# Oracle Financial Services Regulatory Reporting for Reserve Bank of India – Lombard Risk Integration Pack

User Guide

Release 8.0.7.0.0

January 2019

ORACLE®
Financial Services

Oracle Financial Services Regulatory Reporting for Reserve Bank of India – Lombard Risk Integration Pack User Guide, Release 8.0.7.0.0



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# TABLE OF CONTENTS

# LIST OF FIGURES

# LIST OF TABLES

# Preface

Welcome to Release 8.0.7.0.0 of the Oracle Financial Services Regulatory Reporting for Reserve Bank of India – Lombard Risk Integration Pack User Guide.

This section provides a brief description of the scope, the audience, the references, concepts and the organization of the user guide and conventions incorporated into the user guide. The topics in this section are organized as follows:



## Scope of the Guide

The objective of this user guide is to provide a comprehensive working knowledge on Oracle Financial Services Regulatory Reporting for Reserve Bank of India – Lombard Risk Integration Pack (OFS REG REP RBI), Release 8.0.7.0.0. This user guide is intended to help you understand the key features and functionalities of OFS REG REP RBI release 8.0.7.0.0 and details the process flow and methodologies used.

## Intended Audience

This guide is intended for:

- Regulatory Reporting Analyst who maintain the dimensional values across multiple reporting requirements, maintain results area structure of Oracle Financial Services Data Foundation, and ensure data quality.
- Data Analysts who clean, validate, and import data into the Oracle Financial Services Download Specification format, and ensure that data is populated in the relevant tables as per the specifications and executions required for regulatory reporting.
- System Administrator (SA), instrumental in making the application secure and operational and configures the user roles providing necessary access to users.

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## Related Information Sources

In addition to this user guide, you can refer to the following documents in the OHC Documentation Library:

- Oracle Financial Services Regulatory Reporting for Reserve Bank of India – Lombard Risk Integration Pack Installation Manual Release 8.0.7.0.0
- Oracle Financial Services Data Foundation User Guide Release 8.0.7.0.0
- Oracle Financial Services Data Foundation Installation Manual Release 8.0.7.0.0
- Oracle Financial Services Analytical Applications Infrastructure User Guide Release 8.0.7.0.0 (present in the OHC Documentation Libaray)

## How this Guide is Organized?

The OFS Regulatory Reporting for Reserve Bank of India with Lombard Risk Integration User Guide includes the following topics:

## Conventions Used

Table 1 lists the conventions used in this guide.

**Table 1: Conventions Used in this Guide**

| Convention | Meaning |
|---|---|
| *Italics* | Names of books, chapters, and sections as references |
| **Bold** | ♦ Object of an action (menu names, field names, options, button names) in a step-by-step procedure<br>♦ Commands typed at a prompt<br>♦ User input |
| `Monospace` | ♦ Directories and subdirectories<br>♦ File names and extensions<br>♦ Process names<br>♦ Code sample, including keywords and variables within text |

# 1 Introduction

This chapter provides an understanding of the Oracle Financial Services Regulatory Reporting for Reserve Bank of India – Lombard Risk Integration Pack (OFS REG REP RBI) application and its scope. It includes:



## 1.1 Overview

Oracle Financial Services Regulatory Reporting for Reserve Bank of India – Lombard Risk Integration Pack (OFS REG REP RBI) helps the banks to comply with various guidelines issued by RBI, including BCBS 239 regulations. It provides integrating risk data reporting systems and enhances the accuracy of reporting in banks. OFS Risk Regulatory Reporting (REG REP) Solution helps in achieving the objectives by enabling preset steps based on the generalization of a set of solutions. This is made possible by:

- Providing a centralized data storage for risk data through relevant subject areas of Financial Services Data Foundation (FSDF).
- Interfacing with a third party reporting tool such as Lombard Risk Reporter Portal to build necessary template reports to meet the regulatory expectations.

Data accuracy of risk reporting is ensured by:

- Data Governance Studio (DGS).

The OFS REG REP RBI solution enables financial services organizations to manage and execute regulatory reporting in a single integrated environment. It automates end-to-end processes from data capture through submission with industry-leading solutions. It leverages Oracle Financial Services Analytical Application (OFSAA) and Oracle Financial Services Data Foundation (OFSDF) for managing analytical application data. The AgileREPORTER in Regulatory Reporting (REG REP) Solution enables firms to automate the final mile of the reporting process. It provides pre-built integration to Lombard Risk Reporting, eliminating the need for further manual intervention. The solution ensures data integrity allowing banks to focus more time on analyzing and gaining new business insight from their growing stores of data instead of preparing data and reports with the sole objective of meeting submission deadlines.

## 1.2 OFSAA Regulatory Reporting Architecture

OFS REG REP RBI supports the regulatory requirements for various reporting requirements such as DSB3ROR, FORM X, BSR VII and so on, which require enterprise level data spanning multiple areas of banking. Each of these business areas have different applications to answer their respective processing requirements. REG REP warehouses this data for reporting purpose at a single place. An intermediate data transfer layer specific to the source applications enables data loading to REG REP by using the provided download specifications.

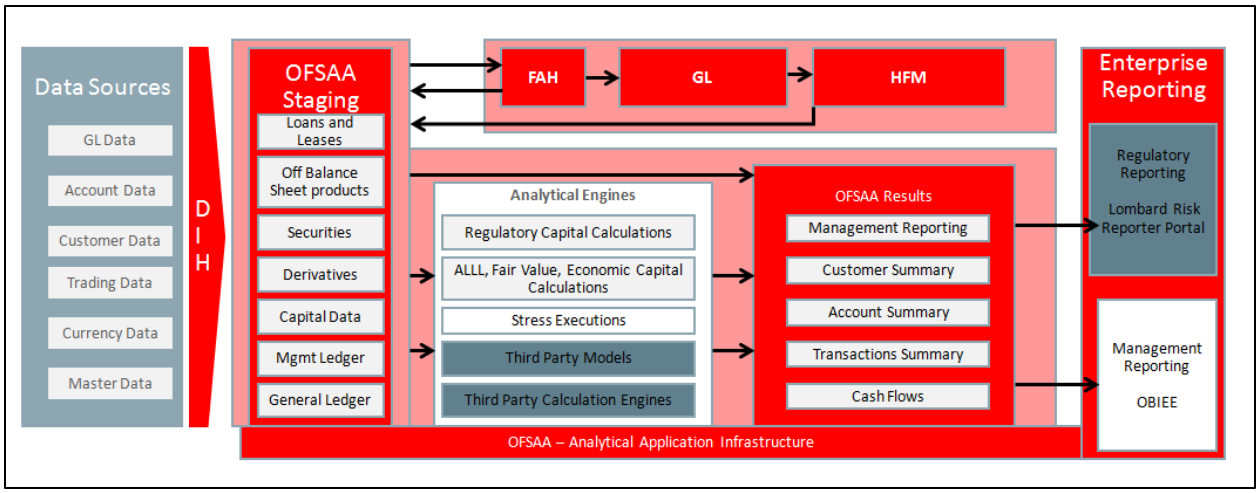



**Figure 1: Regulatory Reporting (REG REP) Solution Architecture**

This interface connects the Oracle FSDF to Lombard Risk. As shown in Architecture of Figure 1, Data flows from OFSAA to Lombard Risk.

OFSDF is an analytical data warehouse platform for the Financial Services industry. OFSDF combines an industry data model for Financial Services along with a set of management and infrastructure tools that allows Financial Services Institutions to develop, deploy, and operate analytical solutions spanning key functional areas in Financial Services, including: 1. Enterprise Risk Management, 2. Enterprise Performance Management, 3. Customer Insight, and 4. Financial Crime and Compliance Management OFSDF. It is a comprehensive data management platform that helps institutions to manage the analytical data life cycle from sourcing to reporting and business intelligence/BI using a unified, consistent platform and toolset.

AgileREPORTER is a forms and workflow tool that enables both creation and submission of regulatory returns. AgileREPORTER addresses the financial reporting requirements of both domestic and international banks and financial institutions by automating compliance with mandated reports to central banks, regulatory agencies. AgileREPORTER works easily with multiple sources of information as it standardizes data elements and automates regulatory report production in prescribed templates with the associated workflow for automatic submission. It is Reliable and efficient infrastructure to compile, generate and submit regulatory reports. It collects data from a wide universe (not just OFSAA Results). It provides automated repeated manual adjustments, variance analysis and validation checks. It provides features to explain and justify a number quickly, including links to OBIEE.

The solution provides a pre-built interface or integration between FSDF and AgileREPORTER. With this integration, end user can automate end to end reporting process covering data preparation to last mile of reporting.

## 1.3 Scope

Oracle Financial Services Regulatory Reporting for Reserve Bank of India – Lombard Risk Integration Pack covers the following regulatory reports for this 8.0.7.0.0 release as mentioned in the table.

**Table 2: Complete Scope for OFS REG REP RBI Release**

| Report Name | Report Code as per Lombard Portal | Report Description | Report Section Covered in 8.0.7.0.0 |
|---|---|---|---|
| Report on Structural Liquidity - STL | LR | Reports the liquidity attributes and inflows and outflows for the reporting entity. | PartA P2<br>PartA P3<br>PartA P4<br>PartA P6<br>PartA P8<br>PartA P9<br>P21, P22, P23 |

**NOTE:** LR v7 Report is configured for Dataflow from Staging to Reporting layer.

The following reports (CRILC, RLC, IRS, and RCAIII) underwent Bug Fixes / Forward Port from previous release.

| Report Name | Report Code as per Lombard Portal | Report Description | Report Section Covered in 8.0.7.0.0 |
|---|---|---|---|
| Central Repository of Information on Large Credits | CRILC | Reports the limit or exposure of Large borrowers of the reporting entity. | Sections 1, 2, and 3 |
| Return on Large Credits | RLC | Reports the exposure to large individual/ group borrowers of the reporting bank. | All |
| Interest Rate Sensitivity | IRS | Reports the interest rate sensitivity for different product types based on residual maturity. | CouponYield DGA<br>P37,P38,P39 |
| Regulatory Capital Adequacy | RCA III | Reports the Return on Capital Adequacy Basel III | Credit Risk ,Market Risk and QCCP |

The following table lists the detailed sections / schedules included in the reports.

**Table 3: Detailed Scope**

| Report Name | Report Section |
|---|---|
| Report on Structural Liquidity – STL / LR | Statement of Structural Liquidity - Domestic Currency, Indian Operations (P2, P3, P4) |
| Report on Structural Liquidity - STL / LR | Statement of Structural Liquidity - Foreign Currency, Indian Operations (P6) |
| Report on Structural Liquidity - STL / LR | Statement of Structural Liquidity - Foreign Currency, Indian Operations (P8) |
| Report on Structural Liquidity - STL / LR | Statement of Structural Liquidity - Combined Indian Operations - Domestic and Foreign Currency (P9) |
| Report on Structural Liquidity - STL / LR | Top 20 Depositors (P21) |
| Report on Structural Liquidity - STL / LR | Category of Depositors (P22) |
| Report on Structural Liquidity - STL / LR | Term Deposit Amount Wise (P23) |

# 2 Getting Started

This chapter provides an understanding of the pre-requsites, general and data preparation assumptions and logging into the application. It includes:



OFS Regulatory Reporting for Reserve Bank of India with Lombard Risk Integration allows you to perform the following activities:

- Manage Data Loading and Transformation from various source systems to staging, processing, and results.
- Manage relevant OFSAA metadata for regulatory reporting purpose. This includes creating, modifying, and viewing the metadata used in reporting.
- View the report metadata for mapping.
- Drill down from AgileREPORTER to OFSAA results area.

## 2.1 Prerequisites

For detailed prerequisites and instructions on installing this Interim Release, see *Oracle Financial Services Regulatory Reporting for Reserve Bank of India – Lombard Risk Integration Pack Installation Guide Release 8.0.7.0.0*.

## 2.2 Assumptions

OFSDF interface with Lombard Risk for RBI is a reporting application and it does not perform any risk/stress calculations. The following are the assumptions for the application:

- Data required for risk and compliance regulatory report templates is available in FSDF as per data requirements.
- Lombard Risk Reporter Portal supports other non-risk and non-compliance related regulatory templates and Oracle Financial Services Analytical Application (OFSAA) may not supply all the necessary data for such reports.
- Textual and other related portions of reports like person details, contact details, Yes / No choices must be updated on Report Portal directly and FSDF does not have placeholder for it.
- Data provided is post reconciliation to ensure that accuracy of data being reported (non-prescribed by regulators) are performed in OFSAA using various components – General Ledger (GL) reconciliation, data quality checks, and variance reporting.
- Validity checks such as edit checks, cross-validation checks and so on prescribed by regulator are performed within the AgileREPORTER.

- All monetory amounts are expected to be positive in number, except valuation outputs which can be positive or negative. Rules are constructed assuming the negative sign of valuation amounts wherever applicable.
- The application populates few specific dimension tables, known as seeded / sample tables as part of the installation script. Since they are used in the metadata, changes in data values have impact on the overall functioning.
- All percentage data are expected in decimal format meaning 9% must be provided as 9 and not 0.09.
- For a data provided as of date, such as last day of the quarter of the reporting year: Quarterly and Year to Date (YTD) report for the given date displays same value for those measures which are of as of date in nature. For example, Annual and Quarterly Balance Sheet and BASEL reports generated as of 31-MAR show same values for all measures such as Account Balance.
- Account Balances such as End of Period Balances are expected to be provided as Net of (without) Unearned Income.
- RCA III - Mkt Risk Specific-CDS: As per the reporting requirement, we must use `Fct_reg_market_risk_exposures.f_cds_undrly_party_cre_nbfc` flag to identify CDS counterparty type. DM change for the same is handled in subsequent model. To support template for 8.0.5.1.0 releases, use the unused column, `Fct_reg_market_risk_exposures.V_eff_credit_score_source`. This column is populated from Basel tables, that is, `Fct_market_risk_exposures.f_cds_undrly_party_cre_nbfc`.
- RCA III - CR On BS excl. Sec: Reporting in this schedule is as per Asset Class (for example: Domestic PSE, Foreign Bank, and so on) for Pre CRM amount and CRM Amount. There is no separate reporting for Non Sec Covered Amount / RWA (Covered by mitigant) anywhere in the template. So we are assuming the following:

  If the mitigant is Guarantor or Credit Derivative, then amount covered by that mitigant will be reported as per Effective Asset Class in its respective line in the template. So each reporting line will have two parts added to it for Amount of Exposure column. First part will report Exposure based on Original Asset Class to report Uncovered RWA, Second part will report Exposure based on Mitigant's Effective Asset Class to report Covered RWA column.
- RCA III - Securitization Related Schedules: Regarding RW reporting of Unrated Eligible Liquidity Facilities in Line 1.2 and 1.2 of all 4 schedules related to securitization exposures, RW is taken as maximum RW assigned to any of the Unrated Eligible Liquidity Facilities. RCA III template issued by RBI has only one cell for the reporting of RW of such unrated facilities. If reporting bank has more than one such facility, maximum RW assigned to any one of these facilities is reported. This is taken as the interpretation of the template.
- RCA III - Securitization Related Schedules: Line Items 1.1. III, 1.1. IV, 2.1. III, and 2.1. IV are not mapped for all 4 schedules related to securitization exposures. Reason behind not mapping these is that they are already covered in 1.2 and 2.2.

- RCA III - Capital Structure Schedules: Some line Items are not mapped in Capital Schedules. The following table explains the reason for not mapping these line items.

| Line Item | Comments |
|---|---|
| Shortfall in regulatory capital instruments in the unconsolidated entities - Amounts subject to Pre-Basel III Treatment. | For this line, there is no amount subject to Pre-Basel III Treatment. |
| Regulatory adjustments applied to Common Equity Tier 1 in respect of amounts subject to Pre-Basel III treatment (please specify the details in remarks column). | All items falling under this category are already captured in previous reporting lines of template, hence null mapping for this line. |
| Shortfall in the Additional Tier 1 capital of majority owned financial entities which are not consolidated with the bank. | As per our interpretation of RBI Basel Guidelines, deduction must be from CET1 alone, and not from respective Tier (CET1, AT1 and T2). |
| Regulatory adjustments applied to Additional Tier 1 in respect of amounts subject to Pre-Basel III treatment (please specify the details in remarks column). | All items falling under this category are already captured in previous reporting lines of template, hence null mapping for this line. |
| Regulatory adjustments applied to Additional Tier 1 due to insufficient Tier 2 to cover deductions - Amounts subject to Pre-Basel III Treatment. | For this line, there is no amount subject to Pre-Basel III Treatment. |
| Shortfall in the Tier 2 capital of majority owned financial entities which are not consolidated with the bank. | As per our interpretation of RBI Basel Guidelines, deduction must be from CET1 alone, and not from respective Tier (CET1, AT1 and T2). |
| Regulatory adjustments applied to Tier 2 capital in respect of amounts subject to Pre-Basel III treatment (please specify the details in remarks column). | All items falling under this category are already captured in previous reporting lines of template, hence null mapping for this line. |

1. CRILC Section 1 - Line ‘In case SMA-0 under SMA, the reason thereof:’ is not mapped as this is expected to be a user input field, where user can directly update the SMA reason.
2. ALE – Section 2 Part F1 and F2 - Line ‘b) Credit event payments (cash settled):’ is interpreted to be derived from subsequent two lines – ‘paid’ and ‘received’.

## 2.3 Logging in to the OFSDF Interface with Lombard Risk for RBI

After the application is installed and configured, to access the OFSDF Interface with Lombard Risk for RBI application you need to log into OFSAAI environment using the OFSAAI login page.

To access application follow these steps:

1. Enter the OFSAAI URL in your browser. The OFSAAI login page is displayed.

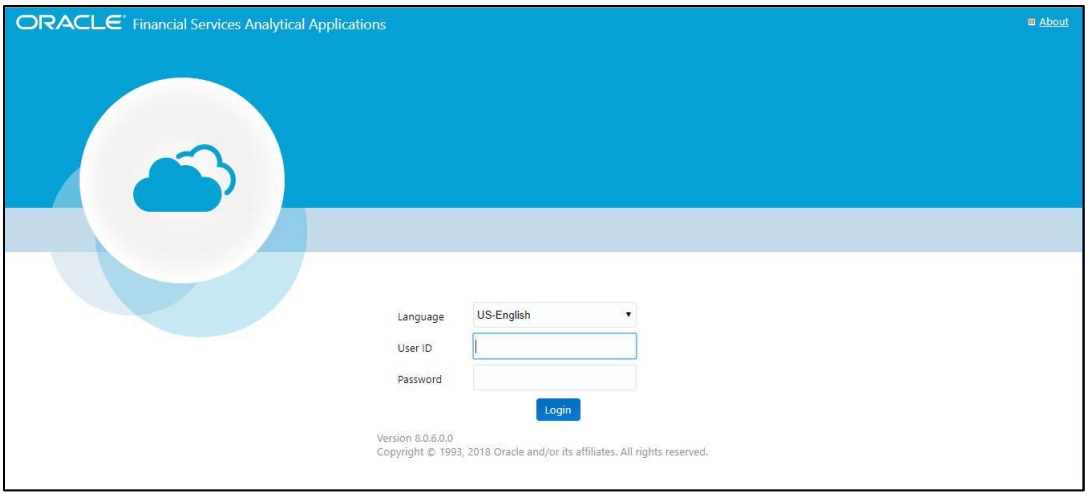
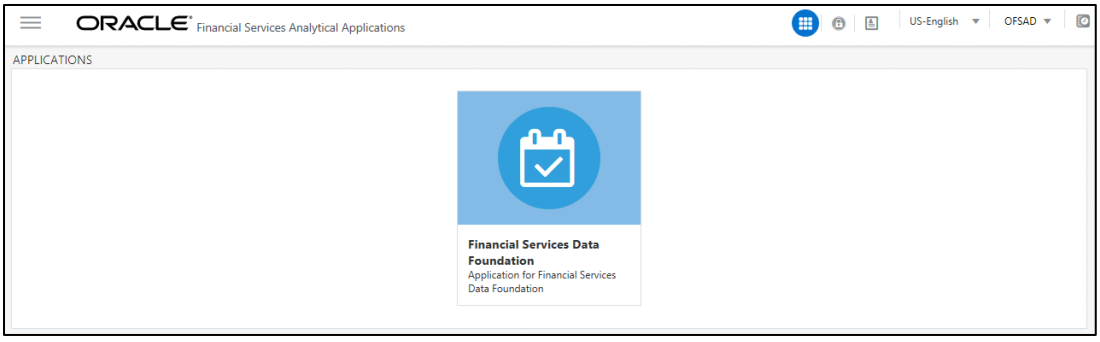



**Figure 2: OFSAAI Log In**

2. Select the desired language from the **Language** drop-down list.
3. Enter your **User ID** and **Password**. When you log into OFSAAI, the first screen is displayed. Select **Financial Services Data Foundation**.



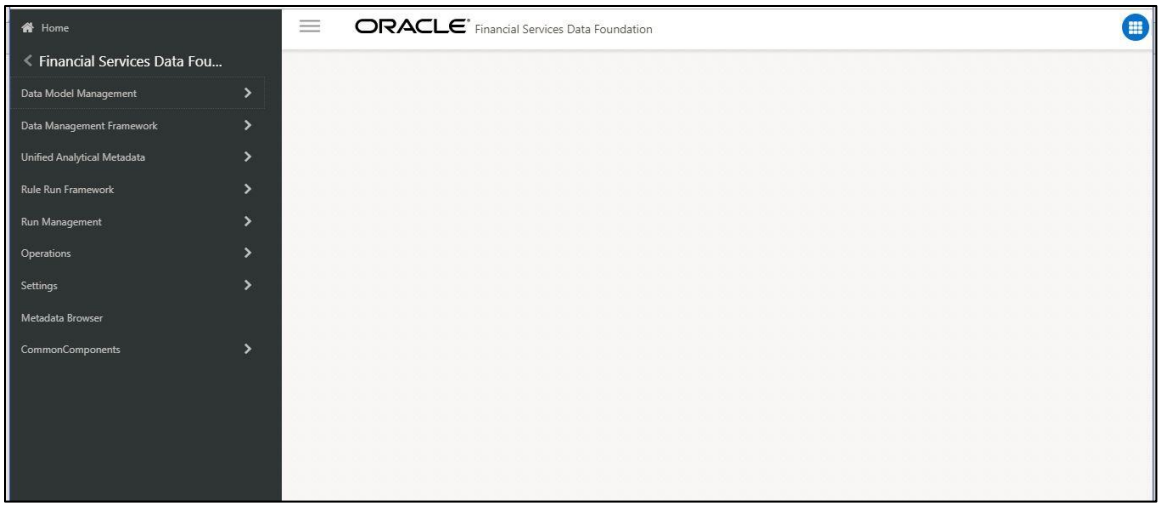



**Figure 3: Landing Page**

## 2.4 Organization of Interface for User Roles

This section explains the various features used by a analyst. It describes the organization of the user interface and provides step-by-step instructions for navigating through the application to carry out these activities.

Data Analysts are expected to perform the following activities:

1. Marking Run as Final
2. Executing Batch to Refresh Derived Entities
3. Drill Down from AgileREPORTER to OFSDF

Reporting Analyst are expected to perform the following activities:

1. Drill Down from AgileREPORTER to OFSDF
2. Using Metadata Browser to check Schedule Wise metadata
3. Using Metadata Browser to check metadata usage across schedules

### 2.4.1 Marking Run as Final

Various applications provide data for regulatory reporting. You must mark specific executions for regulatory reporting as final run.

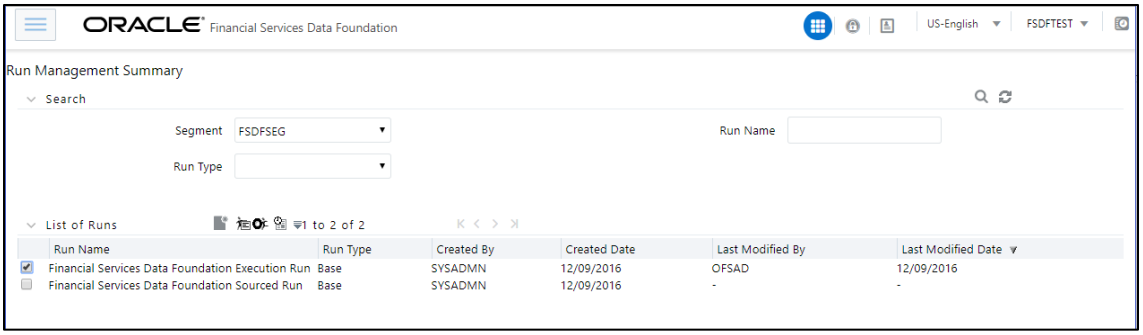



**Figure 4: Run Management Summary Screen**

### 2.4.2 Executing Batch to Resave Derived Entities

To execute the batch to resave derived entities, follow the below steps:

1. Navigate to ***Financial Services Data Foundation → Operations → Batch Execution***
2. Select the batch <<INFODOM>>_RBI_<<REPORT NAME>>_RESAVEDE to resave all the DEs used in that <<REPORT NAME>>.

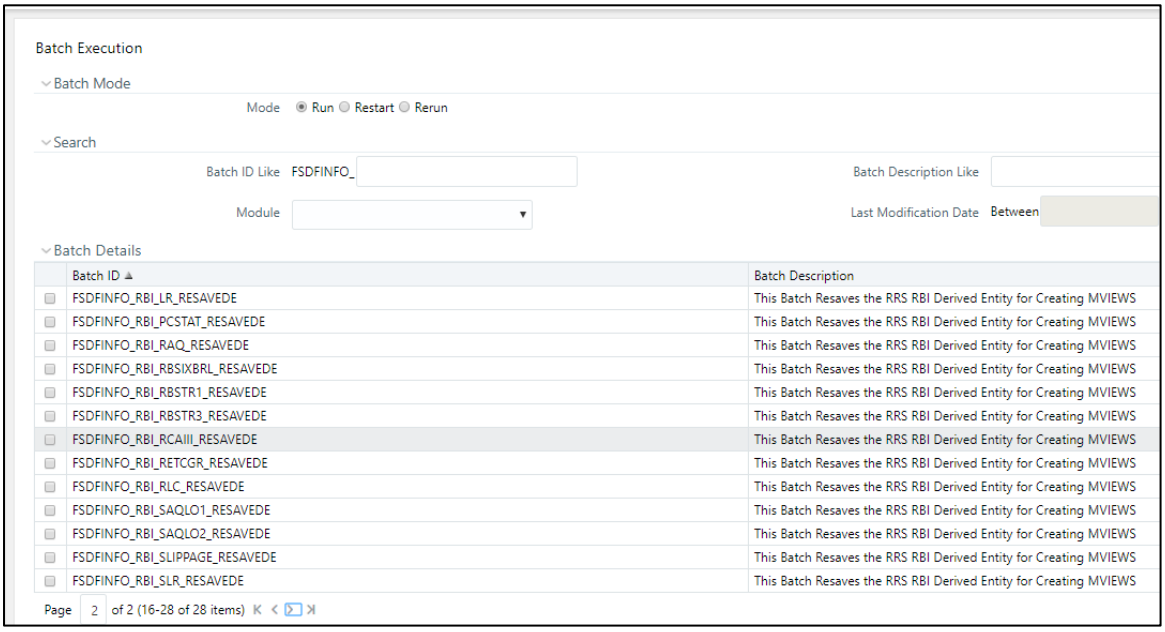



**Figure 5: Batch Execution Screen**

3. Monitor status of the batch using **Batch Monitor** link.

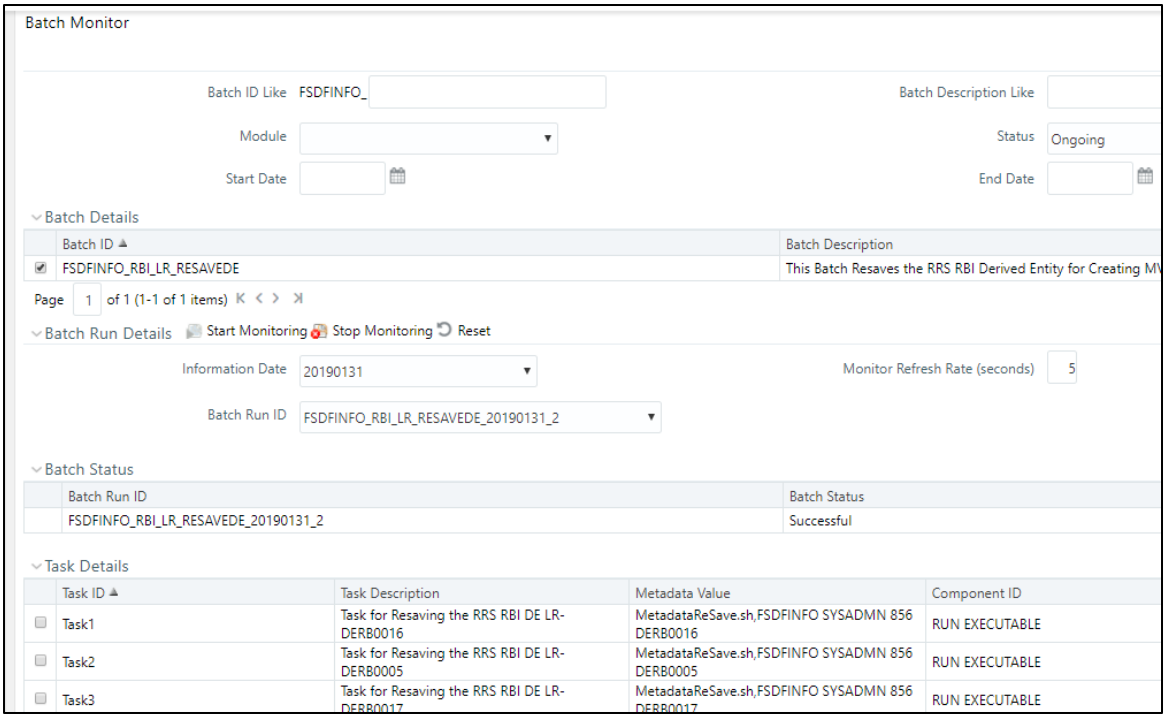



**Figure 6: Batch Monitor Screen**

4. The batches available for this release are:

| RESAVE Batch | Description |
|---|---|
| <<INFODOM>>_RBI_ADJUSTMENT_RESAVEDE | This Batch Resaves the RRS RBI ADJUSTMENT Derived Entities |
| <<INFODOM>>_RBI_BSRII_RESAVEDE | This Batch Resaves the RRS RBI BSRII Derived Entities |
| <<INFODOM>>_RBI_BSRVII_RESAVEDE | This Batch Resaves the RRS RBI BSRVII Derived Entities |
| <<INFODOM>>_RBI_CICDP_RESAVEDE | This Batch Resaves the RRS RBI CICDP Derived Entities |
| <<INFODOM>>_RBI_CRILC_RESAVEDE | This Batch Resaves the RRS RBI CRILC Derived Entities |
| <<INFODOM>>_RBI_CUSTAT_RESAVEDE | This Batch Resaves the RRS RBI CUSTAT Derived Entities |
| <<INFODOM>>_RBI_DSB3ROR_RESAVEDE | This Batch Resaves the RRS RBI DSB3ROR Derived Entities |

| RESAVE Batch | Description |
|---|---|
| <<INFODOM>>_RBI_DSBIALE_RESAVEDE | This Batch Resaves the RRS RBI DSBIALE Derived Entities |
| <<INFODOM>>_RBI_EXPI_RESAVEDE | This Batch Resaves the RRS RBI EXPI Derived Entities |
| <<INFODOM>>_RBI_FORMAS42_RESAVEDE | This Batch Resaves the RRS RBI FORMAS42 Derived Entities |
| <<INFODOM>>_RBI_FORMVIII_RESAVEDE | This Batch Resaves the RRS RBI FORMVIII Derived Entities |
| <<INFODOM>>_RBI_FORMX_RESAVEDE | This Batch Resaves the RRS RBI FORMX Derived Entities |
| <<INFODOM>>_RBI_GTCAII_RESAVEDE | This Batch Resaves the RRS RBI GTCAII Derived Entities |
| <<INFODOM>>_RBI_IRS_RESAVEDE | This Batch Resaves the RRS RBI IRS Derived Entities |
| <<INFODOM>>_RBI_LCRBLR_RESAVEDE | This Batch Resaves the RRS RBI LCRBLR Derived Entities |
| <<INFODOM>>_RBI_LR_RESAVEDE | This Batch Resaves the RRS RBI LR Derived Entities |
| <<INFODOM>>_RBI_PCSTAT_RESAVEDE | This Batch Resaves the RRS RBI PCSTAT Derived Entities |
| <<INFODOM>>_RBI_RAQ_RESAVEDE | This Batch Resaves the RRS RBI RAQ Derived Entities |
| <<INFODOM>>_RBI_RBSIXBRL_RESAVEDE | This Batch Resaves the RRS RBI RBSIXBRL Derived Entities |
| <<INFODOM>>_RBI_RBSTR1_RESAVEDE | This Batch Resaves the RRS RBI RBSTR1 Derived Entities |
| <<INFODOM>>_RBI_RBSTR3_RESAVEDE | This Batch Resaves the RRS RBI RBSTR3 Derived Entities |
| <<INFODOM>>_RBI_RCAIII_RESAVEDE | This Batch Resaves the RRS RBI RCAIII Derived Entities |
| <<INFODOM>>_RBI_RETCGR_RESAVEDE | This Batch Resaves the RRS RBI RETCGR Derived Entities |

| RESAVE Batch | Description |
|---|---|
| <<INFODOM>>_RBI_RLC_RESAVEDE | This Batch Resaves the RRS RBI RLC Derived Entities |
| <<INFODOM>>_RBI_SAQLO1_RESAVEDE | This Batch Resaves the RRS RBI SAQLO1 Derived Entities |
| <<INFODOM>>_RBI_SAQLO2_RESAVEDE | This Batch Resaves the RRS RBI SAQLO2 Derived Entities |
| <<INFODOM>>_RBI_SLIPPAGE_RESAVEDE | This Batch Resaves the RRS RBI SLIPPAGE Derived Entities |
| <<INFODOM>>_RBI_SLR_RESAVEDE | This Batch Resaves the RRS RBI SLR Derived Entities |

