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

User Guide

Release 8.1.0.0.0

April 2022

ORACLE
Financial Services

ORACLE

Oracle Financial Services Regulatory Reporting for US Federal Reserve – Lombard Risk Integration Pack User Guide

Copyright © 2022 Oracle and/or its affiliates. All rights reserved.

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish, or display any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited.

The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

If this is software or related documentation that is delivered to the U.S. Government or anyone licensing it on behalf of the U.S. Government, then the following notice is applicable.

U.S. GOVERNMENT END USERS: Oracle programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, delivered to U.S. Government end users are "commercial computer software" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, use, duplication, disclosure, modification, and adaptation of the programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, shall be subject to license terms and license restrictions applicable to the programs. No other rights are granted to the U.S. Government.

This software or hardware is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications that may create a risk of personal injury. If you use this software or hardware in dangerous applications, then you shall be responsible to take all appropriate fail-safe, backup, redundancy, and other measures to ensure its safe use. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software or hardware in dangerous applications.

Oracle and Java are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

Intel and Intel Xeon are trademarks or registered trademarks of Intel Corporation. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. AMD, Opteron, the AMD logo, and the AMD Opteron logo are trademarks or registered trademarks of Advanced Micro Devices. UNIX is a registered trademark of The Open Group.

This software or hardware and documentation may provide access to or information about content, products, and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services unless otherwise set forth in an applicable agreement between you and Oracle. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services, except as set forth in an applicable agreement between you and Oracle.

For information on third party licenses, click here.

Document Control

Version Number	Revision Date	Change Log
03	April 26, 2022	Added the section Recommendations to execute 8.0.x runs in RRF without Run Management UI.
02	February 18, 2021	Updated: Final draft published
01	December 02, 2020	Created: Draft published

Table of Contents

1 Preface

Welcome to Release 8.1.0.0.0 of the Oracle Financial Services Regulatory Reporting for US Federal Reserve – Lombard Risk Integration Pack User Guide.

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

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

This section lists new features and changes in OFS RE REP USFED release v8.1.0.0.0.

1.1.1 New Features

The new features introduced in this release are as follows:

- Conversion of existing Run Rule Framework to the new OFSAAI Process Modelling Framework feature. For more information, see the Executing Run through Process Modelling Framework in OFS REG REP USFED.
- New USFED Menu to access Data Extracts, Metadata Browse , and Reports (Report Summary and Data Elements Summary). For more information, see the Data Extracts, Metadata Browser, and Viewing Report Summary.
- Enabling the Reporting Flag for a run through the new Process Execution Summary module. For more information, see the Reporting Flag for Run through Process Execution Summary
- New Drill down User Interface. For more information see the Report Verification – Drill down from AgileREPORTER to OFSAA Results Area.

1.2 Deprecated Features

There are no deprecated features in this manual.

1.3 Desupported Features

The desupported feature for OFS REG REP USFED Release v8.1.0.0.0 is the Run Execution and Run Management features through the Run Rule Framework.

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 8.1.0.0.0. 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 8.1.0.0.0 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 http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info
or visit http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs if you are hearing impaired.

1.7 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 – Lombard Risk Integration Pack Installation Manual Release 8.1.0.0.0
- Oracle Financial Services Data Foundation User Guide Release 8.1.0.1.0
- Oracle Financial Services Data Foundation Installation Manual Release 8.1.0.1.0
- Oracle Financial Services Analytical Applications Infrastructure User Guide Release 8.1.0.0.0 (present in the OHC documentation library)

1.8 How This Guide is Organized

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

- Chapter 2: Introduction

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 *Italics*. Screen names are indicated in the following manner: **Introduction** screen Options and buttons are indicated in **Bold**. 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 – Lombard Risk Integration Pack

2 Introduction

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

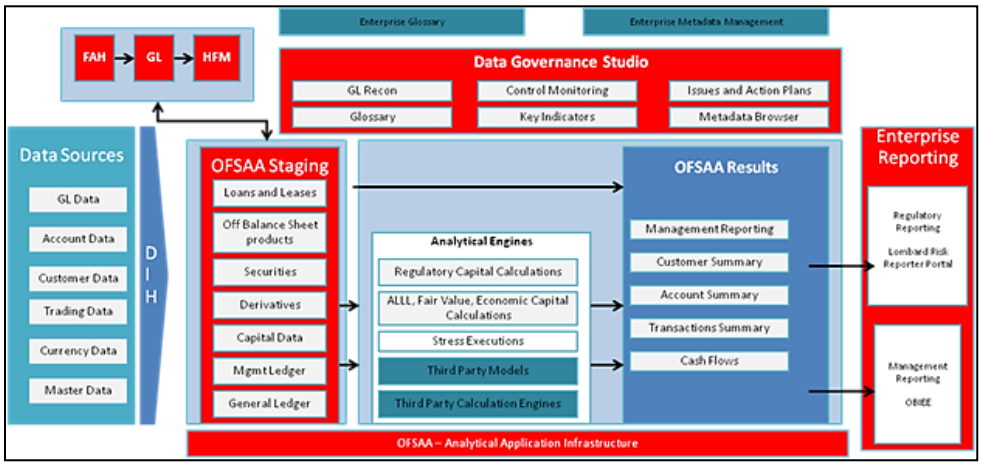
2.1 Overview

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 Lombard Risk. As you can see in the Architecture figure above, Data flows from OFSAA to Lombard Risk.

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, including:

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 – Lombard Risk 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
FR Y-20	Financial Statements for a Bank Holding Company Subsidiary Engaged in Bank-Ineligible Securities Underwriting and Dealing	8.1
FR Y-15	Banking Organization Systemic Risk Report	8.1
FFIEC-009	Country Exposure Report	8.1
FFIEC-009A	Country Exposure Information Report	8.1
FR Y-11	Financial Statements of U.S. Nonbank Subsidiaries of U.S. Holding Companies	8.1
FR Y-11S	Abbreviated Financial Statements of U.S. Nonbank Subsidiaries of U.S. Holding Companies	8.1

Report	Report Name	Released Version
FR-2314	Financial Statements of Foreign Subsidiaries of U.S. Banking Organizations	8.1
FR-2314S	Abbreviated Financial Statements of Foreign Subsidiaries of U.S. Banking Organizations	8.1
FR Y-14A	Capital Assessments and Stress Testing - Annual	8.1
FR Y-9LP	Parent Company Only Financial Statements for Large Holding Companies	8.1
FFIEC-031	Consolidated Reports of Condition and Income for a Bank with Domestic and Foreign Offices	8.1
FR Y-12	Consolidated Holding Company Report of Equity Investments in Nonfinancial Companies	8.1
FFIEC-041	Consolidated Reports of Condition and Income for a Bank with Domestic Offices Only	8.1
FR-2052A	Complex Institution Liquidity Monitoring Report	8.1
FR Y-7N	Financial Statements of U.S. Nonbank Subsidiaries Held by Foreign Banking Organizations	8.1
FR Y-7NS	Abbreviated Financial Statements of U.S. Nonbank Subsidiaries Held by Foreign Banking Organizations	8.1
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
FR-2886B	Cash and Balances Due from Depository Institutions	8.1
FR-2900	Report of Transaction Accounts, Other Deposits, and Vault Cash (Commercial Banks)	8.1
FR Y-14Q	Schedule M.1 – Balances	8.1
FR Y-14Q	Schedule K – Supplemental	8.1
FR Y-14Q	Schedule A – Retail	8.1
FR Y-14Q	Schedule H – Wholesale Risk	8.1
FR Y-14M	Capital Assessments and Stress Testing Report - Monthly	8.1
FFIEC-101	Regulatory Capital Reporting for Institutions Subject to the Advanced Capital Adequacy Framework	8.1
FDIC-8020	Statement of Deposits	8.1
FFIEC-002	Assets and Liabilities of U.S. Branches and Agencies of Foreign Banks	8.1
FR 2420	Selected Money Market Rates	8.1
FFIEC-030	Foreign Branch Report of Condition	8.1
FFIEC-030S	Abbreviated Foreign Branch Report of Condition	8.1

Report	Report Name	Released Version
FR Y-7Q	The Capital and Asset Report for Foreign Banking Organizations	8.1
FR 2835A	Quarterly Report of Credit Card Plans	8.1
FR 2502Q	Quarterly Report of Assets and Liabilities of Large Foreign Offices of U.S. Banks	8.1

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	O	Off-Balance-Sheet Items
7	FFIEC-009A	A	Country Exposure Information Report Part A
8	FFIEC-009A	B	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 on a Recurring Basis
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	A	Type of Investments
71	FR Y-12	B	Type of Security
72	FR Y-12	C	Type of Entity within the Banking Organization
73	FR Y-12	D	Non-financial Investment Transactions During Reporting Period
74	FR Y-14AOR	–	Operational Risk
75	FR Y-14ARCI	–	Regulatory Capital Instruments
76	FR Y-14ARCT	–	Regulatory Capital Transitions
77	FR Y-14ASCENR	–	Scenario
78	FR Y-14ASUMM	–	Summary

Sl. No.	Report Code	Schedule Code	Schedule Name
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
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	M	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	I	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	C	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

Sl. No.	Report Code	Schedule Code	Schedule Name
109	FR Y-14QretailUSothcons	A.7	US Other Consumer
110	FR Y-14QretailUssb	A.9	US Small Business
111	FR Y-14QSEC	B	Securities
112	FR Y-14QSUPMNT	K	Supplemental
113	FR Y-14QTRADING	F	Trading
114	FR Y-15	–	Banking Organization Systemic Risk Report
115	FR Y-15	A	Size Indicator
116	FR Y-20	–	Financial Statements for a Bank Holding Company Subsidiary Engaged in Bank-Ineligible Securities Underwriting and Dealing
117	FR Y-7N	–	Financial Statements of U.S. Nonbank Subsidiaries Held by Foreign Banking Organizations
118	FR Y-7N	IS	Income Statement
119	FR Y-7N	IS-A	Changes in Equity Capital
120	FR Y-7N	IS-B	Changes in Allowance for Loan and Lease Losses
121	FR Y-7N	BS	Balance Sheet
122	FR Y-7N	BS-A	Loans and Lease Financing Receivables
123	FR Y-7N	BS-M	Memoranda
124	FR Y-7NS	–	Abbreviated Financial Statements of U.S. Nonbank Subsidiaries Held by Foreign Banking Organizations
125	FR Y-9C	–	Consolidated Financial Statements for Holding Companies
126	FR Y-9C	HI	Consolidated Income Statement
127	FR Y-9C	HI-A	Changes in Holding Company Equity Capital
128	FR Y-9C	HI-B	Charge-Offs and Recoveries on Loans and Leases and Changes in Allowance for Loan and Lease Losses
129	FR Y-9C	HI-C	Disaggregated Data on the Allowance for Loan and Lease Losses
130	FR Y-9C	HC	Consolidated Balance Sheet
131	FR Y-9C	HC-B	Securities
132	FR Y-9C	HC-C	Loans and Lease Financing Receivables
133	FR Y-9C	HC-D	Trading Assets and Liabilities
134	FR Y-9C	HC-E	Deposit Liabilities1

Sl. No.	Report Code	Schedule Code	Schedule Name
135	FR Y-9C	HC-F	Other Assets
136	FR Y-9C	HC-G	Other Liabilities
137	FR Y-9C	HC-H	Interest Sensitivity
138	FR Y-9C	HC-I	Insurance-Related Underwriting Activities (Including Reinsurance)
139	FR Y-9C	HC-K	Quarterly Averages
140	FR Y-9C	HC-L	Derivatives and Off-Balance-Sheet Items
141	FR Y-9C	HC-M	Memoranda
142	FR Y-9C	HC-N	Past Due and Nonaccrual Loans, Leases, and Other Assets
143	FR Y-9C	HC-P	1–4 Family Residential Mortgage Banking Activities in Domestic Offices
144	FR Y-9C	HC-Q	Assets and Liabilities Measured at Fair Value on a Recurring Basis
145	FR Y-9C	HC-R	Regulatory Capital
146	FR Y-9C	HC-S	Servicing, Securitization, and Asset Sale Activities
147	FR Y-9C	HC-V	Variable Interest Entities
148	FR Y-9LP	–	Parent Company Only Financial Statements for Large Holding Companies
149	FR Y-9LP	PI	Parent Company Only Income Statement
150	FR Y-9LP	PI-A	Cash Flow Statement
151	FR Y-9LP	PC	Parent Company Only Balance Sheet
152	FR Y-9LP	PC-A	Investments in Subsidiaries and Associated Companies
153	FR Y-9LP	PC-B	Memoranda
154	FR-2052A	–	Complex Institution Liquidity Monitoring Report
155	FR-2314	–	Financial Statements of Foreign Subsidiaries of U.S. Banking Organizations
156	FR-2314	IS	Income Statement (calendar year-to-date)
157	FR-2314	IS-A	Changes in Equity Capital
158	FR-2314	IS-B	Changes in Allowance for Loan and Lease Losses
159	FR-2314	BS	Balance Sheet
160	FR-2314	BS-A	Loans and Lease Financing Receivables
161	FR-2314	BS-M	Memoranda

Sl. No.	Report Code	Schedule Code	Schedule Name
162	FR-2314S	–	Abbreviated Financial Statements of Foreign Subsidiaries of U.S. Banking Organizations
163	FR-2644	–	Weekly Report of Selected Assets and Liabilities of Domestically Chartered Commercial Banks and U.S. Branches and Agencies of Foreign Banks
164	FR-2886B	RI-A	Changes in Equity Capital
165	FR-2886B	RC-B	Securities
166	FR-2886B	RC	Balance Sheet
167	FR-2886B	RC-C	Loans and Lease Financing Receivables
168	FR-2886B	RC-M	Claims on and Liabilities to Related Organizations
169	FR-2886B	RC-N	Past Due and Nonaccrual Loans, Leases, and Other Assets
170	FR-2886B	RC-R	Regulatory Capital
171	FR-2886B	RI	Income Statement
172	FR-2886B	RI-B	Changes in Allowance for Loan and Lease Losses
173	FR-2886B	RC-A	Cash and Balances Due from Depository Institutions
174	FR-2886B	RC-L	Derivatives and Off-Balance Sheet Items
175	FR-2900	–	Report of Transaction Accounts, Other Deposits, and Vault Cash
176	FR-2420	A	Federal Funds
177	FR-2420	AA	Selected Borrowings from Non-Exempt Entities
178	FR-2420	B	Eurodollars
179	FR-2420	C	Time Deposits and Certificates of Deposit (CDs)
180	FFIEC-002	RAL	Assets and Liabilities
181	FFIEC-002	A	Cash and Balances Due from Depository Institutions
182	FFIEC-002	C Part I	Loans and Leases
183	FFIEC-002	C Part II	Loans to Small Businesses and Small Farms
184	FFIEC-002	E	Deposit Liabilities and Credit Balances
185	FFIEC-002	K	Quarterly Averages
186	FFIEC-002	L	Derivatives and Off-Balance-Sheet Items
187	FFIEC-002	N	Past Due, Nonaccrual, and Restructured Loans
188	FFIEC-002	O	Other Data for Deposit Insurance Assessments

Sl. No.	Report Code	Schedule Code	Schedule Name
189	FFIEC-002	P	Other Borrowed Money
190	FFIEC-002	Q	Financial Assets and Liabilities Measured at Fair Value on a Recurring Basis
191	FFIEC-002	T	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 Interim Release, see the Oracle Financial Services Regulatory Reporting for US Federal Reserve – Lombard Risk Integration Pack Installation Guide Release 8.1.0.0.0.

3.2 Assumptions

OFSDF interface with Lombard Risk 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) are 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.
- 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 Lombard as they are consumed by the processing application too. For example, Seeded Script of DIM_ASSET_LEVEL has node values not to be considered for FR-2052A. 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
E-2	IG-6	N-6	Y-2

V_ASSET_LEVEL_CODE			
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, 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 is 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 as long as it remains consistent between periods.
- Data in the STG_CAP_INSTR_POSITIONS table is expected as incremental load and not as complete snapshot at a point-in-time.

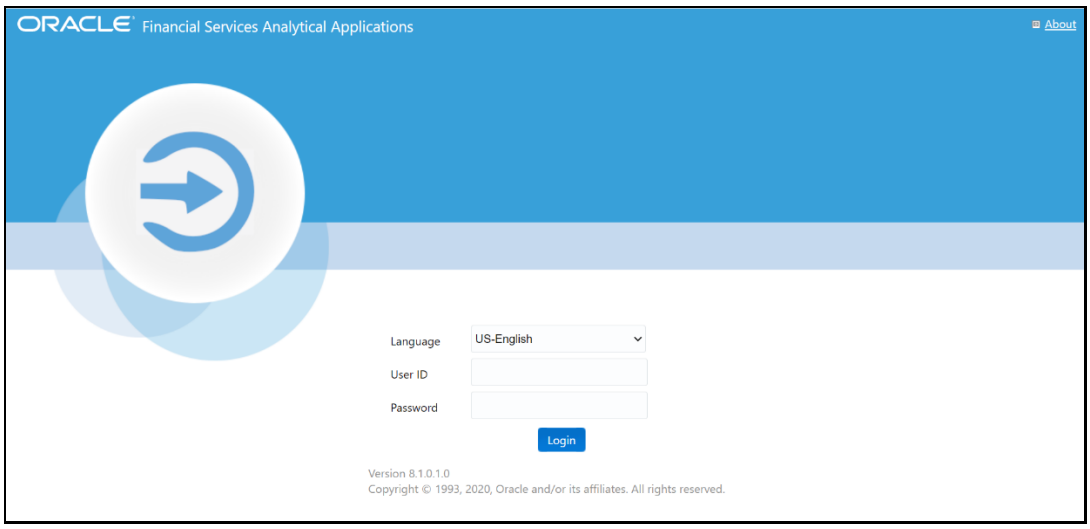
3.3 Accessing the OFSDF Interface or OFS REG REP US FED Interface

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:

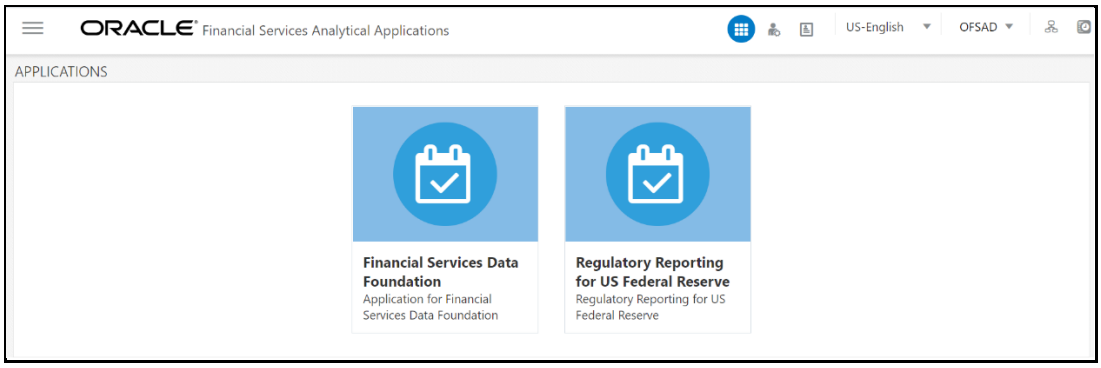
1. Enter the OFSAAI URL in your browser. The OFSAAI login page is displayed.

