# Oracle Financial Services Regulatory Reporting for US Federal Reserve – Integration Pack

**User Guide** 

Release 8.1.2.1.0

**March 2023** 





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#### 1 Preface

Welcome to Release 8.1.1.0.0 of the Oracle Financial Services Regulatory Reporting for US Federal Reserve – 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:

- What is New in this Release for OFS REG REP US FED
- Scope of the Guide
- Intended Audience
- Access to Oracle Support
- Related Information Sources
- How This Guide is Organized
- Conventions Used

#### 1.1 What is New in this Release for OFS REG REP US FED

This section lists new features and changes in OFS REG REP USFED release v8.1.2.1.0.

#### 1.1.1 New Features for 8.1.2.1.0

The new features introduced in this release is a New USFED Menu to access Regulatory Reports (Report Mappings and Report Publish). For more information, see the <u>Report Mappings</u>, and <u>Report Publish</u>.

#### 1.2 Deprecated Features

There are no deprecated features in this release.

#### 1.3 Desupported Features

There are no desupported features in this release.

#### 1.4 Scope of the Guide

The objective of this user guide is to provide a comprehensive working knowledge on Oracle Financial Services Regulatory Reporting for US Federal Reserve – Lombard Risk Integration Pack, Release 8.1.2.1.0. This user guide is intended to help you understand the key features and functionalities of Oracle Financial Services Regulatory Reporting for US Federal Reserve – Lombard Risk Integration Pack (Oracle Financial Services Data Foundation (OFSDF) Interface with Lombard Risk for US FED) release 8.1.2.1.0 and details the process flow and methodologies used.

#### 1.5 Intended Audience

This guide is intended for:

- Regulatory Reporting (Reg Rep) Analyst who bears the responsibility to verify and submit the
  results. The Reg Rep Analyst is also entrusted to maintain the dimensional values across multiple
  reporting requirements, maintain the results area structure of Oracle Financial Services Data
  Foundation.
- 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.

## 1.6 Access to Oracle Support

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

#### 1.7 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 US Federal Reserve Integration Pack Installation Manual Release 8.1.2.1.0
- Oracle Financial Services Data Foundation User Guide Release 8.1.2.1.0
- Oracle Financial Services Data Foundation Installation Manual Release 8.1.2.1.0
- Oracle Financial Services Analytical Applications Infrastructure User Guide Release 8.1.2.1.0 (present in the OHC documentation library)

#### 1.8 How This Guide is Organized

The Oracle Financial Services Regulatory Reporting for US Federal Reserve – Integration Pack User Guide includes the following topics:

- Chapter 2: Introduction
- Chapter 3: Getting Started
- Chapter 4: Regulatory Reporting (REG REP) Solution Data Flow
- Chapter 5: OFSAA Features
- Chapter 6: Executing Run through Run Management for OFS REG REP US FED
- Chapter 7: Data Extracts
- Chapter 8: Metadata Browser
- Chapter 9: Report Submission

- Chapter 10: Maintenance
- Chapter 11: Validation or Edit Checks for Data Schedules
- Chapter 12: Troubleshooting Guidelines
- Chapter 13: Appendix 1

# 1.9 Conventions Used

The following table lists the conventions used in this guide.

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

Conventions	Description
References to sections or chapters in the manual are indicated in <i>Italics</i> .	
Screen names are indicated in the following manner: <b>Introduction</b> screen	
Options and buttons are indicated in <b>Bold</b> .	
Code-related text is indicated in Monospace.	
OFSAAI	Oracle Financial Services Analytical Applications Infrastructure
OFS AAAI	Oracle Financial Services Advanced Analytical Applications Infrastructure Application Pack
RHEL	Red Hat Enterprise Linux
Atomic Schema	Database Schema where the application data model is uploaded
Config Schema	Database Schema which contains setup related configurations and metadata
OFS REG REP USFED	Oracle Financial Services Regulatory Reporting for US Federal Reserve – Integration Pack

#### 2 Introduction

This chapter provides an understanding of the Oracle Financial Services Regulatory Reporting for the US Federal Reserve – Integration Pack Application and its scope. It includes the following:

- Overview
- OFSAA Regulatory Reporting Architecture
- Scope

#### 2.1 Overview

Regulatory Reporting and financial services have evolved to be an inseparable combination. It has worsened since the 2008 financial crisis. Today, banks and financial institutions must file hundreds of regulatory reports. For the U.S. Federal Reserve alone, institutions must file multiple submissions of FFIEC-101, call reports, stress testing reports, and so on. Reporting requirements increase rapidly in number and complexity for banks operating regionally or globally, where they must file in multiple jurisdictions.

The OFS REG REP US FED 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.

# 2.2 OFSAA Regulatory Reporting Architecture

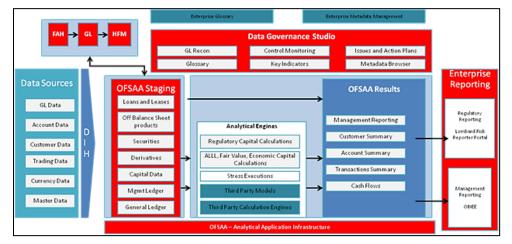


Figure 1: Regulatory Reporting (REG REP) Solution Architecture

This interface connects the Oracle FSDF to Vermeg Portal. As you can see in the Architecture figure above, Data flows from OFSAA to Vermeg Portal.

OFSDF is an analytical data warehouse platform for the Financial Services industry. It 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 that includes the following:

- 1. Enterprise Risk Management
- **2.** Enterprise Performance Management
- 3. Customer Insight
- 4. Financial Crime and Compliance Management

OFSDF 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 form 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 a 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, you can automate the end-to-end reporting process covering data preparation to the last mile of reporting.

#### 2.3 Scope

Oracle Financial Services Regulatory Reporting for US Federal Reserve – Integration Pack covers the following regulatory reports for specified release as mentioned in the table:

Table 2: Scope of Regulatory Reports and Schedules

Report	Report Name	Released Version
FR Y-9C	Consolidated Financial Statements for Holding Companies	8.1.2.0.0
FR Y-20	Financial Statements for a Bank Holding Company Subsidiary Engaged in Bank-Ineligible Securities Underwriting and Dealing	8.1.2.0.0
FR Y-15	Banking Organization Systemic Risk Report	8.1.2.0.0
FFIEC-009	Country Exposure Report	8.1.2.0.0
FFIEC-009A	Country Exposure Information Report	8.1.2.0.0
FR Y-11 Financial Statements of U.S. Nonbank Subsidiaries of U.S. Holding Companies		8.1.2.0.0
FR Y-11S	Abbreviated Financial Statements of U.S. Nonbank Subsidiaries of U.S. Holding Companies	8.1.2.0.0

Report	Report Name	Released Version
FR-2314	Financial Statements of Foreign Subsidiaries of U.S. Banking Organizations	8.1.2.0.0
FR-2314S	Abbreviated Financial Statements of Foreign Subsidiaries of U.S. Banking Organizations	8.1.2.0.0
FR Y-9LP	Parent Company Only Financial Statements for Large Holding Companies	8.1.2.0.0
FFIEC-031	Consolidated Reports of Condition and Income for a Bank with Domestic and Foreign Offices	8.1.2.0.0
FR Y-12	Consolidated Holding Company Report of Equity Investments in Nonfinancial Companies	8.1.2.0.0
FFIEC-041	Consolidated Reports of Condition and Income for a Bank with Domestic Offices Only	8.1.2.0.0
FR-2052A	Complex Institution Liquidity Monitoring Report	8.1.2.0.0
FR Y-7N	Financial Statements of U.S. Nonbank Subsidiaries Held by Foreign Banking Organizations	8.1.2.0.0
FR Y-7NS	Abbreviated Financial Statements of U.S. Nonbank Subsidiaries Held by Foreign Banking Organizations	8.1.2.0.0
FR-2644 Weekly Report of Selected Assets and Liabilities of Domestically Chartered Commercial Banks and U.S. Branches and Agencies of Foreign Banks		8.1.2.0.0
FR-2886B	Cash and Balances Due from Depository Institutions	8.1.2.0.0
FR-2900	Report of Transaction Accounts, Other Deposits, and Vault Cash (Commercial Banks)	
FR Y-14Q	′-14Q Schedule M.1 – Balances	
FR Y-14Q	Schedule K – Supplemental	8.1.2.0.0
FR Y-14Q	Schedule A – Retail	8.1.2.0.0
FR Y-14Q	Schedule H – Wholesale Risk	8.1.2.0.0
FR Y-14M	Y-14M Capital Assessments and Stress Testing Report - Monthly	
FFIEC-101	Regulatory Capital Reporting for Institutions Subject to the Advanced Capital Adequacy Framework	
FDIC-8020	Statement of Deposits	8.1.2.0.0
FFIEC-002	Assets and Liabilities of U.S. Branches and Agencies of Foreign Banks	8.1.2.0.0
FR 2420	Selected Money Market Rates	8.1.2.0.0
FFIEC-030	Foreign Branch Report of Condition	8.1.2.0.0
FFIEC-030S	FIEC-030S Abbreviated Foreign Branch Report of Condition	

Report	Report Name	Released Version
FR Y-7Q	The Capital and Asset Report for Foreign Banking Organizations	8.1.2.0.0
FR 2835A	Quarterly Report of Credit Card Plans	8.1.2.0.0
FR 2502Q	Quarterly Report of Assets and Liabilities of Large Foreign Offices of U.S. Banks	8.1.2.0.0

The following table lists the detailed scope.

Table 3: Detailed Scope of Reports and Schedules

Sl. No.	Report Code	Schedule Code	Schedule Name
1	FDIC-8020	-	Statement of Deposits
2	FFIEC-009	C Part I	Claims on an Immediate Risk Basis
3	FFIEC-009	C Part II	Claims on an Ultimate Risk Basis and Memorandum Items
4	FFIEC-009	D	Claims from Positions in Derivative Contracts
5	FFIEC-009	L	Foreign-Office Liabilities
6	FFIEC-009	0	Off-Balance-Sheet Items
7	FFIEC-009A	А	Country Exposure Information Report Part A
8	FFIEC-009A	В	Country Exposure Information Report Part B
9	FFIEC-031	RC-S	Servicing, Securitization, and Asset Sale Activities
10	FFIEC-031	RC-V	Variable Interest Entities
11	FFIEC-031	RC	Balance Sheet
12	FFIEC-031	RC-A	Cash and Balances Due from Depository Institutions
13	FFIEC-031	RC-B	Securities(bugs)
14	FFIEC-031	RC-C	Loans and Lease Financing Receivables(bugs)
15	FFIEC-031	RC-D	Trading Assets and Liabilities
16	FFIEC-031	RC-E	Deposit Liabilities
17	FFIEC-031	RC-F	Other Assets
18	FFIEC-031	RC-G	Other Liabilities
19	FFIEC-031	RC-H	Selected Balance Sheet Items for Domestic Offices
20	FFIEC-031	RC-I	Assets and Liabilities of IBFs
21	FFIEC-031	RC-K	Quarterly Averages
22	FFIEC-031	RC-L	Derivatives and Off-Balance-Sheet Items

Sl. No.	Report Code	Schedule Code	Schedule Name
23	FFIEC-031	RC-M	Memoranda
24	FFIEC-031	RC-N	Past Due and Nonaccrual Loans, Leases, and Other Assets
25	FFIEC-031	RC-O	Other Data for Deposit Insurance and FICO Assessments
26	FFIEC-031	RC-P	1–4 Family Residential Mortgage Banking Activities in Domestic Offices
27	FFIEC-031	RC-Q	Assets and Liabilities Measured at Fair Value regularly
28	FFIEC-031	RC-R Part I	Regulatory Capital Components and Ratios
29	FFIEC-031	RC-R Part II	Risk-Weighted Assets
30	FFIEC-031	RC-T	Fiduciary and Related Services
31	FFIEC-031	RI	Income Statement
32	FFIEC-031	RI-A	Changes in Equity Capital
33	FFIEC-031	RI-B	Charge-offs and Recoveries and Changes in Allowance for Loan and Lease Losses
34	FFIEC-031	RI-C	Disaggregated Data on the Allowance for Loan and Lease Losses
35	FFIEC-031	RI-D	Income from Foreign Offices
36	FFIEC-031	RI-E	Explanations
37	FFIEC-041	RC	Balance Sheet
38	FFIEC-041	RC-A	Cash and Balances Due from Depository Institutions
39	FFIEC-041	RC-B	Securities
40	FFIEC-041	RC-C	Loans and Lease Financing Receivables
41	FFIEC-041	RC-D	Trading Assets and Liabilities
42	FFIEC-041	RC-E	Deposit Liabilities
43	FFIEC-041	RC-F	Other Assets
44	FFIEC-041	RC-G	Other Liabilities
45	FFIEC-041	RC-K	Quarterly Averages
46	FFIEC-041	RC-L	Derivatives and Off-Balance-Sheet Items
47	FFIEC-041	RC-M	Memoranda
48	FFIEC-041	RC-N	Past Due and Nonaccrual Loans, Leases, and Other Assets
49	FFIEC-041	RC-O	Other Data for Deposit Insurance and FICO Assessments

Sl. No.	Report Code	Schedule Code	Schedule Name	
50	FFIEC-041	RC-P	1–4 Family Residential Mortgage Banking Activities	
51	FFIEC-041	RC-Q	Assets and Liabilities Measured at Fair Value on a Recurring Basis	
52	FFIEC-041	RC-R Part I	Regulatory Capital Components and Ratios	
53	FFIEC-041	RC-R Part II	Risk-Weighted Assets	
54	FFIEC-041	RC-S	Servicing, Securitization, and Asset Sale Activities	
55	FFIEC-041	RC-T	Fiduciary and Related Services	
56	FFIEC-041	RC-V	Variable Interest Entities	
57	FFIEC-041	RI	Income Statement	
58	FFIEC-041	RI-A	Changes in Bank Equity Capital	
59	FFIEC-041	RI-B	Charge-offs and Recoveries and Changes in Allowance for Loan and Lease Losses	
60	FFIEC-041	RI-C	Disaggregated Data on the Allowance for Loan and Lease Losses	
61	FFIEC-041	RI-E	Explanations	
62	FFIEC-101	_	Advanced Capital Adequacy Framework	
63	FR Y-11	BS	Balance Sheet	
64	FR Y-11	BS-A	Loans and Lease Financing Receivables	
65	FR Y-11	BS-M	Memoranda	
66	FR Y-11	IS	Income Statement (calendar year-to-date)	
67	FR Y-11	IS-A	Changes in Equity Capital	
68	FR Y-11	IS-B	Changes in Allowance for Loan and Lease Losses	
69	FR Y-11S	List	Detailed Listing of Subsidiaries	
70	FR Y-12	А	Type of Investments	
71	FR Y-12	В	Type of Security	
72	FR Y-12	С	Type of Entity within the Banking Organization	
73	FR Y-12	D	Non-financial Investment Transactions During Reporting Period	
79	FR Y-14M	_	Capital Assessments and Stress Testing Report	
80	FR Y-14M	A-1	Domestic First Lien Closed-end 1-4 Family Residential Loan Data – Loan Level Table	
81	FR Y-14M	A-2	Domestic First Lien Closed-end 1-4 Family Residential Loan Data – Portfolio Level Table	

Sl. No.	Report Code	Schedule Code	Schedule Name	
82	FR Y-14M	B-1	Domestic Home Equity Loan and Home Equity Line – Loan Level Table	
83	FR Y-14M	B-2	Domestic Home Equity Loan and Home Equity Line – Portfolio Level Table	
84	FR Y-14M	C-1	Address Matching Loan Level Data	
85	FR Y-14M	D-1	Domestic Credit Card Data – Loan Level Table	
86	FR Y-14M	D-2	Domestic Credit Card Data – Portfolio Level Table	
87	FR Y-14QA1	_	Retail	
88	FR Y-14QBAL	М	Balances	
89	FR Y-14QCIL	H.1	Corporate Loan Data	
90	FR Y-14QCRE	H.2	Commercial Real Estate	
91	FR Y-14QFVOHFS	J	Retail Fair Value Option/Held for Sale (FVO/HFS)	
92	FR Y-14QMSR	1	MSR Valuation	
93	FR Y-14QopsriskBL	E.2	Business Line	
94	FR Y-14QopsriskMS	E.1	Operational Loss History	
95	FR Y-14QOpsriskRFR	E.5	Legal Reserves Frequency	
96	FR Y-14QopsriskTH	E.4	Threshold Information	
97	FR Y-14QOpsriskUOM	E.3	Unit-0f-Measure	
98	FR Y-14QPPNR	G	Pre-Provision Net Revenue	
99	FR Y-14QRCI	С	Regulatory Capital Instruments	
100	FR Y-14QRCT	D	Regulatory Capital Transitions	
101	FR Y-14QretailAuto	A.2	US Auto Loan	
102	FR Y-14QretailIntauto	A.1	International Auto Loan	
103	FR Y-14QretailIntcard	A.3	International Credit Card	
104	FR Y-14QretailIntfm	A.5	International First Lien Mortgage	
105	FR Y-14QRetailINTHE	A.4	International Home Equity	
106	FR Y-14QretailIntlothcons	A.6	International Other Consumer Schedule	
107	FR Y-14QretailIntsb	A.8	International Small Business	
108	FR Y-14QretailStudent	A.10	Student Loan	
109	FR Y-14QretailUSothcons	A.7	US Other Consumer	
110	FR Y-14QretailUssb	A.9	US Small Business	
111	FR Y-14QSEC	В	Securities	
112	FR Y-14QSUPMNT	K	Supplemental	

Sl. No.	Report Code	Schedule Code	Schedule Name	
113	FR Y-14QTRADING	F	Trading	
114	FR Y-15	_	Banking Organization Systemic Risk Report	
115	FR Y-15	А	Size Indicator	
116	FR Y-15	В	Interconnectedness Indicators	
117	FR Y-15	С	Substitutability Indicators	
118	FR Y-15	D	Complexity Indicators	
119	FR Y-15	Е	Cross-Jurisdictional Activity Indicators	
120	FR Y-15	F	Ancillary Indicators	
121	FR Y-15	G	Short-Term Wholesale Funding Indicator	
122	FR Y-15	Н	FBO Size Indicator	
123	FR Y-15	I	FBO Interconnectedness Indicators	
124	FR Y-15	J	FBO Substitutability Indicators	
125	FR Y-15	К	FBO Complexity Indicators	
126	FR Y-15	L	FBO Cross-Jurisdictional Activity Indicators (Column B) Combined U.S. Operations (Column A) U	
127	FR Y-15	М	FBO Ancillary Indicators	
128	FR Y-15	N	FBO Short-Term Wholesale Funding Indicator	
129	FR Y-20	-	Financial Statements for a Bank Holding Company Subsidiary Engaged in Bank-Ineligible Securities Underwriting and Dealing	
130	FR Y-7N	-	Financial Statements of U.S. Nonbank Subsidiaries Held by Foreign Banking Organizations	
131	FR Y-7N	IS	Income Statement	
132	FR Y-7N	IS-A	Changes in Equity Capital	
133	FR Y-7N	IS-B	Changes in Allowance for Loan and Lease Losses	
134	FR Y-7N	BS	Balance Sheet	
135	FR Y-7N	BS-A	Loans and Lease Financing Receivables	
136	FR Y-7N	BS-M	Memoranda	
137	FR Y-7NS	-	Abbreviated Financial Statements of U.S. Nonbank Subsidiaries Held by Foreign Banking Organizations	
138	FR Y-9C	-	Consolidated Financial Statements for Holding Companies	
139	FR Y-9C	HI	Consolidated Income Statement	

Sl. No.	Report Code	Schedule Code	Schedule Name	
140	FR Y-9C	HI-A	Changes in Holding Company Equity Capital	
141	FR Y-9C	HI-B	Charge-Offs and Recoveries on Loans and Leases and Changes in Allowance for Loan and Lease Losses	
142	FR Y-9C	HI-C	Disaggregated Data on the Allowance for Loan and Lease Losses	
143	FR Y-9C	НС	Consolidated Balance Sheet	
144	FR Y-9C	НС-В	Securities	
145	FR Y-9C	HC-C	Loans and Lease Financing Receivables	
146	FR Y-9C	HC-D	Trading Assets and Liabilities	
147	FR Y-9C	HC-E	Deposit Liabilities1	
148	FR Y-9C	HC-F	Other Assets	
149	FR Y-9C	HC-G	Other Liabilities	
150	FR Y-9C	HC-H	Interest Sensitivity	
151	FR Y-9C	HC-I	Insurance-Related Underwriting Activities (Including Reinsurance)	
152	FR Y-9C	HC-K	Quarterly Averages	
153	FR Y-9C	HC-L	Derivatives and Off-Balance-Sheet Items	
154	FR Y-9C	НС-М	Memoranda	
155	FR Y-9C	HC-N	Past Due and Nonaccrual Loans, Leases, and Other Assets	
156	FR Y-9C	HC-P	1–4 Family Residential Mortgage Banking Activities in Domestic Offices	
157	FR Y-9C	HC-Q	Assets and Liabilities Measured at Fair Value on a Recurring Basis	
158	FR Y-9C	HC-R	Regulatory Capital	
159	FR Y-9C	HC-S	Servicing, Securitization, and Asset Sale Activities	
160	FR Y-9C	HC-V	Variable Interest Entities	
161	FR Y-9LP	-	Parent Company Only Financial Statements for Large Holding Companies	
162	FR Y-9LP	PI	Parent Company Only Income Statement	
163	FR Y-9LP	PI-A	Cash Flow Statement	
164	FR Y-9LP	PC	Parent Company Only Balance Sheet	
165	FR Y-9LP	PC-A	Investments in Subsidiaries and Associated Companies	
166	FR Y-9LP	PC-B	Memoranda	

Sl. No.	Report Code	Schedule Code	Schedule Name	
167	FR-2052A	-	Complex Institution Liquidity Monitoring Report	
168	FR-2314	-	Financial Statements of Foreign Subsidiaries of U.S. Banking Organizations	
169	FR-2314	IS	Income Statement (calendar year-to-date)	
170	FR-2314	IS-A	Changes in Equity Capital	
171	FR-2314	IS-B	Changes in Allowance for Loan and Lease Losses	
172	FR-2314	BS	Balance Sheet	
173	FR-2314	BS-A	Loans and Lease Financing Receivables	
174	FR-2314	BS-M	Memoranda	
175	FR-2314S	_	Abbreviated Financial Statements of Foreign Subsidiaries of U.S. Banking Organizations	
176	FR-2644	-	Weekly Report of Selected Assets and Liabilities of Domestically Chartered Commercial Banks and U.S. Branches and Agencies of Foreign Banks	
177	FR-2886B	RI-A	Changes in Equity Capital	
178	FR-2886B	RC-B	Securities	
179	FR-2886B	RC	Balance Sheet	
180	FR-2886B	RC-C	Loans and Lease Financing Receivables	
181	FR-2886B	RC-M	Claims on and Liabilities to Related Organizations	
182	FR-2886B	RC-N	Past Due and Nonaccrual Loans, Leases, and Other Assets	
183	FR-2886B	RC-R	Regulatory Capital	
184	FR-2886B	RI	Income Statement	
185	FR-2886B	RI-B	Changes in Allowance for Loan and Lease Losses	
186	FR-2886B	RC-A	Cash and Balances Due from Depository Institutions	
187	FR-2886B	RC-L	Derivatives and Off-Balance Sheet Items	
188	FR-2900	-	Report of Transaction Accounts, Other Deposits, and Vault Cash	
189	FR-2420	А	Federal Funds	
190	FR-2420	AA	Selected Borrowings from Non-Exempt Entities	
191	FR-2420	В	Eurodollars	
192	FR-2420	С	Time Deposits and Certificates of Deposit (CDs)	

Sl. No.	Report Code	Schedule Code	Schedule Name
193	FFIEC-002	RAL	Assets and Liabilities
194	FFIEC-002	А	Cash and Balances Due from Depository Institutions
195	FFIEC-002	C Part I	Loans and Leases
196	FFIEC-002	C Part II	Loans to Small Businesses and Small Farms
197	FFIEC-002	Е	Deposit Liabilities and Credit Balances
198	FFIEC-002	K	Quarterly Averages
199	FFIEC-002	L	Derivatives and Off-Balance-Sheet Items
200	FFIEC-002	N	Past Due, Nonaccrual, and Restructured Loans
201	FFIEC-002	0	Other Data for Deposit Insurance Assessments
202	FFIEC-002	Р	Other Borrowed Money
203	FFIEC-002	Q	Financial Assets and Liabilities Measured at Fair Value on a Recurring Basis
204	FFIEC-002	Т	Fiduciary and Related Services

# 3 Getting Started

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

- Prerequisites
- Assumptions
- Accessing the OFSDF Interface or OFS REG REP USFED Interface
- Organization of the Interface for User Roles

The OFS REG REP US FED Application 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 purposes. 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.

## 3.1 Prerequisites

For prerequisites and detailed instructions on installing this Release, see the <u>Oracle Financial Services</u> Regulatory Reporting for US Federal Reserve – Integration Pack Installation Guide Release 8.1.2.1.0.

## 3.2 Assumptions

OFSDF interface with Vermeg for US FED is a Reporting Application and it does not perform any risk or stress calculations. Following listed are the assumptions for the application:

- Textual and other related portions of reports like personal details, contact details, Yes / No choices must be updated on Report Portal directly and FSDF does not have a placeholder for it.
- Data provided is post reconciliation to ensure that the accuracy of data being reported (non-prescribed by regulators) is performed in OFSAA using various components General Ledger (GL) reconciliation.
- Validity checks such as edit checks, cross-validation checks, and so on prescribed by the regulator are performed within the AgileREPORTER.
- All monetary amounts are expected to be positive in number, except valuation outputs which can
  be positive or negative. There are few exceptions like Excess payments scenarios in Loans/cards
  where Balance loaded can be in Negative Signage. Rules are constructed assuming the negative
  sign of valuation amounts wherever applicable.
- The application populates a 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 an
  impact on overall functioning.

- All percentage data are expected in decimal format meaning 9% must be provided as 9 and not 0.09.
- For data provided as of date, such as the last day of the quarter of the reporting year: Quarterly and Year to Date (YTD) report for the given date display the same value for those measures which are of as of the date in nature. For example, the Annual and Quarterly Balance Sheet and BASEL report generated as of 31-MAR show the same values for all measures such as Account Balance, where the reporting year is from April 01 to March 31.
- In FR-2052A, for PIDs I.O.9 and 0.0.22, there is no OOTB rule provided by OFSAA to identify these PIDs. The accounts which must be reported under PIDs are purely Reporter's Discretion. So, a Custom Rule can be built to report these PIDs.
- Reporting currency identification in FR-2052A must be done by populating setup\_master table, in which V\_COMPONENT\_CODE = 'ENTITY\_REPORTING\_CD' that is defaulted to 'N', must be changed to 'Y' if the Reporting entity has greater than \$700 billion in total consolidated assets and greater than \$10 trillion in assets under custody.
- Data load for FR Y-14M Report must include all the loans closed from the previous month.
- In FR-2052A, few Processing Dimension tables like DIM\_ASSET\_LEVEL, DIM\_RESULT\_BUCKET are
  used. These tables contain values other than the ones required by the Vermeg Field Structures
  template provided by Vermeg as they are consumed by the processing application too. For
  example, the Seeded Script of DIM\_ASSET\_LEVEL has node values not to be considered for FR2052A. Only the following values must be considered for FR-2052A execution from the
  DIM\_ASSET\_LEVEL table.

Table 4: DIM\_ASSET\_LEVEL

V_ASSET_LEVEL_CODE				
A-0	E-4	L-10	S-1-Q	
A-0-Q	G-1	L-11	S-2	
A-1	G-1-Q	L-2	S-2-Q	
A-1-Q	G-2	L-3	S-3	
A-2	G-2-Q	L-4	S-3-Q	
A-2-Q	G-3	L-5	S-4	
A-3	G-3-Q	L-6	S-4-Q	
A-3-Q	G-4	L-7	S-5	
A-4	IG-1	L-8	S-5-Q	
A-4-Q	IG-1-Q	L-9	S-6	
A-5	IG-2	N-1	S-6-Q	
A-5-Q	IG-2-Q	N-2	S-7	
C-1	IG-3	N-3	S-7-Q	
E-1	IG-4	N-4	S-8	
E-1-Q	IG-5	N-5	Y-1	

V_ASSET_LEVEL_CODE				
E-2	IG-6	N-6	Y-2	
E-2-Q	IG-7	N-7	Y-3	
E-3	L-1	S-1	Z-1	

- For FR-2052A for DIM\_RESULT\_BUCKET, values under v\_bucket\_type = 'FRY2052A' should be
  considered, the rest of the values can be ignored as they are consumed by the processing
  application.
- For FR-2900, deposit data is expected to be provided on a net or reciprocal basis in applicable cases as per regulatory instructions.
- For FR-2900, the regulatory template needs to update the CEN Code 1, 2, 3, or Blank for each branch. The definition is as follows:
  - The CEN Code identifies estimated deposit totals, consolidated offices, or locations that do not accept deposits. Complete this item only if applicable by entering 1 for estimated deposits, 2 for deposits consolidated with a different location (applicable for limited-service locations only), or 3 for a non-deposit accepting location. If you are reporting actual deposits for a location, the CEN Code should be left blank.
  - This CEN Code must be populated manually by the client as FSDF provides only accurate deposits. There is no mechanism to identify the use case of estimated deposits and hence CEN Code 1 must be entered manually. FSDF runs consolidation for an Entity and it does not identify a location for consolidation. Hence, consolidation with different locations must be updated manually. If deposits are available in FSDF, the location is expected to be deposit accepting. Hence, the non-deposit accepting location must be populated manually.
  - Adjustment Entries Expectation for FR-2900: FR-2900 Data Expectation for Account / GL granularity is daily. The reporting happens on Monday where the Derived Entity picks one week prior, that is, Tuesday of Last Week to current Monday (Reporting date). But the adjustment Entries for this report are expected to be populated only on Reporting Date (that is, Monday) for all the Cell IDs (MDRM Codes). Each Cell ID represents each Regulator Specific MDRM Code and Weekday (that is, MON, TUE, and so on).
- For FR Y15-B, an effective notional amount in respect of sold credit derivatives is expected to be populated in the FCT\_NET\_EXPOSURES table.
- Payment data is expected to be loaded as per the trade date or as per the settlement date basis if it remains consistent between periods.
- Data in the STG\_CAP\_INSTR\_POSITIONS table is expected as incremental load and not as a complete snapshot at a point in time.
- For FR Y15- schedules about FBO, it is expected that the reporting entity will provide the data for the combined US operations of an FBO excluding section 2 (h) (2) of the Bank Holding Company Act.

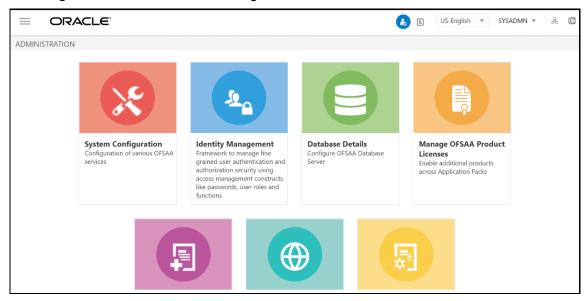
# 3.3 View OFSAA Product Licenses after Installation of Application Pack

In an integrated environment, where you have multiple applications installed on the same domain or infrastructure, OFSAAI allows you to see the other licensed applications through the UI.

To view the OFSAA product license details, follow these steps:

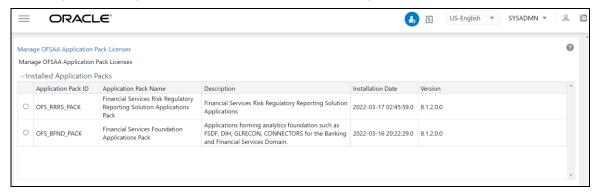
1. Login to the OFSAA Application as a System Administrator.

Figure 2: OFSAA Administration Page



2. Select the **Manage OFSAA Product Licenses** option. The Manage OFSAA Application Pack Licenses page is displayed.

Figure 3: Manage OFSAA Application Pack Licenses Page



3. Under Installed Application Packs section, select the OFS\_RRRS\_PACK option.

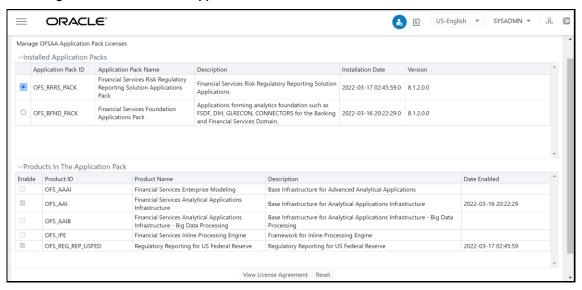


Figure 4: Products in the Application Pack Window

You can now view the list of licensed products associated with RRRS Pack.

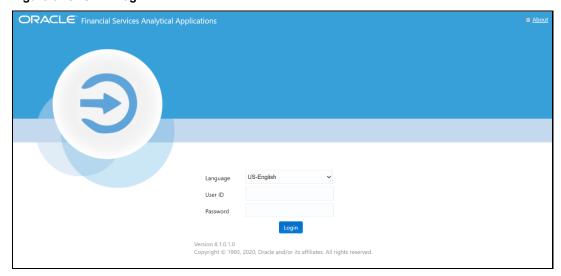
# 3.4 Accessing the OFSDF Interface or OFS REG REP US FED Interface

After the application is installed and configured, to access the OFS REG REP US FED Application you must log in to the OFSAAI Environment using the OFSAAI login page.

To access the application, follow these steps:

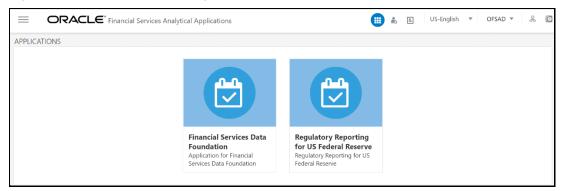
1. Enter the OFSAAI URL in your browser. The OFSAAI login page is displayed.

Figure 5: OFSAAI Log In



- Select the desired language from the Language drop-down list.
- **3.** Enter your User ID and Password. When you log into OFSAAI, the OFSAAI Applications page is displayed.

Figure 6: OFSAAI Applications Page



4. Select the Financial Services Data Foundation option to navigate to the FSDF Application or select the Regulatory Reporting for US Federal Reserve to navigate to the OFS REG REP US FED Application.

## 3.5 Organization of Interface for User Roles

This section explains the various features used by an 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.

To access the Process Execution Summary, the following roles must be assigned to the user:

- **1.** Modify Run Parameters
- 2. Approve Reporting Flag
- 3. Override Reporting Flag
- 4. Request Reporting Flag
- 5. Run Reporting Flag
- 6. View Run Details

Data Analysts are expected to perform the following activities:

- 1. Executing Batch to Refresh Derived Entities
- 2. Drill-down from AgileREPORTER to OFSDF

Regulatory Report Analysts 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

#### **Topics:**

- Process Execution Summary
- Marking Run as Final
- Reporting Flag for Run through Process Execution Summary
- Executing Batch to Resave Derived Entities

- Retrieving the Returns from AgileREPORTER
- Report Verification Drill-down from AgileREPORTER to OFSAA Results Area

#### 3.5.1 Process Execution Summary

This section provides information on the Runs that apply to USFED. The Process Execution Summary is launched after the Runs are executed from the Processing Modelling Framework.

#### 3.5.2 Marking Run as Final

Various applications provide the data for regulatory reporting. You must mark specific executions for Regulatory Reporting as the final Run.

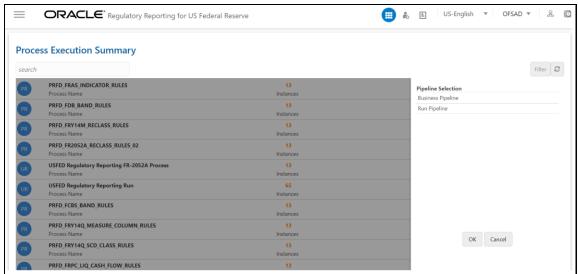
1. After logging into the OFSAAI Applications page, navigate to **Regulatory Reporting for US Federal Reserve**, select **Process Modelling Framework**, and then select **Process Execution Summary**.

Figure 7: Process Execution Summary Screen



2. Scroll towards the right and click **Filter**, select the **Run Pipeline** from the available pipeline selection list. Click **OK**.

Figure 8: Pipeline Selection Screen



- **3.** After the Run execution, the Process Execution Summary is generated in the list format as illustrated in the following steps. The summary page displays the **Process Names** for which the **Run Parameters** are generated.
- **4.** Scroll towards the right and click View in the Process Name row.

Figure 9: Process Execution Summary View Screen



You can view the detailed definition of a Run in a read-only mode. The **Process Execution Details** page displays the execution details for the selected Execution Key with the color band displaying the status of each Execution Key.



Figure 10: Process Execution Details Screen

The execution keys and the corresponding execution details are as follows:

- **Process Description**: The USFED Regulatory Run appears as the process description when the user executes the Regulatory Run.
- MIS Date: The Extraction Date is displayed in this field.
- Start Time: It displays the Execution Date and the Execution Time when the Execution Run starts.
- End Time: It displays the End Execution Date and Execution Time.
- Process Execution Key: Unique identifiers are assigned to each Process Execution.
- Approval Status: It displays the Approval status of the Execution as Completed, Failed, or Ongoing.
- Process Monitor: This helps to show the run definition as defined in the Process Modeling Framework. There are four icons in the Process Monitor as follows:
  - **PMF Launch**: Click **View** to view the Process flow associated with the selected Run.
  - Request Report Flag: To request for a Reporting Run, select an Execution ID in the Process Execution Summary page and click the Request Report Flag. A dialog box appears for you to input your comments. Click Submit and the status of this Run is displayed in the Reporting Flag Section. Only a successful execution can be requested for reporting. For the selected Run and Execution date, there can be only one reporting flag.
  - Approve Report Flag: After submitting the Reporting Run in the earlier section, the Approve Report Flag is enabled. When you click the Approve Report Flag, a dialog box is displayed with User Comments and Approver Comments. The Approver can update the comments in the Approver Comments field and then click Approve or Reject.
  - Override Report Flag: Any reporting execution can be overwritten with another execution. Select a successfully triggered batch on the Process Execution Summary Page. The Override Report Flag is enabled if the execution is already marked as a Reporting Flag. You can override the execution by updating your comments. This must be approved by the approver and the procedure is similar to the procedure detailed in the Approve Report Flag for a Run Section.

### 3.5.3 Reporting Flag for Run through Process Execution Summary

To request, approve, and override a flag for the process execution, perform the following steps:

1. After logging into the OFSAAI Applications Page, navigate to **Regulatory Reporting for US Federal Reserve**, select **Process and Operations**, and then select **Process Execution Summary**.

Figure 11: Process Execution Summary Page



2. Scroll towards the right and click **Filter**, select the **Run Pipeline** from the available pipeline selection list. Click **OK**.

Figure 12: Process Execution Summary Filter Search Result Pane



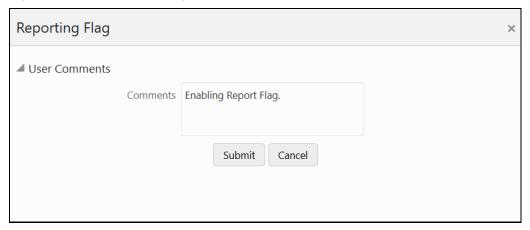
3. Scroll towards the right and click View in the **Process Name** row.