### 2.4.3 Executing Batch to Refresh Derived Entities

To execute the batch to refresh derived entities, follow the below steps:

1. Navigate to ***Financial Services Data Foundation → Operations → Batch Execution***
2. Select the batch <<INFODOM>>_RBI_<<REPORT NAME>>_REFRESH to refresh all the DEs used in that <<REPORT NAME>>.

| REFRESH Batch | Description |
|---|---|
| <<INFODOM>>_RBI_ADJUSTMENT_REFRESH | This Batch Refreshes the RRS RBI ADJUSTMENT Derived Entities |
| <<INFODOM>>_RBI_BSRII_REFRESH | This Batch Refreshes the RRS RBI BSRII Derived Entities |
| <<INFODOM>>_RBI_BSRVII_REFRESH | This Batch Refreshes the RRS RBI BSRVII Derived Entities |
| <<INFODOM>>_RBI_CICDP_REFRESH | This Batch Refreshes the RRS RBI CICDP Derived Entities |
| <<INFODOM>>_RBI_CRILC_REFRESH | This Batch Refreshes the RRS RBI CRILC Derived Entities |
| <<INFODOM>>_RBI_CUSTAT_REFRESH | This Batch Refreshes the RRS RBI CUSTAT Derived Entities |
| <<INFODOM>>_RBI_DSB3ROR_REFRESH | This Batch Refreshes the RRS RBI DSB3ROR Derived Entities |

| REFRESH Batch | Description |
|---|---|
| <<INFODOM>>_RBI_DSBIALE_REFRESH | This Batch Refreshes the RRS RBI DSBIALE Derived Entities |
| <<INFODOM>>_RBI_EXPI_REFRESH | This Batch Refreshes the RRS RBI EXPI Derived Entities |
| <<INFODOM>>_RBI_FORMAS42_REFRESH | This Batch Refreshes the RRS RBI FORMAS42 Derived Entities |
| <<INFODOM>>_RBI_FORMVIII_REFRESH | This Batch Refreshes the RRS RBI FORMVIII Derived Entities |
| <<INFODOM>>_RBI_FORMX_REFRESH | This Batch Refreshes the RRS RBI FORMX Derived Entities |
| <<INFODOM>>_RBI_GTCAII_REFRESH | This Batch Refreshes the RRS RBI GTCAII Derived Entities |
| <<INFODOM>>_RBI_IRS_REFRESH | This Batch Refreshes the RRS RBI IRS Derived Entities |
| <<INFODOM>>_RBI_LCRBLR_REFRESH | This Batch Refreshes the RRS RBI LCRBLR Derived Entities |
| <<INFODOM>>_RBI_LR_REFRESH | This Batch Refreshes the RRS RBI LR Derived Entities |
| <<INFODOM>>_RBI_PCSTAT_REFRESH | This Batch Refreshes the RRS RBI PCSTAT Derived Entities |
| <<INFODOM>>_RBI_RAQ_REFRESH | This Batch Refreshes the RRS RBI RAQ Derived Entities |
| <<INFODOM>>_RBI_RBSIXBRL_REFRESH | This Batch Refreshes the RRS RBI RBSIXBRL Derived Entities |
| <<INFODOM>>_RBI_RBSTR1_REFRESH | This Batch Refreshes the RRS RBI RBSTR1 Derived Entities |
| <<INFODOM>>_RBI_RBSTR3_REFRESH | This Batch Refreshes the RRS RBI RBSTR3 Derived Entities |
| <<INFODOM>>_RBI_RCAIII_REFRESH | This Batch Refreshes the RRS RBI RCAIII Derived Entities |
| <<INFODOM>>_RBI_RETCGR_REFRESH | This Batch Refreshes the RRS RBI RETCGR Derived Entities |

| REFRESH Batch | Description |
|---|---|
| <<INFODOM>>_RBI_RLC_REFRESH | This Batch Refreshes the RRS RBI RLC Derived Entities |
| <<INFODOM>>_RBI_SAQLO1_REFRESH | This Batch Refreshes the RRS RBI SAQLO1 Derived Entities |
| <<INFODOM>>_RBI_SAQLO2_REFRESH | This Batch Refreshes the RRS RBI SAQLO2 Derived Entities |
| <<INFODOM>>_RBI_SLIPPAGE_REFRESH | This Batch Refreshes the RRS RBI SLIPPAGE Derived Entities |
| <<INFODOM>>_RBI_SLR_REFRESH | This Batch Refreshes the RRS RBI SLR Derived Entities |

### 2.4.4 Report Verification - Drill Down from AgileREPORTER to OFSAA Results Area

Drill down functionality enables the user to view the accounts included in the aggregation. Following these steps to drill down from AgileREPORTER to OFSAA:

1. Log in to the AgileREPORTER.

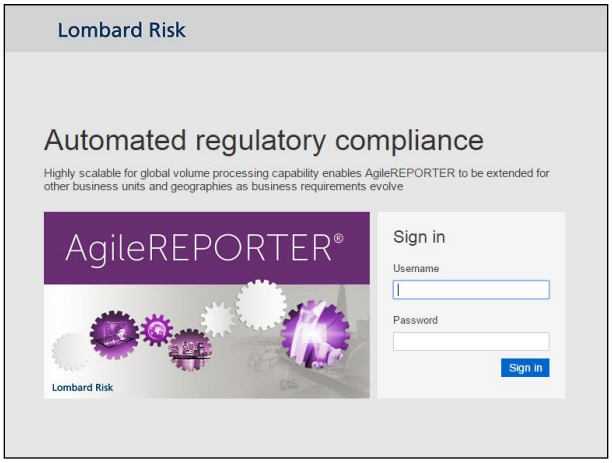



**Figure 7: AgileREPORTER Login Page**

2. The user can view the list of reports in the main page. Click any report name in the Returns column, for example, **FORMVIII**.

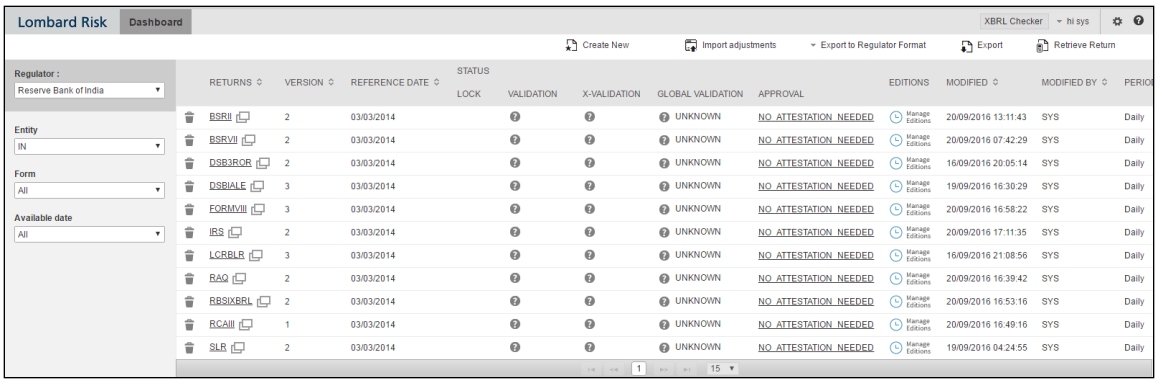



**Figure 8: AgileREPORTER Main Page**

3. The schedule list is displayed in the left hand side. Click any schedule name, for example **AnnexI_P2**.

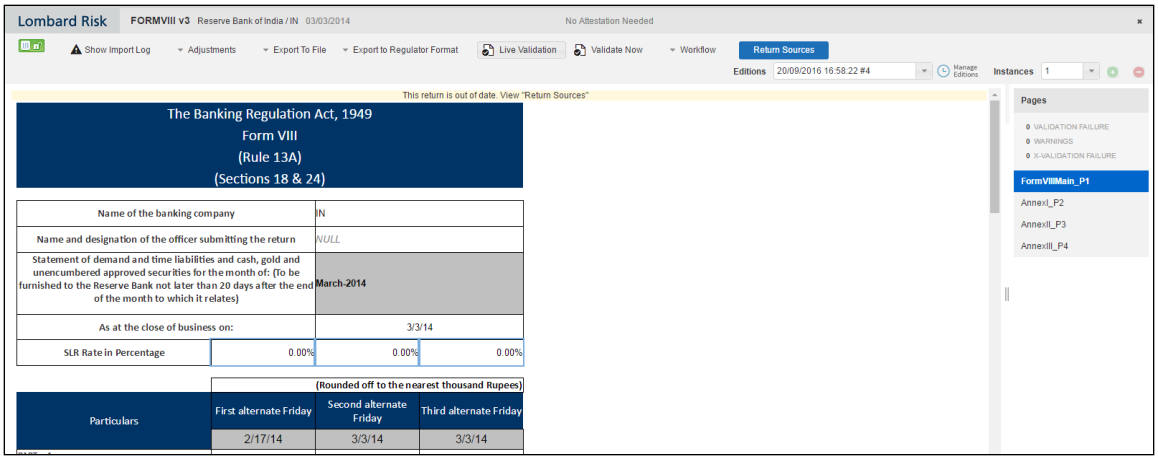



**Figure 9: AgileREPORTER Page Displaying List of Schedules**

4. Click any cell to drill down.

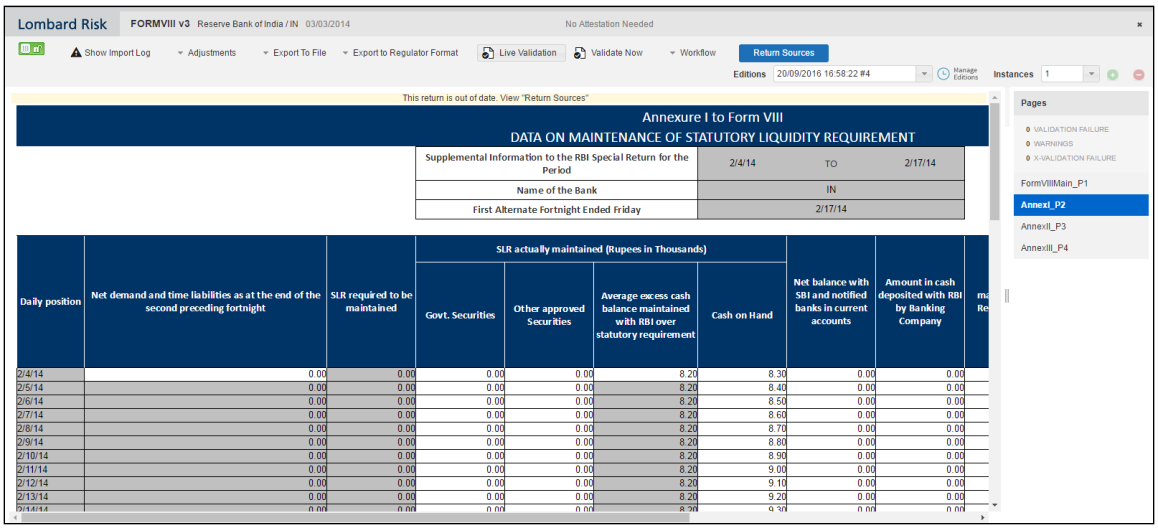



**Figure 10: AgileREPORTER Schedule Details Page**

5. Figure 11 displays drill down for the first cell in Column F. The **OFSAA icon** is displayed. Click OFSAA icon to view how this cell was populated from OFSAA results. You are redirected to the OFSAA drill down page.

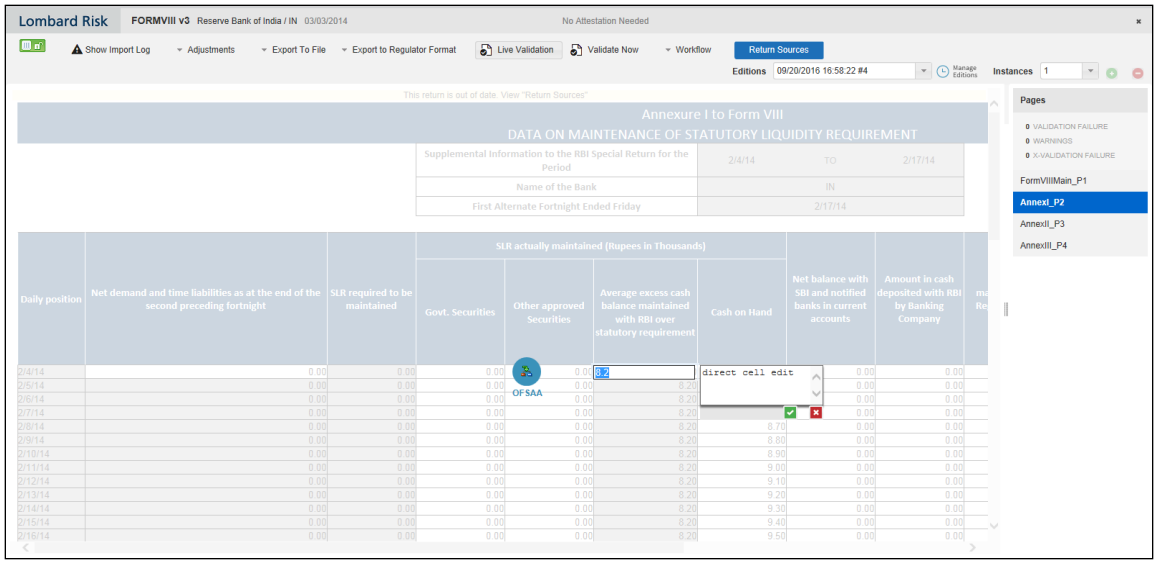



**Figure 11: AgileREPORTER Drill Down**

6. This cell is populated from the derived entity mentioned in the grid header *DE – FMR Fortnightly SLR Maintenance Agg*. The value in the derived entity grid 8200.00 must match with that of the cell in the report. Derived entity is an aggregate built on top of OFSAA results model to serve regulatory template requirements. It is built using dimensions, measures and business processors. The dimensions that participates in determining the cell value is displayed with data. Click the derived entity link in the grid header.

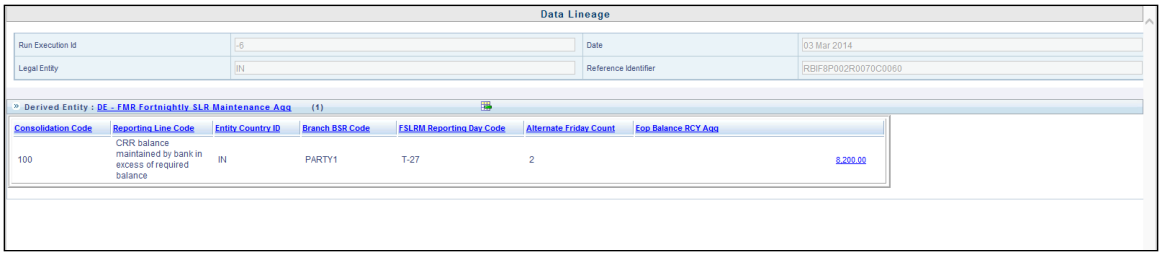



**Figure 12: Data Trace Browser/ OFSAA Report Drill-down Screen**

7. Derived entity details are displayed in the Metadata Browser within the page. Scroll to view complete details such as Datasets, Hierarchies, Measures and so on. Click the measure value in the derived entity row, for example **8,200.00**.

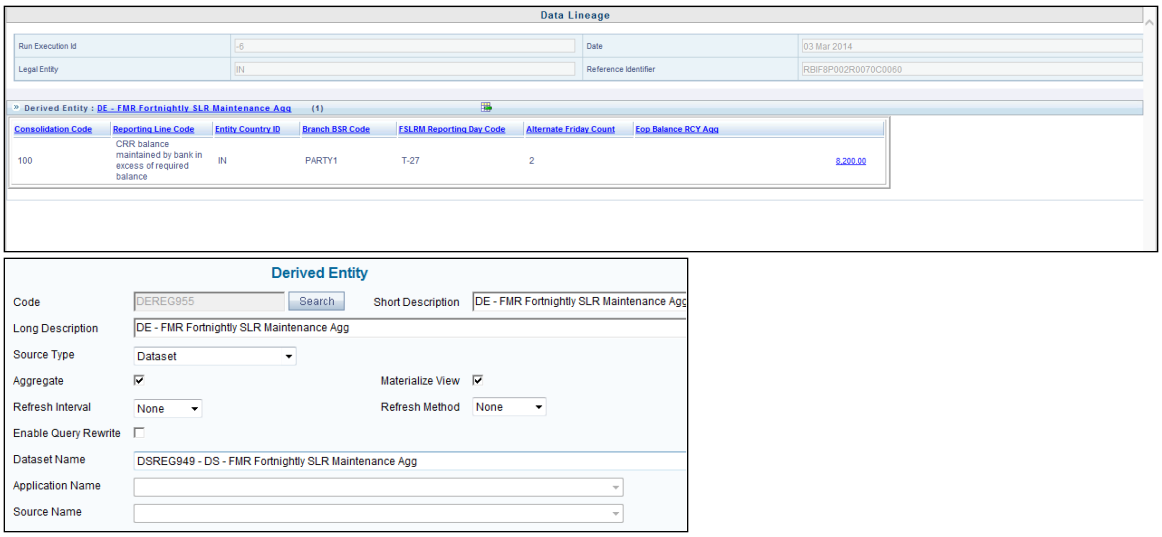



**Figure 13: Derived Entity MDB View**

8. Double-click any figure in the screen to drill-down to the fact tables. The below grid displays the detailed granular rows of fact data that comprises the derived entity aggregate.

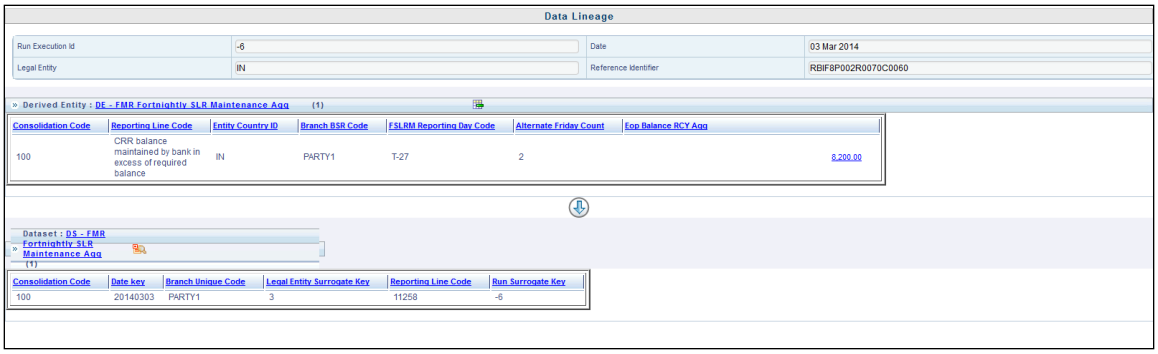



**Figure 14: Drill-down Page**

9. Click **Attribute Selector** icon on the header of the second grid.

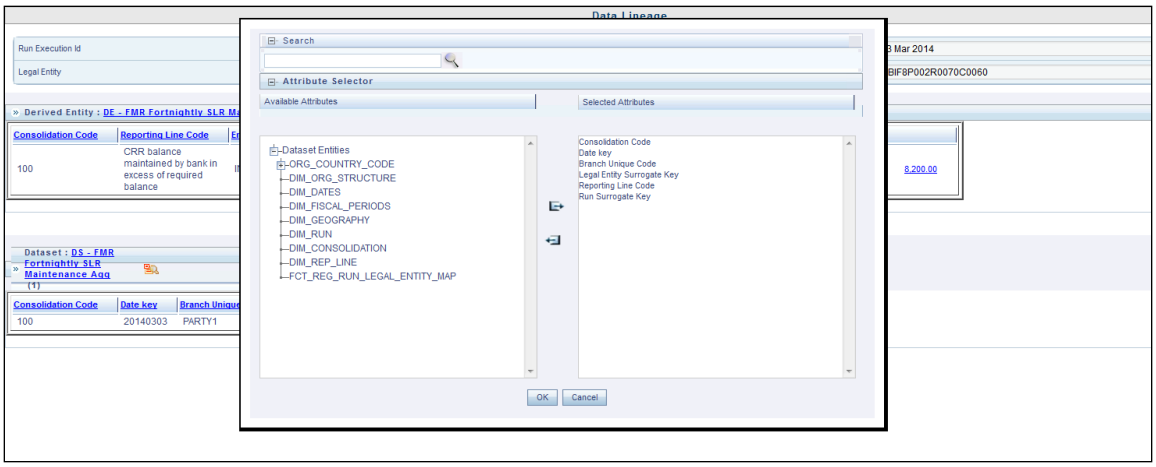



**Figure 15: Drill-down Attribute Selector 1**

10. Expand **Dataset Entities** and select **DIM_ORG_STRUCTURE**. Click **OK**.

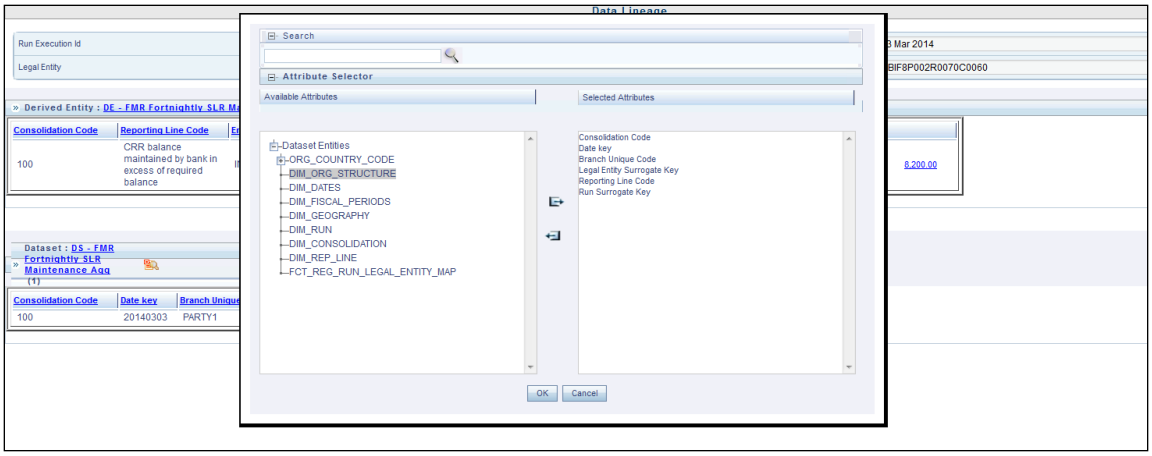



**Figure 16: RBI Drill-down Attribute Selector 2**

11. If account number is required, scroll and expand the account dimension. Select **account number/contract code** and click **OK**. Data source and account / contract code is displayed in the drill down grid.

## 2.4.5 Retrieving the Returns from AgileREPORTER

The Retrieve Return functionality in AgileREPORTER fetches data from OFSAA derived entities and embeds them on AgileREPORTER templates. This runs the decision table process in Lombard Risk. You can view the relevant OFSAA data on various schedules of the AgileREPORTER using this functionality.

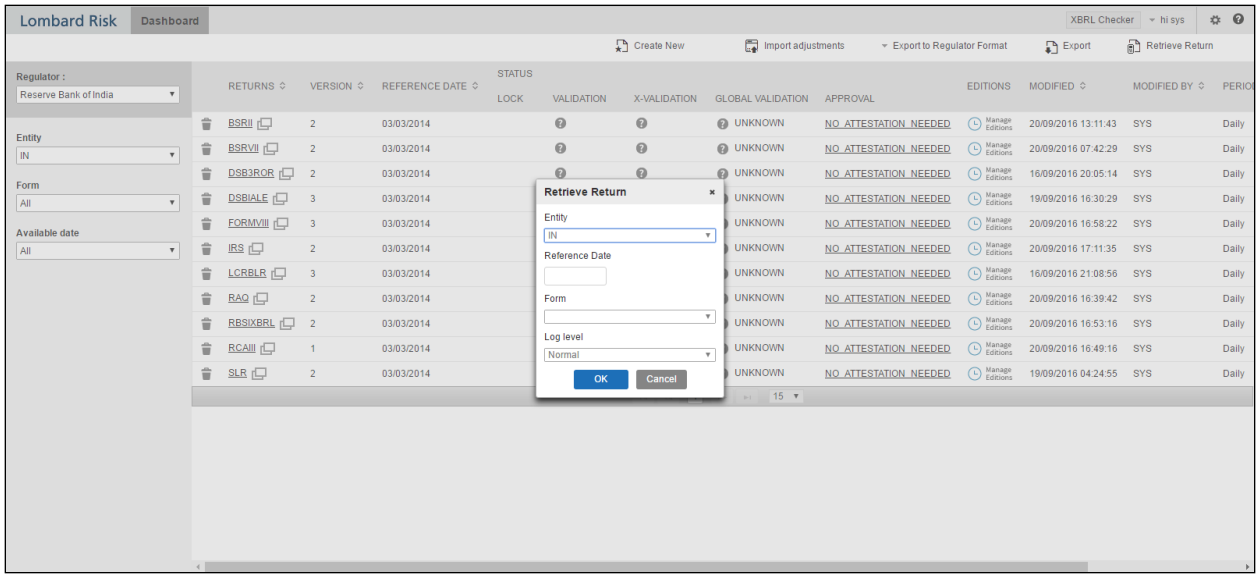



**Figure 17: Retrieve Returns Page**

## 2.5 Metadata Browser

This section helps you to navigate through Metadata Browser and guides you in tracing the source of the metadata. The Metadata Browser function allows you to view and analyze all aspects of the metadata used in the OFSAAI. It provides extensive browsing capabilities of metadata, helps in tracking the impact of changes to metadata, and trace through to the source of originating data.

Metadata Browser (Object and Application View) provides common repository of metadata objects created in OFSAAI and applications 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, thus enabling traceability. It also allows you to view the data flow and the work flow of the application and understand the usage of objects within the application.

The new visualization of Metadata Browser (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.

To access the Metadata Browser (Object and Application View), your role must be mapped to the SCR_MDB function.

Analysts review the metadata used for a particular report schedule to verify the data. Data verification may require looking for metadata used in given schedule or it can be schedules in which particular metadata is used. Data Analysts and Reporting Analysts perform the report verification. Metadata refers to business measures, hierarchies, data sets, derived entities used for a given schedule.

To use MDB for schedule wise metadata, and to use MDB for metadata wise schedule follow the below steps.

1. To use MDB for schedule wise metadata for a given schedule, identify the metadata used.
    a) User can verify the data for related data elements in results using this information. Navigate to path ***Objects → OFSAA Metamodel → Reporting Metadata → Reports***. The Left Hand Side (LHS) displays the list of reports.
    b) Click the object view. The *Report Details* page is displayed.

       You can view the below information in the *Details* tab:

       - **Reporting Elements**: This section displays the line items in report with regulatory references.
       - **Depends On**: This section displays the metadata used in a given schedule.

    c) Click any Reporting Element.

       You can view the following information in this page:

       - **Reporting Element Properties**: It provides information on line items or cell references in regulatory reports.

**Table 4: Fields and their Descriptions in Reporting Element Properties**

| Fields | Description |
|---|---|
| Derived | Provides information on whether the cell is derived / computed using other elements. |

| Fields | Description |
|---|---|
| Confidentiality | Refers to regulator specific interpretation. For MDRM codes, it indicates whether the MDRM codes is confidential for disclosure within a specific report. |
| Notes | Refers to regulator specific interpretation. For MDRM codes, this field provides a detailed description of a given cell reference. |
| Start Date | Refers to regulator specific interpretation. For MDRM codes, this field refers to the effective date of particular cell reference in case. |
| End Date | Refers to regulator specific interpretation. For MDRM codes, this field refers to the effective end/ sunset date of particular cell reference. |

- **Dimension Filters**: This section displays the dimensions and node value filters used to derive a particular cell.
- **Depends on**: This section displays all the hierarchies (dimensions, filters) and business measure used for arriving at a particular cell / MDRM code.

2. Starting from a common metadata used across applicaiton, you may want to know the list of reports/ derived entities this metadata has used. Let us take an example of measure. To use MDB for metadata wise schedule, for each metadata, identify the schedules in which it is used. Follow these steps to identify the schedules:

   a) To view the measures, navigate to path ***Objects → OFSAA Metamodel → Business Metadata → Base Metadata → Measures***. The LHS displays the list of measures.

      You can view the below information in this page:

      - **Measure Properties**: It provides information on properties of Business measures. For example aggregation function, Measure Data Type, Business Exclusions, Filter and Rollup Type.
      - **Depends on**: This section displays all the object names and their types, such as Entities, Columns and so on.

   Follow these steps to view the derived entities used in a given schedule:

   **Note**: The following similar steps are applicable for other metadata such as Business Metadata (Hierarchies, Measures, Variables and so on) and Derived Metadata (Dimensions, Filters and so on).

   a) To view the schedule wise derived entities, navigate to path **Objects → OFSAA Metamodel → Derived Metadata → Derived Entities**. The LHS displays list of Schedules.

      You can view the following information in this page:

      - **Derived Entity Properties**: It provides information on properties of derived entities, such as Source Type, Aggregate Flag, and Materialized View.
      - **Depends on**: This section displays all the object names and their types, such as Measure, Hierarchy, and so on.

# 3 Regulatory Reporting Solution Data Flow

This chapter provides an understanding of the data flow. It explains what happens within data flow and how various processing aspects are integrated with the overall data flow.

It includes:

- Data Preparation
- Mapping of Results to Line Items in Reporting
- AgileREPORTER: Submission

## 3.1 Data Preparation

This section explains the input data preparation from OFSAA. It includes:

- Assumptions for Data Preparation
- RBI Run Chart
- Reclassification of Standard Dimensions
- Configuring Setup Tables for Standard Set of Values
- Run/Execution Expectations
- Consolidation
- Projection Data
- Data Flow from Sources Systems to Staging Area
- Data Flow from Staging to Results Area
- Data flow from Staging to Processing Area
- Data Flow from Processing to Results Area
- Guidelines for Data Loading to Result Area Tables in Data Foundation for Regulatory Reporting Implementations
- FSDF Entity Information
- Fact Tables/Entities
- Inclusion of GL Recon Reconciled Accounts in Reporting

### 3.1.1 Assumptions for Data Preparation

The following assumptions must be considered before Data preparation:

1. REG REP is a reporting solution, which uses data from underlying fact tables directly for reporting. The end user is expected to prepare the load for the required data in reporting area accordingly. Although this has a thin processing layer to reclassify to regulatory dimensions and bands, all the processing measures are expected to be from respective applications and provide as required.

2. It is integrated with results area of the respective processing application, and any change in the underlying processing can disturb the REG REP data sourcing.
3. Baseline and stress data must be populated with appropriate codes. Inaccurate mappings may can lead to inaccurate results. For details please refer to Relationship between Run and Stress.
4. For usage of consolidation dimension (which has values like Actual, Budged, Forecast, and so on), all historical data is expected to be tagged as actual for the purpose of reporting vintage data, as per report requirements. For projection data, for a given run and Projection Period (quarter/year), only one set of data is expected to be stored.
5. All processing reporting requirements requiring cashflows, integration package expects bucketed cash flow as a input (meaning a time bucket for cash flow and cash flow amount is expected as input).

### 3.1.2 RBI RUN CHART

Oracle Financial Services Regulatory Reporting for Reserve Bank of India – Lombard Risk Integration Pack provides the RBI RUN Chart listing the tasks required for population of data for RBI Reports. This covers the following tasks:

- Set up table population
- Stage Dimension Load
- Seeded Dimension Data Population
- Common data Population
- Common Tasks like Exchange Rate Population
- RBI Specific Data Population and Transformation
- Derived Entity Refresh

Download the RBI 8.0.7.0.0 RUN Chart from the MOS.