Figure 2: OFSAAI Log In



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

Figure 3: 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.

3.4 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:

3.4.1 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.

3.4.2 Marking Run as Final

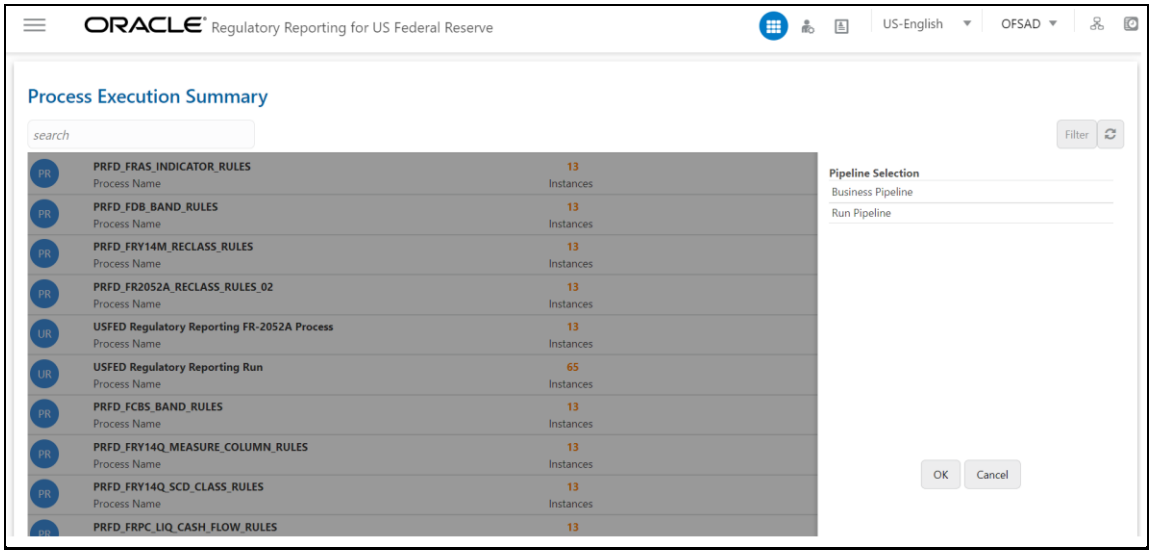
Various applications provide the data for regulatory reporting. You must mark specific executions for regulatory reporting as the final run.

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

Figure 4: 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 5: 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 6: 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 7: 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 identifier 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 in 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.

3.4.3 Reporting Flag for Run through Process Execution Summary

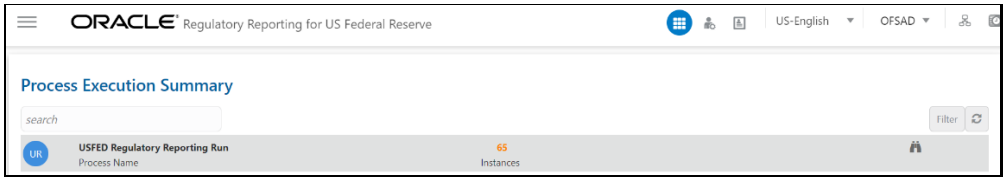
To request, approve, and override a flag for the process execution, perform the following steps:

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 8: Process Execution Summary Page

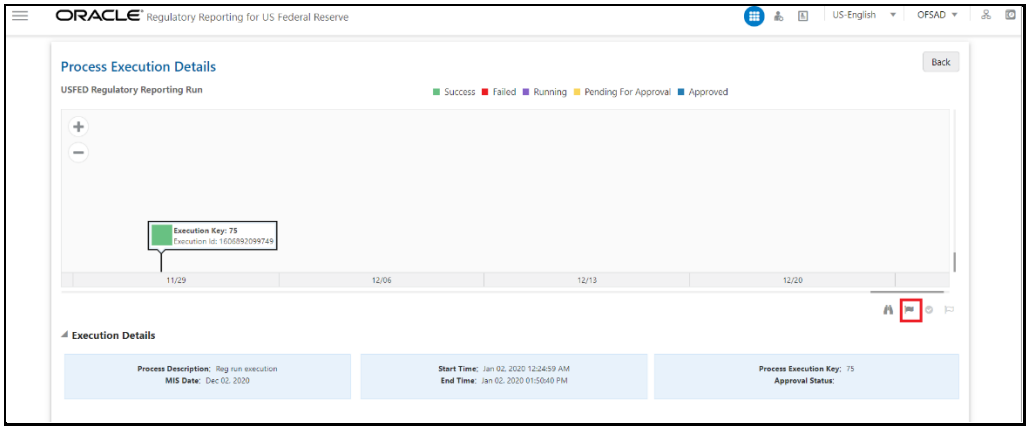
2. Scroll towards the right and click **Filter**, select the **Run Pipeline** from the available pipeline selection list. Click **OK**.

Figure 9: Process Execution Summary Filter Search Result Pane



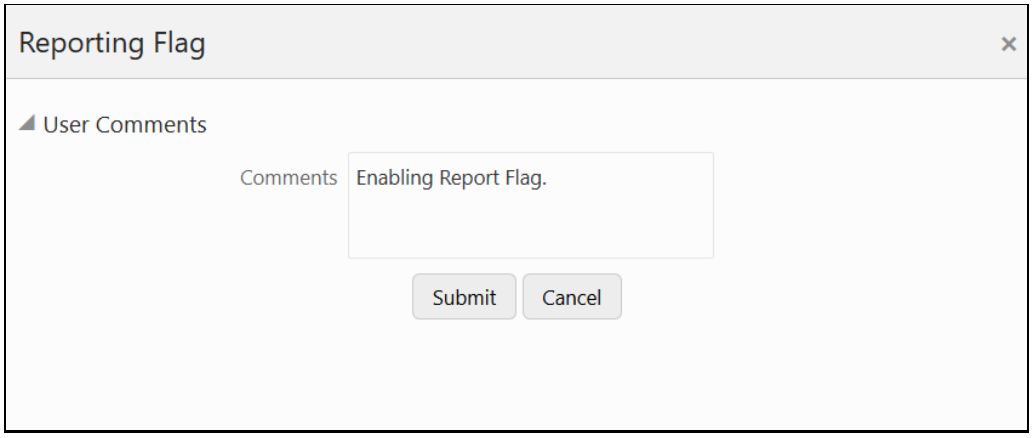
3. Scroll towards the right and click View  in the **Process Name** row.

Figure 10: Process Execution Details Page



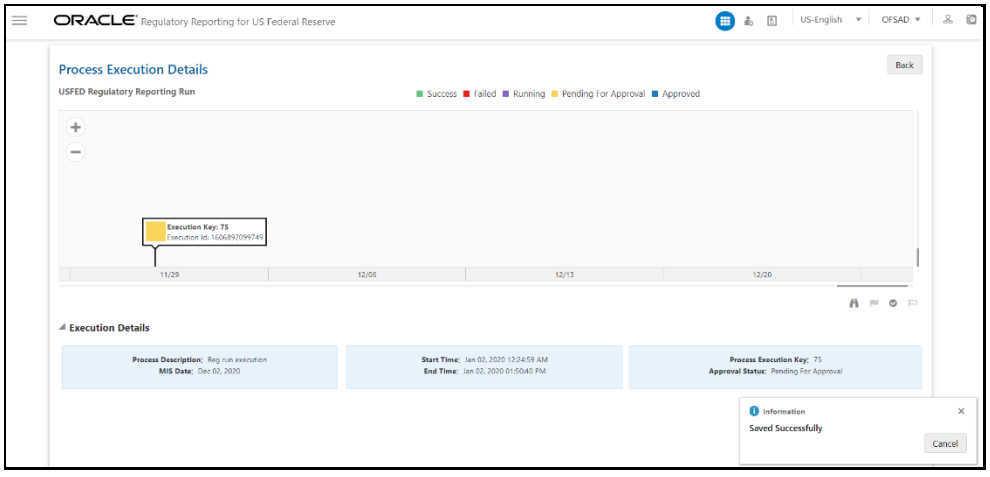
4. Select **Request Report Flag** to request a report flag for the selected run execution.

Figure 11: 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 12: Request Report Flag Save Page

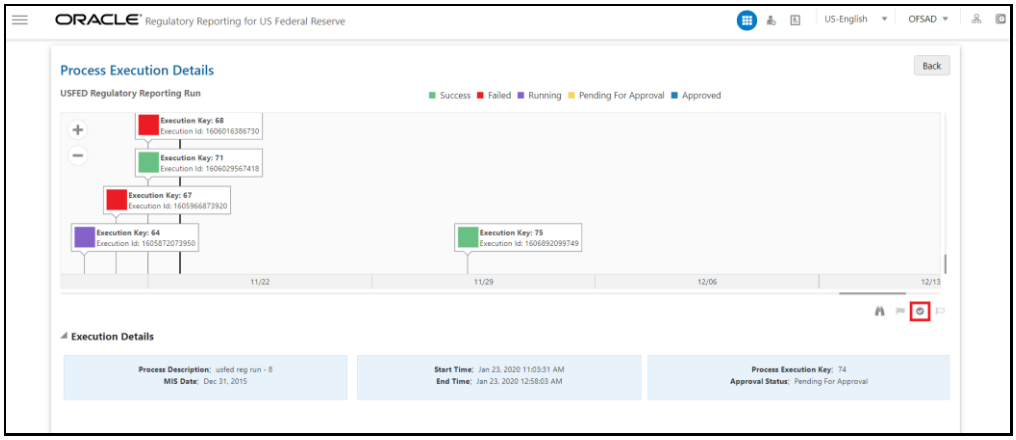


3.4.3.1 Approve Report Flag for a Run

To approve the report flag, perform the following steps:

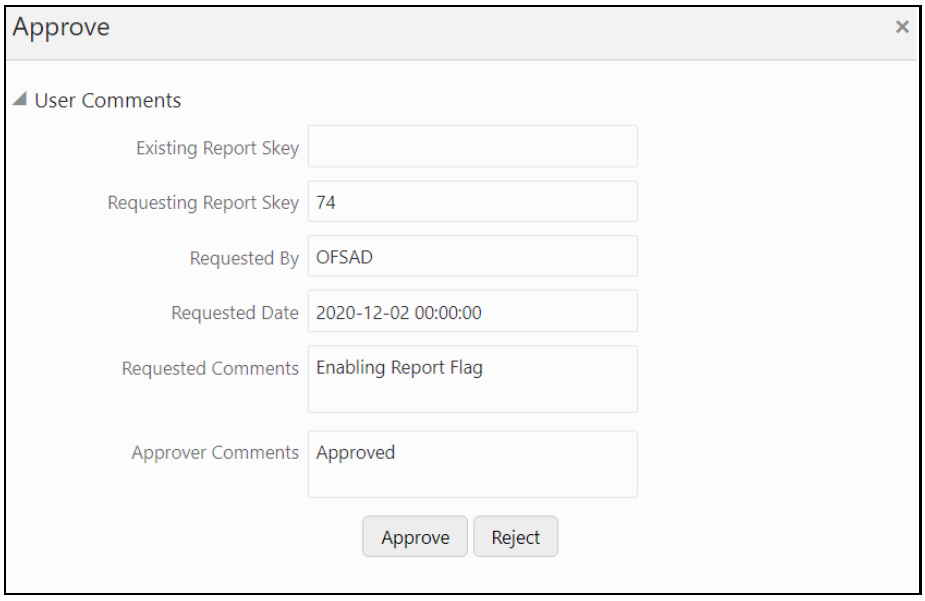
1. Navigate to the **Process Execution Summary** page and select the process name for which the report flag must be approved.
2. Click **Approve** to approve the request.

Figure 13: Approve Request Report Flag



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

Figure 14: Approve Request Report Flag Window



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

3.4.3.2 Override Report Flag for a Run

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

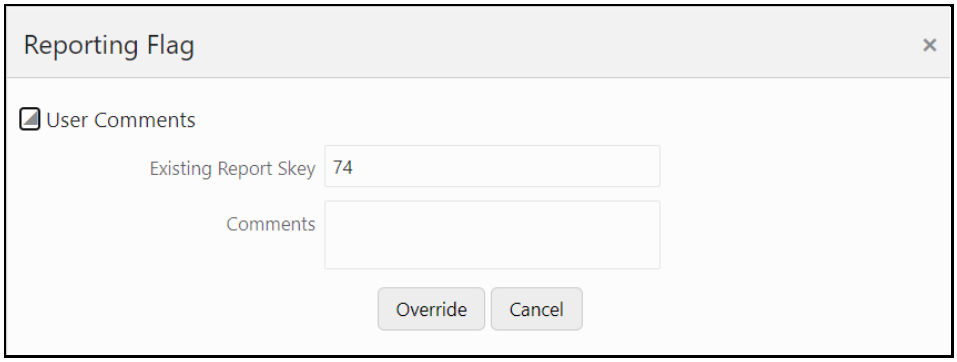
1. Navigate to the **Process Execution Summary** page and select the process name for which the report flag must be overridden.

2. Click **Override Report Flag** to override the report flag.

Figure 15: Override Request Report Flag

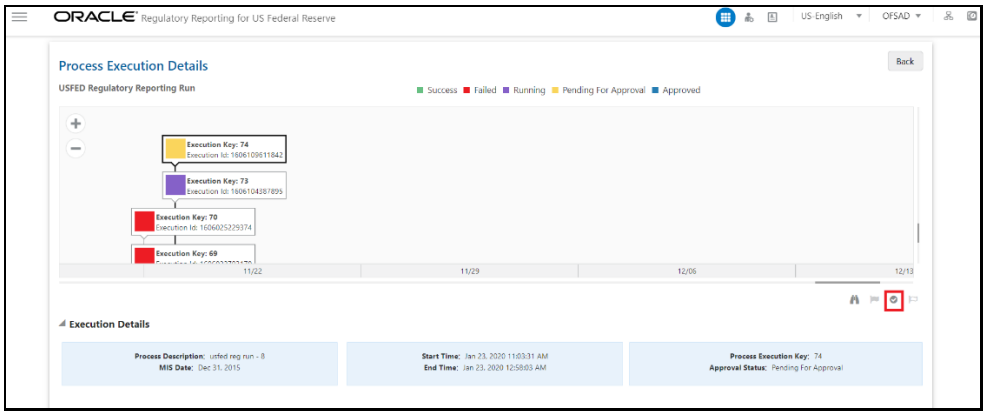
3. Enter the information in the Override Report Flag window.

Figure 16: Override Report Flag Details Window



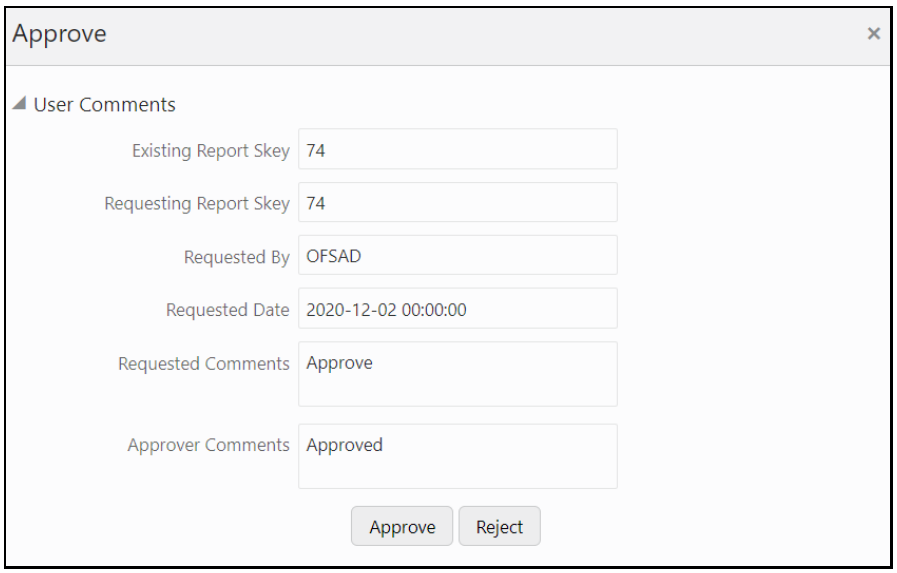
4. Click **Override** to override the requested report flag.

Figure 17: Report Flag Pending for Approval



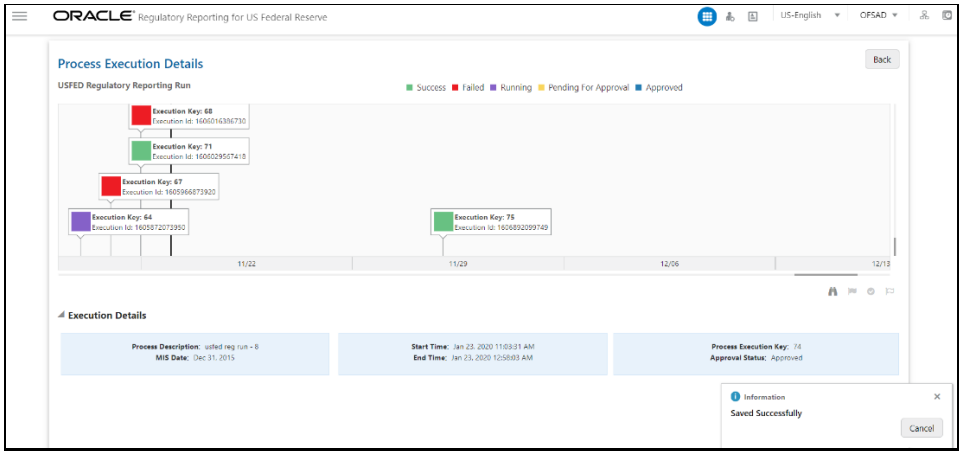
5. Click **Approve Report Flag** to approve the override report flag request.