Figure 13: Process Execution Details Page



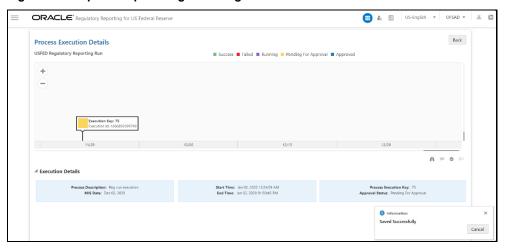
**4.** Select **Request Report Flag** to request a reported flag for the selected run execution.

Figure 14: Request Report Flag Window



**5.** Enter information in the **Comments** field and click **Submit**. The request report flag for a run is saved successfully.

Figure 15: Request Report Flag Save Page



#### **3.5.3.1** Approve Report Flag for a Run

To approve the report flag, perform the following steps:

- **1.** Navigate to the **Process Execution Summary** page and select the process name for which the report flag must be approved.
- 2. Click **Approve** to approve the request.

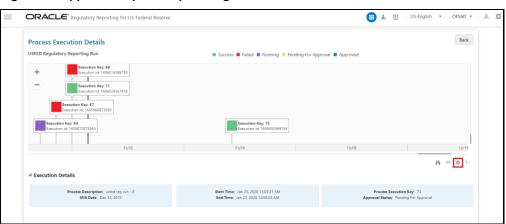
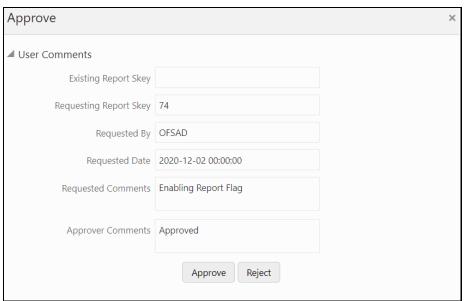


Figure 16: Approve Request Report Flag

3. Enter the information on the Approve Request Flag page.

Figure 17: Approve Request Report Flag Window



**4.** Click **Approve** to approve the requested report flag.

#### **3.5.3.2** Override Report Flag for a Run

To override the report flag for a successful run, perform the following steps:

- **1.** Navigate to the **Process Execution Summary** page and select the process name for which the report flag must be overridden.
- 2. Click **Override Report Flag** to override the Report Flag.

Figure 18: Override Request Report Flag



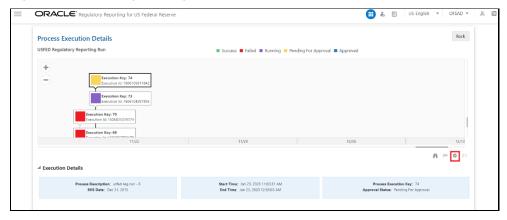
3. Enter the information in the Override Report Flag window.

Figure 19: Override Report Flag Details Window



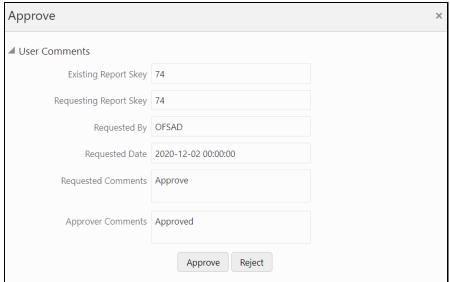
4. Click **Override** to override the requested report flag.

Figure 20: Report Flag Pending for Approval



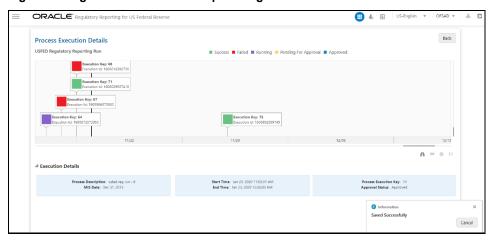
**5.** Click **Approve Report Flag** to approve the override report flag request.

Figure 21: Figure 22: Approve Override Report Flag Window



**6.** Enter the information in the **Approver Comments** field and click **Approve** and the report flag is overridden successfully.

Figure 23: Figure 24: Overridden Report Flag

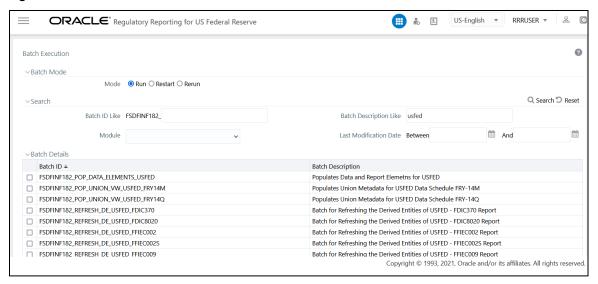


## 3.5.4 Executing Batch to Resave Derived Entities

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

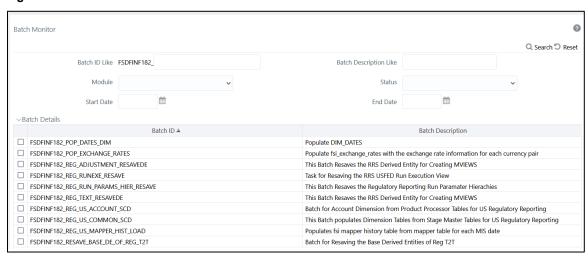
- 1. Navigate to Operations, and then select Batch Execution.
- 2. Select the batch <<INFODOM>>\_RESAVE\_DE\_<<REPORT NAME>> to resave all the reporting DEs used in that <<REPORT NAME>>.

Figure 25: Batch Maintenance Screen



3. Monitor the status of the batch using the **Batch Monitor** link (Navigate to **Regulatory Reporting for US Federal Reserve,** select **Operations,** and then select **Batch Monitor**.)

Figure 26: Batch Monitor Screen

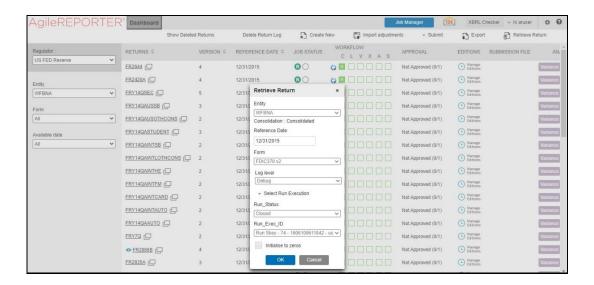


For more information on the list of RESAVE and REFRESH batches, see the MOS

## 3.5.5 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 27: Retrieve Returns Page



# 3.5.6 Report Verification - Drill-down from AgileREPORTER to OFSAA Results Area

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

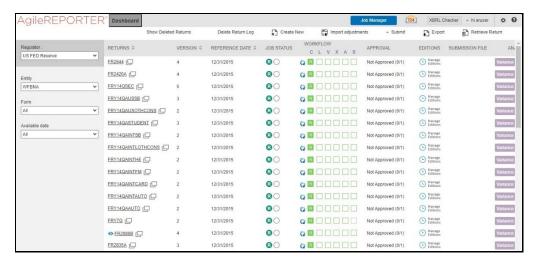
1. Log in to the AgileREPORTER.

Figure 28: AgileREPORTER Login Page



2. You can view the list of reports on the main page. Click any report name in the Returns column, for example, FR Y-9C.

Figure 29: AgileREPORTER Main Page



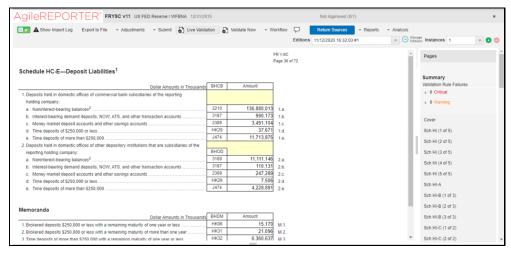
The schedule list is displayed on the left-hand side. Click any schedule name, for example, Schedule HC-E.

Figure 30: AgileREPORTER Page Displaying List of Schedules



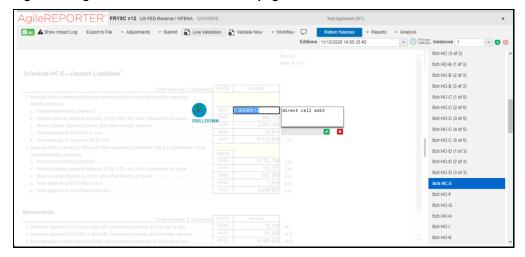
4. Click any cell to drill-down.

Figure 31: AgileREPORTER Schedule Details Page



**5.** Figure 32 displays drill-down for the first cell in Column A. The **OFSAA** icon is displayed. It provides information about the amounts against different MDRM codes here. In the figure, the first MDRM code – BHCB 2210 indicates the amount of deposit held by the bank that is of a non-interest-bearing variant. Click the cell, and the OFSAA icon, to view how this cell was populated from OFSAA results. You are redirected to the OFSAA drill-down page.

Figure 32: AgileREPORTER Drill-Down the page

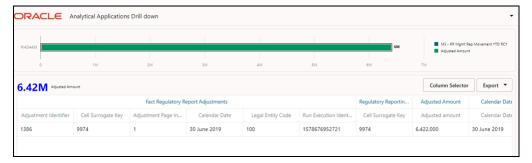


This cell is populated from the derived entity (DE) mentioned in the grid header *DE – Deposit Liabilities – Schedule HC-E*. The value in the derived entity grid 136,880,013 must match that of the cell in the report. The derived entity is an aggregate built on top of the OFSAA Results Model to serve regulatory template requirements.

The DE is built using Dimensions, Measures, and Business Processors. The dimensions that participate in determining the cell value are displayed with data. Click the derived entity link in the grid header.

**6.** Click the **OFSAA** icon, to view how this cell was populated (provides information about the amounts reported in a cell) from OFSAA results. You are redirected to the OFSAA Drill- Down the page.

Figure 33: AgileREPORTER Drill-Down Screen



7. Click the **Column Selector** button on the header of the second table.

DRACLE Analytical **Column Selector** Available Attributes Selected Attributes ▼ 🛅 Dataset Fact Regulatory Report Adjustme Calendar Date ▶ ☐ Regulatory Reporting Cell Dimension 6.42M Adjuste Org Structure Entity Code Adjusted Amount ▼ 🛅 Run Description Calendar Date Run Description ☐ Extraction Date Org Structure Entity Code ☐ Historical Observed Value Indica ▶ ☐ Regulatory Report Code ☐ ☐ Iccap Report Flag ▶ ☐ Regulatory Report Cell Identifier ☐ Jurisdiction Code Page Instance Identifier □ I start Decord India Serach Apply Close

Figure 34: Drill-Down Attribute Selector

NOTE

Select the required nata Source, from the Available Attributes list and click **Move**. You can press the **Ctrl** key and click **Move** for multiple selections to map all the listed Data Sources to the application.

Select the required Data Source, from the Selected Attributes list and click **Remove** to remove the mapped Data Source from the application.

8. Expand **Dataset** and select the **Attribute** to be shown in the Drill-Down. Click **Apply**.

Figure 35: Drill-Down Columns



## 3.5.6.1 Drill-Down Hints

For better drill-down results, read the following hints:

1. Generic SQL Hints for the second drill-down:

The SQL hint configured by you in the table SETUP\_MASTER is applied to the second drill-down query for all cell IDs. This hint must be generic and not specific to any table.

The hint returned from the output of this query is applied to the drill-down query:

```
select v_component_value from setup_master where
v_component_code='DRILLDOWN_GENERIC_HINT'
```

```
For seeding v_component_value as 'DEFAULT', you can modify: v_component_code='DRILLDOWN_GENERIC_HINT'
```

#### For example:

These are some of the sample hints which the user can seed:

```
/*+PARALLEL(4)*/
/*+ALL_ROWS*/
/*+FIRST ROWS(n)*/
```

**2.** Dataset specific SQL Hints for the second drill-down:

Additionally, you can also seed dataset-specific hints for the second drill-down.

v\_component\_code in the SETUP\_MASTER table should be seeded using this naming convention: DRILLDOWN <DATSET CODE> HINT

For example, DRILLDOWN DS1234 HINT

If both <code>DRILLDOWN\_GENERIC\_HINT</code> and <code>DRILLDOWN\_<DATSET\_CODE>\_HINT</code> are seeded by the user, then the <code>DRILLDOWN\_<DATSET\_CODE>\_HINT</code> takes precedence for that cell <code>ID</code> / <code>Dataset</code> combination.

**3.** You cannot drill-down further for non-aggregate Derived Entities. For such DEs, a hyperlink for BP / Measure columns is unavailable in the first drill-down.

It can check if DE is non-aggregate by firing the query below:

```
select v_element_value from metadata_element_master where v_metadata_Code
= '<Derived Entity code>' and n_metadata_version = 0 and v_element_code
='AGGREGATIONREQUIRED'
```

If v element value = 'N', then the DE is non-aggregate.

## 4 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.

#### Topics:

- <u>Data Preparation</u>
- Basel Processing to US FED Results Integration
- LLFP Processing to US FED Results Integration
- LRM Processing to US FED Results Integration
- Overview of OFS REG REP US FED User Interface
- Data Schedule Mapping
- Adjustment Feature for Template-based Reports
- <u>Direct Upload for Data Schedules</u>
- Data Schedule Migration
- Mapping of Results to Line Items in Reporting
- AgileREPORTER: Submission

## 4.1 Data Preparation

This section explains the input data preparation from OFSAA.

#### **Topics**:

- Assumptions for Data Preparation
- Prerequisite Tasks for US FED Run Execution
- US FED Run Chart
- Reclassification of Reporting Dimensions
- Configuring Setup Tables for Standard Set of Values
- Backward Compatibility Support
- Run or 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
- Computation of Offset and Netting Balances for Assets and Liabilities

- <u>Guidelines for Data Loading to Result Area Tables in Data Foundation for Regulatory Reporting</u> Implementations
- FSDF Entity Information
- Fact Tables or Entities
- Inclusion of GL Recon reconciled Accounts in Reporting

## 4.1.1 Assumptions for Data Preparation

The following are the assumptions for data preparation:

- 1. REG REP is a reporting solution, which uses data from underlying fact tables directly for reporting. You are expected to prepare the load for the required data in the reporting area accordingly. Although this has a thin processing layer to reclassify regulatory dimensions and bands, all the processing measures are expected to be from respective applications and provide as required.
- **2.** It is integrated with the 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 lead to inaccurate results. For details please refer to <u>Relationship between Run and Stress</u>.
- **4.** For usage of consolidation dimension (which has values like Actual, Budget, Forecast, and so on), all historical data is expected to be tagged as actual to report 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 cash flows, integration package expects bucketed cash flow as an input (meaning a time bucket for cash flow and cash flow amount is expected as input).
- **6.** FR 2900, FFIEC-031 RC-K, FFIEC-041 RC-K, FR Y-9C HC-K, FFIEC-031 RC-O, and FFIEC-041 RC-O reports require the averaging of the balances as of the close of business for each day for the calendar quarter or an average of the balances as of the close of business on each Wednesday during the calendar quarter. Oracle Financial Services Regulatory Reporting for US Federal Reserve Vermeg Integration supports both the above methods.
- **7.** You must update V\_COMPONENT\_VALUE in SETUP\_MASTER with the method followed at the respective financial institution:
  - **a.** For daily averaging, populate the value 'EVERY-DAY'.
  - **b.** For weekly averaging, populate the value 'EVERY-WEDNESDAY'.

You must update the FSI\_CAL\_MIS\_DATE\_MAP table with dates for which averaging is required.

The table FSI\_CAL\_MIS\_DATE\_MAP (D\_CALENDAR\_DATE DATE, D\_MIS\_DATE DATE) must be populated for Reports – FR 2900, FFIEC-031 RC-K, FFIEC-041 RC-K, FR Y-9C HC-K, FFIEC-031 RC-O, and FFIEC-041 RC-O.

FSI\_CAL\_MIS\_DATE\_MAP is an entity used to generate the quarterly average report with two date columns: D\_CALENDAR\_DATE and D\_MIS\_DATE.

- **a.** D\_CALENDAR\_DATE holds the date details for the calendar year. This includes the holiday date.
- **b.** D\_MIS\_DATE holds the effective date to be considered for quarterly average report generation. This column is excluding the holiday date.

**c.** If the calendar date falls on a holiday, then D\_MIS\_DATE has value (date) for the last working date or any other date value as per the client's requirement.

The above-mentioned reports are generated only if FSI\_CAL\_MIS\_DATE\_MAP is populated.

Example of data in FSI\_CAL\_MIS\_DATE\_MAP:

Table 5: FSI\_CAL\_MIS\_DATE\_MAP

D_CALENDAR_DATE	D_MIS_DATE	Comments
05-Jan-17	05-Jan-17	-
06-Jan-17	06-Jan-17	-
07-Jan-17	06-Jan-17	There is no data loaded from the source. Consider balance from 06-Jan-2017 for 07-Jan-2017.
08-Jan-17	06-Jan-17	There is no data loaded from the source. Consider balance from 06-Jan-2017 for 08-Jan-2017.

When performing averaging:

- **a.** For each date, reporting execution is selected.
- **b.** A business processor holds the average function for the data selected.

Post average calculation averaged data is sent to AgileREPORTER.

**8.** Addition of Setup Master Entries for Branch/FED level reporting:

To ensure retrieval at the Branch/FED level, the RUNEXESUMM view must have the relevant information. This information can be configured by changing the entries for SETUP\_MASTER tables as follows:

**a.** The relevant component code for the configuration in the SETUP\_MASTER table is 'BRANCH\_FED\_DIST\_IDENTIFIER' for the following default configuration.

V_COMPONENT_CODE	V_COMPONENT_DESC	V_COMPONENT_VALUE
BRANCH_FED_DIST_IDENTIFIER	Branch or FED District Identifier	DEFAULT

**b.** To enable RUNEXESUMM entries for Branch/FED District, the V\_COMPONENT\_VALUE must be changed to the V\_ACCT\_BRANCH\_CODE / V\_FED\_RESERVE\_DISTRICT value as per the DIM\_GEOGRAPHY table respectively. This Branch/FED District value must be the one for which retrieval is done.

The RUNEXESUMM view now reflects the entries for the Branch/FED District for retrieval purposes.

9. "FCT\_REG\_ACCOUNT\_SUMMARY.F\_READILY\_DETER\_FAIR\_VALUE must be populated by a Custom Rule by User based on the availability of FCT\_IFRS\_ACCOUNT\_SUMMARY.N\_IFRS\_FAIR\_VALUE\_LEVEL1\_RCY, N\_IFRS\_FAIR\_VALUE\_LEVEL2\_RCY or other logic which you deem as Appropriate."

"The Code 'OTHLIAB' with description 'Other Liabilities' is introduced in Table DIM\_REG\_PRODUCT\_TYPE to facilitate reporting of Other Liabilities in specific line items according

to the User Requirements. There is no OOTB Rule to populate this value as the composition of this value is not mentioned explicitly in the Regulatory instructions and can vary from user to user."

"FSI\_REG\_REPORTING\_PARAM is used in Reporting of certain Line Items which requires specific inputs from the user, notably ASU Adoption Check for which Logic for Reporting varies based on whether ASU Accounting Standard is adopted by the Reporting Institution or not and Sanctioned Limit Threshold in Schedules like FR Y-14Q Schedule K (Supplemental) which can be different from the Regulator prescribed value for few reporters.

#### For example:

```
v_Regulator_code = 'USFED'
v_reg_reporting_param = ASU201601ADOPTION
v reg reporting param val = 'Y'
```

Sample values in this table are provided as part of the configuration as mentioned above and can be updated based on the user requirements."

## 4.1.2 Prerequisite Tasks for US FED Run Execution

US FED Run (RNUS\_REG\_RUN) has tasks that populate data into the Run-enabled tables. Few tasks are prerequisites for US FED Run.

These tasks have data flow for non-Run-enabled tables, and hence these tasks must be executed only once per FIC\_MIS\_DATE irrespective of the number of Apps installed/number of Batches or Run having the same task.

## **4.1.2.1** Recommendations for OFSAA Apps Integration with REG REP US FED

As the prerequisite Batches/Run must be executed only once per FIC\_MIS\_DATE. These are expected to be a non-Run enabled task, hence re-execution causes inconsistency.

If the customer has multiple OFSAA applications that share common metadata like SCD, T2T which are of non-Run enabled in nature, then those tasks must be combined in a single Batch/Run by eliminating all duplicate tasks from all apps.

For example: ##INFODOM##\_REG\_US\_COMMON\_SCD can have overlapping Task with OFS\_CAP\_PACK's ##INFODOM##\_SCD. As both applications use the same SCD metadata, the task re-execution can cause inconsistency in Surrogate Keys. Hence, such tasks must be de-duped before integrating the App Runs.

The main Run can continue to be a separate Run as it has only Run-enabled flows and each Run represents the data required for each Application.

## 4.1.3 US FED RUN CHART

Oracle Financial Services Regulatory Reporting for US Federal Reserve – Lombard Risk Integration Pack provides the US FED RUN Chart listing the tasks required for the population of data for US FED 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
- US FED Specific Data Population and Transformation
- Derived Entity Refresh

Download the US FED 8.1.2.1.0 RUN Chart from the MOS.

## 4.1.4 Reclassification of Reporting Dimensions

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

This section includes the following topics:

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

## 4.1.4.1 Overview of Reclassification of Reporting Dimensions

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

## **4.1.4.1.1** 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 US FED:

**Table 6: Standard Dimension Reclassification** 

User Specific Dimension		Standard Dimension	
DIM_BALANCE_CATEGORY	Balance Category	DIM_STD_BALANCE_CATEGORY	Standard Balance Category
DIM_CREDIT_LINE_PURPOS E	Credit Line Purpose	DIM_STD_CREDIT_LINE_PURPOS E	Standard Credit Line Purpose
DIM_CREDIT_LINE_TYPE	Credit Line Type	DIM_STD_CREDIT_LINE_TYPE	Standard Credit Line Type

User Specific Dimension		Standard Dimension	
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_TYP E	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

## **4.1.4.1.2** Overview of Reclassification of Regulatory Dimensions Population

These are the out of the box User Specific dimensions to Regulatory Dimensions reclassification available in OFS REG REP US FED:

**Table 7: Regulatory Dimension Reclassification** 

User Specific Dimension		Regulatory Dimension	
DIM_ACCOUNT_PURPOSE	Account Purpose Dimension	DIM_REG_ACCOUNT_PURPOSE	Regulatory Account Purposes Dimension
DIM_ACCOUNT_PURPOSE	Account Purpose Dimension	DIM_REG_LOAN_PURPOSE	Regulatory Loan Purpose Dimension
DIM_ACCT_STATUS	Account Status Dimension	DIM_REG_ACCT_STATUS	Regulatory Account Status Dimension
DIM_ACCT_STATUS	Account Status Dimension	DIM_REG_CREDIT_STATUS	Regulatory Credit Status Dimension
DIM_APPLICATION_STATUS	Application Status Dimension	DIM_REG_APPLICATION_STATUS	Regulatory Application Status Dimension
DIM_DOCUMENT_TYPE	Document Type Dimension	DIM_REG_PARTY_DOCUMENT_TYPE	Regulatory Party Document Type Dimension
DIM_INDUSTRY	Industry Dimension	DIM_REG_INDUSTRY	Regulatory Industry Type
DIM_ORG_UNIT	Org Unit Bi Hierarchy	DIM_STD_SECONDARY_LOB	Standard Secondary Line Of Business

User Specific Dimension		Regulatory Dimension	
DIM_LOB	Line Of Business Dimension	DIM_STD_SECONDARY_LOB	Standard Secondary Line Of Business
DIM_PROPERTY_TYPE	Property Type Dimension	DIM_REG_PROPERTY_TYPE	Regulatory Property Type Dimension
DIM_SEC_POOL_TYPE	Securitization Pool Type	DIM_REG_SEC_POOL_TYPE	Regulatory Securitization Pool Type Dimension
DIM_UNDERLYING_TYPE	Underlying Type Master Dimension	DIM_REG_UNDERLYING_TYPE	Regulatory Underlying Type Master Dimension

## 4.1.4.2 Dimension Data Expectations through SCD

By default, all standard dimensions are 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.FCT

## 4.1.4.3 Mappers for Reclassification of Standard Dimensions

These are out of the box mappers that are available in OFS REG REP US FED 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

## 4.1.4.4 Mappers for Reclassification of Regulatory Dimensions

These are out of the box mappers that are available in OFS REG REP US FED for the regulatory dimension reclassifications:

- MPFD\_ACCT\_REG\_ACCT\_PURPOSE: Reg US Mapper for Regulatory Account Purpose
- MPFD\_ACCT\_REG\_ACCT\_STATUS: Reg US Mapper for Regulatory Account Status
- MPFD\_APLCN\_REG\_APLCN\_STATUS: Reg US Mapper for Regulatory Application Status
- MPFD\_ACCT\_REG\_CREDIT\_STATUS: Reg US Mapper for Regulatory Credit Status
- MPFD\_DOC\_TYPE\_REG\_DOC\_TYPE: Reg US Mapper for Regulatory Document Type
- MPFD\_ACC\_INDSTR\_REG\_INDSTRY: Reg US Mapper for Regulatory Industry
- MPFD\_ACCT\_REG\_LOAN\_PURPOSE: Reg US Mapper for Regulatory Loan Purpose
- MPFD\_PROP\_REG\_PROPERTY\_TYPE: Reg US Mapper for Regulatory Property Type
- MPFD\_SEC\_POOL\_REG\_SEC\_POOL: Reg US Mapper for Regulatory Sec Pool Type
- MPFD\_UNDERLYNG\_REG\_UND\_TYPE: Reg US Mapper for Regulatory Underlying Type
- MPFD\_ORGUNT\_LOB\_STD\_SEC\_LOB: Reg US Mapper for Std Secondary Line of Business

## 4.1.4.5 Maintenance of Mappers for Reclassification of Standard Dimensions

The mapper can be maintained under OFSAAI.

1. After logging into the OFSAAI applications page, navigate to **Regulatory Reporting for US Federal Reserve**, select **Administration**, and then select **Map Maintenance**.

Figure 36: Map Maintenance Page



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

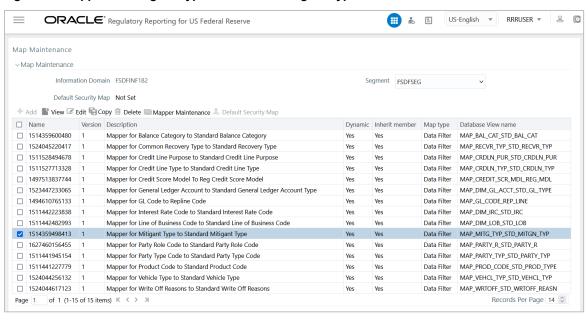
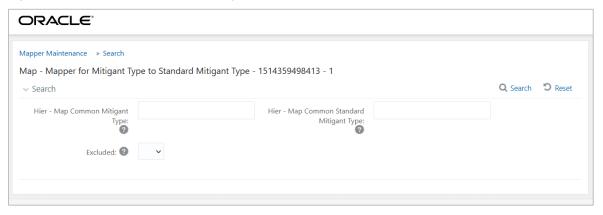


Figure 37: Mapper for Mitigant Type to Standard Mitigant Type

The OFS REG REP US FED 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.

Figure 38: Map Maintenance Search Page



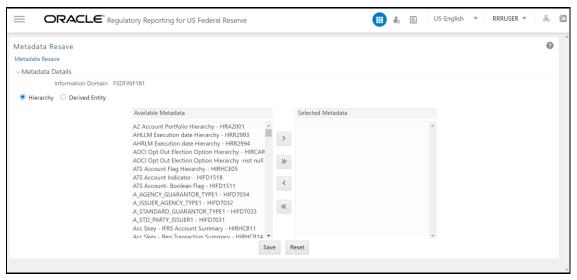
#### **Prerequisites for Mapper Maintenance**

- After logging into the OFSAAI applications page, navigate to Regulatory Reporting for US Federal Reserve, select Administration, and then select 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
- HRLMP001 HIR RLMP Industry Codes
- HRLMP002 HIR RLMP Regulatory Industry Codes
- HRLMP003 HIR RLMP Application Status
- HRLMP004 HIR RLMP Regulatory Application Status
- HRLMP005 HIR RLMP Document Type
- HRLMP006 HIR RLMP Regulatory Document Type
- HRLMP007 HIR RLMP Account Status
- HRLMP008 HIR RLMP Regulatory Account Status
- HRLMP009 HIR RLMP Regulatory Account Purpose
- HRLMP010 HIR RLMP Organization Unit Code
- HRLMP011 HIR RLMP Line of Business Code
- HRLMP012 HIR RLMP Std Secondary Line of Business
- HRLMP013 HIR RLMP Underlying Type
- HRLMP014 HIR RLMP Regulatory Underlying Type

- HRLMP501 HIR RLMP Property Type
- HRLMP502 HIR RLMP Regulatory Property Type
- HRLMP503 HIR RLMP Account Purpose
- HRLMP504 HIR RLMP Regulatory Loan Purpose
- HRLMP505 HIR RLMP Account Status Code
- HRLMP506 HIR RLMP Regulatory Credit Status
- HRLMP507 HIR RLMP Sec Pool Type
- HRLMP508 HIR RLMP Regulatory Sec Pool Type

Figure 39: Metadata Resave Page



#### **Possible Mapping Combinations**

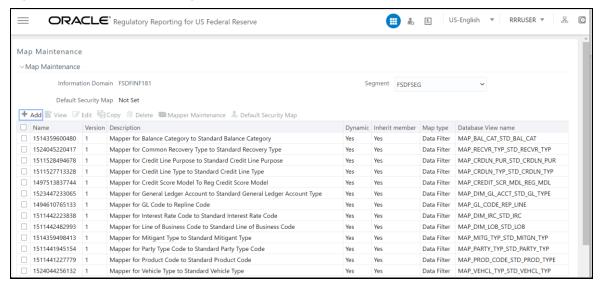
One Standard Dimension table in the source can be mapped only to one Standard Dimension table. One to Many or Many to Many mapping leads to an error in T2T as the records are duplicated. From the illustration, the possible combinations for Mitigant Type to Standard Mitigant Type Mapping are One to One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

- 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 the Mitigant Type Data Model and one value in the Standard Mitigant Type Data Model.
- Many to One Mapping: You can map many values in the Mitigant Type Data Model to one value in the Standard Mitigant Type Data Model using the Mapper Maintenance Screen.

To conduct One to One or Many to One mapping:

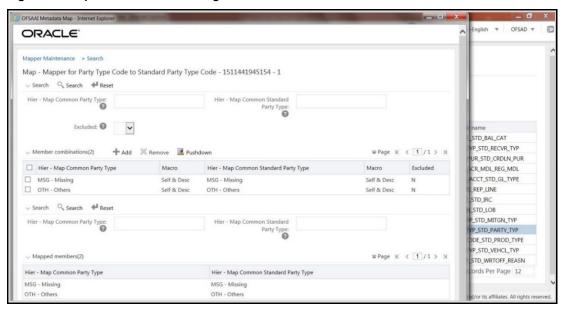
1. After logging into the OFSAAI Applications Page, navigate to **Regulatory Reporting for US Federal Reserve**, select **Administration**, and then select **Map Maintenance**.

Figure 40: Map Maintenance Page



- 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 the 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.

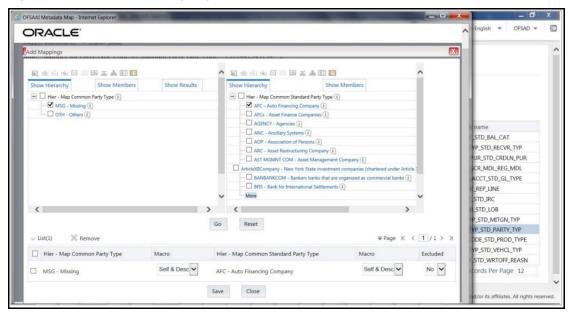
Figure 41: Map Maintenance Add Page



- **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.

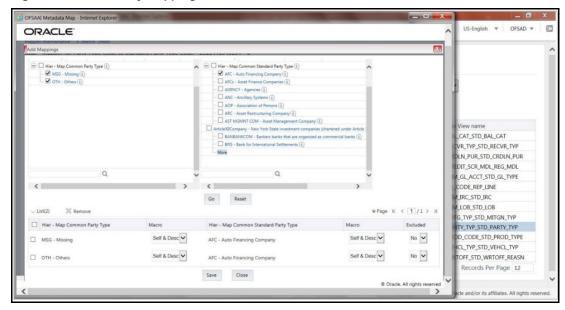
Figure 42: One to One Mapping Page



• 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 the AFC-Auto Financing Company.

Figure 43: One to Many Mapping Windows



**5.** An acknowledgment is displayed: *Confirm Save?* To confirm and save data, click Yes. In the Mapper Maintenance Window, in the Mapped combinations and the Mapped Member's Sections, you can see the newly conducted mapping.

## 4.1.4.6 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:

**Table 8: Mapper Physical Tables** 

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
MPFD_ACC_INDSTR_REG_INDSTRY	1534620323364
MPFD_APLCN_REG_APLCN_STATUS	1534579625179
MPFD_ACCT_REG_ACCT_STATUS	1543562058387
MPFD_DOC_TYPE_REG_DOC_TYPE	1543562182116
MPFD_PROP_REG_PROPERTY_TYPE	1543562526068
MPFD_ACCT_REG_LOAN_PURPOSE	1558941832652
MPFD_ACCT_REG_CREDIT_STATUS	1572098887021
MPFD_SEC_POOL_REG_SEC_POOL	1572203012147
MPFD_ACCT_REG_ACCT_PURPOSE	1577049770867
MPFD_ORGUNT_LOB_STD_SEC_LOB	1577049895116
MPFD_UNDERLYNG_REG_UND_TYPE	1577049533335

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

The mapper maintenance output is always physically stored in the 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 US FED Data Flows (T2Ts and Rules) make use of this information to populate the Standard Dimension Surrogate Keys of Results area tables.

## 4.1.5 Configuring Setup Tables for Standard Set of Values

The following are the setup configurations that are required to be done before executing the US FED Regulatory Reporting Run.

## 4.1.5.1 SETUP\_MASTER Table

The SETUP\_MASTER table in an Atomic Schema must be modified with the required values for US FED.

**Table 9: Setup Master** 

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_E LEMENT_CODE. This is used for Fact Management Reporting T2T.
DEFAULT_FX_RATE_SR C	Default FX Rate Source	DEFAULT	Component Value to be updated according to the values used in STG_EXCHANGE_RATE_HIST.V_RATE_DATA_ORIGIN. This is used for Calculating the Reporting Currency.
DEFAULT_MARKET_CE NTER	Market Center Identifier	DEFAULT	Component Value to be updated according to the values used in STG_INSTRUMENT_MARKET_P RICES.V_MKT_CENTER_ID. This is used for Calculating the Instrument Close Price.
USFED_DEFAULT_PD_ MODEL	PD Model for USFED Regulatory Reporting	DEFAULT	Component Value to be updated according to the values used in STG_PD_MODEL_MASTER.V_P D_MODEL_CODE. This is used for Calculating PD Model Band Skey.

#### 4.1.5.2 FSI REGREPORTING PARAM

The FSI\_REGREPORTING\_PARAM table in an Atomic Schema must be modified with the required values for US FED as a one-time activity.

The V\_REG\_REPORTING\_PARAM\_VAL must be updated to **B** for Branch and **D** for Fed District, based on the report submitted for Branch or Fed District entities.

The default value of this parameter is O.

Table 10: FSI\_REGREPORTING\_PARAM

V_REG_REPORTING_P	V_REG_REPORTING	V_REGULATOR_	Description
ARAM	_PARAM_VAL	CODE	
FFIEC002_AR_TYPE	0	USFED	To retrieve FFIEC-002 and FFIEC-002S, this parameter must be updated with the required values. The list of values supported is <b>B</b> for Branch and <b>D</b> for Fed District, based on the report submitted for Branch or Fed District entities.

### 4.1.5.3 FSI\_PARTY\_STD\_PARTY\_MAP

In the US FED Regulatory Reporting, there is a reporting requirement for certain Party which is a Regulatory Standard. As the Party Dimension is an SCD table and the values of Party Identifier Code (V\_PARTY\_ID) can change from bank to bank, the FSI\_PARTY\_STD\_PARTY\_MAP is used for mapping the bank-specific V\_PARTY\_ID to Regulatory-specific V\_STD\_PARTY\_CODE. Here, you must modify the V\_PARTY\_ID column according to the bank-specific V\_PARTY\_ID of the corresponding Party, which is stored in the Party Dimension (DIM\_PARTY).

The following are the STD Party Codes used in the US FED Regulatory Reporting.