### 3.1.3 Reclassification of Standard Dimensions

This section provides information about Standard Dimension Tables in the Regulatory Reporting for Reserve Bank of India – Lombard Risk Integration Pack (OFS REG REP RBI) application and step-by-step instructions to use this section.

This section includes the following topics:

- Overview of Reclassification of Standard Dimensions
- Overview of Reclassification of Standard Dimensions Population
- Dimension Data Expectations through SCD
- Overview of Mappers for Reclassification of Standard Dimensions
- Maintenance of Mapper for Reclassification of Standard Dimensions
- Loading Mapper Maintenance through Backend
- Usage of Mapper Tables in Data Flow and Reports

#### 3.1.3.1 Overview of Reclassification of Standard Dimensions

There are certain Standard Dimensions in OFS REG REP RBI, which are pre-populated with standard set of values. These values are used by downstream applications for various reporting requirements. There are equivalent customer specific dimension tables which are populated using Slowly Changing Dimension (SCD) process. It is required to reclassify these user specific values to standard specific values as the reporting expects these standard set of values. The reclassification is done using out of the box Mapper Definitions under Mapper Maintenance screen.

#### 3.1.3.2 Overview of Reclassification of Standard Dimensions Population

These are the out of the box User Specific dimensions to Standard Dimensions reclassification available in OFS REG REP RBI:

| User Specific Dimension | | Standard Dimension | |
|---|---|---|---|
| DIM_BALANCE_CATEGORY | Balance Category | DIM_STD_BALANCE_CATEGORY | Standard Balance Category |
| DIM_CREDIT_LINE_PURPOSE | Credit Line Purpose | DIM_STD_CREDIT_LINE_PURPOSE | Standard Credit Line Purpose |
| DIM_CREDIT_LINE_TYPE | Credit Line Type | DIM_STD_CREDIT_LINE_TYPE | Standard Credit Line Type |
| DIM_IRC | Interest Rate Curve | DIM_STANDARD_IRC | Standard Interest Rate Curve |
| DIM_LOB | Line of Business | DIM_STANDARD_LOB | Standard Line of Business |
| DIM_MITIGANT_TYPE | Mitigant Type | DIM_STD_MITIGANT_TYPE | Standard Mitigant Type |
| DIM_PARTY_TYPE | Party Type | DIM_STANDARD_PARTY_TYPE | Standard Party Type |
| DIM_PRODUCT | Product | DIM_STANDARD_PRODUCT_TYPE | Standard Product Type |
| DIM_GL_ACCOUNT | General Ledger | DIM_STD_GL_TYPE | Standard General Ledger Type |
| DIM_VEHICLE_TYPE | Vehicle Type | DIM_STD_VEHICLE_TYPE | Standard Vehicle Type |
| DIM_WRITE_OFF_REASONS | Write Off Reasons | DIM_STD_WRITE_OFF_REASONS | Standard Write Off Reasons |
| DIM_RECOVERY_TYPE | Recovery Type | DIM_STD_RECOVERY_TYPE | Standard Recovery Type |

#### 3.1.3.3 Dimension Data Expectations through SCD

By default, all standard dimensions will be pre-populated with seeded data. It is mandatory to have data in user specific dimensions and then maintain the reclassifications. Therefore, you must execute the SCDs and then map the reclassification codes under Mapper Maintenance.

#### 3.1.3.4 Overview of Mappers for Reclassification of Standard Dimensions

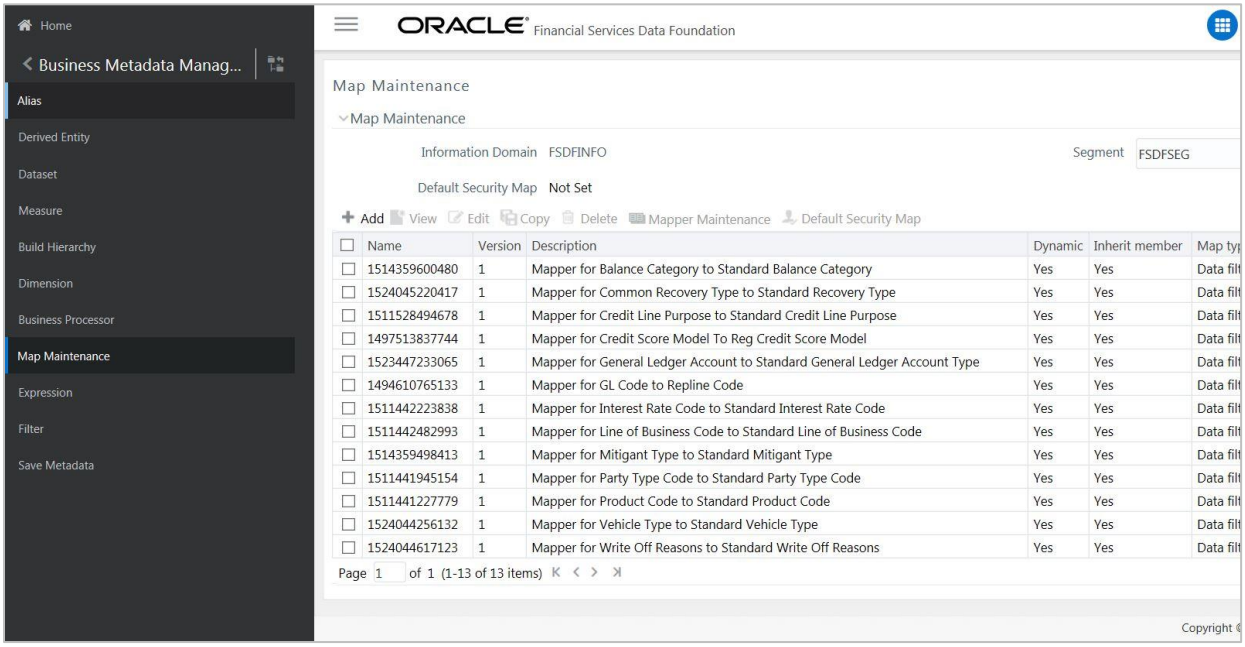
These are out of the box mappers that are available in OFS REG REP RBI for the standard dimension reclassifications:

- MAP_PROD_CODE_STD_PROD_TYPE: Mapper for Product Code to Standard Product Code
- MAP_PARTY_TYP_STD_PARTY_TYP: Mapper for Party Type Code to Standard Party Type Code
- MAP_CRDLN_TYP_STD_CRDLN_TYP: Mapper for Credit Line Type to Standard Credit Line Type
- MAP_DIM_IRC_STD_IRC: Mapper for Interest Rate Code to Standard Interest Rate Code
- MAP_DIM_LOB_STD_LOB: Mapper for Line of Business Code to Standard Line of Business Code
- MAP_BAL_CAT_STD_BAL_CAT: Mapper for Balance Category to Standard Balance Category
- MAP_CRDLN_PUR_STD_CRDLN_PUR: Mapper for Credit Line Purpose to Standard Credit Line Purpose
- MAP_MITG_TYP_STD_MITGN_TYP: Mapper for Mitigant Type to Standard Mitigant Type
- MAP_CREDIT_SCR_MDL_REG_MDL: Mapper for Credit Score Model To Reg Credit Score Model
- MAP_DIM_GL_ACCT_STD_GL_TYPE: Mapper for General Ledger Account to Standard General Ledger Account Type
- MAP_GL_CODE_REP_LINE: Mapper for GL Code to Repline Code
- MAP_RECVR_TYP_STD_RECVR_TYP: Mapper for Common Recovery Type to Standard Recovery Type
- MAP_VEHCL_TYP_STD_VEHCL_TYP: Mapper for Vehicle Type to Standard Vehicle Type
- MAP_WRTOFF_STD_WRTOFF_REASN: Mapper for Write Off Reasons to Standard Write Off Reasons

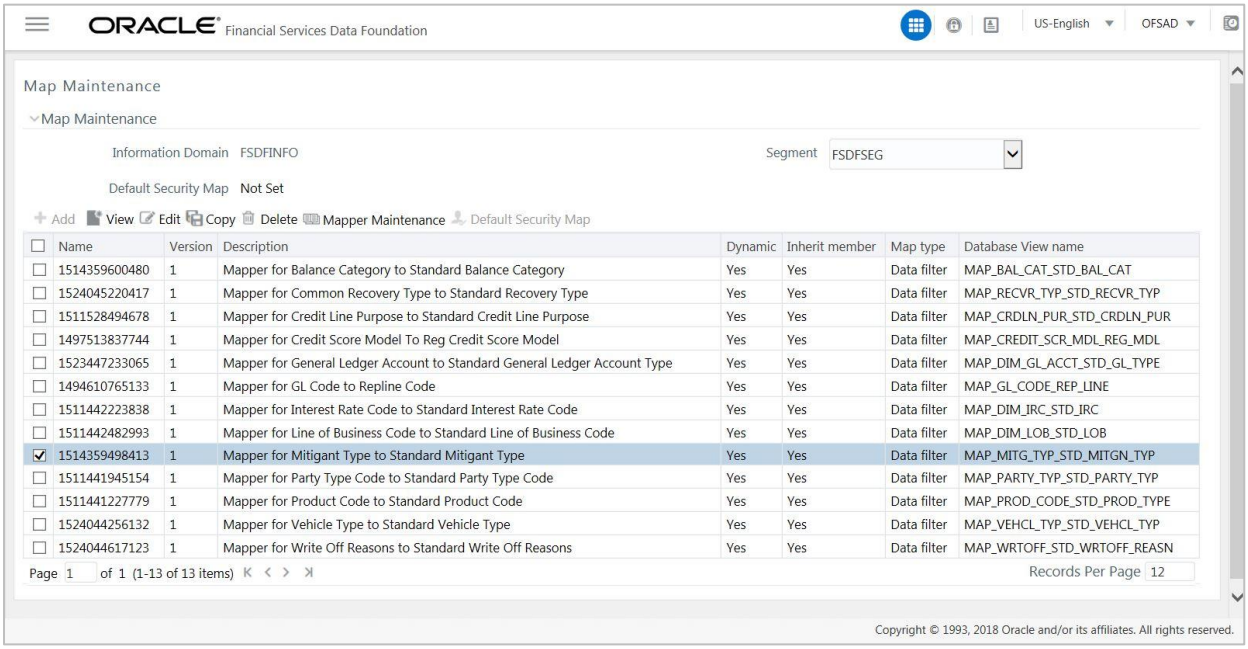
### 3.1.3.5 Maintenance of Mapper for Reclassification of Standard Dimensions

Mapper can be maintained under OFSAAI.

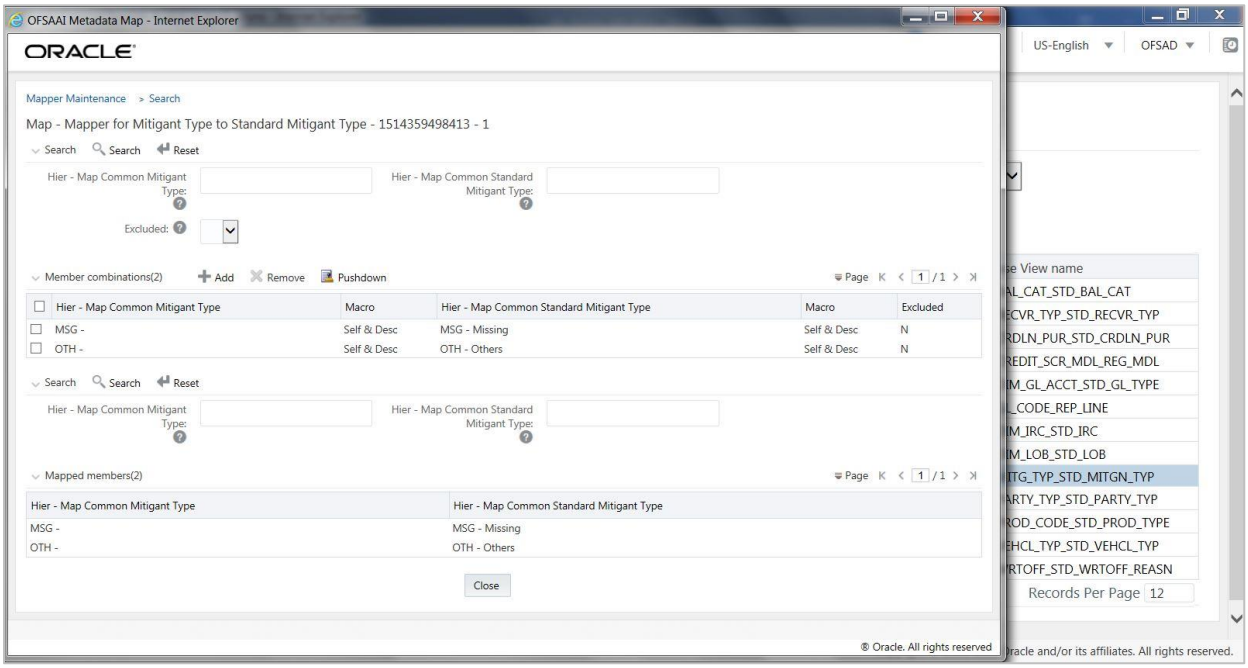
1. Navigate to **OFSAAI > Financial Services Data Foundation > Unified Analytical Metadata > Business Metadata Management > Map Maintenance**.




2. For illustration, we have selected **Mapper for Mitigant Type to Standard Mitigant Type**. Click **Mapper Maintenance**.



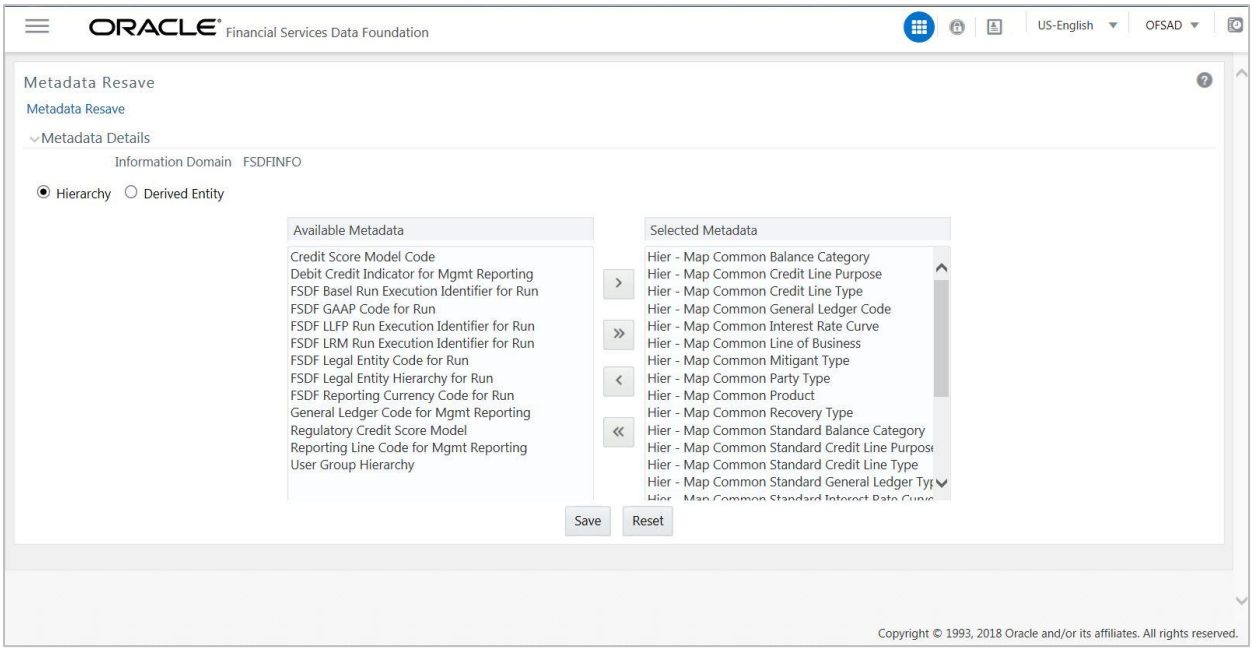
3. OFS REG REP RBI maps OTH and MSG out-of-the-box for this mapper. The remaining mappings can be maintained by the user according to user specific values.




**Prerequisites for Mapper Maintenance**

1. Navigate to **OFSAAI > Financial Services Data Foundation > Unified Analytical Metadata > Business Metadata Management > Save Metadata**. Load all the required user specific dimensions using SCD.
2. To Resave these hierarchies, select these hierarchies and click **Save**
    - HCMDF001 - Hier - Map Common Product
    - HCMDF002 - Hier - Map Common Standard Product Type
    - HCMDF003 - Hier - Map Common Party Type
    - HCMDF004 - Hier - Map Common Standard Party Type
    - HCMDF005 - Hier - Map Common Interest Rate Curve
    - HCMDF006 - Hier - Map Common Standard Interest Rate Curve
    - HCMDF007 - Hier - Map Common Line of Business
    - HCMDF008 - Hier - Map Common Standard Line of Business
    - HCMDF009 - Hier - Map Common Credit Line Type
    - HCMDF010 - Hier - Map Common Standard Credit Line Type
    - HCMDF011 - Hier - Map Common Credit Line Purpose
    - HCMDF012 - Hier - Map Common Standard Credit Line Purpose
    - HCMDF013 - Hier - Map Common Mitigant Type
    - HCMDF014 - Hier - Map Common Standard Mitigant Type

- HCMDF015 - Hier - Map Common Balance Category
- HCMDF016 - Hier - Map Common Standard Balance Category
- HCMDF017 - Hier - Map Common General Ledger Code
- HCMDF018 - Hier - Map Common Standard General Ledger Type
- HCMDF019 - Hier - Map Common Vehicle Type
- HCMDF020 - Hier - Map Common Standard Vehicle Type
- HCMDF021 - Hier - Map Common Write Off Reasons
- HCMDF022 - Hier - Map Common Standard Write Off Reasons
- HCMDF023 - Hier - Map Common Recovery Type
- HCMDF024 - Hier - Map Common Standard Recovery Type



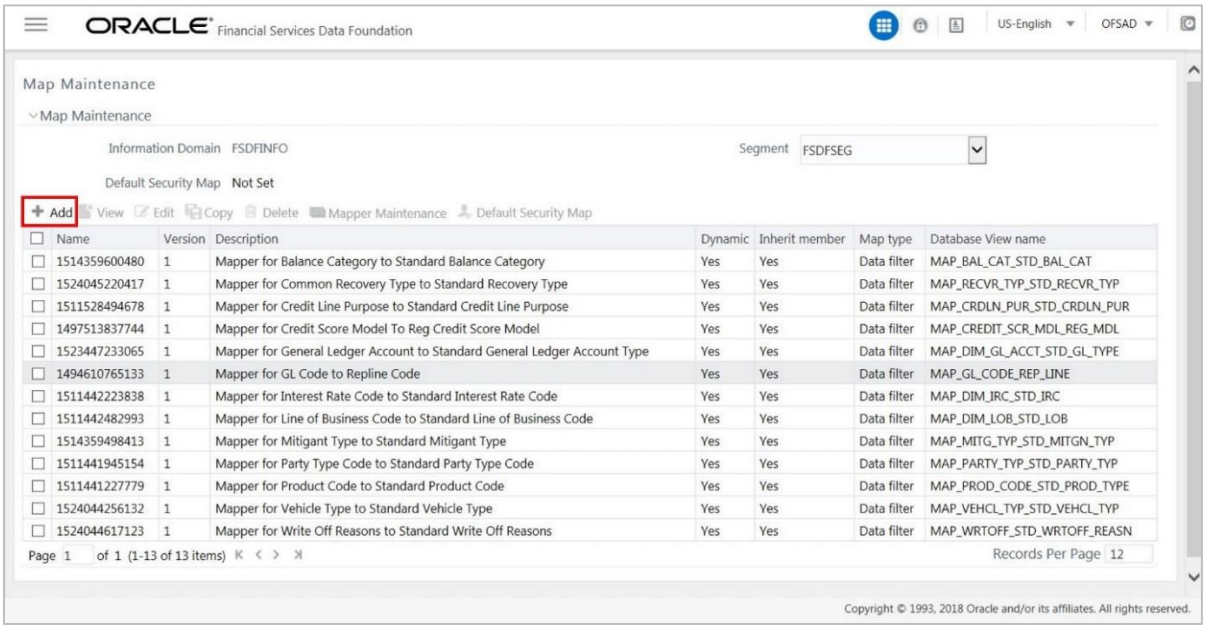

**Possible Mapping Combinations**

One Standard Dimension table in source can be mapped only to one Standard Dimension table. One to Many or Many to Many mapping leads to error in T2T as the records are duplicated. From the illustration, the possible combinations for Mitigant Type to Standard Mitigant Type mapping are One to One and Many to One mappings.

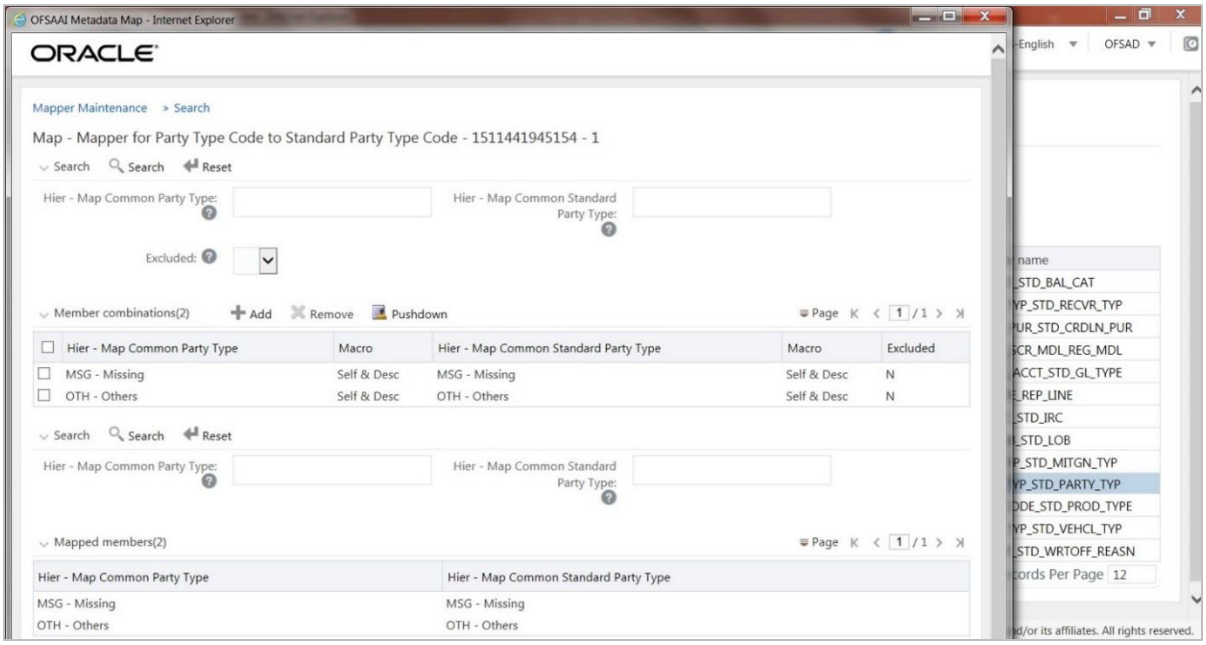
- **One to One Mapping**: You can map one Mitigant Type data model to one Standard Mitigant Type data model using the Mapper Maintenance screen. Here, you must select one value in Mitigant Type data model and one value in Standard Mitigant Type data model.
- **Many to One Mapping**: You can map many values in Mitigant Type data model to one value in Standard Mitigant Type data model using the Mapper Maintenance screen.

To conduct One to One or Many to One mapping:

1. Navigate to **OFSAAI > Financial Services Data Foundation > Unified Analytical Metadata > Business Metadata Management > Map Maintenance**.

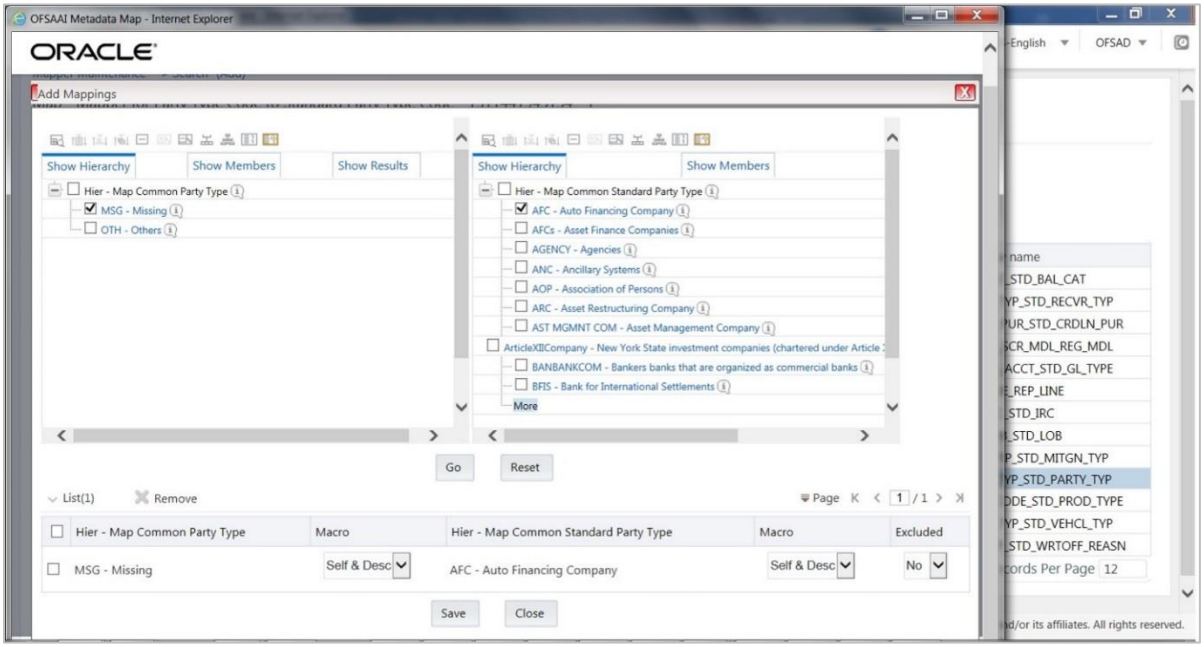



2. Click **Create new Map** icon to create a new map or select an existing Map. For illustration, **Mapper for Party Type Code to Standard Party Type Code** value is selected. Click **Mapper Maintenance** icon.
3. The **Mapper** Maintenance window opens (in this illustration, the **Map - Mapper for Party Type Code to Standard Party Type Code** window opens). To conduct One to One or Many to One mapping, in the Member Combinations section, click **Add**.



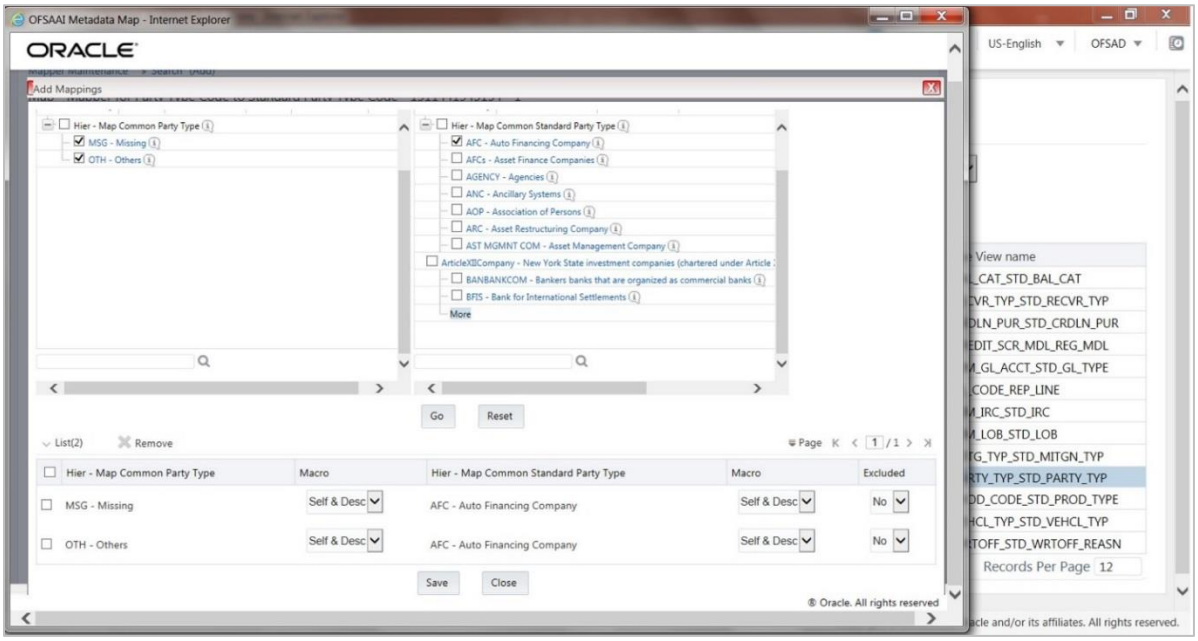
4. The **Add Mappings** pop-up window opens. In this illustration:
   - To map One to One, select one value in the Hier - Map Common Mitigant Type data model and one value in the Hier - Map Common Standard Mitigant Type data model, and click **Go**. Repeat this step for each One to One data model mapping, and then click **Save**.

     In this illustration, **MSG - Missing** is mapped to **AFC - Auto Financing Company**.




   - To map Many to One, select multiple (two in this illustration) values in the Hier - Map Common Mitigant Type data model and one value in the Hier - Map Common Standard Mitigant Type data model, and then click **Go**. Click **Save**.

     In this illustration, **MSG-Missing** and **OTH-Others** are mapped to **AFC-Auto Financing Company**.



5. An acknowledgement is displayed: *Confirm Save?* To confirm saving data, click **Yes**. In the **Mapper** Maintenance window, in the Mapped combinations and the Mapped members sections, you can see the newly conducted mapping.

#### 3.1.3.6 Loading Mapper Maintenance through Backend

Load each Physical table in Atomic Schema with V_MAP_ID as mentioned against each mapper,

V_MEMBER_1 => Customer Specific Value Dimension's Member Code, V_MEMBER_2 => Standard Dimension's Member Code.

This is the list of Mapper Physical Tables and required details:

| PHYSICAL TABLE | V_MAP_ID |
|---|---|
| MAP_MITG_TYP_STD_MITGN_TYP | 1514359498413 |
| MAP_DIM_IRC_STD_IRC | 1511442223838 |
| MAP_PROD_CODE_STD_PROD_TYPE | 1511441227779 |
| MAP_DIM_LOB_STD_LOB | 1511442482993 |
| MAP_CRDLN_PUR_STD_CRDLN_PUR | 1511528494678 |
| MAP_PARTY_TYP_STD_PARTY_TYP | 1511441945154 |
| MAP_BAL_CAT_STD_BAL_CAT | 1514359600480 |
| MAP_CRDLN_TYP_STD_CRDLN_TYP | 1511527713328 |
| MAP_CREDIT_SCR_MDL_REG_MDL | 1497513837744 |
| MAP_DIM_GL_ACCT_STD_GL_TYPE | 1523447233065 |
| MAP_GL_CODE_REP_LINE | 1494610765133 |
| MAP_RECVR_TYP_STD_RECVR_TYP | 1524045220417 |
| MAP_VEHCL_TYP_STD_VEHCL_TYP | 1524044256132 |
| MAP_WRTOFF_STD_WRTOFF_REASN | 1524044617123 |

#### 3.1.3.7 Usage of Mapper Tables in Data Flow and Reports

The mapper maintenance output is always physically stored in underlying tables. These tables are registered in OFSAA as an object. Therefore, these tables can be used, without any restrictions, in any of the metadata that requires reclassification. OFS REG REP RBI Data Flows (T2Ts) make use of this information to populate the Standard Dimension Surrogate Keys of Results area tables.

### 3.1.4 Mappers for Reclassification of Reg Dimensions

The following Mapper tables must be configured as a prerequiste for LR v7 report (V_MEMBER_1 => Customer Specific Value Dimension's Member Code and V_MEMBER_2 => Reg Dimension's Member Code):

- MPIN_ACC_PARTY_REG_PARTY: Mapper for Party to Reg party
- MPIN_ACC_PROD_REG_DEPOSIT : Mapper for Product to Reg Deposit
- MPIN_ACC_PROD_REG_PROD : Mapper for Product to Reg Product

### 3.1.5 Configuring Setup Tables for Standard Set of Values

The following are the setup configurations which are required to be done before executing the RBI Regulatory Reporting Run.