Figure 18: Figure 19: 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 20: Figure 21: Overridden Report Flag

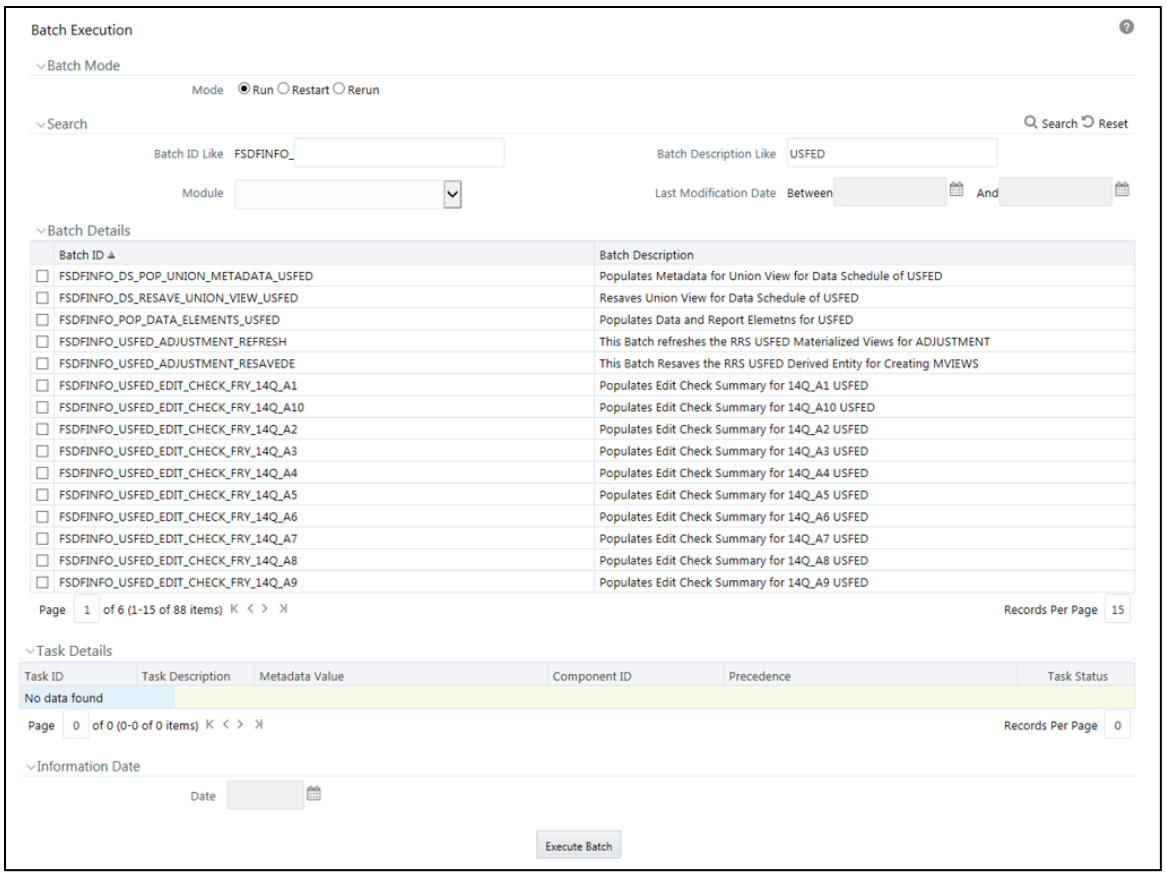


3.4.4 Executing Batch to Resave Derived Entities

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

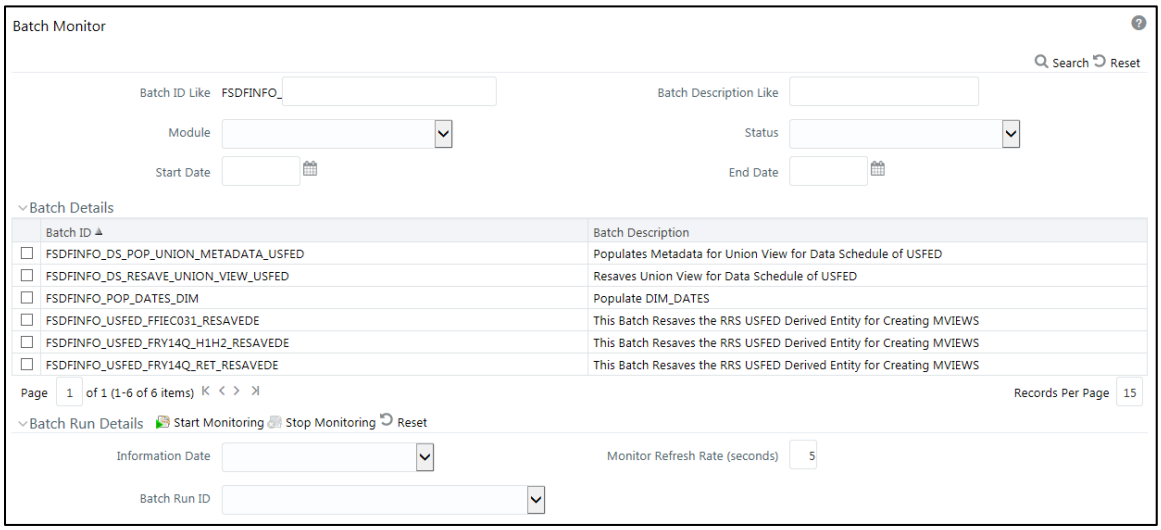
1. Navigate to **Process and Operations**, select **Operations,** and then select **Batch Execution.**
2. Select the batch **<<INFODOM>>_USFED_<<REPORT NAME>>_RESAVEDE** to resave all the DEs used in that **<<REPORT NAME>>**.

Figure 22: Batch Maintenance Screen



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

Figure 23: Batch Monitor Screen



The RESAVE batches available for this release are as follows.

Sl. No.	BATCH_NAME	REPORT_CODE	TYPE
1	REG_ADJUSTMENT_RESAVEDE	Common	Adjustment Derived Entity
2	REG_TEXT_RESAVEDE	Common	Text Derived Entity
3	REG_RUNEXE_RESAVE	Common	AR Run Selection View
4	RESAVE_DE_USFED_FRY9C	FR Y-9C	Latest Version of AR Template
5	RESAVE_DE_USFED_FFIEC031	FFIEC-031	Latest Version of AR Template
6	RESAVE_DE_USFED_FFIEC041	FFIEC-041	Latest Version of AR Template
7	RESAVE_DE_USFED_FRY15	FR Y-15	Latest Version of AR Template
8	RESAVE_DE_USFED_ALL_FRY9C	FR Y-9C	All Versions of AR Template
9	RESAVE_DE_USFED_ALL_FFIEC031	FFIEC-031	All Versions of AR Template
10	RESAVE_DE_USFED_ALL_FFIEC041	FFIEC-041	All Versions of AR Template
11	RESAVE_DE_USFED_ALL_FRY15	FR Y-15	All Versions of AR Template
12	RESAVE_DE_USFED_ALL_FFIEC009	FFIEC-009	All Versions of AR Template
13	USFED_FRY9LP_RESAVEDE	FR Y-9LP	All Versions of AR Template
14	USFED_FRY11_RESAVEDE	FR Y-11	All Versions of AR Template
15	USFED_FRY7N_RESAVEDE	FR Y-7N	All Versions of AR Template
16	USFED_FRY2314_RSVDEPV	FR 2314	All Versions of AR Template
17	USFED_FR2314_RESAVEDE	FR 2314	All Versions of AR Template
18	USFED_FRY14M_RESAVEDE	FR Y-14M	All Versions of AR Template
19	USFED_FRY14M_RESAVEPV	FR Y-14M	All Versions of AR Template
20	USFED_FRY14Q_RET_RESAVEDE	FR Y-14Q	All Versions of AR Template
21	USFED_FRY14Q_MISC_RESAVEDE	FR Y-14Q	All Versions of AR Template

Sl. No.	BATCH_NAME	REPORT_CODE	TYPE
22	USFED_FRY14QSEC_RESAVEDE	FR Y-14Q	All Versions of AR Template
23	USFED_FRY14Q_H1H2_RESAVEDE	FR Y-14Q	All Versions of AR Template
24	USFED_FDIC370_RESAVEDE	FDIC 370	All Versions of AR Template
25	USFED_FDIC8020_RESAVEDE	FDIC 8020	All Versions of AR Template
26	USFED_FFIEC002_RESAVEDE	FFIEC-002	All Versions of AR Template
27	USFED_FFIEC002S_RESAVEDE	FFIEC-009	All Versions of AR Template
28	USFED_FFIEC030S_RESAVEDE	FFIEC-030S	All Versions of AR Template
29	USFED_FFIEC030_RESAVEDE	FFIEC-030	All Versions of AR Template
30	USFED_FR2028D_RESAVEDE	FR 2028D	All Versions of AR Template
31	USFED_FR2420_RESAVEDE	FR 2420	All Versions of AR Template
32	USFED_FR2644_RESAVEDE	FR 2644	All Versions of AR Template
33	USFED_FR2502Q_RESAVEDE	FR 2502Q	All Versions of AR Template
34	USFED_FR2886B_RESAVEDE	FR 2886B	All Versions of AR Template
35	USFED_FRY2900_RESAVEDE	FR 2900	All Versions of AR Template
36	USFED_FRY7Q_RESAVEDE	FR Y-7Q	All Versions of AR Template
37	USFED_FRY8_RESAVEDE	FR Y-8	All Versions of AR Template
38	USFED_FRZ2835A_RESAVEDE	FR 2835A	All Versions of AR Template
39	USFED_FRY-14Q_C_RESAVEDE	FR Y-14Q	All Versions of AR Template
40	USFED_FRY-14Q_D_RESAVEDE	FR Y-14Q	All Versions of AR Template
41	USFED_FRY-14Q_E_RESAVEDE	FR Y-14Q	All Versions of AR Template

Sl. No.	BATCH_NAME	REPORT_CODE	TYPE
42	USFED_FRY2052A_RESAVEDE	FR 2052A	All Versions of AR Template
43	USFED_FRY2052A_RESAVEDEPV	FR 2052A	All Versions of AR Template

The REFRESH batches available for this release are as follows:

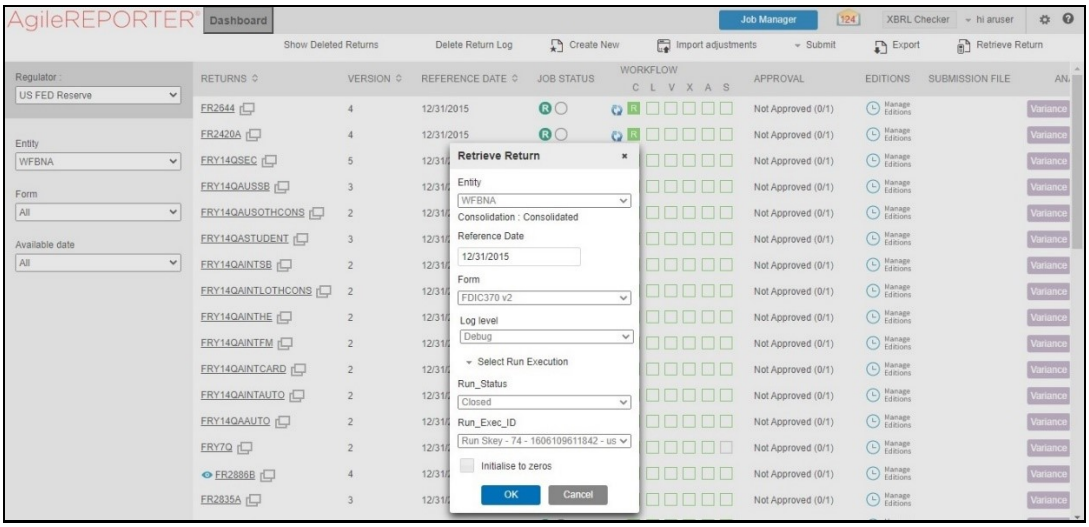
- USFED_FRY7Q_REFRESH
- USFED_FRY8_REFRESH
- REFRESH_DE_USFED_FRY9C
- USFED_FRY9LP_REFRESH
- USFED_FRZ2835A_REFRESH
- REFRESH_DERIVED_ENTITY
- USFED_FDIC370_REFRESH
- REG_ADJUSTMENT_REFRESH
- REFRESH_DE_USFED_ALL_FFIEC031
- REFRESH_DE_USFED_ALL_FFIEC041
- REFRESH_DE_USFED_ALL_FRY9C
- REG_TEXT_REFRESH
- REFRESH_DE_USFED_ALL_FRY15
- REFRESH_DE_USFED_ALL_FFIEC009
- USFED_FFIEC002_REFRESH
- USFED_FFIEC002S_REFRESH
- USFED_FFIEC009_REFRESH
- USFED_FFIEC009a_REFRESH
- USFED_FFIEC030_REFRESH
- USFED_FFIEC030S_REFRESH
- REFRESH_DE_USFED_FFIEC031
- REFRESH_DE_USFED_FFIEC041
- USFED_FFIEC101_REFRESH
- USFED_FR2028D_REFRESH
- USFED_FR2052A_REFRESH
- USFED_FR2314_REFRESH
- USFED_FR2420_REFRESH

- USFED_FR2502Q_REFRESH
- USFED_FR2886B_REFRESH
- USFED_FR2900_REFRESH
- USFED_FRY11_REFRESH
- USFED_FRY14M_REFRESH
- USFED_FRY14Q_H1H2_REFRESH
- USFED_FRY14Q_MISC_REFRESH
- USFED_FRY14Q_RET_REFRESH
- USFED_FRY14QSEC_REFRESH
- REFRESH_DE_USFED_FRY15
- USFED_FR2644_REFRESH
- USFED_FRY7N_REFRESH

3.4.5 Retrieving the Returns from AgileREPORTER

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

Figure 24: Retrieve Returns Page

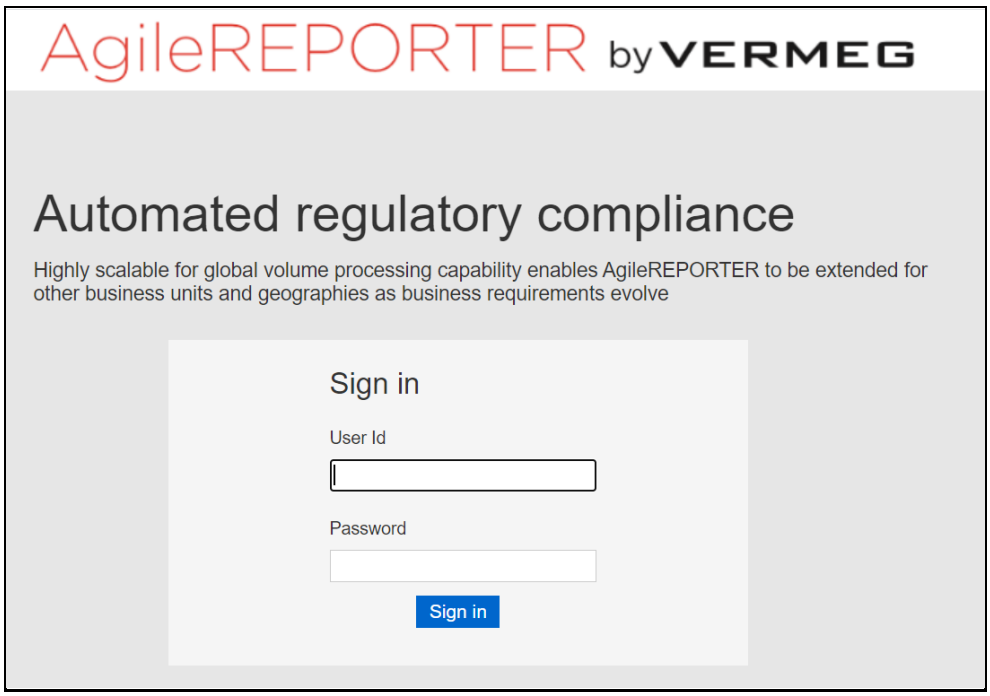


3.4.6 Report Verification - Drill Down from AgileREPORTER to OFSAA Results Area

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

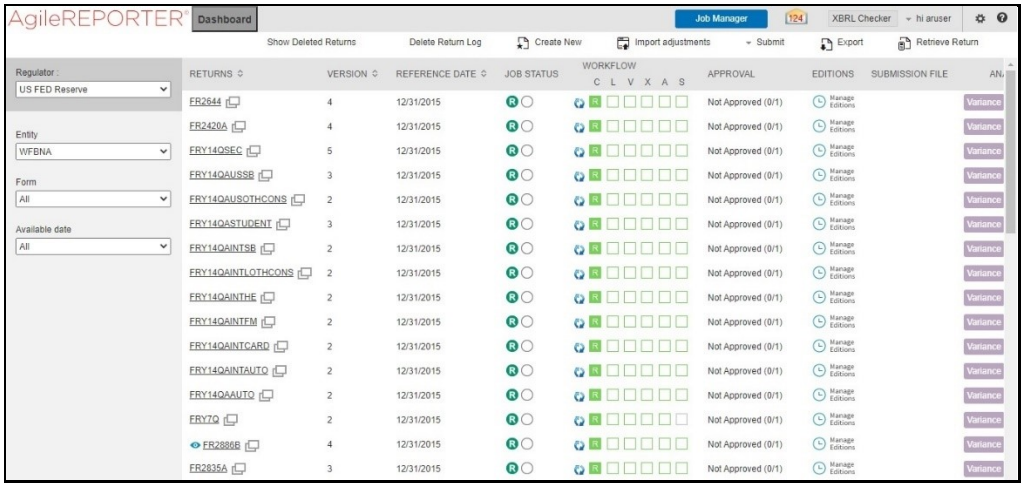
1. Log in to the AgileREPORTER.

Figure 25: AgileREPORTER Login Page



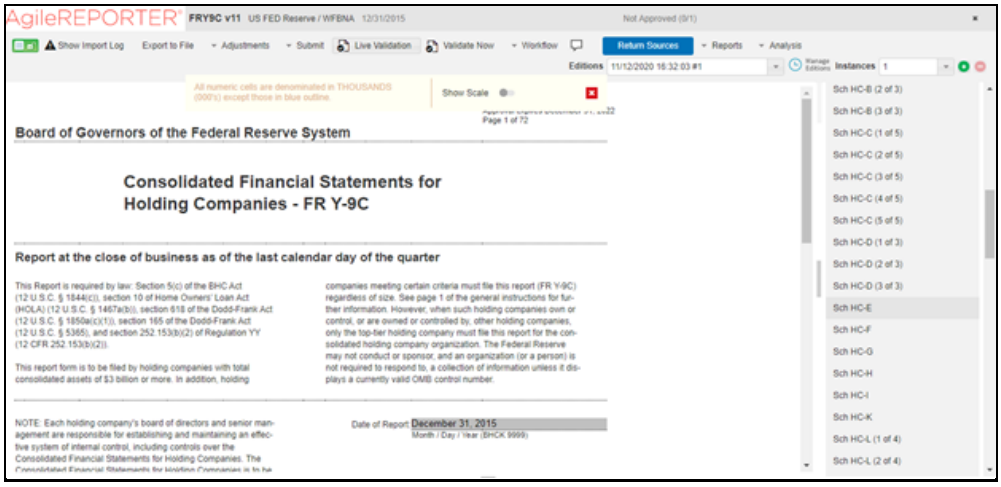
2. You can view the list of reports on the main page. Click any report name in the Returns column, for example, **FR Y-9C**.

