	This T2T stores the probability of default values as of given date for all relevant Party.
T2T_FCT_INSTRUMENT_PD_DETAILS	This T2T stores the probability of default values as of given date for all relevant instruments.

The mapping details for the Credit Score Model and Probability of Default Model T2Ts are given here.

Source Table Name	Logical Stage Table Name	Target Table Name	Logical Fact Table Name	T2T Definition Name
STG_ACCT_CREDI T_SCORE_DETAIL S	Stage Account Credit Score details	FCT_ACCT_CREDIT_ SCORE_DETAILS	Fact Account Credit Score details	T2T_FCT_ACCT_CRED IT_SCORE_DETAILS
STG_SERV_ACCT_ CREDIT_SCORE_D TL	Stage Service Account Credit Score Detail	FCT_SERV_ACCT_CR EDIT_SCORE_DTL	Fact Service Account Credit Score Detail	T2T_FCT_SERV_ACCT _CREDIT_SCORE_DTL
STG_PARTY_PD_D ETAILS	Stage Party Probability of Default Details	FCT_PARTY_PD_DET AILS	Fact Party Probability of Default Details	T2T_FCT_PARTY_PD_ DETAILS
STG_INSTRUMENT _PD_DETAILS	Stage Instrument Probability of Default Details	FCT_INSTRUMENT_ PD_DETAILS	Fact Instrument Probability of Default Details	T2T_FCT_INSTRUME NT_PD_DETAILS

33.1.1 Staging Data Expectation for Credit Score Model

Stage Account Credit Score Details and Stage Service Account Credit Score Details tables expect data incrementally and not in snapshot mode.

For example: Account-1 loaded on Day-1 with Model-1 and Score-1need not be loaded everyday till data gets changed. However, the Reporting tables Fact Account Credit Score Details and Fact Service Account Credit Score Details are mapped to reports in snapshot mode. In the T2T process, latest records available on a daily basis for a given account and model are picked and loaded to the Reporting tables.

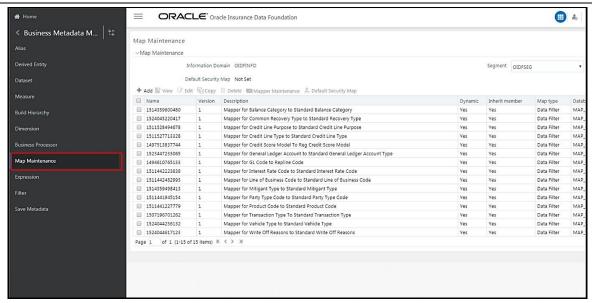
33.2 About Mapper for Credit Score Model to Regulatory Credit Score Model

Credit Score Model dimension table is a slowly changing dimension (SCD), which has user-specific values for available credit score models. Regulatory Credit Score Model dimension table is a seeded dimension, which has the reporting specific values for regulatory reporting requirements. There is one column in the tables Fact Account Credit Score Details table and Fact Service Account Credit Score Details, which stores Regulatory Credit Score Model Surrogate Key (SKey). This column is populated through a mapper table maintained through Mapper Maintenance Component of OFSAAI.

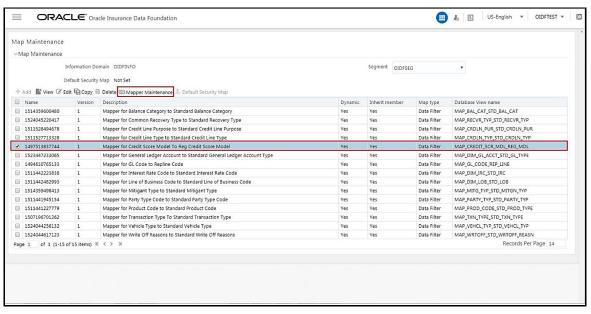
33.3 Maintenance of Mapper for Credit Score Model to Regulatory Credit Score Model

To maintain Mapper for Credit Score Model to Regulatory Credit Score Model, perform these steps.

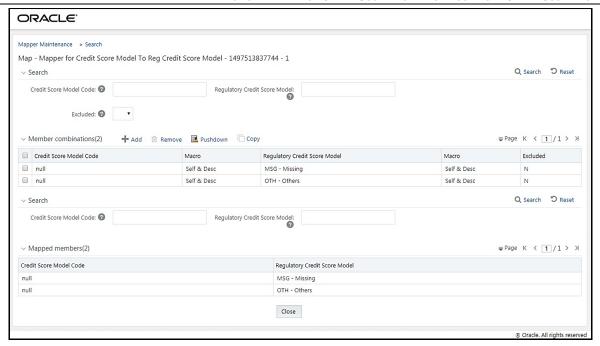
1. Go to OFSAAI > Oracle Insurance Data Foundation > Unified Analytical Metadata > Business Metadata Management > Map Maintenance.



2. The Map Maintenance page appears. Select Mapper for Credit Score Model to Regulatory Credit Score Model. Click Mapper Maintenance icon.



3. The Mapper Maintenance window appears. OIDF Maps OTH and MSG out-of-the-box for this mapper. The remaining Mappings can be maintained by the user according to user specific values.



33.3.1 Prerequisites for Mapper Maintenance

- 1. Load Credit Score Model Dimension using SCD.
- **2.** Resave the following hierarchies:
 - HSCRMDL1 Credit Score Model Code
 - HSCRMDL2 Regulatory Credit Score Model

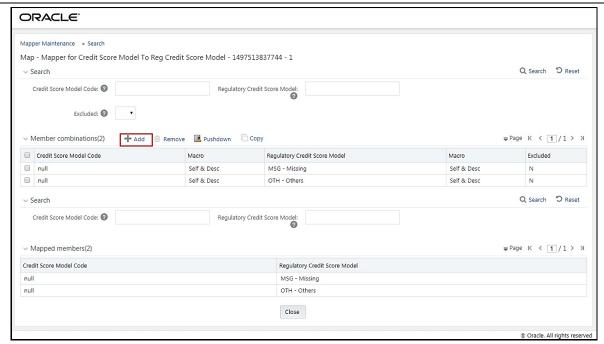
33.3.2 Possible Mapping Combinations

One Credit Score Model in source can be mapped only to one Regulatory Credit Score Model. One to Many or Many to Many mapping will lead to error in T2T as the records will be duplicated. The possible combinations for Credit Score Model to Regulatory Credit Score Model mapping are One to One and Many to One mappings.

33.3.2.1 One-to-One Mapping

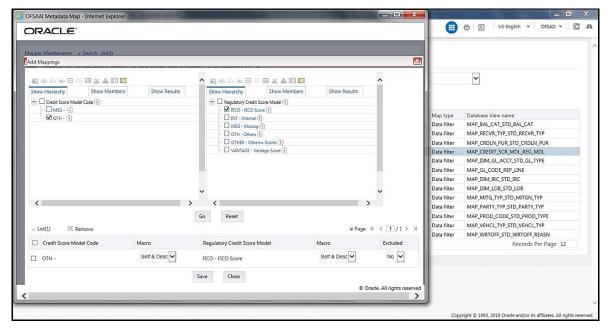
One Credit Score Model can be mapped to one Regulatory Credit Score Model using the Mapper Maintenance screen. Here, you need to select one Credit Score Model and one Regulatory Credit Score Model. This means the corresponding data in Stage Account Credit Score Details Credit Score Model column for the selected Credit Score Model will be loaded into Fact Account Credit Score Details Regulatory Credit Score Model column while loading the T2T.

1. In the Mapper Maintenance window, click Add.

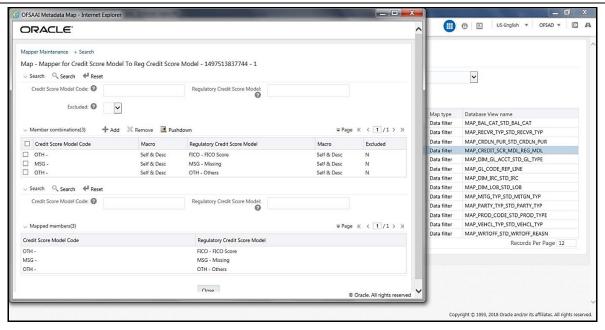


2. The Add Mappings pop-up window is displayed.

In this example, OTH - Others is mapped to FICO - FICO Score. To map, click Go and then to save the mapping, click Save.



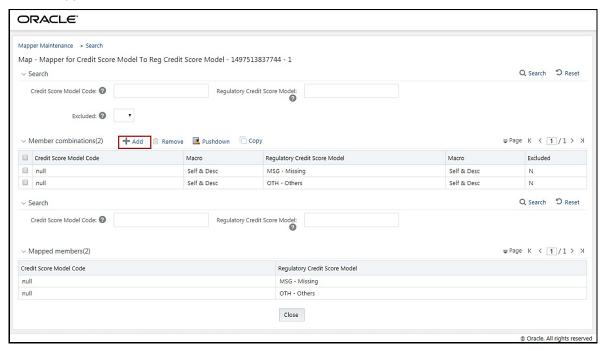
- **3.** An acknowledgement is displayed. Click Yes to confirm.
- **4.** The Mapped Members are displayed in the Mapper Maintenance Screen.



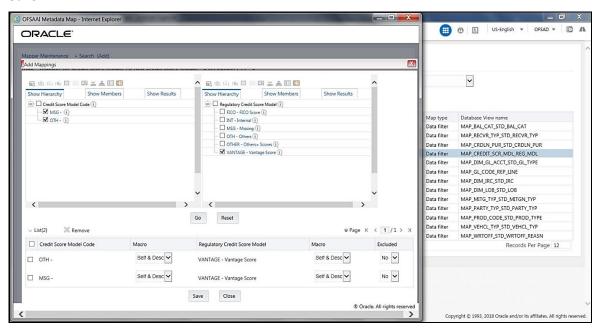
33.3.2.2 Many-to-One Mapping

Many Credit Score Models can be mapped to one Regulatory Credit Score Model using the Mapper Maintenance screen. Here, you need to select two or more Credit Score Models and one Regulatory Credit Score Model. This means the corresponding data in Stage Account Credit Score Details Credit Score Model column for the selected Credit Score Models will be loaded into Fact Account Credit Score Details Regulatory Credit Score Model column while loading the T2T.

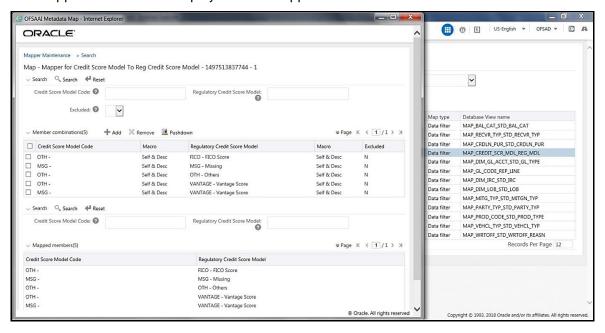
1. In the Mapper Maintenance window, click Add.



2. The Add Mappings pop-up window is displayed. In this example, MSG – Missing and OTH - Others are mapped to VANTAGE - Vantage Score. To map, click Go and then to save the mapping, click Save.



- **3.** An acknowledgement is displayed. Click Yes to confirm.
- **4.** The Mapped Members are displayed in the Mapper Maintenance Screen.



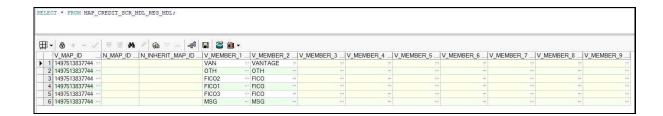
33.4 Loading Mapper Maintenance through Backend

Load the MAP_CREDIT_SCR_MDL_REG_MDL table in Atomic Schema with V_MAP_ID as 1497513837744, V_MEMBER_1 => Credit Score Model Code (values from DIM_CREDIT_SCORE_MODEL.V_CREDIT_SCORE_MODEL_CODE), V_MEMBER_2 => Regulatory

Credit Score Model Code (values from DIM_REG_CREDIT_SCORE_MODEL.V_REG_CREDIT_SCORE_MODEL_CODE).

NOTE

These values are actual business key columns and not display codes.



33.5 Deploying Credit Score Model and Probability of Default Model Tables on Hive

All RDBMS related Credit Score Model and Probability of Default Model Result tables can also be deployed on Hive (Stage and Results on Hive).

NOTE

In general, Stage and Result tables are also supported in Hive. However, there are some exceptions. For a list of tables that are not supported in Hive, see <u>List of Unsupported T2Ts</u>.