#### 3.1.5.1 SETUP_MASTER Table

The SETUP_MASTER table in atomic schema must be modified with the required values for RBI.

| V_COMPONENT_ CODE | V_COMPONENT_ DESC | V_COMPONENT_ VALUE | Description |
|---|---|---|---|
| DEFAULT_FINANCIAL _ELEMENT | Default Financial Element | DEFAULT | Component Value to be updated according to the values used in STG_GL_DATA.V_FINANCIAL_ELEME NT_CODE. This is used for Fact Management Reporting T2T. |
| DEFAULT_FX_RATE_ SRC | Default FX Rate Source | DEFAULT | Component Value to be updated according to the values used in STG_EXCHANGE_RATE_HIST.V_RAT E_DATA_ORIGIN. This is used for Calculating the Reporting Currency. |
| DEFAULT_MARKET_C ENTER | Market Center Identifier | DEFAULT | Component Value to be updated according to the values used in STG_INSTRUMENT_MARKET_PRICES .V_MKT_CENTER_ID. This is used for Calculating the Instrument Close Price. |
| RBI_DEFAULT_PD_M ODEL | PD Model for RBI Regulatory Reporting | DEFAULT | Component Value to be updated according to the values used in STG_PD_MODEL_MASTER.V_PD_MO DEL_CODE. This is used for Calculating PD Model Band Skey. |

### 3.1.6 Run/Execution Expectations

Run refers to execution. It is assumed that at different time periods, different combination of parameters, and different data require different executions. From a reporting perspective, as required by regulators, RRDF application requires data for the following executions:

1. Current Data / Execution
    a. Reporting month end data
    b. Projection Data
2. Historical (trend/vintage) Data
    a. Yearly
    b. Quarterly
3. Stressed Data

For DSBROR and RBSTR3 reports the SETUP_MASTER table should be updated as follows:

1. DSBROR: It is expected to display Domestic and Overseas data separately. In such cases, data is expected separately at each legal entity level within the organisation structure. Domestic data is populated in the report as data for legal entity within India. Overseas data is populated in the report as data for legal entity outside India.
2. RBSTR3: Is expected to display Year-To-Date (YTD) balance reported Quarterly.

Populate the following tables before executing reports in Reporter Portal, and after populating data in the OFSAA results tables through a scheduled batch:

- SETUP_MASTER: The below mentioned parameters should be updated before every regulatory reporting run.

| V_COMPONENT_CODE | V_COMPONENT_DESC | V_COMPONENT_VALUE (Sample Value) |
|---|---|---|
| CURRENT_QUARTER_NAME | Current Quarter Name | 2014-Q2 |
| PREVIOUS_YEAR | Previous Year | 2013-2014 |
| PREVIOUS_QUARTER_NAME | Previous Quarter Name | 2014-Q1 |
| CURRENT_YEAR | Current Year | 2014-2015 |
| CURRENT_MIS_DATE | Current MIS Date | 2014-06-30 |
| DEFAULT_GAAP | DEFAULT_GAAP | INGAAP |

**NOTE:** For LR v7 report, SETUP_MASTER should be updated for DEFAULT_GAAP value as 'INGAAP' before executing the Account Dimension SCD (<INFODOM>_REG_RBI_ACCOUNT_SCD: This Batch is for Account Dimension from Product Processor Tables for RBI Regulatory Reporting).

- FCT_REG_RUN_LEGAL_ENTITY_MAP: As an Organization should have a hierarchical structure and reporting could happen for entity at any level in the hierarchy, the applicable reporting entity should be provided as part of every regulatory reporting run in this table.

### 3.1.7 Consolidation

Consolidation is handled as part of Financial Services Data Foundation (FSDF). Consolidation in FSDF refers to elimination of intra company transactions, that is, any kind of transactions between two parties or entities which are part of the reporting organizational hierarchy for a given execution. When there is only one legal entity involved in a execution it is called as SOLO Entity vs earlier one as CONSOLIDATED Entity.

It is expected that in staging area, customer loads the data from source system and then uses consolidation logic to arrive at consolidated output for results.

- Scope of consolidation is about list of Entities which participate in consolidation.
- Legal Entity Structure is looked through ORGANIZATION STRUCTURE DIMENSION. This stores parent-child relationship. This is stored only once.
- While moving the data, Legal Entity can move related entities to processing/reporting area.
- Legal structure being finalized once, this structure only stores one parent-child relationship.

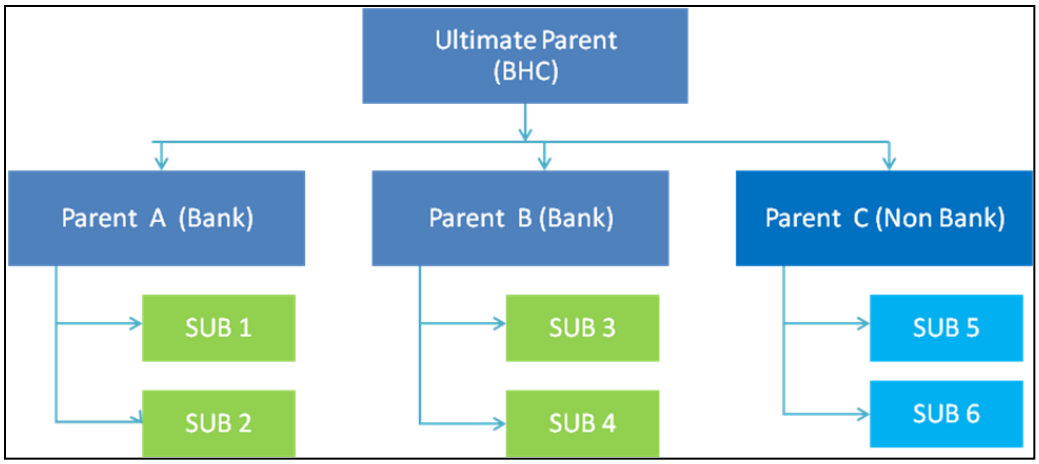



**Figure 18: Consolidation**

- Transaction / exposure between SUB 1 and SUB 2 should be eliminated while reporting for Parent A.
- Transaction / exposure between SUB 1 and SUB 3 should not be eliminated while reporting for Parent A.
- It is customer for banking products and issuer for traded securities which are considered for the intra company elimination.

Consider the following example:

| FSDF AREA | ENTITY CODE | ACCOUNT NUMBER | CUSTOMER | ISSUER |
|---|---|---|---|---|
| STAGE LOAN CONTRACTS | SUB 1 | ACCOUNT 1 | SUB 2 | |
| STAGE LOAN CONTRACTS | SUB 1 | ACCOUNT 2 | PARTY 1 | |
| STAGE INVESTMENT CONTRACTS | SUB 1 | ACCOUNT 3 | PARTY 1 | SUB 2 |

| | | | | |
|---|---|---|---|---|
| FCT COMMON ACCOUNT SUMMARY | SUB 1 | ACCOUNT 2 | PARTY 1 | |
| FSI INTRA COMPANY ACCOUNT | SUB 1 | ACCOUNT 1 | SUB 2 | |
| FSI INTRA COMPANY ACCOUNT | SUB 1 | ACCOUNT 3 | PARTY 1 | SUB 2 |

As shown in the precedding table, Account 1 is moved to FSI INTRA COMPANY ACCOUNT as and Account Summary tables. Run Enabled tables contain records specific to selected legal entity and consolidation type.

Consolidation is also linked to multiple hierarchies banking organizations have. Multiple hierarchies refer to the different grouping of group entities under different parent for a given regulatory requirements.

Hierarchy structure is thus primary input to the consolidation process. Depending on whether you have multiple hierarchies or not, there are two data flows.

Consolidation with Multiple Organization Structure Hierarchy:

1. You load Organization Structure Hierarchy to STAGE ORG STRUCTURE MASTER table, which is moved to ORG STRUCTURE DIMENSION using SCD component.

2. Execution specific organization structure hierarchies along with parent and child entity codes are populated in STAGE LEGAL ENTITY HIERARCHY INTERFACE table, which is moved to LEGAL ENTITY HIERARCHIES DIMENSION using SCD component.

3. Execution specific Consolidation percentage is loaded in STAGE ENTITY CONSOLIDATION PERCENTAGE table, where child entity code, parent entity code and consolidation percentage is populated. This is moved to FACT ENTITY CONSOLIDATION PERCENTAGE table using Table to Table transformation. In FSDF 804 release, this feature is not supported yet.

4. The STAGE LEGAL ENTITY HIERARCHY is used for the Consolidation process and not the one from ORGANIZATION STRUCTURE DIMENSION.

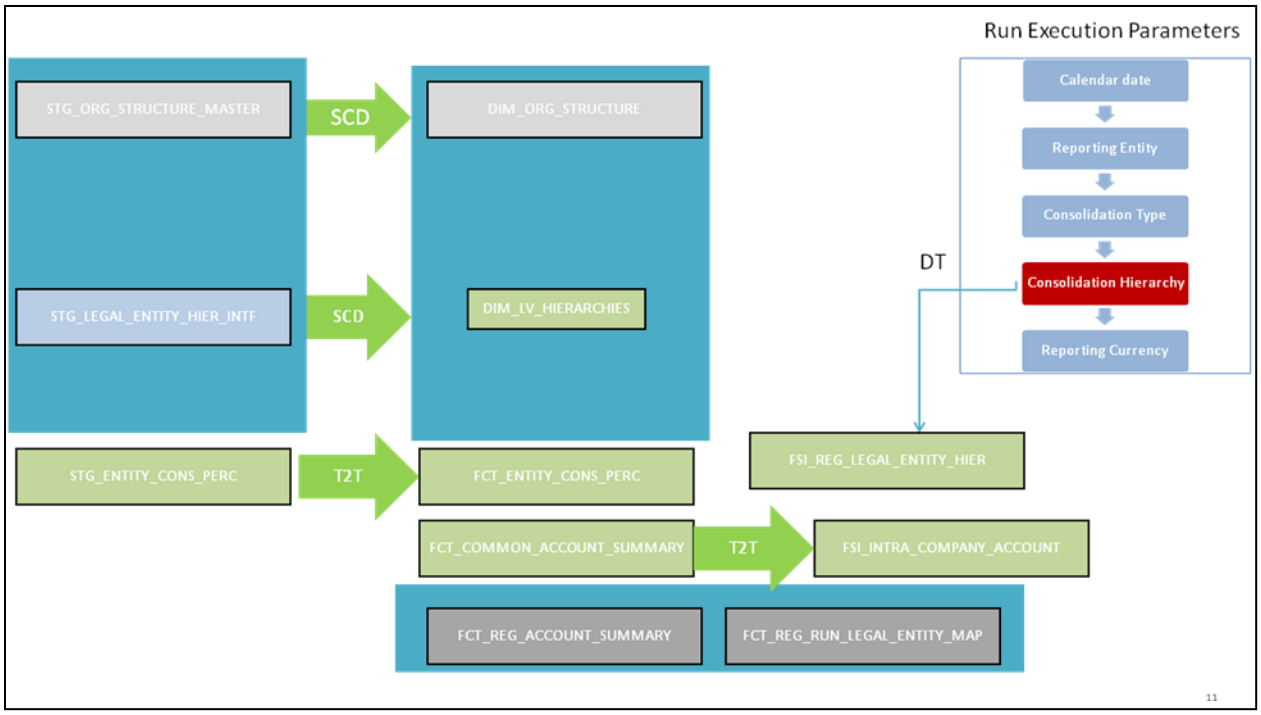



**Figure 19: Consolidation with Multiple Organization Structure Hierarchy**

5. If you do not have Multiple Hierarchy, STAGE LEGAL ETNTITY HIERARCHY which is used for the Consolidation process can be populated from ORG STRUCTURE DIMENSION instead of the STAGE LEGAL ENTITY HIERARCHY.

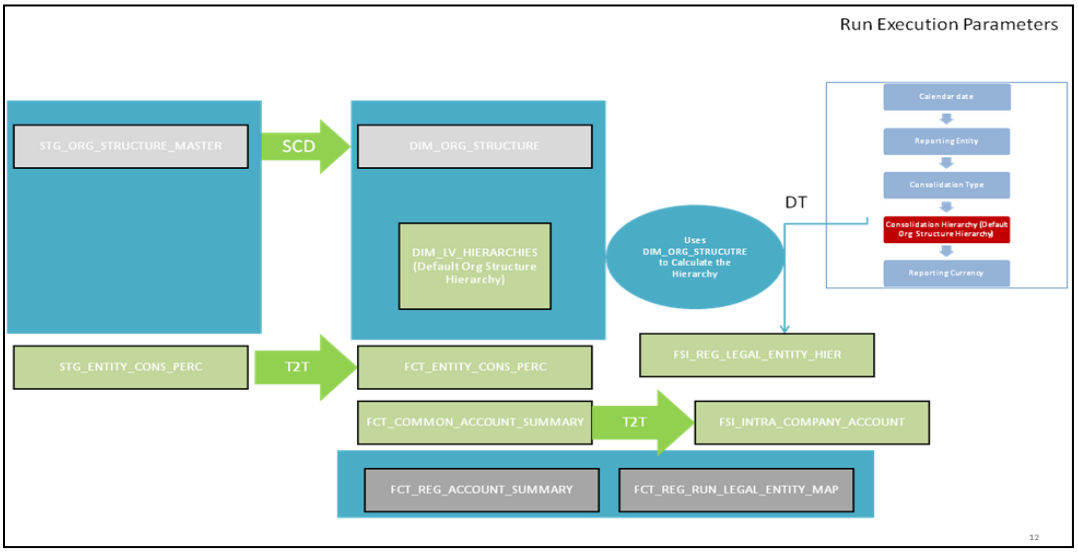



**Figure 20: Consolidation without Multiple Organization Structure Hierarchy**

**NOTE:** A Solo Run does not require any type of consolidation of elimination of accounts with other entities.

**Additional Data Preparations to handle Consolidation**

The entity FCT_REG_RUN_LEGAL_ENTITY_MAP is used once you select REPORTING ENTITY from AgileREPORTER. This table is populated as part of RBI Run Execution.

| RUN TYPE | FIC MIS DATE | REPORTING ENTITY | RUN EXECUTION |
|---|---|---|---|
| SOLO | 20160330 | LE1 | 12 |
| SOLO | 20160330 | LE2 | 14 |
| CONSOLIDATED | 20160330 | LE1 | 16 |
| CONSOLIDATED | 20160330 | LE2 | 16 |
| CONSOLIDATED | 20160330 | LE3 | 16 |

For solo run, only one reporting entity is expected to be included whereas consolidated run includes all entities involved in execution. This entity provides flexibility to select one REPORTING ENTITY in AgileREPORTER and select relevant data for the particular execution based on if it is consolidated or solo.

#### 3.1.7.1 Relationship between Run and Stress

The OFS REG REP RBI application for example in BSR II Annual, picks up reporting data based on the Reporting Run that populates the underlying Fact Table(s). Reporting Run is a flag, which must be marked as 'Y' in a DIM_RUN table so that, the OBIEE reporting layer selects a particular run execution.

In this application, a Run comprises:

a. **Baseline Run**: The Bank Holding Company (BHC) may have multiple runs. The run used for reporting is marked with a **Reporting Flag = Y**. This is the Baseline run for a given reporting date. It is referred to as Baseline because the values that it represents are not stressed and the BHC may use these base values for stressing them according to various scenarios. A history of such runs accumulated over period of time provides historical runs. For more information on updating the reporting flag, refer section Updating Reporting Flag.

b. **Stress Run**: Stress runs hold data, which are stressed by a certain percentage/basis point over the Baseline figures. The BHC expects these figures to reflect the business/risk position under predetermined business scenarios/economic conditions.

c. Identification of Baseline and Stress run occurs from STRESS DIMENSION.

In this application, the required stress runs are tagged to a Baseline run. If the BHC performs several stress runs, the relevant runs which are intended for reporting are identified and tagged with a reporting Baseline run using the V_RUN_ID in the DIM_RUN.

DIM RUN stores n_run_skey / v_execution_id, which are execution specific for every run definition which is v_run_id. Therefore, the run definition can remain constant over a period of time and different executions provide different outputs due to underlying data changes.

DIM_STRESS conveys the stress definition. Additionally, it links the original run Definition (v_run_id) and Stressed run ID (v_stressed_run_id). You must refer to the DIM_RUN table to get expected run execution of these runs definitions pertaining to a particular date / n_mis_date_skey.

The same fact table stores both the Baseline data and the Stressed data, uniquely identified through Scenario codes (and Run skeys).

Refer to the *Business Metadata.xls* present in the installer package for details on different Fact Tables used for related reports.

### 3.1.8 Projection Data

The following points provide information on the projection data:

1. Baseline run also populates projected date data.
2. This application requires projected data at two levels - Quarterly and Annual.
3. The **DIM_CONSOLIDATION** table is used to identify the projections. It contains the codes for projected quarters and years as required by the templates.
4. In the Fact tables, projection data is referred with respective Consolidation codes (scenario code for **FCT_MGMT_REPORTING**). BHC must populate the data accordingly.
5. In the following example, FQ1 means Financial Quarter 1, FY1 means Financial Year 1 and so on.

**Table 5: Projection Data Example 1**

| Consolidation Code | Consolidation Description | Reporting Line | Scenario | EOP Balance |
|---|---|---|---|---|
| 100 | Actual | 100 | BSL | 426,367 |
| 400 | FQ1 | 100 | BSL | 608,618 |
| 401 | FQ2 | 100 | BSL | 870,502 |
| 402 | FQ3 | 100 | BSL | 567,736 |
| 403 | FQ4 | 100 | BSL | 846,196 |
| 404 | FQ5 | 100 | BSL | 775,027 |
| 410 | FY1 | 100 | BSL | 470,092 |
| 411 | FY2 | 100 | BSL | 473,880 |
| 412 | FY3 | 100 | BSL | 942,034 |
| 413 | FY4 | 100 | BSL | 497,889 |
| 414 | FY5 | 100 | BSL | 807,813 |

**Note:**

- For Movement measures data is not carried from one reporting period to another. For example, Profit or Loss. Where General ledger balances such as loan outstanding are carried forward from one year to another, profit and loss is period specific.
- Therefore, unlike End of Period (EoP) balance, movement values for quarter actuals must be derived for reporting. For a historical data, net sales for quarter 3 is the difference between sales figure as of end of quarters 2 and 3. You do not need to provide this difference as a download.

Movement data for actual is identified through different runs and the respective values is summed up.

- Only those records, whose corresponding runs fall between the fiscal month start date and end date of the reporting quarter are selected for summation. Each Run has an associated date, and runs can be performed daily. Assuming that runs are performed daily in a given quarter (90 days), REG REP sums up data points across all 90 days to arrive at a quarter end movement figure.

**Table 6: Projection Data Example 2**

| Code | Projected Period | Reporting Line | Scenario | Run ID | Date | Projected Amount | Movement |
|---|---|---|---|---|---|---|---|
| 100 | Actual | 100 | BSL | RUNID001 | 10-Oct-13 | 300,000 | 900,000 |
| 100 | Actual | 100 | BSL | RUNID002 | 15-Nov-13 | 100,000 | |
| 100 | Actual | 100 | BSL | RUNID003 | 20-Nov-13 | 300,000 | |
| 100 | Actual | 100 | BSL | RUNID004 | 30-Dec-13 | 200,000 | |
| 400 | FQ1 | 100 | BSL | -- | -- | -- | 608,618 |
| 401 | FQ2 | 100 | BSL | -- | -- | -- | 870,503 |
| 402 | FQ3 | 100 | BSL | -- | -- | -- | 567,736 |
| 410 | FY1 | 100 | BSL | -- | -- | -- | 470,093 |
| 411 | FY2 | 100 | BSL | -- | -- | -- | 473,881 |
| 412 | FY3 | 100 | BSL | -- | -- | -- | 942,035 |

- However, when projection of net sales for quarter 2 next year is to be performed, no derivation is required. Projections data for said quarter can be directly downloaded in the respective Fact table(s) for reporting.

### 3.1.9 Data Flow from Source Systems to Staging Area

The staging area is populated with data from various data sources, such as GL data, Account data, Customer data, Trading data, Currency data, and Master data. Refer to *Data Integration Hub (DIH) User Guide* in OHC Documentation Library for details. DIH enables to load the data from the source systems to the OFSAA staging tables, through logical interfaces, known as Application Data Interfaces (ADI). DIH provides a set of User Interfaces (UI), which is used to define and maintain External Data Descriptor (EDD), Application Data Interfaces, and map the EDDs and ADIs through connectors.

## 3.1.10 Data Flow from Staging to Results Area

This section details the pass through data, transformed data and classification.

### 3.1.10.1 Pass Through Data

Pass through data refers to the static data that is pre-processed and flows to the results area directly. The Common Staging Area (CSA) model represents the data entry point into the FSDF. 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 staging area is a physical data model, which is deployed using the Analytical Application Infrastructure, which manages it. 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 a bank.

The staging area acts as the single source of data, and contains unified data requirements for various banking areas such as Loans and Losses, Off balance Sheet products, Securities, Derivatives, Capital Data, Management Ledger and General Ledger. Common example of this category includes various monetary amounts, dates and so on.

## 3.1.11 Data Flow from Staging to Processing Area

The staging area of the FSDF serves 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 Finance to Risk to Compliance.

These applications consist of custom-built computational engines and numerical libraries, and can 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 the 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 OFSDF recognizes the need for distinct application-specific working stores, separate from the staging and reporting area. For example, the OFSAA Asset and Liability Management (ALM) application has a distinct set of ALM-specific tables, as does the Market Risk solution.

**Note:** The structure of 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 OFSDF. This is because OFSDF is intended to be an open platform. Other analytical applications and engines can equally provision data out of OFSDF by mapping their input requirements appropriately to the OFSDF staging area model.

### 3.1.12 Data Flow from Processing to Results Area

This step is similar to Data Flow from Staging to Results Area. It involves either pass through data from processing to results or loading directly to results (refer Section 3.1.9). This is mostly due to processing measures such as Fair Value, Risk Weighted Assets, and so on.

### 3.1.13 Guidelines for Data Loading to Result Area Tables in Data Foundation for Regulatory Reporting Implementations

Regulatory reports make use of data available across several fact tables in the OFSAA data foundation model and these result tables are either loaded from the raw data sourced from source systems via out-of-box T2T's or processed data output from various OFSAA applications.

For example, Fact LRM Account Summary (FCT_LRM_ACCOUNT_SUMMARY) which stores the liquidity risk related attributes and metrics computed by OFSAA LRM application, Fact Loan Loss Forecasting and Provision Account Summary (FCT_LLFP_ACCOUNT_SUMMARY) which stores the attributes and measures computed by OFSAA LLFP application. However, there can be several implementation use cases in the regulatory reporting space where customer may not have licensed any of OFSAA application and hence must put additional custom effort to design an ETL process to load the required data elements into the respective fact tables referenced by the report. The following section highlight some of the guidelines that the customer can consider when designing a data flow for such a use case.

- Consistent Usage of Run Identifier

  Most of the fact tables used in regulatory reporting are run enabled and have a composite primary key inclusive of run identifier that enables same snapshot of data to be loaded multiple times into the target fact table for any given execution date. All the out of the box processes that impact data used in regulatory reports are executed as part of an integrated run to ensure that run identifier is consistent across fact tables. Since the reporting is done on an integrated schema, it is imperative for the custom data flow design to keep this integrity intact. This essentially means that the custom ETL processes designed to load the data directly into the fact tables must be able to leverage the run identifier generated by the run engine during execution. Run Identifier information is available in DIM_RUN table.

- Correct Dimensional Lookup Configuration

  Dimensional identifiers are typically part of referential integrity constraints with the fact table so the custom ETL processes must ensure that lookups retrieve a valid surrogate keys for a given value of business key. The intermediate staging structure must ensure all the business keys are persisted correctly and the lookup condition is designed on the correct dimension table.

  For example, FCT_LRM_ACCOUNT_SUMMARY.n_asset_level_skey → DIM_ASSET_LEVEL.n_asset_level_skey. The business key (v_asset_level_code) must be sourced and persisted to ensure correct values are populated in the target column, that is, FCT_LRM_ACCOUNT_SUMMARY.n_asset_level_skey.

- Data Loading Guidelines for handling Negative or Credit Balances

  To handle Negative Balances in Regulatory Reporting, there are two primary sources of the negative balances:

  1. Natural asset negative balances from system of records
  2. Adjustment entries or Plug entries.

  Reporting requirement is to show the genuine asset negative balances as liabilities where adjustment entries should be aggregated to the same heading assets or liabilities as they are loaded. RBI uses General Ledger type from General Ledger Account dimension. Primarily following two General Ledger Type codes are used for this purpose.

  1. ASSET
  2. LIABILITY

  General Ledger is available in every contract or product processor table as General Ledger code. Following products are considered for the treatment of negative balances:

  1. Loans and Cards
     a. Loans are reported under Assets category in Balance Sheet. There are cases when customer makes excess payment towards the loan account which makes the end of period account balance becoming credit balance or negative balance.
     b. When excess payment is made, then account will no longer fall under Asset category, but it becomes a liability for the financial institution and must be reported as non-interest bearing demand deposits in respective line items.
     c. To avoid reporting of excess payment as assets, you must assign a General Ledger code to given account with V_GL_TYPE_CODE = 'LIAB'.
     d. When for any loan regulatory reclassification assigned with GL code having V_GL_TYPE_CODE = 'LIAB', it excludes the reporting for all asset line items and it is added to Liability in respective line items.
     e. Accounts created for Adjustment or Plug entries must have General Ledger code having V_GL_TYPE_CODE = 'AST'. This adds up to the same asset line item resulting in addition or reduction of overall reporting amount for a given line item based on sign of end of period balance.
     f. Accounts created for Adjustment or Plug entries for excess payments must have General Ledger code having V_GL_TYPE_CODE = 'LIAB'. This adds up to the same Liability line item resulting in addition or reduction of overall reporting amount for a given line item based on sign of end of period balance.

#### 3.1.13.1 Data Mapping (T2T)

Data Mapping refers to the process of retrieving unstructured data from data sources for further data processing, storage, or migration. This feature is commonly known as RDBMS source to RDBMS target (T2T) framework in the OFSAA world and can be leveraged when source data is available in Oracle database. Dimensional lookups must be handled via the T2T's join condition and expressions. Refer to *OFS AAI User Guide* for more details on configuring a T2T.

#### 3.1.13.2 Data File Mapping (Flat File to RDBMS Target - F2T)

If the source data is available in file structures, OFSAA F2T component can be used to bring the data in the OFSAA eco system. As lookups cannot be configured in a F2T, this component must be used in conjunction with T2T component, that is, data is first loaded from the file to an interim staging structure using the F2T component followed by data load to the target result area table using the T2T component. This is least recommended approach as there is need for interim table structure in data model and involves multiple data hops which add to the overhead.

See the *Oracle Financial Services Analytical Applications Infrastructure User Guide* for more details on OHC configuring a F2T.

### 3.1.14 FSDF Entity Information

The FSDF entity information is given in the Dimension and Fact tables.

#### 3.1.14.1 Dimension Tables/Entities

**Table 7: Dimension Tables/Entities**

| Sl. No. | List of Dimension Tables | Table/Entity Logical Names | Table/Entity Descriptions |
|---|---|---|---|
| 1 | DIM_ACQUIRED_FIRM | Acquired Firm Dimension | This table stores the Legal Entity information which are acquired by the reporting entity. |
| 2 | DIM_ACTIVITY_TYPE | Opportunity Activity Type Dimension | This stores the list of activity types that can be performed for an opportunity. |
| 3 | DIM_ADDRESS | Address Dimension | This dimension table stores the master address details. The Staging table is Stage Address Master. |
| 4 | DIM_APPLICATION_REJECT_REASONS | Application Reject Reasons Dimension | This table stores the list of rejection reasons possible while processing an application. This is a dimension table. |
| 5 | DIM_APPLICATION_STATUS | Application Status Dimension | Stores the master list of application status – processing, cancelled by customer, outstanding, outstanding from restructuring, and so on. |
| 6 | DIM_APPLICATION_TYPE | Application Type Dimension | This stores the application types - Fresh, Existing, and Enhancements. |

| Sl. No. | List of Dimension Tables | Table/Entity Logical Names | Table/Entity Descriptions |
|---|---|---|---|
| 7 | DIM_ATTRITION | Attrition Dimension | List of reasons why customers terminate relationship with the Financial Institution. |
| 8 | DIM_AUTH_DECISION_REASONS | Authorization Decision Reasons Dimension | This table stores the master list of authorization decision reasons like delinquency, fraud and so on. |
| 9 | DIM_AVAIL_INTRADAY_LIQ_SOURCE | Dimension Available Intraday Liquidity Source | This entity stores the standard list of available intraday liquidity sources. For example: "Reserve balances at the central bank", "Balances with other banks that can be used for intraday settlement" as mentioned in BCBS 248. |
| 10 | DIM_BALANCE_CATEGORY | Balance Category Dimension | This dimension entity stores the list of categories that a Balance can have. |
| 11 | DIM_BANK_INSTRUMENT_TYPE | Bank Instrument Type Dimension | This entity holds the unique list of all the Instrument Type used by the Financial Institution and the details of each Instrument Type. |
| 12 | DIM_BILL_PLAN | Billing Account Dimension | The account by which bills are generated and payments applied for policy premium. This can be the same as a policy or different. Multiple policies can be associated with the same bill plan. |
| 13 | DIM_BUSINESS_CLASS | Business Class Dimension | This table stores the list of all the applicable business classes for the entities. This refers to Article 159 and subsequent annexures. |
| 14 | DIM_BUSINESS_SEGMENT | Business Segment Dimension | This table stores the list of applicable business segments in which an entity operates. |
| 15 | DIM_BUSINESS_UNIT | Business Unit Dimension | This table stores various details of the business units that operate under the bank. This is used for pillar 3 reporting. |

| Sl. No. | List of Dimension Tables | Table/Entity Logical Names | Table/Entity Descriptions |
|---|---|---|---|
| 16 | DIM_CAMPAIGN | Campaign Dimension | This entity stores the account-wise summary details for the product processor. |
| 17 | DIM_CAMPAIGN_CHANNEL | Campaign Channel Dimension | This entity stores the list of channels that a campaign can utilize. |
| 18 | DIM_CAPITAL_REQUIREMENT_TYPE | Capital Requirement Type Dimension | This table stores the list of capital requirement types as specified by the supervisor. |
| 19 | DIM_CARDS_MASTER | Cards Master | This table stores the cards products. |
| 20 | DIM_CARD_TYPE | Card Type Dimension | This entity stores the list of all types of cards issued by the bank. |
| 21 | DIM_CATASTROPHE_EVENTS | Catastrophe Events Dimension | Dimension table to store catastrophic events for a claim. |
| 22 | DIM_CAUSES | Causes Dimension | This table stores the information about causes defined in the system, the list of values are like Earthquake, Loan Fraud, Theft, and so on. |
| 23 | DIM_CDS_INDEX | CDS Index Name Dimension | This table stores the various CDS index names. |
| 24 | DIM_CHANNEL | Acquisition Channel Dimension | This entity stores the master list of acquisition channel codes available for acquiring new accounts.<br>New accounts are analyzed by acquisition channel codes, to determine the most efficient channels for acquisition. |
| 25 | DIM_CHANNEL_TXN | Channel Transaction Dimension | This entity stores the list of all transaction channels offered by the Bank.<br>These are the channels through which a customer transaction is processed. |
| 26 | DIM_CLAIM | Claim Dimension | This table stores the list of all claims. |
| 27 | DIM_CLAIM_REFERRAL_REASON | Claim Referral Reason Dimension | This table stores the different referral reasons for a claim. |

| Sl. No. | List of Dimension Tables | Table/Entity Logical Names | Table/Entity Descriptions |
|---|---|---|---|
| 28 | DIM_CLAIM_REFUSAL_REASON | Dimension Claim Refusal Reason | This table stores the list of all the reasons for which a claim can be refused by the entity. |
| 29 | DIM_CLAIM_STATUS | Dimension Claim Status | This table stores the list of all status codes and descriptions, which are applicable for a claim transaction. |
| 30 | DIM_COLLATERAL_PURPOSE | Collateral Purpose Dimension | This table stores the list of all applicable uses of collateral like pledge, held, and so on. |
| 31 | DIM_COLLECTION_OFFICER | Collection Officer Dimension | This entity stores the collection officer details. |
| 32 | DIM_COMMODITY | Commodity Information | This entity stores the master list of commodities in which a bank does trading. For example: Sugar, Steel, Rubber, and so on. |
| 33 | DIM_COMMODITY_GRADE | Commodity Grade Dimension | This table stores the grades of all tradable commodities or forms of the commodity. For example: Soyabean (commodity) can have multiple grades such as soyabean oil, soyabean seed, soyabean meal, and so on. This table is a SCD. The MASTER table for this Dimension table is STG_COMMODITY_GRADE_MASTER. |
| 34 | DIM_COMMON_COA | Common Chart Of Accounts Dimension | This table stores the Common COA members in BI. |
| 35 | DIM_CONSENT_PURPOSE | Consent Purpose Dimension | This table stores the Consent Purpose definitions received from source systems. |
| 36 | DIM_CONSOLIDATION_APPROACH | Dimension Consolidation Approach | This table stores the list of all approaches used for consolidating related undertaking with parent undertaking. |