Figure 26: AgileREPORTER Main Page



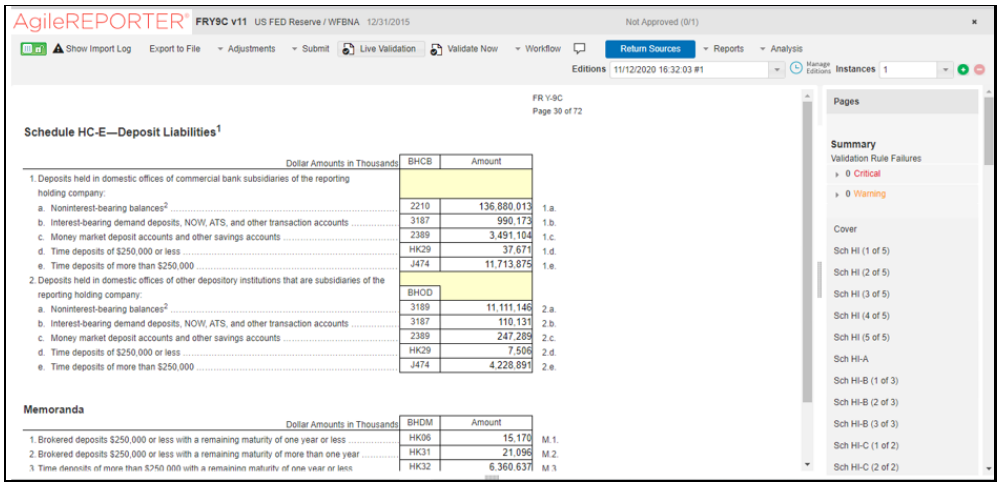
3. The schedule list is displayed on the left-hand side. Click any schedule name, for example, **Schedule HC-E**.

Figure 27: AgileREPORTER Page Displaying List of Schedules



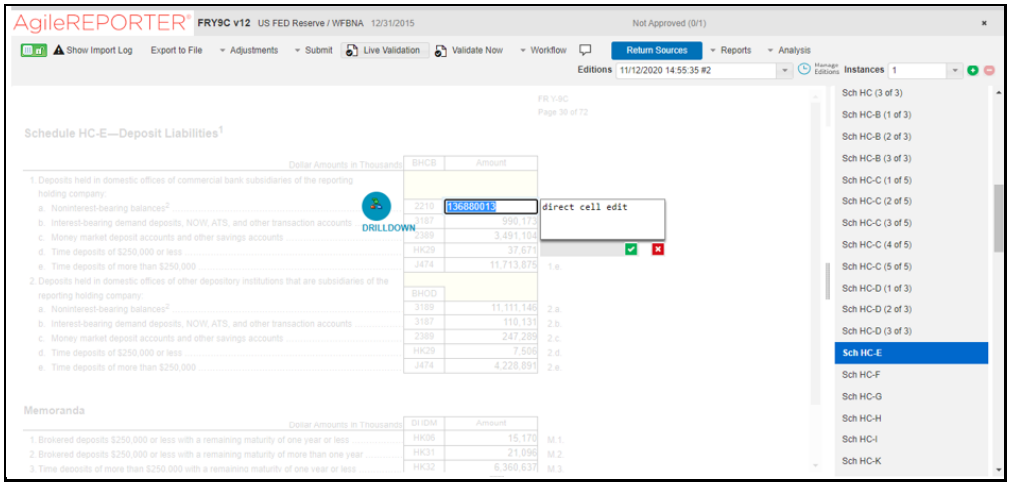
4. Click any cell to drill down.

Figure 28: AgileREPORTER Schedule Details Page



5. Figure 29 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 29: AgileREPORTER Drill Down page

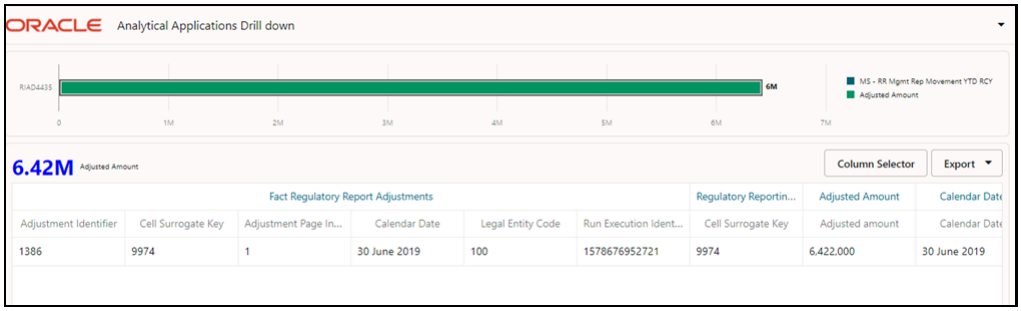


This cell is populated from the derived entity (DE) mentioned in the grid header *DE – Deposit Liabilities – Schedule HC-E*. The value in the derived entity grid 136,880,013 must match with that of the cell in the report. The derived entity is an aggregate built on top of the OFSAA results model to serve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

The DE is built using dimensions, measures, and business processors. The dimensions that participate in determining the cell value is displayed with data. Click the derived entity link in the grid header.

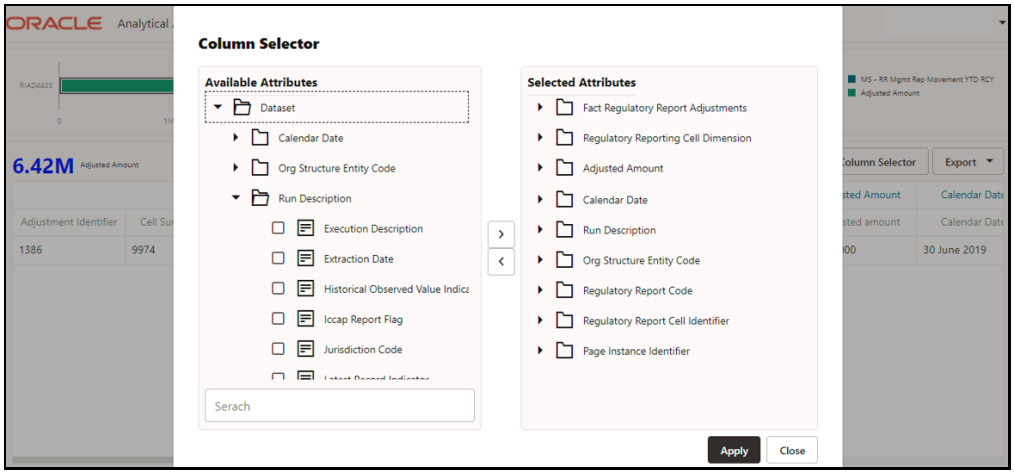
6. Click the **OFSAA** icon, to view how this cell was populated (provides information about the amounts reported in a cell) from OFSAA results. You are redirected to the OFSAA Drill down page.

Figure 30: AgileREPORTER Drill-Down Screen



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

Figure 31: Drill Down Attribute Selector



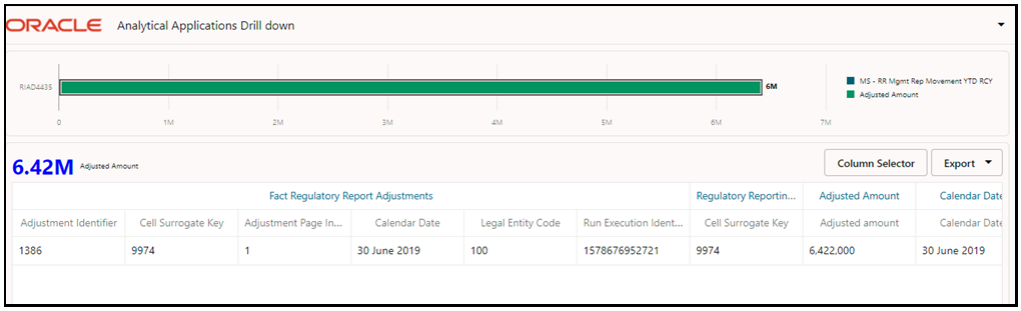
NOTE

Select the required Data 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 32: Drill Down Columns



3.4.6.1 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 `DRILLDOWN_GENERIC_HINT and DRILLDOWN_<DATSET_CODE>_HINT` are seeded by the user, then the `DRILLDOWN_<DATSET_CODE>_HINT` takes precedence for that cell ID / Dataset 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:

4.1 Data Preparation

This section explains the input data preparation from OFSAA.

Topics:

- Guidelines for Data Loading to Result Area Tables in Data Foundation for Regulatory Reporting 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 to regulatory dimensions and bands, all the processing measures are expected to be from respective applications and provide as required.
2. It is integrated with 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 Relationship between Run and Stress.
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 for the purpose of reporting vintage data, as per report requirements. For projection data, for a given run and Projection Period (quarter/year), only one set of data is expected to be stored.
5. All processing reporting requirements requiring 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 – Lombard Risk Integration supports both the above methods.
7. You must update V_COMPONENT_VALUE in SETUP_MASTER with 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 is 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 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 these 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. There are few tasks which are prerequisite 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 task 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 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 8.1.0.0.0 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 set 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_PURPOSE	Credit Line Purpose	DIM_STD_CREDIT_LINE_PURPOSE	Standard Credit Line Purpose
DIM_CREDIT_LINE_TYPE	Credit Line Type	DIM_STD_CREDIT_LINE_TYPE	Standard Credit Line Type
DIM_IRC	Interest Rate Curve	DIM_STANDARD_IRC	Standard Interest Rate Curve

User Specific Dimension		Standard Dimension	
DIM_LOB	Line of Business	DIM_STANDARD_LOB	Standard Line of Business
DIM_MITIGANT_TYPE	Mitigant Type	DIM_STD_MITIGANT_TYPE	Standard Mitigant Type
DIM_PARTY_TYPE	Party Type	DIM_STANDARD_PARTY_TYPE	Standard Party Type
DIM_PRODUCT	Product	DIM_STANDARD_PRODUCT_TYPE	Standard Product Type
DIM_GL_ACCOUNT	General Ledger	DIM_STD_GL_TYPE	Standard General Ledger Type
DIM_VEHICLE_TYPE	Vehicle Type	DIM_STD_VEHICLE_TYPE	Standard Vehicle Type
DIM_WRITE_OFF_REASONS	Write Off Reasons	DIM_STD_WRITE_OFF_REASONS	Standard Write Off Reasons
DIM_RECOVERY_TYPE	Recovery Type	DIM_STD_RECOVERY_TYPE	Standard Recovery Type

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
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.

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

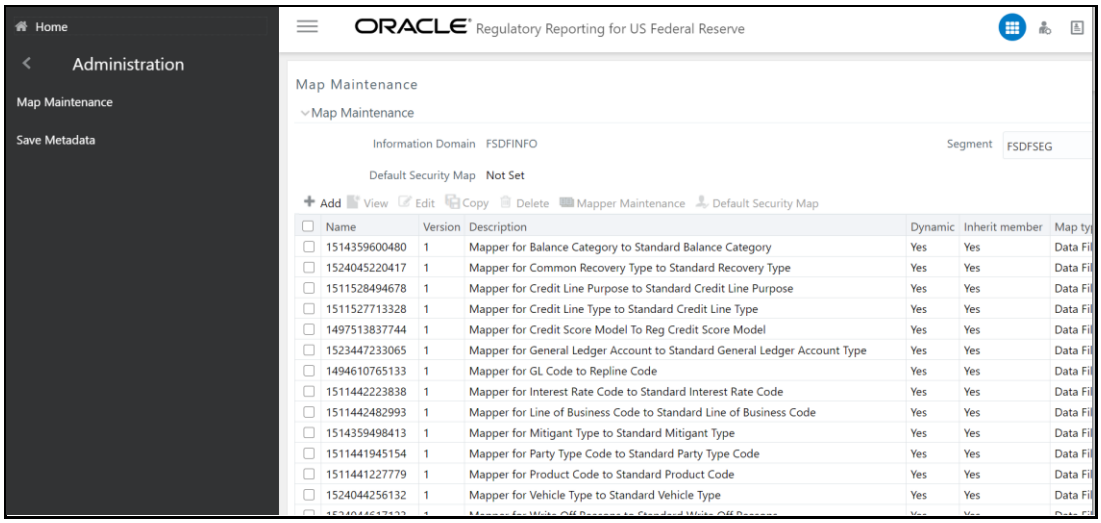
- MPFD_ACCT_REG_CREDIT_STATUS: Reg US Mapper for Regulatory Credit Status
- MPFD_DOC_TYPE_REG_DOC_TYPE: Reg US Mapper for Regulatory Document Type
- MPFD_ACC_INDSTR_REG_INDSTRY: Reg US Mapper for Regulatory Industry
- MPFD_ACCT_REG_LOAN_PURPOSE: Reg US Mapper for Regulatory Loan Purpose
- MPFD_PROP_REG_PROPERTY_TYPE: 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.

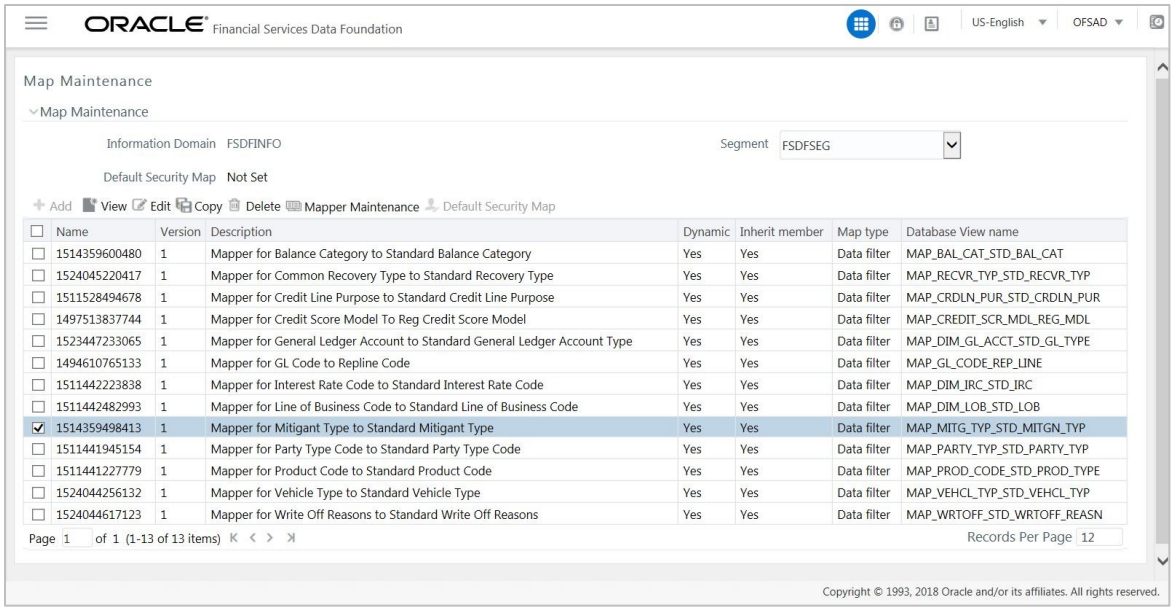
1. After logging into the OFSAAI applications page, navigate to **Regulatory Reporting for US Federal Reserve**, select **Administration** and then select **Map Maintenance**.

Figure 33: Map Maintenance page



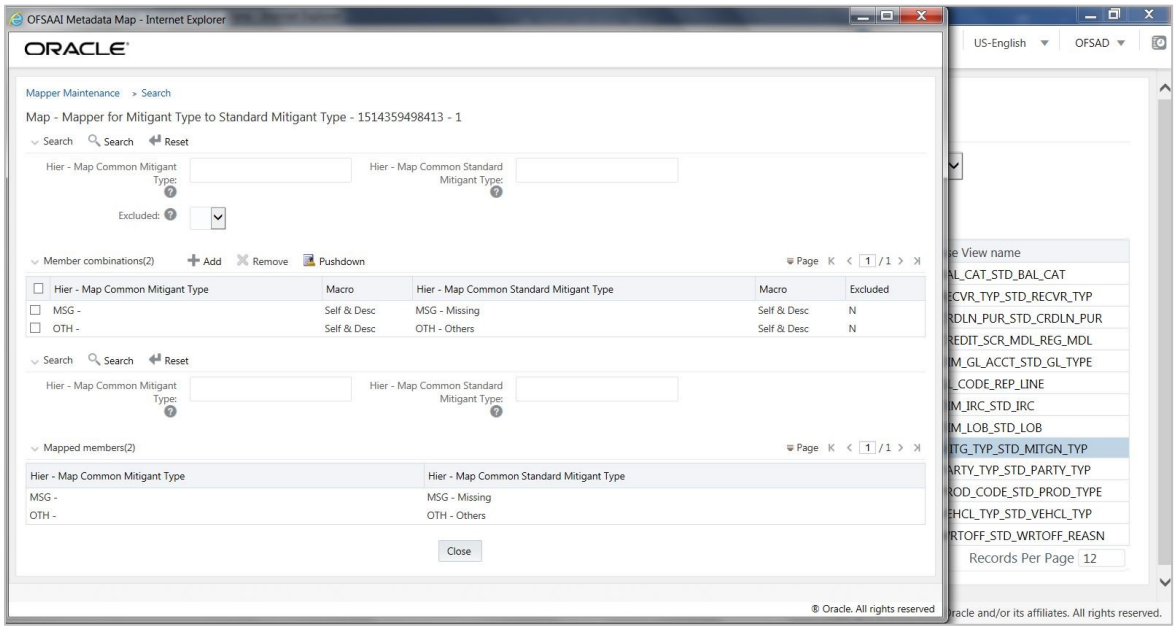
2. For illustration, we have selected **Mapper for Mitigant Type to Standard Mitigant Type**. Click **Mapper Maintenance**.