**Table 11: Standard Party Codes** 

V_STD_PARTY_CODE	V_STD_PARTY_NAME	V_PARTY_ID
ADB	Asian Development Bank (ADB)	ADB
ADC	Andean Development Corporation	ADC
AFDB	African Development Bank (AfDB)	AFDB
AFESD	Arab Fund for Economic and Social Development (AFESD)	AFESD
AIC	Arab Investment Company	AIC
AIGC	Inter-Arab Investment Guarantee Corporation	AIGC
AJIC	Arab Joint Investment Company (U.A.E Egypt Investment Company)	AJIC
AMF	Arab Monetary Fund	AMF
ARAAI	Arab Authority for Agricultural Investment and Development	ARAAI
ARACAG	Cooperation Council for the Arab States of the Gulf (also Gulf Cooperation Council (GCC))	ARACAG

V_STD_PARTY_CODE	V_STD_PARTY_NAME	V_PARTY_ID
ARAFTA	Arab Fund for Technical Assistance to Arab and African Countries	ARAFTA
ARAPIC	Arab Petroleum Investment Company	ARAPIC
ASEAN	Association of Southeast Asian Nations (ASEAN)	ASEAN
ASPC	Asia and Pacific Council	ASPC
BADEA	Arab Bank for Economic Development in Africa (BADEA)	BADEA
BCEAO	Central Bank of West African States	BCEAO
BEAC	Bank of Central African States	BEAC
BIS	Bank of International Settlements	BIS
BLADEX	Banco Latino Americano De Exportaciones, SA (BLADEX)	BLADEX
BOC	Bank of Canada	BOC
BOE	Bank of England	BOE
ВОЈ	Bank of Japan	вој
CABEI	Central American Bank of Economic Integration (CABEI) (also: Banco Centralamericano de Integracion Economica (BCIE))	CABEI
CACM	Central American Common Market (CACM)	CACM
CAMDC	Central American Development Corporation	CAMDC
CAMMS	Central American Fund for Monetary Stabilization	CAMMS
CAMRII	Central American Research Institute for Industry	CAMRII
CAN	Andean Community of Nations (CAN) (formerly Andean Group)	CAN
CARDA	Caribbean Regional Development Agency	CARDA
CARICOM	Caribbean Community and Common Market (CARICOM)	CARICOM
CDB	Caribbean Development Bank	CDB
CENTO	Central Treaty Organizations (CENTO)	CENTO
CICO	Caribbean Investment Corporation	CICO
CNDI	Conseil de l'Entente	CNDI
COLPCO	Colombo Plan for Co-Operative Economic and Social Development in Asia and the Pacific	COLPCO
EACSO	East African Common Service Organization	EACSO

V_STD_PARTY_CODE	V_STD_PARTY_NAME	V_PARTY_ID
EAS	East African Community	EAS
EASADB	East African Development Bank	EASADB
EASCDB	East Caribbean Development Bank	EASCDB
EBRD	European Bank for Reconstruction and Development (EBRD)	EBRD
ECB	European Central Bank	ECB
ECCB	Eastern Caribbean Central Bank	ECCB
ECSC	European Coal and Steel Community (ECSC)	ECSC
EDF	European Development Fund (EDF)	EDF
EFTA	European Free Trade Association (EFTA)	EFTA
EIB	European Investment Bank (EIB)	EIB
EU	European Union (EU) (includes the EC)	EU
EUAEC	European Atomic Energy Community (Euratom)	EUAEC
EUC	Council of Europe	EUC
EUCON	Eurocontrol	EUCON
EUF	Eurofima	EUF
EUIF	European Investment Fund	EUIF
FAMC	Federal Agricultural Mortgage Corporation	FAMC
FAO	Food and Agriculture Organization (FAO)	FAO
FAOIC	Fund for Arab Oil Importing Countries	FAOIC
FDIC	Federal Deposit Insurance Corporation	FDIC
FEDFINBNK	Federal Financing Bank	FEDFINBNK
FHA	Federal Housing Administration	FHA
FHLB	Federal Home Loan Banks	FHLB
FHLMC	Federal Home Loan Mortgage Corporation	FHLMC
FICO	Financing Corporation	FICO
FLAR	Latin American Reserve Fund (FLAR) (formerly Andean Reserve Fund)	FLAR
FLB	Federal Land Banks	FLB
FNMA	Federal National Mortgage Association	FNMA
FRB	Federal Reserve Bank	FRB
FZ	Franc Zone	FZ
FmHA	Farmers Home Administration	FmHA
GNMA	Government National Mortgage Association	GNMA

V_STD_PARTY_CODE	V_STD_PARTY_NAME	V_PARTY_ID
GUC	Gulf Investment Corporation	GUC
IAEA	International Atomic Energy Agency	IAEA
IBRD	International Bank for Reconstruction and Development (IBRD) (part of World Bank)	IBRD
ICAO	International Civil Aviation Organization	ICAO
ICC	International Criminal Court	ICC
IDA	International Development Association (IDA) (part of World Bank)	IDA
IDB	Inter-American Development Bank (IDB)	IDB
IFAD	International Fund for Agricultural Development	IFAD
IFC	International Finance Corporation (IFC)	IFC
IIF	Institute of International Finance (Ditchley Institute)	IIF
ILO	International Labor Organization (ILO)	ILO
IMF	International Monetary Fund	IMF
INDB	Inter-American Development Bank	INDB
INTAIC	Inter-American Investment Corporation	INTAIC
INTASL	Inter-American Savings and Loan Bank	INTASL
IOM	Intergovernmental Committee for Migration	IOM
IRC	International Red Cross	IRC
IRO	International Refugee Organization	IRO
ISDB	Islamic Development Bank	ISDB
ISF	Islamic Solidarity Fund ISF	
LATAIA	Latin American Integration Association	LATAIA
MIGA	Multilateral Investment Guaranty Agency (MIGA)	MIGA
MWL	Muslim World League	MWL
NADB	North American Development Bank (NADBank)	NADB
NATO	North Atlantic Treaty Organization (NATO)	NATO
NCUA	National Credit Union Administration NCUA	
NCUSIF	National Credit Union Share Insurance Fund NCUSIF	
NOIB	Nordic Investment Bank	NOIB
OAPEC	Organization of Arab Petroleum ExportingCountries (OAPEC), which includes:	OAPEC

V_STD_PARTY_CODE	V_STD_PARTY_NAME	V_PARTY_ID		
OAPF	OAPEC Oil Facility	OAPF		
OAPS	OAPEC Special Account	OAPS		
OAS	Organization of American States (OAS) (Pan American Union) and affiliated organizations	OAS		
OAU	Organization of African Unity (OAU)	OAU		
OCAM	Organisation Commune Africaine et Mauricienne (OCAM)	OCAM		
OCAS	Organization of Central American States (OCAS)	OCAS		
OECD	Organization for Economic Cooperation and Development (OECD)	OECD		
OECS	Organization of Eastern Caribbean States (OECS)	OECS		
OICN	Organization of the Islamic Conference	OICN		
OPES	OPEC Special Fund	OPES		
РАНО	Pan American Health Organization (Pan American Sanitary Bureau)	РАНО		
PCCN	Preparatory Commission for the Comprehensive Nuclear-Test-Ban Treaty Organization	PCCN		
PERSGT	Permanent Secretariat of the General Treaty on Central American Economic Integration			
POSTMST	Postmaster's Demand Deposit Accounts POSTMST			
RBA	Reserve Bank of Australia RBA			
REFCORP	Resolution Funding Corporation REFCORP			
RIVPBC	River Plate Basin Commission RIVPBC			
SAFA	Special Arab Fund for Africa	SAFA		
SAUERC	Saudi-Egyptian Reconstruction Company SAUERC			
SBA	Small Business Administration	SBA		
SEIC	Saudi-Egyptian Industrial Investment Company	SEIC		
SELA	Sistema Economico Latinamericano (SELA) (Latin American Economic System)			
SNB	Swiss National Bank	SNB		
SOLFES	Solidarity Fund for Economic and Social SOLFES Development in Non-aligned Countries			
SPEFAN	Special Fund for Arab Non-oil Producers	SPEFAN		

V_STD_PARTY_CODE	V_STD_PARTY_NAME	V_PARTY_ID
TCRM	Tripartite Commission for the Restitution of Monetary Gold	TCRM
TENVAL	Tennessee Valley Authority	TENVAL
UDEAC	Union Douaniere et Economique de l'Afrique Centrale (UDEAC) (Customs and Economic Union of Central Africa)	UDEAC
UMOA	Union Monetaire Ouest-Africaine (UMOA) (West African Monetary Union)	UMOA
UN	United Nations	UN
UNIASC	United Arab Shipping Company	UNIASC
UNICEF	International Childrens Emergency Fund	UNICEF
UNIDEA	Union Douaniere des Etats de l'Afrique de l'Ouest	UNIDEA
UNIEAC	Union des Etats de l'Afrique Centrale	UNIEAC
UNSAC	United Nations (UN), and Specialized Agencies and Commissions	UNSAC
UPU	Universal Postal Union UPU	
USDOT	US Department of Treasury USDOT	
VA	Veteran Affairs VA	
VTF	Venezuela Trust Fund	VTF
WB	World Bank WB	
WBG	West Bank and Gaza WBG	
WHO	World Health Organization (WHO) WHO	
WIPO	World Intellectual Property Organization (WIPO)	
WTO	World Trade Organization (WTO)	WTO

#### 4.1.5.4 FSI\_REG\_MORT\_INSURER

In the US FED Regulatory Reporting, there is a reporting requirement for certain Mortgage Issuers which are considered to be Regulatory Standard. As Party Dimension is an SCD table and the values of Party Identifier Code (V\_PARTY\_ID) can change bank to bank, the FSI\_REG\_MORT\_INSURER table is used for mapping the bank-specific V\_PARTY\_ID to Regulatory-specific V\_REG\_MORT\_ISSUER\_CD. Here, you must modify the V\_PARTY\_ID column according to the bank-specific V\_PARTY\_ID of the corresponding Party, which is stored in Party Dimension (DIM\_PARTY).

The following are the Regulatory Specific Issuer Codes that are getting used in US FED Regulatory Reporting.

**Table 12 Issuer Codes** 

V_REG_MORT_ISSUER_CD	V_PARTY_ID		
Arch MI	Arch MI	Arch MI	
CMG	CMG Insurance Company	CMG	
CRA	Community Reinvestment Act Loans	CRA	
ESNT	Essent	ESNT	
FHA	Federal Housing Administration	FHA	
FHAP	FHA Project	FHAP	
FHAR	FHA Residential	FHAR	
GE	Genworth Mortgage Insurance	GE	
HUD	Department of Housing and Urban Development	HUD	
HUDL	HUD 235 Loans	HUDL	
INT	Integon	INT	
MGIC	Mortgage Guarantee Insurance Company	MGIC	
MSG	Missing	MSG	
NMI	National Mortgage Insurance	NMI	
OTH	Others	ОТН	
PMI	Private Mortgage Insurance Company	PMI	
RAD	Radian	RAD	
RMIC	Republic Mortgage Insurance Company	RMIC	
TRD	Triad	TRD	
UGIC	United Guaranty Residential Insurance Company	UGIC	
VA	Department of Veteran Affairs	VA	
VAR	VA Residential VAR		

## 4.1.6 Backward Compatibility Support

The changes in the seeded dimension values can impact the sourcing in the Staging layer as the values expected in the reporting condition can mismatch with the existing source data. To support the old values along with the new configurations, you can use the Backward Compatibility Data Transformation batch for every MIS Date along with the regular Run Chart executions.

The batch which is packaged out-of-the-box is <INFODOM>\_UPDATE\_BACKWARD\_COMP. This must be executed after every Stage data load.

1. Entity Type Changes

During the past releases, there were changes in the Entity Type Dimension values for supporting the changes in reporting conditions. To continue to source old values and use a new configuration, you can use the batch which updates the Stage Org Structure Master Table Entity Type column with the reporting requirement using the old sourcing values.

#### 2. Subordinated Debt

There were changes in the Subordinated Debt sourcing requirement for supporting the changes in reporting conditions. Earlier, the Instrument Type was used to identify the subordinated debt products, whereas now a flag is used in the Stage Borrowings table. The batch can be used to update the flag using the instrument type and continue to source the values in the instrument type.

#### 3. Counter Party CVA Table

There were changes in the reporting conditions for the Counter Party CVA. Earlier, the report was retrieved from the Customer Summary table, which is moved to the Counter Party CVA (Basel Processing Output) table. Now, there is a new T2T (T2T\_FCT\_CP\_CVA\_DETAILS\_MIGRATION) introduced to support the backward compatibility that can be added to the Run after the Task for T2T\_FCT\_REG\_ACCOUNT\_SUMMARY. This T2T is not included in out-of-the-box Run but can be added to the Run at the customer site to load the table.

## 4.1.7 Run or Execution Expectations

Run refers to execution. It is assumed that at different periods, different combinations of parameters, and different data require different executions. From a reporting perspective, as required by regulators, the 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
  - c. Yearly
  - **d.** Quarterly
- 3. Stressed Data

## 4.1.8 Consolidation

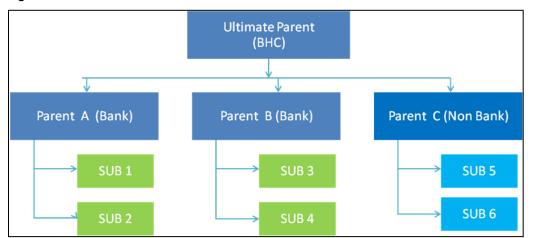
Consolidation is handled as part of the Financial Services Data Foundation (FSDF). Consolidation in FSDF refers to the elimination of intracompany transactions, that is, any kind of transactions between two parties or entities which are part of the reporting organizational hierarchy for a given execution.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

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

- The scope of consolidation is about a list of Entities that participate in consolidation.
- Legal Entity Structure is looked at through ORGANIZATION STRUCTURE DIMENSION. This stores
  a parent-child relationship. This is stored only once.

- While moving the data, Legal Entity can move related entities to the processing/reporting area.
- The legal structure being finalized once, this structure only stores one parent-child relationship.

Figure 44: Consolidation Workflow



- 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 a customer for banking products and issuer for traded securities which are considered for the intracompany elimination.

Consider the following example:

**Table 13: Consolidation** 

FSDF AREA	ENTITY CODE	ACCOUNT NUMBER	CUSTOMER	ISSUER
STAGE LOAN CONTRACTS	SUB1	ACCOUNT 1	SUB 2	
STAGE LOAN CONTRACTS	SUB 1	ACCOUNT 2	PARTY 1	
STAGE INVESTMENT CONTRACTS	SUB 1	ACCOUNT 3	PARTY1	SUB 2
FCT COMMON ACCOUNT SUMMARY	SUB 1	ACCOUNT 2	PARTY1	
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 preceding table, Account 1 is moved to the FSI INTRA COMPANY ACCOUNT and Account Summary tables. Run Enabled tables contain records specific to the 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 parents for the given regulatory requirements.

Refer to the following representation where FR Y-9C and FR-2052A are two regulatory reporting requirements.

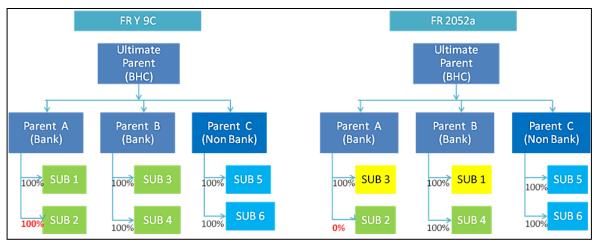


Figure 45: Consolidation with Multiple Hierarchies

Consolidation percentage refers to the percentage of asset or liability of a Child Entity that is brought under the Parent Heading. Except for Joint ventures and similar organization structures, Child Entities are moved under the Parent or they are not. This means the consolidation percentage is either 100% or 0%. For proportionate consolidation (Joint venture is an example for this), a given Child is moved under two Parents with all assets and liabilities divided as per the Joint Venture Agreement. Currently, in FSDF 804, proportionate consolidation is not handled.

The hierarchy structure is thus the 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:

- You load Organization Structure Hierarchy to the STAGE ORG STRUCTURE MASTER table, which
  is moved to the ORG STRUCTURE DIMENSION using the SCD component.
- Execution-specific organization structure hierarchies along with parent and child entity codes are populated in the STAGE LEGAL ENTITY HIERARCHY INTERFACE table, which is moved to the LEGAL ENTITY HIERARCHIES DIMENSION using the SCD component.
- Execution-specific Consolidation percentage is loaded in the STAGE ENTITY CONSOLIDATION
  PERCENTAGE table, where the child entity code, parent entity code, and the consolidation
  percentage are populated. This is moved to the FACT ENTITY CONSOLIDATION PERCENTAGE
  table using Table-to-Table transformation. In FSDF 804 release, this feature is not supported yet.

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

**DATA PREPARATION** 

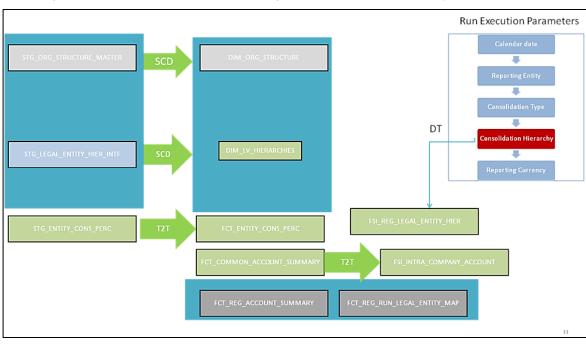


Figure 46: Consolidation with Multiple Organization Structure Hierarchy

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

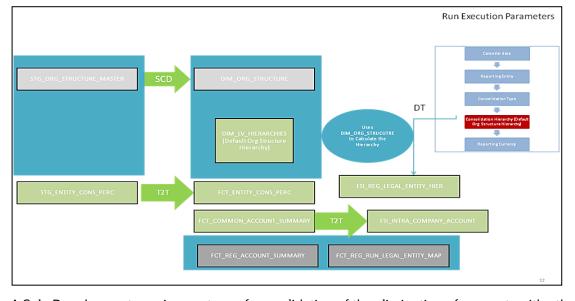


Figure 47: Consolidation without Multiple Organization Structure Hierarchy

A Solo Run does not require any type of consolidation of the 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 the USFED Run Execution.

RUN TYPE	FIC MIS DATE	REPORTING ENTITY	RUN EXECUTION
SOLO	20151231	LE1	12
SOLO	20151231	LE2	14
CONSOLIDATED	20151231	LE1	16
CONSOLIDATED	20151231	LE2	16
CONSOLIDATED	20151231	LE3	16

**Table 14: Reporting Entity in AgileREPORTER** 

For the solo run, only one reporting entity is expected to be included whereas a 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.

## 4.1.8.1 Relationship between Run and Stress

The REG REP application for example in FRY 14 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:

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 a 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 some time provides Historical Runs. For more information on updating the reporting flag, refer to section <a href="Updating Reporting Flag">Updating Reporting Flag</a>.

NOTE

For retrieving multiple Runs in AgileREPORTER for the same date, you must refresh the Derived Entities for each Run separately by enabling and disabling the Reporting Flag in a sequence.

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.

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 some 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 the expected run execution of these runs definitions about 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.

## 4.1.9 Projection Data

The following points provide information on the Projection Data:

- 1. The 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 to with the 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 15: 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 are period specific.

Therefore, unlike the End of Period (EoP) balance, movement values for quarter actuals must be derived for reporting. For historical data, net sales for quarter 3 is the difference between the sales figure as of the end of quarters 2 and 3. You need not provide this difference as a download. Movement data for actual is identified through different runs and respective values are 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 16: 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	
100	Actual	100	BSL	RUNID002	15-Nov-13	100,000	900,000
100	Actual	100	BSL	RUNID003	20-Nov-13	300,000	900,000
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 the projection of net sales for quarter 2 next year is to be performed, no derivation is required. Projections data for the said quarter can be directly downloaded in the respective Fact table(s) for reporting.

## 4.1.10 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. See the <u>Data Integration Hub (DIH) User</u> <u>Guide</u> in OHC Documentation Library for details. DIH enables to load of 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.

## 4.1.11 Data Flow from Staging to Results Area

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

#### **Topics**:

- Pass-Through Data
- Derived or Transformed Data and Reclassifications
- Reclassified to Regulatory Classifications

## 4.1.11.1 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 or 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. A common example of this category includes various monetary amounts, dates, and so on.

#### 4.1.11.2 Derived or Transformed Data and Reclassifications

OFSDF Interface with Lombard Risk for OFS REG REP US FED requires specific hierarchies and data to be transformed and reclassified to regulator-specific values.

**Table 17: Data Transformation Example** 

Source Hierarchy	Target Hierarchy		
ISSUER TYPE = US GOVT / FED	INSTRUMENT RISK FACTOR = INTEREST RATE	INSTRUMENT DERIVATIVE TYPE = SPOT	DIM REG INSTR CLASSIFICATION = US GOVT SECURITIES
PROPERTY TYPE = 1-4Units	LTV Ratio < 2		DIM REG PRODUCT CLASSIFICATION

For example, data from banks has attributes such as issuer type and bank instrument type. However, these values are bank-specific and must be converted or reclassified to a regulatory specific set of values such as DIM REG INSTR CLASSIFICATION as mentioned above.

Reporting derived entities use these reclassified dimensions. Some of the reclassifications are performed in the respective application area.

**DATA PREPARATION** 

For example, DIM BASEL PRODUCT TYPE. This reclassification is performed in Basel application processing and is available for reporting directly.

Other transformations include various bands such as delinquency band, loan purpose, and so on.

#### 4.1.11.3 Reclassified to Regulatory Classifications

After transformation, the regulatory data is reclassified as follows.

Table 18: Data Reclassification Example 1

Source		Target
DIM PROPERTY TYPE	LTV Band Ratio	DIM REG PROD CLASSIFICAITON
1TO4UNITS	>2	1-4FAMCONLOAN

Table 19: Data Reclassification Example 2

FCT REG ACCOUNT SUMMARY					
Account Number	REG PROD Classification	Residual Maturity Band	Delinquency Band		
1	1-4FAMCONLOAN	1	3		

The sample reclassifications performed to transform the existing hierarchies to regulatory specific hierarchies are:

- Regulatory Product Classification
- Regulatory Instrument Classification
- Regulatory Deposit Classification
- Trading Account Book Type Classification
- Claim Amount Population for Country Risk
- Immediate Counterparty Classification for Country Risk
- Claim Sector Reclassification for Country Risk
- Risk Sector Reclassification for Country Risk
- Cross Border Claim Reclassification for Country Risk
- Guarantee Amount Population for Country Risk

The additional transformations that are performed are:

- Remaining Time to Maturity Band
- Next Repricing Date Band
- Regulatory Delinquency Band

See <u>Business Metadata</u> for details of these reclassifications.

#### 4.1.12 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 include 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 have 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 or schemas within the processing area.

The processing area tables or 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.

## 4.1.13 Data Flow from Processing to Results Area

This step is similar to <u>Data Flow from Staging to Results Area</u>. It involves either pass through data from processing to results or loading directly to results. This is mostly due to processing measures such as Fair Value, Risk-Weighted Assets, and Averages as prescribed by the Regulator, and so on.

# 4.1.14 Computation of Offset and Netting Balances for Assets and Liabilities

The computation of Offset and Netting Balances for Assets and Liabilities are as follows:

- Loan and Deposit Offset Computation: For the reporting of balances for Loans and Deposits, the
  offsetting of the Loan and the Hypothecated Deposit Balances are done.
  - If the Loan Balance is greater than the Hypothecated Balance, then the Net Balance is reported as Loan Balance.
  - If the Hypothecated Balance is greater than the Loan Balance, then the net balance is reported as Deposit Balance.

For an Offset Deposit Account associated with Multiple Loan Accounts, the Loan Accounts are ranked based on the balance with the lowest balance specified as the Top rank and which is first netted.

- Asset Liability Netting using Netting Agreement: Asset and Liability Balances with depository
  institutions should be reported after netting the balances of accounts part of a netting agreement.
  Deposit Balances part of a netting agreement is netted, post the offsetting with loan balances if
  applicable.
- Fiduciary Account Netting for Derivatives and Overdrafts: Overdrafts and Derivatives Contracts
  are netted as part of the Reporting of Fiduciary Contracts in the schedule RC-T. Fiduciary balances
  are netting against the Overdraft and Derivative Balances of the Party of the Parent Account of the
  Fiduciary Contracts.

# 4.1.15 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-the-box T2Ts 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 implementations use cases in the regulatory reporting space where the customer cannot have licensed any of the OFSAA applications 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 highlights 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 the 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, the customs data flow design must 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 the 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 key for a given value of the 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 refers 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:

- **a.** Natural asset negative balances from the system of records
- **b.** Adjustment entries or Plug entries.

The 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. USFED uses the General Ledger type from the General Ledger Account dimension. Primarily following two General Ledger Type codes are used for this purpose.

#### a. ASSET

#### b. 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:

#### a. Loans and Cards

- i. Loans are reported under the Assets category in the Balance Sheet. There are cases when a customer makes an excess payment towards the loan account which makes the end of the period account balance becoming credit balance or negative balance.
- **ii.** When excess payment is made, then the account does not fall under the 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.
- iii. To avoid reporting the excess payment as assets, you must assign a General Ledger code to the given account with  $V_GL_TYPE_CODE = 'LIAB'$ .
- iv. 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 is added to Liability in respective line items.
- **v.** 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 the addition or reduction of the overall reporting amount for a given line item based on the sign of the end of the period balance.
- **vi.** 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 the addition or reduction of the overall reporting amount for a given line item based on the sign of the end of the period balance.

Table 20: Data Loading to Result Area Tables

					FR Y-9C		
Use Case	Product	Account	GL TYPE	Balance	HC-C 6. a	HC-E 1. a	HC-H 1
Genuine Debit Balance	Credit Card	AC 001	ASSET	400	400		400
Excess Payments: Genuine Negative Balance	Credit Card	AC 002	Liability	-600		600	
Adjustment Positive Entry	Credit Card	AC 003	ASSET	100	100		100
Adjustment Negative Entry	Credit Card	AC 004	ASSET	-250	-250		-250

					FR Y-9C		
Excess Payments: Adjustment Positive Entry	Credit Card	AC 005	LIABILITY	200		-200	
Excess Payments: Adjustment Negative Entry	Credit Card	AC 006	LIABILITY	-300		+300	
Total	•				250	700	250

HC-C Line Item 6. a: Credit Cards

HC-E Line Item 1. a: Non-Interest-Bearing Balances

HC-H Line Item 1: Earning Assets

#### Impact of Negative Balances on Derivative GL Reconciliation Scenarios

Derivatives (Trading Assets / Trading Liabilities / All Other Assets / All Other Liabilities)

- 1. Derivatives are not expected to have genuine negative notional amounts or end-of-period balances as in the case of loans or cards. The fair value of a derivative can be loaded as a Positive or Negative value as available.
- 2. The application runs a rule called a Trading Account Type dimension which checks for GL code having V\_GL\_TYPE\_CODE. If GL type is ASSET, it is shown under Trading Assets / All Other Assets. If GL type is 'LIAB', it is shown under Trading Liabilities or All Other Liabilities.

Currently, this feature is enabled for FR Y-11 / FR 2314 / FR 2052A Reports only. Other reports to uptake this feature in subsequent releases.

Table 21: Impact of Negative Balances on Derivative GL Reconciliation Scenarios

							FR Y-11 / FR 2314 / FR Y-9C			
Use Case	Natural or Adjustment	ACC	GL Type	GL Bal	SL BAL	Fair Value / Unrealized Gain	Other Assets BS 7 / HC-F 6	Other Liabilities BS 14 / HC-G 3	Revaluation Gains BS M 4.e or 6.e HC-D 11	Revaluation Loss HC-D 14
GL and SL match	Natural	AC 01	Asset	800	800	800	800		800	
GL and SL match	Natural	AC 02	LIAB	-1500	-1500	-1500		1500		1500
GL has Assets higher than SL data	Natural	AC 03	Asset	1100	1000	1000	1000		1000	
GL has Assets higher than SL data	Adjustment	AC 04	Asset		100	100	100		100	
GL has lower assets than the SL data	Natural	AC 05	Asset	1200	1500	1500	1500		1500	
GL has lower assets than the SL data	Adjustment	AC 06	Asset		-300	-300	-300		-300	
GL has higher liabilities than the SL data	Natural	AC 07	LIAB	-2000	-1750	-1750		1750		1750
GL has higher liabilities than the SL data	Adjustment	AC 08	LIAB		-250	-250		250		250
GL has lower liabilities than the SL data	Natural	AC 09	LIAB	-1250	-1750	-1750		1750		1750
GL has lower liabilities than the SL data	Adjustment	AC 10	LIAB		500	500		-500		-500

From the OFSAA technical infrastructure standpoint, the mentioned options are available to the customer to design and implement the custom ETL process explained above. OFSAA strongly recommends the following options to maintain consistency in terms of data lineage in the Metadata browser as the configured metadata can be made available in the meta-model through MDB publish:

- 3. Data Integration Hub (DIH) Connectors
- **4.** Data Mapping (T2T) option in Application Infrastructure
- 5. Data File Mapping (F2T) option in Application Infrastructure

#### Topics:

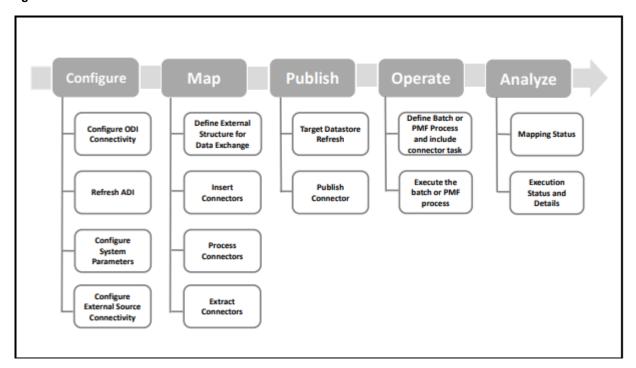
- DIH Connectors
- Data Mapping (T2T)
- Data File Mapping (Flat File to RDBMS Target F2T)

#### 4.1.15.1 DIH Connectors

If you have a licensed DIH to source the data from the external systems into OFSAA, a DIH connector is the recommended approach to load the data into results. The Source data could either reside in a relational structure or a file structure. The mappings maintained in DIH are logical and they abstract the physical references including the Dimensional lookups seamlessly without the need for any additional join or configuration.

See the <u>Data Integration Hub (DIH) User Guide</u>, for more information about loading the data into a result area table.

Figure 48: DIH Connectors



#### 4.1.15.2 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 the RDBMS source to RDBMS target (T2T) framework in the OFSAA world and can be leveraged when source data is available in the Oracle database. Dimensional lookups must be handled via the T2T's join condition and expressions. See the OFSAAI User Guide for more details on configuring a T2T.

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

If the source data is available in file structures, the OFSAA F2T component can be used to bring the data into the OFSAA ecosystem. As lookups cannot be configured in an F2T, this component must be used in conjunction with the 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 the least recommended approach as there is a need for interim table structure in the data model and involves multiple data hops that add to the overhead.

See the OFSAAI User Guide, for more details on configuring an F2T.

## **4.1.16** FSDF Entity Information

The FSDF entity information is given in the Dimension Tables and Data Elements documents available on the MOS page.

OFS Regulatory Reporting for US Federal Reserve - Dimension Tables <release version>

OFS Regulatory Reporting for US Federal Reserve - Data Elements < release version>

### 4.1.17 Fact Tables or Entities

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

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

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

The list of processing output tables is available in the OFS Regulatory Reporting for US Federal Reserve - Data Elements <release version> document on the MOS page.

# 4.1.18 Inclusion of GL Recon Reconciled Accounts in Reporting

By default, the Regulatory Reporting expects reconciliation data in the staging area for all the reports. For OFS Data Management (OFSDM) pack (OFS General Ledger Reconciliation Application (GL Recon)) installed in the same Infodom as Regulatory Reporting is installed, the results area tables will have accounts with account numbers (having prefixes defined in REVELEUS\_PARAMETER\_MASTER.V\_PARAM\_VALUE column for the

REVELEUS\_PARAMETER\_MASTER.V\_PARAM\_CODE = 'ADJUSTMENT\_EXP\_PREFIX' used in GL Recon application).

Report-specific treatment for such accounts is handled in the Regulatory Reporting application for cases like several accounts that must be reported.

For example FR Y-14Q Retail (A1 to A10) and FR Y-14M

# 4.2 Basel Processing to US FED Results Integration

This chapter provides information about Basel Processing to US FED Results Integration in the Oracle Financial Services Data Foundation application and step-by-step instructions to use this section.

This chapter includes the following topics:

- Overview of Basel Processing to US FED Results Integration Tables
- Overview of Basel Processing to US FED Results Integration
- Executing the BASEL Processing to US FED Results Integration T2Ts
- Checking the Execution Status
- BASEL Processing to US FED Results Integration Results T2Ts

# 4.2.1 Overview of Basel Processing to US FED Results Integration Tables

As part of Basel processing to US FED results in integration, US FED tables are loaded from Basel Processing tables using Table to Table (T2T) component of Oracle Financial Services Analytical Applications Infrastructure (OFSAAI) framework. Following are the Results Tables that store integrated results:

- FCT\_FORECAST\_REG\_CAP\_SUMMARY
- FCT\_MITIGANT\_REG\_CAPITAL
- FCT\_MR\_CAPITAL\_SUMMARY
- FCT\_MR\_VAR\_PORTFOLIO\_SUMMARY
- FCT\_MR\_VAR\_SUMMARY
- FCT\_REG\_ACCT\_MITIGANT\_MAPPING
- FCT\_REG\_CAP\_PLCD\_COLL\_SUMMARY
- FCT\_REG\_CAP\_POOL\_SUMMARY
- FCT\_REG\_CP\_CAPITAL\_SUMMARY
- FCT\_REG\_LE\_CAPITAL\_SUMMARY
- FCT\_REG\_OR\_CAPITAL\_SUMMARY
- FCT\_REG\_POOL\_MITIGANT\_MAP
- FCT\_REG\_CAP\_ACCOUNT\_SUMMARY

As part of Basel processing results to US FED integration, US FED is packaging the aforementioned T2Ts. These are optional T2Ts that are deployed only when OFS\_CAP\_ADQ\_PACK is installed.

# 4.2.2 Overview of Basel Processing to US FED Results Integration

Table-to-Table seeded definitions are provided for loading data into the target tables:

**Table 22: Table to Table Seeded Definitions** 

Sl. No.	Source Table Name	Target Table Name	T2T Definition Name
1	FCT_CCP_DETAILS	FCT_REG_CP_CAPITAL_SUMM ARY	T2T_FRCCS_FCT_CCP_DETAIL S
2	FSI_CAP_SFT_EXPOSURES	FCT_REG_CAP_ACCOUNT_SU MMARY	T2T_FRCAS_FSI_CAP_SFT_EXP OSURES
3	FSI_CAP_INVESTMENT_EXPOS URES	FCT_REG_CAP_ACCOUNT_SU MMARY	T2T_FRCAS_FSI_CAP_INVEST MENT_EXPOSURES
4	FSI_CAP_DERIVATIVES	FCT_REG_CAP_ACCOUNT_SU MMARY	T2T_FRCAS_FSI_CAP_DERIVAT IVES
5	FSI_CAP_BANKING_EXPOSURES	FCT_REG_CAP_ACCOUNT_SU MMARY	T2T_FRCAS_FSI_CAP_BANKIN G_EXPOSURES
6	FSI_CAP_EXP_MITIGANT_MAPP ING	FCT_REG_ACCT_MITIGANT_M APPING	T2T_FRAMM_NET_POOL_EXP_ MITIGANT_MAP
7	FSI_CAP_SUB_EXPOSURES	FCT_REG_ACCT_MITIGANT_M APPING	T2T_FRAMM_FSI_CAP_SUB_EX POSURES
8	FSI_CAP_MITIGANTS	FCT_MITIGANT_REG_CAPITAL	T2T_FMRC_FSI_CAP_MITIGAN TS
9	FCT_SECURITIZATION_POOL	FCT_REG_SEC_POOL_SUMMA RY	T2T_FCT_REG_SEC_POOL_SU MMARY
10	FCT_OPS_RISK_DATA	FCT_REG_OR_CAPITAL_SUMM ARY	T2T_FCT_REG_OR_CAPITAL_S UMMARY
11	FCT_MARKET_RISK_EXPOSURE S	FCT_REG_MARKET_RISK_EXP OSURES	T2T_FCT_REG_MARKET_RISK_ EXPOSURES
12	FCT_STANDARD_ACCT_HEAD	FCT_REG_LE_CAPITAL_SUMM ARY	T2T_FCT_REG_LE_CAPITAL_S UMMARY
13	FCT_PARTY_GROUP_LARGE_EX POSURE	FCT_REG_LARGE_EXP_CP_LIM ITS	T2T_FCT_REG_LARGE_EXP_CP _LIMITS
14	FCT_COUNTERPARTY_EXPOSU RE	FCT_REG_CP_CAPITAL_SUMM ARY	T2T_FCT_REG_CP_CAPITAL_S UMMARY
15	FSI_CAP_NETTABLE_POOL	FCT_REG_CAP_POOL_SUMMA RY	T2T_FCT_REG_CAP_POOL_SU MMARY
16	FSI_PLACED_COLLATERAL	FCT_REG_CAP_PLCD_COLL_S UMMARY	T2T_FCT_REG_CAP_PLCD_COL L_SUMMARY
17	FSI_CAP_INVESTMENT_EXPOS URES	FCT_REG_CAP_ACCOUNT_SU MMARY	T2T_FCT_REG_CAP_FIXED_AS ST_SUMMARY

Sl. No.	Source Table Name	Target Table Name	T2T Definition Name
18	FSI_CAP_BANKING_EXPOSURES	FCT_REG_CAP_CREDIT_LINE_S UMMRY	T2T_FCT_REG_CAP_CREDIT_LI NE_SUMMRY
19	FSI_CAP_BANKING_EXPOSURES	FCT_REG_CAP_ASSET_SOLD_S UMMARY	T2T_FCT_REG_CAP_ASSET_SO LD_SUMMARY
20	FCT_MR_VAR_SUMMARY_DAT A	FCT_MR_VAR_SUMMARY	T2T_FCT_MR_VAR_SUMMARY
21	FCT_MR_VAR_SUMMARY_DAT A	FCT_MR_VAR_PORTFOLIO_SU MMARY	T2T_FCT_MR_VAR_PORTFOLI O_SUMMARY
22	FCT_MARKET_RISK_IR_CAPITAL	FCT_MR_CAPITAL_SUMMARY	T2T_FCT_MR_CAPITAL_SUMM ARY_FMRIRC
23	FCT_MARKET_RISK_FOREX_CA PITAL	FCT_MR_CAPITAL_SUMMARY	T2T_FCT_MR_CAPITAL_SUMM ARY_FMRFRXC
24	FCT_MARKET_RISK_EQ_CAPITA L	FCT_MR_CAPITAL_SUMMARY	T2T_FCT_MR_CAPITAL_SUMM ARY_FMREQC
25	FCT_MARKET_RISK_COM_CAPI TAL	FCT_MR_CAPITAL_SUMMARY	T2T_FCT_MR_CAPITAL_SUMM ARY_FMRCC
26	FSI_FORECAST_RWA	FCT_FORECAST_REG_CAP_SU MMARY	T2T_FCT_FORECAST_REG_CA P_SUMMARY
27	FCT_MARKET_RISK_CAPITAL	FCT_MARKET_RISK_REPORTIN G	MKT_RISK_REPORTING_POP_I R
28	FSI_CAP_SUB_EXPOSURES	FCT_REG_POOL_MITIGANT_M AP	T2T_FRPMM_FSI_CAP_SUB_EX POSURES

# 4.2.3 Executing the BASEL Processing to US FED Results Integration T2Ts

For Basel - US FED integration, you must have US FED and Basel installed on the same INFODOM. Also, you must ensure that US FED and Basel are running the same version.

There are two ways to integrate Basel and US FED:

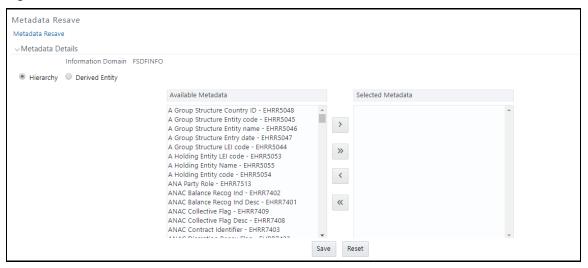
- Creating Integrated Run at Implementation Site: During implementation, you can merge the tasks of both BASEL and US FED and create an integrated Run to execute each time. The processes inside Run should be ordered as Basel first, then US FED, and finally the Basel - US FED Integration process. In this Run, the Basel processing area and the US FED results in area tables must have the same Run SKEY across all tables.
  - For BASEL US FED Integration Run, please use the US FED Run Management screen as the Request Report Flag, Override Report Flag, and Approve Report Flag options are not available in the Basel Run Management Screen to enable the Reporting Flag.
- 2. Using approved Basel Run Execution ID in US FED Run: In this case, you can use the out-of-the-box Basel Run as-is for execution. After the execution, if the values are correct, you can execute the out-of-the-box US FED Run by selecting the required Basel Run SKEY from the Run Management

screen. In this case, the Basel processing area has one RUN SKEY and for the same data, US FED has a different RUN SKEY in US FED results area tables, where the data is getting reported. Sample report generation is as follows:

- **a.** Log in to Oracle Financial Services Analytical Applications interface with your credentials.
- **b.** Navigate to **Regulatory Reporting for US Federal Reserve**, select **Process Modelling Framework**, and then select **Process Modeller**.
- c. Select a Run and click Execute Run.
- d. The Run Details and Run Execution Parameters window is displayed.
- **e.** Enter the Run Name and Run Execution Description. The Basel Run Execution Identifier and FIC MIS Date is auto-populated from the Basel Run report used.
- f. Click OK.

Resave Hierarchy HFSDF004 (US FED - Basel Run Execution Identifier for Run) after Basel execution for getting values in this Basel Run Execution Identifier.