| Sl. No. | List of Dimension Tables | Table/Entity Logical Names | Table/Entity Descriptions |
|---|---|---|---|
| 37 | DIM_CONTACT | Contact Dimension | This entity stores the list of contacts imported by the Financial Institution. |
| 38 | DIM_COVERAGE_STATUS | Coverage Status Dimension | This table stores the list of all statuses for coverage. |
| 39 | DIM_COVERAGE_TYPE | Coverage Type Dimension | This table stores the list of all coverage types. |
| 40 | DIM_COVERAGE_WITHDR_STATUS | Coverage Withdraw Status Dimension | This table stores the Policy Coverage Withdrawal Status description. Values can be STANDARD, LIFE WITHDRAWAL, and NO WITHDRAWAL. |
| 41 | DIM_CREDIT_CENTER | Credit Center Dimension | This tables stores the credit center location codes. |
| 42 | DIM_CREDIT_LINE | Credit Facility Dimension | This table stores the credit facility definition. Credit facility is committed line of credit given to a customer who can have multiple draws / exposures out of a given credit line. |
| 43 | DIM_CREDIT_LINE_PURPOSE | Credit Facility Purpose Dimension | This table stores the purpose of the said credit facility. Values expected are combination of Lending Purpose, Facility Type, and so on. |
| 44 | DIM_CREDIT_LINE_STATUS | Credit Line Status Dimension | This table stores account's credit line status values as used by customer. The status of the credit line can be Active, Frozen, and Closed. This is customer dimension. |
| 45 | DIM_CREDIT_LINE_TYPE | Credit Facility Type Dimension | This table stores the credit facility types. It is expected to hold Direct or Modified values of Facility Type like:<br>• REVOLVING CREDIT<br>• Term Loan<br>• REVOLVING CREDIT converting to Term Loans and so on. |

| Sl. No. | List of Dimension Tables | Table/Entity Logical Names | Table/Entity Descriptions |
|---|---|---|---|
| | | | Unlike standard credit line type this is open list. |
| 46 | DIM_CREDIT_OFFICER | Credit Officer Dimension | This entity stores the credit officer details. |
| 47 | DIM_CREDIT_PARTCPN | Credit Participation Dimension | This table stores the credit participation information. It details the various attributes of a given credit participation ID. |
| 48 | DIM_CREDIT_PARTCPN_TRNCH | Credit Participation Tranche Dimension | This table stores the credit participation tranche information. It details the various attributes of a given credit participation tranche. |
| 49 | DIM_CREDIT_PARTCPTION | Credit Participation Contract Dimension | This table stores the contract identifiers for the main participation or syndication contract. |
| 50 | DIM_CREDIT_PARTCPTION_TRANCHE | Credit Participation Tranche Dimension | This table stores the contract identifiers for the tranche participation or syndication contract. Bank can open one default or multiple tranches under a given main contract. Different banks can participate in loan syndication for different tranches. Lead bank can choose the banks among the syndication who can participate as well. |
| 51 | DIM_CREDIT_QUALITY_TYPE | Credit Quality Type Dimension | This entity stores the credit quality information relevant to an account. It helps in analyzing the performance of the account at the portfolio level. List of values are Pass, Low Pass, Pre Watch, Watch list, Doubtful, and so on. |
| 52 | DIM_CREDIT_REASON | Credit Reason Dimension | This table stores the master list of credit reasons. |

| Sl. No. | List of Dimension Tables | Table/Entity Logical Names | Table/Entity Descriptions |
|---|---|---|---|
| 53 | DIM_CREDIT_SCORE_MODEL | Dim Credit Score Model | This entity stores the list of credit score models used in arriving at the credit score. FICO and Vantage score can be examples of models used. |
| 54 | DIM_CUSTODIAN | Custodian Dimension | This table stores the custodian related information. |
| 55 | DIM_CUSTOMER | Customer Dimension | This entity stores the list of the organization's customers and the customer attributes. It includes even those customers who have ceased to have a relationship with the organization. |
| 56 | DIM_CUSTOMER_EMPLOYMENT_TYPE | Customer Employment Type Dimension | This entity stores the employment type information related to the customer. This information helps is understanding the employment/business of the customer to which bank has given the loan. List of values are Professional Service, Self-Employment, Small Scale Business, Medium Scale Business, Private Enterprise, and so on. |
| 57 | DIM_CUSTOMER_SERVICE_ENROLL | Customer Service Enrollment | This table stores the service enrollments that the customer can enroll into. The set of services and subscriptions can be Online Registration, Social Media Following, Mobile Application Download, Credit Protection, ID Protection, Money Management Tool, Standing Instructions, ECS/ Direct Debits, Newsletter, Fee based Enrollments, Supplementary Cards, Secure Code / Safekey, Auto Redemption / Cashback, Contactless / NFC Enrollment, Comprehensive Card Protection. |

| Sl. No. | List of Dimension Tables | Table/Entity Logical Names | Table/Entity Descriptions |
|---|---|---|---|
| 58 | DIM_CUSTOMER_TYPE | Customer Type Dimension | This entity stores the master list of customer types: OUR / OTH. |
| 59 | DIM_DATA_ORIGIN | Data Origin Dimension | This table stores the source system codes from which the staging data originated. |
| 60 | DIM_DEALER | Dealer Dimension | This table stores the master list of Trading Book dealers. |
| 61 | DIM_DEALER_GROUP | Dealer Group Dimension | This table store the master list of dealer groups. |
| 62 | DIM_DECISION_STATUS | Decision Status Dimension | This table contains the master list of application decision status like pending, referred, cancelled and so on. |
| 63 | DIM_DEDUCTIBLE | Policy Deductible Dimensions | This table stores the information related to deductible, types, applies to information. |
| 64 | DIM_DEPOSIT_SUB_ACCOUNT | Split Deposit Sub Account Dimension | This table stores the sub accounts for split deposits. Banks often split deposit to differentiate transactional and non-transactional balances for the purpose of regulatory reporting. This table stores the details of split sub accounts along with reference of original deposit account. |
| 65 | DIM_DEVIATION_REASONS | Deviation Reasons Dimension | This entity stores the unique set of deviation reasons that are used to analyze up to 5 deviations that are granted to applicants. |
| 66 | DIM_DOCUMENT_TYPE | Document Type Dimension | This entity stores the various types of document. Types of document can be bank specified or as required to the process in the bank. This table stores the list of all types of document that are required by bank for an account. For example: HUD, Know before you Owe, and so on. |

| Sl. No. | List of Dimension Tables | Table/Entity Logical Names | Table/Entity Descriptions |
|---|---|---|---|
| 67 | DIM_DRIVER | Driver Dimension | This table stores the driver details. |
| 68 | DIM_DWELLING | Dwelling Dimension | This table stores the dimensional information for dwelling fire, commercial property, and commercial autos. |
| 69 | DIM_EDUCATION | Education Dimension | This entity stores the education details. |
| 70 | DIM_EMAIL | Email Dimension | This table stores the master email details. The staging table is Stage Email Master. |
| 71 | DIM_EMPLOYEE | Employee Dimension | This table stores the employee information. |
| 72 | DIM_ENCUMBRANCE_SOURCES | Encumbrance Sources Dimension | This table stores the Encumbrance Sources required by Ana-Credit. |
| 73 | DIM_EXPOSURE | Exposure Dimension | This entity stores the account-wise summary details for the product processor. |
| 74 | DIM_EXPOSURE_SENIORITY | Exposure Seniority Dimension | This entity stores the different levels of exposures seniority. |
| 75 | DIM_FIXED_ASSETS | Fixed Assets Dimension | This table stores the data related to fixed assets. Fixed assets are physical assets such as Buildings, Land, Machinery, Automobiles, Gold bullion, and so on. They can be sold and appropriate profit / loss can be recognized based on appropriate accounting principles. |
| 76 | DIM_FIXED_ASSETS_TYPE | Fixed Assets Type Dimension | This table stores the data related to type of fixed assets. Types of fixed assets are Real Estate, Equipment, Automobiles, and so on. Type under the movable category include automobiles. Type under the immovable category include real estate, equipment, and so on. The STG_FIXED_ASSETS_TYPE_MASTER is the master table for this dimension, |

| Sl. No. | List of Dimension Tables | Table/Entity Logical Names | Table/Entity Descriptions |
|---|---|---|---|
| | | | wherein bank provided inputs of fixed asset type are captured. |
| 77 | DIM_FORBORNE_STATUS | Forborne Status Dimension | This table stores the forbearance statuses. |
| 78 | DIM_FRAUD_REASONS | Fraud Reasons Dimension | This table stores the master list of fraud reasons. |
| 79 | DIM_FUND | Fund Dimension | This table stores list of all funds used by the entity. |
| 80 | DIM_GEOGRAPHY | Geography Dimension | This dimension entity stores the list of geographical locations where any of the transaction channels of the bank are located. |
| 81 | DIM_GL_ACCOUNT | General Ledger Account Dimension | This table stores the GL account details. |
| 82 | DIM_GL_ACCOUNTING_HEAD | GL Accounting Capital Head Dimension | This table stores the subset of GL heads which constitute a banks accounting capital. |
| 83 | DIM_GL_BOOK | GL Book Dimension | This table stores the GL book. |
| 84 | DIM_GUARANTEE_SCHEME | Credit Guarantee Scheme Dimension | This table stores the scheme name under which a collateral-free credit is granted to the counterparty. The exposure disbursed under these schemes are considered to be guaranteed by the Trust implementing these schemes. |
| 85 | DIM_GUARANTOR_TYPE | Guarantor Type Dimension | This table stores the guarantor type. |
| 86 | DIM_HEDGE_PORTFOLIO_SET | Hedge Portfolio Set Dimension | This table stores the unique hedge identification under which the accounts are covered. |
| 87 | DIM_HEDGE_STATUS | Hedge Status Dimension | This table stores the applicable statuses for a hedge transaction. |

| Sl. No. | List of Dimension Tables | Table/Entity Logical Names | Table/Entity Descriptions |
|---|---|---|---|
| 88 | DIM_HEDGE_TYPE | Hedge Type Dimension | This table stores the types of a hedge transaction. For example: values include Delta Hedge, Gamma Hedge, and so on. |
| 89 | DIM_HOME_OWNERSHIP | Home Ownership Dimension | This table stores the master list of ownership codes like own home, own mobile, rented home, and so on. |
| 90 | DIM_HOUSEHOLD | Household Dimension | This entity stores the information of the household. More than one customer can belong to a Household. |
| 91 | DIM_INFL_INDEX | Inflation Index Name Dimension | This entity stores the master list of indexes which are used to measure inflation in an economy. Inflation is the rate at which the general level of prices for goods and services is rising and, consequently, the purchasing power of currency is falling. |
| 92 | DIM_INDUSTRY | Industry Dimension | This entity stores the industry information. |
| 93 | DIM_INSTRUMENT_CONTRACT | Instruments Contracts Dimension | This entity stores the contracts and instruments in the market and their attributes. |
| 94 | DIM_INSURANCE_CLASS_CODE | Insurance Class Code Dimension | This table stores the different ISO classification codes for insurance. |
| 95 | DIM_INSURANCE_COVERAGE | Insurance Coverage Dimension | This Band table stores the insurance coverage in term of percentage. |
| 96 | DIM_INSURANCE_SCHEME | Dimension Insurance Scheme | This entity stores the details of insurance scheme. |
| 97 | DIM_INS_LAPSE_RATE_GROUP | Insurance Lapse Rate Group Dimension | This table stores the insurance lapse rates to be used for valuation of insurance policies. In another table lapse rate group code binds multiple lapse rates under one heading. |

| Sl. No. | List of Dimension Tables | Table/Entity Logical Names | Table/Entity Descriptions |
|---|---|---|---|
| 98 | DIM_INS_MORBIDITY_TABLE | Insurance Morbidity Table 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. Used in computing policy premiums and reserves. |
| 99 | DIM_INS_MORTALITY_TABLE | Insurance Mortality Table 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 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. In dimension table a definition of a mortality table is stored. |
| 100 | DIM_IRC | Interest Rate Curve Dimension | This entity stores the interest rate curve definitions. |
| 101 | DIM_ISSUER | Issuer Dimension | This entity is used as an issuer of marketable collaterals. |
| 102 | DIM_ISSUER_TYPE | Issuer Type Dimension | This entity stores the Issuer Types. |
| 103 | DIM_LEGAL_PROCEDING_STATUS | Legal Proceeding Status Dimension | This entity stores the legal proceeding status codes for the customer along with the descriptions for each status code. |

| Sl. No. | List of Dimension Tables | Table/Entity Logical Names | Table/Entity Descriptions |
|---|---|---|---|
| 104 | DIM_LEGAL_REPORTING | Legal Reporting | This entity stores the legal reporting hierarchy of an organization. The lowest level of the hierarchy is the booking transit and the highest level is the whole Financial Group defined as per the BASEL guidelines. |
| 105 | DIM_LITIGATION | Litigation Dimension | This table stores the information regarding claims wherein litigation (court case) has been initiated by a claim party. The litigation provides additional detail for claims that have been included in a court case. |
| 106 | DIM_LOAN_PARTICIPATION | Loan Participation Dimension | This table stores the participation loan details. |
| 107 | DIM_LOAN_PARTICIPATION_TRANCHE | Loan Participation Tranche Dimension | This table stores the participation loan tranche details. |
| 108 | DIM_LOAN_PURPOSE | Loan Purpose Dimension | This table stores the master list of loan purposes, for example new purchase, loan refinancing and so on. |
| 109 | DIM_LOAN_RECOURSE_TYPE | Loan Recourse Type Dimension | This table stores the loan recourse type and category. For example: Interest only / Principle only: Full / Partial. |
| 110 | DIM_LOB | Line Of Business Dimension | This entity stores the account-wise summary details for the product processor. |
| 111 | DIM_LOCATION | Location Dimension | This table stores the location dimension. |
| 112 | DIM_LOSS_MITIGATION_PROGRAM | Loss Mitigation Program Dimension | "This table stores the loss mitigation program details. Examples of loss mitigation programs include match pay, temporary mitigation programs lasting up to 12 months, or permanent mitigation programs lasting more than one year. |

| Sl. No. | List of Dimension Tables | Table/Entity Logical Names | Table/Entity Descriptions |
|---|---|---|---|
| 113 | DIM_LOSS_SHARE_AGREEMENT | Loss Share Agreement Dimension | This table stores the specific loss sharing agreements. A unique ID should be generated for each active sharing agreement. The specific ID should be consistent over time for as long as the agreement remains active without a relevant change in the terms of the loss sharing agreement.<br>The institution should also provide a written summary of the relevant terms of each loss sharing agreement along with the corresponding Loss Share ID number. Additional supporting documentation may be requested if necessary.<br>Report blank if the account is not associated with a loss sharing agreement. |
| 114 | DIM_LV_HIERARCHIES | Hierarchy Level Dimension | This table stores the hierarchy level information. |
| 115 | DIM_MANAGEMENT | Account Management Dimension | This entity stores the organization hierarchy across the management. |
| 116 | DIM_MARITAL_STATUS | Marital Status Dimension | This entity stores customer marital status details. |
| 117 | DIM_MARKET_CELL | Market Cell Dimension | This table stores the list of market cells. |
| 118 | DIM_MARKET_VARIABLES | Market Variable Dimension | This entity stores the dimensional data of the general market variables like GDP, CPI, and so on. |
| 119 | DIM_MERCHANT | Merchant Dimension | This table stores the merchant details. |
| 120 | DIM_MERCHANT_CATEGORY | Merchant Category Dimension | This entity stores the master list for all categories of merchants who own the bank's POS terminals. |

| Sl. No. | List of Dimension Tables | Table/Entity Logical Names | Table/Entity Descriptions |
|---|---|---|---|
| 121 | DIM_MIGRATION_REASONS | Migration Reasons Dimension | This entity stores a unique set of deviation reasons that are used to analyze up to 5 deviations that are granted to applicants. |
| 122 | DIM_MITIGANT | Mitigant Dimension | This entity stores the information on various risk mitigants like collateral, guarantee, nettable liabilities, and so on. |
| 123 | DIM_MITIGANT_SECURITY_INT_TYPE | Mitigant Security Interest Type Table Dimension | This table stores the bank specific security interest types. A security interest is a type of property interest created by agreement or by operation of law over assets to secure the performance of an obligation usually the payment of a debt. |
| 124 | DIM_MITIGANT_TYPE | Mitigant Types Dimension | This entity stores the master list of mitigant types given by the customers against their exposures. Possible types include: Collateral, Guarantee, and so on. |
| 125 | DIM_MKTG_PROGRAM | Marketing Program Dimension | This entity stores the list of programs for execution of campaign.<br>A program is a container for organizing, designing, and executing multistage, triggered, and recurring marketing programs using new or existing campaigns. |
| 126 | DIM_MORT_SERV_RIGHTS | Mortgage Servicing Rights Dimension | This table stores the unique mortgage servicing rights. In turn this table helps identify unique mortgage servicing rights. |
| 127 | DIM_MR_ASSET | Asset Dimension | This entity stores the list currencies and the commodities where commodity is used to identify the commodity risk factor and currency for other risk factor. |

| Sl. No. | List of Dimension Tables | Table/Entity Logical Names | Table/Entity Descriptions |
|---|---|---|---|
| 128 | DIM_NETTING_AGREEMENT | Netting Agreement Dimension | This table stores the details of Netting Agreement. Netting agreement happens between a bank and a counterparty for OTC derivative and SFT transactions. Example of netting agreement are ISDA, FOA, EEI, and so on. |
| 129 | DIM_NON_PERFORMING_CATEGORY | Non Performing Category Dimension | This entity stores the various categories of non-performing accounts which are required by management to analyze and take action. This is a generic category and will change from bank to bank, each non-performing account will be associated with one of these categories. Non-performing categories can be Non-Accrual, Other Real Estate Owned, Restructured, Purchased Assets, Held for Sale, and Others. Categorization of Non-performing accounts is bank specific helping them to have a better analysis of the risk. |
| 130 | DIM_OFFER | Offer Dimension | This entity stores the offers for a campaign.<br>An offer is a single proposition or message to a customer that provides an incentive to respond. Offers are associated with a campaign, and then presented to contacts and prospects when the campaign is launched. Offers can be reused in many campaigns, but the campaign is a one-time instance of the offer presented to a customer at a certain point in time. |
| 131 | DIM_OPTY_WL_REASON | Reason Dimension | This entity stores the list of opportunity Win or Loss reasons. |

| Sl. No. | List of Dimension Tables | Table/Entity Logical Names | Table/Entity Descriptions |
|---|---|---|---|
| 132 | DIM_ORG_STRUCTURE | Organization Structure Dimension | This entity stores the organization structure of the financial institution. |
| 133 | DIM_ORG_UNIT | Organization Unit Dimension | This table stores the organization unit information. |
| 134 | DIM_OWNERSHIP_CATEGORY | Ownership Category Dimensions | This entity stores the ownership categories for the account. Ownership categories are set of conditions that a depositor must meet to qualify for deposit insurance coverage. Each deposit insurance scheme can have different set of ownership category, for example: FDIC ownership categories are Single Accounts, Certain Retirement Accounts, Joint Accounts, Revocable Trust Accounts, Irrevocable Trust Accounts, Employee Benefit Plan Accounts, Corporation/Partnership/Unincorporated Association Accounts and Government Accounts. Most Common Owner Categories used are Single Accounts, Joint Accounts, Certain Retirement Accounts and Revocable Trust Accounts. |
| 135 | DIM_PARTNER | Partner Dimension | This entity stores the information of the Partners who are associated with the financial institution. |
| 136 | DIM_PARTY | Party Dimension | This table stores the history of a party details. The party here can be customer, issuer, guarantor, and so on. |
| 137 | DIM_PARTY_TYPE | Party Type Dimension | This table stores the party type. The party here can be customer, issuer, guarantor, and so on. |

| Sl. No. | List of Dimension Tables | Table/Entity Logical Names | Table/Entity Descriptions |
|---|---|---|---|
| 138 | DIM_PARTY_RELATIONSHIP_TYPE | Party Relationship Type Dimension | This table stores the relationship types defined by the Bank. The 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, wherein the entity is represented by the party. |
| 139 | DIM_PAYMENT_SETTLEMENT_SYSTEM | Payment Settlement System Dimension | This entity stores the list of available payment and settlement system. A payment and settlement system can be described as a system which consists of a particular group of institutions and a set of instruments and procedures, designed to ensure the circulation of money and speed up interbank and other settlements resulting from the various economic transactions either within a country or between countries. |
| 140 | DIM_PD_MODEL | Probability Of Default Model Dimension | This table stores the probability of default model name, description, and version details. |
| 141 | DIM_PHONE | Phone Dimension | This table stores the master phone details. The staging table is Stage Phone Master. |
| 142 | DIM_PLACED_COLLATERAL | Placed Collateral Dimension | This table stores the master collaterals information that are placed by the financial institution with other financial institutions in order to secure its borrowings. |

| Sl. No. | List of Dimension Tables | Table/Entity Logical Names | Table/Entity Descriptions |
|---|---|---|---|
| 143 | DIM_PLANNED_ACTION | Planned Action Dimension | This table stores the Planed Actions that are required for Basel III and Dodd-Frank schedule. Financial Institutions should capture all material planned actions, including, but not limited to, the roll-off or sale of an existing portfolio, the issuance of regulatory capital instruments and other strategic corporate actions. |
| 144 | DIM_POLICY | Policy Dimension | This table stores the list of all policies. |
| 145 | DIM_POLICY_COVERG_BASIS | Policy Coverage Basis Dimension | This table stores the coverage base code. Coverage amount is calculated using this Base code. For example: Coverage amount is based on percentage of Covered Fund plus percentage of Excluded Funds. In this case, Covered Fund and Excluded Fund becomes the base. This is customer-specific dimension and values mentioned above are for illustration only. |
| 146 | DIM_POLICY_LAPSE_REASON | Policy Lapse Reason Dimension | This table stores the list of all the reasons why policies are lapsed. |
| 147 | DIM_POLICY_TYPE | Policy Type Dimension | This table stores the different types of policies issued by the entity. The types of policies are Third Party Liability, Directors and Officers Liability Insurance, Products Liability Insurance and so on. |
| 148 | DIM_POOL_CLASS | Pool Class Dimension | This table stores the master list of securitization pool classes. |
| 149 | DIM_POOL_IDENTIFICATION | Pool Identification Dimension | This table stores the master list of securitization pools. |
| 150 | DIM_PORTFOLIO | Portfolio Dimension | This table stores the list of all portfolios defined by the entity. |

| Sl. No. | List of Dimension Tables | Table/Entity Logical Names | Table/Entity Descriptions |
|---|---|---|---|
| 151 | DIM_POSITION_TYPE | Position Type Dimension | This table stores the various positions of a marketable instrument. |
| 152 | DIM_PREPAYMENT_REASON | Prepayment Reason Dimension | This entity stores the various reasons for prepayment of a loan amount. |
| 153 | DIM_PRODUCER | Producer Dimension | This table stores the producer details. |
| 154 | DIM_PRODUCER_AGENT | Producer Agent Dimension | This table stores the details of agent working in agency / producer. |
| 155 | DIM_PRODUCT | Product Dimension | This table stores the details of all the products (existing / stopped) offered by the Financial Institution. |
| 156 | DIM_PRODUCT_CATEGORY | Loan Product Category Dimension | This table stores the loan product category information. |
| 157 | DIM_PRODUCT_FEATURE | Product Feature Dimension | This entity stores the product feature details. |
| 158 | DIM_PRODUCT_TYPE | Product Type Dimension | This entity stores information on all types of lending products. |
| 159 | DIM_PROFESSION | Profession Dimension | This entity stores the list of professions that a customer can possibly be employed in. |
| 160 | DIM_PROGRAM_MASTER | Program Dimension | This table contains the master list of programs launched by banks. Programs are like COC (Cash on Call), BT (Balance Transfer), and so on. |
| 161 | DIM_PROSPECT | Prospect Dimension | This entity stores the list of prospects imported by the financial institution. |
| 162 | DIM_PURCHASE_CATEGORY | Purchase Category Dimension | This table stores the purchase categories. |

| Sl. No. | List of Dimension Tables | Table/Entity Logical Names | Table/Entity Descriptions |
|---|---|---|---|
| 163 | DIM_QUOTE_DECLINATION_TYPE | Quotes Declination Type Dimension | This table stores the Quote declinations types. Example of the Quote Declinations are Rates too high, Billing Plan, Fraud and Bankruptcy, Uninsurable Risks, Age of Building, and so on. |
| 164 | DIM_QUOTE_SOURCE | Quote Source Dimension | This table stores the description of the source of the quote. For example: Producing Agency, Producing Agent, Customer, and so on. |
| 165 | DIM_QUOTE_SOURCE_METHOD | Quote Source Method Dimension | This table stores the description of the source method of the Quotes. For example: Turbo rater, quick quote, and so on. |
| 166 | DIM_QUOTE_SUBMISSION_METHOD | Quote Submission Method Dimension | This table stores the different methods the insurance company receives the Quote. Example of the quote submission method are mail, fax, internet, and so on. |
| 167 | DIM_RATE_PLAN | Rate Plan Dimension | This table stores the Rate Plan that is the base rate, algorithm and factors filed with a governing body by which a policy premium is determined. |
| 168 | DIM_RECOVERY_AGENT | Recovery Agent Dimension | This table stores the details of recovery agents, who recover amount from delinquent accounts. |
| 169 | DIM_RECOVERY_TYPE | Recovery Type Dimension | This table stores the values of the nature of recovery done by the insurance company. The values can be Multiple, Salvage, Subrogation, Deductible, Fraud, Litigation, Others, Reinsurance, Excess Recovery, and None. |
| 170 | DIM_REGION | Region Dimension | This entity stores a list of geographic regions where campaigns are targeted. |

| Sl. No. | List of Dimension Tables | Table/Entity Logical Names | Table/Entity Descriptions |
|---|---|---|---|
| 171 | DIM_REINSURANCE_RISK_TYPE | Reinsurance Risk Type Dimension | This table stores the list of all reinsurance risk types. |
| 172 | DIM_REJECTION_REASON | Rejection Reason Dimension | This entity stores all the rejection reasons given by prospects for not buying a product or service. |
| 173 | DIM_REPORT_TYPE | Report Type Dimension | This table stores the list of report types supported by Market Risk Module: Var Report / Position Report. |
| 174 | DIM_REQUEST_TYPE | Request Type Dimension | This entity stores the various types of responses obtained from the campaign. |
| 175 | DIM_RESPONSE_TYPE | Response Type Dimension | This table stores the types of responses obtained during a campaign. |
| 176 | DIM_RESERVE_TYPE | Reserve Type Dimension | This entity stores the Reserve type, further classified into Specific Reserves, SOP 03-3 Reserves, Commercial Pool Reserves, Consumer Reserves, and Qualitative Factor Reserves. The Reserve is an exposure level attribute and an exposure can have a Reserve which can be classified into any one of the above classifications. |
| 177 | DIM_RETENTION_OFFER_TYPE | Retention Offer Type Dimension | This table stores the list of retention offer types. |
| 178 | DIM_RISK_ITEM | Risk Item Dimension | This table stores the insurable objects that are considered as Risk items. Examples include Building, vehicles, animals, property, engine, aircraft, and so on. |
| 179 | DIM_SALES_REPRESENTATIVE | Sales Representative Dimension | This table stores the list of sales representatives. |
| 180 | DIM_SALES_STAGE | Sales Stage Dimension | This entity stores list of stages in an opportunity life cycle. |

| Sl. No. | List of Dimension Tables | Table/Entity Logical Names | Table/Entity Descriptions |
|---|---|---|---|
| 181 | DIM_SEC_POOL_MASTER | Securitisation Pool Master Dimension | This table stores the details on the securitisation pool. |
| 182 | DIM_SEC_POOL_TYPE | Securitisation Pool Type Dimension | This table stores the various securitisation pool types. |
| 183 | DIM_SEC_PROGRAM | Securitisation Program Dimension | This entity stores the details of the securitisation program type. |
| 184 | DIM_SERVICED_LOAN_ACCOUNT | Serviced Loan Account Dimension | This table stores the account summary. However, only for those accounts which bank holds for servicing purpose only. These accounts can or cannot be originated by the bank. |
| 185 | DIM_SERVICE_CHARGE | Service Charge Dimension | This table stores the list of service charge codes applicable to the various transaction product processors. |
| 186 | DIM_SERVICE_REPRESENTATIVE | Service Representative Dimension | This table stores the list of service representatives. |
| 187 | DIM_SERVICE_SLIPPAGE_REASON | Service Slippage Reason Dimension | This table stores the different service slippage reason codes. |
| 188 | DIM_SOCIAL_MEDIA | Social Media Dimension | This entity stores the list of social media. |
| 189 | DIM_SOCIAL_MEDIA_POST | Social Media Post Dimension | This entity stores the message, video, and so on about the product, brand, and so on posted over the social media. |
| 190 | DIM_SRC_SYSTEM | Source System Dimension | This table stores the details regarding the various source systems which are used for sourcing data for Basel II Calculation and Reporting. |
| 191 | DIM_STOCK_INDEX | Equity Or Index Dimension | This table stores the list of stocks and indices. |

| Sl. No. | List of Dimension Tables | Table/Entity Logical Names | Table/Entity Descriptions |
|---|---|---|---|
| 192 | DIM_STOCK_TICKER | Stock Ticker Dimension | This table stores the list of ticker symbol that is used to uniquely identify a publicly traded equity or commodity on an exchange. |
| 193 | DIM_SUB_NETTING_AGREEMENT | Sub Netting Agreement Dimension | This table stores the details of Sub Netting Agreement. Sub Netting happens within broader netting agreement covering either geography, markets (int, fx, and so on). |
| 194 | DIM_SURVEY | Survey Dimension | This entity stores the master list of surveys conducted for the service request and other purpose. |
| 195 | DIM_TERMINAL | Terminal Dimension | This table stores the terminal details. |
| 196 | DIM_TERMINAL_TYPE | Terminal Type Dimension | This table stores the master list of all terminal types: OWN / OTHERS |
| 197 | DIM_TIME_SPECIFIC_OBLIGATIONS | Time Specific Obligation Dimension Table | This table stores the list of the time specific obligations that are settled within an intraday. |
| 198 | DIM_TRADING_DESK | Trading Desk Dimension | This entity stores the unique list of Trading Desk and the details of each Trading Desk. |
| 199 | DIM_TRANSACTION | Transaction Dimension | This entity stores the list of all transaction types that can be effected at any of the transaction channels of the bank. |
| 200 | DIM_TREATMENT | Treatment Dimension | This entity stores the treatment which is channel-specific instance of an offer. |
| 201 | DIM_TXN_CHANNEL | Transaction Channel Dimension | This entity stores the list of all transaction channels offered by the bank to its customers. |
| 202 | DIM_TXN_FAILURE_REASON | Txn Failure Reason Dimension | This master list stores the possible reasons for a transaction failure. |

| Sl. No. | List of Dimension Tables | Table/Entity Logical Names | Table/Entity Descriptions |
|---|---|---|---|
| 203 | DIM_TXN_STATUS | Transaction Status Dimension | This table stores the master list of all possible transaction status: Successful / Unsuccessful. |
| 204 | DIM_UNDERLYING | Underlying Dimension | This table stores the underlying information for Derivatives products. This table will cater derivatives underlying which in case of instrument underlying, underlying code will be same as instrument code and in case of contract underlying (for products like swaption) underlying code will be unique generated code. |
| 205 | DIM_UNDERWRITER | Underwriter Dimension | This table stores the underwriter details. |
| 206 | DIM_UNDERWRITING_MODEL_TYPE | Dimension Underwriting Model Type | This table stores list of all types of underwriting model types. |
| 207 | DIM_VEHICLE | Vehicle Dimension | This table stores the vehicle details that are involved / attached to policies and claims. |
| 208 | DIM_VEHICLE_TYPE | Vehicle Type Dimension | This table stores the vehicle types. For example: SUV, Car, Truck, and so on. |
| 209 | DIM_VENDOR | Vendor Dimension | This entity stores the information of the vendors who are associated with the campaign. A campaign can also be launched/executed through a Vendor. |
| 210 | DIM_VINTAGE | Vintage Dimension | This table stores the building vintage dimensions in credit risk analytics. Vintage codes are Year + Month combination. |

| Sl. No. | List of Dimension Tables | Table/Entity Logical Names | Table/Entity Descriptions |
|---|---|---|---|
| 211 | DIM_WATCHLIST | Watch List Dimension | The Watch List table provides a repository for the risk and trust lists used for monitoring transactional or trading activities. This is summary-level information about the list itself and does not define list membership. Examples of money laundering-related list sources include OFAC, Suspicious Activity Reporting (SAR), and FATF. |
| 212 | DIM_WAVE | Wave Dimension | This entity stores the different waves which are used for an execution of a campaign.<br>Waves are a method of phasing the delivery of a campaign or stage over time |
| 213 | DIM_WRITE_OFF_REASONS | Write-Off Reasons Dimension | This table stores the master list of reasons based on which the contracts are written-off from the books. |

### 3.1.15 Fact Tables/Entities

For all tables with data flow type tagged as a Processing, it is recommended that you map data directly to result area if processing application is not part of OFSAA product suite. For example, Basel computations, RWA Numbers, and Capital Ratio are taken from processing area which is populated by OFSAA or other Basel application.