Figure 34: Mapper for Mitigant Type to Standard Mitigant Type



3. 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 35: Map Maintenance Search page



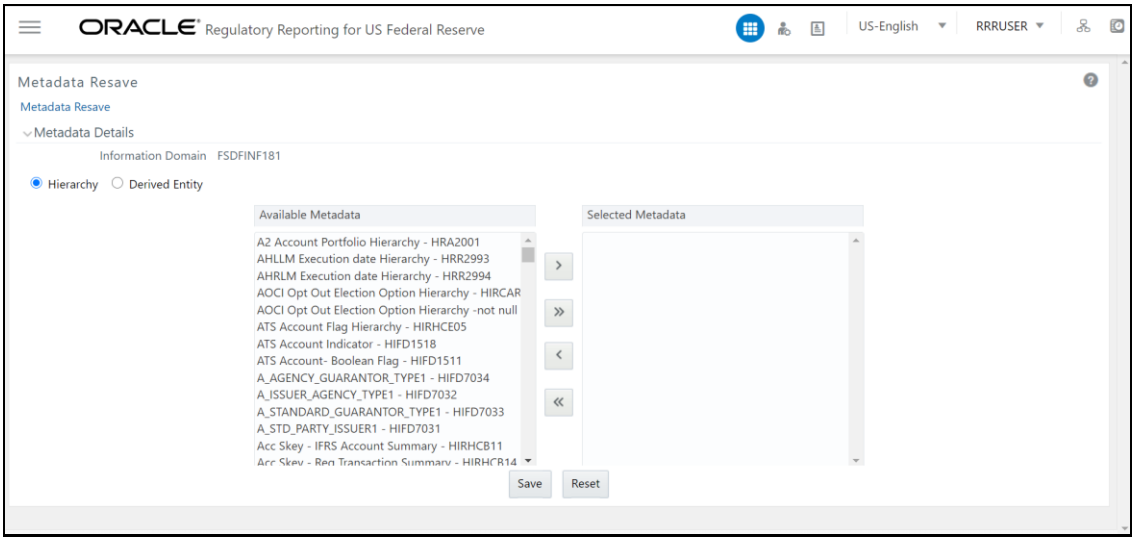
Prerequisites for Mapper Maintenance

1. 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 36: Metadata Resave page



Possible Mapping Combinations

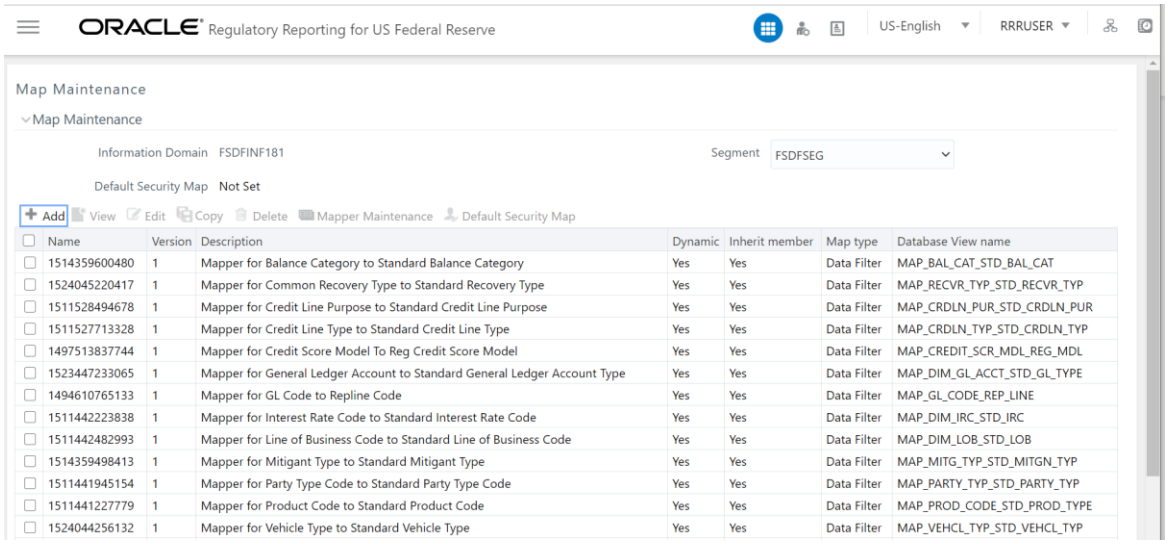
One Standard Dimension table in the source can be mapped only to one Standard Dimension table. One to Many or Many to Many mapping leads to error in T2T as the records are duplicated. From the illustration, the possible combinations for Mitigant Type to Standard Mitigant Type mapping are One to One and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

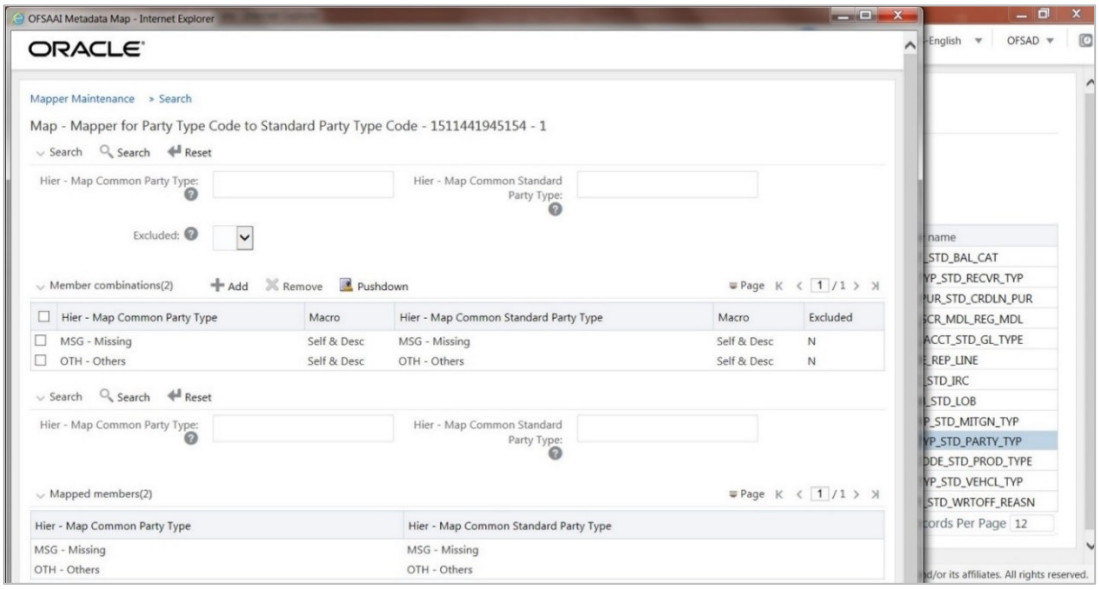
Figure 37: Map Maintenance Page



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 38: Map Maintenance Add page

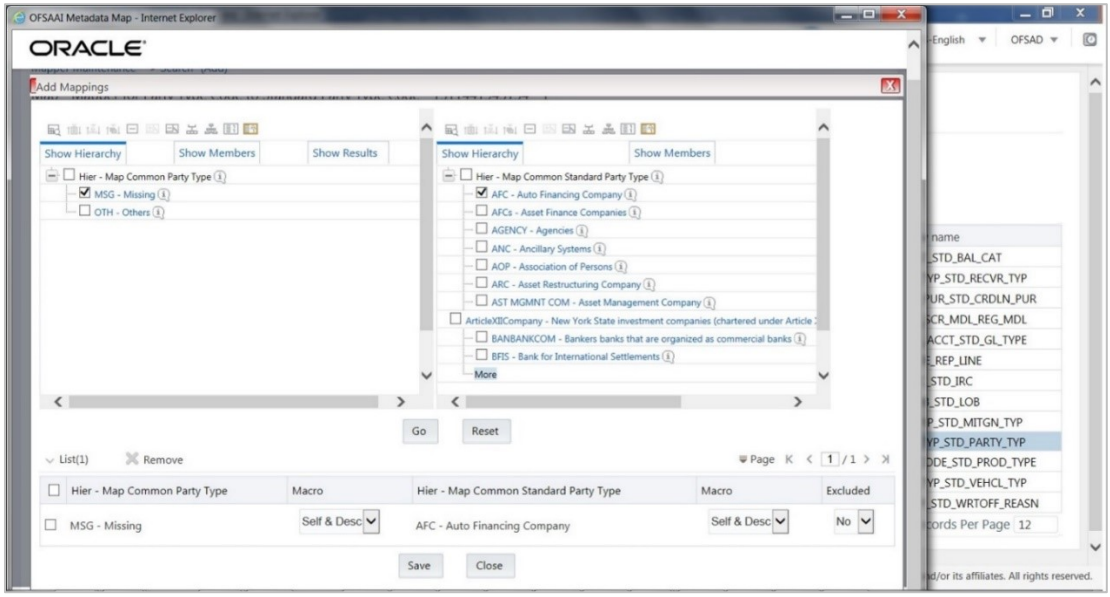


4. The **Add Mappings** pop-up window opens. In this illustration:

- 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**.

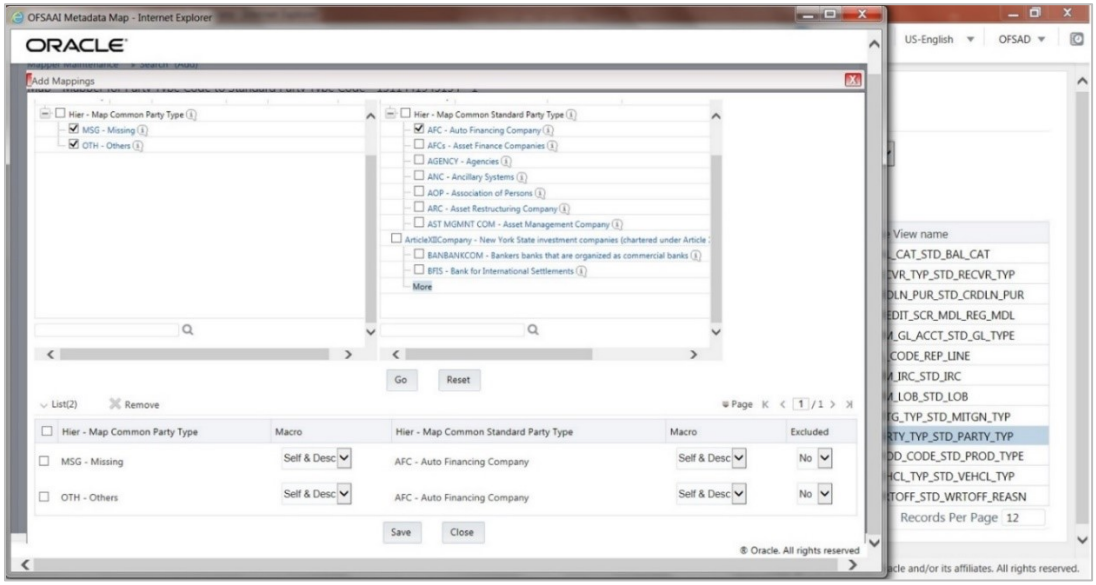
Figure 39: One to One Mapping page



- 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 40: One to Many Mapping window



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 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_ELEMENT_CODE. This is used for Fact Management Reporting T2T.
DEFAULT_FX_RATE_SRC	Default FX Rate Source	DEFAULT	Component Value to be updated according to the values used in STG_EXCHANGE_RATE_HIST.V_RATE_DATA_ORIGIN. This is used for Calculating the Reporting Currency.
DEFAULT_MARKET_CENTER	Market Center Identifier	DEFAULT	Component Value to be updated according to the values used in STG_INSTRUMENT_MARKET_PRICES.V_MKT_CENTER_ID. This is used for Calculating the Instrument Close Price.
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_PD_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 onetime activity.

The V_REG_REPORTING_PARAM_VAL must be updated to **B** for Branch and **D** for Fed District, based on the report submission for Branch or for Fed District entities.

Table 10 FSI_REGREPORTING_PARAM

V_REG_REPORTING_PARAM	V_REG_REPORTING_PARAM_VAL	V_REGULATOR_CODE	Description
FFIEC002_AR_TYPE	O	USFED	To retrieve FFIEC-002 and FFIEC-002S, this parameter must be updated with the required values. The list of values supported are **B** for Branch and **D** for Fed District, based on the report submission for Branch or for Fed District entities.

The default value of this parameter is **O**.

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 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_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 corresponding Party, which is stored in Party Dimension (DIM_PARTY).

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

Table 11: Standard Party Codes

V_STD_PARTY_CODE	V_STD_PARTY_NAME	V_PARTY_ID
BOC	Bank of Canada	BOC
BOE	Bank of England	BOE
BOJ	Bank of Japan	BOJ
ECB	European Central Bank	ECB
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
FNMA	Federal National Mortgage Association	FNMA

V_STD_PARTY_CODE	V_STD_PARTY_NAME	V_PARTY_ID
FRB	Federal Reserve Bank	FRB
FmHA	Farmers Home Administration	FmHA
GNMA	Government National Mortgage Association	GNMA
HOSTEADASOC	Home-stead associations	HOSTEADASOC
IMF	International Monetary Fund	IMF
NCUA	National Credit Union Administration	NCUA
NCUSIF	National Credit Union Share Insurance Fund	NCUSIF
OCB	Other Central Bank	OCB
OGSE	Other GSE	OGSE
POSTMST	Postmaster's Demand Deposit Accounts	POSTMST
RBA	Reserve Bank of Australia	RBA
SNB	Swiss National Bank	SNB
TENVAL	Tennessee Valley Authority	TENVAL
UN	United Nations	UN
VA	Veteran Affairs	VA
WB	World Bank	WB
INDB	Inter-American Development Bank	INDB

4.1.5.4 FSI_REG_MORT_INSURER

In the US FED Regulatory Reporting, there is 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 bank-specific V_PARTY_ID of corresponding Party, which is stored in Party Dimension (DIM_PARTY).

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

Table 12 Issuer Codes

V_REG_MORT_ISSUER_CD	V_REG_MORT_ISSUER_NAME	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

V_REG_MORT_ISSUER_CD	V_REG_MORT_ISSUER_NAME	V_PARTY_ID
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	OTH
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 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 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 customer site to load the table.

4.1.7 Run or Execution Expectations

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

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

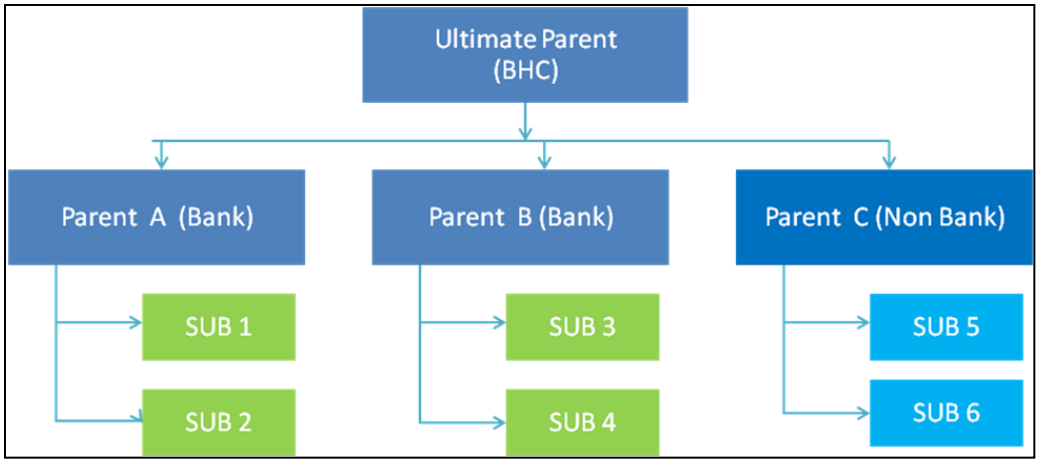
4.1.8 Consolidation

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 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 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 41: 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

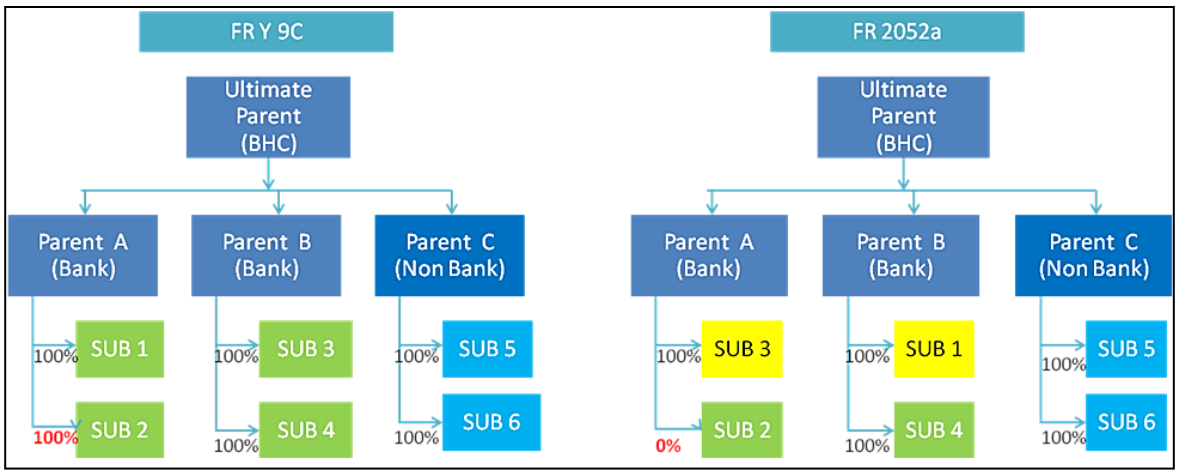
FSDF AREA	ENTITY CODE	ACCOUNT NUMBER	CUSTOMER	ISSUER
STAGE LOAN CONTRACTS	SUB 1	ACCOUNT 1	SUB 2	
STAGE LOAN CONTRACTS	SUB 1	ACCOUNT 2	PARTY 1	
STAGE INVESTMENT CONTRACTS	SUB 1	ACCOUNT 3	PARTY 1	SUB 2
FCT COMMON ACCOUNT SUMMARY	SUB 1	ACCOUNT 2	PARTY 1	
FSI INTRA COMPANY ACCOUNT	SUB 1	ACCOUNT 1	SUB 2	
FSI INTRA COMPANY ACCOUNT	SUB 1	ACCOUNT 3	PARTY 1	SUB 2

As shown in the 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 42: Consolidation with Multiple Hierarchies



Consolidation percentage refers to the percentage of asset or liability of child entity that is brought under 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 Joint venture agreement. Currently, in FSDF 804, proportionate consolidation is not handled.

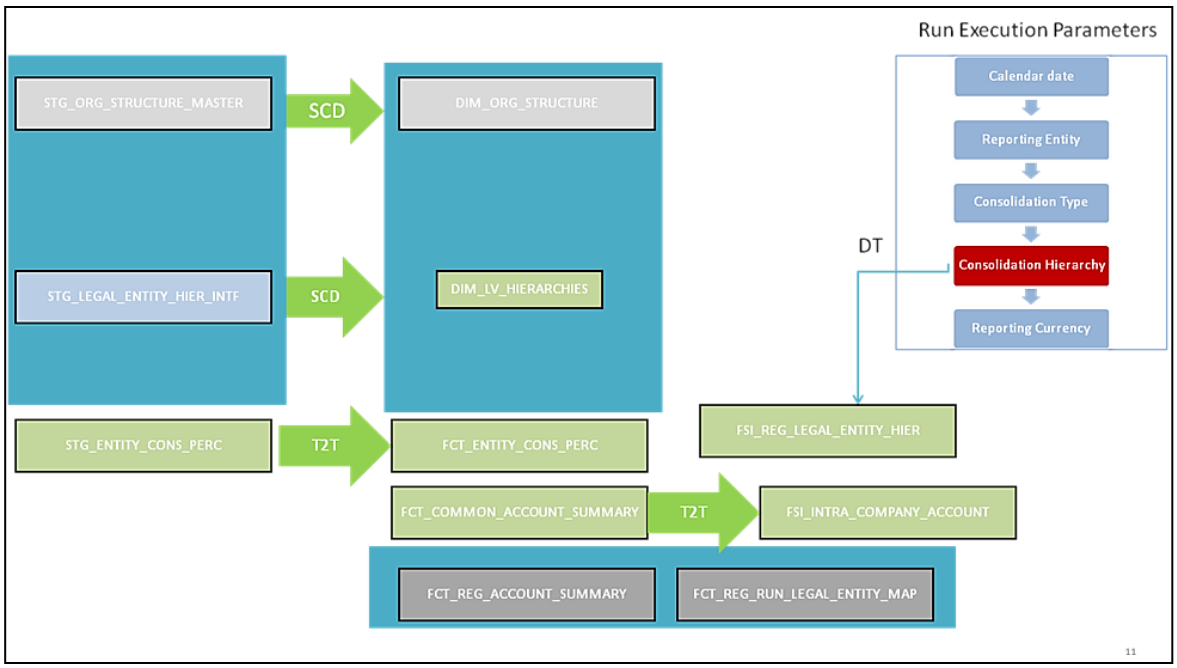
The hierarchy structure is thus primary input to the consolidation process. Depending on whether you have multiple hierarchies or not, there are two data flows.