Figure 49: Basel Metadata Resave Screen



**3.** Select only one Basel Run from the Available Hierarchies for the execution and click Save. The **Run Management Summary** window is displayed.

# 4.2.4 Checking the Execution Status

The status of execution can be monitored using the Batch Monitor screen.

For more comprehensive coverage of configuration and execution of a batch, see <a href="OFS Analytical Applications Infrastructure User Guide">OFS Analytical Applications Infrastructure User Guide</a>.

The status messages in Batch Monitor are:

- N Not Started
- 0 On Going
- F Failure
- S Success

The execution log can be accessed on the application server in the following directory ftpshare/logs/<Run\_Date>/FSDFINFO/LOAD DATA. The file name has the Batch Execution ID. Following are the error log tables in the Atomic Schema:

- FCT\_FORECAST\_REG\_CAP\_SUMMARY\$
- FCT\_MITIGANT\_REG\_CAPITAL\$
- FCT\_MR\_CAPITAL\_SUMMARY\$
- FCT\_MR\_VAR\_PORTFOLIO\_SUMMARY\$
- FCT\_MR\_VAR\_SUMMARY\$
- FCT\_REG\_ACCT\_MITIGANT\_MAPPING\$
- FCT\_REG\_CAP\_PLCD\_COLL\_SUMMARY\$
- FCT\_REG\_CAP\_POOL\_SUMMARY\$
- FCT\_REG\_CP\_CAPITAL\_SUMMARY\$
- FCT\_REG\_LE\_CAPITAL\_SUMMARY\$
- FCT\_REG\_OR\_CAPITAL\_SUMMARY\$
- FCT\_REG\_POOL\_MITIGANT\_MAP\$
- FCT\_REG\_CAP\_ACCOUNT\_SUMMARY\$

### **4.2.5** BASEL Processing to US FED Results Integration Results T2Ts

T2T definitions can be retrieved as an excel document for reference from the metadata browser of the Unified Metadata Manager (UMM) component of OFSAAI.

# 4.3 LLFP Processing to US FED Results Integration

This chapter provides information about US FED Processing to US FED Results Integration in the Oracle Financial Services Data Foundation Application and step-by-step instructions to use this section.

This chapter includes the following topics:

- Overview of LLFP Processing to US FED Results Integration Tables
- Overview of LLFP Processing to US FED Results Integration
- Executing the LLFP Processing to US FED Results Integration T2Ts
- Checking the Execution Status
- LLFP Processing to US FED Results Integration Results T2Ts

# 4.3.1 Overview of LLFP Processing to US FED Results Integration Tables

As part of LLFP processing to FSDF results integration, US FED Tables are loaded from LLFP Processing Tables using Table to Table (T2T) component of Oracle Financial Services Analytical Applications Infrastructure (OFSAAI) Framework. Following are the Results Tables that store integrated results:

FCT\_LLFP\_ACCOUNT\_SUMMARY

As part of LLFP processing results to FSDF integration, FSDF is packaging the aforementioned T2Ts. These are optional T2Ts that are deployed only when OFS\_IFRS\_PACK is installed.

## 4.3.2 Overview of LLFP Processing to US FED Results Integration

Table-to-Table seeded definitions are provided for loading data into the Target Tables.

**Table 23: Table to Table Seeded Definitions** 

Sl. No.	Source Table Name	Target Table Name	T2T Definition Name
1	FCT_ACCOUNT_DETAILS	FCT_LLFP_ACCOUNT _SUMMARY	T2T_FCT_LLFP_ACCOUNT _SUMMARY

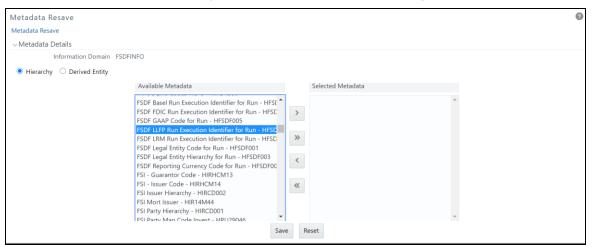
# 4.3.3 Executing the LLFP Processing to US FED Results Integration T2Ts

For LLFP - US FED integration, you must have US FED and LLFP installed on the same INFODOM. There are two ways to integrate LLFP and US FED:

- Creating Integrated Run at Implementation Site: During implementation, you can merge the tasks of both LLFP and US FED and create an integrated Run to execute each time. The processes inside Run should be ordered as LLFP first, then US FED, and finally the LLFP - US FED Integration process. In this Run, the LLFP processing area and the FSDF results area tables must have the same Run SKEY across all tables.
  - For LLFP US FED Integration Run, please use the FSDF Run Management screen as the Request Report Flag, Override Report Flag, and Approve Report Flag options are not available in the LLFP Run Management Screen to enable the Reporting Flag.
- 2. Using approved LLFP Run Execution ID in US FED Run: In this case, you can use the out-of-the-box LLFP Run as-is for execution. After the execution, if the values are correct, you can execute the out-of-the-box US FED Run by selecting the required LLFP Run SKEY from the Run Management screen. In this case, the LLFP processing area has one RUN SKEY and for the same data, US FED has a different RUN SKEY in US FED results area tables, where the data is getting reported. Sample report generation is as follows:
  - a. Log in to Oracle Financial Services Analytical Applications Interface with your credentials.
  - **b.** Navigate to **Regulatory Reporting for US Federal Reserve**, select **Process Modelling Framework**, and then select **Process Modeller**.
  - c. Select a Run and click Execute Run.
  - **d.** The *Run Details* and *Run Execution Parameters* Window is displayed.
  - **e.** Enter the Run Name and Run Execution Description. The LLFP Run Execution Identifier and FIC MIS Date is auto-populated from the LLFP Run Report used.
  - f. Click Ok.

Resave Hierarchy HFSDF007 (US FED - LLFP Run Execution Identifier for Run) after LLFP execution for getting values in this LLFP Run Execution Identifier.

Table 24: Metadata Resave Hierarchy for USFED-LLFP Run Execution Page



**3.** Select only one LLFP Run from the Available Hierarchies for the execution and click Save. The *Run Management Summary* window is displayed.

### 4.3.4 Checking the Execution Status

The status of execution can be monitored using the Batch Monitor screen.

For more comprehensive coverage of configuration and execution of a batch, see <a href="OFS Analytical Applications Infrastructure User Guide">OFS Analytical Applications Infrastructure User Guide</a>.

The status messages in Batch Monitor are:

- N Not Started
- 0 On Going
- F Failure
- S Success

The execution log can be accessed on the Application Server in the following directory ftpshare/logs/<Run\_Date>/FSDFINFO/LOAD DATA. The file name has the Batch Execution ID. Following is the error log table in the Atomic Schema:

FCT\_LLFP\_ACCOUNT\_SUMMARY\$

## 4.3.5 LLFP Processing to US FED Results Integration Results T2Ts

T2T definitions can be retrieved as an Excel document for reference from the Metadata Browser of the Unified Metadata Manager (UMM) component of OFSAAI.

# 4.4 LRM Processing to US FED Results Integration

This section provides information about LRM Processing to US FED Results Integration in the Oracle Financial Services Data Foundation application and step-by-step instructions to use this section.

#### **Topics:**

- Overview of LRM Processing to US FED Results Integration Tables
- Overview of LRM Processing to US FED Results Integration
- Executing the LRM Processing to US FED Results Integration T2Ts
- Checking the Execution Status
- LRM Processing to US FED Results Integration Results T2Ts

## 4.4.1 Overview of LRM Processing to US FED Results Integration Tables

As part of LRM processing to US FED results in integration, US FED tables are loaded from LRM Processing tables using Table to Table (T2T) component of Oracle Financial Services Analytical Applications Infrastructure (OFSAAI) framework. Following are the Results Tables that store integrated results:

FCT\_LRM\_ACCOUNT\_SUMMARY

As part of LRM processing results to US FED integration, US FED is packaging the aforementioned T2Ts. These are optional T2Ts that are deployed only when OFS\_TR\_PACK is installed.

## 4.4.2 Overview of LRM Processing to US FED Results Integration

Table-to-Table seeded definitions are provided for loading data into the target tables.

**Table 25: Table to Table Seeded Definitions** 

Sl. No.	Source Table Name	Target Table Name	T2T Definition Name
1	FSI_LRM_INSTRUMENT	FCT_LRM_ACCOUNT_SUMMARY	T2T_FCT_LRM_ACCOUNT _SUMMARY

## 4.4.3 Executing the LRM Processing to US FED Results Integration T2Ts

For LRM - US FED integration, you must have US FED and LRM installed on the same INFODOM. There are two ways to integrate LRM and US FED:

- Creating Integrated Run at Implementation Site: During implementation, you can merge the tasks of both LRM and US FED and create an integrated Run to execute each time. The processes inside Run should be ordered as LRM first, then US FED, and finally the LRM - US FED Integration process. In this Run, the LRM processing area and the FSDF results in area tables must have the same Run SKEY across all tables.
  - For LRM US FED Integration Run, please use the US FED Run Management screen as the Request Report Flag, Override Report Flag, and Approve Report Flag options are not available in the LRM Run Management Screen to enable the Reporting Flag.
- 2. Using approved LRM Run Execution ID in US FED Run: In this case, you can use the out-of-the-box LRM Run as-is for execution. After the execution, if the values are correct, you can execute the out-of-the-box US FED Run by selecting the required LRM Run SKEY from the Run Management screen.

In this case, the LRM processing area has one RUN SKEY and for the same data, US FED has a different RUN SKEY in FSDF results area tables, where the data is getting reported. Sample report generation is as follows:

- **a.** Log in to Oracle Financial Services Analytical Applications interface with your credentials.
- **b.** Navigate to **Regulatory Reporting for US Federal Reserve**, select **Process Modelling Framework**, and then select **Process Modeller**.
- c. Select a Run and click Execute Run.
- d. The *Run Details* and *Run Execution Parameters* window is displayed.
- **e.** Enter the Run Name and Run Execution Description. The LRM Run Execution Identifier and FIC MIS Date is auto-populated from the LRM Run report used.
- f. Click Ok.

Resave Hierarchy HFSDF006 (US FED - LRM Run Execution Identifier for Run) after LRM execution for getting values in this LRM Run Execution Identifier.



**3.** Select only one LRM Run from the Available Hierarchies for the execution and click Save. The *Run Management Summary* window is displayed.

## 4.4.4 Checking the Execution Status

The status of execution can be monitored using the Batch Monitor screen.

For more comprehensive coverage of configuration and execution of a batch, see <a href="OFS Analytical">OFS Analytical</a> Applications Infrastructure User Guide.

The status messages in Batch Monitor are:

- N Not Started
- 0 On Going
- F Failure
- S Success

The execution log can be accessed on the application server in the following directory ftpshare/logs/<Run\_Date>/FSDFINFO/LOAD DATA. The file name has the Batch Execution ID. Following is the error log table in the Atomic Schema:

FCT\_LRM\_ACCOUNT\_SUMMARY\$

# 4.4.5 LRM Processing to US FED Results Integration Results T2Ts

T2T definitions can be retrieved as an excel document for reference from the Metadata Browser of the Unified Metadata Manager (UMM) component of OFSAAI.

## 4.5 Overview of OFS REG REP User Interface

This section provides details to log in to the OFSAA Application, View Report Summary, View Schedule Summary, View Cells, and Map Data Schedules. It includes:

- Logging in to OFS REG REP UI
- Viewing Report Summary
- Viewing Schedule Summary
- Viewing Data Elements
- Viewing Cell Summary

## 4.5.1 Logging in to OFS REG REP UI

After the applications are installed and configured, to access the OFS REG REP UI you must log in to the OFSAAI Environment using the OFSAAI Login Page.

NOTE

The built-in security system ensures that you are permitted to access the window and actions based on the authorization only.

To access the OFS REG REP UI, follow these steps:

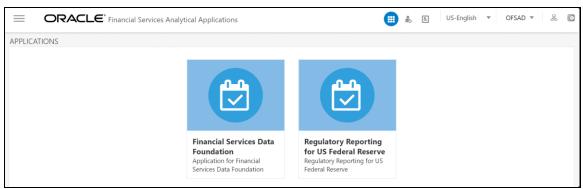
1. Enter the OFSAAI URL in your browser. The OFSAAI Login Page is displayed.

Figure 50: 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 **OFSAA Applications** page is displayed.

Figure 51: OFSAA Applications Screen



4. Select the **Financial Services Data Foundation**. The FSDF landing page is displayed.

Figure 52: Financial Services Data Foundation Landing Page



Or select the **Regulatory Reporting for US Federal Reserve**. The Regulatory Reporting for Reporting for US Federal Reserve landing page is displayed.

Navigation List

Data Elements

Administration

Data Management

Metadata Management

Process Modelling Framework

Process Modelling Framework

Regulatory Data Extract

Metadata Browser

Regulatory Reports

> Regulatory Reports

> Regulatory Reports

> Regulatory Reports

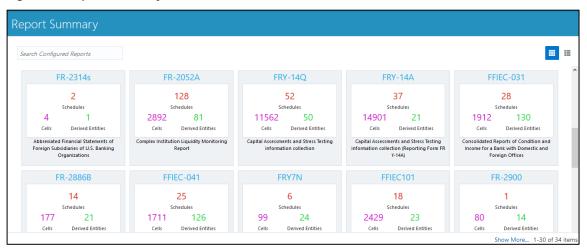
Figure 53: Regulatory Reporting for US Federal Reserve Page

## 4.5.2 Viewing Report Summary

The Report Summary data comes pre-seeded based on the applications that are installed. The Report Summary enables you to view all the configured reports for the jurisdiction.

After logging into the OFS REG REP UI, navigate to **Regulatory Reporting Metadata** and select **Reports** to view **the Reports Summary** window.

Figure 54: Report Summary Screen



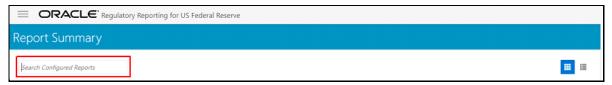
NOTE

You can view the summary of all the configured reports in the

Tile view or List view .

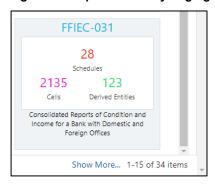
The Search Bar helps you to find the required information from the database. You can enter the nearest matching keywords to search and filter the results by entering information in the search box. You can search for a Report using either the name or description.

Figure 55: Report Summary Search Bar



The Paging option at the bottom right corner allows you to see more reports than the ones currently displayed on the window.

Figure 56: Report Summary Paging Option



#### 4.5.2.1 Report Information

Each tile or list on the Report Summary window corresponds to one report. For each report, you can view the report code, report description, number of schedules within the report, the number of configured non-derived cells, and count of utilized derived entities.

For example, the CRSA report in the tile or list view is displayed as follows:

Figure 57: Report in Tile View

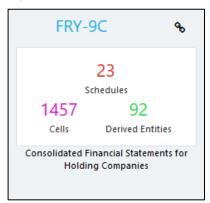
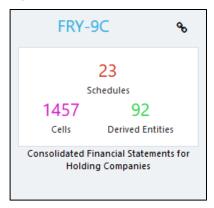


Figure 58: Report in List View



Select the **Report Code** to navigate to the **Schedule Summary** window.

Figure 59: Report Information



## 4.5.3 Viewing Schedule Summary

The Schedule Summary window provides the component schedules for the corresponding report. Select the Report Code in the Report Summary window to navigate to the Schedule Summary window (as shown in Figure 66).

For example, the Schedule Summary window for the FR Y-9C report is displayed as follows.

Figure 60: Schedule Summary Screen



You can view the summary of all the configured reports in the

Tile view or List view .

The Search Bar helps you to find the required information from the database. You can enter the nearest matching keywords to search and filter the results by entering information in the search box. You can search for a Schedule using either the name or description.

The Paging option (Figure 61) at the bottom right corner allows you to see more reports than the ones currently displayed on the window.

NOTE

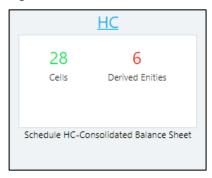
Select the icon on the top right corner to return to the Report Summary window.

#### 4.5.3.1 Schedule Information

Each tile or list on the Schedule Summary window corresponds to one schedule under the report. For each schedule, you can view the schedule code and the description, the number of configured non-derived cells for the schedule, and the count of utilized derived entities.

For example, the Schedule Page3 tile is displayed as follows. Select the Schedule Code to navigate to the Cell Information window.

Figure 61: Schedule Information



## 4.5.4 Viewing Data Elements

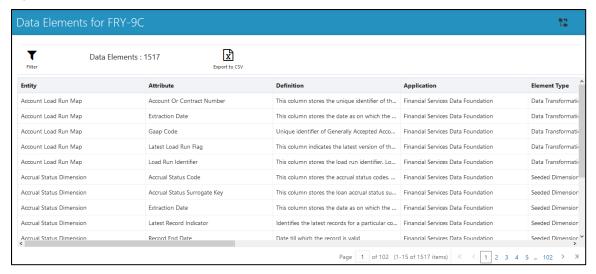
Each tile or list on the Report Summary window corresponds to one report. For each report, you can view the report code, report description, number of schedules within the report, the number of configured non-derived cells, and count of utilized derived entities.

Figure 62: Report Information



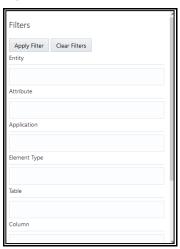
1. Click the chain icon on the right top corner to display the data elements for the respective item. The data elements view option is available at the report schedule and cell level.

Figure 63: Data Elements Screen



**2.** Select **Filter** to apply filters on the selected data. The filter pane allows filtering data on specific columns.

Figure 64: Filters



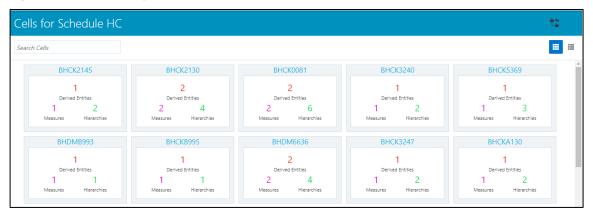
- **3.** Select **Apply Filter** to apply the required filters on the selected data.
- 4. Select **Clear Filter** to clear the applied filters and display all records for the component.
- **5.** Select **Export to CSV** to export the data displayed in the window.

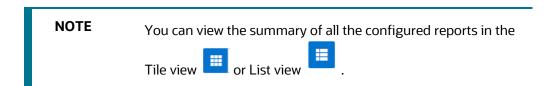
## 4.5.5 Viewing Cell Summary

The Cell Summary window provides the non-derived cells or MDRMs configured as a part of the solution for the corresponding schedule under a report. Select the Schedule Code in the Schedule Summary window to navigate to the Cell Summary window (as shown in Figure 65).

For example, the **Cells for Schedule Page3** summary window under the CRSA report is displayed as follows.

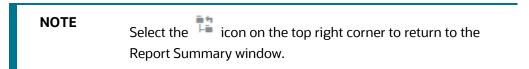
Figure 65: Cell Summary Window





The Search Bar helps you to find the required information from the database. You can enter the nearest matching keywords to search and filter the results by entering information in the search box. You can search for a Cell using either the name or description.

The Paging option (Figure 65) at the bottom right corner allows you to see more reports than the ones currently displayed on the window.



#### **Topics:**

- Cell Information
- Derived Entity
- Measure
- Filters

#### 4.5.5.1 Cell Information

Each tile or list on the Cell Summary window corresponds to one cell or MDRM under the schedule. For each cell, you can view the MDRM name, count of utilized derived entities, count of utilized OFSAA hierarchies, and measures for that cell.

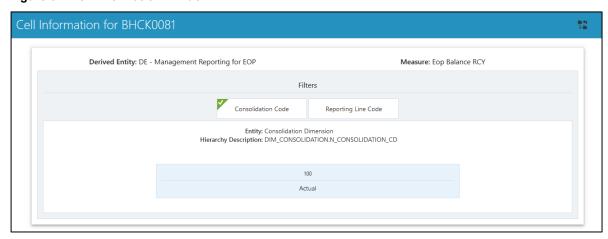
For example, the cell CRSAR040C180 tile is displayed as follows. Select the cell or MDRM Code to navigate to the Cell Information window.

Figure 66: Cell Information



The Cell Information window is displayed as follows.

Figure 67: Cell Information Window



Each section in the Cell Information window displays the relevant OFSAA Metadata and filters used for the cell.

#### 4.5.5.2 Derived Entity

This displays the name of the OFSAA Materialized View or View that contributes to the Cell.

#### 4.5.5.3 Measure

This displays the name of the OFSAA Measure that is reported for the particular Cell.

#### 4.5.5.4 Filters

The Filter conditions are as follows:

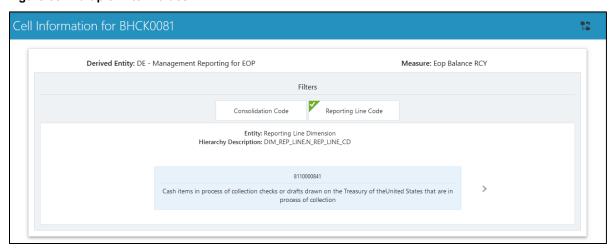
- 1. All filters that are applied to the cell are displayed under the filter section. It displays all the applied filters as their OFSAA description.
- **2.** On selection, the filter is marked by a sign on the top left corner of the selected filter.
- **3.** The section that follows displays the entity or table on top of which the filter is based and the OFSAA Level Description for the selected filter.

**4.** All filter values that apply to the particular MDRM are available as a ribbon. Each filter value is in a separate box.

For example, in the previous case for MDRM CRSAR040C180, the applied filters are Consolidation Code and Reporting Line Code. Currently, the Consolidation Code filter is selected and the required filter values for the same are 100.

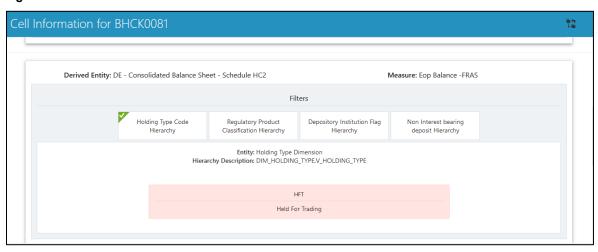
In the case of multiple values, the filters are displayed as follows with an arrow mark.

Figure 68: Multiple Filter Values



The filters in case of not in condition are highlighted in red are displayed as follows.

Figure 69: Not in Condition Filters



# 4.6 Data Schedule Mapping

Data Schedule-based reports utilize wrapper views to report data. For Adjustments & for addition on newer granularity not provided by OFSAA solutions for data schedule-based reports, this feature allows mapping new derived entity columns to the corresponding wrapper view columns. The topics in this section are taken as an example and organized as follows:

Prerequisites

- Navigating to Mapping Window
- Mapping Window
- Adding Derived Entity
- Mapping Procedure
- Saving Mapping Configuration

### 4.6.1 Prerequisites

The prerequisites for Data Schedule Mapping are as follows:

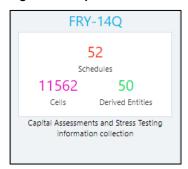
- All Derived Entities and the Wrapper Views should be resaved through resave batch pages and by the execution of scripts packaged as Postscripts with installer respectively.
- Execute the batch **<INFODOM>\_DS\_POP\_UNION\_METADATA\_USFED** available in the batch execution page post the step above.

## 4.6.2 Navigating to Mapping Window

Select the **Navigation Menu** in the Regulatory Reporting for US FED home page to navigate to the **Report Summary** window. Navigate to the data schedule-based report for which mappings are to be done.

For example: to map schedules under the FR Y-14 report, select the FRY-14Q report.

Figure 70: Report Information



Select the report code (Figure 71) to navigate to the schedules. All schedules under the report are available in this window.

Figure 71: Schedules Information



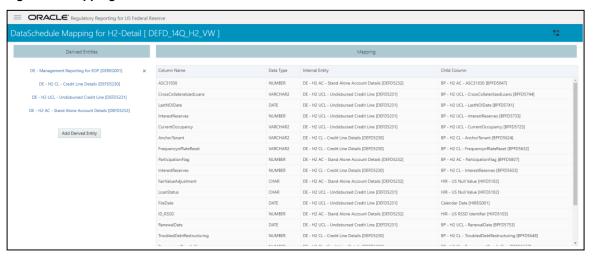
Schedules for which mapping feature is available can be clearly distinguished by the Edit icon available in the schedule tile. Schedules for which the feature is not available do not have the edit icon present in the corresponding tile.

Select Edit to navigate to the mapping window.

## 4.6.3 Mapping Window

The Mapping window displays the wrapper view utilized for the data schedule and the contributing OFSAA derived entities to the wrapper view. The window also displays the line items of the data schedule-based report along with the internal derived entity columns mapped to it.

Figure 72: Mapping Window



## **4.6.3.1** Mapping Window Components

The Mapping window components are as follows.

Schedule Name

The Schedule Name is displayed on the top left corner of the window.

Wrapper View

The Wrapper view utilized for the schedule is mentioned with square brackets in the top pane along with the schedule name.

Contributing Derived Entities

The left section of the report lists down the OFSAA derived Entities that contribute to the Wrapper View. The list contains derived entities that are by default provided by the OFSAA solution and the ones added by the user.

Figure 73: Derived Entities



#### • Mapping Table

The mapping table shows all contributing components to the line item of the data schedule. The columns of the mapping table are in Table 26.

**Table 26: Mapping Table Components** 

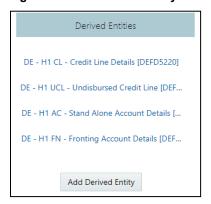
Table Column	Description
Column Name	This defines the line item of the data schedule for which mapping is to be done.
Data Type	This column defines the data type of the line item as per OFS REG REP US FED instructions.
Internal Entity	This column defines the contributing derived entity.
Child Column	This column defines the derived entity metadata which maps to the line item of the data schedule.

# 4.6.4 Adding Derived Entity

To add a new derived entity, follow these steps:

1. Select Add Derived Entity.

Figure 74: Add Derived Entity



**2.** This lists the available Derived Entities that are present in the current Infodom. The Derived Entities can be searched by either code or name in the search box.

Figure 75: Derived Entities List



3. Select the desired Derived Entity that must be added for adjustments and click Add.

Figure 76: Selected Derived Entity

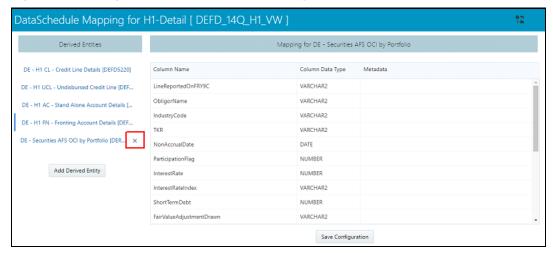


**NOTE** 

The same Derived Entity cannot be added twice for Data Schedule Mapping.

**4.** On adding the new Derived Entity, the Mapping Window is displayed as follows.

Figure 77: Mapping Window with New Derived Entity



**5.** Derived entities added through the above method can be distinguished from OFSAA based derived entities through a **Remove** present at the end of the derived entity tab. This mark enables the removal of the derived entity. Derived Entities that are from the OFSAA provided granularities

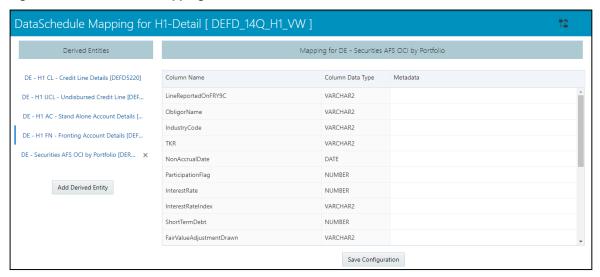
do not have the **Remove** mark and thus mapping for such derived entities cannot be removed or modified from this window.

## 4.6.5 Mapping Procedure

The Mapping Window for any added derived entity allows mapping columns of the derived entity to the line item of the Data Schedule.

For example, the mapping window for Derived Entity DE - Securities AFS OCI by Portfolio [DEREG008] is displayed as follows.

Figure 78: Data Schedule Mapping Window

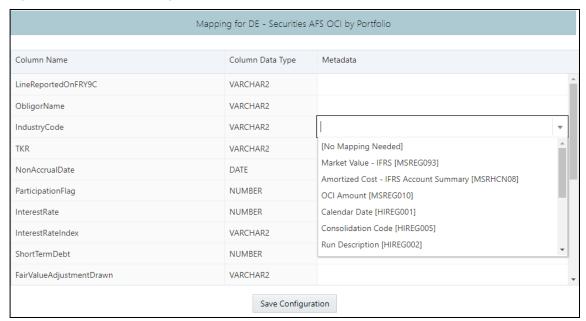


The mapping of the line item to the derived entity column can be modified by double-clicking on the respective row in the **Metadata** column of the Mapping Table.

When the row is clicked, all the columns of the Derived Entity are listed and can be selected to map that to the corresponding line item listed under the **Column Name** Column of the table. If no mapping is required, then select the **No Mapping Needed** option.

Example for Derived Entity DE - Securities AFS OCI by Portfolio [DEREG008] is displayed as follows.

Figure 79: Metadata Mapping Window



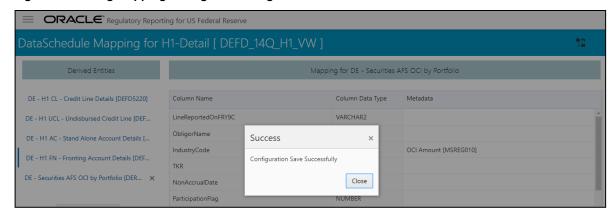
**NOTE** 

Ensure that the data type of the selected metadata matches the Column Data Type.

# 4.6.6 Saving Mapping Configuration

After the mapping is complete as described in earlier sections, select **Save Configuration** at the bottom of the window to save the configuration. The following message is displayed after the configuration is saved.

Figure 80: Saving Mapping Configuration Page



Click Close.

# 4.7 Adjustment Feature for Template-based Reports

The adjustments feature is a new enhancement 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 or MDRM Code and the Report Code to which the MDRM belongs. 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.

#### **Topics:**

• Implementing the Adjustment Feature

## 4.7.1 Implementing the Adjustment Feature

To implement the Adjustment Feature, identify the Cell ID for the report and the line item where adjustment must be implemented.

For example FRY-9C Report

Schedule: HC-C

Line Item: 1.b Loans Secured by Real Estate / Secured by farmland

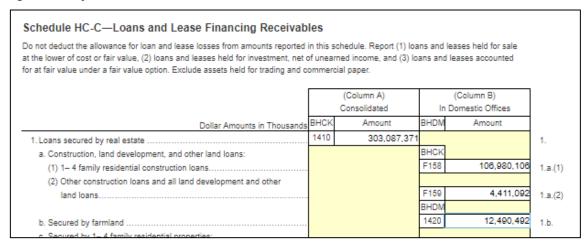
Cell ID: BHDM1420

NOTE

The Adjustment feature works only for fixed table cells (Open Y cells are not supported).

The report currently displays a Total value = 12,490,492 for the identified cell as shown in the following figure.

Figure 81: Adjustment Feature



Now, the requirement is to adjust this amount to 12,500,492,000.00

#### **Topics**:

- Populating Base Tables
- Refreshing Adjustment Derived Entity
- Lombard Verification

#### 4.7.1.1 Populating Base Tables

FCT\_REG\_REPORT\_ADJUSTMENTS: This table must be populated with the requisite *Adjustment Amount* and other related columns.

For example:

#### $N_ADJUSTED_AMT = 10000000$

The corresponding **N\_CELL\_SKEY** value must be picked from DIM\_REG\_REPORT\_CELL for the respective **CELL\_ID**. The DIM\_REG\_REPORT\_CELL table is pre-seeded with cell IDs for reports supported for this feature.

The following columns must also be updated accordingly:

- 1. N\_ENTITY\_SKEY
- 2. N\_RUN\_SKEY
- 3. N\_MIS\_DATE\_SKEY

#### 4.7.1.2 Refreshing Adjustment Derived Entity

Execute the resave batch for Adjustments (<<INFODOM>>\_REG\_ADJUSTMENT\_RESAVE), to save the Adjustment derived entity - DEADJ001.

This ensures that the adjustment amount is reflected in the adjustment-derived entity DEADJ001.

#### 4.7.1.3 Lombard Verification

Post adjustments, the retrieved report should reflect the amount that is coming from the sourced systems and the adjusted amount.

The retrieved report should reflect the amount after adjustments as shown in the following figure.

(12,490,492,000.00 +10000000) = 12,500,492,000.00

Schedule HC-C—Loans and Lease Financing Receivables Do not deduct the allowance for loan and lease losses from amounts reported in this schedule. Report (1) loans and leases held for sale at the lower of cost or fair value, (2) loans and leases held for investment, net of unearned income, and (3) loans and leases accounted for at fair value under a fair value option. Exclude assets held for trading and commercial paper. (Column A) (Column B) Consolidated In Domestic Offices Amount BHDM BHCK Amount Dollar Amounts in Thousands 303.087.371 1. Loans secured by real estate ..... BHCK a. Construction, land development, and other land loans: F158 106,980,106 (1) 1- 4 family residential construction loans....... 1.a.(1) (2) Other construction loans and all land development and other F159 4.411.092 land loans.. 1.a.(2) BHDN 1420 12,500,492 b. Secured by farmland ..... 1.b

Figure 82: Lombard Adjustment Verification

NOTE

The Adjustment amount can be negative to achieve a subtracted amount.

# 4.8 Direct Upload for Data Schedules

This product feature allows line items for data schedule-based reports to be directly mapped to data sourced from various systems that are not captured through OFSAA regular granularities (for example, Portfolio granularity). The Direct Upload option involves using wrapper views and shadow-derived entities for managing data from regular granularities and non-OFSAA granularities to be exposed together to the Lombard Agile Reporter.

Source & Staging Area

FSDF Result Area

Derived Entity(View)

Source Systems

Derived Entity for Detail Data Schedule ((Materialized View)

Lombard Agile Reporter

Detail Data Schedule ((Materialized View)

Customized Columns Usage

Other Regulatory Reporting Applications

DIH/ETL

Customized Table

There can be multiple shadow derived entity them is mutually available and an an appended provided that data amongst them is mutually available.

Figure 83: Data Schedules Direct Upload

#### **Topics:**

- Setting up Shadow Derived Entity
- Defining Shadow Derived Entity
- Mapping Data Schedule
- Executing View Creation Batch

#### 4.8.1 Setting up Shadow Derived Entity

The initial step to enable a data schedule involves setting up a shadow-derived entity that holds data from sources that are not provided by OFSAA regular granularities.

## 4.8.2 Defining Shadow Derived Entity

The shadow-derived entity and all the underlying objects which include the Datasets, Hierarchies, Measures, and Business Processors must be defined from the OFSAA UI page under the **Financial Services Data Foundation**, select **Unified Analytical Metadata**, and then select **Business Metadata**.

See OFS Analytical Applications Infrastructure User Guide for more details.

#### **NOTE**

For populating the shadow derived entity cases where a new table is introduced which are not already a part of the OFSAA data model, ensure that the following conditions are met:

- **1.** The primary key of the shadow table is the same as the granularity of the data required for the data schedule.
- **2.** Data is expected to be mutually exclusive between OFSAA results and the shadow table.
- 3. Customer to load data into shadow tables through ETL or DIH.
- **4.** Run Identifier, MIS Date, and Entity Identifier must be mandatory attributes and part of the primary key.
- 5. This table can be created by extending the OFSAA data model followed by executing the source model generation to enable table visibility in the OFSAA framework.

# 4.8.3 Mapping Data Schedule

Mapping of the shadow-derived entity to the line items can be achieved by using the user interface described in Section 4.6: Data Schedule Mapping.

#### **4.8.4** Executing View Creation Batch

Post mapping columns for direct upload through the steps mentioned in the previous section, the view must be recreated in the database to reflect the shadow-derived entity as a part of its definition.

This can be achieved by executing **<<##INFODOM##\_DS\_RESAVE\_UNION\_VIEW\_USFED>>** batch from the batch execution page to save the view definition.

The resave batch is a sample batch for view resaves which can be utilized for the concerned view by replacing the sample view name with the desired view name under the batch maintenance page. After the changes are saved, the batch can be executed from the batch execution page.

This should modify the view definition to include the new shadow-derived entity given all metadata mapped through the page has the same data type as the parent metadata.

**NOTE** 

If the metadata type required for the line item and as identified by the wrapper view does not match that of the shadowderived entity, the view recreation fails. The errors are logged in the ERR\_LOG\_UNION\_VIEW\_PARSER table in the atomic schema.

#### 4.8.4.1 Verifying the Configuration

After the batch is successfully executed, use any SQL tool to verify that the view is dependent on the derived entity added to the configuration. This can be verified from the USER\_DEPENDENCIES table by using the following query.

Select REFERENCED NAME from User Dependencies Where NAME='<<VIEWNAME>>>'

Here the VIEWNAME specifies the wrapper view for which mapping was done.

# 4.9 Data Schedule Migration

This section details the migration of Data Schedule mapping across environments.

#### Topics:

- Prerequisites
- Assumptions
- Steps for Source Environment
- Steps for Destination Environment

#### 4.9.1 Prerequisites

The following tables must be backed up in the source and target environments before the migration is performed:

- FSI DS CHILD COL MAP
- FSI DS INT CHILD INFO
- FSI DS SEEDED VW INFO
- FSI DS VW CHILD MAP
- FSI DS VW COL INFO
- FSI DS VW COL MAP

User-defined Derived Entity (Entities) created for Data Schedule Mapping must be migrated through the Object Migration feature of OFSAA (OFS Advanced Analytical Applications Infrastructure Application Pack 8.0.8.0.0 User Guide).

#### 4.9.2 Assumptions

The assumptions considered before the migration is performed are as follows:

- OFSAA objects (for example, determine derived entities) required for the Data Schedule Mapping are present in the destination environment.
- Migration overwrites already existing configuration in the Destination Schema with the one from the Source Schema.
- The migration steps stated in the following sections for Data Schedule Mapping are performed for one view at a time.

#### 4.9.3 Steps for Source Environment

Execute the following script files to migrate in the Source Environment:

- 1. VW\_FSI\_DE\_MIGRATION\_UNION\_DE.sql
- 2. FSI DE MIGRATION UNION.sql
- **3.** <u>FSI DE MIGRATION UNION INSERT.sql</u> (bypassing the union view name and jurisdiction code in the same sequence)

NOTE

Information for the parameters to be passed in the step above for a particular schedule and report can be obtained from  ${\tt FSI \ DS \ REPORT \ VIEW \ MAP}.$ 

**4.** Generate insert scripts from the FSI\_DE\_MIGRATION\_UNION table (say FSI\_DE\_MIGRATION\_UNION\_SOURCE\_EXPORT.sql) in the Source Environment, which can be used to populate the same table in the Destination Environment.

#### 4.9.4 Steps for Destination Environment

Execute the following script files to migrate in the Destination Environment:

- 1. VW FSI DE MIGRATION UNION DE.sal
- 2. FSI\_DE\_MIGRATION\_UNION.sql
- **3.** FSI\_DE\_MIGRATION\_UNION\_SOURCE\_EXPORT.sql (the insert script generated from the Source Schema)
- **4.** MIGRATION POPULATION TABLES.sql (by replacing parameters P\_JURISDICTION and P UNION VIEW with the Jurisdiction Code and Union View Name, respectively).

# 4.10 Mapping of Results to Reporting Requirements of Vermeg

Figure 84 explains the flow of data between OFSAA and AgileREPORTER.