33.6 Populating Credit Score Model and Probability of Default Model T2T Result Tables

Follow this T2T process to populate data into any Credit Score Model and Probability of Default Model T2T Result table:

NOTE

You can also follow this T2T process to populate data into any Hive related Credit Score Model and Probability of Default Model T2T Result table.

- **1.** To populate data into any Credit Score Model and Probability of Default Model T2T Result table, execute the batch for T2T. For a detailed procedure, see:
 - a. Prerequisites for loading T2T.
 - **b.** Set the Run Parameters.
 - c. Save the Run Parameters.
 - **d.** Execute the Batch for T2T.

- **2.** To check the T2T batch execution status of the Credit Score Model and Probability of Default Model Result tables, follow the procedure <u>Check the Batch Execution Status of T2T</u>.
- **3.** To verify log files, and check the error messages (if any), follow the procedure <u>Verify T2T Log Files</u> and <u>Check Error Messages</u>

34 Other Miscellaneous Tables

This chapter provides information about populating various other Results tables in the Oracle Insurance Data Foundation application and step-by-step instructions to use this section.

This chapter includes the following topics:

- About Other Result T2Ts (Result T2Ts)
- Deploying Other Result Tables on Hive
- Populating Other T2T Result Tables

Other Results tables store Party details related to fixed assets, spend obligations and assets sold. These tables are used for the purpose of financial report of the party or organization.

34.1 About Other Result T2Ts (Result T2Ts)

Other Result T2Ts and their description are given here.

T2T Name	T2T Description
T2T_FCT_ASSETS_SOLD	This T2T stores the data of assets sold over a period.
T2T_FCT_FIXED_ASSETS	This T2T stores the details pertaining to fixed assets such as real estate.
T2T_FCT_SPEND_OBLIGATIONS	This T2T stores the contract codes for purchase obligations such as long duration IT contract signed by Insurance Company or other spend obligations such as lease contracts.

The mapping details for the Other Result T2Ts are given here.

Source Table Name	Logical Stage Table Name	Fact Table Name	Logical Fact Table Name	T2T Name
STG_ASSETS_SOLD	Stage Assets Sold	FCT_ASSETS_SOL D	Fact Assets Sold	T2T_FCT_ASSETS_SOLD
STG_FIXED_ASSETS_ DETAILS	Stage Fixed Assets Details	FCT_FIXED_ASSE TS	Fact Fixed Assets	T2T_FCT_FIXED_ASSET S
STG_SPEND_OBLIGA TIONS	Stage Spend Obligations	FCT_SPEND_OBLI GATIONS	Fact Spend Obligations	T2T_FCT_SPEND_OBLIG ATIONS

34.2 Deploying Other Result Tables on Hive

All RDBMS related Other Result tables can also be deployed on Hive (Stage and Results on Hive).

NOTE

In general, Stage and Result tables are also supported in Hive. However, there are some exceptions. For a list of tables that are not supported in Hive, see <u>List of Unsupported T2Ts</u>.

34.3 Populating Other T2T Result Tables

Follow this T2T process to populate data into Other T2T Result tables:

NOTE

You can also follow this T2T process to populate data into any Hive related Other T2T Result table.

- **1.** To populate data into any Other T2T Result table, execute the batch for T2T. For a detailed procedure, see:
 - a. Prerequisites for loading T2T.
 - **b.** Set the Run Parameters.
 - **c.** Save the Run Parameters.
 - **d.** Execute the Batch for T2T.
- **2.** To check the T2T batch execution status of the Other Result tables, follow the procedure <u>Check the</u> Batch Execution Status of T2T.
- **3.** To verify log files, and check the error messages (if any), follow the procedure <u>Verify T2T Log Files</u> and <u>Check Error Messages</u>.

35 Transaction Summary Tables

This chapter provides information about Transaction Summary tables in the Oracle Insurance Data Foundation application and step-by-step instructions to use this section.

This chapter includes the following topics:

- About Transaction Summary T2T (Result Table)
- Deploying Transaction Summary Result Tables on Hive
- Populating Transaction Summary T2T Result Tables

The Fact Transaction Summary stores data from the stage transactions table for further operation reporting. The data is moved through a T2T process from stage to fact, which ensures that the stage data is available in a single table in the result area.

35.1 About Transaction Summary T2T (Result Table)

Transaction Summary T2Ts and their description are given here.

T2T Name	T2T Description
T2T_STG_ANNUITY_TXNS_FTS	This T2T stores the details of annuity transactions.
T2T_STG_BORROWINGS_TXNS_FTS	This T2T stores the details of borrowing transactions.
T2T_STG_CREDIT_DERIVATIVES_TXNS_FTS	This T2T stores the details of credit derivatives transactions.
T2T_STG_FOREX_TXNS_FTS	This T2T stores the details of Forex account transactions.
T2T_STG_FUTURES_TXNS_FTS	This T2T stores the details of futures contract transactions.
T2T_STG_GUARANTEES_TXNS_FTS	This T2T stores the details of guarantees transactions.
T2T_STG_INVESTMENT_TXNS_FTS	This T2T stores the details of investment transactions.
T2T_STG_LOAN_CONTRACT_TXNS_FTS	This T2T stores transactions that occurred on loan contracts.
T2T_STG_MM_TXNS_FTS	This T2T stores details of money market transactions.
T2T_STG_MUTUAL_FUNDS_TXNS_FTS	This T2T stores details of mutual fund transactions.
T2T_STG_OPTION_CONTRACTS_TXNS_FTS	This T2T stores details of option contracts transactions.
T2T_STG_RETIREMENT_ACCOUNTS_TXNS_FT S	This T2T stores the details of transactions that occurred on Retirement accounts.
T2T_STG_SWAP_ACCOUNT_TXNS_FTS	This T2T stores the details of swap account transactions.
T2T_STG_TRUSTS_TXNS_FTS	This T2T stores the details of transactions that occurred on trust accounts.
T2T_STG_COMMODITIES_TXNS_FTS	This T2T stores the details of commodity transactions.
T2T_STG_CUSTODIAN_ACCOUNT_TXNS_FTS	This T2T stores the details of transactions for a custodian account.
T2T_STG_REPO_TRANSACTIONS_FTS	This T2T stores the details of repurchase and reverse repurchase transactions.

The mapping details for the Transaction Summary T2Ts are given here.

Source Table Name	Logical Stage Table Name	Fact Table Name	Logical Fact Table Name	T2T Name
STG_ANNUITY_TXN	Stage Annuity	FCT_TRANSACTIO	Fact Annuity	T2T_STG_ANNUITY_TX
S	Transactions	N_SUMMARY	Transactions	NS_FTS
STG_BORROWINGS	Stage Borrowings	FCT_TRANSACTIO	Fact Transaction	T2T_STG_BORROWING
_TXNS	Transactions	N_SUMMARY	Summary	S_TXNS_FTS
STG_CREDIT_DERIV ATIVES_TXNS	Stage Credit Derivatives Transactions	FCT_TRANSACTIO N_SUMMARY	Fact Transaction Summary	T2T_STG_CREDIT_DERI VATIVES_TXNS_FTS
STG_FOREX_TXNS	Stage Forex	FCT_TRANSACTIO	Fact Transaction	T2T_STG_FOREX_TXNS
	Transactions	N_SUMMARY	Summary	_FTS
STG_FUTURES_TXN	Stage Futures	FCT_TRANSACTIO	Fact Transaction	T2T_STG_FUTURES_TX
S	Transactions	N_SUMMARY	Summary	NS_FTS
STG_GUARANTEES	Stage Guarantees	FCT_TRANSACTIO	Fact Transaction	T2T_STG_GUARANTEE
_TXNS	Transactions	N_SUMMARY	Summary	S_TXNS_FTS
STG_INVESTMENT_	Stage Investment	FCT_TRANSACTIO	Fact Transaction	T2T_STG_INVESTMEN
TXNS	Transactions	N_SUMMARY	Summary	T_TXNS_FTS
STG_LOAN_CONTR	Stage Loan Contract	FCT_TRANSACTIO	Fact Transaction	T2T_STG_LOAN_CONT
ACT_TXNS	Transactions	N_SUMMARY	Summary	RACT_TXNS_FTS
STG_MM_TXNS	Stage Money Market	FCT_TRANSACTIO	Fact Transaction	T2T_STG_MM_TXNS_F
	Transactions	N_SUMMARY	Summary	TS
STG_MUTUAL_FUN	Stage Mutual Funds	FCT_TRANSACTIO	Fact Transaction	T2T_STG_MUTUAL_FU
DS_TXNS	Transactions	N_SUMMARY	Summary	NDS_TXNS_FTS
STG_OPTION_CON TRACTS_TXNS	Stage Option Contracts Transactions	FCT_TRANSACTIO N_SUMMARY	Fact Transaction Summary	T2T_STG_OPTION_CO NTRACTS_TXNS_FTS
STG_RETIREMENT_ ACCOUNTS_TXNS	Stage Retirement Accounts Transactions	FCT_TRANSACTIO N_SUMMARY	Fact Transaction Summary	T2T_STG_RETIREMENT _ACCOUNTS_TXNS_FT S
STG_SWAP_ACCOU	Stage Swap Account	FCT_TRANSACTIO	Fact Transaction	T2T_STG_SWAP_ACCO
NT_TXNS	Transactions	N_SUMMARY	Summary	UNT_TXNS_FTS
STG_TRUSTS_TXNS	Stage Trusts	FCT_TRANSACTIO	Fact Transaction	T2T_STG_TRUSTS_TXN
	Transactions	N_SUMMARY	Summary	S_FTS
STG_COMMODITIES _TXNS	Stage Commodities	FCT_TRANSACTIO	Fact Transaction	T2T_STG_COMMODITI
	Transactions	N_SUMMARY	Summary	ES_TXNS_FTS
STG_CUSTODIAN_A CCOUNT_TXNS	Stage Custodian Account Transactions	FCT_TRANSACTIO N_SUMMARY	Fact Transaction Summary	T2T_STG_CUSTODIAN_ ACCOUNT_TXNS_FTS
STG_REPO_TRANS	Stage Reporting	FCT_TRANSACTIO	Fact Transaction	T2T_STG_REPO_TRAN
ACTIONS	Transactions	N_SUMMARY	Summary	SACTIONS_FTS

35.2 Deploying Transaction Summary Result Tables on Hive

All RDBMS related Transaction Summary Result tables can also be deployed on Hive (Stage and Results on Hive).

NOTE

In general, Stage and Result tables are also supported in Hive. However, there are some exceptions. For a list of tables that are not supported in Hive, see <u>List of Unsupported T2Ts</u>.

35.3 Populating Transaction Summary T2T Result Tables

Follow this T2T process to populate data into Transaction Summary T2T Result tables:

NOTE

You can also follow this T2T process to populate data into any Hive related Transaction Summary T2T Result table.

- **1.** To populate data into any Transaction Summary T2T Result table, execute the batch for T2T. For a detailed procedure, see:
 - a. Prerequisites for loading T2T.
 - **b.** Set the Run Parameters.
 - **c.** Save the Run Parameters.
 - d. Execute the Batch for T2T.
- **2.** To check the T2T batch execution status of the Transaction Summary Result tables, follow the procedure Check the Batch Execution Status of T2T.
- **3.** To verify log files, and check the error messages (if any), follow the procedure <u>Verify T2T Log Files</u> and <u>Check Error Messages</u>.

36 Big Data in OIDF

This chapter provides information about Big Data processing supported in the Oracle Insurance Data Foundation application.

The following topics are included:

- About Big Data in OIDF
- OIDF Big Data Architecture
- About Staging and Results on Hive
- About Staging on Hive and Results on RDBMS
- Staging and Results on Hive
- Modifications
- Workarounds
- <u>List of Supported SCDs and T2Ts</u>
- List of Unsupported T2Ts
- Executing Run through Run Management for Hive

36.1 About Big Data in OIDF

OIDF supports Big Data processing on HDFS (Hadoop Distributed File System) using Hive as Query Engine. The AAI application components such as SCD, H2H, and DQs provide equivalent Hive support. For more information, see OFS Analytical Applications Infrastructure User Guide.