Consolidation with Multiple Organization Structure Hierarchy:

- 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 is 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.

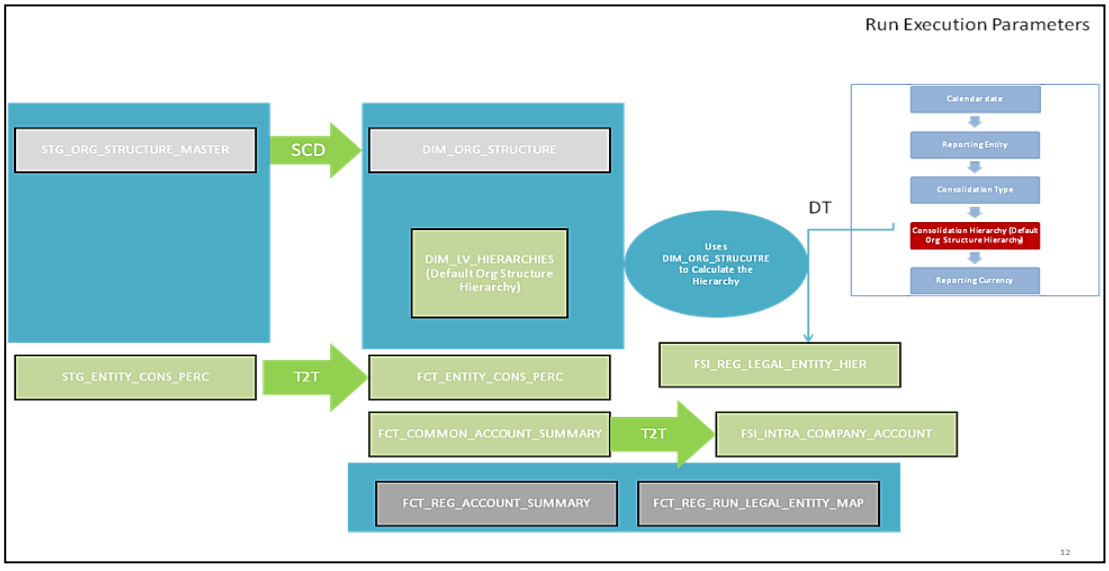
The STAGE LEGAL ENTITY HIERARCHY is used for the Consolidation process and not the one from ORGANIZATION STRUCTURE DIMENSION.

Figure 43: Consolidation with Multiple Organization Structure Hierarchy



If you do not have Multiple Hierarchy, 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 44: 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.

Table 14: Reporting Entity in AgileREPORTER

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

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

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 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 a period of time provides historical runs. For more information on updating the reporting flag, refer section Updating Reporting Flag.

> **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 a period of time and different executions provide different outputs due to underlying data changes.

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

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

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

4.1.9 Projection Data

The following points provide information on the projection data:

1. Baseline run also populates projected date data.
2. This application requires projected data at two levels - Quarterly and Annual.
3. The **DIM_CONSOLIDATION** table is used to identify the projections. It contains the codes for projected quarters and years as required by the templates.
4. In the Fact tables, projection data is referred with 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 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	900,000
100	Actual	100	BSL	RUNID002	15-Nov-13	100,000	
100	Actual	100	BSL	RUNID003	20-Nov-13	300,000	
100	Actual	100	BSL	RUNID004	30-Dec-13	200,000	
400	FQ1	100	BSL	--	--	--	608,618
401	FQ2	100	BSL	--	--	--	870,503
402	FQ3	100	BSL	--	--	--	567,736
410	FY1	100	BSL	--	--	--	470,093
411	FY2	100	BSL	--	--	--	473,881
412	FY3	100	BSL	--	--	--	942,035

However, when 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 Data Integration Hub (DIH) User Guide in OHC Documentation Library for details. DIH enables to load the data from the source systems to

the OFSAA staging tables, through logical interfaces, known as Application Data Interfaces (ADI). DIH provides a set of User Interfaces (UI), which is used to define and maintain External Data Descriptor (EDD), Application Data Interfaces, and map the EDDs and ADIs through connectors.

4.1.11 Data Flow from Staging to Results Area

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

Topics:

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.

For example, DIM BASEL PRODUCT TYPE. This reclassification is performed in Basel application processing and 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 Business Metadata 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 has a distinct set of ALM-specific tables, as does the Market Risk solution.

> **NOTE** The structure of these processing area stores is decided by the actual analytical application and engine used. The OFSAA suite of applications is organized this way, with each application managing a specific set of tables 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 Data Flow from Staging to Results Area. 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 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 application and hence must put additional custom effort to design an ETL process to load the required data elements into the respective fact tables referenced by the report. The following section 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 of 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 it 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 addition or reduction of overall reporting amount for a given line item based on 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 addition or reduction of overall reporting amount for a given line item based on sign of the end of the period balance.

					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

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 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.

							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 Metadata browser as the configured metadata can be made available in the meta-model through MDB publish:

1. Data Integration Hub (DIH) Connectors
2. Data Mapping (T2T) option in Application Infrastructure
3. Data File Mapping (F2T) option in Application Infrastructure

Topics:

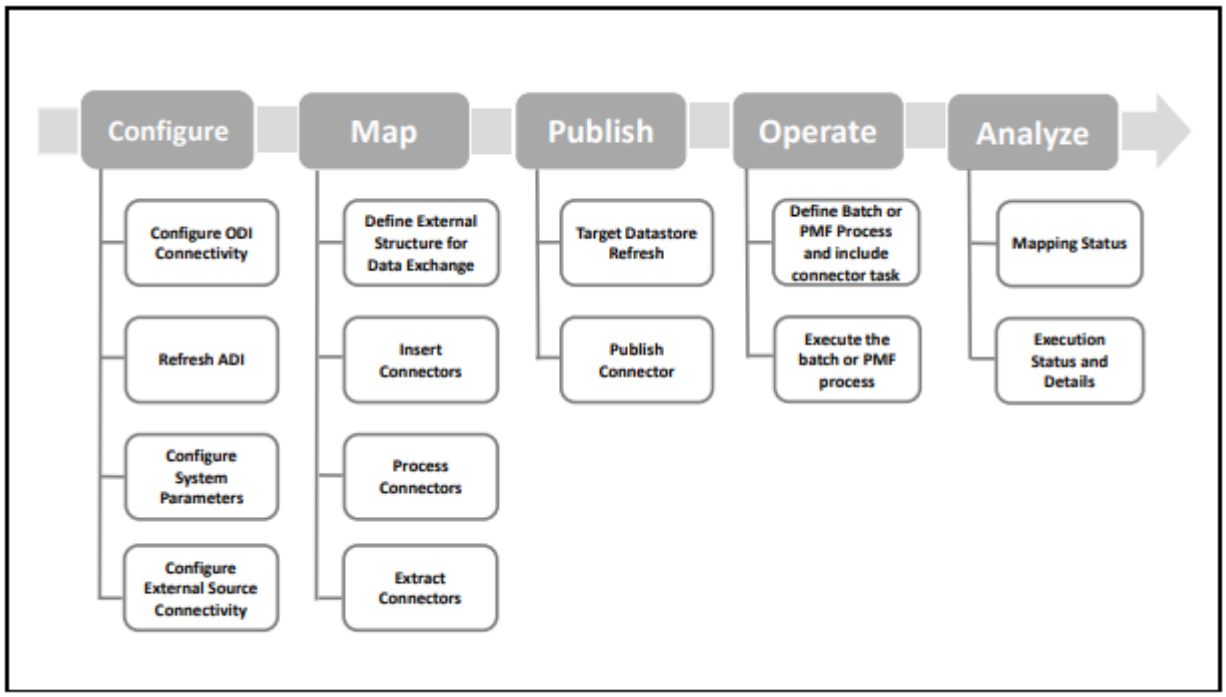
- DIH Connectors
- Data Mapping (T2T)
- Data File Mapping (Flat File to RDBMS Target - F2T)

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

Figure 45: 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 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 in 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 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 are available in the OFS Regulatory Reporting for US Federal Reserve - Data Elements <release version> document in 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 Regulatory Reporting application for cases like a number of 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:

4.2.1 Overview of Basel Processing to US FED Results Integration Tables

As part of Basel processing to US FED results 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 stores 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 20: Table to Table Seeded Definitions

Sl. No.	Source Table Name	Target Table Name	T2T Definition Name
1	FCT_CCP_DETAILS	FCT_REG_CP_CAPITAL_SUMMARY	T2T_FRCCS_FCT_CCP_DETAILS
2	FSI_CAP_SFT_EXPOSURES	FCT_REG_CAP_ACCOUNT_SUMMARY	T2T_FRCAS_FSI_CAP_SFT_EXPOSURES
3	FSI_CAP_INVESTMENT_EXPOSURES	FCT_REG_CAP_ACCOUNT_SUMMARY	T2T_FRCAS_FSI_CAP_INVESTMENT_EXPOSURES
4	FSI_CAP_DERIVATIVES	FCT_REG_CAP_ACCOUNT_SUMMARY	T2T_FRCAS_FSI_CAP_DERIVATIVES
5	FSI_CAP_BANKING_EXPOSURES	FCT_REG_CAP_ACCOUNT_SUMMARY	T2T_FRCAS_FSI_CAP_BANKING_EXPOSURES
6	FSI_CAP_EXP_MITIGANT_MAPPING	FCT_REG_ACCT_MITIGANT_MAPPING	T2T_FRAMM_NET_POOL_EXP_MITIGANT_MAP
7	FSI_CAP_SUB_EXPOSURES	FCT_REG_ACCT_MITIGANT_MAPPING	T2T_FRAMM_FSI_CAP_SUB_EXPOSURES
8	FSI_CAP_MITIGANTS	FCT_MITIGANT_REG_CAPITAL	T2T_FMRC_FSI_CAP_MITIGANTS
9	FCT_SECURITIZATION_POOL	FCT_REG_SEC_POOL_SUMMARY	T2T_FCT_REG_SEC_POOL_SUMMARY
10	FCT_OPS_RISK_DATA	FCT_REG_OR_CAPITAL_SUMMARY	T2T_FCT_REG_OR_CAPITAL_SUMMARY
11	FCT_MARKET_RISK_EXPOSURES	FCT_REG_MARKET_RISK_EXPOSURES	T2T_FCT_REG_MARKET_RISK_EXPOSURES
12	FCT_STANDARD_ACCT_HEAD	FCT_REG_LE_CAPITAL_SUMMARY	T2T_FCT_REG_LE_CAPITAL_SUMMARY
13	FCT_PARTY_GROUP_LARGE_EXPOSURE	FCT_REG_LARGE_EXP_CP_LIMITS	T2T_FCT_REG_LARGE_EXP_CP_LIMITS
14	FCT_COUNTERPARTY_EXPOSURE	FCT_REG_CP_CAPITAL_SUMMARY	T2T_FCT_REG_CP_CAPITAL_SUMMARY
15	FSI_CAP_NETTABLE_POOL	FCT_REG_CAP_POOL_SUMMARY	T2T_FCT_REG_CAP_POOL_SUMMARY
16	FSI_PLACED_COLLATERAL	FCT_REG_CAP_PLCD_COLL_SUMMARY	T2T_FCT_REG_CAP_PLCD_COLL_SUMMARY
17	FSI_CAP_INVESTMENT_EXPOSURES	FCT_REG_CAP_ACCOUNT_SUMMARY	T2T_FCT_REG_CAP_FIXED_AST_SUMMARY
18	FSI_CAP_BANKING_EXPOSURES	FCT_REG_CAP_CREDIT_LINE_SUMMRY	T2T_FCT_REG_CAP_CREDIT_LINE_SUMMRY

Sl. No.	Source Table Name	Target Table Name	T2T Definition Name
19	FSI_CAP_BANKING_EXPOSURES	FCT_REG_CAP_ASSET_SOLD_SUMMARY	T2T_FCT_REG_CAP_ASSET_SOLD_SUMMARY
20	FCT_MR_VAR_SUMMARY_DATA	FCT_MR_VAR_SUMMARY	T2T_FCT_MR_VAR_SUMMARY
21	FCT_MR_VAR_SUMMARY_DATA	FCT_MR_VAR_PORTFOLIO_SUMMARY	T2T_FCT_MR_VAR_PORTFOLIO_SUMMARY
22	FCT_MARKET_RISK_IR_CAPITAL	FCT_MR_CAPITAL_SUMMARY	T2T_FCT_MR_CAPITAL_SUMMARY_FMRIRC
23	FCT_MARKET_RISK_FOREX_CAPITAL	FCT_MR_CAPITAL_SUMMARY	T2T_FCT_MR_CAPITAL_SUMMARY_FMRFRXC
24	FCT_MARKET_RISK_EQ_CAPITAL	FCT_MR_CAPITAL_SUMMARY	T2T_FCT_MR_CAPITAL_SUMMARY_FMREQC
25	FCT_MARKET_RISK_COM_CAPITAL	FCT_MR_CAPITAL_SUMMARY	T2T_FCT_MR_CAPITAL_SUMMARY_FMRCC
26	FSI_FORECAST_RWA	FCT_FORECAST_REG_CAP_SUMMARY	T2T_FCT_FORECAST_REG_CAP_SUMMARY
27	FCT_MARKET_RISK_CAPITAL	FCT_MARKET_RISK_REPORTING	MKT_RISK_REPORTING_POP_IR
28	FSI_CAP_SUB_EXPOSURES	FCT_REG_POOL_MITIGANT_MAP	T2T_FRPMM_FSI_CAP_SUB_EXPOSURES

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:

1. 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 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 and Operations**, select **Process Modelling Framework** and then select **Process Modeller**.

c. Select a **Run** and click **Execute Run**.

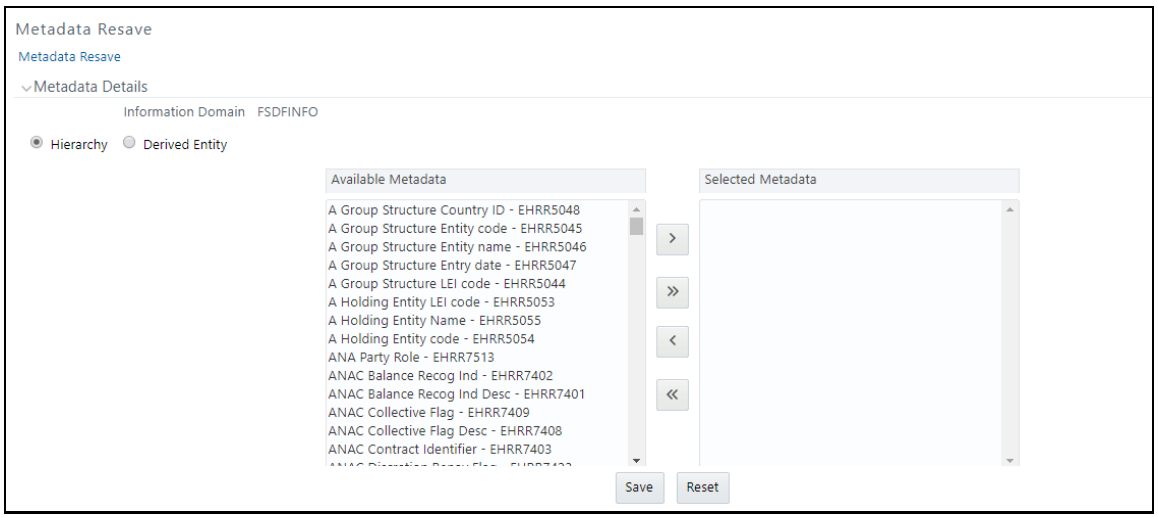
d. The **Run Details** and **Run Execution Parameters** window is displayed.

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 46: 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 OFS Analytical Applications Infrastructure User Guide.

The status messages in Batch Monitor are:

- N - Not Started
- O - 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:

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 stores 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 21: 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:

1. 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:

   g. Log in to Oracle Financial Services Analytical Applications interface with your credentials.

   h. Navigate to **Regulatory Reporting for US Federal Reserve**, select **Process and Operations**, select **Process Modelling Framework** and then select **Process Modeller**.

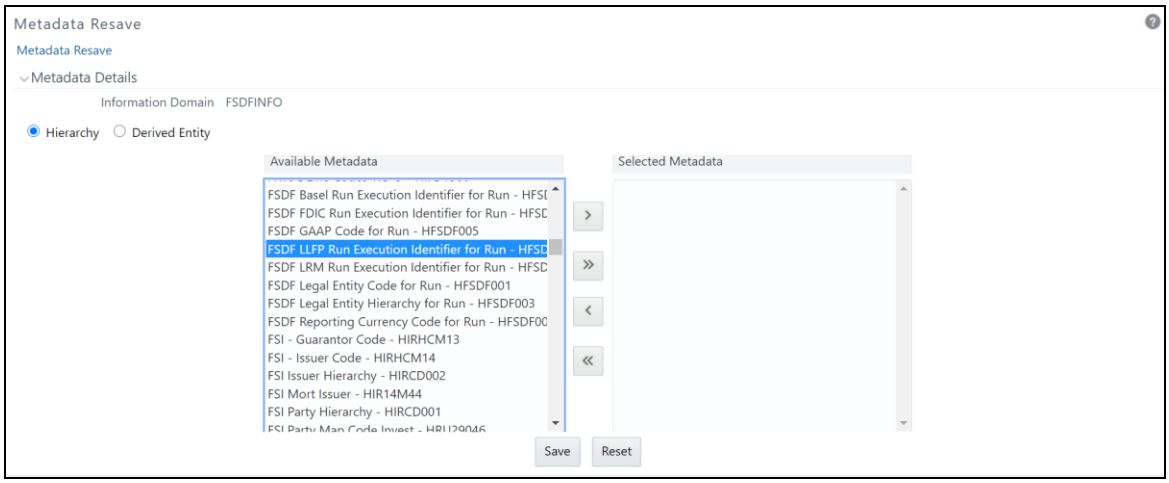
   i. Select a **Run** and click **Execute Run**.

   j. The ***Run Details*** and ***Run Execution Parameters*** window is displayed.

   k. 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.

   l. 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.