Workflow **Validations** Vermeg REPORTER Reporter Portal **Decision Table Decision Table** Form Instance Form Form Instance Adjustments Metadata Data Reporting Entity Adjustment Retrieve Return Trace OFSAA Web-service Results Cons type Dimension Aggregation Fact 1 Factn Org unit Legal Entity **OFSAA Data Lineage** 

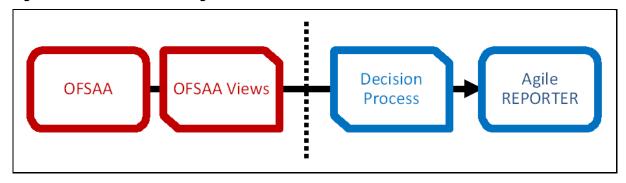
Figure 84: Data Flow between OFSAA and AgileREPORTER

OFSAA provides the data to AgileREPORTER in the form of derived entities. The 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 85: Decision Process in AgileREPORTER



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

**NOTE** 

Metadata for data transformation is available as part of the data warehouse configuration pack provided ready-to-use or preconfigured from OFSAA. You need not perform any mapping for the reports. However, this information can be useful for maintenance or extensions when a ready-to-use pack is not available.

# 4.11 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 forms or returns) for various jurisdictions. AgileREPORTER provides a reliable and efficient infrastructure to compile, generate, and submit Regulatory Reports.

# **5** OFSAA Features

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

#### **Topics:**

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

Regulatory Reporting Solution (RRS) 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 the OFSAA infrastructure. Additionally, the metadata route provides traceability from reporting elements to the data elements used.

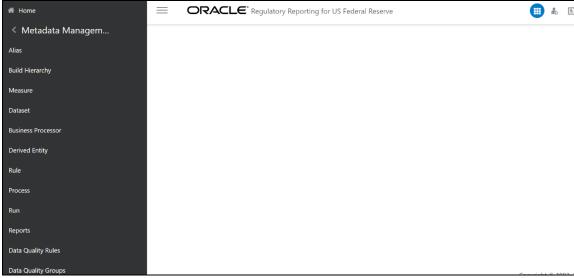
#### **5.1** OFSAA Infrastructure

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:

- Expressions
- Hierarchies
- Filters

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

Figure 86: Regulatory Reporting Metadata Landing Page



#### **5.2** Business Metadata

In addition to Derived Entity, REG REP uses the following OFSAA features to create the business metadata. For details on the features, see the OFS Analytical Applications Infrastructure User Guide.

- 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 versus Liability versus 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 that 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 that 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 a data warehouse for a large number of functions and to generate reports.

#### **5.3** Derived Entity

It is the primary component of OFSAA used for US FED. Regulatory Reporting Solution uses Derived Entity to create a physical materialized view which is then queried by Lombard using preset data handoff templates. An Entity refers to a table in which data is stored. Derived Entity within the infrastructure system facilitates you to define entities that are populated through a series of data transformation

processes resulting from an existing Dataset or a Source Application. An Entity can be used to define other Business Metadata such as Measures, Hierarchies, Dimensions, Datasets, and Cubes.

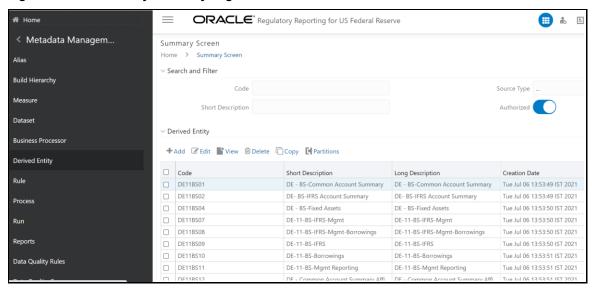
Derived Entities comprise the following:

- 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 **Regulatory reporting for US Federal Reserve**, select **Metadata Management**, and then select **Derived Entity**. The existing derived entities summary screen is displayed. You can Add a new derived entity and Edit, View, Delete, Copy or Partition an existing Derived Entity.

Figure 87: Derived Entity Summary Page



Derived Entities must have AS\_OF\_DATE and LEGAL\_ENTITY as the mandatory dimensions. The 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 to in the 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.

2. Click **Add** to create a new Derived Entity.

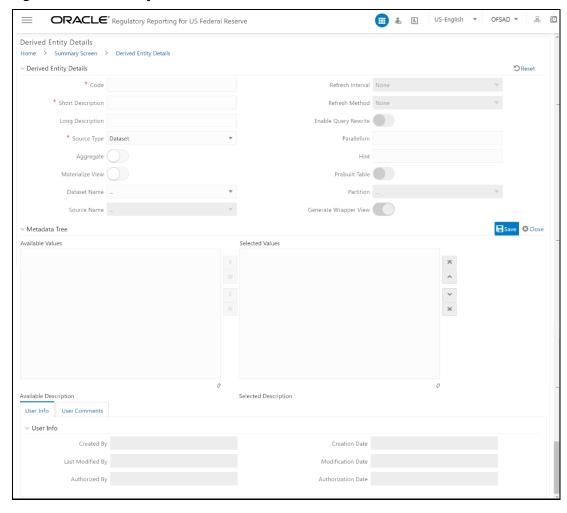


Figure 88: Derived Entity User Interface

## 5.3.1 Creation of Derived Entity

Derived Entities must have **Code**, **Short Description**, and **Source Type** Mandatory Dimensions. The 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 to in the 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.

See the <u>OFS Analytical Applications Infrastructure User Guide</u> for more information on creating a Derived Entity.

#### **5.3.2** 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 (<u>OHC</u>) documentation library for detailed steps to incrementally refresh derived entities.

#### 5.4 Run Rule Framework Features

OFSDF Interface with Lombard Risk for US FED uses the following Rules Framework of OFSAA. For more information about the features, see the OFS Analytical Applications Infrastructure User Guide.

Rules: Financial institutions require constant monitoring and measurement of risk 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 the 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.

# 5.5 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. A decision table is a metadata object within AgileREPORTER that stores the criteria for deriving value for each cell reference. The metadata is packaged for a regulatory report as part of the OFS Risk Regulatory Solution. The 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 measures. 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.

The decision mapping table is processed against the contents of the 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 27: Dimension Mapping Example 1			

Cell References	Is Derived?	Product Type	Customer Type	Branch Country	Measure
BHCK1234	No	Real Estate Loans	Individuals	US	Amortized Cost
BHCK1235	No	Real Estate Loans	Individuals	Non-US	Amortized Cost
BHCK9088	Yes				

BHCK1598	No	Credit Cards	Individuals		Amortized Cost
BHCK7075	No		Foreign Banks	Non-US	Amortized Cost
BHCK7075	No		Sovereign	Non-US	Amortized Cost

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 the template. AgileREPORTER converts the Decision Table Mapping present in excel into configuration entries within their schema.

Table 28: Dimension Mapping Example 2

Cell References	Is Derived?	Product Type	Customer Type	Branch Country	Measure
BHCK1234	No	RELO	IND	US	MREG0001
BHCK1235	No	RELO	IND	Non-US	MREG0001
BHCK9088	Yes				
BHCK1598	No	СС	IND		MREG0001
BHCK7075	No		FB	Non-US	MREG0001
BHCK7075	No		SOV	Non-US	MREG0001

#### NOTE

All the Dimension Member Codes that are used in the decision table are pre-seeded by OFSAA and cannot be modified. Therefore, if you have other member codes in the dimension, then you must reclassify them by using the Reclassification 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 that result in a single unified Reporting Dimension must be performed to address the complexity of the Decision Table. The reclassification rule is defined in OFSAA and packaged as part of the OFSAA Risk Regulatory Reporting (REG REP) Solution.

In some cases, certain sections of the schedule or the entire schedule can be a list of data rows without any mapping to a 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 the *sheet* column or *row*-column of the template.

**NOTE** 

As a part of the solution, metadata exists as ready-to-use or preconfigured with the installer.

# 6 Executing Run through Process Modelling Framework in OFS REG REP US FED

Process Modeling Framework (PMF) is a design and execution framework that enables the Process Pipeline developers to implement various Pipelines modeled by the Business Analysts. The Process Pipeline developers use the framework to orchestrate the Business Pipelines and the Run Pipelines within OFSAA and to design the artifacts that participate in the Pipelines to complete their implementation.

This chapter provides information about the usage of the Process Modeling Framework (PMF) feature in the Oracle Financial Services Regulatory Reporting for Us Federal Reserve (OFS REG REP US FED) application.

**NOTE** 

For more information about the Process Modeling Framework (PMF) feature in OFSAA, see the <u>Process Modelling Framework Orchestration</u> <u>Guide</u>.

This chapter includes the following topics:

- Overview
- Designing a Pipeline in OFS REG REP US FED
- Verifying the Execution Logs

#### 6.1 Overview

In OFS REG REP US FED, Process Modelling Framework (PMF) is used to create a Run definition in a Run process. The visual representation of the Run is enabled through PMF by the construction of a Run Pipeline. PMF is a feature in parallel to the Run Management feature. Through the PMF, you can execute the following two Ready-to-use Runs for data loading:

- Financial Services Regulatory Reporting for US Federal Reserve -Lombard Risk Integration Pack (OFS REG REP US FED) Sourced Run
- Financial Services Regulatory Reporting for US Federal Reserve -Lombard Risk Integration Pack (OFS REG REP US FED) Execution Run

#### 6.2 Designing a Pipeline in OFS REG REP US FED

You can design the process flow diagrams for both the processes (Business Process Pipeline and Run Pipeline). This is an example of a process flow diagram for a Run Pipeline (for OFS REG REP US FED Sourced Run).

After you create, design, and define the process in the process flow diagram, you must assign values to the Run parameters, and execute the Run. You can execute a Run Pipeline from the UI or using a command-line utility called wfExecExternal.sh.

This section includes the following topics that describe the Run Pipeline execution from the UI:

• Selecting the Run Parameters and Executing the Run

- Verifying the Run Execution
- Verifying the Execution Logs

#### **NOTE**

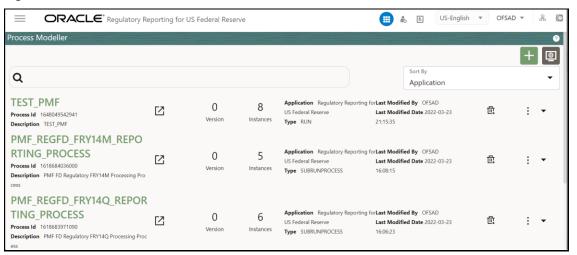
For more information about executing the Run Pipeline using a command-line utility, see the section *Using Command Line Utility* in the <u>Process Modelling Framework Orchestration Guide</u>.

#### 6.2.1 Selecting the Run Parameters and Executing the Run

After designing and saving the process flow diagram, the Process is listed on the *Process Modeler* page. To select the Run parameters and execute the Run, follow this procedure:

1. On the **Process Modeler** page, click the **More** icon corresponding to the Run Pipeline that must be executed.

Figure 89: Process Modeler Screen



2. When you click **Execute Run**, the **Select Run Params** Window is displayed.

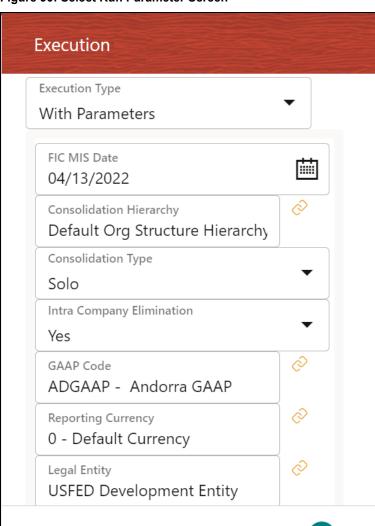


Figure 90: Select Run Parameter Screen

- 3. Select the **Execution Type** as **With Parameters** from the drop-down list.
- **4.** Select or enter the required values for each field as follows.

**Table 29: Run Parameter Fields and Descriptions** 

Field Name	Description or Instruction
Reporting Currency	Enter the Reporting Currency Code used to calculate the amount during the data population in the target table.
Legal Entity	Select the Legal Entity Code to identify the legal entity used for the Run.
Consolidation Type	Select the Consolidation Type of legal entities on a solo or consolidation basis. In a Solo Run, only the selected legal entity is used. In a Consolidated Run, along with the selected legal entity, all its child legal entities are also used.

Field Name	Description or Instruction
Intra Company Elimination	Select the Intra Company Elimination type to eliminate (YES) or skip the elimination (NO) of Intra Company Accounts during a Consolidated Run.
Consolidation Hierarchy	Enter the Legal Entity Hierarchy used for the consolidated run. This parameter is not required for the Solo Run.
GAAP Code	Enter the required accounting standard.
FIC MIS Date	Select the extraction date.
Run Execution Description	Enter a longer description of the Run.

When you click OK, the Run execution begins. The Select Run Params Window closes.

**NOTE** 

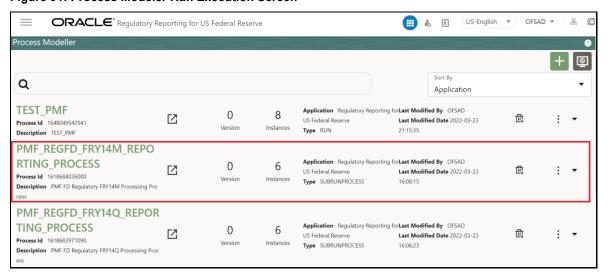
The execution of the Run Pipeline is triggered using the selected FIC MIS DATE. The Run SKey is generated and inserted into the DIM\_RUN table. For the Run SKey generated, the corresponding user-selected Run parameters are inserted into the RUN\_EXE\_PARAMETERS table.

#### **6.2.2** Verifying the Run Execution

After selecting the Run Parameters and beginning the Run execution, verify the progress of the Run. To verify the Run Execution Progress, follow this procedure:

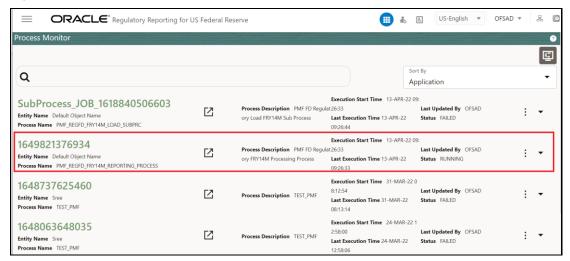
1. On the **Process Modeler** Page, click the **More** icon corresponding to the Run Pipeline that must be verified. Click **Process Flow Monitor**.

Figure 91: Process Modeler Run Execution Screen



2. The *Process Monitor* Window is displayed. You can see the generated Process Flow ID, the Run Execution timestamp, and the status of the Run Execution. To verify the Run Execution Status at the Pipeline level, click the corresponding Process Flow ID.

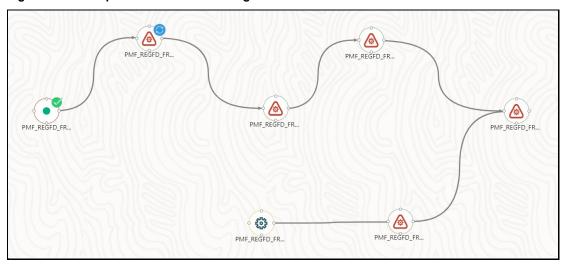
Figure 92: Process Monitor Screen



**3.** The Process Flow Diagram Window is displayed. The **②** icon at each Sub Pipeline indicates that the Run execution is successful.

NOTE The icon at each Sub Pipeline indicates that the Run execution is unsuccessful.

Figure 93: Run Pipeline Process Flow Diagram



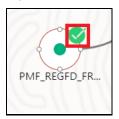
#### **6.2.3** Verifying the Execution Logs

You can access the execution logs to verify the details of the Run.

To verify the execution log, follow these steps:

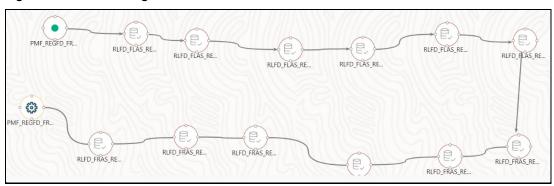
1. In the **Process Monitor** Window, click the required Process Flow ID. The Process Flow Diagram is displayed in a new window. Hover on the required Sub Pipeline. Four icons appear. Click the log lcon.

Figure 94: Sub Pipeline



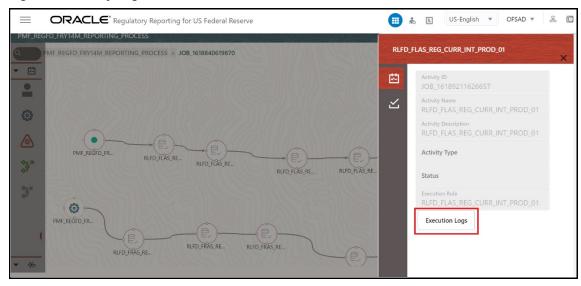
2. The *Execution Logs* window is displayed. Click the required metadata to verify the execution log.

Figure 95: Execution Logs



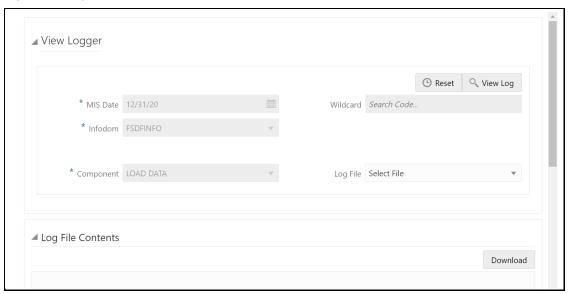
3. The Activity window is displayed. Click **Execution Log**.

Figure 96: Activity Logs



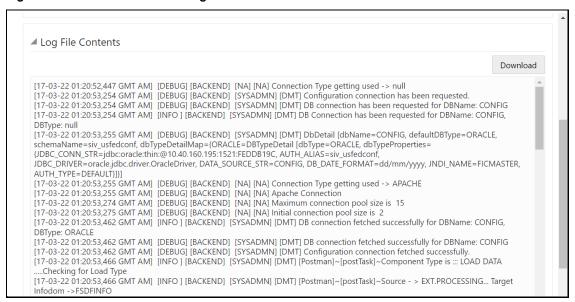
**4.** Click **Execution Logs**. The Log File details page is displayed.

Figure 97: Log File



5. Select the **Log File** that you wish to view from the drop-down list and click **View Log**. The Run execution log details are displayed.

Figure 98: View Run Execution Log Window



**6.** The Run execution log details are listed in a separate window.

Alternatively, to verify the execution logs, click the icon in the Process flow diagram window. The log details of the Run execution are displayed in a new window.

Figure 99: Run Execution Logs



For detailed information about the complete functioning of the PMF, see the <u>Process Modelling</u> <u>Framework Orchestration Guide</u>.

# 6.3 Recommendations to Execute 8.0.x Regulatory Reporting Run (RRF) in 8.1.x without Run Management User Interface

The Run Management functionality is no longer available from 8.1.0.0.0 releases of all OFSAA applications since the ready-to-use Reporting Run is now using Run Pipeline in the Process Modelling Framework. If you still wish to use the Rule Run Framework (RRF), you can consider the following additional configuration steps to achieve the Run Management features.

**NOTE** 

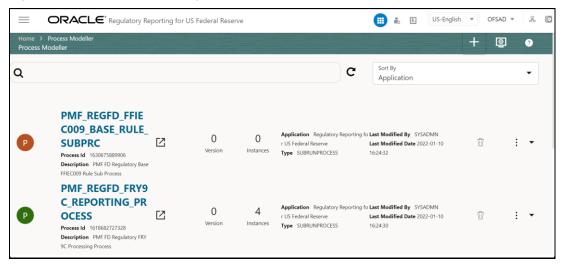
The product direction is to start using the Process Modelling Framework Run pipelines for Regulatory Reporting Run executions instead of obsolete Reporting Run (RRF). The ready-to-use version of the Reporting Run (RRF) will no longer be updated in the Regulatory Reporting Installer. All the new tasks added for the reporting will only be a part of the PMF Run Pipeline.

The Run Management User Interface was used to capture and store the run parameters for downstream usage.

To execute the RRF Run with the parameter support, follow this procedure:

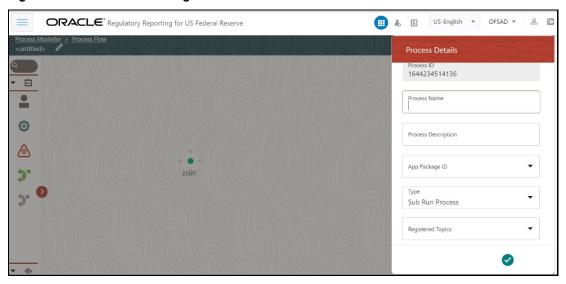
1. After logging into the OFSAAI applications page, navigate to **Regulatory Reporting for US Federal Reserve**, select **Process Modelling Framework** and then select **Process Modeller**.

Figure 100: Process Modeller Page



2. On the **Process Modeller** page, click the **Add** icon to create a new Run Pipeline the Process Details page is displayed.

Figure 101: Process Details Page



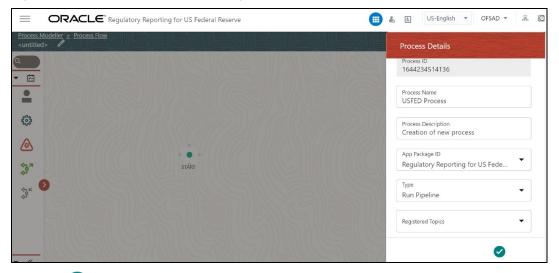
**3.** Select or enter the required values in the following mandatory fields. Other fields in the **Updated Process Details** page can be ignored.

**Table 30: Process Details Fields and Descriptions** 

Field Name	Description or Instruction
Process Name	Enter the process name.
Process Description	Enter the process description.
App Package ID	Select the Application Package ID <b>as Regulatory Reporting for US Federal Reserve</b> from the dropdown list.
Туре	Select the process type as Run Pipeline.

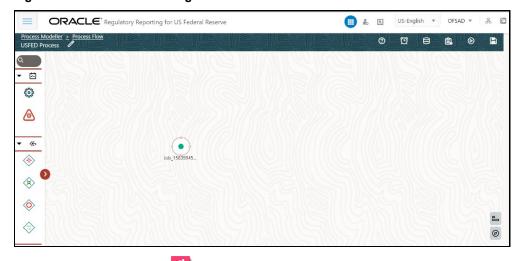
Field Name	Description or Instruction
Infodom	Select the infodom from the dropdown list.
Segment	Select the <b>USFED segment</b> from the dropdown list.

Figure 102: Updated Process Details Page



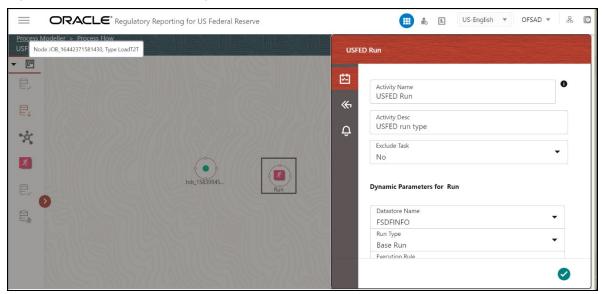
**4.** Click **OK** icon to save the created process. The Process Saved page is displayed.

Figure 103: Process Saved Page



**5.** Add the **Run Type Node** icon by dragging and dropping onto the canvas. The USFED Run Details page is displayed.

Figure 104: USFED Run Details Page



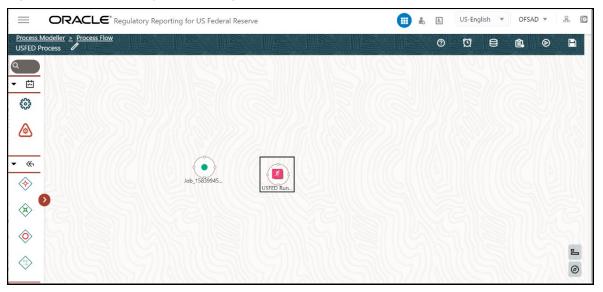
**6.** Select or enter the required values for each field as follows.

Table 31: USFED Run Details Fields and Descriptions

Field Name	Description or Instruction	
Activity Name	Enter the activity name.	
Activity Description	Enter the activity description.	
Exclude Task	Select <b>No</b> from the dropdown list.	
Dynamic Parameters for Run		
Datastore Name	Select the Infodom from the dropdown list.	
Run Type	Select the run type as <b>Base Run</b> from the dropdown list.	
Execution Rule	Select the execution rule as <b>USFED Execution Run</b> from the dropdown list.	
Run Parameters	Enter the runtime parameter as <b>WF_RUNSK</b> .	

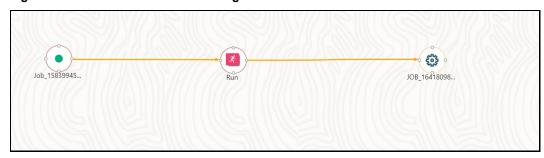
7. Click **OK** icon to save the entered run type node details.





**8.** Add the **Service Task** icon to end the Run Pipeline and connect the Nodes using the Connectors in the USFED Process Canvas page.

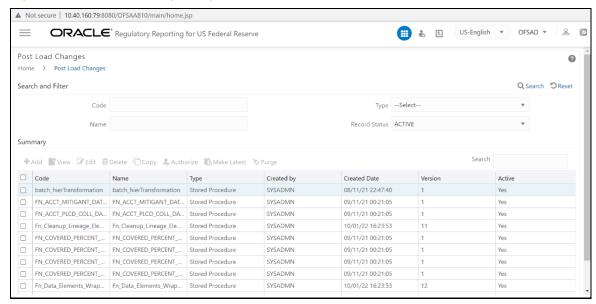
Figure 106: USFED Process Canvas Page



These steps will enable RRF run execution through the PMF along with the parameters' support. There is an additional step required since the PMF run pipeline will be generating the Run Surrogate Key (Run Skey) and store the parameters against this Run Skey. But, when RRF run gets invoked, there will be a new Run Skey that will be generated for RRF. Since we need parameters for RRF run, it is expected to copy the run parameters from the PMF run to RRF run. The same can be achieved using the Post Load Changes (PLC).

9. Create a Data Transform (DT) for the Run with the Run Parameters under PLC with the Standard Run Parameters and an additional Parameter as WF\_RUNSK to copy the data of RUN\_EXE\_PARAMETERS of WF\_RUNSK to load into the RUN\_EXE\_PARAMETERS for \$RUNSK.





For example: DT can contain an Insert command as follows.

```
INSERT INTO RUN EXE PARAMETERS
  (V PARAM ID,
  V SEGMENT CODE,
  N RUN SKEY,
  V PARAM VALUE CODE,
  V HIER NODE CODE,
  V LEAF CONDITION,
  V HIER NODE DESC)
  SELECT V PARAM ID,
         V SEGMENT CODE,
         I RUN SKEY AS N RUN SKEY, -- The $RUNSK for Reporting Run
         V PARAM VALUE CODE,
         V HIER NODE CODE,
         V LEAF CONDITION,
         V HIER NODE DESC
    FROM RUN EXE PARAMETERS
  WHERE N RUN SKEY = I WF RUN SKEY -- The WF RUNSSK from PMF
```

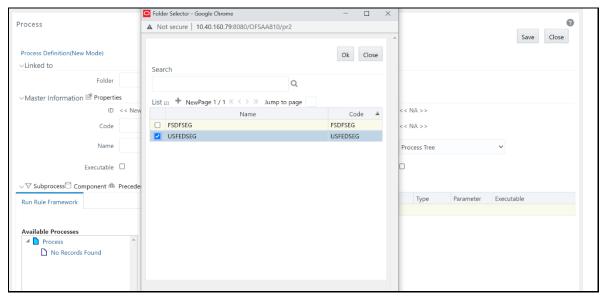
**10.** In the *Financial Services Data Foundation* Application, select *Rule Run Framework*, and then select *Process*.

Figure 108: Process Creation Page



11. Click **New** to create a process in the Regulatory Rules Framework to add the newly created DT with an optional parameter as WF RUNSK. Select the Folder as **USFEDSEG** and click **OK**.

Figure 109: Process Segment Selection Page

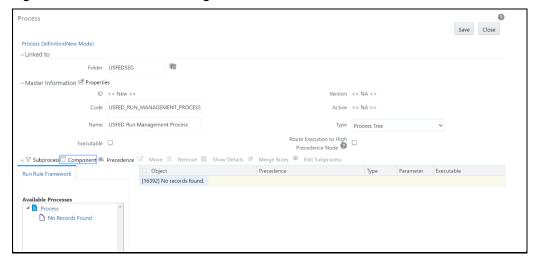


**12.** Select or enter the required values for each field as follows.

Table 32: USFED Run Details Fields and Descriptions

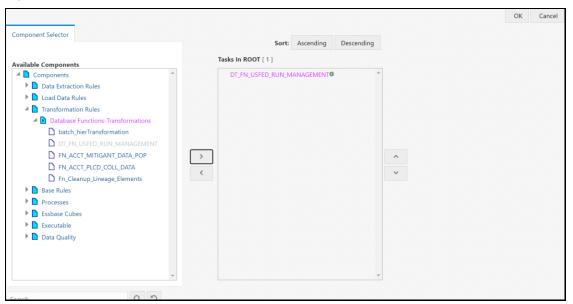
Field Name	Description or Instruction
Code	Enter the process code.
Name	Enter the process name.

Figure 110: Process Definition Page



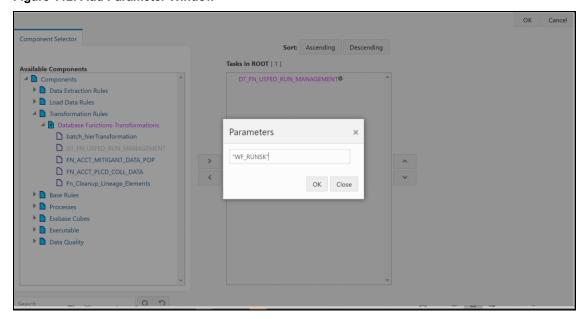
**13.** Select the **Component** option and the *Component Selector* window is displayed.

Figure 111: Component Selector Window



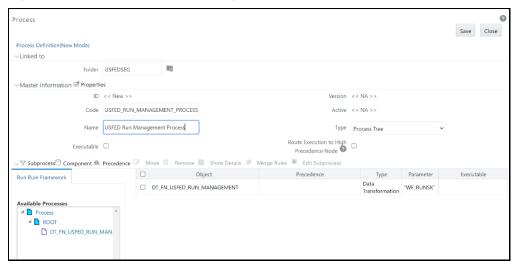
- **14.** From the **Available Components** column, select **Transformation Rules**, then select **Database Functions Transformations** and then select the corresponding **DT**, click **Move** icon to add the DT to the **Tasks In Root** column.
- **15.** In the **Tasks In Root** column, select the Process and right click on the **Setting** icon to add the parameters. The Add Parameters Window is displayed.

Figure 112: Add Parameter Window



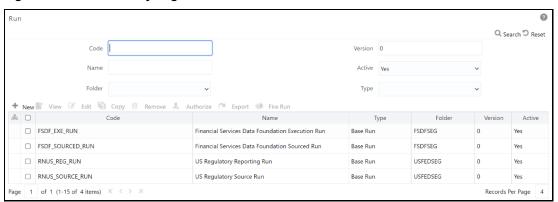
- **16.** Click **OK** to add the parameter details to the Data Transformation.
- **17.** Click **OK** in the **Component Selector** window to save the Data Transformation. The Process Definition Save page is displayed

Figure 113: Process Definition Save Page



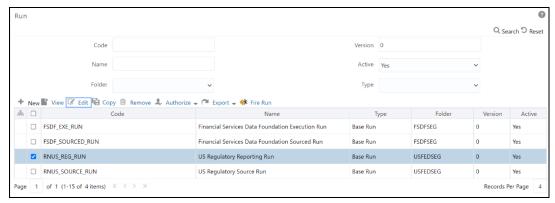
- **18.** Click **Save** button to save the process details.
- **19**. In the *Financial Services Data Foundation* Application, select *Rule Run Framework*, and then select *Run*.

Figure 114: Run Summary Page



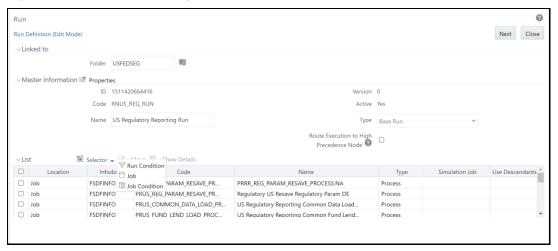
20. Select the **USFED Reporting Run** from the Run Summary page.

Figure 115: Run Summary Page



**21.** Click **Edit** icon to edit the run details The Edit Run Details page is displayed.

Figure 116: Edit Run Details Page



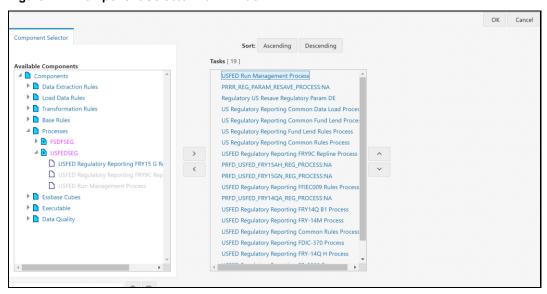
**22.** Click the **Selector** dropdown list and select the *Job* option. The Component Selector window is displayed.

From the **Available Components** column, select **Processes**, then select **USFEDSEG** and then select the corresponding process, click **Move** icon to add the newly created process to the USFED reporting run as the first task.

**NOTE** 

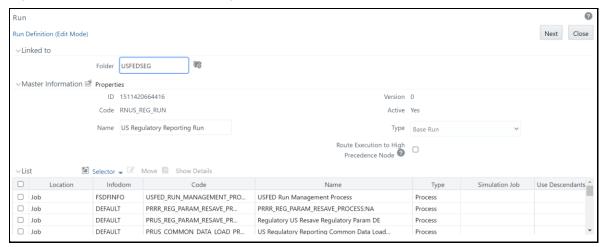
The selected component must always be on top of the Tasks table. You can use the **Move Up** icon to do the same.

Figure 117: Component Selector Run Window



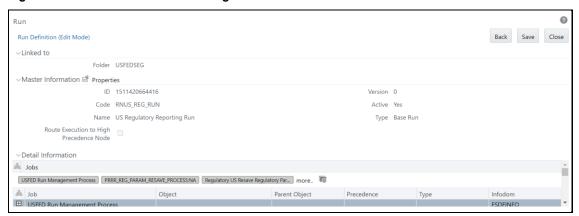
23. Click **Ok** button to save the run details. The updated Run Definition page is displayed.

Figure 118: Updated Run Definition Page



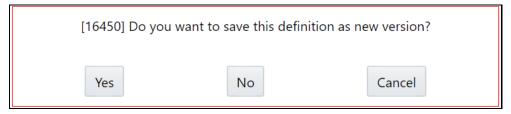
**24.** Click **Next** button to view the added process to the run. The Process Added to Run page is displayed.

Figure 119: Process Added to Run Page



**25.** Click **Save** button and a confirmation window is displayed.

Figure 120: Confirmation Window



- **26.** Click **No** to add the process to the existing USFED Regulatory Run.
- **27.** Execute the initially created run from the Process Modeler screen with the run parameters (similar to Run Management). The PMF generates a Run Skey that will be provided as inputs to the RUN\_EXE\_PARAMETERS.
- **28.** Execute the USFED Regulatory Reporting Run that creates another Run Skey and the DT retrieves the parameters.

# 7 Regulatory Reports

In order to verify the existing logic, to enable and disable the mapping paths at a high level and at each mapping ID level, to publish the reports, to enable and disable the published reports, to re-execute and overwrite the publish reports there are two new features introduced such as Reports Mapping and Reports Publish in the OFS REG REP USFED Application.

Currently the Regulatory Reporting logic is built inside the Configuration Package and hence any additional configuration is not supported in the REG REP USFED application. To enable this additional configuration, the reporting logic is now moved from the existing Configuration Package to OFSAA. The logic for computing the MDRM values are located in OFSAA, and the Configuration Package will perform as a Key Value Pair for each MDRM. Adjustments will still be distinct, and the same values will be supplied as adjustments into the Configuration Package.

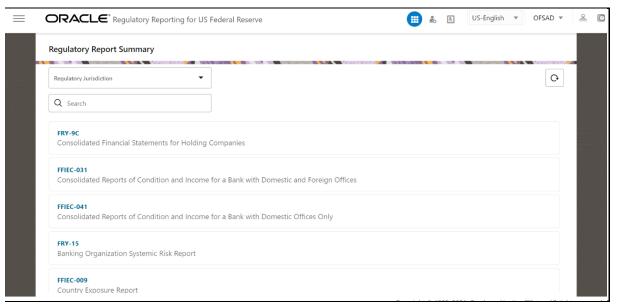
# 7.1 Manage Report Mappings

This section provides the procedures to view, enable and disable the mappings at a high level and at each mapping ID level and to add a configuration in the OFS REG REP USFED Application.

#### **View Report Mappings**

1. After logging into the OFSAAI Applications page, navigate to **Regulatory Reporting for US Federal Reserve**, select **Regulatory Reports**, and then select **Report Mappings**.

Figure 121: Regulatory Reporting Summary Page



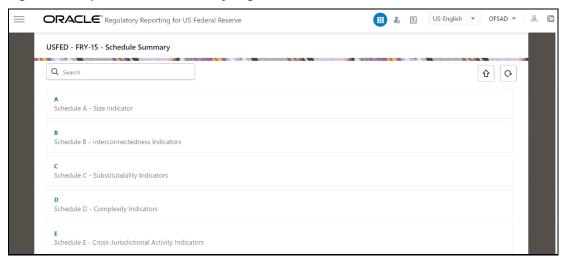
**2.** Select the **Regulatory Jurisdiction** from the dropdown list and in the **Search Pane**, enter the report that you wish to add the additional configuration.

Figure 122: Regulatory Report Summary Result Page



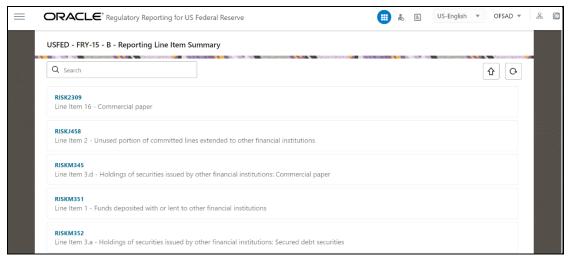
3. Click on the FRY-15 Report link and the list of schedules associated with the report is displayed.

Figure 123: Report Schedule Summary Page



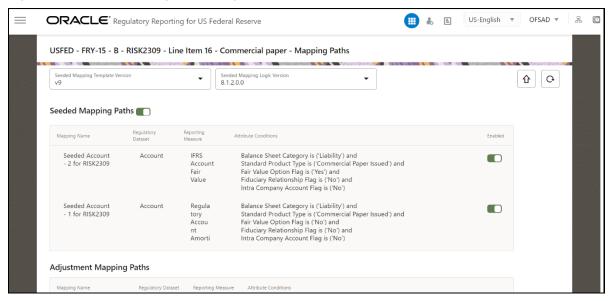
**4.** Click on any one of the schedules and the Reporting Line-Item Summary page is displayed.