36.2 OIDF Big Data Architecture

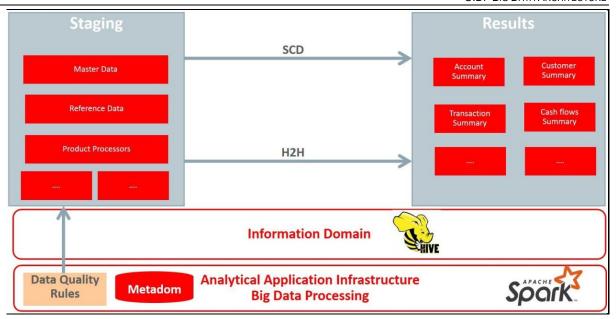
In Big Data processing, OIDF provides two types of deployment processes for Hive support. They are:

- Staging and Results on Hive
- Staging on Hive and Results on Oracle

36.2.1 About Staging and Results on Hive

In the Staging and Results on Hive deployment process, the Staging, and Results model elements are a part of Hive known as Hive Datadom. The config schema definitions used by AAI and certain metadata definitions that were part of Atomic schema now resides in a RDBMS schema known as Metadom. Refer to the below architecture diagram for the representation of this deployment process.

OIDF Big Data Architecture - Staging and Results on Hive



For the list of supported OIDF Hive Metadata definitions, refer to Run Chart, SCD Metadata, and Technical Metadata (Staging Source) documents at My Oracle Support.

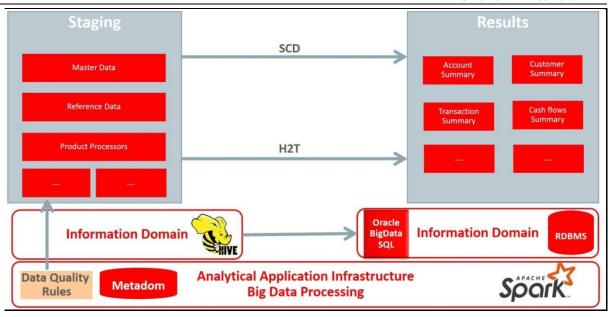
NOTE

Ensure that String values, which are null, must contain \n and then source to Hive stage tables.

36.2.2 About Staging on Hive and Results on RDBMS

In the Staging on Hive and Results on RDBMS deployment process, the Staging occurs on Hive, known as Hive Datadom, and the Results model elements are a part of RDBMS, known as RDBMS Datadom. In this deployment process, an additional software is required, which is Oracle BigData SQL (For more information, see Oracle Insurance Data Foundation Installation Guide Release 8.0.9.0.0 in OHC). Oracle BigData SQL software resides on Hive and RDBMS Datadoms, and enables the user to create a link to Hive Stage tables as external tables in RDBMS. This software manages the data representation of the Hive tables in RDBMS Datadom and can be accessed as external table objects. As a result, enables the use of RDBMS infrastructure components of SCD, T2T, and DQs. For more information on External Tables, see the section Verifying Oracle's External Tables Utility in the Oracle Insurance Data Foundation Installation Guide Release 8.0.9.0.0. Refer to the below architecture diagram for the representation of this deployment process.

OIDF Big Data Architecture - Staging on Hive and Results on RDBMS



36.3 Staging and Results on Hive

This section provides information about the Staging and Results on Hive.

36.3.1 Modifications

Modifications in OIDF Hive (Staging and Results on Hive deployment process) compared to OIDF RDBMS are:

Dim Dates Population

The Dim Dates functionality in Hive is similar to that of RDBMS. The difference exists in the date input format on the UI. In OIDF Hive, the Date Range input format is, an executable textbox contains .sh file name followed by the FROM and TO dates.

For example:

load-dimdates-run.sh, 20110101, 20110105

36.3.2 Workarounds

The list of workarounds in OIDF Hive (Staging and Results on Hive deployment process) is:

• The process of data access, modification, and representation is different in HDFS compared to that of RDBMS. Therefore, the mechanism for Data Protection also varies.

Workarounds:

Data Redaction

The process of enabling Data Redaction for Hive can be performed using CDH Manager (Cloudera Distribution Hadoop Manager). For more information, see the section Sensitive Data Redaction in the Cloudera Security Guide.

Right to Forget

The Right to Forget feature enhancement is planned for future releases. However, prior to loading in the Hive instance, Anonymization of Party PII data can be done at the source. This process provides the flexibility to secure the PII information, and in addition, to drop the PII upon a request from the Party.

Mappers are supported using AM/HM screens in OIDF (RDBMS). However, development of the
underlying functionality for AM/HM feature in OIDF Hive is planned for future releases. Therefore,
the Mappers will be supported during future releases.

Workaround:

The Views defined on these Mappers in RDBMS are converted to Tables in Hive. Therefore, these Mappers must be loaded manually:

- MAP_BAL_CAT_STD_BAL_CAT
- MAP_CRDLN_PUR_STD_CRDLN_PUR
- MAP_CRDLN_TYP_STD_CRDLN_TYP
- MAP_CREDIT_SCR_MDL_REG_MDL
- MAP_DIM_GL_ACCT_STD_GL_TYPE
- MAP_DIM_IRC_STD_IRC
- MAP_DIM_LOB_STD_LOB
- MAP_GL_CODE_REP_LINE
- MAP_MITG_TYP_STD_MITGN_TYP
- MAP_PARTY_TYP_STD_PARTY_TYP
- MAP_PROD_CODE_STD_PROD_TYPE
- MAP_RECVR_TYP_STD_RECVR_TYP
- MAP_VEHCL_TYP_STD_VEHCL_TYP
- MAP_WRTOFF_STD_WRTOFF_REASN

NOTE

Hierarchies are supported using AM/HM screens in OIDF (RDBMS). However, development of the underlying functionality for AM/HM feature in OIDF Hive is planned for future releases. As a result, the tables REV_BIHIER and REV_LOCALE_HIER will be available in Hive, when the Hierarchies will be supported during future releases.

Data is not populated in the target table FSI_INTRA_COMPANY_ACCOUNT.

Workaround:

FSI_REG_LEGAL_ENTITY_HIER load references POP_REG_LE_HIER DT, which is not supported in OIDF Hive. FSI_REG_LEGAL_ENTITY_HIER must be loaded to make use of the T2T for FSI_REG_LEGAL_ENTITY_HIER because that T2T consists of an inner join on FSI_REG_LEGAL_ENTITY_HIER.

Similarly, Dimension tables for Unsupported SCDs must be loaded to make use of the T2Ts that reference them.

• In Hive, the exchange rates population for cross currencies is not being derived using exchange rates values for a base currency.

Workaround:

Source the corresponding Exchange Rate value.

• When performing Big Data installation for OIDF Hive, the following error is logged in the file OIDF installation.log:

Error:ORA-00942: table or view does not exist

ORA-06512: at "<Atomic_Schema_Name>.FSI_CREATE_SEQUENCE", line 6

Workaround:

This error can be ignored.

36.3.3 List of Supported SCDs and T2Ts

This section provides the list of supported SCDs and T2Ts for OIDF Hive (Staging and Results on Hive deployment process).

36.3.3.1 List of Supported SCDs

The SCDs for Hive used in Data Foundation solutions are listed in the Oracle Insurance Data Foundation for Hive - SCD Metadata for Hive spreadsheet under <u>Technical Metadata for OIDF HIVE 8.0.9.0.0</u>.

36.3.3.2 Run Enabled T2Ts

To execute SOURCED_RUN and EXE_RUN in Run Management, follow these steps:

- 1. Navigate to the Run Management section. Select the required Run (SOURCED_RUN or EXE_RUN) to execute.
- **2.** Select all required values.
- **3.** Save the batch.
- **4.** Query DIM_RUN in Metadom. Copy the resultant entry and insert in the DIM_RUN table of Datadom.
- **5.** In the Batch Execution screen, execute Run.

36.3.3.3 List of Supported T2Ts

The T2Ts for Hive used in Data Foundation solutions are listed in the Oracle Insurance Data Foundation for Hive - Technical Metadata (Staging Source) spreadsheet under <u>Technical Metadata for OIDF HIVE</u> 8.0.9.0.0.

36.3.4 List of Unsupported T2Ts

This is the list of unsupported T2Ts for OIDF Hive (Staging and Results on Hive deployment process):

- T2T_FCT_PARTY_FAMILY_MEDICAL_DA
- T2T_FCT_PARTY_MDCAL_CONDITN_DTL
- T2T_FCT_POLICY_TRANSACTIONS_HLD
- T2T_FCT_POLICY_TRANSACTIONS_ISS
- T2T_FPT_STG_RETIREMENT_ACCOUNTS_TXNS
- T2T_FPT_STG_PROP_CASU_POLICY_TXNS
- T2T_FPT_STG_LIFE_INS_POLICY
- T2T_FPT_STG_HEALTH_INS_TXNS
- T2T_FPT_STG_ANNUITY_TXNS
- T2T_FCT_APPLICATION_DOCUMENT
- T2T_FCT_APPLICNS_DOC_PRINT_LOG
- T2T_FCT_PARTY_EMPLOYMENT_DETAILS
- T2T_FCT_PRDCR_INS_DISTRBTION_DTLS

36.3.5 Executing Run through Run Management for Hive

To load data in OIDF Hive, use Solo or Consolidated run execution in Run Management. For detailed information, see the chapter Executing Run through Run Management.

37 Metadata Browser

This chapter provides information about Metadata Browser in the Data Foundation application and step-by-step instructions to use this section.

This chapter includes the following topics:

- Overview
- Object View
- Metadata Publish
- Metadata Object to Application Map

37.1 Overview

Metadata Browser (MDB) with an Object and an Application view, provides a common repository of metadata objects created in Oracle Financial Services Analytical Applications Infrastructure (OFSAAI) and Oracle Financial Services Analytical Applications (OFSAA) hosted in OFSAAI. Using this view, you can identify the usage of base objects in higher level objects and the mapping of Objects to Application. It enables traceability and impact analysis to the user. It also allows users to view the data flow and the work flow of the application and understand the usage of objects within the application.

The visualization of MDB supports Application view and Object view. In Application view, you can browse through the metadata created using the Applications hosted in OFSAAI. In object view, you can view the metadata created in OFSAAI.

37.2 Object View

Object view provides the detailed view of the Object. It comprises of basic details, detailed properties, dependencies, usage in higher level Object and Applications consuming the Metadata objects. Object view provides the option to navigate to its dependent or higher level usage objects. Object view enables the user to identify the usage and its dependencies across other objects.

Following are the steps to be followed to migrate the Objects to the metamodel structure: The Object view will provide the following areas in Financial Service Data Foundation:

- Data Foundation Metadata
- Target Data Model
- Data Mapping
- Data File Mapping
- Data Transformation
- Data Quality Rules
- Data Quality Groups
- Process Metadata
- Process

37.3 Metadata Publish

In order to publish the relevant metadata object to the metamodel structure, a seeded batch name <Infodom>_MDB has to be executed.

Post successful publish, all the objects can be viewed in the Metadata browser. This step will need to done on regular basis to ensure that metamodel is in sync with underlying metadata.

37.4 Metadata Object to Application Map

To map all the objects the Financial Service data foundation application, a batch name <Infodom>_ MDB_OBJECT_APPLN_MAP has to be executed.

38 Recommendation for Backdated Run

This chapter provides information about performing a backdated Run in the Data Foundation application and step-by-step instructions to use this section.

There are scenarios that require Run executions for a prior date due to reasons such as, Backdated Regulatory Return Submission or Backdated Management Report Generation, etc.

This chapter includes the following topics:

- Overview of Backdated Run Execution
- Required Changes
- Recommendations

38.1 Overview of Backdated Run Execution

Backdated Run Execution is similar to any regular Run Execution in Data Foundation. You must reload or correct the data, which must be loaded for the given prior date. Refer to <u>Oracle Insurance Data Foundation Runchart</u> and execute the relevant Batches/Runs for the required prior date.

38.2 Required Changes

The following are the prerequisites for Backdated Run Execution:

- 1. Handling Slowly Changing Dimensions (SCDs)
 - Ensure that all SCD executions for the given prior date or period is happened / completed with valid records in all the SCD dimensions. Record Start Date and Record End Date columns must have values.
- 2. Handling T2T Joins

By default, all out-of-the-box T2Ts have Joins with SCD dimensions using latest record indicator. This must be modified to pick the correct record using Record Start Date and Record End Date columns of SCD dimension.

38.3 Recommendations

Modifying T2T Joins using Record Start Date and Record End Date columns causes poor performance due to comparison of multiple dates in the query. The following are the recommendations:

- 1. Copy the existing T2T definitions and modify the Joins to pick Record Start Date and Record End Date instead of latest record indicator.
- 2. Copy Record Start Date and Record End Date of the existing Data Foundation Process (under Run Rule Framework) which loads T2T and replace them with new T2T definitions changed above.
- 3. Whenever a backdated Run is required, modify the Run definition without changing the Run ID to pick the modified Process.