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 OFS Analytical Applications Infrastructure User Guide.

The status messages in Batch Monitor are:

- N - Not Started
- O - 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:

4.4.1 Overview of LRM Processing to US FED Results Integration Tables

As part of LRM processing to US FED results 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 stores 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 22: 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:

1. 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 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 and Operations**, select **Process Modelling Framework** and then select **Process Modeller**.

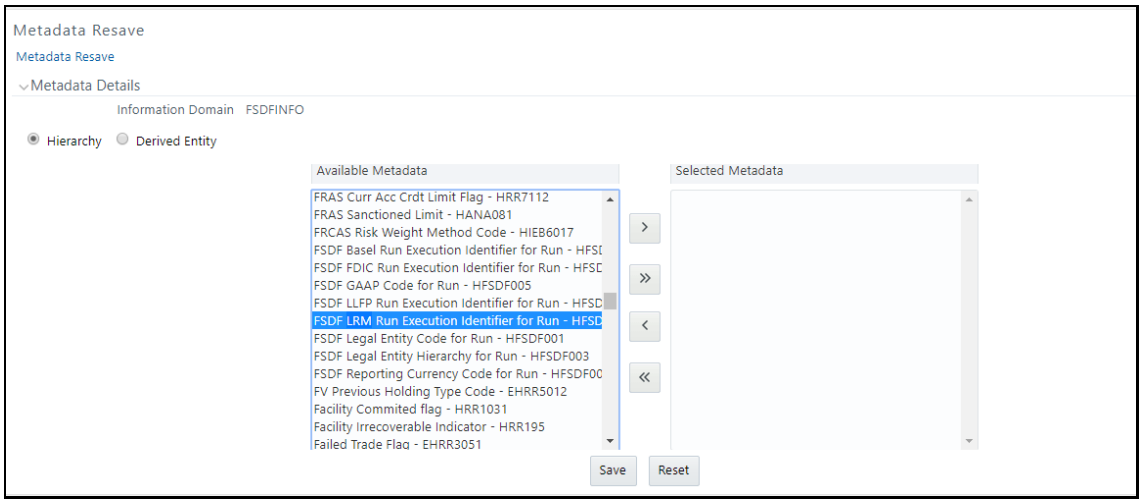
   c. Select a **Run** and click **Execute Run**.

   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 OFS Analytical Applications Infrastructure User Guide.

The status messages in Batch Monitor are:

- N - Not Started
- O - 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

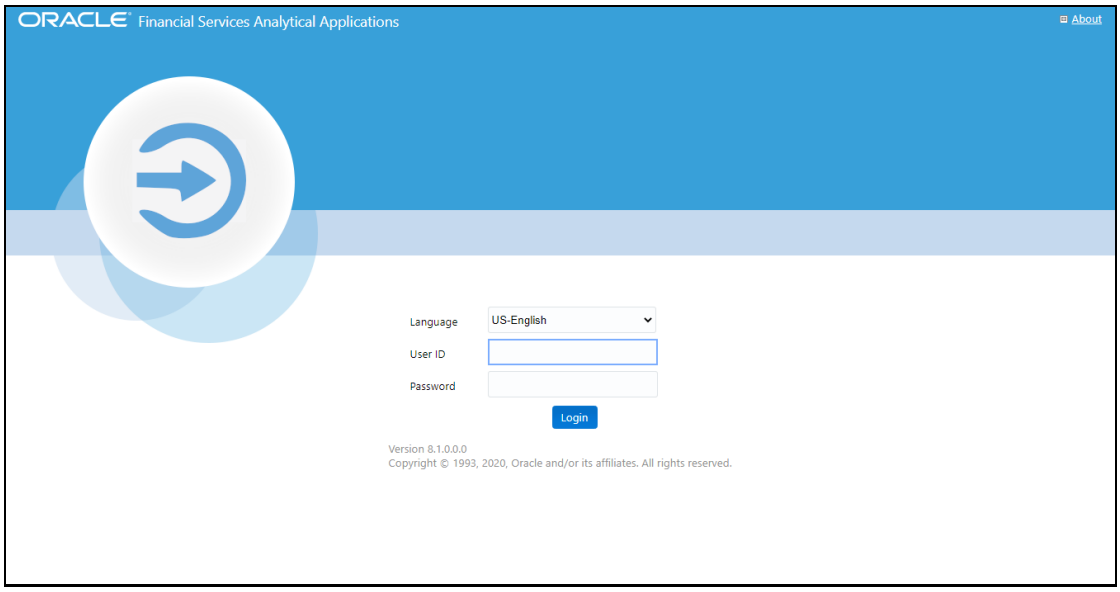
After the applications are installed and configured, to access the OFS REG REP UI you must log in to the OFSAAI environment using the OFSAAI login page.

> **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:

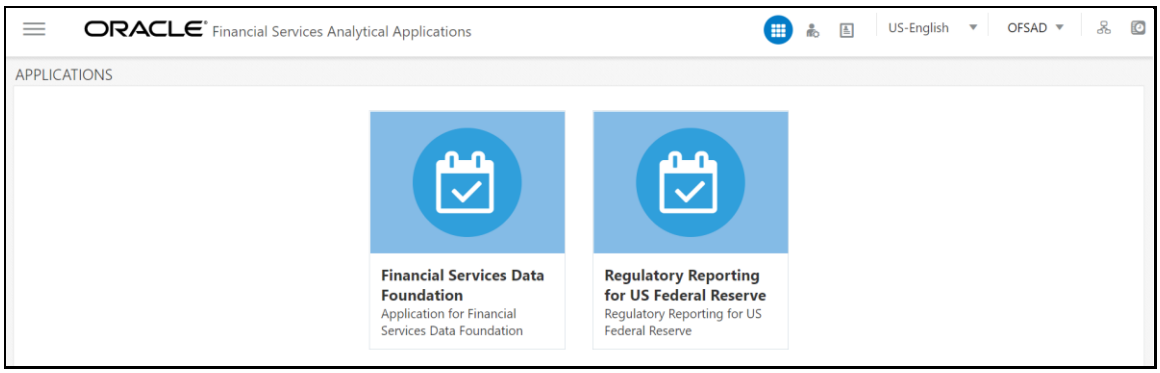
1. Enter the OFSAAI URL in your browser. The OFSAAI login page is displayed.

Figure 47: 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 48: OFSAA Applications Screen



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

Figure 49: 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.

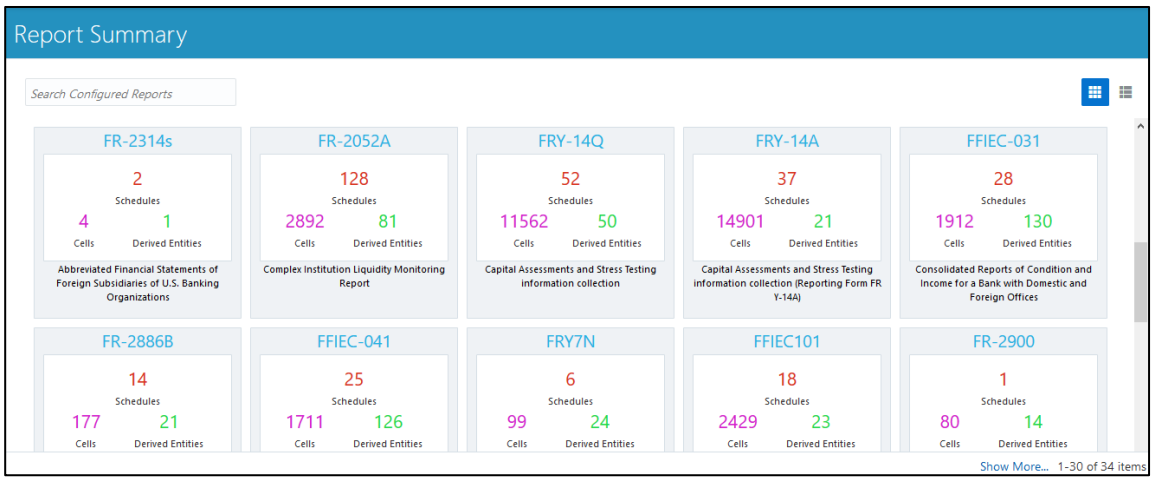
Figure 50: Regulatory Reporting for US Federal Reserve Page

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 **Reports Summary** window.

Figure 51: Report Summary Screen



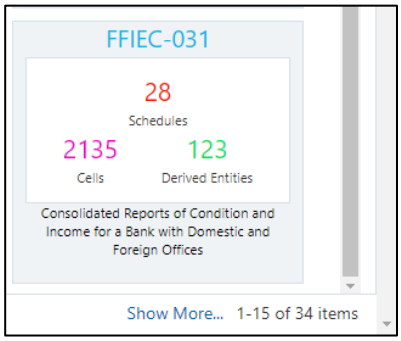
NOTE You can view the summary of all the configured reports in the Tile view or List view .

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 on the search box. You can search for a Report using either the name or description.

Figure 52: 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 53: 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 54: Report in Tile View

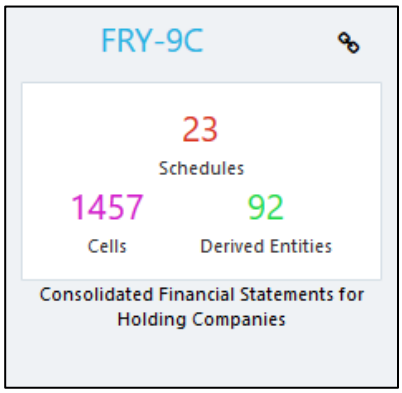
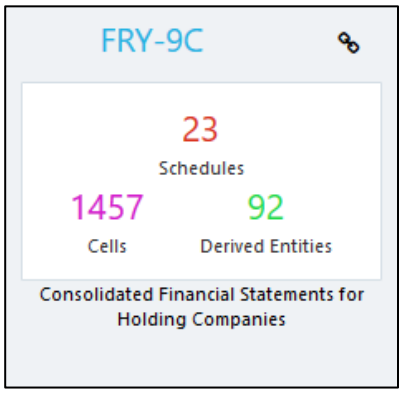


Figure 55: Report in List View

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

Figure 56: Report Information

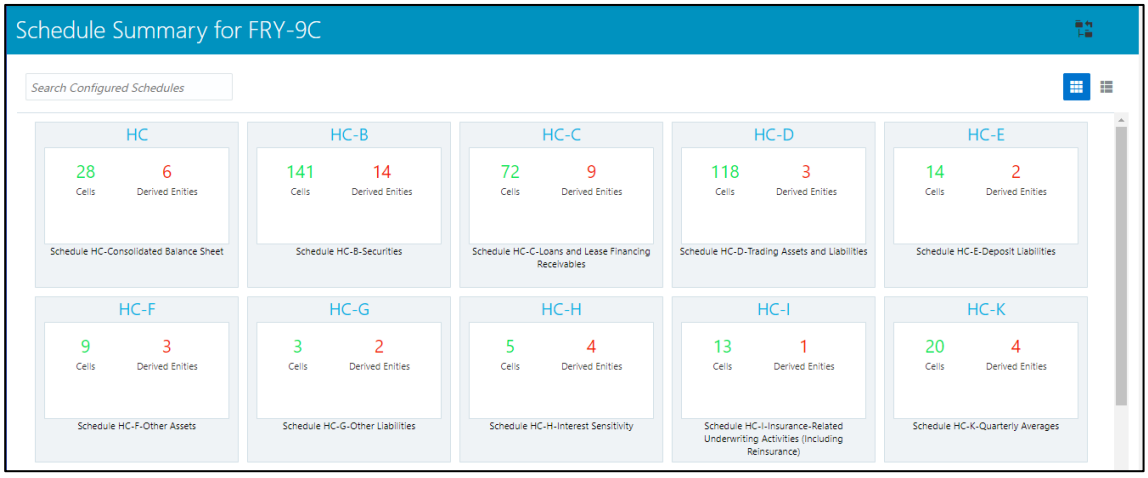


4.5.3 Viewing Schedule Summary

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 57: Schedule 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 on the search box. You can search for a Schedule using either the name or description.

The Paging option (Figure 58) at the bottom right corner allows you to see more reports than the ones currently displayed on the window.

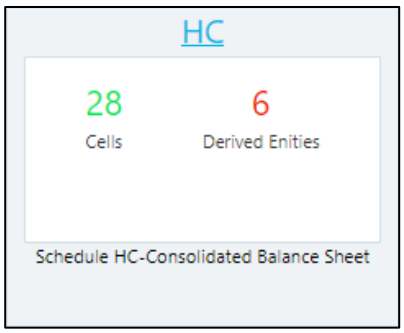
NOTE Select the icon on the top right corner to return to the Report Summary window.

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 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.

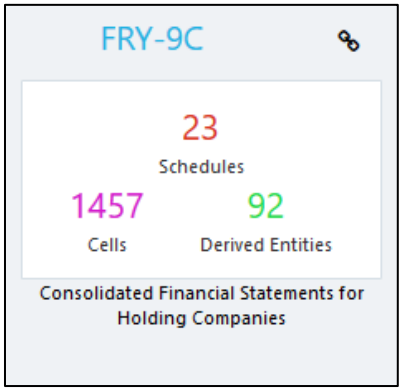
Figure 58: Schedule Information



4.5.4 Viewing Data Elements

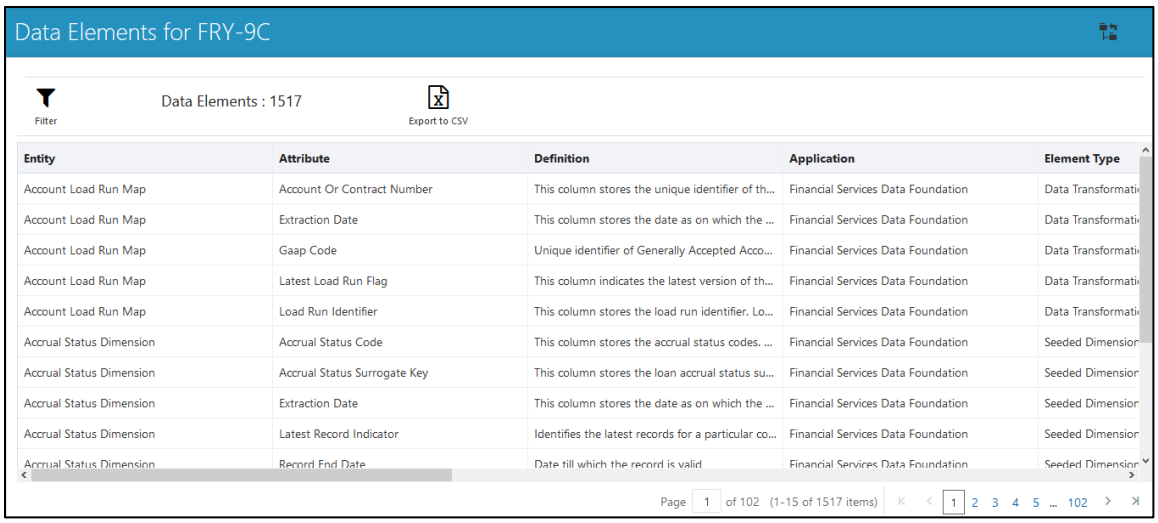
Each tile or list on the Report Summary window corresponds to one report. For each report, you can view the report code, report description, number of schedules within the report, the number of configured non-derived cells, and count of utilized derived entities.

Figure 59: Report Information



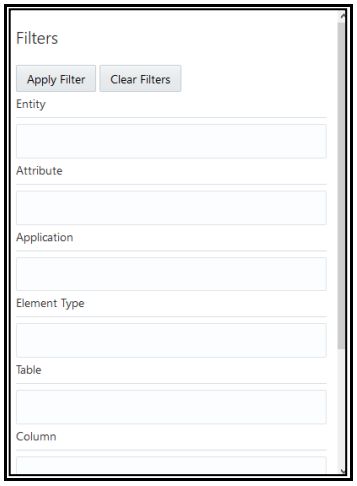
1. Click the chain icon on the right top corner to display the data elements for the respective item. The data elements view option is available at the report schedule and cell level.

Figure 60: Data Elements Screen



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

Figure 61: Filters



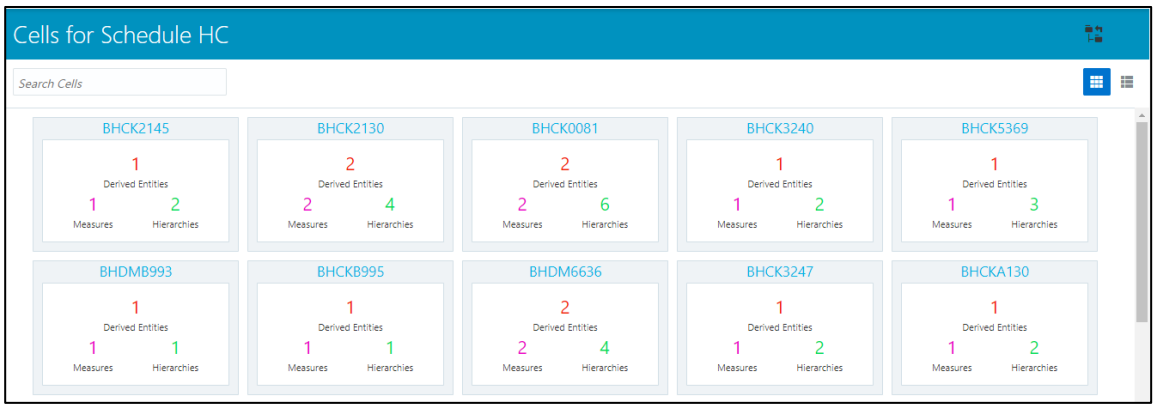
3. Select **Apply Filter** to apply the required filters on the selected data.
4. Select **Clear Filter** to clear the applied filters and display all records for the component.
5. Select **Export to CSV** to export the data displayed in the window.

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 62).

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

Figure 62: Cell Summary Window



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 on the search box. You can search for a Cell using either the name or description.

The Paging option (Figure 62) 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.

Topics:

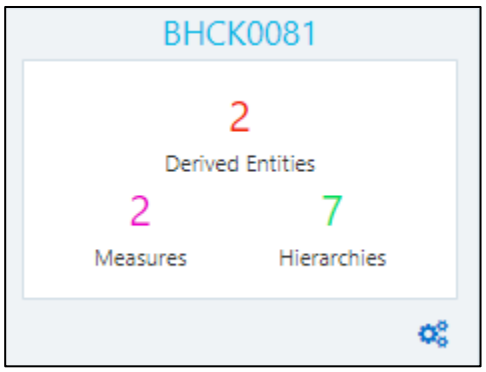
- Cell Information
- Derived Entity
- Measure
- Filters

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.