Figure 124: Schedule Based Reporting Line-Item Summary Page



5. Select the line item for which you wish to view the seeding mapping details. Select the Seeded Mapping Template Version and the Seeded Mapping Logic Version from the dropdown list for this specific line item to view its seeded mapping path details.

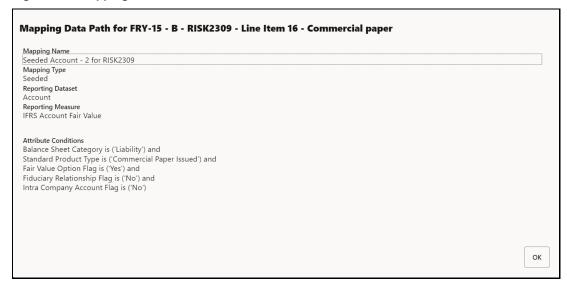
Figure 125: Seeded Mapping Details Page



The seeded mapping details consists of the reporting logic for mapping such as Measures, and Attributes and Values seeded by the application. Each line item can contain one or many mapping IDs associated with it. You can either enable and disable the entire seeded mapping of a line-item or enable and disable specific mapping of a line-item in the application.

**6.** Double click on any one of the Attribute Conditions of the existing Seeded Mappings to view the Mapping Path.

Figure 126: Mapping Data Path for a Line Item Window



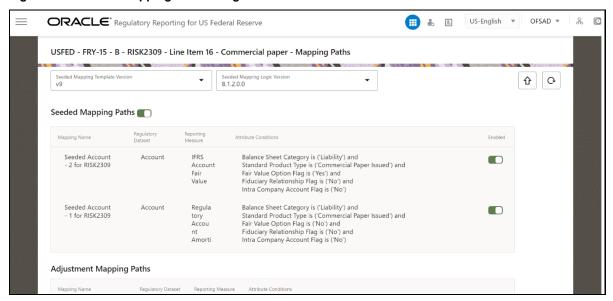
7. Click **Ok** to close this window.

#### **Enable or Disable Seeding Mapping Path**

This section provides the procedure to enable or disable the Seeded Data Mapping Details.

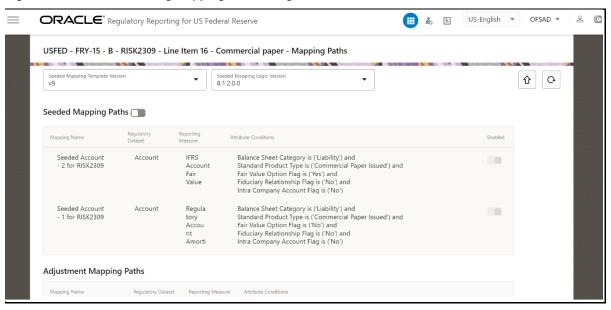
1. In the **Seeded Data Mapping Details** Page, you can enable or disable the Seeded Mapping Details.

Figure 127: Seeded Mapping Details Page



2. You can disable the **Seeding Mapping Path** option to disable all the line items under this specific Seeded Mapping.

Figure 128: Disabled Seeding Mapping Details Page



Or

3. You can disable the **Seeding Mapping of a specific Mapping ID** option.

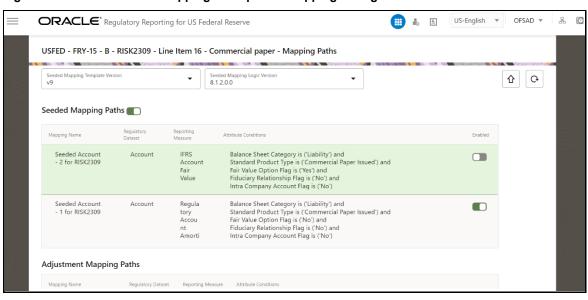


Figure 129: Disable seeded Mapping of a Specific Mapping ID Page

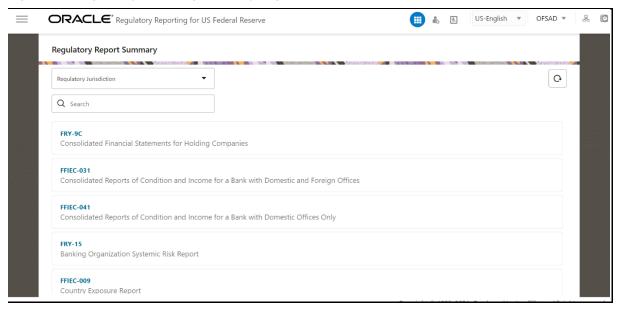
**4.** You can enable the disabled the Seeding Mapping Details of a specific line item or a Specific Mapping ID in the application.

#### **Add Report Mappings**

This section provides the procedure to add the Seeded Data Mapping Details.

1. After logging into the OFSAAI Applications Page, navigate to **Regulatory Reporting for US Federal Reserve**, select **Regulatory Reports**, and then select **Report Mappings**.

Figure 130: Regulatory Reporting Summary Page



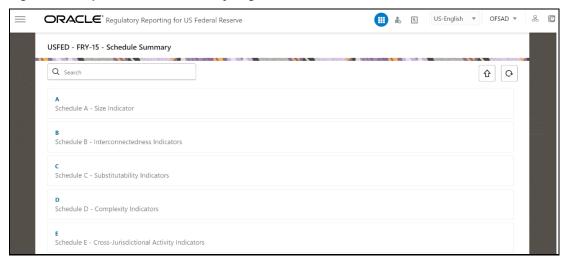
**2.** Select the **Regulatory Jurisdiction** from the dropdown list and in the **Search Pane**, enter the report that you wish to add the additional configuration.

Figure 131: Regulatory Report Summary Result Page



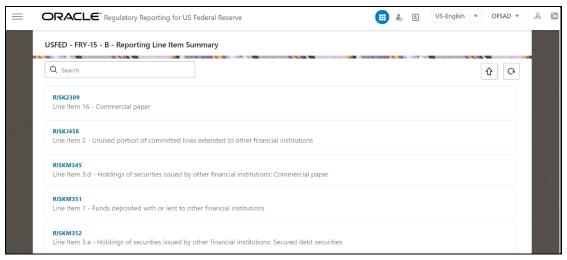
3. Click on the **S** Report link and the list of schedules associated with the report is displayed.

Figure 132: Report Schedule Summary Page



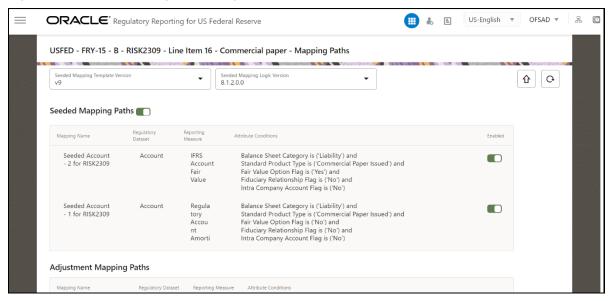
**4.** Click on any one of the schedules and the Reporting Line-Item Summary Page is displayed.

Figure 133: Schedule Based Reporting Line-Item Summary Page



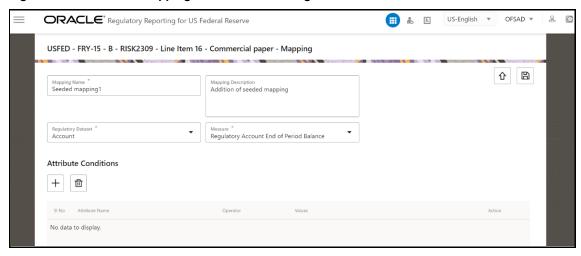
5. Select the line item for which you wish to view the seeding mapping details. Select the Seeded Mapping Template Version and the Seeded Mapping Logic Version from the dropdown list for this specific line item to view its Seeded Mapping Path Details.

Figure 134: Seeded Mapping Details Page



**6.** Scroll down and click the **Add** icon to add an alternative mapping path for an MDRM. The Alternative Mapping path page is displayed.

Figure 135: Alternative Mapping Details Addition Page



**7.** Enter information in the following fields.

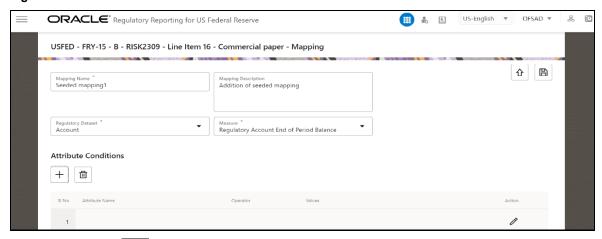
**Table 33: Alternative Mapping Details Addition** 

Field Name	Description or Instruction
Mapping Name	Enter the name of the new mapping configuration.
Mapping Description	Enter the description for the new mapping configuration.
Regulatory Dataset	Select the appropriate dataset from the dropdown list that will be used for Regulatory Reporting.

Field Name	Description or Instruction	
Measure	Select the appropriate measure from the dropdown list. The list of measure available is based on the regulatory dataset selection.	

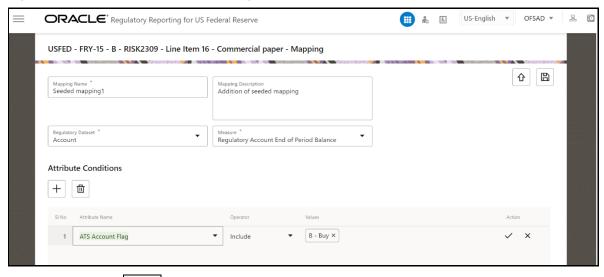
**8.** Click the Attribute **Add** icon to add the attribute conditions for the MDRM. The Attribute Addition window is displayed.

Figure 136: Attribute Condition Add Window



9. Click the **Edit** icon to add the attribute conditions such as **Attribute Name**, **Operator** and **Value** from the dropdown list.

Figure 137: Attribute Condition Details Page



- **10.** Click the Save icon to save the added attribute details.
- **11.** Click the Save button to save the added alternative mapping path in the application. A regulatory mapping added confirmation window is displayed.

USFED - FRY-15 - B - RISK2309 - Line Item 16 - Commercial paper - Mapping

Mapping Name \*
Seeded mapping

Regulatory Dataset \*
Account

Regulatory Mapper
Success. The mapping has been succesfully added.

Attribute Conditions

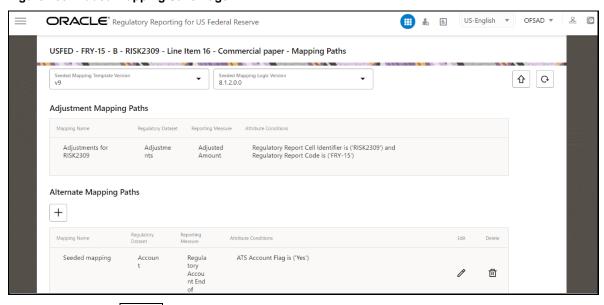
| Image: Condition of the condition

Figure 138: Regulatory Mapping Added Confirmation Window

**12.** Click the **Ok** button and the newly added Alternative mapping path saved page is displayed.

Figure 139: Added Mapping Save Page

OK



- 13. Click the **Edit** icon to edit the newly added seeded mapping details.
- **14.** Click the **Delete** icon to delete the added seeded mapping details.

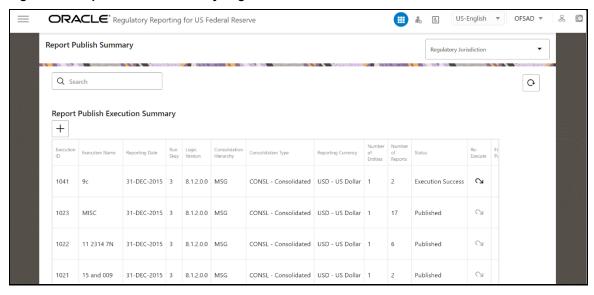
# 7.2 Reports Publish

Before retrieving the report, this feature allows you to verify the reporting values after considering seeded mappings and alternate mappings.

To publish the reports, follow these steps:

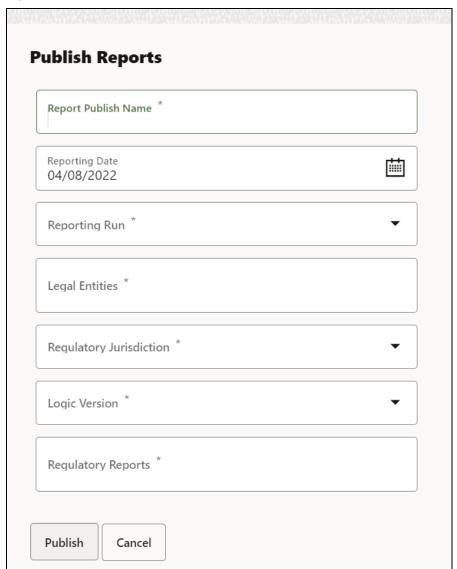
1. After logging into the OFSAAI Applications page, navigate to **Regulatory Reporting for US Federal Reserve**, select **Regulatory Reports**, and then select **Report Publish**.

Figure 140: Report Publish Summary Page



2. Click the Add icon to publish a report. The Publish Reports window is displayed.

Figure 141: Publish Reports Window



**3.** Enter information in the following fields.

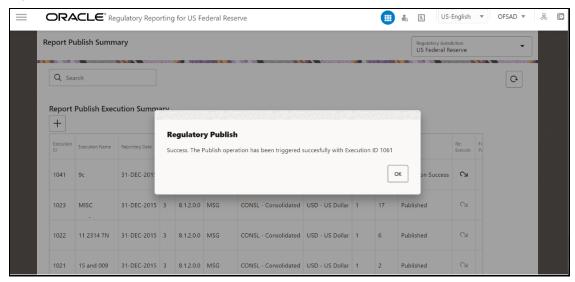
Table 34: Reports Publish

Field Name	Description or Instruction
Report Publish Name	Enter the business name of the publish.
Reporting Date	Select the maximum run execution date using the calendar. By default, the maximum run execution date is displayed for a group of runs executed in that period.
Reporting Run	Select the reporting run from the dropdown list.
Legal Entities	Select one or many legal entities from the dropdown list.
Regulatory Jurisdiction	Select the jurisdiction from the dropdown list.

Field Name	Description or Instruction	
Logic Version	Select the logical version of the seeding mapping of the report.	
Regulatory Reports	Select the one or more regulatory reports from the dropdown list.	

**4.** Click the **Publish** button to publish the report for the report to retrieve the fact table data. A confirmation window is displayed.

Figure 142: Reports Publish Confirmation Window



**5.** Click the **Ok** button to view the recently published report details in the Report Publish Execution summary.

## 7.2.1 Manage Reports Publish

This section provides information on the procedures to re-execute, final publish or view the published reports in the application.

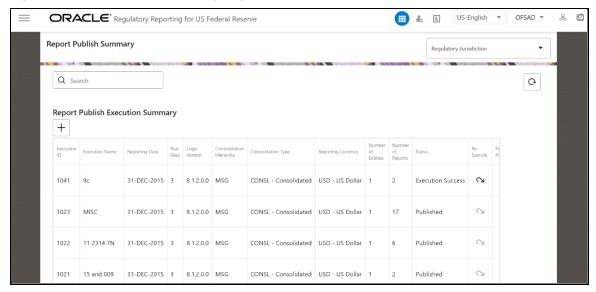
#### **Re-execute Published Reports**

To re-execute the published reports, follow these steps:

OK

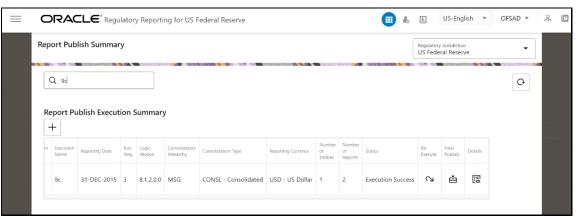
1. After logging into the OFSAAI applications page, navigate to **Regulatory Reporting for US Federal Reserve**, select **Regulatory Reports**, and then select **Report Publish**.

Figure 143: Report Publish Summary Page



**2.** Select the **Regulatory Jurisdiction** from the dropdown list and enter a specific report that you wish to view using the Search pane. The Report Publish Summary Result page is displayed.

Figure 144: Report Publish Execution Summary Page



3. Click the **Re-execute** icon to re-execute the published report details. The Report Publish Summary page is displayed.

Report Publish Summary

Report Publish Execution Summary

Report Publish E

Figure 145: Report Publish Re-execution Confirmation Window

4. Click the **OK** button to re-execute the published report. The Report Publish Re-execution Confirmation Window is displayed. The status of the re-execution triggered report status changes to **Ongoing** in the application.

Figure 146: Report Publish Execution Summary Page

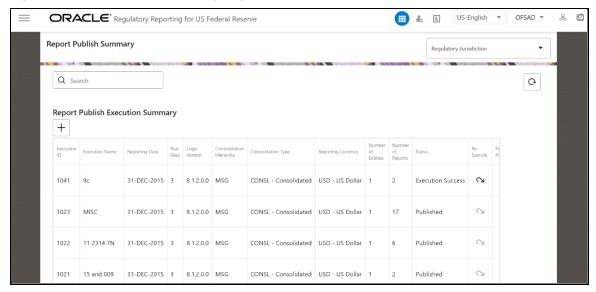


#### **Final Publish Reports**

To final publish the reports, follow these steps:

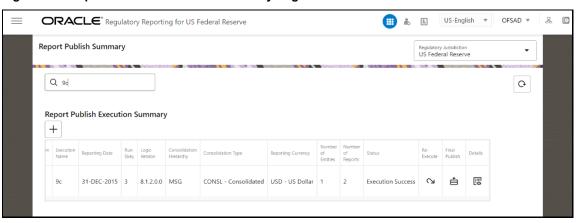
1. After logging into the OFSAAI applications page, navigate to **Regulatory Reporting for US Federal Reserve**, select **Regulatory Reports**, and then select **Report Publish**.

Figure 147: Report Publish Summary Page



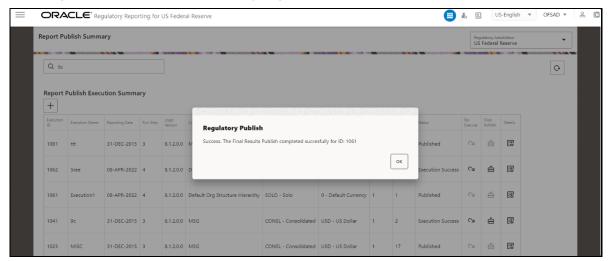
**2.** Select the **Regulatory Jurisdiction** from the dropdown list and enter a specific report that you wish to view using the Search pane. The Report Publish Summary Result page is displayed.

Figure 148: Report Publish Execution Summary Page



3. Click the **Final Publish for Reporting** icon to final publish the report. The Final Publish Report Confirmation Window is displayed.

Figure 149: Publish Report Summary Page



**4.** Click the **OK** button . The Final Report Publish Confirmation Window is displayed. The status of the final published report status changes to **Published** in the application.

Figure 150: Report Publish Execution Summary Page

OK

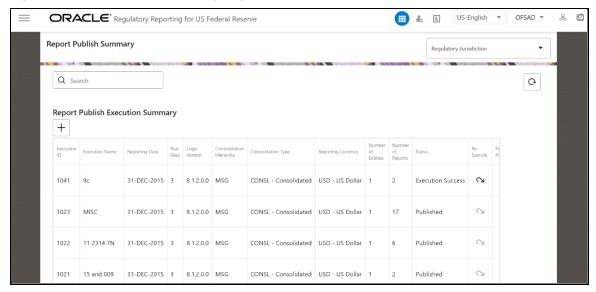


#### **View Published Reports**

To view the published reports, follow these steps:

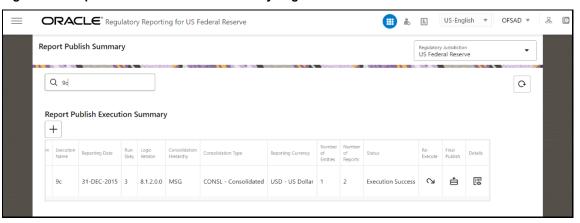
1. After logging into the OFSAAI applications page, navigate to **Regulatory Reporting for US Federal Reserve**, select **Regulatory Reports**, and then select **Report Publish**.

Figure 151: Report Publish Summary Page



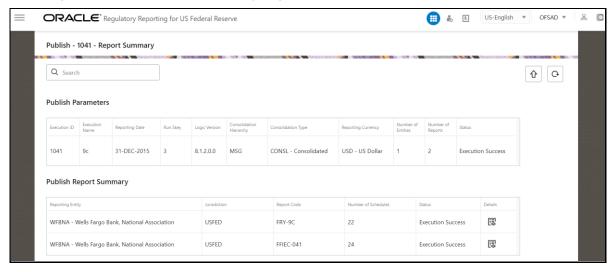
2. Select the **Regulatory Jurisdiction** from the dropdown list and enter a specific report that you wish to view using the Search pane. The Report Publish Summary Result page is displayed.

Figure 152: Report Publish Execution Summary Page



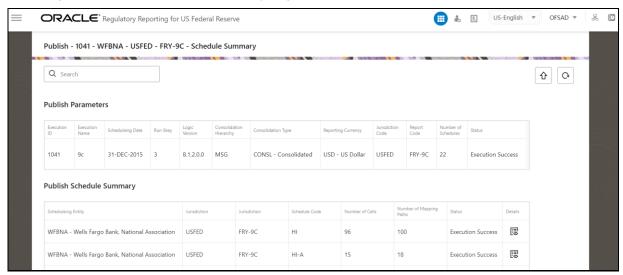
3. Click the **View** icon to view the published report details. The Report Publish Summary page is displayed.

Figure 153: Publish Report Summary Page



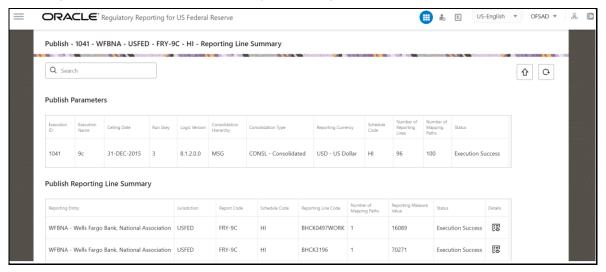
4. Click the Reporting Entity that you wish to see. The Report Schedule Summary page is displayed.

Figure 154: Report Schedule Summary Page



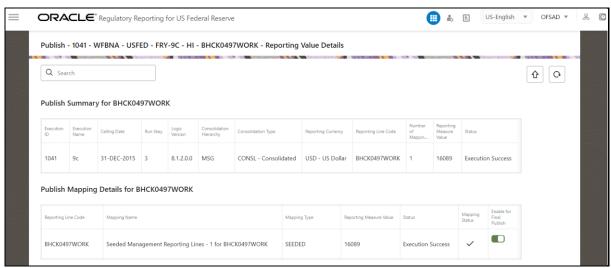
5. Click the Schedule that you wish to see. The Report Line Item Summary details page is displayed.

Figure 155: Report Line Item Summary Details Page



**6.** Click the Reporting Line item that you wish to see. The Mapping Details of the MDRM page is displayed.

Figure 156: Mapping Details Page



**7.** You can disable or enable the MDRM for final publish.

**NOTE** Once the Final Publish is completed, you cannot enable or disable the MDRM level values.

## 8 Data Extracts

This chapter provides information on creating and executing data extract definitions to export the regulatory reporting data into .csv files. It allows you to export data for a specific report, or cells and schedules. You can also export the data from a Derived Entity.

# 8.1 Create an Export Definition

To create an export definition, perform the following steps:

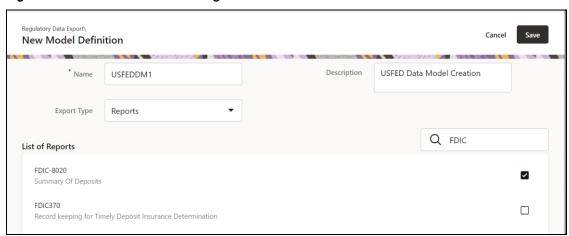
1. After logging into the OFSAAI applications page, navigate to **Regulatory Reporting for US Federal Reserve**, select **Regulatory Data Extracts**.

Figure 157: Regulatory Data Export Page



2. Click **Create**. The New Model Definition page is displayed.

Figure 158: New Model Definition Page



3. Select or enter the required values for each field as follows.

**Table 35: Model Export Definition Fields and Descriptions** 

Field Name	Description or Instruction
Name	Enter the name of the new model definition.
Description	Enter the new model definition description.
Export Type	Select the Export Type of the model from the dropdown list.
Report	This field is displayed only when the Export Type is either Schedule or Reporting Lines. Select the appropriate report from the drop-down list.
Search	Search for a specific object from the available list.

- **4.** Select the required objects from the list by marking the checkbox.
- Click Save to complete the Export definition creation.
   On successful creation of the Export Definition, the Regulatory Data Export Definitions Summary page is displayed.

Figure 159: Regulatory Data Export Definitions Summary Page



# **8.2** Edit and View an Export Definition

To edit and view an export definition, perform the following steps:

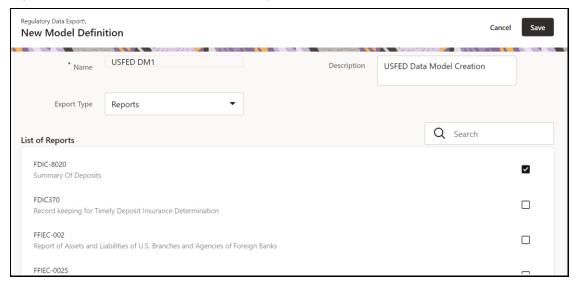
1. Click on the Export Definition that you wish to edit or view from the Export Definitions Summary page.

Figure 160: Regulatory Data Export Definitions Summary Page



The Edit or View Export Definition page appears.

Figure 161: Edit or View Export Definition Page



**2.** You can update the existing information if required and click **Save** to save the changes in the Export Definition or click **Cancel** to cancel if there is no modification in the Export Definition.

# 8.3 Delete an Export Definition

To delete an export definition, perform the following steps:

1. Select a Model Export Definition from the Export Definitions Summary page.

Figure 162: Delete Regulatory Data Export Definition Page



2. Click Delete to delete the Export Definition.

# 8.4 Executing the Regulatory Data Export Definition through Process Modelling Framework

After the Export Definition has been created, a process must be created in the Run Pipeline and must be executed through the Process Modelling Framework.

# 9 Metadata Browser

This section helps you to navigate through the 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 a 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 Applications, thus enabling traceability. It also allows you to view the data flow and the workflow of the application and understand the usage of objects within the application.

The new visualization of Metadata Browser (MDB) supports the Application view and Object view. In the Application view, you can browse through the metadata created using the applications hosted in OFSAAI. In the Object view, you can view the metadata created in OFSAAI.

To access the Metadata Browser (Object and Application Views), your role must be mapped to the SCR MDB function.

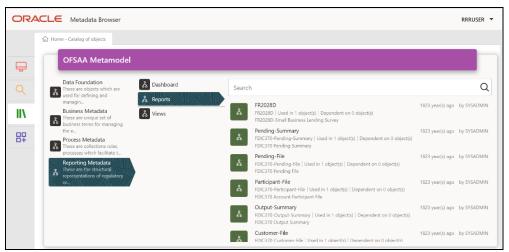
Analysts review the metadata used for a particular report schedule to verify the data. Data verification may require looking for metadata used in a given schedule or schedules in which particular metadata is used. Data Analysts and Reporting Analysts perform the report verification. Metadata refers to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

## 9.1 Reporting Metadata

To use MDB for schedule-wise metadata, and to use MDB for metadata wise schedule, identify the metadata used, perform the following steps:

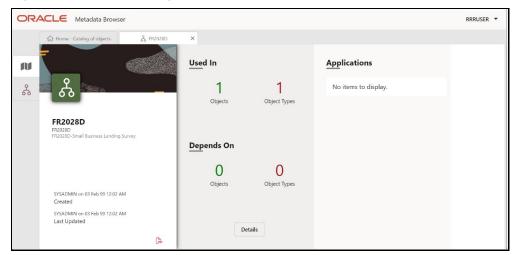
 You can verify the data for related data elements in results using this information. Navigate to Metadata Browser, select Catalog of Objects, select OFSAA Metamodel, select Reporting Metadata, and then select Reports. The MDB Reporting Metadata Screen is displayed.

Figure 163: MDB - Reporting Metadata Page



Click the object view FR2028D to view the list of schedules. The Reporting Metadata Schedule View page is displayed.

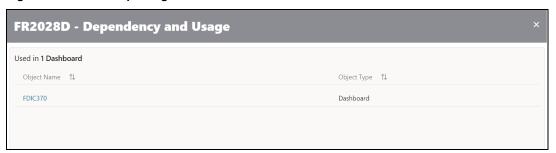
Figure 164: MDB - Reporting Metadata - Schedule View



You can view the following information on the **Schedule Details** page:

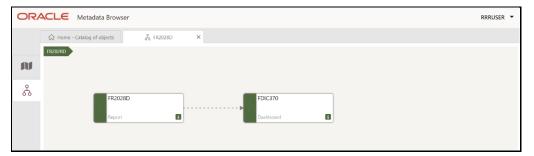
- **Depends On**: This section displays the metadata used in a given schedule.
- **Used In**: This section displays the Reports in which this schedule is used.
- Applications: This section displays the applications in which this schedule is used.
- 3. Click **Details** to view the dependency and usage information such as the **Object Name** and the **Object Type**.

Figure 165: MDB - Reporting Metadata - Schedule View 1



**4.** From the **Schedule View** page, click the **Dependency** tab to view the report tree structure.

Figure 166: MDB - Reporting Metadata Tree Structure Page



Starting from common metadata used across the application, you may want to know the list of reports or derived entities this metadata has used. Let us take an example of a measure. To identify how value is computed, perform the following steps to trace it back to the metadata.

## 9.2 Business Metadata

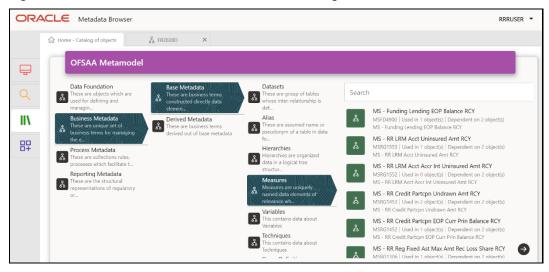
This section provides information on the Business Metadata Objects which include Base Metadata and Derived Metadata.

### 9.2.1 Base Metadata

The following are the steps to perform to view the Base Metadata details. For example, Measures.

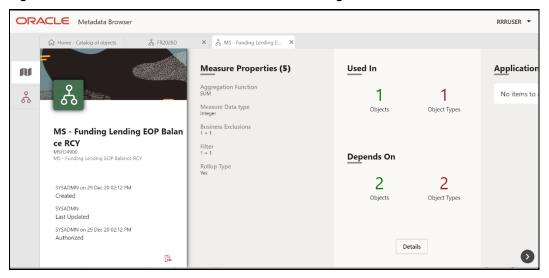
 To view the measures, navigate to Catalog of Objects, select OFSAA Metamodel, select Business Metadata, select Base Metadata, and then select Measures. The MDB Business Metadata Page is displayed.

Figure 167: MDB - Business Metadata - Measure View Page



Click the Measure that you wish to view. The MDB Business Metadata Measure Details page is displayed.

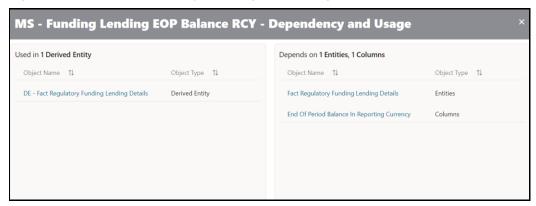
Figure 168: MDB - Business Metadata Measure Details Page



You can view the following information on this page:

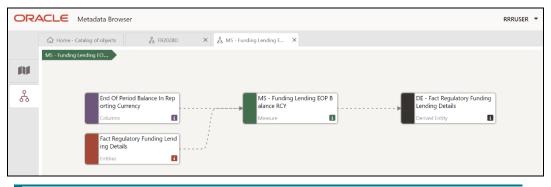
- Measure Properties: It provides information on the properties of Business measures. For example, aggregation function, Measure Data Type, Business Exclusions, Filter, and Rollup Type.
- **It depends on**: This section displays all the object names and their types, such as Entities, Columns, and so on.
- Used In: This section displays the Objects in which this schedule is used.
- Applications: This section displays the applications in which this schedule is used.
- 3. Click **Details** to view the measure dependency and usage information.

Figure 169: Measure Dependency and Usage Details Page



**4.** From the **Measure Details** page, click the **Dependency** tab to view the measure tree structure.

Figure 170: Business Metadata Measure Tree Page



**NOTE** 

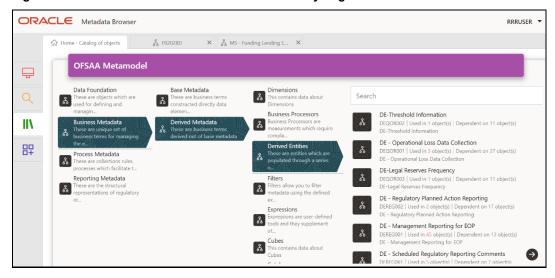
The similar steps as mentioned in this section are applicable for other metadata such as Business Metadata (Hierarchies, Measures, Variables, and so on) and Derived Metadata (Dimensions, Filters, and so on), Process Metadata (Process, Rules, and so on) and Data Foundation (Target Model, Sources, Connectors, and so on).

## 9.2.2 Derived Metadata

The following are the steps to perform to view the Derived Metadata details. For example, Derived Entities.

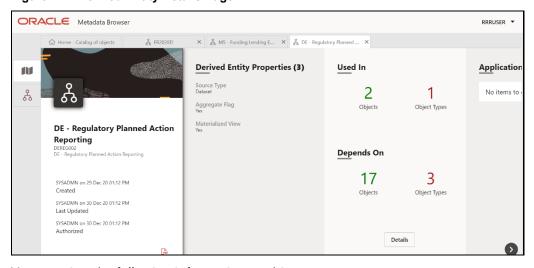
To view the schedule-wise derived entities, navigate to Catalog of Objects, select OFSAA
 Metamodel, select Business Metadata, select Derived Metadata, and then select Derived
 Entities.

Figure 171: MDB - Business Metadata - Derived Entity Page



2. Click the **Derived Entity** that you wish to view. The **Derived Entity Details** page is displayed.

Figure 172: Derived Entity Details Page

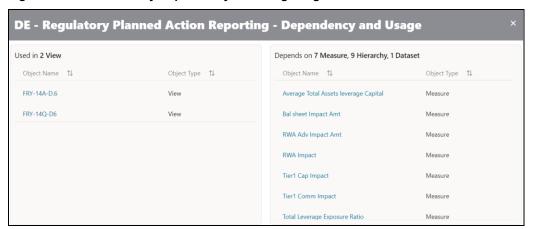


You can view the following information on this page:

- Derived Entity Properties: It provides information on properties of derived entities, such as Source Type, Aggregate Flag, and Materialized View.
- **It depends on**: This section displays all the object names and their types, such as Dataset, Hierarchy, and so on.
- Used In: This section displays the Objects in which this schedule is used.

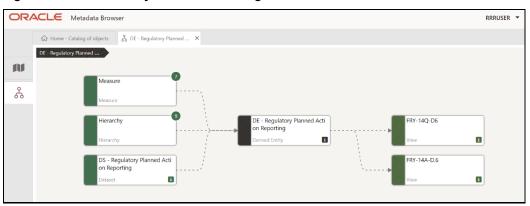
- Applications: This section displays the applications in which this schedule is used.
- 3. Click **Details** to view the derived entity dependency and usage information.

Figure 173: Derived Entity Dependency and Usage Page



**4.** From the **Derived Entity Details** page, click the **Dependency** tab to view the Derived Entity tree structure.

Figure 174: Derived Entity Tree Structure Page



For more information about the Metadata and its usage, see the OFSAA Metadata Browser User Guide.

# 9.3 Metadata Report Utility

The Metadata Export Utility helps you to export OFSAA Metadata into Excel Sheet. This feature helps to get a view of OFSAA Metadata and its dependencies. It is a template-based approach where you create templates and select Metadata Objects that must be extracted. The extraction process is supported only for Excel Sheet. While defining the template, you are expected to have prior knowledge of the OFSAA Metadata Objects that are relevant from this application point of view.

## 9.3.1 Prerequisites

The following executions must be performed before using the Metadata Export Utility:

- 1. Before executing MDB Publish and Data Elements Wrapper Batch, ensure the following:
  - **a.** Tablespace Requirement:

- i. Ensure that the **USERS** tablespace have a minimum of 150 GB available
- ii. Ensure that the **TEMP** tablespace is a minimum of 45 GB available
- **b.** Execute the following **Gather Stat** command for the mentioned tables:

```
BEGIN
DBMS_STATS.GATHER_TABLE_STATS(USER, 'TABLE_NAME');
END;
```

- i. Atomic Schema:
  - FSI\_M\_CELL\_DETAILS
  - FSI\_DE\_SEEDED\_DIMENSIONS
  - FSI\_DE\_TABLE\_APPLICATION\_MAP
  - FSI\_DE\_PP\_TABLE\_LIST
  - FSI\_DE\_METADATA\_SEEDED\_VW\_MAP
  - FSI\_DE\_PP\_TABLE\_REPORT\_MAP
- **ii.** Config Schema:
  - AAI\_OBJECT\_B
  - AAI\_OBJECT\_TL
  - AAI\_DMT\_DEFINITION
  - AAI\_DMT\_DEF\_SOURCE\_ENTITY
  - AAI\_DMT\_MAPPING\_DETAILS
  - PR2\_RULES\_B
  - PR2\_RULE\_MAP
  - PR2\_RULE\_OBJECT
  - PR2\_RULE\_OBJECT\_MEMBER
  - PR2\_OBJECT\_TL
  - PR2\_OBJECT\_TRACE
  - BATCH\_MASTER
  - BATCH\_TASK\_MASTER
  - BATCH\_PARAMETER\_MASTER
  - METADATA\_MASTER
  - METADATA\_ELEMENT\_MASTER
  - METADATA\_LOCALE\_MASTER
  - METADATA\_TYPE\_MASTER
  - METADATA\_ATTRIBUTE\_MASTER
- 2. MDB Publish: Execute the batch, INFODOM\_MDB

- 3. After Executing MDB Publish and Data Element Wrapper Batch, ensure the following:
  - **a.** Execute the following Gather Stat command for the mentioned tables:

```
BEGIN
DBMS_STATS.GATHER_TABLE_STATS(USER, 'TABLE_NAME');
END;
```

- i. Atomic Schema:
  - FSI\_DE\_REPORT\_LINEAGE\_BASE
  - FSI\_DE\_METADATA\_TGT\_MEMBER
  - FSI\_DE\_METADATA\_SRC\_MEMBER
  - FSI\_DE\_REPORT\_TARGET\_MEMBER
  - FSI\_DE\_REPORT\_SOURCE\_MEMBER
- 4. Logs: MDB logs are generated under deployed area /Context\_Name/logs/MDB\_XXXX.log
- 5. Data Elements Wrapper Execution: After MDB Publish is completed successfully with the message "Metadata publishing is finished." in the /Context\_Name/logs/MDB\_XXXX.log, you must execute the Data Elements Utility with the following seeded batch to get the Data Lineage for each Metadata in OFSAA:

```
<INFODOM> POP DATA ELEMENTS USFED
```

This execution requires adequate tablespace. Ensure that your Atomic Schema is having enough tablespace in TEMP and USERS.