NOTE

It is recommended to use this only when there is Backdated Run requirement. Any normal sequential days execution can be performed using out-of-the-box T2Ts and Runs as it results in better performance.

38.4 Backdated Run Execution using Latest Record Indicator (LRI) batch

A new Data Transformation batch UPDATE_BACK_DATED_DIM_LRI is created. This batch supports Backdated Run execution in the Latest Record Indicator (LRI) dimension table. The task in the UPDATE_BACK_DATED_DIM_LRI batch updates LRI Dimension Table for a given Dimension Table and for a given FIC_MIS_DATE. When this batch is triggered for a given FIC_MIS_DATE, the SKeys are updated with the new LRI flag value (F_LATEST_RECORD_INDICATOR = Y/N).

To execute Backdated Run using LRI batch:

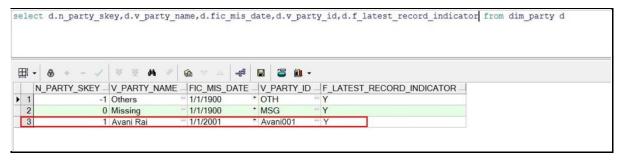
1. Add the required data records to their Master table and for the required FIC_MIS_DATE. For example, added two records to STG_PARTY_MASTER. The resultant image is shown below.



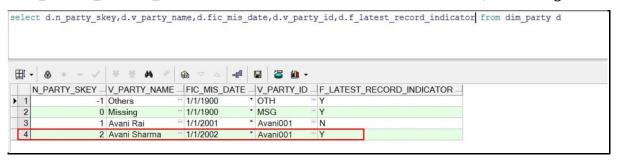
NOTE

Ensure that V_PARTY_ID is same in this step and the LRI batch execution step.

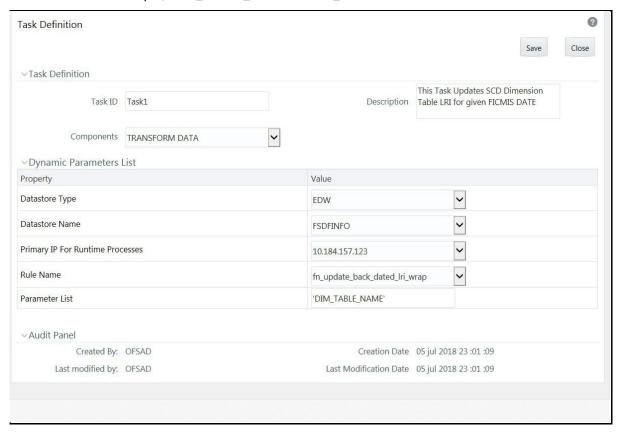
2. Execute the SCD batch to add the required records from Master table to its Dimension table with the required FIC_MIS_DATEs. For example, executed SCD batch to add records from STG_PARTY_MASTER to DIM_PARTY. The resultant data record in the DIM_PARTY is as shown below:



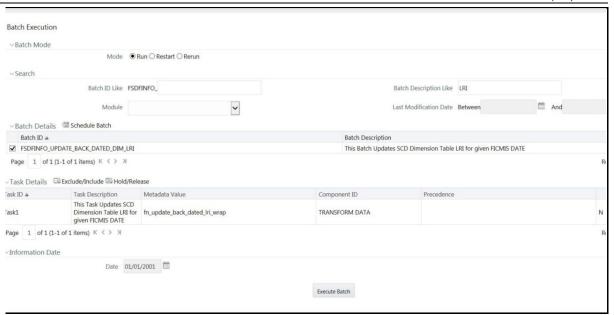
- After adding the first record to DIM_PARTY for the FIC_MIS_DATE 1/1/2001, the flag F_LATEST_RECORD_INDICATOR associated with this data record is set to Y.
- After adding the second record to DIM_PARTY for the FIC_MIS_DATE 1/1/2002, the flag F_LATEST_RECORD_INDICATOR associated with this data record is set to Y, and the flag



- F_LATEST_RECORD_INDICATOR associated with the previous data record (with FIC_MIS_DATE 1/1/2001) is set to N automatically.
- 3. In Batch Maintenance, add a Task for the LRI Dimension table. In the Parameter List field, mention the Dimension table name ('DIM_TABLE_NAME') for which Backdated Run using LRI must be executed. In this example, 'DIM_TABLE_NAME' = 'DIM_PARTY'.

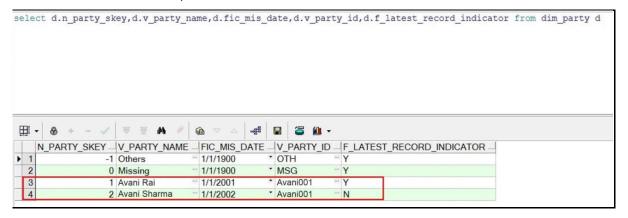


4. In the Batch Execution window, execute the UPDATE_BACK_DATED_DIM_LRI batch for different FIC_MIS_DATEs.



The following are the examples of data record after running the LRI batch with different FIC_MIS_DATEs:

The image depicts execution of the UPDATE_BACK_DATED_DIM_LRI batch for a backdated record for its FIC_MIS_DATE. Therefore, this record is the Latest Record. In the following image, the LRI batch is executed for the data record with historical FIC_MIS_DATE 1/1/2001. Therefore, the flag F_LATEST_RECORD_INDICATOR associated with FIC_MIS_DATE 1/1/2001 is set to Y. This data record is flagged as the Latest Record, and will be used as default by the system for all future transactions and processes.



To change the default data selection, execute the UPDATE_BACK_DATED_DIM_LRI batch for the required data record for its FIC_MIS_DATE. In the following image, the batch is executed for the data record with FIC_MIS_DATE 1/1/2002. Therefore, the flag F_LATEST_RECORD_INDICATOR associated with this FIC_MIS_DATE 1/1/2002 is set to Y and this data record is now flagged as the Latest Record. This record will be used as default by the system for all future transactions and processes. The flag select d.n party skey,d.v party name,d.fic mis date,d.v party id,d.f latest record indicator from dim party d



F_LATEST_RECORD_INDICATOR associated with the earlier default data record (with FIC_MIS_DATE 1/1/2001) is set automatically to N, indicating that the record with FIC_MIS_DATE 1/1/2001 is not the Latest Record anymore.

5. Monitor the status of the batch in the Batch Monitor screen.

39 Compare Data Model Reports

This chapter provides information about comparing Data Model Reports of two release versions in the Data Foundation application and step-by-step instructions to use this feature.

The first section gives you an understanding of the Data Model Report extracted from the erwin Data Modeling tool. The Comparing Data Model Reports section details the steps to use the OFSAA application and download the Difference Report between two Data Model release versions.

This chapter includes the following topics:

- Creating Data Model Report from erwin
- Extracting Data Model Report from erwin
- Comparing Data Model Reports

39.1 Creating Data Model Report from erwin

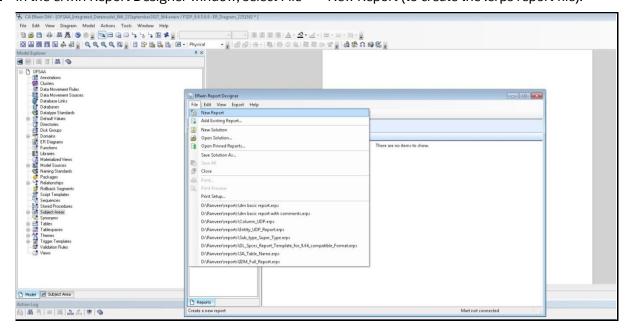
You can create new Data Model Reports from the erwin Data Modeling tool if there are no .eprs files to extract the information.

NOTE

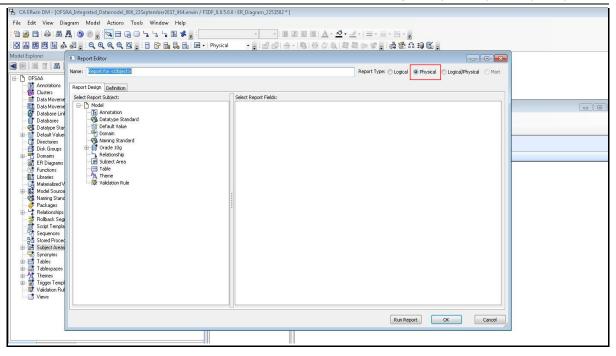
If the Data Model Reports are existing, see Extracting Data Model Report from erwin for more information.

Perform the following steps to extract the Data Model Report form erwin Data Modeling tool:

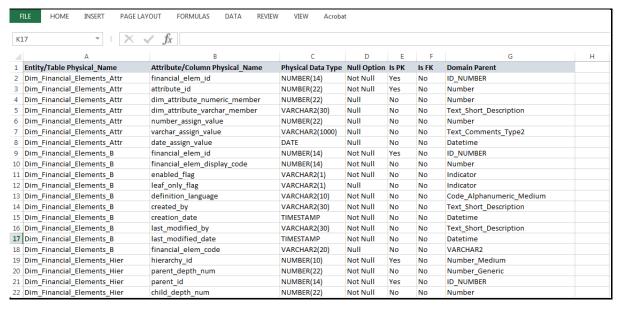
1. In the erwin Report Designer window, select File --> New Report (to create the .erps report file).



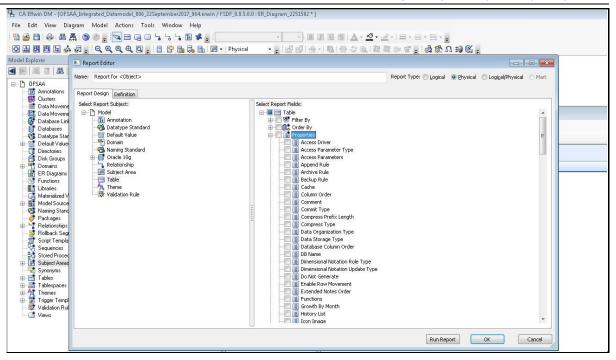
2. In the Report Editor window Select Report Type as Physical --> Select Report Subject as Table.



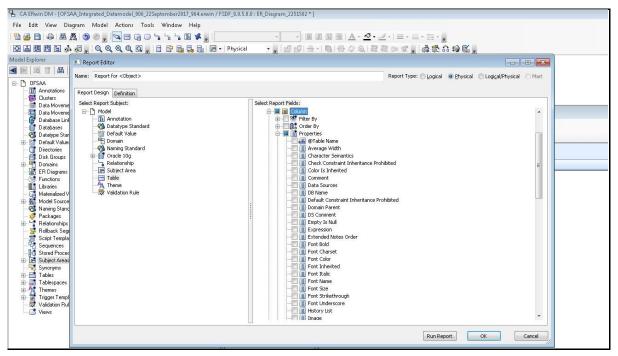
3. Select the Report Fields to match the sample Data Model Report shown as follows:



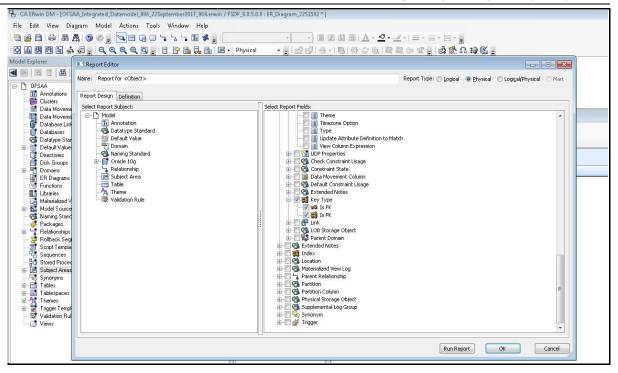
4. Go to Table > Properties, select Physical Name (Entity/Table Physical_Name).



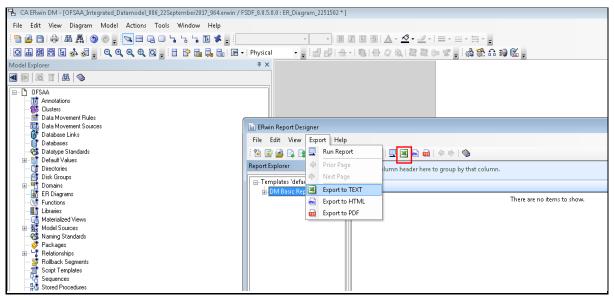
5. Go to Table > Column, select Physical Name (Attribute/Column Physical_Name), Physical Data Type, Null Option, and Domain Parent.