For processed tables, you can look for the following options:

- OFSAA Data Integration Hub (DIH) product
- Flat File
- Table-to-Table Transformation with source being processing application

**Table 8: Fact Tables/Entities**

| Sl. No. | List of Fact Tables | Table/Entity Logical Names | Table/Entity Descriptions | Data Flow Type |
|---|---|---|---|---|
| 1 | FCT_ACCOUNT_MITIGANT_ MAP | Fact Account Mitigant Map | This entity stores the account to mitigant mapping. It supports more than one mitigant to be mapped to an account. | Staging |
| 2 | FCT_ACCT_RECOVERY_ DETAILS | Fact Account Recovery Details | This entity stores the details of recoveries for each account. | Staging |
| 3 | FCT_ACCT_WRITE_OFF_ DETAILS | Fact Account Write Off Details | This entity stores the details of write-off for each account. | Staging |
| 4 | FCT_CARDS_SUMMARY | Fact Cards Summary | This table stores the contract summary of all active card accounts. | Staging, Results |
| 5 | FCT_COMMON_ACCOUNT_ SUMMARY | Fact Common Account Summary | This table stores common account level information that usually comes as an input through staging. | Staging |
| 6 | FCT_CREDIT_LINE | Fact Credit Facility | This table stores the credit facility data. Credit facility is committed line of credit given to a customer who can have multiple draws / exposures out of a given credit line. | Staging, Results |
| 7 | FCT_LOAN_ACCOUNT_ SUMMARY | Fact Loan Summary | This table stores the details of loans. This table includes mortgage and vehicle loans. | Staging, Results |

| Sl. No. | List of Fact Tables | Table/Entity Logical Names | Table/Entity Descriptions | Data Flow Type |
|---|---|---|---|---|
| 8 | FCT_MITIGANTS | Fact Mitigants | This entity stores all the Mitigants and their details. | Staging |
| 9 | FCT_RECOVERY | Fact Recovery | This table stores the recovery details for all delinquent accounts. | Staging |
| 10 | FCT_REG_CAP_ACCOUNT_ SUMMARY | Fact Regulatory Capital Account Summary | This table stores the regulatory capital for each account. Typically, this table is an input from Basel application. | Results |
| 11 | FCT_PARTY_FINANCIAL_ DETAIL | Fact Party Financial Detail | This entity stores the financial information (Balance-Sheet, Profit and Loss statement, and Ratios) in base and reporting currency of the parties like Customer and Guarantor. | Staging |
| 12 | FCT_PARTY_FINANCIALS | Fact Party Financials | This entity stores the financial information (Balance-Sheet, Profit and Loss statement, and Ratios) of the parties like Customer and Guarantor. Balance sheet is prepared as of a particular date (Balance sheet creation date). | Staging |
| 13 | FCT_PARTY_RATING_DETAILS | Fact Party Rating Details | This table stores the party rating details of the customer, counterparty, guarantor, and so on. | Staging |
| 14 | FCT_IFRS_ACCOUNT_ SUMMARY | Fact IFRS Account Summary | This table stores the measures related to account that are computed by IFRS application. | Processing |
| 15 | FCT_ACCOUNT_POSTION_ PAIR | Fact Account Position Pair | This table defines position pairings that relate a primary position and its offsetting position. The position pairs can be held in any manner (for example, cash or margin). It contains only active customer account positions. | Staging |

| Sl. No. | List of Fact Tables | Table/Entity Logical Names | Table/Entity Descriptions | Data Flow Type |
|---|---|---|---|---|
| 16 | FCT_ACCT_CUST_DETAILS | Fact LRM Account Customer Relationship Details | This entity stores the derived attribute at account and customer granularity (includes joint accounts). | Staging |
| 17 | FCT_ACCT_PLACED_COLL_ MAP | Fact Account Placed Collateral Map | This table stores the account to placed collateral mapping. It is an intersection table to denote a placed collateral can be used in multiple account and an account contains multiple collateral. | Staging |
| 18 | FCT_COLL_PORTFOLIO_MTM_ DETAILS | Fact MTM Collateral Details | This table stores the MTM impact on derivative positions on a day-to-day basis. | Processing |
| 19 | FCT_COLL_PORTFOLIO_MTM_ SUMMARY | Fact MTM Collateral Summary | This table stores the MTM impact on derivative positions at a cumulative level. | Processing |
| 20 | FCT_DEPOSITS_BORROWINGS | Deposits And Borrowings | This table stores all the deposit and other borrowings accounts of bank. | Staging, Results |
| 21 | FCT_IFRS_MITIGANTS_ SUMMARY | Fact IFRS Mitigants Summary | This table stores the valuation of Mitigants as per IFRS requirements. Mitigant definitions happen in DIM MITIGANT and this table serves as additional set of attributes for FACT MITIGANTS. | Processing |
| 22 | FCT_IFRS_PLACED_ COLLATERAL | Fact IFRS Placed Collateral | This table stores the valuation of placed Collateral as per IFRS requirements. Placed Collateral definitions happen in DIM PLACED COLLATERAL and this table serves as additional set of attributes for FACT PLACED COLLATERAL. | Processing |

| Sl. No. | List of Fact Tables | Table/Entity Logical Names | Table/Entity Descriptions | Data Flow Type |
|---|---|---|---|---|
| 23 | FCT_LRM_ACCOUNT_ SUMMARY | Fact LRM Account Summary | This table stores the details of the Account Derived in Liquidity Risk Management Solution. | Processing |
| 24 | FCT_LRM_PLACED_ COLLATERAL | Fact LRM Placed Collateral | This table stores the liquidity specific procedded attributes for placed Collateral as per Liquidity Risk regulations. Placed Collateral definitions happen in DIM PLACED COLLATERAL and this table serves as additional set of attributes for FACT PLACED COLLATERAL. | Processing |
| 25 | FCT_MGMT_REPORTING | Fact Management Reporting | This table stores the management reporting data related to organization and product profitability/income statement/balance sheet. | Processing |
| 26 | FCT_PLACED_COLLATERAL | Fact Placed Collateral | This table stores the details of collateral which are placed against an account. | Staging |
| 27 | FCT_RATING_DWNGRD_ COLL_SUMMARY | Fact Rating Downgrade Collateral Summary | This entity stores the details regarding loss of Rehypothecation Rights due to a downgrade for a placed collateral. | Processing |
| 28 | FCT_RATING_DWNGRD_ MTGNT_SUMM | Fact Rating Downgrade Mitigant Summary | This entity stores the details regarding loss of Rehypothecation Rights due to a downgrade for a mitigant. | Processing |
| 29 | FCT_REG_ACCOUNT_ SUMMARY | Fact Regulatory Account Summary | This table stores the regulatory reclassifications and other information as required for regulatory reporting. | Results |
| 30 | FCT_LEGAL_ENTITY_DETAILS | Fact Legal Entity Details | This table stores the details of the legal entity. | Staging |

| Sl. No. | List of Fact Tables | Table/Entity Logical Names | Table/Entity Descriptions | Data Flow Type |
|---|---|---|---|---|
| 31 | FCT_REG_AGG_CASH_FLOWS | Fact Regulatory Aggregated Cashflows | This entity stores the aggregated cashflows for regulatory reporting purposes. | Results |
| 32 | FCT_REG_CUSTOMER_ SUMMARY | Fact Regulatory Customer Summary | This table stores the details at a customer level. | Results |
| 33 | FCT_REG_GL_CASH_FLOWS | Fact Regulatory General Ledger Cashflows | This table stores the cashflow details of general ledger accounts for regulatory reporting requirements. | Results |
| 34 | FCT_REG_MITIGANTS_ SUMMARY | Fact Regulatory Mitigants Summary | This table stores the cashflow groups required for FR2052A reporting. | Results |
| 35 | FCT_REG_PLACED_ COLLATERAL | Fact Regulatory Placed Collateral | This table stores the cashflow groups required for FR2052A reporting. | Results |
| 36 | FCT_REG_RUN_LEGAL_ENTITY _MAP | Fact Regulatory Legal Entity Run Map | This table stores the reporting entity identifier for every regulatory reporting run. | Results |
| 37 | FCT_SUBST_PLACED_ COLLATERAL | Fact Substitutable Collateral | This entity stores the details of a collateral which has to be substituted. | Processing |
| 38 | FCT_SUBSTITUTABLE_ MITIGANTS | Fact Substitutable Mitigants | This entity stores the details of a mitigant which has to be substituted. | Processing |
| 39 | FCT_TRANSACTION_SUMMARY | Fact Transaction Summary | This table stores the transaction summary. | Results |
| 40 | FCT_TRD_ACCOUNT_TXN_ SUMMARY | Fact Trading Account Transaction Summary | This entity stores all Fact Trading Account Transaction details. | Results |

| Sl. No. | List of Fact Tables | Table/Entity Logical Names | Table/Entity Descriptions | Data Flow Type |
|---|---|---|---|---|
| 41 | FCT_FIXED_ASSETS | Fact Fixed Assets | This table stores measures pertaining to assets. Fixed assets are physical assets such as Buildings, Land, Machinary, Automobiles, Gold bullion, and so on. They can be sold and appropriate profit/loss can be recognized based on appropriate accounting principles. | Staging |
| 42 | FCT_LLFP_ACCOUNT_ SUMMARY | Fact Loan Loss Forecasting And Provision Account Summary | This entity stores loan loss forecasting and provision account summary. Typically this table is an input from loan loss forecasting and provision (LLFP) application. | Processing |
| 43 | FCT_REG_ACCT_MITIGANT_ MAPPING | Fact Regulatory Account Mitigant Mapping | This table stores the account mitigant mapping information. | Results |
| 44 | FCT_CR_CUSTOMER_ SUMMARY | Fact Credit Risk Customer Summary | This entity stores the details of various measures pertaining to the customer. | Staging |
| 45 | FCT_ASSETS_SOLD | Fact Assets Sold | This table stores the data of assets sold over a period of time. For example, banks sells loans to other parties. | Staging |
| 46 | FCT_ENTITY_INFO | Fact Entity Information | This entity stores the information about the various entities in the Oraganization Structure of the Financial Institution. | Staging |
| 47 | FCT_FIDUCIARY_SERV_ INVST_SUMM | Fact Fiduciary Services Investmnet Summary | This entity stores the details of investments done through a fiduciary account. | Staging` |
| 48 | FCT_MERCHANT_BANKING | Fact Merchant Banking | This entity stores the details of issues associated with a fiduciary account. | Staging |

| Sl. No. | List of Fact Tables | Table/Entity Logical Names | Table/Entity Descriptions | Data Flow Type |
|---|---|---|---|---|
| 49 | FCT_MITIGANT_REG_CAPITAL | Fact Mitigant Regulatory Capital | This table stores the regulatory capital information related to mitigants. | Processing |
| 50 | FCT_REG_TRANSACTION_ SUMMARY | Fact Regulatory Transaction Summary | This table stores the summary of regulatory transactions. For example, amount of securities sold or transferred from HTM to AFS. | Results |
| 51 | FCT_SECURITIZATION_POOL | Fact Securitisation Pool | This table stores the information on the securitization pool. | Processing |
| 52 | FCT_SEC_EXPOSURES | Fact Securitisation Exposures | This entity stores all the Securitisation Exposures for Basel II processing. | Processing |
| 54 | FCT_INSTR_PROPOSED_TXNS | Fact Instrument Proposed Transactions | This table stores the proposed set of instruments that are transacted by the Financial Institution. | Staging |
| 55 | FCT_NON_SEC_EXPOSURES | Fact Non Securitisation Exposures | This entity stores all the Securitisation Exposures. | Processing |
| 56 | FCT_NETTABLE_POOL | Fact Nettable Pool | This entity stores all Pools created for Netting. | Processing |
| 57 | FCT_PAYMENTS_SUMMARY | Fact Payment Summary | This entity stores the payment value, Receipt or inward value and Netted (payment and receipts) value aggregated at currency level in natural currency and reporting currency. | Results |
| 58 | FCT_CAP_INSTR_POSITIONS | Fact Capital Instrument Positions | This entity stores the regulatory position of capital instruments and details of treatment to capital instrument under Basel I and III regulations. | Staging |
| 59 | FCT_REG_EXP_MITIGANT_ MAPPING | Fact Regulatory Exposure Mitigant Mapping | This table is planned for deprecation. | Processing |

| Sl. No. | List of Fact Tables | Table/Entity Logical Names | Table/Entity Descriptions | Data Flow Type |
|---|---|---|---|---|
| 60 | FCT_CP_CREDIT_QUALITY_ SUMMARY | Fact Counterparty Credit Quality Summary | This table stores the output of CVA calculation done for a given counterparty. | Processing |
| 61 | FCT_MORT_SERV_RIGHTS | Fact Mortgage Servicing Rights | This tables stores the Mortgage Servicing Rights valuation information. Mortgage Servicing Rights values are typically book value, fair value, and so on. | Processing |
| 62 | FCT_REG_LE_CAPITAL_ SUMMARY | Fact Regulatory Legal Entity Capital Summary | This table stores the regulatory capital related information for the legal entity. This table stores all information from the GL related to the capital structure processing and the various levels of capital computations processed and computed by the application. This stores information at the granularity of the capital line item, for each capital component group. Some of the line items stored are Tier 1 Capital, Tier 2 Capital, Total Capital, and Capital Ratio. | Results |
| 63 | FCT_REG_CP_CAPITAL_ SUMMARY | Fact Regulatory Counterparty Capital Summary | This table stores all the regulatory capital related information of a counterparty. Some of the risk parameters in this table are probability of default and internal and external rating for the counterparty. This table is generally used for CVA and default fund calculations. | Processing |
| 64 | FCT_REG_CAP_PLCD_COLL_ SUMMARY | Fact Regulatory Capital Placed Collateral Summary | This table stores the information of all exposures to a bank which are placed collateral. The placed collateral by the bank is for default fund contribution or for other OTC transactions, with a central counterparty. It is generally used for cleared transactions and default fund contributions. | Processing |

| Sl. No. | List of Fact Tables | Table/Entity Logical Names | Table/Entity Descriptions | Data Flow Type |
|---|---|---|---|---|
| 65 | FCT_REG_CAP_POOL_ SUMMARY | Fact Regulatory Capital Pool Summary | This table stores the information of all exposures to a bank, which are at a pool level. Some of the pool identified for this table are OTC nettable pool and retail pools. This table stores the regulatory capital information related to these pools. | Processing |
| 66 | FCT_LOANS_SERVICED | Fact Loans Serviced | This table stores the details of loans serviced by bank. They may or may not be originated by the bank. | Staging |
| 67 | FCT_FUND_CIS_COMPOSITION | Fact Fund CIS Composition | This entity stores the composition of the Investment funds. | Staging |
| 68 | FCT_CAP_INSTR_TXNS | Fact Capital Instrument Transactions | This entity stores the transactions on the capital instruments. | Staging |
| 69 | FCT_CREDITRISK_ACCOUNT_ SUMMARY | Fact Credit Risk Account Summary | This entity stores the different measures of exposures pertaining to Credit Risk Analytics. | Processing |
| 70 | FCT_LIQUIDITY_REPORTING | Fact Liquidity Reporting | This entity stores the measure to be reported for each of the Liquidity Reporting line. Reporting Measures are the amounts displayed in standard template prescribed by supervisor. For example, Reporting lines and measures mentioned in QIS Reporting Template reporting lines, reporting lines and measures mentioned in "Instructions for completing and submitting the Liquidity Monitoring Tool (4-G) template. | Processing |

| Sl. No. | List of Fact Tables | Table/Entity Logical Names | Table/Entity Descriptions | Data Flow Type |
|---|---|---|---|---|
| 71 | FCT_LIQUIDITY_REP_LINE_ COMMENT | Fact Liquidity Reporting Line Comments | This entity stores the comments for each of the Liquidity Reporting line. Reporting Lines are the standard template reporting lines prescribed by supervisor. For example, Reporting lines mentioned in QIS Reporting Template reporting lines, reporting lines mentioned in "Instructions for completing and submitting the Liquidity Monitoring Tool (4-G) template. | Processing |
| 72 | FCT_REG_EQ_INV_SUMMARY | Regulatory Equity Investmnet Summary | This table stores the summary of equity investments done by entity as per regulatory equity investment types. | Results |
| 73 | FCT_OTTI_FV_PROJECTIONS | Fact Other Than Temporary Impairment Fair Value Projections | This table store the assumptions to determination criteria and value for Other-than-temporary impairment for product investment. | Processing |
| 74 | FCT_OPSRISK_LOSS_ PROJECTION | Fact Operational Risk Loss Projection | This table stores the projection of operational losses across required measurement units and period for a given operational loss data category. | Processing |
| 75 | FCT_OTTI_FV_ASSUMPTIONS | Fact Other Than Temporary Impairment Fair Value Assumptions | This table stores the assumptions to determination criteria and value for Other-than-temporary impairment for product investment. | Processing |
| 76 | FCT_SCEN_VARIABLE_ PROJECTION | Fact Scenario Variable Summary | This table stores the projection of various variables for Enterprise Stress Testing or any other similar usage. | Processing |

| Sl. No. | List of Fact Tables | Table/Entity Logical Names | Table/Entity Descriptions | Data Flow Type |
|---|---|---|---|---|
| 77 | FCT_CAP_INSTR_PROPOSED_ REDEEM | Fact Capital Instrument Proposed Redemption | This entity stores the proposed set of capital instruments that are redeemed or converted by the Financial Institution. | Staging |
| 78 | FCT_CAP_INSTR_PROPOSED_ ISSUES | Fact Capital Instrument Proposed Issues | This entity stores the proposed set of capital instruments that are issued by the Financial Institution. | Staging |
| 79 | FCT_CARDS_BALANCE_ SUMMARY | Fact Cards Balance Summary | This table stores the cards summary details of cards like eop bal, interest rate, current payment, and others against card balance category. | Staging |
| 80 | FCT_PFT_ACCOUNT_ SUMMARY | Fact PFT Account Summary | This table stores the account level measures computed by the PFT application. | Processing |
| 81 | FCT_REGULATORY_PLANNED_ ACTION | Fact Regulatory Planned Actions | This table stores the impact of Planed Actions on various measures like capital, RWA, exposure, and so on that are required for Basel III and Dodd-Frank schedule. Financial Institutions must capture all material planned actions, including, but not limited to, the roll-off or sale of an existing portfolio, the issuance of regulatory capital instruments and other strategic corporate actions. | Processing |
| 82 | FCT_REPORTING_GROUP_ OUTPUT | Fact Reporting Group Output | This entity stores the outputs at Reporting Group Level. | Processing |
| 83 | FCT_STANDARD_ACCT_HEAD | Fact Standard Accounting Head | This table stores the data as per the standard accouning heads. | Processing |

| Sl. No. | List of Fact Tables | Table/Entity Logical Names | Table/Entity Descriptions | Data Flow Type |
|---|---|---|---|---|
| 84 | FCT_REG_CP_EXP_MTM_DTLS | Regulatory Counterparty Exposure Mitigant Summary | This table stores the MTM summary for a given counterparty and Netting agreement for business as usual and stressed scenarios. | Staging |
| 85 | FCT_CREDIT_PARTCPTN_ TRNCH_MAP | Fact Credit Participation Tranche Map | This entity maps the participation to various tranches. | Staging |
| 86 | FCT_ACCT_CREDIT_SCORE_ DETAILS | Fact Account Credit Score Details | This entity stores the details of the credit score of account thoroughout its lifetime. | Staging |
| 87 | FCT_SERV_ACCT_CREDIT_ SCOR_DTL | Fact Serviced Account Credit Score Details | This entity stores the details of the credit score of serviced account thoroughout its lifetime. | Staging |
| 88 | FCT_INSTRUMENT_PD_ DETAILS | Fact Instrument Probability of Default Details | This table stores the probability of default values as of given date for all relevant instruments. | Staging |
| 89 | FCT_PARTY_PD_DETAILS | Fact Party Probability of Default Details | This table stores the probability of default values as of given date for all relevant parties. | Staging |
| 90 | FCT_REG_HEDGE_SUMMARY | Fact Regulatory Hedge Summary | This table stores summary of hedged portfolio set which includes effective and ineffective portion of gain and loss, hedged notion amount, IRC used, and so on. | Processing |
| 91 | FCT_HEDGE_PORTFL_SET_ ACC_MAP | Fact Hedge Portfolio Set Account Map | This table stores the unique hedge identification providing summary of accounts that are "Hedged" and instrument which is used for "Hedging". | Staging |

## 3.2 Mapping of Line Items to Reporting Requirements of Lombard Risk

Figure 21 explains the flow of data between OFSAA and AgileREPORTER.

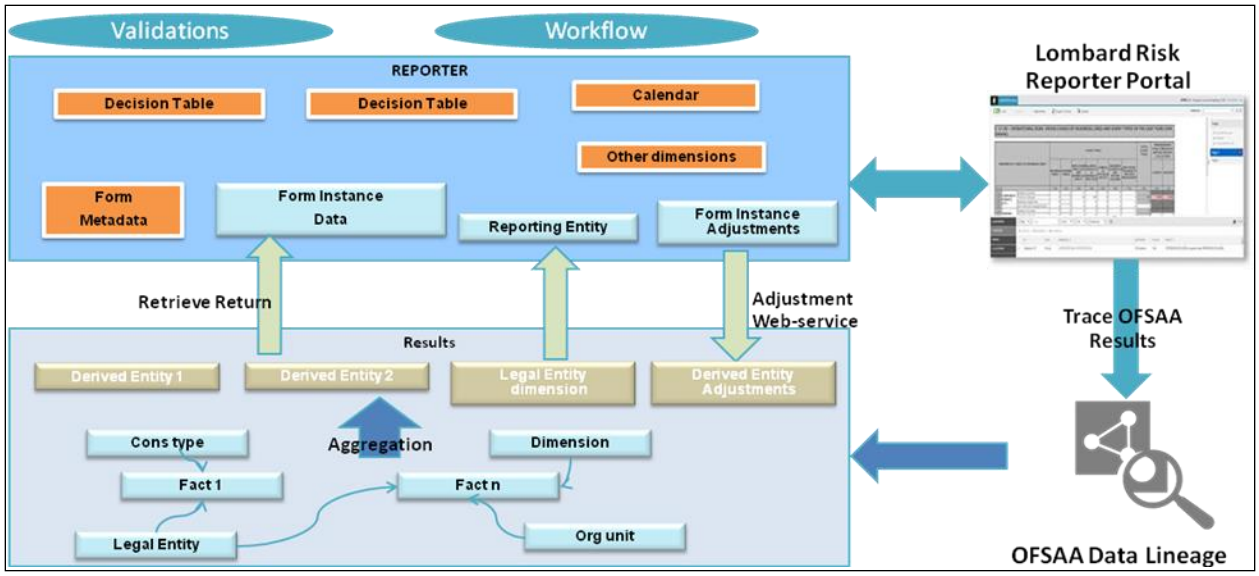



**Figure 21: Data Flow between OFSAA and AgileREPORTER**

OFSAA provides the data to AgileREPORTER in the form of derived entities. Derived entity is an existing OFSAA higher order metadata object and can be physicalized as a materialized view in the database. Derived entities store aggregated data from base fact entities specified in the dataset and have the necessary dimensions and measures. Dimensional and measure combination stored within the derived entity is mapped to cells within the report. This mapping is maintained within the 'Dimensional mapping' template. 'Decision Process' within AgileREPORTER reads the derived entities and dimension mapping information to derive the data for reporting. Derived entities are created based on measures, hierarchies, and datasets.

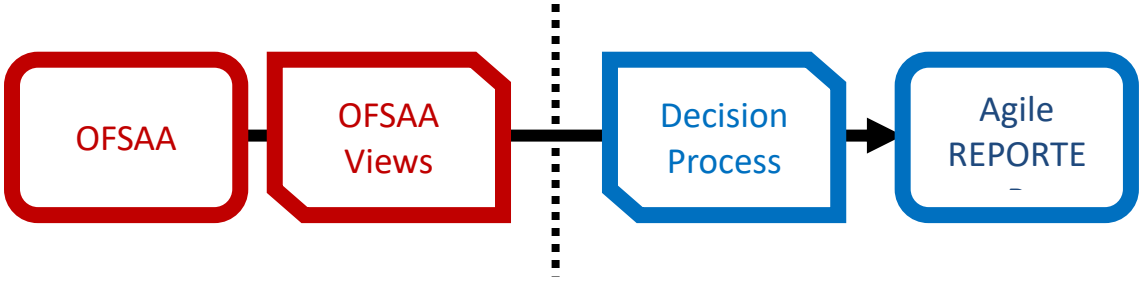



**Figure 22: Decision Process in AgileREPORTER**

Each regulatory report contains numerous schedules. Each schedule contains various cells that need to be reported. Each cell or box is uniquely identified by a cell reference (or box identifier). OFSAA and Lombard Risk provide a unique cell reference to the cell.

Each cell is mapped to a set of dimensions and measures within OFSAA. A group of cells within the schedule have similar mappings (such as same dimensions but different member codes). Such groups are identified to create logical sections within the schedule. A derived entity is created for each of these logical sections within the schedule.

The dataset associated with the derived entity, provides data for the specific derived entity. Data such as measures, in a derived entity are aggregated based on dimensions that are included in thederived entity, even though the fact entities in the dataset contain complete details of the data.

Some of the cells in the schedule can be derived as per the logic provided by the regulator. Derivation could be an expression built using values from other cells. Examples of derivation are ratio, node-level rollup, direct reference to cells in other schedules within the report. These derivations are performed within the Lombard Risk Reporter portal. OFSAA provides data only for the cells that are not derived.

The "Decision Process" within Lombard Risk Reporter Portal uses the dimension mapping template to interprete data present in the derived entity. Decision process creates form data by reading the information from the derived entity, and derives the necessary data that will be used by the Lombard Risk Reporter Portal to display reporting data.

Refer to the excel sheet for the list of Reporting Lines used across all the RBI returns.

**NOTE:** Metadata for data transformation is available as part of the data ware house configuration pack provided Out-of-Box / pre-configured from OFSAA. You need not perform any mapping for the reports. However, this information can be useful for maintenance or extensions when Out-of-Box pack is not available.

## 3.3 Mapping Metadata

The list of reports with the corresponding Mapping Metadata Information are present in the Hierarchy Measure Linkages document present in My Oracle Support page.

## 3.4 AgileREPORTER: Submission

The AgileREPORTER is a web-based regulatory reporting tool provided by Lombard Risk. It provides necessary features to address e-filing workflow, validation and submission process, and supports reports (called as forms/returns) for various jurisdictions. AgileREPORTER provides a reliable and efficient infrastructure to compile, generate, and submit regulatory reports.

Lombard Risk Reporter portal stores data related to forms/returns in its schema. Lombard Risk application supports loading of data into its schema in the following ways:

- **Cell References File hand-off**: It is used when data providers compute all the information required for reports and pass the data that is required for each cell in the report.
- **Base Data hand-off**: It is used when data providers pass base data to the Lombard Risk application and expect computations that are required for each cell to be performed within the Lombard Risk application.

However, Lombard Risk Reporter portal supports dimensional mapping based approach for OFSAA. In this approach, data hand-off is based on dimensions and measures similar to the pattern of information storage in OFSAA. Decision table mapping process within the Lombard Risk Reporter portal maps dimensions and measures to cell references.

### 3.4.1 Decision Process

Decision process is a component within Lombard Risk Reporter portal that processes each row of the derived entity for the criteria's specified in the decision table to derive cell references and data that will be used to display on the face of returns.

Decision process is triggered within the reporter portal after OFSAA establishes data readiness for reporting. This indicates that data in fact entities, pass all the necessary data quality checks and the derived entities are refreshed for latest AS OF DATE and final reporting run.

Decision process can be triggered in batch mode, and can be scheduled to run in an Enterprise Scheduler. Alternatively, decision process can also be triggered in ad-hoc mode for a specific report.

# 4 OFSAA Features

Regulatory Reporting (REG REP) Solution configures the data hand-off structure to Lombard using metadata. The following sections provide details on datasets, measures, hierarchies and Derived Entities. Multiple derived entities are linked to a specific regulatory schedule. You can modify the configuration using OFSAA infrastructure. Additionally, metadata route provides traceability from reporting elements to the data elements used.

This chapter provides an understanding of the AAI components used in the solution and dimensional mapping. It includes:

- OFSAA Infrastructure
- Business Metadata
- Derived Entity
- Rules Run Framework Features
- Dimension Mapping

## 4.1 OFSAA Infrastructure

OFSAA Infrastructure includes the facilities for creating and maintaining dimensional reference data, interest rate and currency exchange rate data, and process tuning data. Additionally, OFSAA Infrastructure includes functionality for building and maintaining rules that can be used by any Oracle Financial Services Analytical Application. These common rule objects include:

1. Expressions
2. Hierarchies
3. Filters

The analytical applications that you see on the Left Hand Side (LHS) of the Financial Services Applications home page depends on your logon privileges and on the OFSAA modules that are installed for your environment.

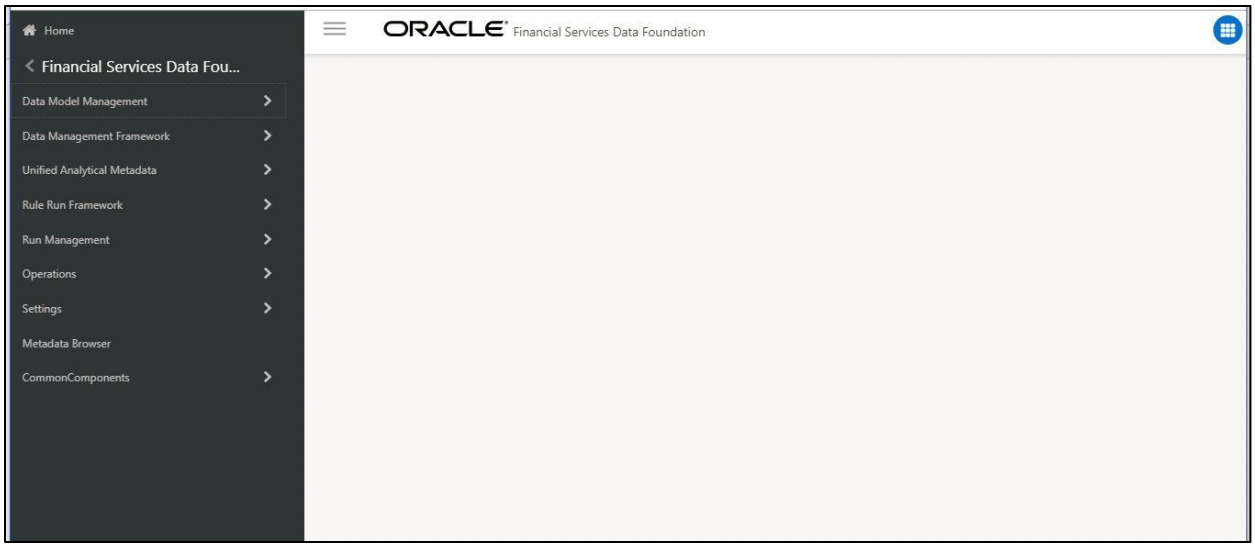



**Figure 23: Landing Page**

## 4.2 Business Metadata

In addition to Derived Entity, REG REP uses the following OFSAA features to create the business metadata. For details on the features, refer to *OFS Analytical Applications Infrastructure User Guide* in OHC documentation library.

- **Hierarchies**: Some OFSAA dimensions support hierarchies. Hierarchies can be used to provide sophisticated stratification for either processing or reporting purposes. For example, an organizational hierarchy can start with a Division level containing Western Region, Eastern Region, and Southern Region; the next level down within the hierarchy can be state or county. A product hierarchy can begin with branches for Asset vs.Liability vs. Service products; under the Asset branch, you can define additional branches for Mortgage Lending, Commercial Lending, Consumer Lending, and so on.
- **Measures**: Business Measure refers to a uniquely named data element of relevance which can be used to define views within the data warehouse. It typically implies aggregated information as opposed to information at a detailed granular level that is available before adequate transformations.
- **Business Processor**: It refers to a uniquely named data element of relevance which can be used to define views within the data warehouse. It typically implies aggregated information as opposed to information at a detailed granular level that is available before adequate transformations.
- **Datasets**: It refers to a group of tables whose inter-relationship is defined by specifying a join condition between the various tables. It is a basic building block to create a query and execute on a data warehouse for a large number of functions and to generate reports.

## 4.3 Derived Entity

It is the primary component of OFSAA used for OFSDF Interface with Lombard Risk for RBI Regulatory Reporting Solution uses Derived Entity to create physical materialized view which is then queried by Lombard using pre-set data hand-off templates. An Entity refers to a table in which data is stored. Derived Entity within the infrastructure system facilitates you to define entities which are populated through a series of data transformation processes resulting from an existing Data Set or a Source Application. An Entity can be used to define other Business Metadata such as measures, hierarchies, dimensions, data sets, and cubes.