Parameters used in < INFODOM> POP DATA ELEMENTS USFED Batch

The batch can be executed in different modes according to each requirement. The following are the parameters used for executing the batch.

The default parameters used in the <INFODOM>\_POP\_DATA\_ELEMENTS\_USFED batch are:

Table 36: Task1 (METADATA PARSER)

Sl. No.	Parameter	Description	List of Values	Default Value
1	P_FULL_PARSE	Full Parser Flag	Y/N	'Υ'
2	P_INFODOM_NAME	Infodom Name	##INFODOM# #	<value fed="" infodom="" installed="" is="" of="" the="" us="" where="">. For example: 'FSDFINFO'</value>

Table 37: Task2 (REPORT PARSER)

Sl. No.	Parameter	Description	List of Values	Default Value
1	P_JURISDICTION	Jurisdiction Code	USFED	'USFED'
2	P_INFODOM_NAME	Infodom Name	##INFODOM# #	<value fed="" infodom="" installed="" is="" of="" the="" us="" where="">. For example: 'FSDFINFO'</value>

Execution Types for METADATA Parsing in <infodom>\_pop\_data\_elements\_usfed Batch

- 1. Full METADATA Parsing [Default Mode] (if the P\_FULL\_PARSE parameter is 'Y', then the parsing happens for the entire METADATA and Run Elements for the Run(s) enabled in FSI\_DE\_POP\_RUN\_LIST table in the Atomic Schema).
- 2. Incremental METADATA Parsing [Optional Mode. Batch Parameter to Be Modified] (if the P\_FULL\_PARSE parameter is 'N', then the parsing happens for changed METADATA and Run Elements for the Run(s) enabled in FSI\_DE\_POP\_RUN\_LIST table in the Atomic Schema).

You can edit the parameters by accessing the Batch Maintenance screen.

- **a.** Log in to Oracle Financial Services Analytical Applications interface with your credentials.
- **b.** Navigate to **Regulatory Reporting for US Federal Reserve**, select **Operations**, and then select **Batch Maintenance**.
- c. Select Batch Name (<infodom>\_pop\_data\_elements\_usfed)
- **d.** (OPTIONAL) Select Task1 and click the Edit button. The *Edit Task Definition* Window is displayed.
- **e.** Modify the Parameter List field as applicable.

The values must be in single quotes and comma-separated for each value. Follow the same order as in the table.

Execution Types for REPORT Parsing in < INFODOM> POP DATA ELEMENTS USFED Batch:

- 1. US FED Jurisdiction REPORT Parsing [Default Mode] (if the P\_JURISDICTION parameter is 'USFED', then the parsing happens for US FED Reports enabled in FSI\_DE\_POP\_REPORT\_LIST table in the Atomic Schema).
  - Even if the P\_JURISDICTION parameter in <INFODOM>\_POP\_DATA\_ELEMENTS\_USFED Batch is loaded, the Dashboards which get parsed depend on the FSI\_DE\_POP\_REPORT\_LIST table in the Atomic Schema.
- **2.** All Jurisdictions REPORT Parsing [Optional Mode. Batch Parameter to Be Modified] (if the P\_JURISDICTION parameter is NULL, that is, (") or two Single Quotes, then the parsing happens for entire Reports enabled in FSI\_DE\_POP\_REPORT\_LIST table in the Atomic Schema).

You can edit the parameters by accessing the Batch Maintenance screen.

- **a.** Log in to Oracle Financial Services Analytical Applications interface with your credentials.
- **b.** Navigate to **Regulatory Reporting for US Federal Reserve**, select **Operations**, and then select **Batch Maintenance**
- c. Select Batch Name (<INFODOM> POP DATA ELEMENTS USFED)
- **d.** (OPTIONAL) Select Task2 and click the Edit button. The *Edit Task Definition* Window is displayed.
- e. Modify the Parameter List field as applicable.

The values must be in single quotes and comma-separated for each value. Follow the same order as in the table.

#### **Enabling Run for METADATA Parsing**

Every execution for METADATA Parsing requires a minimum of one Run to be enabled in the FSI\_DE\_POP\_RUN\_LIST table in the Atomic Schema. By default, RGRNUSFED is enabled.

**Table 38: Run Names for Metadata Parser** 

RUN NAME	INCLUDE RUN
1511420664416	Υ

#### Excluding Irrelevant Data Flows from Lineage Reports

For each Run, some of the Data Mappings can be functionally irrelevant. For these cases concerning any Run, the customer can opt for removing these Data Flow from Lineage Reports as an exclusion by inputting the same in the FSI\_DE\_RUN\_FLOW\_REMOVAL table.

#### **Enabling Reports for REPORT Parsing**

Every execution for REPORT Parsing requires a minimum of one Report to be enabled in the FSI\_DE\_POP\_REPORT\_LIST table in the Atomic Schema. By default, the following Reports are enabled for US FED Jurisdiction.

**Table 39: Report Codes for Report Parser** 

DASHBOARD_ID	JURISDICTION_CODE	REPORT_CODE	INCLUDE_REPORT
1	USFED	FRY-9C	Υ
2	USFED	FRY-9LP	Υ
3	USFED	FFIEC-009	Υ
4	USFED	FFIEC-009a	Υ
5	USFED	FRY-15	Υ
6	USFED	FRY-20	Υ
7	USFED	FRY-12	Υ
8	USFED	FRY-11	Υ
9	USFED	FRY-11s	Υ
10	USFED	FR-2314	Υ
11	USFED	FR-2314s	Υ
12	USFED	FR-2052A	Υ
13	USFED	FR-2052B	Υ
14	USFED	FRY-14Q	Υ
15	USFED	FRY-14A	Υ
16	USFED	FFIEC-031	Υ

17	USFED	FR-2886B	Υ
18	USFED	FFIEC-041	Υ
19	USFED	FRY7N	Υ
20	USFED	FFIEC101	Υ
21	USFED	FR-2900	Υ
22	USFED	FDIC-8020	Υ
23	USFED	FRY-14M	Υ
24	USFED	FR-2644	Υ
25	USFED	FRY-7NS	Υ
26	USFED	FFIEC-002	Υ
27	USFED	FR2420	Υ
28	USFED	FFIEC-002S	Υ
29	USFED	FR2502Q	Υ
30	USFED	FFIEC030	Υ
31	USFED	FFIEC030S	Υ
32	USFED	FR2835A	Υ
33	USFED	FRY7Q	Υ
34	USFED	FRY8	Υ
35	USFED	FR2028D	Υ
37	USFED	FDIC370	Υ

By default, All Dashboards are enabled and if you wish to parse particular Dashboards, modify the FSI\_DE\_POP\_REPORT\_LIST table in the Atomic Schema by enabling/disabling the "Include Report Column".

Executing SELECTED tasks of <INFODOM> POP DATA ELEMENTS USFED Batch

By default, the <INFODOM>\_POP\_DATA\_ELEMENTS\_USFED Batch contains both the tasks, that is, METADATA Parsing and REPORT Parsing. You can use the platform feature of the EXCLUDE / INCLUDE Batch Task for the Optional execution of required tasks.

#### **Topics**:

- Verifying Logs
- Validating Lineage Outputs

# 9.3.2 Verifying Logs

Data Elements logs are generated in Atomic Schema under the FSI\_MESSAGE\_LOGS table.

**Table 40: Data Element Logs** 

Tasks	Batch Run ID	Indication
Task1 (METADATA Parsing)	REGISTER_ELEMENTS_ <batch_ Run_ID&gt;</batch_ 	Processes Metadata Parsing. The message "Completed REISTER_ELEMENTS" indicates that the Metadata parsing is completed with Registration.
Task2 (REPORT Parsing)	REPORT_TO_ELEMENTS_ <batch_run_id></batch_run_id>	Processes Report Parsing.  The message "Completed REPORT_TO_ELEMENTS" indicates that all the Report parsing is completed.

## 9.3.3 Validating Lineage Outputs

In Atomic Schema, you must verify that data is present in the following tables and ensure that the table is populated:

- FSI\_DE\_RUN\_LINEAGE\_METADATA
- MDR\_LINEAGE\_METADATA
- FSI\_DE\_REPORT\_LINEAGE\_BASE

It is recommended that the following SQL statement must be executed in Config Schema if this INDEX is not created:

```
CREATE INDEX index_mdr_mod_parent_child
CREATE INDEX index_mdr_mod_parent_child
ON mdb_object_dependencies (parent_object_def_id,child_object_def_id)
COMPUTE STATISTICS
/
```

## 9.3.4 User Access

The following user groups are pre-seeded in the component that helps you get access to the Metadata Report Extract Screen.

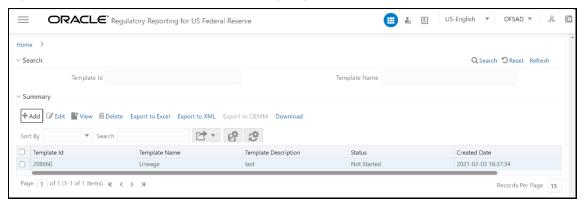
- 1. MDR View Group: To see Metadata Report Extract with View permissions.
- 2. MDR Owner Group: To create templates in Metadata Report Extract.

## 9.3.5 Create and Export Metadata Report Templates

Perform the following steps to create and export the Metadata Report Templates:

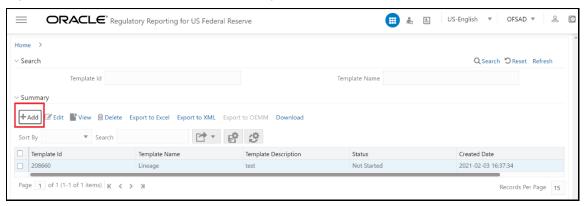
1. Navigate to **Utilities** and then select **Metadata Report**.

Figure 175: Metadata Report Template Summary Page



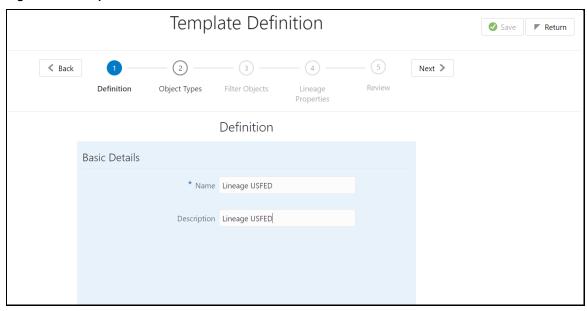
2. Click Add icon, in the Summary Screen, to create a new Metadata Report Template.

Figure 176: Add Metadata Report Template Page



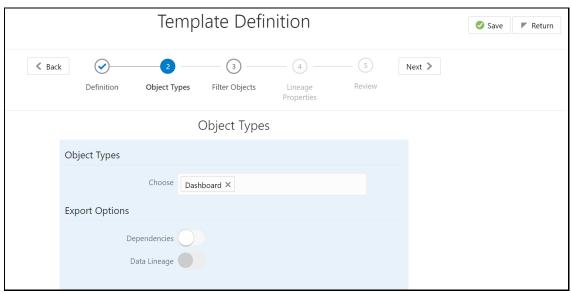
3. Provide the Name and Description for the new template on the *Template Definition* Page.

Figure 177: Template Definition Window



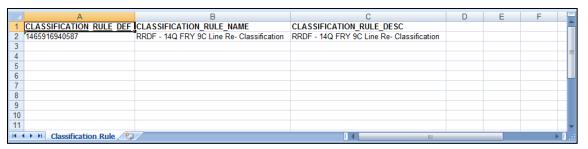
- **4.** Select the desired object from the Object Type dropdown to be exported.
- 5. The Individual **Report** generates only the basic properties of the object selected, that is, name and description. The Relational **Report** generates detailed information up to the Entities level if Dependencies is chosen; and up to the Staging Columns level, if Data Lineage is selected along with Dependencies.
- 6. Dependencies: The Metadata Object is dependent on several other Metadata Objects. Metadata Object is also used (that is, consumed) in several other Metadata Objects. Dependency or usage tree can be of any depth. For example, a rule can be dependent on a hierarchy, business processor, and dataset. Further, each of these metadata objects can be dependent on other metadata objects. Metadata Export Utility exports all the dependent or used Metadata Objects for all paths in the dependency or usage tree if this option is selected.
- 7. Lineage: Data is loaded from source systems to staging and then moved across to processing/reporting. Lineage traces the data element as it moves across different layers of OFSAA: staging, processing, and reporting. Metadata Export Utility exports the lineage of each of the reporting area data elements that are identified by dependencies.
- 8. For Individual Report: In the Export Options, do not select Dependencies or Data Lineage.

Figure 178: Object Types Window



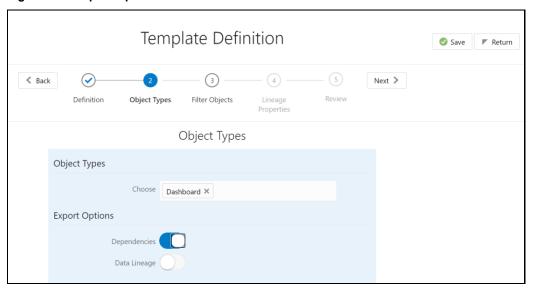
**9.** The exported sample report for individuals is as follows:

Figure 179: Individual Sample Report



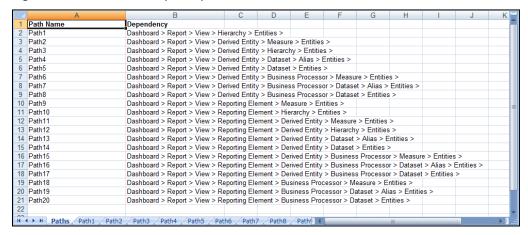
For Relational Report: In the Export Options, select Dependencies.

Figure 180: Export Options



**10.** The exported sample report for Relational is as follows:

Figure 181: Relational Sample Report



**11.** The first sheet shows the different Paths and their Dependencies until the Entities level. Select the required Path sheet at the bottom to view the dependencies.

Each path tells how the dependency/usage is derived from dashboard to entity or vice versa involving various OFSAA object types like Derived Entity, Hierarchies, Datasets, Measures, and so on.

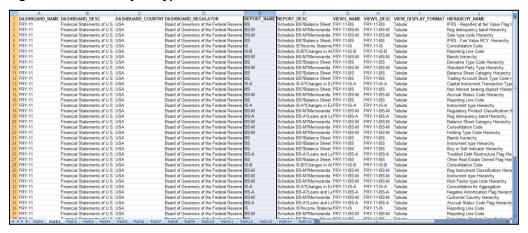
These paths are generated by the system using data already published in MDB dependency tables as part of the OFSAA MDB object publish.

For every dependent object type displayed in each path sheet, the following columns are displayed:

- Object type name
- Object type description

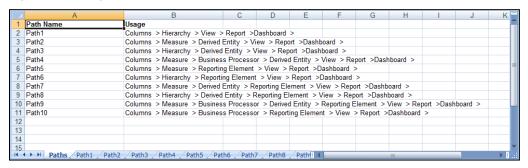
- One or many Object-specific properties (optional)
- 12. For example: In Path1, Dashboard is the first Object type, the dependencies generated are Dashboard Name, Dashboard Description, and Dashboard properties: Dashboard Country, Dashboard Regulator, and so on. Similarly, Report is the next Object type in Path1 and the dependencies generated are Report Name, Report Description, Views Name, Views Description, View Display Format, and so on. Then followed by Hierarchy Objects name, description, and properties up to the Entities level.

Figure 182: Path 1 Object Type



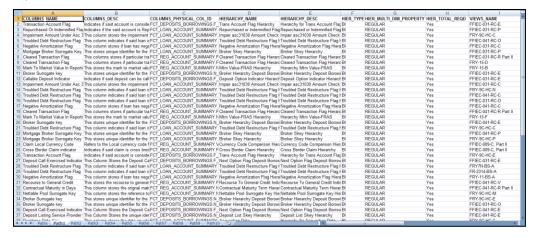
The Usage sample report (generated by default when Dependencies is selected) is as follows:

Figure 183: Usage Sample Report



The first sheet shows the different Paths and their Usage until the Dashboard level. Select the required Path sheet at the bottom to view the Usage.

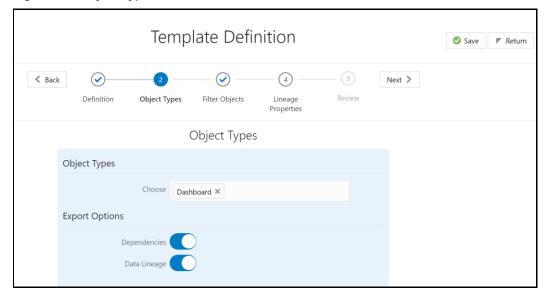
Figure 184: Patch Selection Sheet



**13.** Select Data Lineage in *Template Definition* and then select *Choose Object Type* to export the lineage details up to the Staging Columns level.

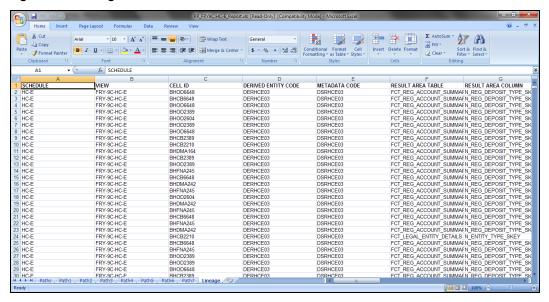
Data Lineage can be selected only if the Dependencies option is chosen. The minimum memory settings to run lineage reports should be export JAVA\_OPTS="-Xms1024m -Xmx8192m"

Figure 185: Object Type Selection



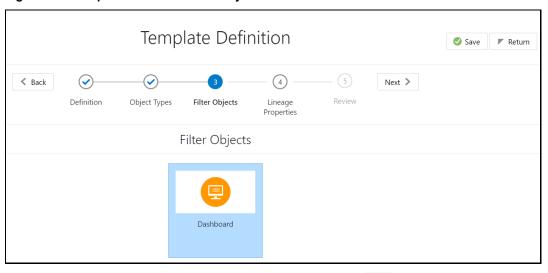
Data Lineage is generated as a separate sheet in the generated Relational report along with the Dependencies. Select the Lineage **Sheet** to view the Data Lineage (up to Staging Column Level).

Figure 186: Lineage Details



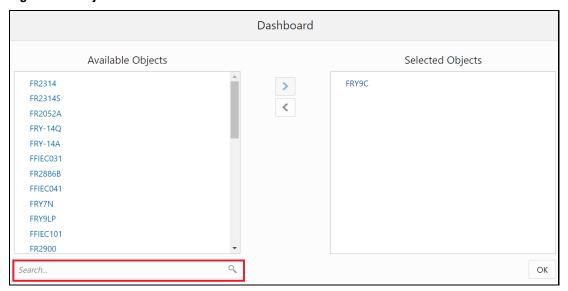
**14.** Select Filter Objects to see the selected objects.

Figure 187: Template Definition Filter Objects Window



**15.** Select one Filter Object from the Available Objects and click to add a Selected Object. Select one Selected Object from the Available Objects and click to remove a Filter Object.

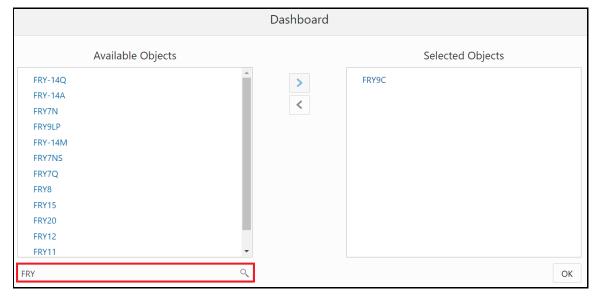
Figure 188: Object Selection Window



**16.** When the object list is huge, use the Search option as shown above. Type the first three letters of the Filter Object name and the relevant Filter Objects are displayed.

You can type the complete Filter Object name to select and add to the Selected Objects.

Figure 189: Object Search Option Window



**17.** Select the Lineage Properties required to be generated.

The following Lineage Properties (columns) are available in the Metadata Report Screen.

Table 41: Lineage Properties

SI. No.	Lineage Property	Property Description	
1	Jurisdiction	Stores the Jurisdiction Code of Lineage Report generated.	
2	Report	Stores the Report Code of the Lineage Report generated.	
3	Schedule	Stores the Schedule Code of the Lineage Report generated.	
4	View	Stores the View Code of the Lineage Report generated.	
5	Cell ID	Stores the Cell ID (MDRM Code) of the Lineage Report generated.	
6	Cell Group ID	Stores the Cell Group ID of the Lineage Report generated. Each Cell Group ID represents a decision to populate the cell. Multiple Group IDs represent multiple OR conditions in decisions.	
7	Derived Entity Code	Stores the Derived Entity Code of the Lineage Report generated for the given Cell ID and Cell Group ID.	
8	Derived Entity Description	Stores the Derived Entity Description of the Lineage Report generated for the given Cell ID and Cell Group ID.	
9	Metadata Code	Stores the Metadata Code of the Lineage Report generated for the given Cell ID, Cell Group ID, and Derived Entity.	
10	Metadata Description	Stores the Metadata Description of the Lineage Report generated for the given Cell ID, Cell Group ID, and Derived Entity.	
11	Metadata Type	Stores the Metadata Type of the Lineage Report generated for the given Cell ID, Cell Group ID, and Derived Entity.	
12	Metadata Sub Code	Stores the Metadata Sub Code of the Lineage Report generated for the given Cell ID, Cell Group ID, Derived Entity, and Metadata Code.  Metadata Sub Code represents direct Metadata (Metadata Sub Code is the same Metadata Code) or derived Metadata Code like Datasets/Expressions.	
13	Metadata Sub Description	Stores the Metadata Sub Description of the Lineage Report generated for the given Cell ID, Cell Group ID, Derived Entity, and Metadata Code. Metadata Sub Code represents direct Metadata (Metadata Sub Code is the same Metadata Code) or derived Metadata Code like Datasets/Expressions.	
14	Metadata Sub Type	Stores the Metadata Sub Type of the Lineage Report generated for the given Cell ID, Cell Group ID, Derived Entity, and Metadata Code.  Metadata Sub Code represents direct Metadata (Metadata Sub Code is the same Metadata Code) or derived Metadata Code like Datasets/Expressions.	
15	Result Area Table Application	Stores the Results Area Table Application of the Lineage Report generated for the given Cell ID, Cell Group ID, Derived Entity, Metadata Code, and Metadata Sub Code. The Results Area Table application is the responsible OFSAA Application to populate the table.	
16	Result Area Table Type	Stores the Results Area Table Type of the Lineage Report generated for the given Cell ID, Cell Group ID, Derived Entity, Metadata Code, and	

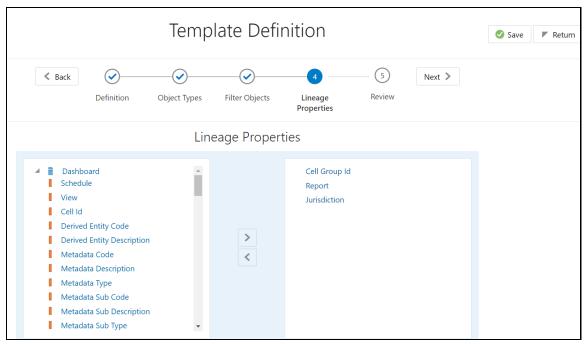
SI. No.	Lineage Property	Property Description	
		Metadata Sub Code. The Results Area Table Type represents how the table is populated. For example Data Flow, Seeded Data, and so on.	
17	Result Area Table	Stores the Results Area Table the Lineage Report generated for the given Cell ID, Cell Group ID, Derived Entity, Metadata Code, and Metadata Sub Code. The Results Area Table is the OFSAA data model table that populates or helps to populate the given Cell (MDRM) in the Reporting Layer.	
18	Result Area Column	Stores the Results Area Column the Lineage Report generated for the given Cell ID, Cell Group ID, Derived Entity, Metadata Code, Metadata Sub Code, and Results Area Table. The Results Area Table column is the OFSAA data model column that populates or helps to populate the given Cell (MDRM) in Reporting Layer.	
19	Report Filter Operator	Stores the Report Filter Operator of the Lineage Report generated for the given Results Area Column and Member Code. The operator represents the Agile REPORTER filter condition operator when a report is retrieved.	
20	Report Filter Member	Stores the Report Filter Member of the Lineage Report generated for the given Results Area Column. The operator represents the Agile REPORTER filter condition member when a report is retrieved.	
21	Target Metadata Operator	Stores the Target Metadata Operator of the Lineage Report generated for the given Results Area Column and Member Code embedded inside the Metadata like Business Processor, Hierarchy, or Dataset. The operator is derived after a standardization process like Reverting all <>, =, IN, NOT IN conditions to equal operator.	
22	Target Metadata Member	Stores the Target Metadata Operator of the Lineage Report generated for the given Results Area Column and Member Code embedded inside the Metadata like Business Processor, Hierarchy, or Dataset. The Member Code presents its ultimate form through a standardization process like Reverting all <>, =, IN, NOT IN conditions to the equal operator and getting the respective Member Codes.	
23	Reporting Run Name	Stores the Regulatory Reporting Run Name for Jurisdiction Code of Lineage Report generated.	
24	Lineage Run or Batch Level1	Stores the Level1 Run Name or Batch Name of Lineage Report generated for populating the Results Area Table and Column.	
25	Lineage Data Flow Name Level1	Stores the Level1 Data Flow Name of Lineage Report generated for populating the Results Area Table and Column.	
26	Lineage Data Flow Type Level1	Stores the Level1 Data Flow Type of Lineage Report generated for populating the Results Area Table and Column.	
27	Lineage Element Table Level1	Stores the Level1 Source Table of Lineage Report generated for populating the Results Area Table and Column.	
28	Lineage Element Column Level1	Stores the Level1 Source Column of Lineage Report generated for populating the Results Area Table and Column.	
29	Lineage Run or Batch Level2	Stores the Level2 Run Name or Batch Name of Lineage Report generated for populating the Level1 Source Table and Column.	

SI. No.	Lineage Property	Property Description	
30	Lineage Data Flow Name Level2	Stores the Level2 Data Flow Name of Lineage Report generated for populating the Level1 Source Table and Column.	
31	Lineage Data Flow Type Level2	Stores the Level2 Data Flow Type of Lineage Report generated for populating the Level1 Source Table and Column.	
32	Lineage Element Table Level2	Stores the Level2 Source Table of Lineage Report generated for populating the Level1 Source Table and Column.	
33	Lineage Element Column Level2	Stores the Level2 Source Column of Lineage Report generated for populating the Level1 Source Table and Column.	
34	Lineage Run or Batch Level3	Stores the Level3 Run Name or Batch Name of Lineage Report generated for populating the Level2 Source Table and Column.	
35	Lineage Data Flow Name Level3	Stores the Level3 Data Flow Name of Lineage Report generated for populating the Level2 Source Table and Column.	
36	Lineage Data Flow Type Level3	Stores the Level3 Data Flow Type of Lineage Report generated for populating the Level2 Source Table and Column.	
37	Lineage Element Table Level3	Stores the Level3 Source Table of Lineage Report generated for populating the Level2 Source Table and Column.	
38	Lineage Element Column Level3	Stores the Level3 Source Column of Lineage Report generated for populating the Level2 Source Table and Column.	
39	Lineage Run or Batch Level4	Stores the Level4 Run Name or Batch Name of Lineage Report generated for populating the Level3 Source Table and Column.	
40	Lineage Data Flow Name Level4	Stores the Level4 Data Flow Name of Lineage Report generated for populating the Level3 Source Table and Column.	
41	Lineage Data Flow Type Level4	Stores the Level4 Data Flow Type of Lineage Report generated for populating the Level3 Source Table and Column.	
42	Lineage Element Table Level4	Stores the Level4 Source Table of Lineage Report generated for populating the Level3 Source Table and Column.	
43	Lineage Element Column Level4	Stores the Level4 Source Column of Lineage Report generated for populating the Level3 Source Table and Column.	
44	Lineage Run or Batch Level5	Stores the Level5 Run Name or Batch Name of Lineage Report generated for populating the Level4 Source Table and Column.	
45	Lineage Data Flow Name Level5	Stores the Level5 Data Flow Name of Lineage Report generated for populating the Level4 Source Table and Column.	
46	Lineage Data Flow Type Level5	Stores the Level5 Data Flow Type of Lineage Report generated for populating the Level4 Source Table and Column.	
47	Lineage Element Table Level5	Stores the Level5 Source Table of Lineage Report generated for populating the Level4 Source Table and Column.	
48	Lineage Element Column Level5	Stores the Level5 Source Column of Lineage Report generated for populating the Level4 Source Table and Column.	
49	Lineage Run or Batch Level6	Stores the Leveló Run Name or Batch Name of Lineage Report generated for populating the Level5 Source Table and Column.	

Sl. No.	Lineage Property	Property Description	
50	Lineage Data Flow Name Level6	Stores the Leveló Data Flow Name of Lineage Report generated for populating the Level5 Source Table and Column.	
51	Lineage Data Flow Type Level6	Stores the Level6 Data Flow Type of Lineage Report generated for populating the Level5 Source Table and Column.	
52	Lineage Element Table Level6	Stores the Level6 Source Table of Lineage Report generated for populating the Level5 Source Table and Column.	
53	Lineage Element Column Level6	Stores the Level6 Source Column of Lineage Report generated for populating the Level5 Source Table and Column.	
54	Lineage Run or Batch Level7	Stores the Level7 Run Name or Batch Name of Lineage Report generated for populating the Level6 Source Table and Column.	
55	Lineage Data Flow Name Level7	Stores the Level7 Data Flow Name of Lineage Report generated for populating the Level6 Source Table and Column.	
56	Lineage Data Flow Type Level7	Stores the Level7 Data Flow Type of Lineage Report generated for populating the Level6 Source Table and Column.	
57	Lineage Element Table Level7	Stores the Level7 Source Table of Lineage Report generated for populating the Level6 Source Table and Column.	
58	Lineage Element Column Level7	Stores the Level7 Source Column of Lineage Report generated for populating the Level6 Source Table and Column.	
59	Lineage Run or Batch Level8	Stores the Level8 Run Name or Batch Name of Lineage Report generated for populating the Level7 Source Table and Column.	
60	Lineage Data Flow Name Level8	Stores the Level8 Data Flow Name of Lineage Report generated for populating the Level7 Source Table and Column.	
61	Lineage Data Flow Type Level8	Stores the Level8 Data Flow Type of Lineage Report generated for populating the Level7 Source Table and Column.	
62	Lineage Element Table Level8	Stores the Level8 Source Table of Lineage Report generated for populating the Level7 Source Table and Column.	
63	Lineage Element Column Level8	Stores the Level8 Source Column of Lineage Report generated for populating the Level7 Source Table and Column.	
64	Lineage Run or Batch Level9	Stores the Level9 Run Name or Batch Name of Lineage Report generated for populating the Level8 Source Table and Column.	
65	Lineage Data Flow Name Level9	Stores the Level9 Data Flow Name of Lineage Report generated for populating the Level8 Source Table and Column.	
66	Lineage Data Flow Type Level9	Stores the Level9 Data Flow Type of Lineage Report generated for populating the Level8 Source Table and Column.	
67	Lineage Element Table Level9	Stores the Level9 Source Table of Lineage Report generated for populating the Level8 Source Table and Column.	
68	Lineage Element Column Level9	Stores the Level9 Source Column of Lineage Report generated for populating the Level8 Source Table and Column.	
69	Lineage Run or Batch Level10	Stores the Level10 Run Name or Batch Name of Lineage Report generated for populating the Level9 Source Table and Column.	

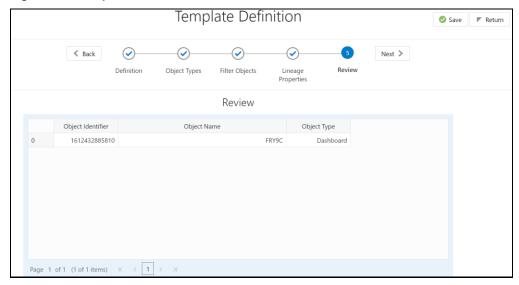
SI. No.	Lineage Property	Property Description	
70	Lineage Data Flow Name Level10	Stores the Level10 Data Flow Name of Lineage Report generated for populating the Level9 Source Table and Column.	
71	Lineage Data Flow Type Level10	Stores the Level10 Data Flow Type of Lineage Report generated for populating the Level9 Source Table and Column.	
72	Lineage Element Table Level10	Stores the Level10 Source Table of Lineage Report generated for populating the Level9 Source Table and Column.	
73	Lineage Element Column Level10	Stores the Level10 Source Column of Lineage Report generated for populating the Level9 Source Table and Column.	
74	Data Element Table Application	Stores the Ultimate Source Table Application of Lineage Report generated for populating the Results Area Table and Column. The application is responsible for sourcing the data.	
75	Data Element Table Type	Stores the Ultimate Source Table Type of Lineage Report generated for populating the Results Area Table and Column. This represents the Type of the Source Table like Download, Mapper Download, Seeded Data, Run Parameters, and so on.	
76	Data Element Table	Stores the Ultimate Source Table of Lineage Report generated for populating the Results Area Table and Column.	
77	Data Element Column	Stores the Ultimate Source Column of Lineage Report generated for populating the Results Area Table and Column.	
78	Data Element Filter Operator	Stores the Ultimate Source Table Column Operator Code of Lineage Report generated concerning Report Filter Operator in Results Area. This is the derived representation of the Report Filter Operator in the Results Area.	
79	Data Element Filter Member	Stores the Ultimate Source Table Column Member Code of Lineage Report generated concerning Report Filter Member Code in Results Area. This is the derived representation of the Report Filter Member Code in the Results Area.	
80	Data Element Metadata Operator	Stores the Ultimate Source Table Column Operator Code of Lineage Report generated concerning Target Metadata Operator in Results Area. This is the derived representation of the Target Metadata Operator in the Results Area.	
81	Data Element Metadata Member	Stores the Ultimate Source Table Column Member Code of Lineage Report generated concerning Target Metadata Member Code in Results Area. This is the derived representation of the Target Metadata Member Code in the Results Area.	

Figure 190: Lineage Properties Window



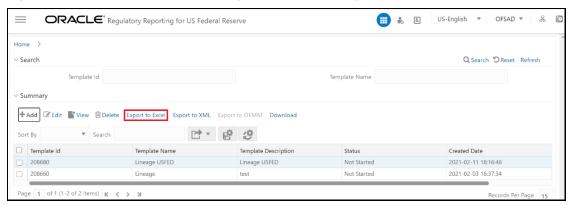
**18.** Review the Template Definition once and click Save.

Figure 191: Template Definition Review Window



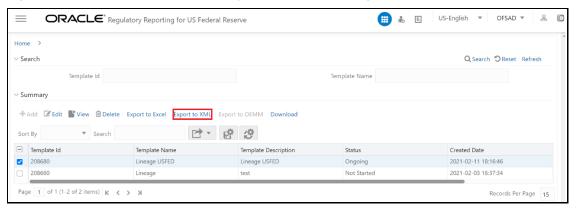
19. Click Return to go to the Summary page.

Figure 192: Template Definition Summary-Export to Excel Page



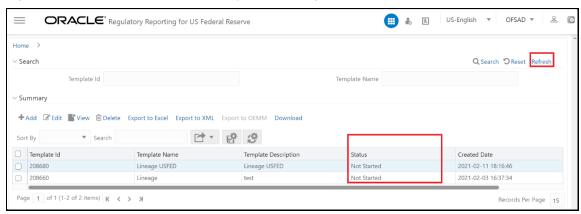
- **20.** Select a template in the Template List in the Summary screen and click Export to Excel to export the desired objects in Excel Sheet format.
  - MDB Publish must be triggered before executing the Export to Excel option.
- **21.** Select a template in the Template List in the Summary screen and click Export to XML to export the desired objects in XML format.
  - MDB Publish must be triggered before executing the Export to XML option.

Figure 193: Template Definition Summary-Export to an XML Page



**22.** The Report Generation function is an asynchronous action and to check the status of the export function, use the Refresh option in the *Summary* screen.

Figure 194: Template Definition Summary- Refresh Page

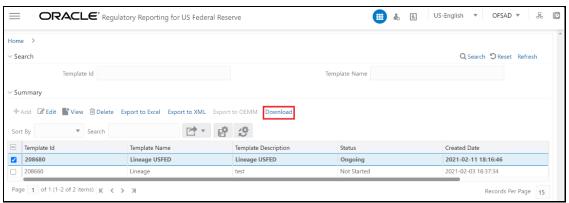


- For Excel Export, the following are the Status values:
- Not Started: The Report Generation is yet to start, but the function has triggered the action in the background.
- Ongoing: The Report Generation is started and in process.
- Completed: The Report Generation is completed and ready to view or download.
- Failed / Partially Completed / No Path Found: The Report Generation encountered an issue and the process is partially completed or failed.

The export logs are generated and placed in the path /Context\_Name/logs/MDB.log. Log files give the following information:

- a. All Paths Query
- **b.** The Query for each path and if data is present for this path
- c. Lineage Query
- d. Status of Excel Output Creation
- Exceptions and errors, if any.
- **23.** Select a template in the Template List in the *Summary* screen and click Download to save a copy of the generated Metadata Report Templates Excel Sheet, after the export status shows as completed.

Figure 195: Template Definition Summary-Download Page



#### **User Access**

The following user groups are pre-seeded in the component that helps you to get access to the Metadata Report Extract screen.

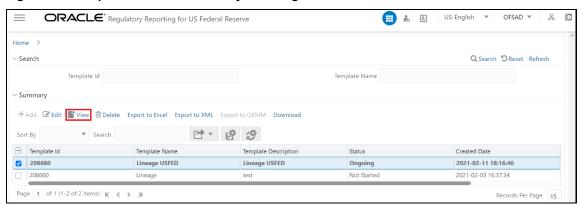
- 1. MDR View Group: To see Metadata Report Extract with View permissions.
- 2. MDR Owner Group: To create templates in Metadata Report Extract.

# 9.3.6 View Metadata Report Templates

Perform the following steps to view the Metadata Report Templates:

- 1. Select a template in the Template List in the Summary screen.
- **2.** Click the View icon to view the generated Metadata Report Templates excel report (after the export status shows as completed).

Figure 196: Template Definition Summary View Page



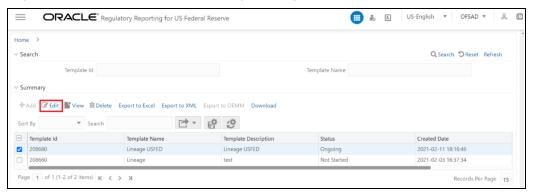
The Metadata Report Templates excel report is opened in view-only mode.

## 9.3.7 Modify or Edit Metadata Report Templates

Perform the following steps to edit or modify the Metadata Report Templates:

- **1.** Select a template in the Template List in the *Summary* screen.
- **2.** Click the Edit icon to modify the generated Metadata Report Templates excel report (after the export status shows as completed).

Figure 197: Template Definition Summary Edit Page

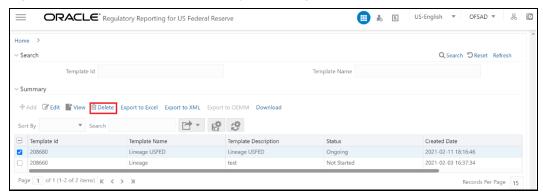


## 9.3.8 Delete Metadata Report Templates

Perform the following steps to delete the Metadata Report Templates:

- 1. Select a template in the Template List in the Summary screen.
- 2. Click the Delete icon to delete the Metadata Report Templates.