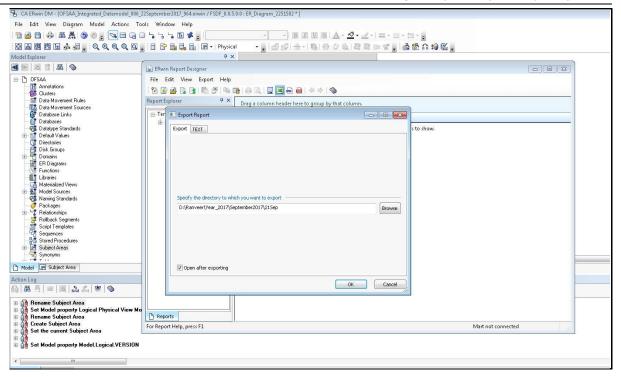
6. Go to Table > Key Type, select Is PK and Is FK. Click OK.



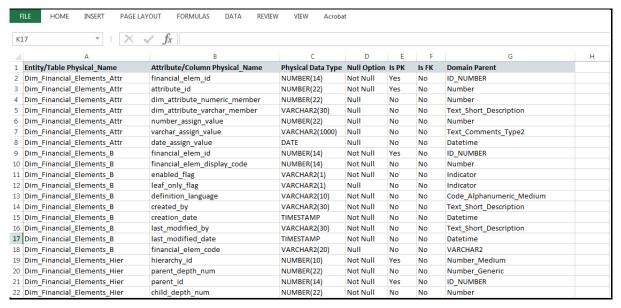
7. In the erwin Report Designer window, select Export > Export to Text (Excel Format) or the XL icon.



8. Enter or Browse the Export file path where you want to save the Data Model Report file.



9. The generated Data Model Report file will open and must be in the following format.



NOTE Ensure that the file is saved in .xlsx format.

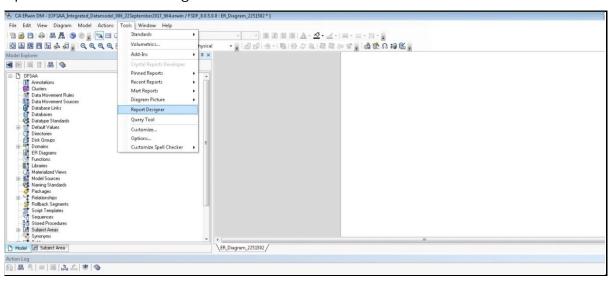
39.2 Extracting Data Model Report from erwin

OIDF is a collection of data model artifacts delivered as erwin files or can be extracted as .XLS file from erwin Data Modeling tool. OIDF hence requires a license of the erwin Data Modeling tool.

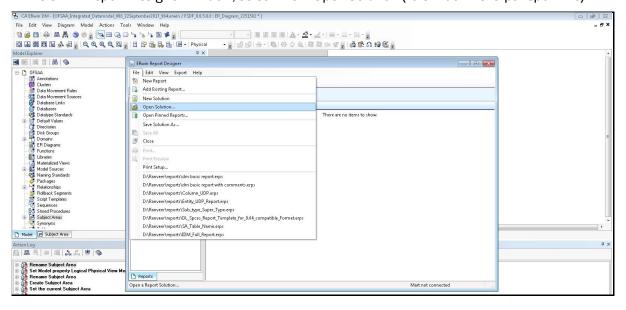
erwin is the current and only supported modeling tool to view and edit the model. Currently, the minimum version of erwin supported is 9.8.

Perform the following steps to extract the Data Model Report form erwin Data Modeling tool:

1. Open the Erwin Data Modeling tool.

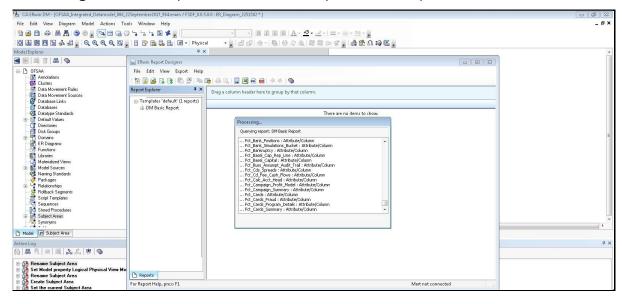


- **2.** Select Tools > Report Designer from the Menu bar.
- 3. In the erwin Report Designer window, select File > Open Solution (to extract the .erps report file).





- **4.** Browse the path of the .erps file, select the file and click Open.
- 5. The existing Data Model Report file is extracted and processed to export the file in XL format.



6. The generated Data Model Report file in XL format is opened. Save the file in .xlsx format.

39.3 Comparing Data Model Reports

Perform the following steps to extract the Data Model Report form erwin Data Modeling tool:

- 1. Open the OFSA Application with your login credentials.
- 2. In the Object Administration tab, select Object Administration > Utilities > Compare Models.



3. Browse the Old Data Model Report Excel File and New Data Model Report Excel File respectively. The Compare button is displayed.

NOTE

The Old Data Model Report and New Data Model Report must be in same format and file extension must be .xlsx

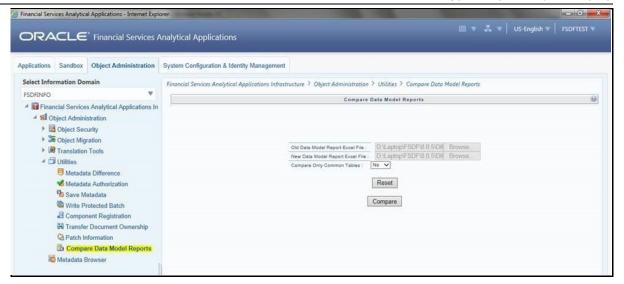
Click Reset if you want to select a different Data Model Report.

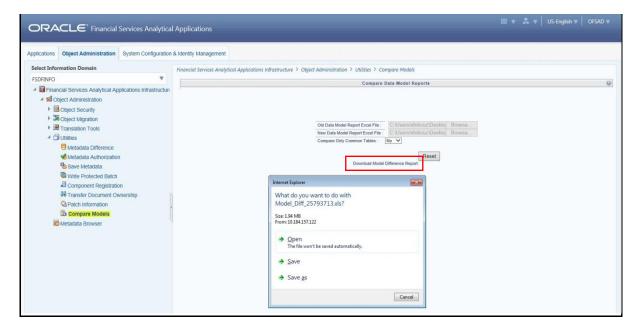
4. The Compare Only Common Tables option is "No" by default, select "Yes" only if required.

NOTE

The Compare Only Common Tables option "Yes" is used when comparing Data Model Report of different products. The Report fields will be different for each product and only common fields are required to compare for investigation.

5. Click Compare. The Data Model Difference Report is generated.





6. Click Download Model Difference Report link and Save the report.

40 Data Quality Rules Execution

This chapter provides information about Data Quality Rules Execution in the Oracle Insurance Data Foundation application and step-by-step instructions to use this section.

This chapter includes the following topics:

- Data Quality Framework
- Data Quality Rules For Staging Tables
- Data Quality Groups for Staging Tables

40.1 Data Quality Framework

Data Quality Framework consists of a scalable rule-based engine which uses a single-pass integration process to standardize, match, and duplicate information across global data. Data Quality Framework within the Infrastructure system facilitates you to define rules and execute them to query, validate, and correct the transformed data existing in an Information Domain.

You can access Data Quality Framework by expanding the Data Integrator Framework within the Unified Metadata Manager section in tree structure of LHS menu.

Data Quality Framework consists of the following sections:

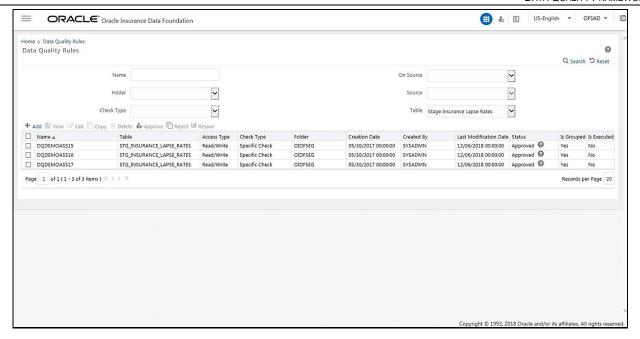
- Data Quality Rules
- Data Quality Groups Summary

40.1.1 Data Quality Rules

Data Quality Rules within the Data Integrator framework of Infrastructure system facilitates you to create a DQ (Data Quality) definition and define nine specific validation checks based on Range, Data Length, Column Reference/Specific Value, List of Value/Code, Null Value, Blank Value, Referential Integrity, Duplicity, and Custom Check/Business. You can also correct data for range, column reference, list of values, null value, and blank value parameters.

The defined Data Quality Rule checks can be logically grouped and executed together. You (Business Analysts) need to have ETL Analyst function role mapped to access the Data Quality Summary framework within the Infrastructure system.

Navigation to Data Quality Rules is Data Management Framework > Data Quality Framework > Data Quality Rules.



The Data Quality Rules screen displays the list of pre-defined Data Quality Rules with the other details such as DQ Name, Table Name, Access Type, Check Type, Folder, Creation Date, Created By, Last Modification Date, and Status of the Rule. A defined rule is displayed in Saved status, until it is Approved/Rejected by the approver. An Approved rule can be grouped in order for execution and a Rejected rule is sent back to the user with the Approver comments.

You can add, view, modify, copy, approve/reject, or delete Data Quality Rules within the Data Quality Rules screen. You can also make use of Search and Pagination options to search for a Data Quality Rule based on DQ Name, Table Name, Folder, or Check Type and view the existing Data Quality Rules within the system.

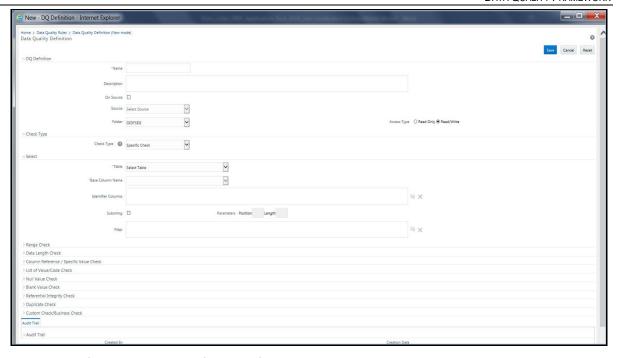
For more information, refer to Oracle Financial Services Analytical Applications Infrastructure User Manual.

40.1.2 Create Data Quality Rule

You can create a Data Quality Rule definition by specifying the DQ Definition details along with the type of validation check on the required table and defining the required validation conditions to query and correct the transformed data.

To create Data Quality Rule in the Data Quality Rules screen:

1. Click Add button in the Data Quality Rules tool bar. Add button is disabled if you have selected any check box in the grid. The Data Quality Definition screen is displayed.



- 2. In the DQ definition section, perform the following:
 - Enter the Name by which you can identify the DQ definition.
 - Enter a description or related information about the definition.
 - Select the Folder (available for selected Information Domain) from the drop down list.
 - Select the Access Type as either Read Only or Read/Write.
- **3.** Select the Check Type from the drop down list. You can mouse-over i icon for information.
 - Select Specific Check, if the defined conditions are based on individual checks on a single column.
 - Select Generic Check, if the defined conditions are based on multiple columns of a single base table. These checks are not pre-defined and can be specified (user-defined) as required.

If Specific Check is selected, perform the following:

- Select Table Name and Base Column Name from the drop down list. The list displays all the tables which are marked for Data Quality Rule in a data model, which has the table classification property code set to 340.
- (Optional) If you have selected Base Column of type Varchar/Char, select the Substring check box, enter numeric values in Parameters Position and Length fields.
- Click the below button and define the Filter condition using the Specify Expression screen.
- Define the required Validation Checks by selecting the appropriate grid and specify the details.
 You can define nine specific validation checks based on Range, Data Length, Column
 Reference/Specific Value, List of Value/Code, Null Value, Blank Value, Referential Integrity,
 Duplicity, and Custom Check/Business.

For more information, refer to Oracle Financial Services Analytical Applications Infrastructure User Manual.

NOTE

A minimum of one Validation check must be defined to generate a query.

- 1. Click Generate Query. The details are validated and the validated query along with the status is displayed in the Generated Query section.
 - If Generic Check is selected, perform the following:
 - Select Table Name from the drop down list. The list displays all the tables which are marked for Data Quality Rule in a data model, which has the table classification property code set to 340.
 - Click the below button and define the Filter condition using the Specify Expression screen.
 - Click Add button in the Condition grid. The Specify Expression screen is displayed. Define the Condition expression.