Derived Entities comprise the following:

- Measures
- Hierarchies
- Datasets

Ensure to define the above components within OFSAA before configuring the derived entity, and select **Materialized View** property in Derived Entity. This property creates the derived entity as materialized views.

1. Navigate to path ***Financial Services Data Foundation → Unified Analytics Metadata → Business Metadata Management → Derived Entity***. The existing derived entities summary screen is displayed. You can Add a new derived entity and Edit, View, Delete, or Copy an existing derived entity.

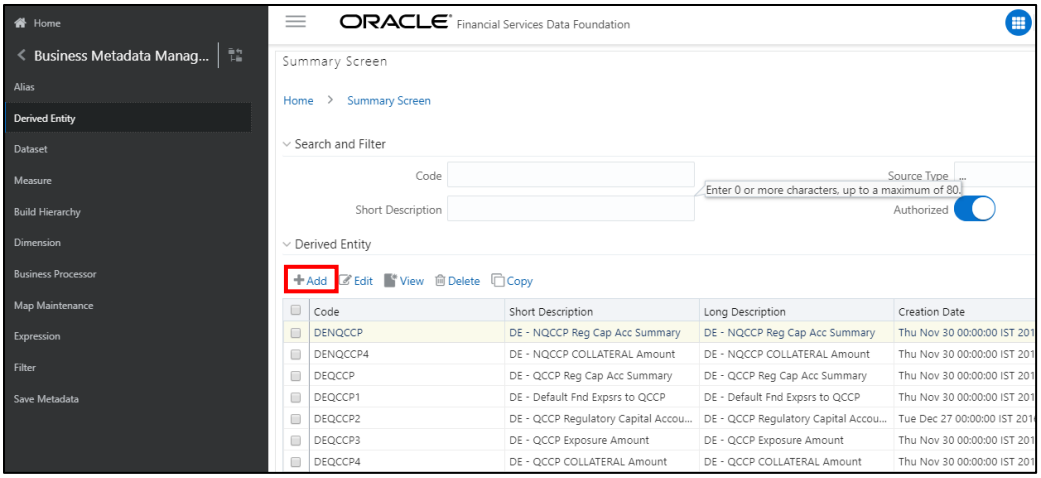



**Figure 24: Derived Entity User Interface**

Derived Entities must have AS_OF_DATE and LEGAL_ENTITY as the mandatory dimensions. Rest of the structure of the derived entity can vary depending on the dimensions present. A metadata configuration table is present in AgileREPORTER to link the name of the column in the derived entity and dimension that is referred in dimension mapping process.

Derived entities have data for the 'Final Reporting Run' only, which is reported to the Regulatory, and are refreshed for the latest hand-off date.

A metadata configuration table is maintained within AgileREPORTER to capture the derived entities that supply data for each schedule.

1. Click the **Add** button to create a new Derived Entity.

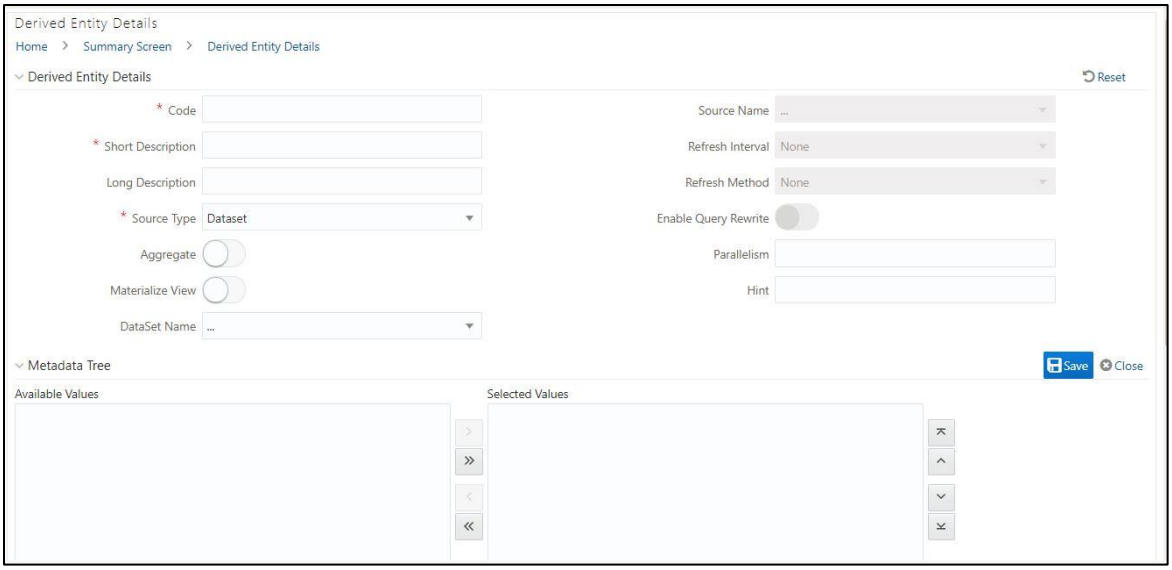



**Figure 25: Derived Entity User Interface**

### 4.3.1 Creating Derived Entity

Derived Entities must have **Code**, **Short Description** and **Source Type** mandatory dimensions as shown in Figure 25. Rest of the structure of the derived entity can vary depending on the dimensions present. A metadata configuration table is present in AgileREPORTER to link the name of the column in the derived entity and dimension that is referred in dimension mapping process.

Derived entities have data for the 'Final Reporting Run' only, which is reported to the Regulatory, and are refreshed for the latest hand-off date.

A metadata configuration table is maintained within AgileREPORTER to capture the derived entities that supply data for each schedule.

Refer to *OFS Analytical Applications Infrastructure User Guide* in (OHC) documentation library for detailed steps on creating a derived entity.

### 4.3.2 Saving Derived Entities

After the server restart is complete, save all the derived entities manually using the OFSAAI User Interface (**Unified Analytical Metadata >> Business Metadata Management >> Derived Entity**).

#### 4.3.2.1 Adjustments DE

| Task No. | Derived Entity Code | Derived Entity Description |
|---|---|---|
| Task1 | DEADJ001 | DE - Regulatory Adjustments |

The adjustments feature enables to adjust the differing values of the report systems. The Adjustments Derived Entity derives its values from the Adjustments Fact table (FCT_REG_REPORT_ADJUSTMENTS) that specifies the adjustment value and the seeded table (DIM_REG_REPORT_CELL) that specifies the cell ID / MDRM Code and the Report Code to which the MDRM belongs to. This ensures that there can be direct adjustments made to MDRM(s) such that the values from both the derived entities are traceable and efficiently reported.

### 4.3.3 Refreshing Derived Entities

The complete Derived Entities can be refreshed as a whole or incrementally for selected time periods. Refer to *OFS_DE_INCREMENTAL_MV_REFRESH* in (OHC) documentation library for detailed steps to incrementally refersh derived entities.

#### 4.3.3.1 Implementing the Adjustment Feature

Perform the following steps to implement the Adjustment feature:

1. Identify the Cell ID for the report and line item where adjustment has to be implemented.

   For example:

   **Report**: DSBIALE

   **Line Item**: I.1 Cash on hand

   **Cell ID**: RBIDSBIALEP001R0020C0020

   The report currently displays a Total value = 69,337,000.00 for the identified cell as shown in the following figure. Now, the requirement is to adjust this amount to 69,338,000.00

Section 1: Assets and Liabilities

| Part-A: ASSETS (Amount Outstanding at end of Month) | Domestic Operations | | Overseas Operations | | Global Operations | |
|---|---|---|---|---|---|---|
| | Total | Of Which Held in Forex | Total | Of Which Held in Forex | Total | Of Which Held in Forex |
| I.Cash Funds | 109,497,000.00 | 54,179,000.00 | 109,497,000.00 | 54,179,000.00 | 109,497,000.00 | 54,179,000.00 |
| I.1 Cash on Hand | 69,337,000.00 | 24,462,000.00 | 69,337,000.00 | 24,462,000.00 | 69,337,000.00 | 24,462,000.00 |
| I.2 Balances/Deposits with RBI/central Banks | 40,160,000.00 | 29,717,000.00 | 40,160,000.00 | 29,717,000.00 | 40,160,000.00 | 29,717,000.00 |

2. FCT_REG_REPORT_ADJUSTMENTS: This table must be populated with the requisite ‘Adjustment Amount’ and other related columns.

   For example:

   **N_ADJUSTED_AMT - 1000**

   The corresponding N_CELL_SKEY value must be picked from DIM_REG_REPORT_CELL for the respective CELL_ID.

   Also the following columns must be updated accordingly:

   **N_ENTITY_SKEY,**

   **N_RUN_SKEY,**

**N_MIS_DATE_SKEY**

3. Execute the resave batch for Adjustments (<<INFODOM>>_RBI_ADJUSTMENT_RESAVE), to save the Adjustment derived entity - **DEADJ001**.
4. Retrieved report should reflect the amount after adjustments, as shown in the following figure. (69,337,000.00 +10000) = 69,338,000.00

**NOTE:** The Adjustment amount can be negative as well to achieve subtracted amount.

| Section 1: Assets and Liabilities | | | | | | |
|---|---|---|---|---|---|---|
| Part-A: ASSETS (Amount Outstanding at end of Month) | Domestic Operations | | Overseas Operations | | Global Operations | |
| | Total | Of Which Held in Forex | Total | Of Which Held in Forex | Total | Of Which Held in Forex |
| I.Cash Funds | 109,498,000.00 | 54,179,000.00 | 109,497,000.00 | 54,179,000.00 | 109,498,000.00 | 54,179,000.00 |
| I.1 Cash on Hand | 69,338,000.00 | 24,462,000.00 | 69,337,000.00 | 24,462,000.00 | 69,338,000.00 | 24,462,000.00 |
| I.2 Balances/Deposits with RBI/central Banks | 40,160,000.00 | 29,717,000.00 | 40,160,000.00 | 29,717,000.00 | 40,160,000.00 | 29,717,000.00 |

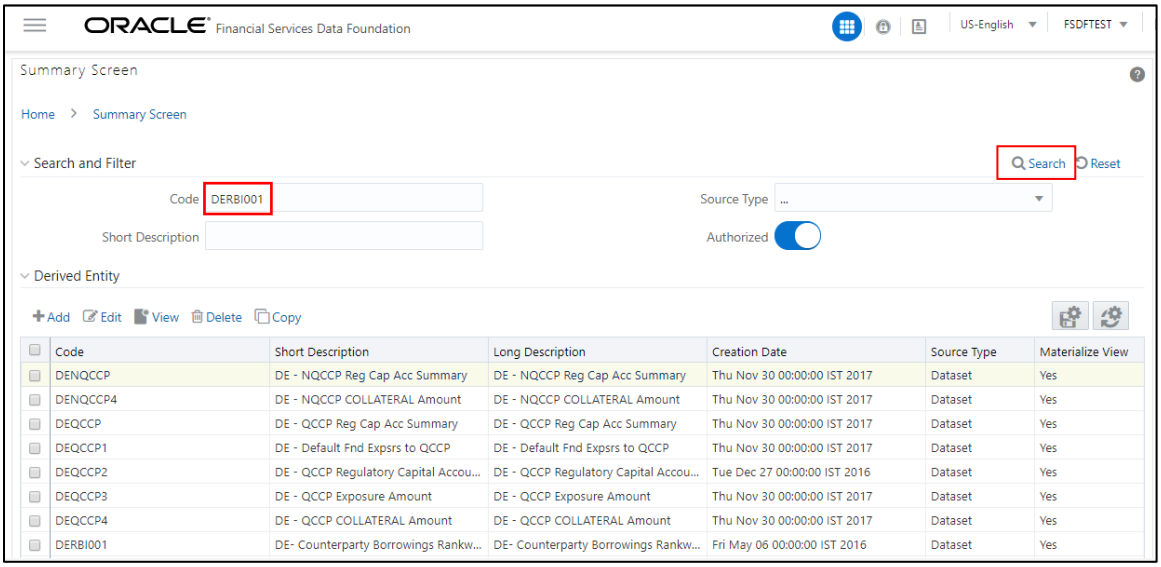
**NOTE:** The Adjustment feature works only for fixed grid cells (Open Y cells are not supported).

### 4.3.4 Adding a Hint to a Derived Entity

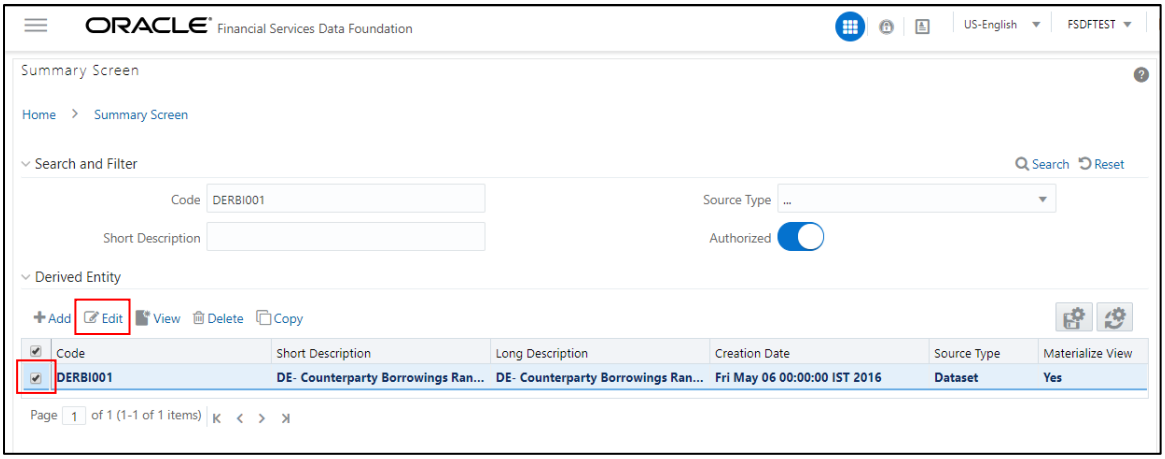
Perform the following steps to add a Hint to a Derived Entity:

**A. To add a Hint in a DE, perform the following steps:**

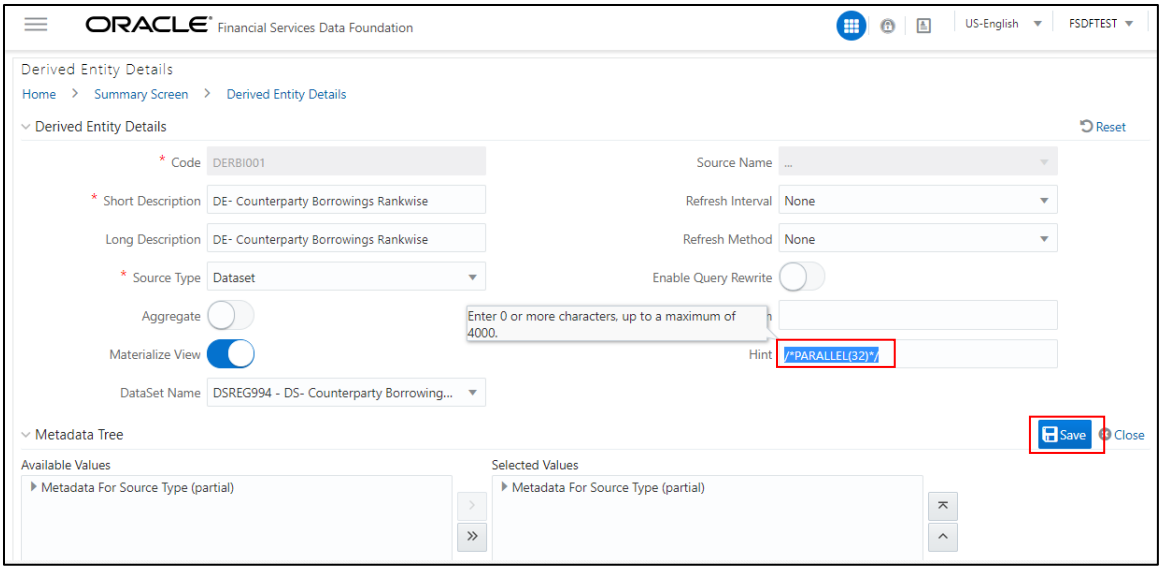
1. Log in to OFSAA application GUI.
2. Navigate to **Financial Services Data Foundation → Unified Analytical Metadata → Business Metadata Management → Derived Entity**. The Summary Screen is displayed as follows.




3. Enter the **DE Code** and click **Search**. The corresponding DE Code and details are displayed.



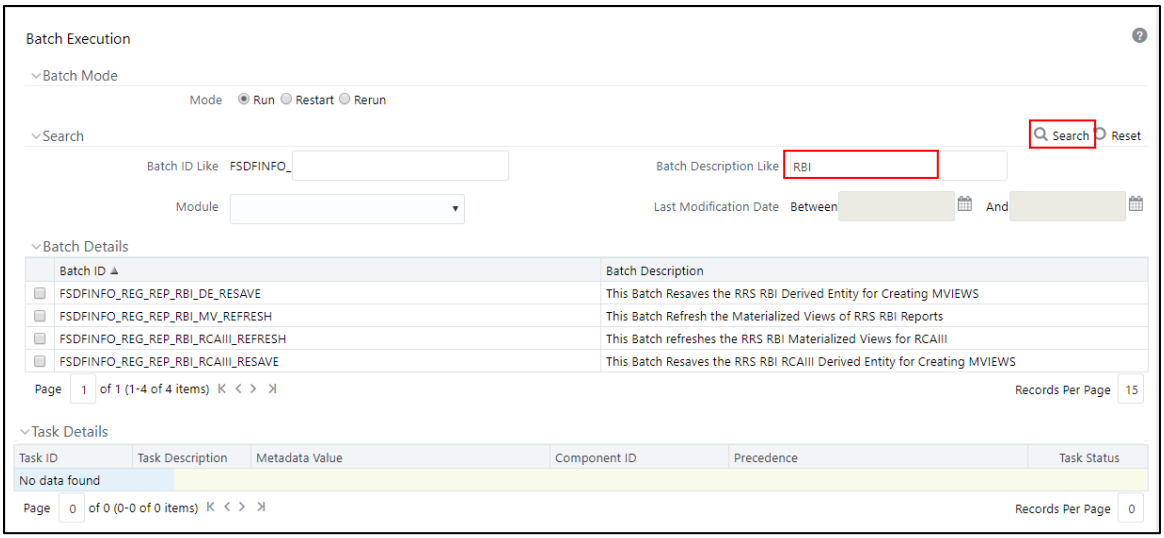

4. Select the **DE Code** and click **Edit**. The DE details are displayed.



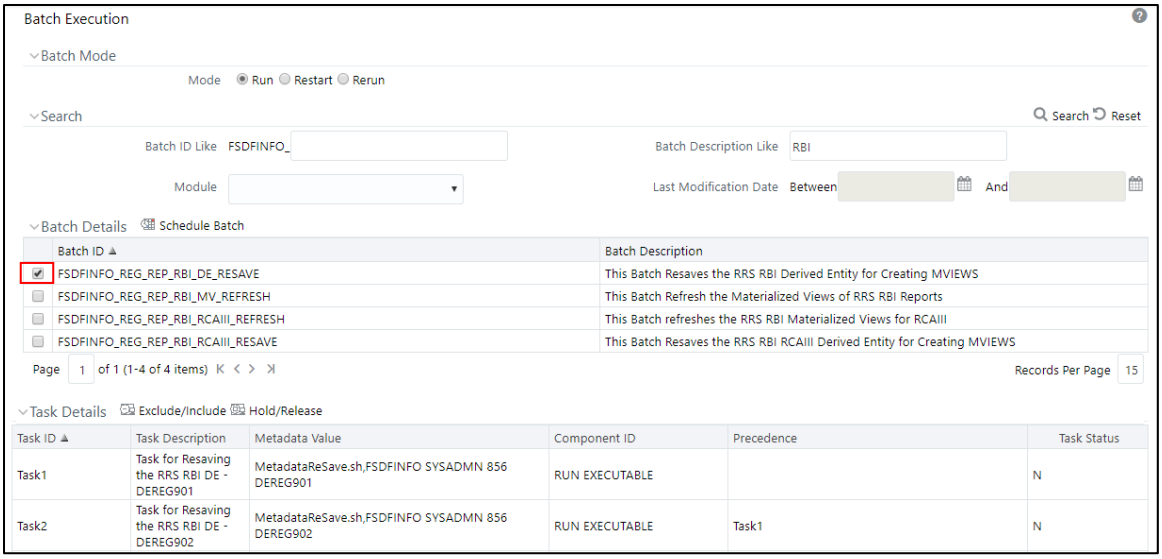

5. Enter the **Hint** for the DE and click **Save**.

**B. To execute the Hint added in the DE, perform the following steps:**

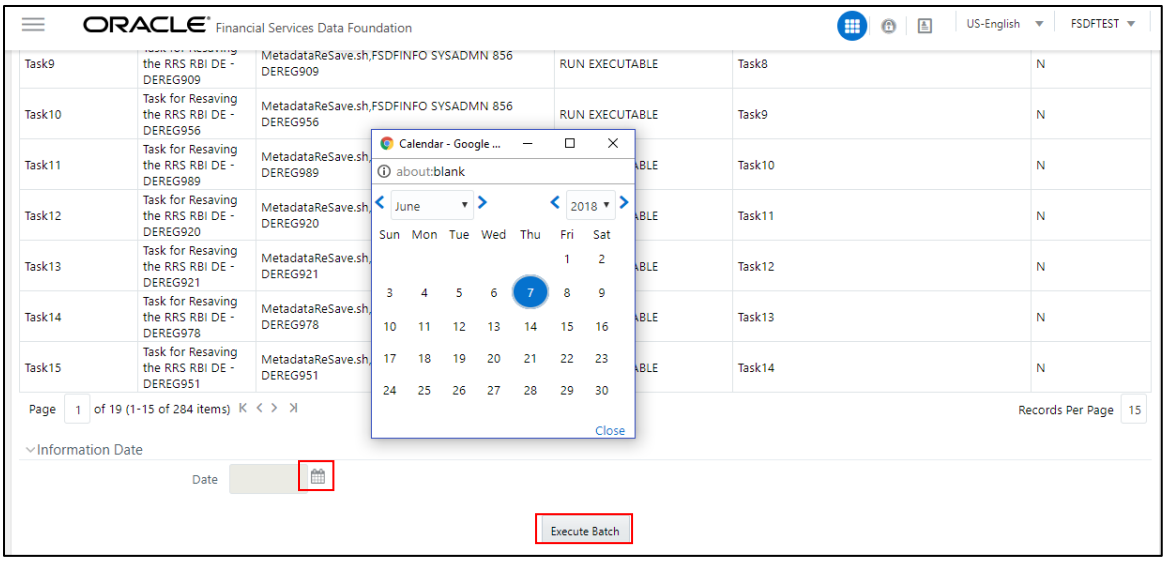
1. Navigate to **Financial Services Data Foundation → Operations → Batch Execution**. The Batch Execution screen is displayed.




2. Enter the **Batch Description Like** and click **Search**.




3. Select the modified/ required DE for Batch Execution under the **Batch Details**.




4. Select the **Date** and click **Execute Batch**. After execution, the DDL reflects the Hint added to the DE.

### 4.3.5 User Roles

Following are the user roles for derived entity:

- **Reporting Analyst**: This user can create, modify, and delete a derived entity.
- **Data Analyst**: This user can view the derived entities.

## 4.4 Rules Run Framework Features

OFSDF Interface with Lombard Risk for RBI uses the following Rules Run Framework of OFSAA. For details on the features refer to *OFS Analytical Applications Infrastructure User Guide* in OHC documentation library.

- **Rules**: Financial institutions require constant monitoring and measurement of risk in order to conform to prevalent regulatory and supervisory standards. Such measurement often entails significant computations and validations with an organization's data. Data must be transformed to support such measurements and calculations. The data transformation is achieved through a set of defined Rules.

  REG REP uses Rules for reclassification of dimensions.

- **Process**: A set of Rules collectively form a Process. A Process definition is represented as a Process Tree. The Process option in the Rules Run Framework provides a framework that facilitates the definition and maintenance of a Process. By defining a Process, you can logically group a collection of Rules that pertain to a functional process.
- **Run**: The Run feature in the Rules Run Framework helps you to combine various components and/or processes together and execute them with different underlying approaches. Further, run conditions and/or job conditions can be specified while defining a run.

## 4.5 Dimension Mapping

Each cell reference is mapped to a set of dimensions and measures. This mapping is documented in excel and then converted to a Decision table through an offline utility provided by AgileREPORTER. Decision table is a metadata object within AgileREPORTER that stores the criteria for deriving value for each cell reference. The metadata is packaged for regulatory report as part of the OFS Risk Regulatory Solution. Decision table process within AgileREPORTER reads the metadata and derived entity published by OFSAA to populate data required for returns for the specified date and legal entity.

The following table is an example of dimension mapping. Each cell reference is mapped to a set of dimension members and measure. If a dimension is left empty for a cell reference, it indicates that it is not participating in the mapping process. If there are multiple mappings for a cell reference, then the value of this cell can come from any of these criteria.

Decision mapping table is processed against the contents of derived entity to reporting data. Each record of the derived entity is matched against the criteria specified in the decision table to identify the cell reference and derive return data (such as, cell reference and cell value).

**Table 9: Dimension Mapping Example 1**

| Cell References | Is Derived? | Standard Product Type Code | Bucket Category | Bucket Type | Measure |
|---|---|---|---|---|---|
| RBIIRSP022R0020C0020 | No | Perpetual Cumulative Preference Shares | 1 to 28 days | IR | Agg Outflow Amount |
| RBIIRSP022R0020C0030 | No | Perpetual Cumulative Preference Shares | 29 days to 3 months | IR | Agg Outflow Amount |
| RBIIRSP022R0020C0040 | Yes | | | | |
| RBIIRSP022R0020C0050 | No | Perpetual Cumulative Preference Shares | Over 6 months and upto 1 year | IR | Agg Outflow Amount |
| RBIIRSP022R0020C0060 | No | Perpetual Cumulative Preference Shares | Over 1 year and upto 3 years | IR | Agg Outflow Amount |
| RBIIRSP022R0020C0070 | No | Perpetual Cumulative Preference Shares | Over 3 years and upto 5 years | IR | Agg Outflow Amount |

The following table is derived after converting the dimension member and measure names into corresponding dimension member codes (not surrogate keys) and measure codes. This decision table mapping is provided for each decision table in excel format as per template. AgileREPORTER converts the decision table mapping present in excel into configuration entries within their schema.

**Table 10: Dimension Mapping Example 2**

| Cell References | Is Derived? | Product Type | Customer Type | Branch Country | Measure |
|---|---|---|---|---|---|
| RBIIRSP022R0020C0020 | No | Perpetual Cumulative Preference Shares | 1 to 28 days | IR | MSREG976 |
| RBIIRSP022R0020C0030 | No | Perpetual Cumulative Preference Shares | 29 days to 3 months | IR | MSREG976 |
| RBIIRSP022R0020C0040 | Yes | | | | |
| RBIIRSP022R0020C0050 | No | Perpetual Cumulative Preference Shares | Over 6 months and upto 1 year | IR | MSREG976 |
| RBIIRSP022R0020C0060 | No | Perpetual Cumulative Preference Shares | Over 1 year and upto 3 years | IR | MSREG976 |
| RBIIRSP022R0020C0070 | No | Perpetual Cumulative Preference Shares | Over 3 years and upto 5 years | IR | MSREG976 |

**Note**: All the dimension member codes that are used in the decision table are preseeded by OFSAA and cannot be modified. Therefore, if you have other member codes in the dimension, then you must re-classify them by using re-classification rule post load, or value-code mapping during load.

Decision tables must be prepared closer to the report submission period. In some cases, reclassification of multiple dimensions which result in a single unified reporting dimension must be performed in order to address the complexity of decision table. Reclassification rule is defined in OFSAA and packaged as part of OFSAA Risk Regulatory Reporting Solution.

In some cases, certain sections of the schedule or the entire schedule can be a list of data rows without any mapping to fixed set of dimension members. For example, Top 20 counterparties, List of Available for Sale (AFS) - securities. In such cases, since there are no cell references, decision table mapping specifies the names of dimensions and measures of derived entities in ‘sheet’ column or ‘row’ column of the template.

**Note**: As a part of the solution, metadata exists as out-of-box / pre-configured with installer.

# 5 Report Submission

This chapter provides an understanding of the report submission process. It includes:



## 5.1 Report Submission: AgileREPORTER to Regulator

After OFSAA has prepared and hands off the data as required to Lombard Risk, the subsequent activities are performed within the AgileREPORTER.

Lombard takes care of the report format as per the regulatory requirement which may be eXtensible Business Reporting Language (XBRL)/ XML/ Excel / .Data/ XML and so on.

## 5.2 Edit Checks/ Validity Check/ Quality Checks

The AgileREPORTER carries out the report level / submission check comprising Edit Chceks / Validity Checks / Quality Checks as provided by the regulator.

**NOTE:** Refer to the AgileREPORTER user documentation provided by Lombard Risk, for details of activities within the AgileREPORTER.

## 5.3 Report Templates to be used in AgileREPORTER

The report templates to be used in AgileREPORTER are listed as follows:

| Report Name | Template Version |
|---|---|
| BSRII | BSRII_v3 |
| BSRVII | BSRVII_v2 |
| CICDP | CICDP_v1 |
| CRILC | CRILC_v7 |
| CUSTAT | CUSTAT_v2 |
| DSB3ROR | DSB3ROR_v5 |
| DSBIALE | DSBIALE_v8 |
| EXPI | EXPI_v1 |
| FORMAS42 | FORMAS42_v3 |
| FORMVIII | FORMVIII_v4 |
| FORMX | FORMX_v3 |

| Report Name | Template Version |
|---|---|
| GTCAII | GTCAII_v1 |
| IRS | IRS_v4 |
| LCRBLR | LCRBLR_v6 |
| LR | LR_v7 |
| RAQ | RAQ_v7 |
| RBSIXBRL | RBSIXBRL_v5 |
| RBSTR1 | RBSTR1_v3 |
| RBSTR3 | RBSTR3_v6 |
| RCAIII | RCAIII_v7 |
| RETCGR | RETCGR_v1 |
| RLC | RLC_v4 |
| SAQLO1 | SAQLO1_v2 |
| SAQLO2 | SAQLO2_v2 |
| SLIPPAGE | SLIPPAGE_v2 |
| SLR | SLR_v3 |

## 5.4 Supported Report Template Version and Activation Date

The AgileREPORTER contains the details of the Report template version and the activation date of the same. This can be accessed by selecting the Entity setup option in the Settings Menu which enables the user to Add, Modify, and Delete Entitites. Click on a created Entity to access report templates according to version and the activation date, and assign the necessary privilages as required.

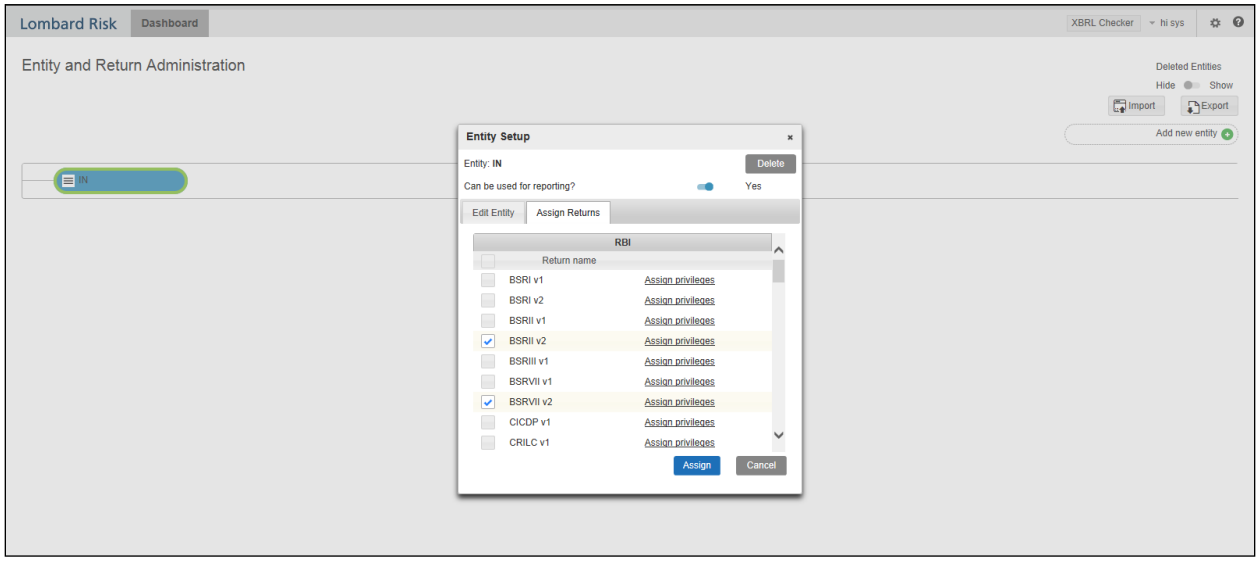



**Figure 26: AgileREPORTER Entity Setup**

Refer to the *OFS AgileREPORTER User Guide* for more details.