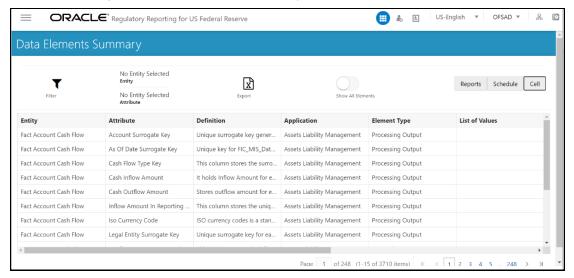
Figure 198: Template Definition Summary Delete Page



# 9.4 Viewing Data Elements Summary

Select Data Elements Summary from the main navigation menu to view all the Data Elements.

Figure 199: Data Elements Summary



By default, the page displays all the data elements.

Figure 200: Selection Panel



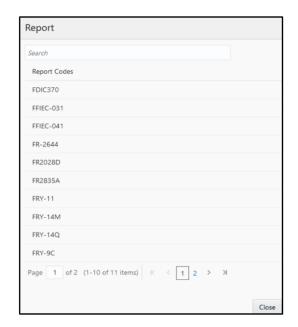
Click a row and the selection panel displays the selected entity and attribute.

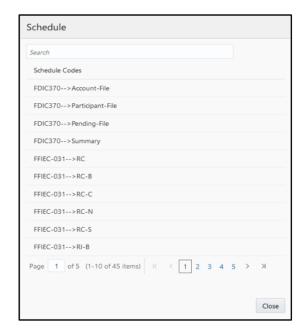
Figure 201: Selected Entity



The tabs on the right can be used to view reports, schedules, and cells as shown in Figure 201, which are utilized for the selected data element.

Figure 202: Report or Schedule View





NOTE

For <u>Viewing Data Elements</u> and <u>Viewing Data Elements</u> <u>Summary</u>, Data Elements batch execution is required for the screen to function.

# 10 Report Submission

This chapter provides an understanding of the report submission process.

#### Topics:

- Report Submission: AgileREPORTER to Regulator
- Edit Checks or Validity Check or Quality Checks
- Report Templates to be used in AgileREPORTER
- Supported Report Template Version and Activation Date

# 10.1 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, and so on.

# 10.2 Edit Checks or Validity Check or Quality Checks

The OFSAA UI carries out the report level or submission check comprising Edit Checks or Validity Checks, or Quality Checks as provided by the regulator.

NOTE

See <u>Validation or Edit Checks</u> and also the AgileREPORTER user documentation provided by VERMEG (Lombard Risk), for details of activities within the AgileREPORTER.

# 10.3 Report Templates to be used in AgileREPORTER

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

**Table 42: Report Templates for AgileREPORTER** 

Report or Schedule Name	Report Template
FDIC-8020	FDIC8020_V2
FFIEC-002	FFIEC002_V2
FFIEC-002S	FFIEC002S_V1
FFIEC-009	FFIEC009_V2
FFIEC-009A	FFIEC009A_V1
FFIEC-030	FFIEC030_V3
FFIEC-030S	FFIEC030S_V1
FFIEC-031	FFIEC031_V26

Report or Schedule Name	Report Template	
FFIEC-041	FFIEC041_V26	
FFIEC-101	FFIEC101_V2	
FR-2052A	FR2052A_V4	
FR-2314	FR2314_V6	
FR-2314S	FR2314S_V2	
FR-2420A	FR2420A_V3	
FR-2420B	FR2420B_V3	
FR-2420C	FR2420C_V4	
FR 2502Q	FR2502Q_V2	
FR-2644	FR2644_V4	
FR 2835A	FR2835A_V2	
FR-288SB	FR2886B_V3	
FR-2900 <sup>1</sup>	FR2900_V4	
FR Y-11	FRY11_V6	
FR Y-11S	FRY11S_V3	
FR Y-12	FRY12_V2	
FR Y-14A OR	FRY14AOR_V2	
FR Y-14A RCI	FRY14ARCI_V1	
FR Y-14A RCT	FRY14ARCT_V2	
FR Y-14A SCENR	FRY14ASCENR_V1	
FR Y-14A SUMM	FRY14ASUMM_V5	
FR Y-14M	FRY14M_V1	
FR Y-14MA1	FRY14MA1_V1	
FR Y-14MA2	FRY14MA2_V1	
FR Y-14MB1	FRY14MB1_V1	
FR Y-14MB2	FRY14MB2_V1	
FR Y-14MC	FRY14MC_V1	
FR Y-14MD1	FRY14MD1_V1	
FR Y-14MD2	FRY14MD2_V1	
FR Y-14QA1	FRY14QA1_V3	
FR Y-14QA AUTO	FRY14QAAUTO_V2	

Report or Schedule Name	Report Template
FR Y-14QA INTAUTO	FRY14QAINTAUTO_V2
FR Y-14QA INTCARD	FRY14QAINTCARD_V3

#### **Adjustment Entries Expectation for FR-2900**

FR-2900 Data Expectation for Account / GL granularity is daily. The reporting happens on Monday where the Derived Entity picks one week prior, that is, Tuesday of Last Week to current Monday (Reporting date). But the adjustment Entries for this report are expected to be populated only on Reporting Date (that is, Monday) for all the Cell IDs (MDRM Codes). Each Cell ID represents each Regulator Specific MDRM Code and Weekday (that is, MON, TUE, and so on).

Table 43: Table 44: Report Templates for AgileREPORTER

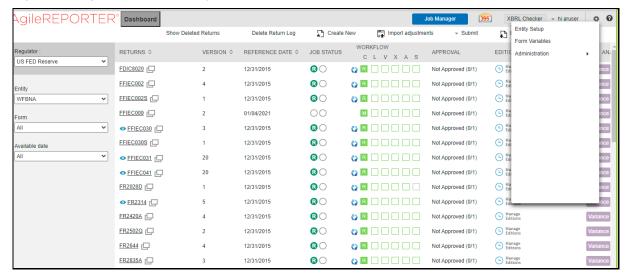
Report Name	Report Template
•	Report Template
FR Y-14QA INTFM	FRY14QAINTFM_V2
FR Y-14QA INTHE	FRY14QAINTHE_V2
FR Y-14QA INTL OTH CONS	FRY14QAINTLOTHCONS_V2
FR Y-14QA INTSB	FRY14QAINTSB_V2
FR Y-14QA STUDENT	FRY14QASTUDENT_V3
FR Y-14QA US OTH CONS	FRY14QAUSOTHCONS_V3
FR Y-14QA USSB	FRY14QAUSSB_V3
FR Y-14Q BAL	FRY14QBAL_V4
FR Y-14Q CIL	FRY14QCIL_V1
FR Y-14Q CIL H1	FRY14QCILH1_V1
FR Y-14Q CRE	FRY14QCRE_V1
FR Y-14Q FVO/HFS	FRY14QFVOHFS_V3
FR Y-14Q MSR	FRY14QMSR_V1
FR Y-14Q OPSRISKBL	FRY14QOpsriskBL_V1
FR Y-14Q OPSRISKMS	FRY14QOpsriskMS_V1
FR Y-14Q OPSRISKRFR	FRY14QOpsriskRFR_V1
FR Y-14Q OPSRISKTH	FRY14QOpsriskTH_V1
FR Y-14Q OPSRISKUOM	FRY14QOpsriskUOM_V1
FR Y-14Q PPNR	FRY14QPPNR_V2
FR Y-14Q RCI	FRY14QRCI_V2
FR Y-14Q RCT	FRY14QRCT_V3
FR Y-14Q RETAIL AUTO	FRY14QAAUTO_V2

Report Name	Report Template
FR Y-14Q RETAIL INTAUTO	FRY14QAINTAUTO_V2
FR Y-14Q RETAIL INTCARD	FRY14QAINTCARD_V3
FR Y-14Q RETAIL INTFM	FRY14QAINTFM_V2
FR Y-14Q RETAIL INTHE	FRY14QAINTHE_V2
FR Y-14Q RETAIL INTL OTHCONS	FRY14QAINTLOTHCONS_V2
FR Y-14Q RETAIL INTSB	FRY14QAINTSB_V2
FR Y-14Q RETAIL STUDENT	FRY14QASTUDENT_V3
FR Y-14Q RETAIL US OTHCONS	FRY14QAUSOTHCONS_V3
FR Y-14Q RETAIL USSB	FRY14QAUSSB_V3
FR Y-14Q SEC	FRY14QSEC_V5
FR Y-14Q SUPMNT	FRY14QSUPMNT_V2
FR Y-14Q TRADING	FRY14QTRADING_V3
FR Y-15	FRY15_V9
FR Y-20	FRY20_V2
FR Y-7N	FRY7N_V4
FR Y-7NS	FRY7NS_V1
FR Y-7Q	FRY7Q_V2
FR Y-9C	FRY9C_V18
FR Y-9LP	FRY9LP_V8

# 10.4 Supported Report Template Version and Activation Date

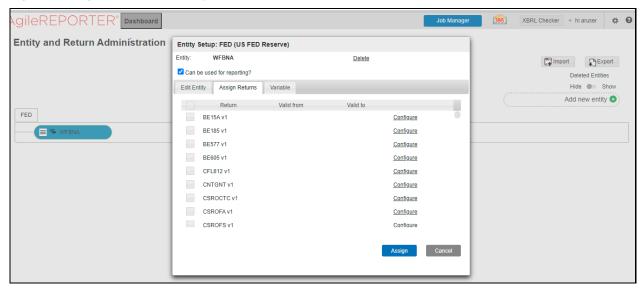
The AgileREPORTER contains the details of the Report Template version and the Activation Date of the same. This can be accessed by selecting the Entity setup option in the Settings Menu which enables you to Add, Modify, and Delete Entities. Click on an existing Entity to access Report Templates according to version and the Activation Date, and assign the necessary privileges as required.

Figure 203: AgileREPORTER Entity Setup



Click on a Created Entity to access report templates according to the Version and the Activation Date, and assign the necessary privileges as required.

Figure 204: AgileREPORTER Entity Setup: US FED Reserve



# 11 Maintenance

This chapter provides an understanding of the maintenance process for the Regulatory Templates.

Changes to the Regulatory Template are one of the most common and continuous activities. The following steps help to assess the impact (You can replace the measure, dimension for existing data warehousing configuration pack using the following process):

- Choosing different execution as a final. After report verification, if the requirement is to change the
  execution, then you must visit the Process Execution Summary section. After making these changes
  you must refresh Derived Entities. Then AgileREPORTER also needs to retrieve returns so that
  revised data is reflected on AgileREPORTER.
- 2. If Executing Batch to resave Derived Entities is not working, you can look for Batch Operation Log files. For file path, OFS Analytical Applications Infrastructure Installation and Configuration Guide.
- 3. To apply a revised patch, refer to the ReadMe file for instructions to be followed.
- **4.** To update the revised data warehouse configuration pack, perform the following instructions.
  - a. Navigate to Settings, select Administration, and then select Data Warehouse Integration.

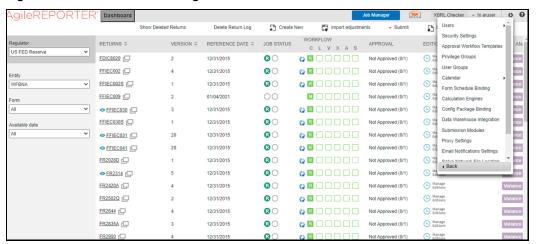


Figure 205: Data Warehouse Integration

- b. Click Add to add a contextual button.
- c. Enter details of the contextual button.

**Name:** The text 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.

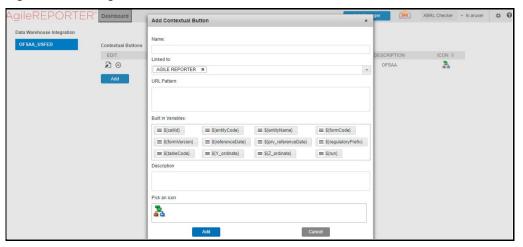
http://<<OFSAA\_HOST>>:<<OFSAA\_PORT>>/<
drilldown/USFED/\${formCode}/\${cellId}/\${formVersion}/\${referenceDate}/\${run}/\${entityCode}

#### Example:

http://10.40.72.155:7278/OFSAA/drilldown/USFED/\${formCode}/\${cellId}/\${formVersion}/\${referenceDate}/\${run}/\${entityCode}

- i. Use http or https depending on the protocol configured for OFSAA.
- **ii.** Select an icon.
- d. Click Add to save the details.

Figure 206: Adding Contextual Button



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

**NOTE** 

• See <u>AgileREPORTER user documentation</u> for details.

## Validation or Edit Checks for Data Schedules

This chapter explains the validation or edit checks for various data schedules supported within the Regulatory Reporting Application.

## 12.1 Overview of Edit Check Process

As per regulatory references, edit checks are used during Regulatory Report submission to verify and improve overall data quality and communicate key structural features of the collection. "DATA COLLECTED" for the Regulator is "DATA SUBMITTED" for a Reporting Entity.

For template reports, edit checks are exclusively handled in VERMEG (Lombard Risk) AgileREPORTER and are not covered in the OFSAA Application.

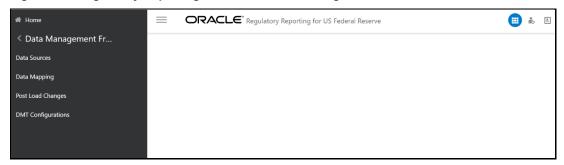
# 12.2 Configuration Steps

Perform the following configurations to validate / edit check for the data schedules before the Edit Check Execution:

### 12.2.1 Source Model Generation

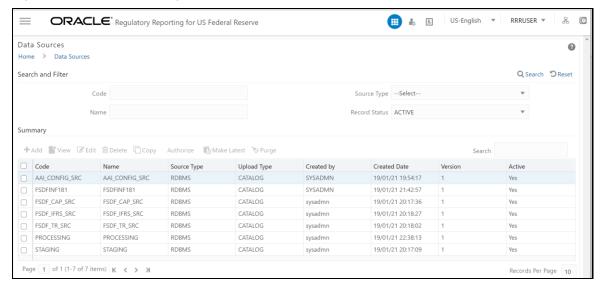
1. After logging into the OFSAAI Applications page, navigate to **Regulatory Reporting for US Federal Reserve** Application.

Figure 207: Regulatory Reporting Us Federal Reserve Page



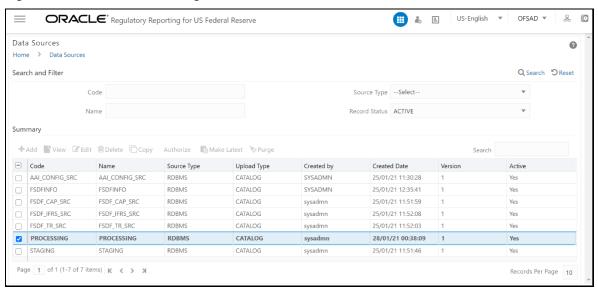
2. Navigate to **Data Management Framework** and select **Data Sources**. A new window is displayed as follows.

Figure 208: Data Sources Page



3. In the Summary pane, select PROCESSING and click the Edit icon. A new edit pane is displayed.

Figure 209: Data Sources Edit Page



4. Select Catalog and enter the required details.

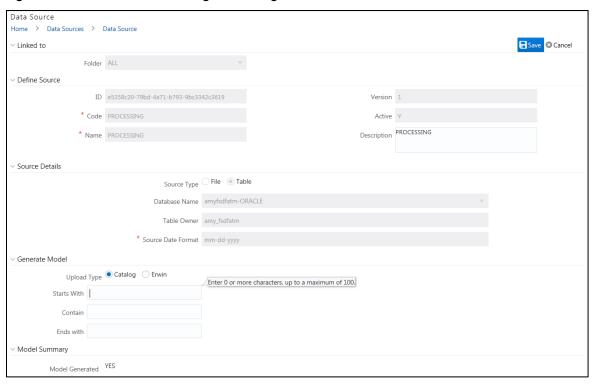


Figure 210: Generate Model Catalog Details Page

**5.** Click Save to complete the configuration.

## **12.2.2 SETUP\_MASTER Table**

The SETUP\_MASTER table must be updated with the top-most parent entity for the Bank that is used for consolidation with the following SQL Statement:

**UPDATE SETUP\_MASTER** 

SET V\_COMPONENT\_VALUE = <Topmost Parent Entity Code>

WHERE V\_COMPONENT\_CODE = '2052A\_CONS\_ENTITY\_CODE';

# 12.3 Execution Steps

Perform the following batch run to complete the Edit Check execution:

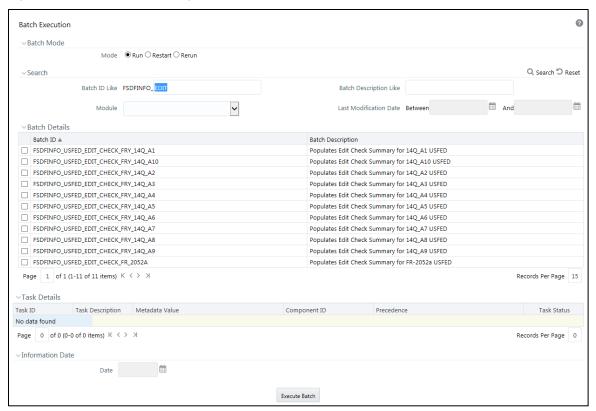
FSDFINFO\_USFED\_EDIT\_CHECK\_FR\_2052A batch.

## **12.4** How to Execute the Batches?

Perform the following steps to complete the Edit Check Batch Execution:

- 1. Log in to OFSAA application GUI.
- 2. Navigate to Regulatory Reporting for US Federal Reserve, select Process and Operations, select Operations, and then select Batch Execution. The Batch Execution window is displayed as follows.

Figure 211: Batch Execution page



**3.** Enter the edit check name in Batch ID Like and click Search. The Batch ID is displayed in the *Batch Details* pane.

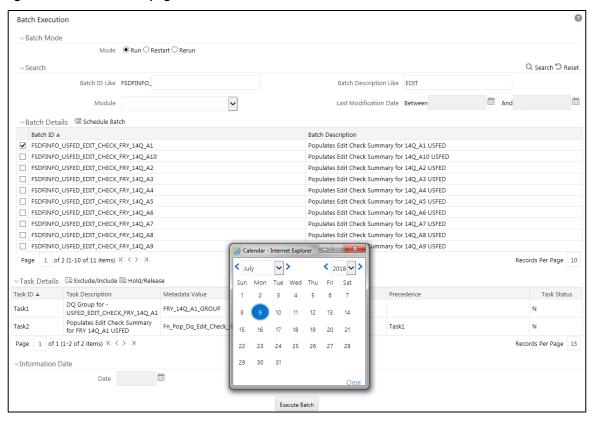


Figure 212: Batch Details page

**4.** Select the Batch ID, click the Date icon to choose the batch execution run date, and click Execute Batch.

# 12.5 Logs and Status

For Batch log, navigate to **Regulatory Reporting for US Federal Reserve**, select **Process and Operations**, select **Operations**, and then select **Batch Monitor** to check the status of the batch.

The Edit Check log is classified into two types:

### 1. Summary Table

The FSI\_EDIT\_CHECK\_SUMMARY table stores the summary of the edit check executions for all the OFSAA implementations of edit checks. The summary table attributes and descriptions are as follows.

Table 45: FSI Edit Check Summary Table

Attribute Name	Attribute Description	
V_BATCH_ID	This is the ID provided by the batch execution.	
N_EDIT_CHECK_SKEY	This is the surrogate key (SKey) of the edit check from the FSI_EDIT_CHECK_MASTER table.	
V_DQ_CHECK_ID	This is the ID from the DQ_CHECK_MASTER table populated for the Data Quality Check-based edit checks.	

Attribute Name	Attribute Description	
RUN_STATUS	The following are the values for RUN_STATUS:	
	F – Failed	
	E – Error	
	I – Information	
	W – Warning	
	P – Pass	
	Null – Data Quality makes no entry is for RUN_STATUS if there is no data being processed.	
FAILED_ROWS	The number of rows for the RUN_STATUS.	
FIC_MIS_DATE	Date of the Batch execution.	
ENTITY	Data Transformation edit checks populate the individual entity names of the checks.	

Edit Check does not make an entry for either ENTITY or DQ\_CHECK\_ID if it is aggregated validations performed across multiple FR-2052A report data schedules.

#### 2. Detail Table

The following table shows the mapping for each Edit Check and its Details Table.

**Table 46: Detail Table** 

Edit Check No.	Edit Check Description	Edit Check Type	Details Table
2	Internal Transactions Reported on Consolidated Reporting Entity	Data Quality	DQ_RESULT_SUMM_MASTER DQ_RESULT_DETL_MASTER
3	Internal Transactions Reported Without Internal Counterparty	Data Quality	DQ_RESULT_SUMM_MASTER DQ_RESULT_DETL_MASTER
4	Lendable Value in Excess of Market Value	Data Quality	DQ_RESULT_SUMM_MASTER DQ_RESULT_DETL_MASTER
5	Third-Party Reporting Entity Exposures versus Consolidated	Data Transformatio n	FSI EDIT CHECK 5 LOG
6	Symmetry of Intercompany Transactions	Data Transformatio n	FSI EDIT CHECK 6 LOG
7	Large Haircuts on Secured Transactions	Data Quality	DQ_RESULT_SUMM_MASTER DQ_RESULT_DETL_MASTER

9	Missing Required Products by Entity Type	Data Transformatio n	FSI RUN PROD BY ENT TYP LOG
10	Improper Intra-entity Consolidation	Data Quality	DQ_RESULT_SUMM_MASTER DQ_RESULT_DETL_MASTER
12	Invalid or Missing Counterparty Field	Data Quality	DQ_RESULT_SUMM_MASTER DQ_RESULT_DETL_MASTER
13	Missing or Not Applicable [Collateral Class] Field	Data Quality	DQ_RESULT_SUMM_MASTER DQ_RESULT_DETL_MASTER
14	Large Other Product or Counterparty Balance	Data Transformatio n	FSI_EDIT_CHECK_SUMMARY
15	FRY-14MD2	Control Total Check	AAI_DQ_CTC_RESULT_DETAIL  AAI_DQ_CTC_RESULT_SUMMARY  FSI_EDIT_CHECK_SUMMARY
16	FRY-14MD2	Specific Check	DQ_RESULT_SUMM_MASTER DQ_RESULT_DETL_MASTER

The Data Transformation Details Tables with the attributes and descriptions are as follows.

## 3. FSI\_EDIT\_CHECK\_5\_LOG

This table stores the result of the comparison between aggregation of maturity value, collateral value, lendable value, and market value of the top-most parent entity with its child entities.

Table 47: FSI Edit Check 5 Log

Attribute Name	Attribute Description
D_FIC_MIS_DATE	FIC MIS DATE of the batch provided during execution
N_MATURITY_STATUS	Maturity status has two values:  0 – Maturity values of the parent not matching child entities  1 – Maturity Values of the parent matching child entities
N_COLLATERAL_STATUS	Collateral status has two values:  0 – the Collateral value of the parent not matching the child entities  1 – the Collateral value of parent matching the child entities
N_LENDABLE_STATUS	Lendable status has two values:  0 – Lendable value of the parent not matching the lendable value of the child entities  1 – Lendable values of the parent matching the lendable values of child entities
N_MARKET_STATUS	Market status has two values:  0 – Market value of the parent not matching child entities  1 – Market value of parent matching child entities

Attribute Name	Attribute Description
V_BATCH_ID	The batch ID of the batch being executed

### 4. FSI\_EDIT\_CHECK\_6\_LOG

This table stores the result of the comparison between the maturity outflow amount versus the maturity inflow amount.

Table 48: FSI Edit Check 6 Log

Attribute Name	Attribute Description
V_INTERNAL_COUNTERPARTY	Internal Counterpart value of the Inflow / Outflow
D_FIC_MIS_DATE	FIC MIS DATE of the batch provided during execution
N_ED_STATUS	ED status has two values:
	0 – Maturity value sum of inflow not matching outflow
	1 – Maturity value sum of inflow matching outflow
V_BATCH_ID	The batch ID of the batch being executed
V_REPORTING_ENTITY	Legal Entity Name / Internal Counterparty of the views

#### 5. FSI\_RUN\_PROD\_BY\_ENT\_TYP\_LOG

This table stores the availability status of PIDs for the reporting entity's entity type.

**Table 49: PID Reporting Entity Type** 

Attribute Name	Attribute Description
RUN_SKEY	RUN SKEY is the run from the views
FIC_MIS_DATE	FIC MIS Date of the batch being executed
ENTITY_TYPE	Entity Type of the Reporting Entity
PID	PID of the record from view
STATUS_FLAG	Status values have two flags:  1 – PID is present for that entity type of Reporting Entity  0 – PID missing for that entity type of Reporting Entity
BATCH_ID	The batch ID of the batch being executed

The status of validation/edit checks are stored in the following SQL statement:

```
SELECT T1.FIC_MIS_DATE, T2.V_ED_CHK_ID, T2.V_ED_CHK_NAME, T2.V_ED_CHK_DESC,

NVL(T1.V_DQ_CHECK_ID, T1.ENTITY)

ENTITY, T1.FAILED_ROWS, T1.RUN_STATUS

FROM

FSI EDIT CHECK SUMMARY T1,
```

```
FSI_EDIT_CHECK_MASTER T2
WHERE T1.N_EDIT_CHECK_SKEY = T2.N_EDIT_CHECK_SKEY
AND T1.V BATCH ID = <Batch ID>
```

# 12.6 FR 2052A Post-Submission Validation Checks

This section outlines the automated validation applied to each FR 2052A submission to verify and improve overall data quality and communicate key structural features of the collection. These checks represent the early foundation of a validation framework for the FR 2052A report and are refined and expanded upon as the collection progresses. OFS Regulatory Reporting performs the following checks either through Data Quality or Design.

Validation Check	Performed in: Regulatory Reporting / Lombard Risk AgileREPORTER / Processing	Approach: Design / Data Quality / Data Transformation
Internal Transactions Reported on Consolidated Reporting Entity	Regulatory Reporting	Data Quality
Internal Transactions Reported Without Internal Counterparty	Regulatory Reporting	Data Quality
Lendable Value in Excess of Market Value	Regulatory Reporting	Data Quality
Third-Party Reporting Entity Exposures versus Consolidated	Regulatory Reporting	Data Transformation
Symmetry of Intercompany Transactions	Regulatory Reporting	Data Transformation
Large Haircuts on Secured Transactions	Regulatory Reporting	Data Quality
Mismatched Currency Reporting	Regulatory Reporting	Design (this is handled as part of OFS Regulatory Reporting Model design)
Missing Required Products by Entity Type	Regulatory Reporting	Data Transformation
Improper Intra-entity Consolidation	Regulatory Reporting	Data Quality
Invalid or Missing Counterparty Field	Regulatory Reporting	Data Quality
Missing or Not Applicable (Collateral Class) Field	Regulatory Reporting	Data Quality
Large Other Product or Counterparty Balance	Regulatory Reporting	Data Transformation
Weekend Maturities (in respective source system)	Processing	_

# 12.7 FR Y-14MD2 Post-Submission Validation Checks

This section outlines the different checks performed for FR Y-14MD2 to verify and improve overall data quality. The total number of DQ checks available in the release for FR Y-14MD2 submission is 143. To get the count (Integrity Check), "Control Total Check" is configured, and for others "Specific Check". All checks are part of DQ GROUP "FRY\_14M\_D2\_GROUP".

**Table 50: Post Submission Validation Checks** 

Validation Check	Performed in: Regulatory Reporting / Lombard Risk AgileREPORTER / Processing	Approach: Design / Data Quality / Data Transformation
Count of portfolios with negative values	Regulatory Reporting	Data Quality
Count of portfolios less than/greater than the reference value	Regulatory Reporting	Data Quality
Count of portfolios not equal to the reference value	Regulatory Reporting	Data Quality
Field with Null Value	Regulatory Reporting	Data Quality
Field format N12.4.	Regulatory Reporting	Data Quality
Bank ID is not in the format N10.	Regulatory Reporting	Data Quality
Credit Card Type/Credit Card Lending Type has value other than 1-4	Regulatory Reporting	Data Quality
Period ID should be the last day of the reporting period of the data set. This field must be always a past date and must be different from Period Id in the previous month's dataset.	Regulatory Reporting	Design (this is handled as part of OFSAA DQ check as we are passing mis_date while executing the DQ)

# 13 Troubleshooting Guidelines

This section covers Troubleshooting Guidelines for the users of Oracle Financial Services Regulatory Reporting Integration with AgileREPORTER, called Integration.

Integration users provide the data inputs through the OFSDF where data is loaded, processed and results are made available for reporting purposes. The 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 or Editing of this aggregated data.

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

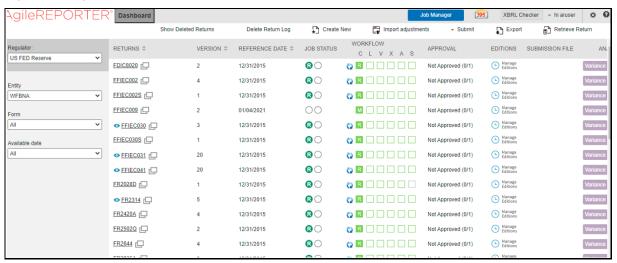
### **Topics**:

- Prerequisites
- Troubleshooting Use Cases

# 13.1 Prerequisites

It is assumed that you can log in and see the following menus and respective reports in AgileREPORTER.

Figure 213: 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 purposes and the actual name depends on the integration pack licensed.

## 13.2 Troubleshooting Use Cases

This section provides information about the various troubleshooting use cases in AgileREPORTER.

#### **Topics:**

- Unable to Generate Report
- Invalid Filter Combination for the Given Return
- Data Unavailable in AgileREPORTER
- Data Available in AgileREPORTER but Not as Expected

## 13.2.1 Unable to Generate Report

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

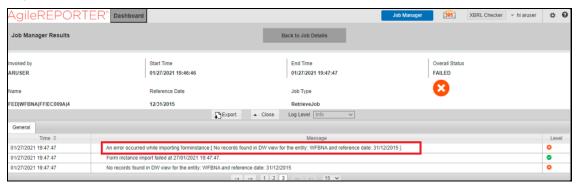
If the process mentioned in Installation Manual is correctly followed and still the report list is not available, then you are requested to log in to the bug or service request with VERMEG (Lombard Risk).

## 13.2.2 Invalid Filter Combination for the Given Return

If you are unable to generate reports and if you get the "Invalid filter combination for the given return" error, then there can be two possibilities for this failure:

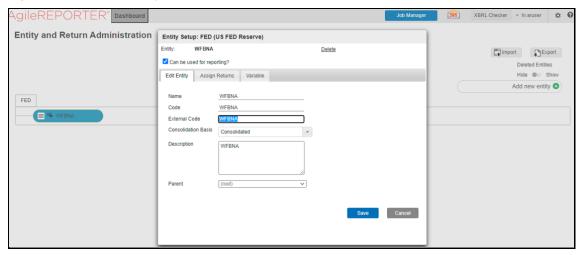
**1.** Data in the RUNEXESUMM view in the Atomic Schema is not matching with the Lombard retrieval that includes Date, Run, Entity, or Entity's Consolidation Type.

Figure 214: Data in RUNEXESUMM View



2. External Code is not matching with the Code for Entity as per OFSAA.

Figure 215: Code for Entity



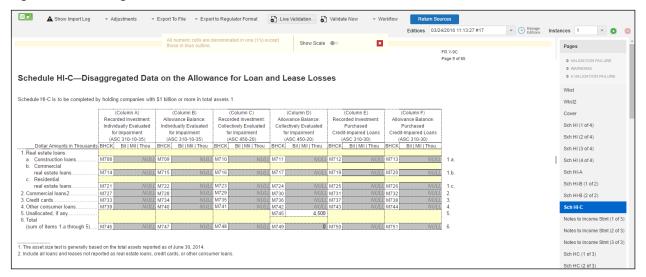
## 13.2.3 Data Unavailable in AgileREPORTER

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

## 13.2.3.1 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 Entity does not have data at all.

Figure 216: Fetching Null Values



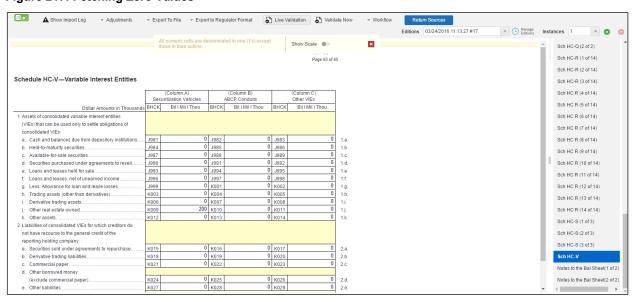


Figure 217: Fetching Zero Values

#### You must validate as:

- **1.** Derived Entity has data:
  - **a.** Execute the Derived Entity or Materialized views to check if the Derived Entity has data or not.
  - **b.** If the Derived Entity or materialized view has data but not showing in AgileREPORTER, you must log a Bug or Service Request with VERMEG (Lombard Risk).
- 2. Derived Entity does not have data:
  - **a.** Execute the Derived Entity or Materialized views to check if the Derived Entity has data.
  - **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 or Service Request with AgileREPORTER.
  - **g.** If data is not available in the dataset, then check if the 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 or Service Request with My Oracle Support.

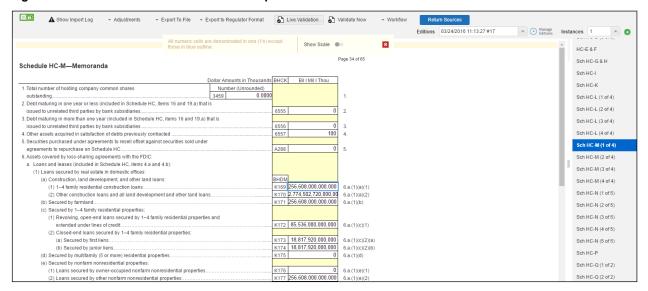
## 13.2.4 Data Available in AgileREPORTER but Not as Expected

This use case is where you can reference data for a required cell of a schedule in AgileREPORTER; however, the value shown differs from the expected value.

Let us take the following example to illustrate the steps to be followed. This refers to Schedule HC-M from the FR Y-9C report from US FED. A particular cell referred to here is BHDMK169 –

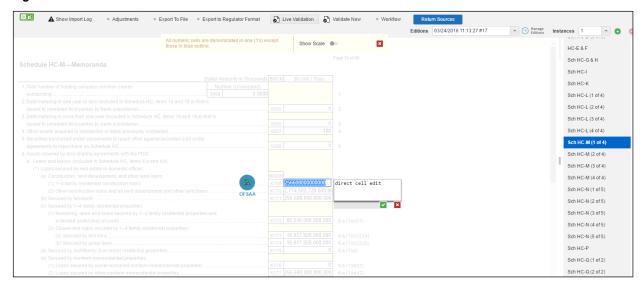
- 6.a. Loans and leases (included in Schedule HC, items 4.a and 4.b):
- (1) Loans secured by real estate in domestic offices:
- (a) Construction, land development, and other land loans:
- (1) 1–4 family residential construction loans

Figure 218: Schedule HC-M from FR Y-9C Report



You can Drill-down for each cell to check the details of data as to what is included in the aggregation. To Drill-down, click the value of a particular cell, and it is shown as highlighted. It shows the OFSAA Data Lineage icon on clicking as shown in Figure 219.

Figure 219: Drill-down OFSAA Icon



Make sure that you are logged into to OFSAA infrastructure before clicking the Data Lineage icon.

- If you are not logged in, click on this icon to open the OFSAA Infrastructure Login Window. Log in
  using appropriate credentials and return to the Report Portal and click the same Data Lineage icon
  again.
- If you are logged in to OFSAA Infrastructure, the Data Lineage first page opens.

Figure 220: AgileREPORTER Drill-down



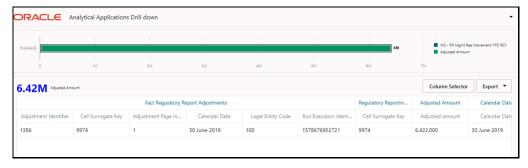
The top pane of this screen shows the following information which helps to connect the AgileREPORTER aggregated data to OFSAA references.

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

The lower pane displays all hierarchies with values used in a given Derived Entity and measures aggregated for a given combination of hierarchy values.

To refer to the measure values, scroll rightwards using the horizontal scroll bar at the bottom. On the extreme right, adjusted amounts are displayed as shown in Figure 221:

Figure 221: Adjusted Amount



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

### **Topics**:

- Using Drill-down with Data Lineage View
- Data Lineage View is Unavailable

### 13.2.4.1 Using Drill-down with Data Lineage View

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

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

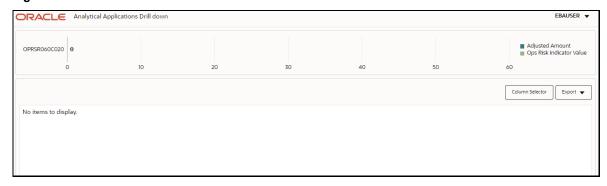
Any deviation from expectations can be then checked back for:

- 1. If the measure is stage pass through, then validate using T2T to verify if stage data is as expected or must be corrected.
- **2.** If the measure is processed, then validate using T2T to verify processing measure is correctly moved to the 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 sequences which can lead to overwriting the values.
- **4.** If all the source data is as expected and the result area is now showing unexpected output, then log a Bug or Service Request with My Oracle Support.

### 13.2.4.2 Drill-down View is Unavailable

If the second block does not show any data, then data analysts or you are advised to see the Dataset worksheet of Business Metadata.

Figure 222: Drill-down Data Unavailable



There can be a few reasons why the Drill-down screen does not show the data:

- Internet connection is timed out or broken down in this case clicking Data Lineage on AgileREPORTER results in a drill-down of the page. To rectify this, re-login to OFSAA infrastructure and AgileREPORTER.
- **2.** Drill-down data view works after Metadata is published using OFSAA Infrastructure to validate if Metadata is properly published or not.
- 3. If Metadata is published and the Drill-down Screen still does not show the data, then start with the Derived Entity Code shown at the beginning of the Drill-down Screen. This Derived Entity Code is available even if data is unavailable.

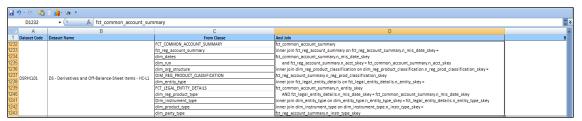
**4.** Using this Derived Entity code, data analysts are advised to see the OFSAA Business Metadata document with the worksheet name as *Derived Entity*. Sample Business Metadata excel is shown in the following Figure 223:

Figure 223: Business Metadata-1



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

Figure 224: Business Metadata-2



The Dataset ANSI Joins provides valuable information on how various entities are joined or 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 or Service Request with My Oracle Support.

# **OFSAA Support**

Raise a Service Request (SR) in My Oracle Support (MOS) for queries related to the OFSAA Applications.

## **Send Us Your Comments**

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- Is the information clearly presented?
- Do you need more information? If so, where?
- Are the examples correct? Do you need more examples?
- What features did you like most about this manual?

If you find any errors or have any other suggestions for improvement, indicate the title and part number of the documentation along with the chapter/section/page number (if available) and contact the Oracle Support.

Before sending us your comments, you might like to ensure that you have the latest version of the document wherein any of your concerns have already been addressed. You can access My Oracle Support site that has all the revised/recently released documents.