The Expression is displayed with the "IF" and "Else" conditions along with the Severity status as either Error or Warning. You can change the Severity by selecting from the drop down list.

NOTE

You can add an Assignment only when the Severity is selected as Warning. Assignments are added when you want to correct or update record(s) in base column data / selected column data. There can be one or more assignments tagged to a single condition. However, selecting severity as Error indicates there are no corrections and only facilitates in reporting the quantity of bad records.

2. Select the check box adjacent to the required Condition expression and click Add button in the Assignment grid. The assignment details are populated.

NOTE

You can add an Assignment only if the Severity is Warning. There can be one or more assignments tagged to a single condition.

3. Specify the Assignment details as tabulated.

Field	Description
Column Name	Select the Column Name from the drop down list.
Assignment Type	Select the Assignment Type as one of the following:
	No Assignment: is the default selected assignment which does not have any target column update, but the message details are pushed.
	Direct Value: enter the Assigned Value
	Another Column: select the required Column as Assigned Value from the drop down list.

Field	Description
	Code: select the required Code as Assigned Value from the drop down list if any code / leaf values exist for the selected base column.
	If not, you are alerted with a message indicating that No Code values exist for the selected base column.
Assignment Value	Select the Assignment Value from the drop-down list according to the Assignment Type selected.
Message Severity	Select the Message Severity as either 1 or 2 from the drop down list.
Message	Select the required Message for the Severity from the drop down list.

4. You can also add multiple assignments by clicking Add button in Assignment grid.

NOTE Minimum of one condition needs to be defined to save the Rule.

5. Click Save. The defined Data Quality Rule definition is displayed in the Data Quality Rule Summary screen with the status as "Saved".

40.1.3 View Data Quality Rule

You can view individual Data Quality Rule definition details at any given point.

To view the existing Data Quality Rule definition in the Data Quality Rule Summary screen:

- 6. Select the check box adjacent to the required DQ Name.
- 7. Click View button from the Data Quality Rules tool bar.
- **8.** The DQ Definition screen displays the details of the selected Data Quality definition. The Audit Trail section at the bottom of DQ Definition screen displays metadata information about the Data Quality Rule defined.

40.1.4 Modify Data Quality Rule

You can update the existing Data Quality Rule definition details except for the Definition Name, Table, and Base Column selected.

To update the required Data Quality Rule definition details in the Data Quality Rule Summary screen:

1. Select the check box adjacent to the required DQ Name.

NOTE You can only edit those rules which have status either as Saved or as Rejected.

2. Click Edit button from the Data Quality Rules tool bar. The Edit button is disabled if you have selected multiple DQ Names. The DQ Definition screen is displayed.

- **3.** Update the details as required.
 - For more information, see Create Data Quality Rule section.
- **4.** Click Save to update the changes.

40.1.5 Copy Data Quality Rule

You can copy the existing Data Quality Rule to quickly create a new DQ definition based on the existing rule details or by updating the required parameters.

To copy an existing Data Quality Rule definition in the Data Quality Rule Summary screen:

- 1. Select the check box adjacent to the required DQ Name in the list whose details are to be duplicated.
- 2. Click Copy button from the Data Quality Rules tool bar. Copy button is disabled if you have selected multiple check boxes. The DQ Definition screen is displayed.
- **3.** Edit the DQ definition Name and other details as required. For more information, see Create Data Quality Rule section.
- **4.** Click Save. The defined Data Quality Rule definition is displayed in the Data Quality Rule Summary screen with the status as "Saved".

40.1.6 Approve/Reject Data Quality Rule

You (Authorizer) can Approve a pre-defined Data Quality Rule definition for further execution or Reject an inappropriate DQ definition listed within the Data Quality Rule Summary screen. You should be mapped to DQ Authorizer function role to Approve or Reject a DQ definition.

To Approve/Reject Data Quality Rule in the Data Quality Rule Summary screen:

- 1. Select the checkbox adjacent to the required DQ Name. Ensure that you select the "Saved" DQ definition based on the Status indicated in the Data Quality Rules grid.
- **2.** Perform one of the following:
 - To Approve the DQ definition, click Approve button. The User Comments screen is displayed.
 Enter the notes or additional information to the user and click OK. The selected DQ definition is approved and a confirmation dialog is displayed.
 - To Reject the DQ definition, click Reject button. The User Comments screen is displayed. Enter the notes or additional information to the user and click OK.

The selected DQ definition is rejected and a confirmation dialog is displayed.

NOTE The authorizer can approve/reject only one definition at a time.

The Approved/Rejected status of the DQ definition is indicated in the Status column of the Data Quality Rule Summary screen. You can mouse-over the i button to view the Approver comments in a pop-up.

40.1.7 Delete Data Quality Rule

You can remove Data Quality Rule definition(s) which are created by you and which are no longer required in the system by deleting from Data Quality Rule Summary screen.

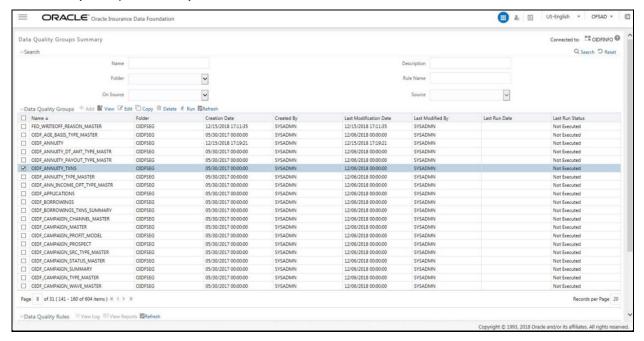
- 1. Select the check box adjacent to the required DQ Name whose details are to be removed.
- 2. Click Delete button from the Data Quality Rules tool bar.
- 3. Click OK to confirm deletion.

40.2 Data Quality Groups Summary

Data Quality Groups Summary within the Data Integrator framework of Infrastructure system facilitates you to logically group the define DQ definitions and schedule for execution. DQ definitions can be executed either through Data Quality Groups Summary screen of Data Integrator framework or in Batch Execution screen of Operations module.

When a Data Quality Group is executed for processing, the details of the execution are captured in a log file. You (Business Analysts) need to have ETL Analyst function role mapped to access the Data Quality Summary framework within the Infrastructure system. You can access Data Quality Groups Summary by expanding the Data Quality framework within the Unified Metadata Manager section in tree structure of LHS menu.

Navigation to Data Quality Groups Summary is Data Management Framework > Data Quality Framework > Data Quality Groups Summary.



The Data Quality Groups Summary screen displays the list of pre-defined Data Quality Groups with the other details such as Group Name, Description, Creation Date, Created By, Last Modification Date, and Last Modified By. You can Create and Execute DQ Group definitions and view, modify, copy, or delete DQ Group definitions within the Data Quality Groups Summary screen.

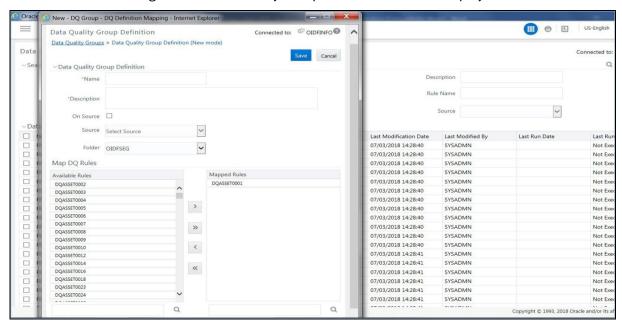
You can also make use of Search and Pagination options to search for a DQ Group definition based on Group Name, Description, or Rule Name and view the existing DQ Group definitions within the system.

40.2.1 Create Data Quality Group

You can create a DQ Group definition by defining the DQ Definition details and mapping the required DQ Rules which are authorized and approved within the system.

To create DQ Group in the Data Quality Groups Summary screen:

1. Click Add button in the Data Quality Groups tool bar. Add button is disabled if you have selected any check box in the grid. The Data Quality Group Definition screen is displayed.



- 2. In the Data Quality Group Definition section, perform the following:
 - Enter the Group Name by which you can identify the DQ Group.
 - Enter a description or related information about the DQ Group.
 - Select the Folder (available for selected Information Domain) from the drop down list.
- 3. In the Map DQ Rules section, perform the following:
 - Select the required DQ Rule from the Available Rules list and click Select. You can also search to select a specific DQ Rule by entering the required keyword and clicking the Find button.
 - To select all the listed DQ Rules, click Select All.
 - You can also deselect a DQ Rule by selecting from the Mapped Rules list and clicking Deselect or clicking Deselect All to deselect all the mapped rules. You can search to deselect a specific DQ Rule by entering the keyword and clicking the Find button. S
- **4.** Click Save. The defined DQ group is listed in the Data Quality Rule Summary screen and can be executed for processing.

40.2.2 Execute Data Quality Group

You can execute a defined DQ Group Definitions along with the mapped Rules and validation checks in the Data Quality Rule Summary screen. You can also execute a DQ Group in the Batch Execution screen of Operations module.

To Execute a DQ Group in the Data Quality Rule Summary screen:

- 1. Select the checkbox adjacent to the required Group Name.
- 2. Click Execute button from the Data Quality Groups tool bar. Execute button is disabled if you have selected multiple check boxes. The Group Execution screen is displayed.
- **3.** In the Batch Details section, perform the following:

Select the MIS Date using the Calendar. MIS Date refers to the date with which the data for the execution would be filtered. In case MIS date is not present in the target table, execution happens ignoring the date parameter.

NOTE

The DQ Batch ID is auto populated and is not editable.

Specify the percentage of Threshold (%) limit in numeric value. This refers to the maximum percentage of records that can be rejected in a job. If the percentage of failed records exceeds the Rejection Threshold, the job will fail. If the field is left blank, the default the value is set to 100%.

- 4. Click Execute. A confirmation message is displayed and the DQ Group is scheduled for execution.
- **5.** Once the DQ Group is executed, you can view the details of the execution along with the log information in the

40.2.3 View Logs screen.

For more information, see View Data Quality Group Summary Log section.

40.2.4 View Data Quality Group

You can view individual Data Quality Group definition details at any given point.

To view the existing DQ Group definition in the Data Quality Group Summary screen:

- **1.** Select the check box adjacent to the required Group Name. The mapped DQ Rules are displayed in the Data Quality Rules section.
- **2.** Click View button from the Data Quality Groups tool bar. The Data Quality Group Definition screen displays the DQ definition details.

40.2.5 Modify Data Quality Group

You can update the existing DQ Group definition details except for the Group Name.

To updated the required DQ Group definition details in the Data Quality Groups Summary screen:

- **1.** Select the check box adjacent to the required Group Name.
- **2.** Click Edit button from the Data Quality Groups tool bar. The Data Quality Group Definition screen is displayed.
- 3. Update the details and click Save to update the changes.

40.2.5.1 Copy Data Quality Group

You can copy the existing DQ Group details to quickly create a new DQ definition based on the existing details or by updating the required parameters.

To copy an existing DQ Group definition in the Data Quality Groups Summary screen:

- 1. Select the check box adjacent to the required Group Name in the list whose details are to be duplicated.
- 2. Click Copy button from the Data Quality Groups tool bar. Copy button is disabled if you have selected multiple check boxes. The Data Quality Group Definition screen is displayed.
- **3.** Edit the DQ Group Name and other details as required.
- **4.** Click Save. The new DQ Group definition is displayed in the Data Quality Groups Summary screen.

40.2.5.2 View Data Quality Group Summary Log

You can view the execution log details of Data Quality Rules in the View Logs screen. The View Logs screen displays the details such as Check Name, Log Message, Message Date, Message Time, Total Rows, Rows Impacted, Assignment Type, Assignment Severity, and Severity Message of the executed Data Quality Rules.

To view the Data Quality Rule execution log details in the Data Quality Groups Summary screen:

- 1. Select the check box adjacent to the Group Name in the Data Quality Groups grid.
 - The Data Quality Rules associated with the selected Group are displayed in the Data Quality Rules grid.
- 2. Select the check box adjacent to the DQ Name in the Data Quality Rules grid.
- 3. Click View Logs button. The View Logs screen is displayed.
- 4. In the View Logs screen, select the Information Date from the drop down list.
 - Based on the selection, you can select the Group Run ID and Iteration ID from the corresponding drop-down list.
- **5.** Click the below button from the Group Execution details tool bar.
 - The Data Quality Rule Logs grid displays the execution log details of the selected Data Quality Rule. You can also click Reset button in the Group Execution details tool bar to reset the selection.