# 6 Maintenance

This chapter provides an understanding of the maintainence process for the regulatory templates.

Changes to regulatory template is one of the most common and continuous activity. The following steps help to assess the impact (You can replace the measure, dimension for existing dataware housing configuration pack using the below process):

1. Choosing different execution as a final. After report verification, if requirement is to change the execution, then you must visit Marking Run as Final section. After making these changes you must refresh Derived Entities (**Error! Reference source not found.**). Then AgileREPORTER also needs to retrieve returns so that revised data is reflected on AgileREPORTER.
2. If **Error! Reference source not found.** is not working, you can look for Batch Operation Log files. For file path, refer to *OFS Analytical Applications Infrstructure Installation Manual* in OHC documentation library and search for **ficdb/log**.
3. To apply revised patch, refer to the **ReadMe** file for instructions to be followed.
4. To update revised data warehouse configuration pack, perform the following instructions.
   i. Click **Settings → Administration → Data Warehouse Integration**.

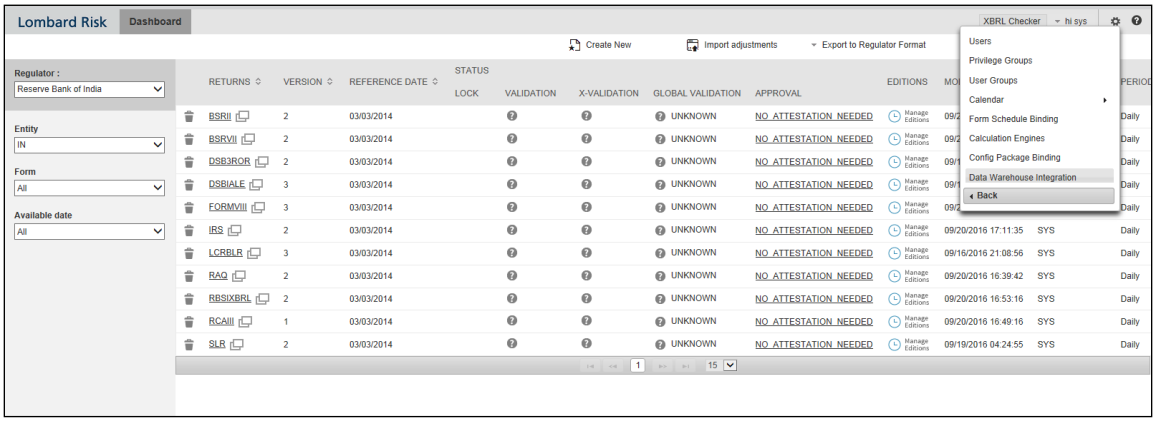



**Figure 27: Data Warehouse Integration**

   ii. Click **Add** to add a contextual button.

   iii. Enter details of the contextual button.

   **Name:** It is the text that needs to be displayed in the contextual button.

   **URL Pattern:** Replace `<<OFSAA_HOST>>`, `<<OFSAA_PORT>>` and `<<OFSAA_CONTEXT>>` with host, port and web context of the environment where OFSAA is installed. Replace `<<OFSAA_HOST>>` with the name of information domain.

   http://<<OFSAA_HOST>>:<<OFSAA_PORT>>/<<OFSAA_CONTEXT>>/OFSAADrilldown/drilldownreport.jsp?cellid=${cellId}&infodom=<<INFODOM>>&legalentity=${entityCode}&run=${run}&date=${referenceDate}

**Example:**

http://127.0.0.1:8080/ofsaa/OFSAADrilldown/drilldown.jsp?cellid=${cellId}&infodom=OFSFSDFINFO&legalentity=${entityCode}&run=${run}&date=${referenceDate}

i. Use http or https depending on the protocol configured for OFSAA.

ii. Pick an icon.

iv. Click **Add** to save the details.

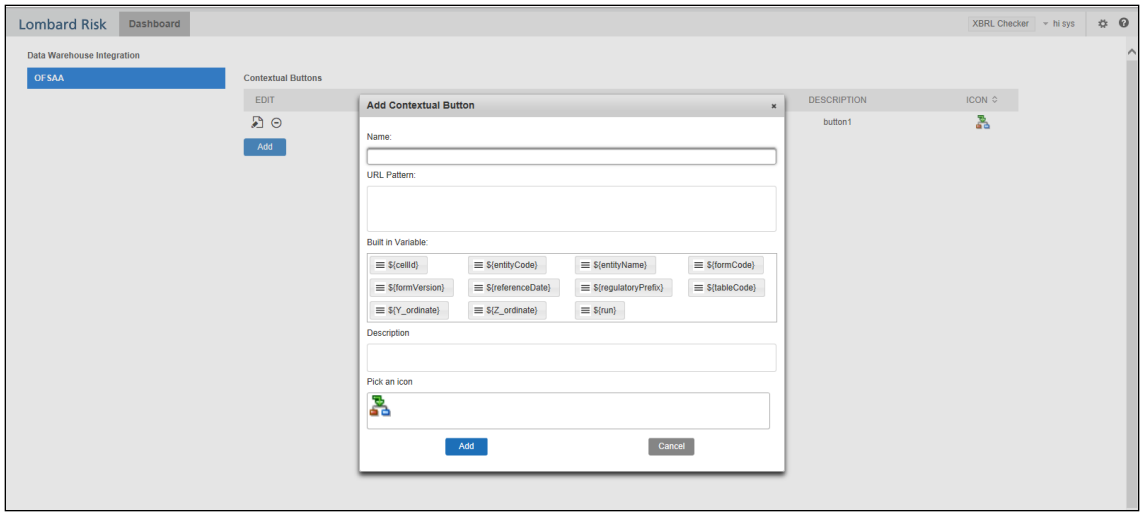



**Figure 28: Adding Contextual Button**

5. After the data ware configuration pack is updated, Lombard Configuration pack must reflect this.

**Note**: Refer to *Lombard Risk AgileREPORTER User Guide* (*Online Help*) for details.

# 7 Troubleshooting Guidelines

This section covers troubleshooting guidelines for user of Oracle Financial Services Regulatory Reporting Integration with AgileREPORTER, hereafter called as Integration.

Integration users provide the data inputs through the OFSDF where data is loaded, processed and results are made available for reporting purposes. Integration package then makes this data available in required formats to AgileREPORTER. In AgileREPORTER, this data is then aggregated according to the reporting requirements and end users view this from AgileREPORTER User Interfaces designed for the Viewing / Editing of this aggregated data.

This section provides detailed guidelines on how to troubleshoot the data issues tracing back the data flow from AgileREPORTER.

## 7.1 Prerequisites

It is assumed that user can login and see following menus and respective reports in AgileREPORTER.

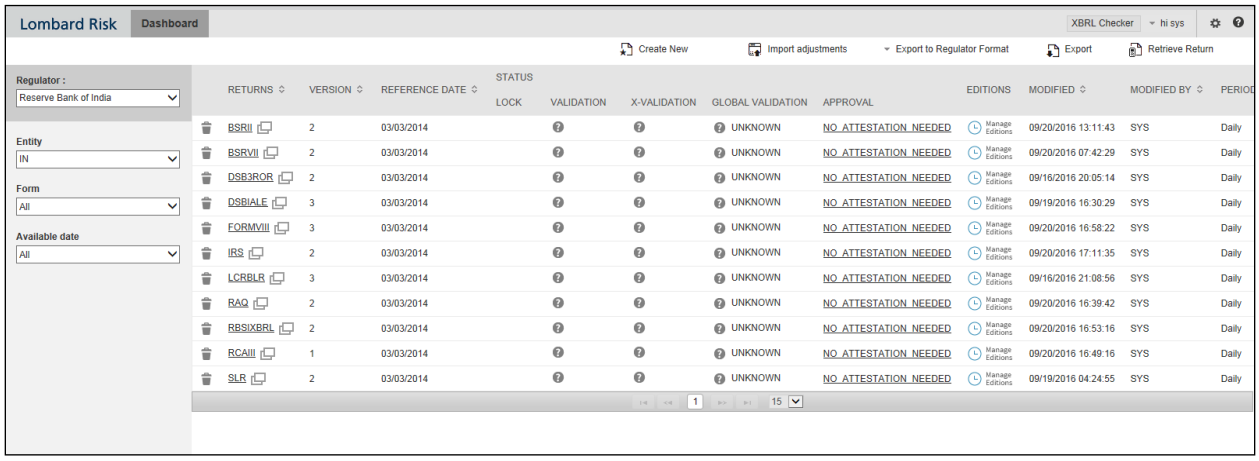



**Figure 29: AgileREPORTER**

This means configurations activities for the AgileREPORTER and OFSAA are completed. Set up activities for Entity is done and reports templates as shown above are available for viewing. Report Names shown in the figure are for illustration purpose and actual name depends on the integration pack licensed.

## 7.2 Troubleshooting Use Cases

### 7.2.1 Unable to Generate Report

If you are unable to generate reports, meaning none of the derived entities referred in the report has rows for the LE/date combination, then you must refer to Installation Manuals of AgileREPORTER or OFSAA Integration pack for further instructions and steps to be followed.

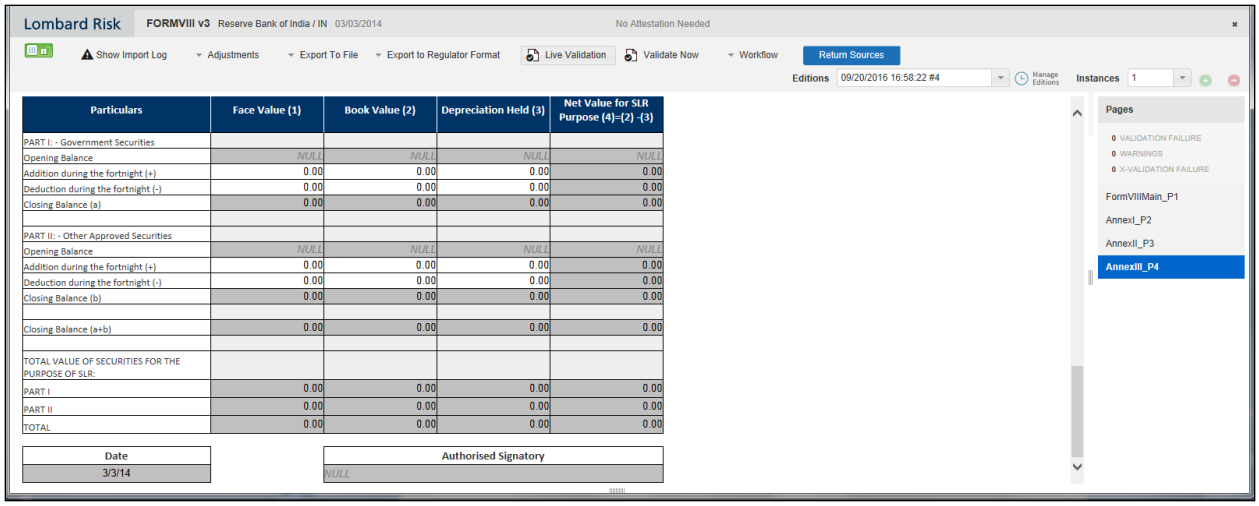
If the process mentioned in Installation Manual is correctly followed and still report list is not available then you are requested to login the bug / service request with Lombard Risk.

### 7.2.2 Data Unavailable in AgileREPORTER

This is a use case where you are logged in to AgileREPORTER, and selected particular regulatory report for appropriate entity and As of Date, but unable to generate the report.

#### 7.2.2.1 Fetching Null or Zero Values

AgileReporter is showing either Zero or Null values. It indicates that Derived Entities has data (however, all required filer conditions are not matching and resulting in zero value output) or Derived Entiy does not have data at all.




| Particulars | Face Value (1) | Book Value (2) | Depreciation Held (3) | Net Value for SLR Purpose (4)=(2) -(3) |
|---|---|---|---|---|
| PART I: - Government Securities | | | | |
| Opening Balance | NULL | NULL | NULL | NULL |
| Addition during the fortnight (+) | 0.00 | 0.00 | 0.00 | 0.00 |
| Deduction during the fortnight (-) | 0.00 | 0.00 | 0.00 | 0.00 |
| Closing Balance (a) | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | | |
| PART II: - Other Approved Securities | | | | |
| Opening Balance | NULL | NULL | NULL | NULL |
| Addition during the fortnight (+) | 0.00 | 0.00 | 0.00 | 0.00 |
| Deduction during the fortnight (-) | 0.00 | 0.00 | 0.00 | 0.00 |
| Closing Balance (b) | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | | |
| Closing Balance (a+b) | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | | |
| TOTAL VALUE OF SECURITIES FOR THE PURPOSE OF SLR: | | | | |
| PART I | 0.00 | 0.00 | 0.00 | 0.00 |
| PART II | 0.00 | 0.00 | 0.00 | 0.00 |
| TOTAL | 0.00 | 0.00 | 0.00 | 0.00 |

| Date | Authorised Signatory |
|---|---|
| 3/3/14 | NULL |

**Figure 30: Fetching Null or Zero Values**

You must validate as:

1. Derived Entity has data:
    a. Execute the Derived Entity / Materialized views to check if Derived Entity has data or not.
    b. If Derived Entity / materialized view has data but not showing in AgileREPORTER, you must log a Bug / Service Request with Lombard Risk.
2. Derived Entity does not have data:
    a. Execute the Derived Entity / Materialized views to check if Derived Entity has data or not.
    b. If Derived Entity does not have data, then check the Business Metadata excel for a given schedule.
    c. Check Worksheet titled ‘Derived Entity’ in Business Metadata excel. Get all the derived entities for a given schedule.
    d. Get dataset for each derived entity.
    e. Execute datasets in OFSAA FSDF Atomic Schema to check if data is available for a given dataset joins.
    f. If data is available in dataset queries, you must log a Bug / Service Request with AgileREPORTER.
    g. If data is not available in dataset, then check if selection of Entity, Available Date (as of date) is appropriate and required executions are available. If Entity, As of Date and Run executions are correct and still data is not available, then you must log a Bug / Service Request with Oracle Support.

### 7.2.3 Data Available in AgileREPORTER but Not as Expected

This use case where you are able to refer data for a required cell of a schedule in AgileREPORTER; however, value shown differs from expected value.

Let us take following example to illustrate the steps to be followed. This refers to RegCapitalBaselIIIC_P2 from RCAIII v1 report from RBI. Particular cell referred here is RBIRCA3P002R0110C0030 –

Common Equity Tier 1 capital (CET1): instruments and reserves:

1. Interest free funds from H.O. (for Foreign banks):

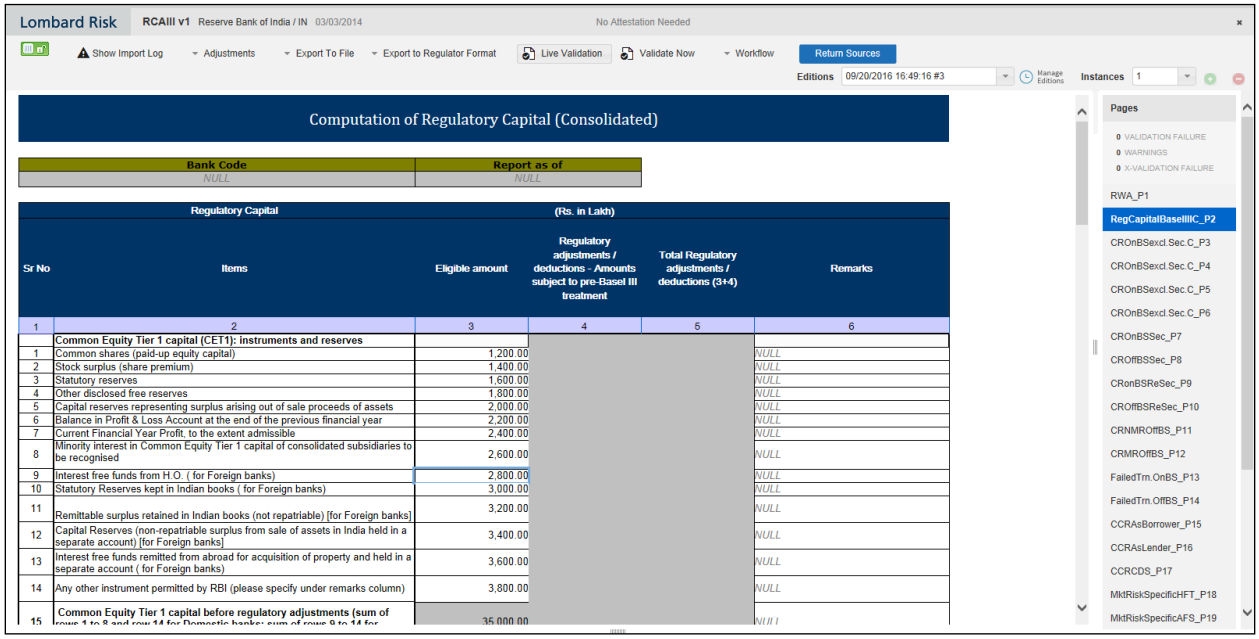



**Figure 31: RWA_P1 from RCAIII v1 Report**

You can drill down for each cell to check details of data as what is included in aggregation. To drill down, click the value of particular cell and it is shown highlighted. It shows OFSAA data lineage icon on clicking as shown in Figure 32.

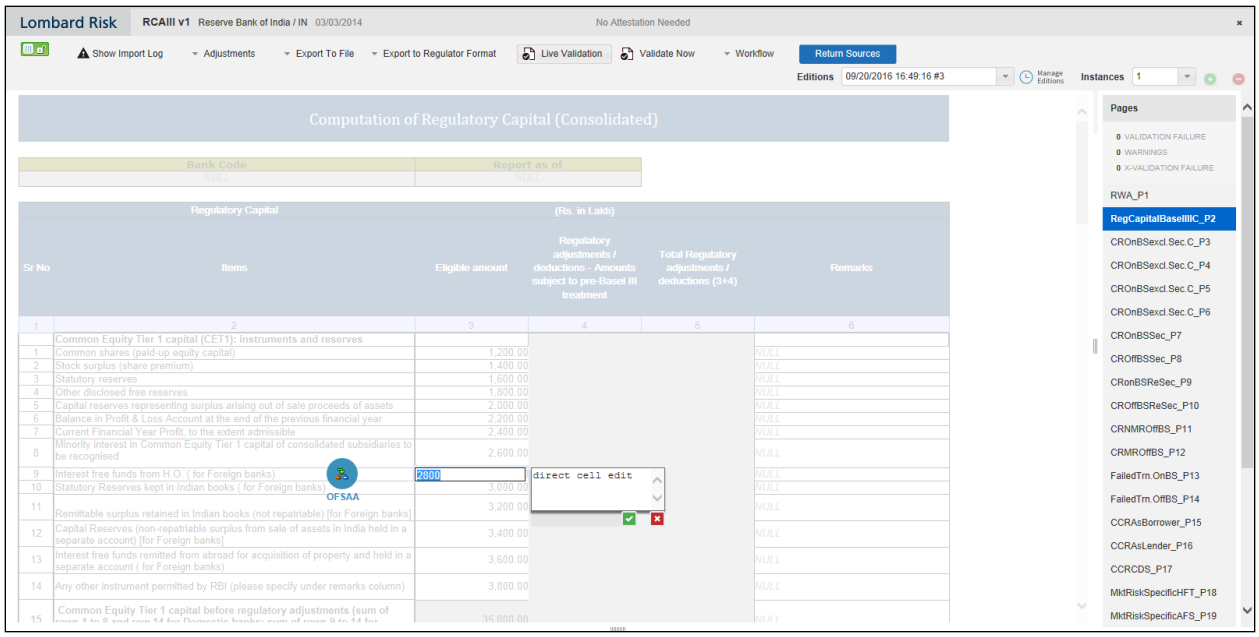



**Figure 32: OFSAA Data Lineage Icon**

Make sure that you are logged in to OFSAA infrastructure before clicking **Data Lineage** icon.

- If you are not already logged in, clicking here opens the OFSAA infrastructure login window. Log in using appropriate credentials and come back to Report Portal and click the same **Data Lineage** icon again.
- If you are already logged in to OFSAA Infrastructure, the Data Lineage first page opens as shown in Figure 33.

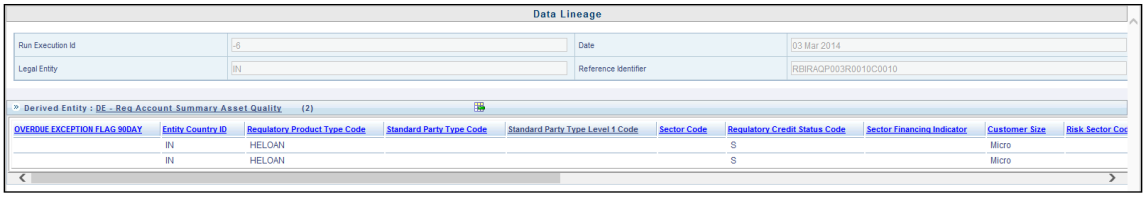



**Figure 33: OFSAA Data Lineage Page**

Top block of this screen shows following information which helps to connect the AgileREPORTER aggregated data to OFSAA references.

1. Run Execution ID: This refers to OFSAA Execution ID chosen for a given report.
2. Date: This refers to AS OF DATE selected for a given report.
3. Legal Entity: This refers to the OFSAA Legal Entity for whom the report is generated.
4. Reference Identifier: This is the cell reference for which data drill down / lineage is being checked.

Second block displays all hierarchies with values used in a given Derived Entity and measures aggregated for a given combination of a hierarchy values.

To refer the measure values, scroll rightwards using horizontal scroll bar at bottom of second block. On extreme right, measures are displayed as shown in Figure 34:

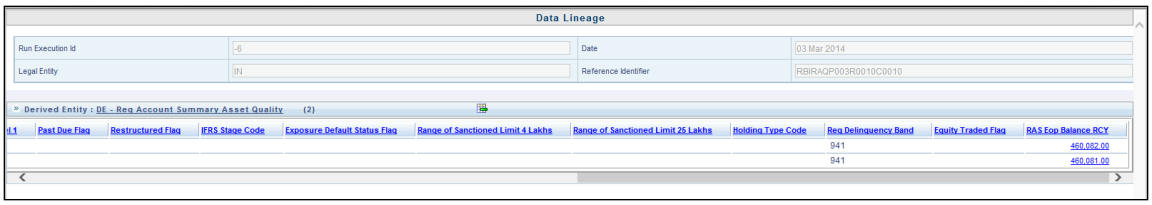



**Figure 34: Measure Values**

Only measure values are hyperlinked indicating that they can be drilled down further. On clicking the amount, second level drill down show the lowest granularity data available for a given cell reference.

#### 7.2.3.1 Using Drill Down with Data Lineage View

Data Analysts/You can then compare these accounts and their respective monetary amounts with expected values. One can check the following:

1. All required accounts are shown in aggregation
2. Unwanted accounts are not included in aggregation
3. Measures / Monetary amounts at account granularity are as expected.

Any deviation from expectations can be then checked back for:

1. If measure is stage pass through, then validate using T2T to verify if stage data is as expected or must be corrected.
2. If measure is processed, then validate using T2T to verify processing measure is correctly moved to result area.
3. If reclassified hierarchies are showing unexpected values, check Rules and source hierarchies of rules. This use case needs close verification to ensure that all source hierarchies have required values or Rule sequence which can lead to overwriting the values.
4. If all the source data is as expected and result area is now showing unexpected output, then log a Bug / Service Request with Oracle Support.

#### 7.2.3.2 Data Lineage View is not available

If the second block does not show any data, then data analysts/you are advised to refer to the data set worksheet of Business Metadata.

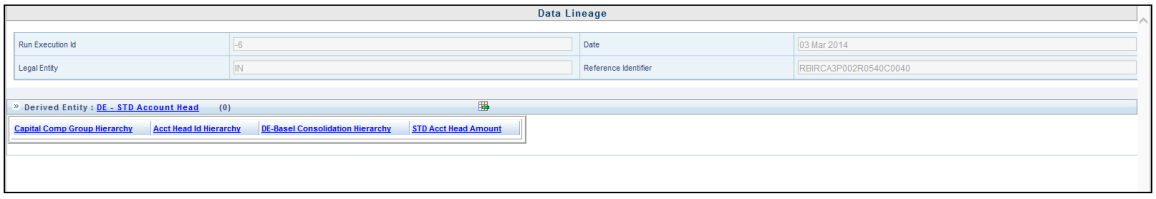
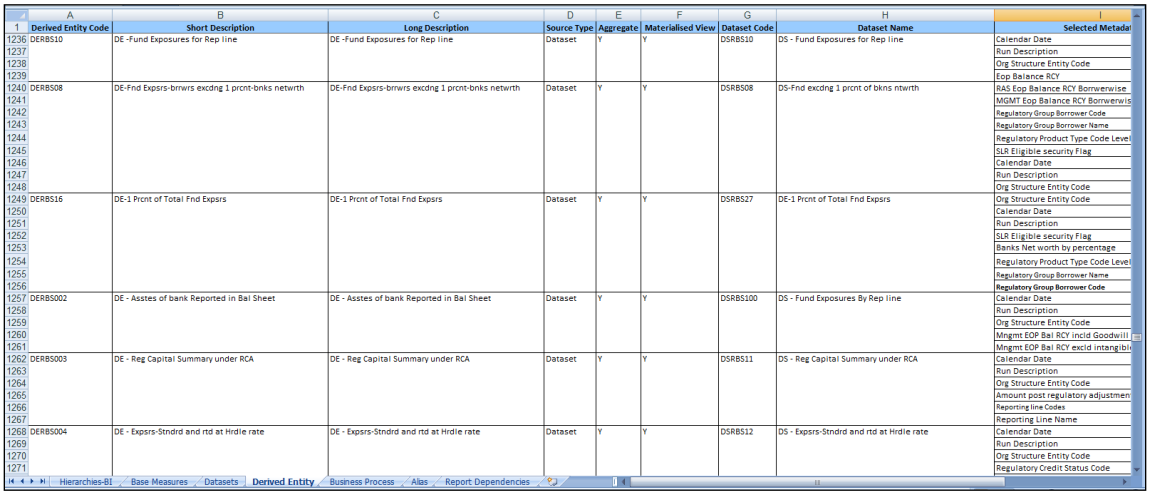



**Figure 35: Data Lineage Unavailable**

There can be few reasons why second block does not show the data:

1. Internet connection is timed out or broken down - in this case clicking Data Lineage on AgileREPORTER results in a black second block. To rectify this, re-login to OFSAA infrastructure and AgileREPORTER.

2. Data Lineage view works after Metadata is published using OFSAA Infrastructure. To validate if Metadata is properly published or not.
3. If Metadata is properly published and second block still does not show the data, then start with Derived Entity code shown at the beginning of second block. This Derived Entity code is available even if data is not available.
4. Using this Derived Entity code data analysts are advised to refer to OFSAA Business metadata with worksheet name as 'Derived Entity'. Sample Business Metadata excel is shown in Figure 36:

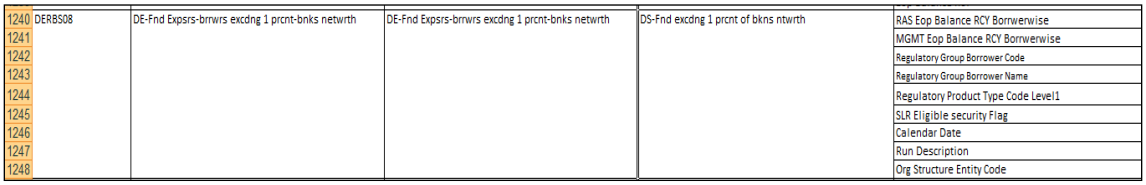


| | A | B | C | D | E | F | G | H | I |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Derived Entity Code | Short Description | Long Description | Source Type | Aggregate | Materialised View | Dataset Code | Dataset Name | Selected Metadat |
| 1236 | DERBS10 | DE -Fund Exposures for Rep line | DE -Fund Exposures for Rep line | Dataset | Y | Y | DSRBS10 | DS - Fund Exposures for Rep line | Calendar Date |
| 1237 | | | | | | | | | Run Description |
| 1238 | | | | | | | | | Org Structure Entity Code |
| 1239 | | | | | | | | | Eop Balance RCY |
| 1240 | DERBS08 | DE-Fnd Expsrs-brrwrs excdng 1 prcnt-bnks netwrth | DE-Fnd Expsrs-brrwrs excdng 1 prcnt-bnks netwrth | Dataset | Y | Y | DSRBS08 | DS-Fnd excdng 1 prcnt of bkns ntwrth | RAS Eop Balance RCY Borrwerwise |
| 1241 | | | | | | | | | MGMT Eop Balance RCY Borrwerwis |
| 1242 | | | | | | | | | Regulatory Group Borrower Code |
| 1243 | | | | | | | | | Regulatory Group Borrower Name |
| 1244 | | | | | | | | | Regulatory Product Type Code Level |
| 1245 | | | | | | | | | SLR Eligible security Flag |
| 1246 | | | | | | | | | Calendar Date |
| 1247 | | | | | | | | | Run Description |
| 1248 | | | | | | | | | Org Structure Entity Code |
| 1249 | DERBS16 | DE-1 Prcnt of Total Fnd Expsrs | DE-1 Prcnt of Total Fnd Expsrs | Dataset | Y | Y | DSRBS27 | DE-1 Prcnt of Total Fnd Expsrs | Org Structure Entity Code |
| 1250 | | | | | | | | | Calendar Date |
| 1251 | | | | | | | | | Run Description |
| 1252 | | | | | | | | | SLR Eligible security Flag |
| 1253 | | | | | | | | | Banks Net worth by percentage |
| 1254 | | | | | | | | | Regulatory Product Type Code Level |
| 1255 | | | | | | | | | Regulatory Group Borrower Name |
| 1256 | | | | | | | | | Regulatory Group Borrower Code |
| 1257 | DERBS002 | DE - Asstes of bank Reported in Bal Sheet | DE - Asstes of bank Reported in Bal Sheet | Dataset | Y | Y | DSRBS100 | DS - Fund Exposures By Rep line | Calendar Date |
| 1258 | | | | | | | | | Run Description |
| 1259 | | | | | | | | | Org Structure Entity Code |
| 1260 | | | | | | | | | Mngmt EOP Bal RCY incld Goodwill |
| 1261 | | | | | | | | | Mngmt EOP Bal RCY excld intangibl |
| 1262 | DERBS003 | DE - Reg Capital Summary under RCA | DE - Reg Capital Summary under RCA | Dataset | Y | Y | DSRBS11 | DS - Reg Capital Summary under RCA | Calendar Date |
| 1263 | | | | | | | | | Run Description |
| 1264 | | | | | | | | | Org Structure Entity Code |
| 1265 | | | | | | | | | Amount post regulatory adjustmen |
| 1266 | | | | | | | | | Reporting line Codes |
| 1267 | | | | | | | | | Reporting Line Name |
| 1268 | DERBS004 | DE - Expsrs-Stndrd and rtd at Hrdle rate | DE - Expsrs-Stndrd and rtd at Hrdle rate | Dataset | Y | Y | DSRBS12 | DS - Expsrs-Stndrd and rtd at Hrdle rate | Calendar Date |
| 1269 | | | | | | | | | Run Description |
| 1270 | | | | | | | | | Org Structure Entity Code |
| 1271 | | | | | | | | | Regulatory Credit Status Code |

Hierarchies-BI | Base Measures | Datasets | Derived Entity | Business Process | Alias | Report Dependencies

**Figure 36: Business Metadata - 1**

5. By referring to Business Metadata, you can get complete information on Derived Entity such as dataset, Fact tables, measures, hierarchies defined under particular Derived Entity.



| | | | | | |
|---|---|---|---|---|---|
| 1240 | DERBS08 | DE-Fnd Expsrs-brrwrs excdng 1 prcnt-bnks netwrth | DE-Fnd Expsrs-brrwrs excdng 1 prcnt-bnks netwrth | DS-Fnd excdng 1 prcnt of bkns ntwrth | RAS Eop Balance RCY Borrwerwise |
| 1241 | | | | | MGMT Eop Balance RCY Borrwerwise |
| 1242 | | | | | Regulatory Group Borrower Code |
| 1243 | | | | | Regulatory Group Borrower Name |
| 1244 | | | | | Regulatory Product Type Code Level1 |
| 1245 | | | | | SLR Eligible security Flag |
| 1246 | | | | | Calendar Date |
| 1247 | | | | | Run Description |
| 1248 | | | | | Org Structure Entity Code |

**Figure 37: Business Metadata - 2**

The Dataset ANSI Joins provide valuable information on how various entities are joined/linked together. By executing these Joins, you can confirm if data is available for given filters and conditions. If data is fetched using Dataset Joins and Data Lineage does not show data, you must log a Bug / Service Request with Oracle Support Services.

Oracle Financial Services Regulatory Reporting for Reserve Bank of India – Lombard Risk Integration Pack User Guide Release 8.0.7.0.0

January 2019

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