40.2.6 Delete Data Quality Group

You can remove the DQ Group definition(s) which are created by you and which are no longer required in the system by deleting from Data Quality Groups Summary screen.

To delete:

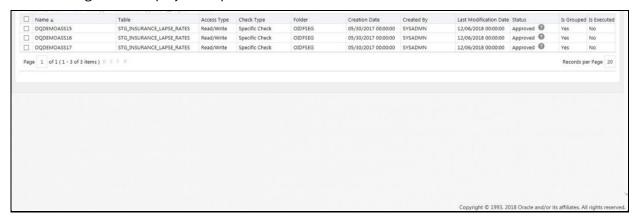
- 1. Select the check box adjacent to the required Group Name whose details are to be removed.
- 2. Click Delete button from the Data Quality Groups tool bar.
- **3.** Click OK in the information dialog to confirm deletion.

40.3 Data Quality Rules For Staging Tables

Data Quality (DQ) Rules are framed and created based on Staging Tables. Each rule is based on specified staging table column Specific Check or table Generic Check. The rules created for each of the tables are detailed in the DQ_Check_Rules spreadsheet.

In Specific Check, a particular column is checked based on rule's predefined checks, where as in Generic Check any columns are not specified. Generic Check is useful if you have a check which is not Specific or you use IF-ELSE conditions or CASE statements.

The following screen displays the Specified DQ Rules:



40.4 Data Quality Groups for Staging Tables

To execute any DQ rule, a Group must be created and the rules for execution has to be mapped with this group. For each staging table, a group has to be created and rules for these particular table have to be mapped under this Group.

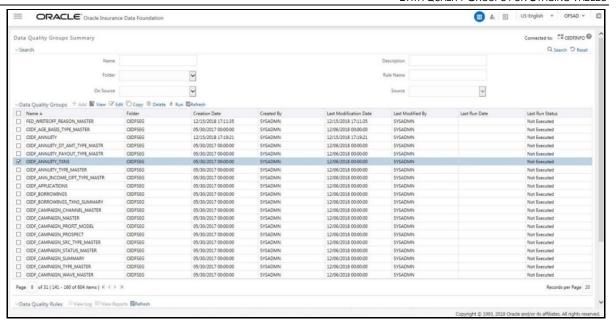
For more information regarding Group Execution, refer to the section Execute Data Quality Group as follows. The DQ_Group_Mapping spreadsheet displays the total groups and corresponding Rules mapped to that Group.

40.4.1 DQ Group Execution

You can execute the DQ Rules either from Data Quality Group Summary window or via a Batch execution. To execute the Data Quality Groups from the Data Quality Groups Summary window:

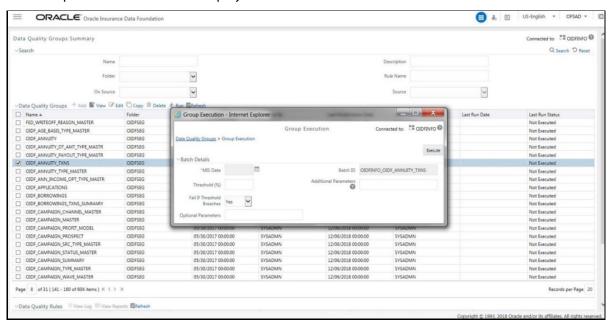
1. Select the check box adjacent to the Group, you want to execute.

The corresponding DQ Rules are displayed in Data Quality Rules grid.



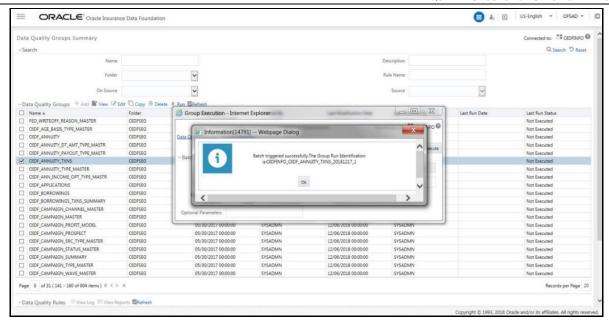
2. Click Run.

The Group Execution window is displayed.



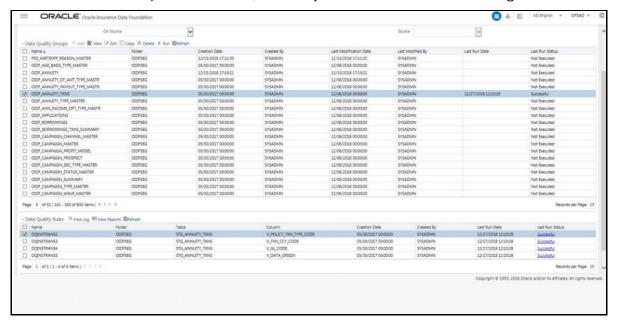
- 3. Select MIS Date.
- **4.** Click Execute button from the Group Execution window.

The execution is triggered and the following message is displayed.



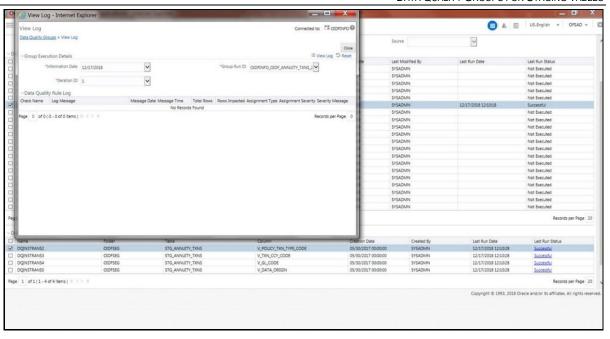
Once the execution is complete, you can view the details from the Data Quality Rules Summary window. To view the execution logs:

1. Select the check box adjacent to the rule, of which you want to see the execution log.



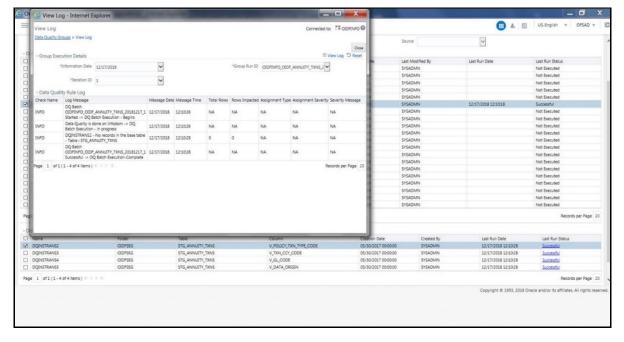
2. Click View Logs button.

The View Logs window is displayed.



- 3. Select the Information Date from the drop down list.
- **4.** Select the Group Run ID from the drop down list.
- **5.** Select the Iteration ID from the drop down list.
- **6.** Click the View Log button.

The details of the selected Group Execution are displayed.



40.4.2 Batch Execution of DQ Rules

Create a Batch for executing DQ Rules and add a Task to the selected Batch. Add component as RUN DQ RULE and in Dynamic Parameter List, add a DQ Group.

A single Batch can have multiple number of Tasks and each Task is executing the DQ Group. Batch execution facilitates the execution of multiple Groups simultaneously.

You can also use the Include or Exclude functionality to determine which all groups have to be executed. The following batches need to be executed in OIDF.

V_BATCH_ID	V_BATCH_DESCRIPTION
<infodom>_ALM</infodom>	Data Quality batch for ALM tables
<infodom>_CAMPAIGN</infodom>	Data Quality batch for CAMPAIGN tables
<infodom>_COLLATERAL</infodom>	Data Quality batch for Collateral tables
<infodom>_COLLECTION AND RECOVERY</infodom>	Data Quality batch for Collection and Recovery tables
<infodom>_CRM</infodom>	Data Quality batch for CRM tables
<infodom>_CUSTOMER</infodom>	Data Quality batch for Customer tables
<infodom>_EXPOSURE</infodom>	Data Quality batch for EXPOSURE tables
<infodom>_GL AND ACCOUNTING</infodom>	Data Quality batch for GL and Accounting group
<infodom>_LRM</infodom>	Data Quality batch for LRM tables
<infodom>_MARKET RISK</infodom>	Data Quality batch for MARKET RISK tables
<infodom>_MASTER</infodom>	Data Quality batch for master tables
<infodom>_MISCELLANEOUS</infodom>	Data Quality batch for Miscellaneous tables
<infodom>_OP RISK</infodom>	Data Quality batch for OP RISK tables
<infodom>_ORIGINATION</infodom>	Data Quality batch for Origination tables
<infodom>_PRODUCT PROCESSORS</infodom>	Data Quality batch for Product Processors group
<infodom>_RATES</infodom>	Data Quality batch for Rates tables
<infodom>_RATING</infodom>	Data Quality batch for RATING tables
<infodom>_SECURITIZATION</infodom>	Data Quality batch for Securitization tables
<infodom>_TRANSACTIONS</infodom>	Data Quality batch for Transactions tables
<infodom>_TRANSACTION SUMMARY</infodom>	Data Quality batchfor Transaction Summary tables

The DQ Batches and corresponding groups are detailed in the DQ_Batch_Group_Mapping spreadsheet.

For more information regarding Batch Execution, refer to Operations module of Oracle Financial Services Analytical Applications Infrastructure User Manual.

41 APPENDIX A Naming Conventions Used in OIDF Data Model

This Appendix chapter explains the various naming conventions used in OIDF Logical Data Model and Physical Data Model. In addition, the domains in PDM and LDM are also listed with their descriptions.

41.1 Naming Conventions Used in OIDF LDM and PDM

erwin Data Model consists of Logical and Physical data structures for each model file.

The following section explains the various naming conventions used in Oracle Insurance Data Foundation (OIDF) Logical Data Model (LDM) and Physical Data Model (PDM).

- OIDF Logical Data Model Naming Conventions
- OIDF Physical Data Model Naming Conventions
- Domains (PDM and LDM)

41.1.1 OIDF Logical Data Model Naming Conventions

erwin modeler tool allows two views namely Logical view and Physical view for each model file. Accordingly, the OIDF LDM file can be viewed in logical view mode and physical view mode. Different naming conventions and standards are applied to the two views of the OIDF LDM.

NOTE

The physical view of the OIDF LDM is not the same as the OIDF PDM. The PDM is a distinct model and is shipped as a separate erwin File.

- LDM Logical View Mode Entity Naming Conventions
- LDM Physical View Mode Table Naming Conventions

41.1.2 LDM Logical View Mode Entity Naming Conventions

Entities in the logical view are named in such a way that the names themselves convey the functional meaning of the entity. The first letter of each word in an entity name is capitalized (e.g. "Application Stage"). Entity names also contain common suffixes for the classes of entities listed in the table below:

Attribute names also contain common set of suffixes for the classes of attributes as listed in table below:

Class of Entity	Suffix	Example
Туре	Туре	Asset-Liability Type
Group	Group	Product Group
Code	Code	Collection Status Code
History	History	Account Balance History
Associative entities	Мар	Customer Account Map

Class of Entity	Suffix	Example
Unique Identifier	ID	
Reference Identifiers	Reference ID	
Code	Code	
Number	Number	
Name	Name	
Description	Description	
Boolean Values	Flag	Y or N
Indicator	Indicator	More than one value ('A', 'B', 'C', and so on)
Percentage	Percent	
Rate	Rate	
Amount	Amount	
Balance	Balance	
Term	Term	
Frequency	Frequency	
Unit	Unit	
Record created by		Created By
Record modified by		Modified By
Record created on		Created On
Record modified on		Modified On
Record validity start date		From Date
Record validity end date		End Date

41.1.3 LDM Physical View Mode Table Naming Conventions

In the physical view of the OIDF LDM follows a different naming convention for entities and attributes in the model, and these reflect naming standards that are more readily acceptable to table and column naming constraints of common database systems.

The entity names in the physical view mode of the LDM are capitalized and each entity follows the following naming pattern:

- FSW_<Subject Area>_<Table Name>
- 'FSW' is a constant prefix.
- Subject Area> is abbreviated form of the entity's primary subject area.
- <Table Name> is a meaningful name for the entity with no embedded spaces between words. Table
 Name may be abbreviated.

Logical View Name	Physical View Name	Description
Account Addresst	FSW_ACCT_ACCOUNT_ADDRESS	Account Address entity belonging primarily to Account (ACCT) subject area.

41.1.4 OIDF Physical Data Model Naming Conventions

The OIDF PDM consists of tables grouped into two distinct areas namely the Staging Area and Results Area. The Staging Area consists of tables for data sourcing and the Results Area consists of the star schemas / datamarts for reporting and Bl.

erwin modeler tool allows two views namely Logical view and Physical view for each model file. Accordingly, the OIDF PDM (Physical Data Model) file can be viewed in logical view mode and physical view mode. Different naming conventions and standards are applied to the two views of the OIDF Physical Data Model.

- PDM Logical View Mode Naming Conventions
- PDM Physical View Mode Naming Conventions

41.1.5 PDM Logical View Mode Naming Conventions

In the logical view model, OIDF PDM model tables and columns have descriptive names that readily convey the meaning and use of the element. In the logical view, names of tables and columns can have more than one word with the first letter of each word capitalized. Staging Area structures and Results Area structures have different name prefixes and suffixes as outlined in the table below:

PDM Area		Prefix	Suffix	Example
Staging (Data Sourcing)	All Tables	Stage		Stage Reinsurance Contracts Held
sourcing)	Transaction Tables		Transactions	Stage Reinsurance Issued Transactions
	Master Tables		Master	Stage Reinsurance Contract Type Master
Results	All Fact Tables	Fact		Fact Policy Transactions
(Datamart)	All Dimension Tables		Dimension	Reinsurance Contract Type Dimension

41.1.5.1 PDM Physical View Mode Naming Conventions

In the physical view model, OIDF PDM tables and columns may have abbreviated words joined by underscore character to form more meaningful and descriptive names.

Table names in the physical view are capitalized.

PDM Area		Prefix	Suffix	Example
Staging (Data Sourcing)	All Tables	STG_		STG_REINSURANCE_CONTRACTS_HELD
Sourcing)	Transaction Tables		_TXNS	STG_REINSURANCE_ISSUED_TXNS
	Master Tables		_MASTER	STG_RI_CONTRACT_TYPE_MASTER
Results	All Fact Tables	FCT_		FCT_POLICY_TRANSACTIONS
(Datamart)	All Dimension Tables	DIM_		DIM_RI_CONTRACT_TYPE

The table below lists the prefix and/or suffix used for columns names in the physical view of the OIDF PDM. The prefix or suffix depends on the class and data type of the column.

Column name prefix to indicate column datatype:

Column Data Type	Prefix
Varchar	v_
Number	n_
Date	d_
Flag	f_

Column name suffix for common classes of columns:

Column Class	Suffix
Method	_method
Percentage	_pct
Rate	_rate
Balance	_bal/_balance
Amount	_amt/_amount
Term	_term
Туре	_type
Frequency	_freq

In addition, frequently occurring keywords in column names may be abbreviated as shown in the following table:

Name	Abbreviated Form	Name	Abbreviated Form
Accrual	accr	Local Currency	lcy
Account	acct	Line Of Business	lob
Accounting Currency	асу	Maximum	Max
Address	addr	Minimum	min
Adjustment	adj	Mortgage	mort
Advance	adv	Message	msg
Amount	amt	Multiplier	mult
Application	арр	Number	num
Average	avg	Over Draft	od
Balance	bal	Option	opt
Business	bus	Origination	org
Currency	ссу	Percent	pct
Consolidation	cons	Payment	pmt
Customer	cust	Prepayment	ppmt
Description	desc	Product	prod
Dimension	dim	Source	src
Detail	dtl	Status	stat
Earnings at Risk	ear	Statistics	stats
End Of Period	еор	Temporary	temp
Error	err	Total	tot
Flag	flg	Transaction	txn
Frequency	freq	Value at Risk	var
Future	fut	Value	val
Forex	fx		
Generation	gen		
General Ledger	gl		
Hierarchy	hier		
History	hist		

41.1.5.2 Domains (PDM and LDM)

Domains are Logical data types that are attached to each column within the model. The following table lists the domains and their descriptions.

Serial No	Domain Name	Domain Description
1	Date	DATE
2	Timestamp	TIMESTAMP
3	Number	NUMBER(10)
4	Amount	NUMBER(22,3)
5	Code	NUMBER(5)
6	Flag	CHAR(1)
7	Frequency	NUMBER(5)
8	ID	VARCHAR2(25)
9	Percent	NUMBER(10,6)
10	Percent_Long	NUMBER(15,11)
11	Phone_Fax_Number	NUMBER(15)
12	Rate	NUMBER(10,6)
13	Term	NUMBER(5)
14	Alphanumeric_Code	VARCHAR2(10)
15	Name	VARCHAR2(60)
16	Currency_Code	VARCHAR2(3)
17	Short_Description	VARCHAR2(60)
18	Description	VARCHAR2(255)
19	Account_Number	VARCHAR2(25)
20	System_Identifier	NUMBER(20)
21	Long_Description	VARCHAR2(4000)

APPENDIX B: Standard Data Expectations

42.1 Rate and Percentage

Data in the columns associated with the below mentioned domains must be provided as a counting number (a whole number, which must not begin from 0).

- LONG_RATE
- Rate
- RATE
- Short_Rate
- RATE_LONG
- Number_Percentage
- Percent
- Percent_Long

For example: If the interest rate is 8.9, then OIDF considers 8.9 as the value in the column instead of 0.089, because 0.089 is not valid as interest rate value.

43 APPENDIX C: How to Define a Batch

This Appendix provides information about How to Define a Batch in the Oracle Insurance Data Foundation application and step-by-step instructions to use this section.

This chapter includes the following topic:

• Batch Definition

43.1 Batch Definition

Create a batch from the OFSAAI Batch Maintenance screen as follows:

- 1. From the OFSAAl Home menu, navigate to Operations > Batch Maintenance.
- **2.** In the Batch Maintenance window, Select '+' button from the Batch Name tool bar. The New Batch Definition window is displayed.
- 3. Enter the Batch details as tabulated.

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The Batch Name is auto generated by the system. You can edit to specify a Batch name based on the following conditions:
The Batch Name should be unique across the Information Domain.
The Batch Name must be alphanumeric and should not start with a number.
The Batch Name should not exceed 41 characters in length.
The Batch Name should not contain special characters "." and
"-".
Enter a description for the Batch based on the Batch Name.
(Optional) Select the check box to create a new Batch by
duplicating the existing Batch details.
On selection, the Batch ID field is enabled.
It is mandatory to specify the Batch ID if Duplicate Batch option is selected.
Select the required Batch ID from the list.
Select the check box if the Batch has to be created sequentially based on the task specified. For example, if there are 3 tasks defined in a Batch, task 3 should have precedence as task 2, and task 2 should have precedence as task 1.

4. Click Save to save the Batch definition details.

The new Batch definition details are displayed in the Batch Name section of Batch Maintenance window with the specified Batch ID.

44.1 Reporting Code Description

Report Code	Report Name
BS-C1	Balance sheet
BS-C1B	Off-balance sheet items
BS-C1D	Assets and liabilities by currency
Country - K1	Activity by country
Cover - A1A	Premiums, claims & expenses - Annual
Cover - A1Q	Premiums, claims & expenses - Quarterly
OF - B1A (solo)	Own funds (annual template - for solo entities)
OF - B1A (group)	Own funds (annual template - for groups)
OF - B1Q (solo)	Own funds (quarterly template - for solo entities)
OF - B1Q (group)	Own funds (quarterly template - for groups)
VA - C2A	Summary analysis of changes in BOF
VA - C2B	Analysis of changes in BOF due to investments
VA - C2C	Analysis of changes in BOF due to technical provisions
VA - C2D	Analysis of changes in BOF due to own debt and other items
SCR - B2A	Solvency capital requirement (for undertaking on standard formula or partial internal models)
SCR - B2B	Solvency capital requirement (for undertakings on partial internal models)
SCR - B2C	Solvency capital requirement (for undertaking on full internal models)
SCR - B3A	Solvency capital requirement - market risk
SCR - B3B	Solvency capital requirement - counterparty default risk
SCR - B3C	Solvency capital requirement - life underwriting risk
SCR - B3D	Solvency capital requirement - health underwriting risk
SCR - B3E	Solvency capital requirement - non-life underwriting risk
SCR - B3F	Solvency capital requirement - non-life catastrophe risk
SCR - B3G	Solvency capital requirement - operational risk
MCR - B4A	Minimum capital requirement (except for composite undertakings)
MCR - B4B	Minimum capital requirement (for composite undertakings)
Assets - D1	Investments Data - Portfolio list (detailed list of investments) - Annual
Assets - D1Q	Investments Data – Quarterly (Portfolio list or Quarterly summary)
Assets - D1S	Structured products Data - Portfolio list

Report Code	Report Name
Assets - D2O	Derivatives data – open positions
Assets - D2T	Derivatives data - historical derivatives trades
Assets - D3	Return on investment assets (by asset category)
Assets - D4	Investment funds (look-through approach)
Assets - D5	Securities lending and repos
Assets - D6	Assets held as collateral
TP - F1	Life and Health SLT Technical Provisions - Annual
TP - F1Q	Life and Health SLT Technical Provisions - Quarterly
TP - F2	Projection of future cash flows (Best Estimate - Life)
TP - F3	Life obligations analysis
TP - F3A	Only for Variable Annuities - Description of guarantees by product
TP - F3B	Only for Variable Annuities - Hedging of guarantees
TP - F4	Information on annuities stemming from Non-Life insurance obligations
TP - E1	Non-Life Technical Provisions - Annual
TP - E1Q	Non-Life Technical Provisions - Quarterly
TP - E2	Projection of future cash flows (Best Estimate - Non-life)
TP - E3	Non-life Insurance Claims Information
TP - E4	Movements of RBNS claims
TP - E6	Loss distribution profile non-life
TP - E7A	Underwriting risks (peak risks)
TP - E7B	Underwriting risks (mass risks)
Re - J1	Facultative covers non-life & life
Re - J2	Outgoing Reinsurance Program in the next reporting year
Re - J3	Share of reinsurers
Re - SPV	Special Purpose Insurance Vehicles
G01	Entities in the scope of the group
G03	(Re)insurance Solo requirements
G04	Non-(re)insurance Solo requirements
G14	Contribution to group TP
G20	Contribution to Group SCR with D&A
IGT1	IGT - Equity type transactions, debt & asset transfer
IGT2	IGT - Derivatives
IGT3	IGT - Internal Reinsurance

Report Code	Report Name
IGT4	IGT - Cost sharing, contingent liabilities, off BS items and other IGT
RC	Risk Concentration

45 APPENDIX E Template to Generate Data Dictionary and Download Specification for erwin 9.8

OFSAA data models have been designed and released on 7.x version of erwin. However, if there is a requirement to upgrade to the latest version of erwin (9.8), the existing procedure to generate DL specification using the published report templates fails in the 9.8 version. This is because of architectural changes between the two erwin versions. This chapter provides information about the procedure to generate data dictionary and download specification for erwin 9.8, for all OFSAA data models qualified on OIDF 8.0.9.

45.1 Prerequisite

Upgrade model to 9.x series before initiating generation of the DL specification.

45.2 Procedure

Download the attached excel based template "OFSAA Data Model Dictionary Template.xls" and follow the steps mentioned below. This template is compatible with all the OFSAA data models that are qualified with OIDF version and erwin version 9.8.

- 1. Ensure that the Erwin Data Modeler version is erwin 9.8.
- **2.** Ensure that macros are enabled in this excel before execution.
- **3.** Open the OFSAA data model in erwin 9.8 or a later version before executing this template.
- **4.** Click the "UDP selection Menu" button to launch UDP selection form.
- **5.** Select the appropriate application UDP's (optional).
- **6.** Click the "Generate Report" button.
- 7. On successful execution, the following message is displayed "Report generation is Complete".
- **8.** The download specification and the data dictionary report is located in "OFSAA_Download_Spec" worksheet.

NOTE

To generate report for twoapplication UDP's such as "BASEL_III_USA_ADVNCD" and "OR", you need to manually remove the extra characters from the UDP name in the data model else the execution will throw an error. The UDP names will be fixed in the upcoming release of OIDF.

OFSAA Support Contact Details

Raise an SR in the My Oracle Support (MOS) if you have any queries related to the OFSAA applications.

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- Did you find any errors?
- Is the information clearly presented?
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- What features did you like most about this manual?

If you find any errors or have any other suggestions for improvement, indicate the title and part number of the documentation along with the chapter/section/page number (if available) and contact the Oracle Support.

Before sending us your comments, you might like to ensure that you have the latest version of the document wherein any of your concerns have already been addressed. You can access My Oracle Support site which has all the revised/recently released documents.