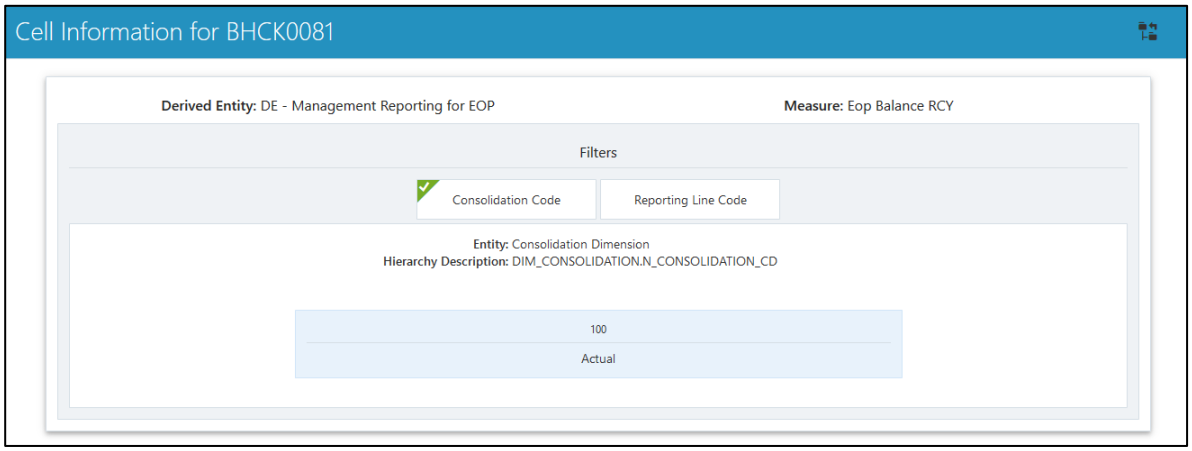
For example, the cell CRSAR040C180 tile is displayed as follows. Select the cell or MDRM Code to navigate to the Cell Information window.

Figure 63: Cell Information



The Cell Information window is displayed as follows.

Figure 64: 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:

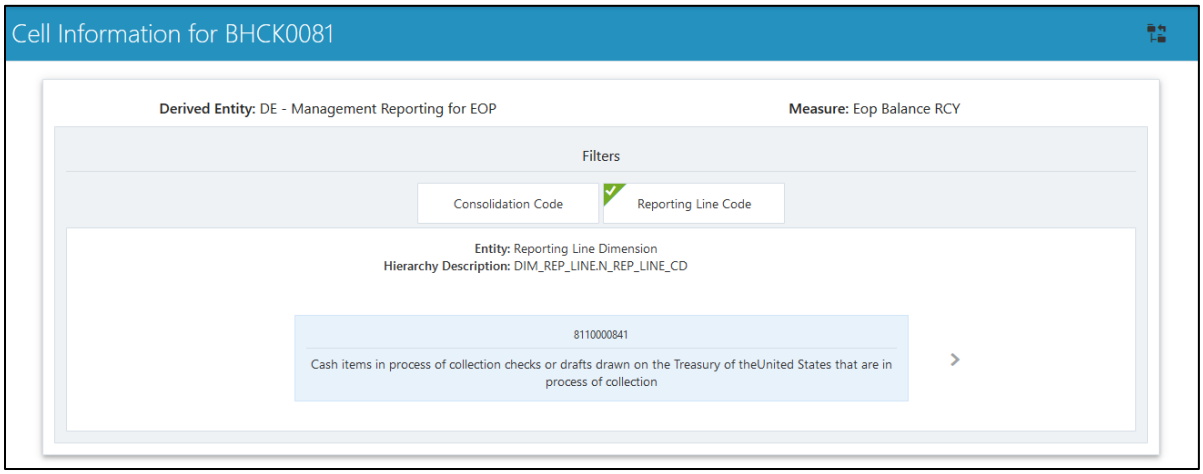
1. All filters that are applied to the cell are displayed under the filter section. It displays all the applied filters as their OFSAA description.
2. On selection, the filter is marked by a sign on the top left corner of the selected filter.
3. The section that follows displays the entity or table on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

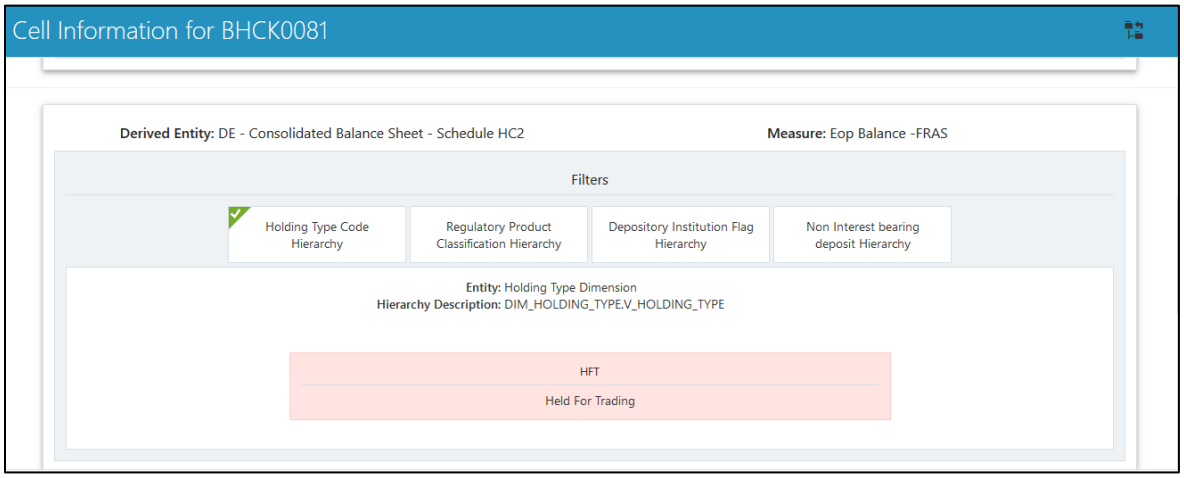
   In the case of multiple values, the filters are displayed as follows with an arrow mark.

Figure 65: Multiple Filter Values



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

Figure 66: 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

4.6.1 Prerequisites

The prerequisites for Data Schedule Mapping are as follows:

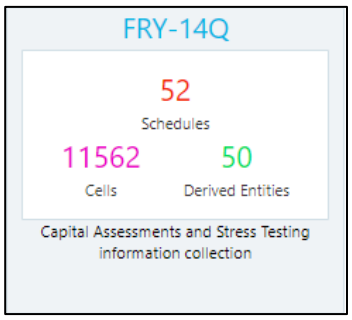
- All Derived Entities and the Wrapper Views should be resaved through resave batch pages and by the execution of scripts packaged as Postscripts with installer respectively.
- Execute the batch **<INFODOM>_DS_POP_UNION_METADATA_USFED** available in the batch execution page post the step above.

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.

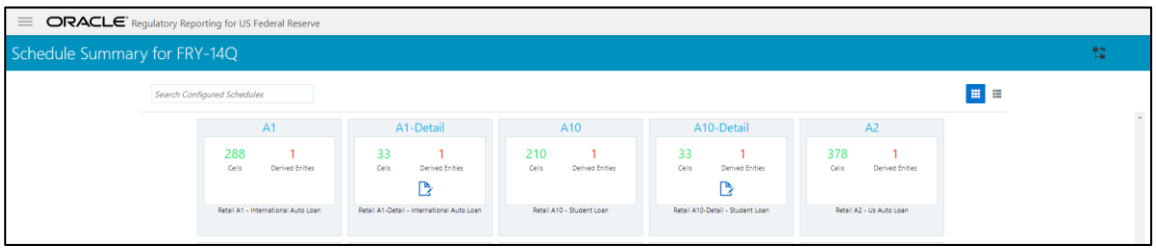
For example: to map schedules under the FR Y-14 report, select the FRY-14Q report.

Figure 67: Report Information



Select the report code (Figure 68) to navigate to the schedules. All schedules under the report are available in this window.

Figure 68: Schedules Information



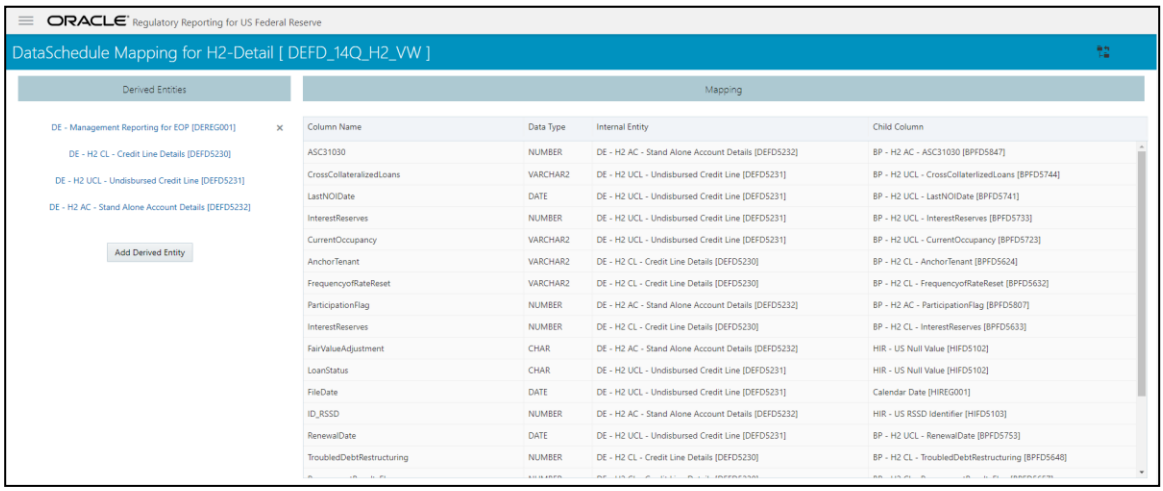
Schedules for which mapping feature is available can be clearly distinguished by the Edit icon available in the schedule tile. Schedules for which the feature is not available do not have the edit icon present in the corresponding tile.

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 69: 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.

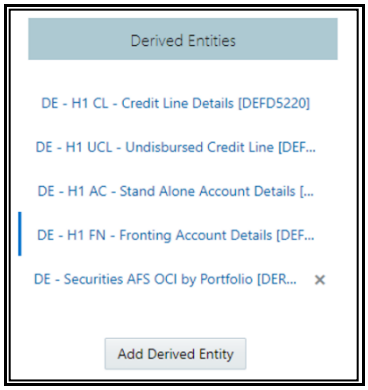
- Wrapper View

  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 70: 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 in Table 23.

Table 23: Mapping Table Components

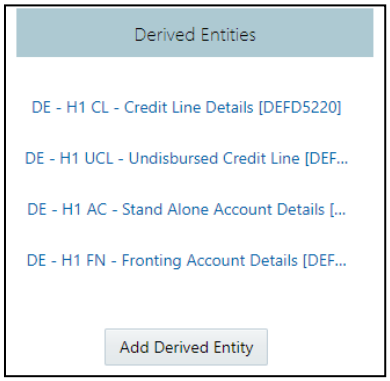
Table Column	Description
Column Name	This defines the line item of the data schedule for which mapping is to be done.
Data Type	This column defines the data type of the line item as per OFS REG REP US FED instructions.
Internal Entity	This column defines the contributing derived entity.
Child Column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

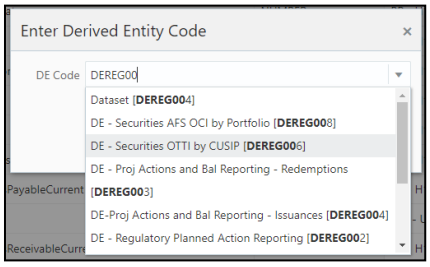
1. Select **Add Derived Entity**.

Figure 71: Add Derived Entity



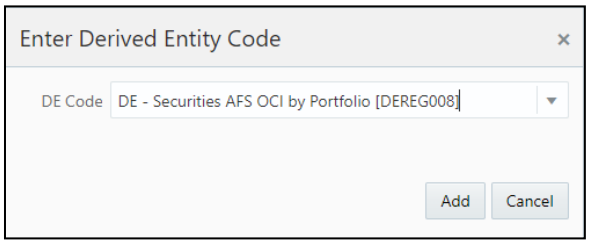
2. This lists the available Derived Entities that are present in the current infodom. The Derived Entities can be searched by either code or name in the search box.

Figure 72: Derived Entities List



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

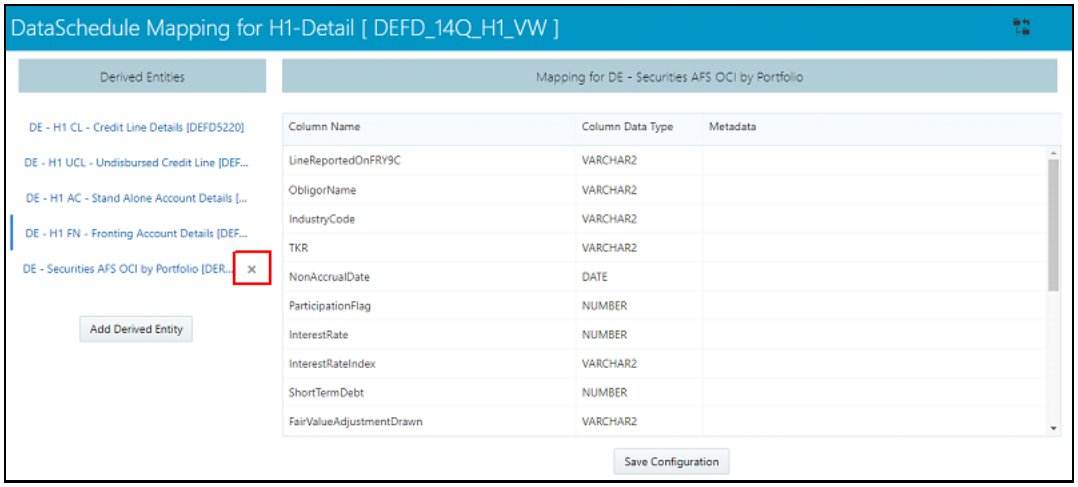
Figure 73: Selected Derived Entity



> **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 74: Mapping Window with New Derived Entity



5. Derived entity added through the above method can be distinguished from OFSAA based derived entities though 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

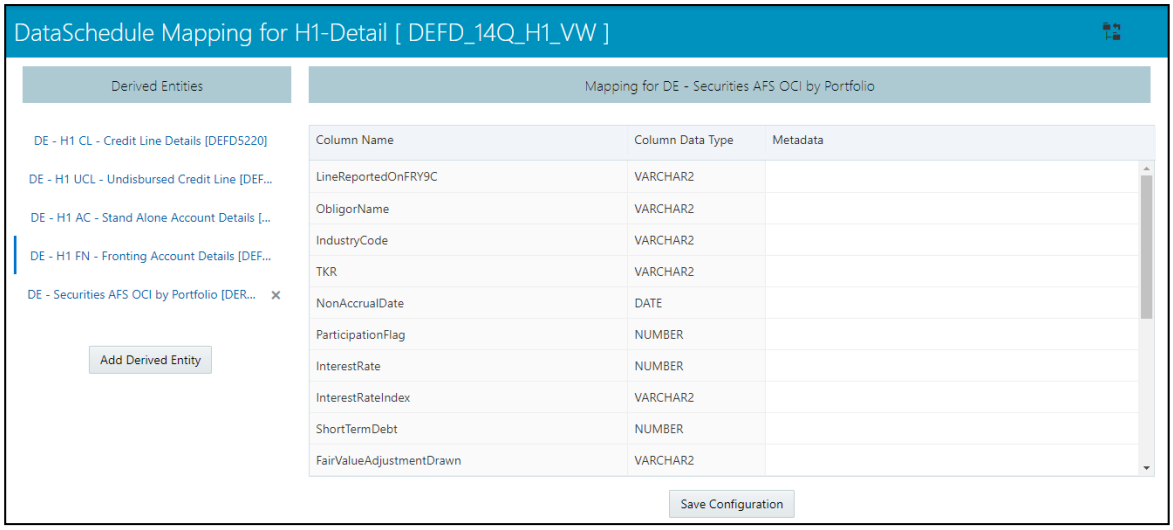
not have the **Remove**  mark and thus mapping for such derived entities cannot be removed or modified from this window.

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 75: Data Schedule Mapping Window

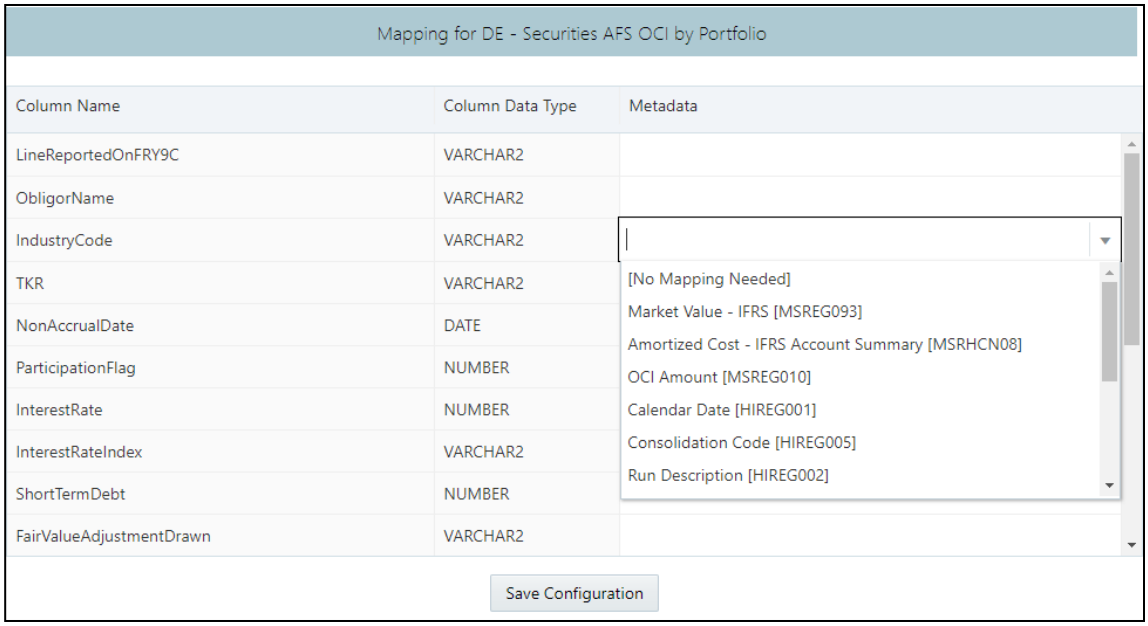


The mapping of the line item to the derived entity column can be modified by double-clicking on the respective row in the **Metadata** column of the mapping table.

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 76: Metadata Mapping

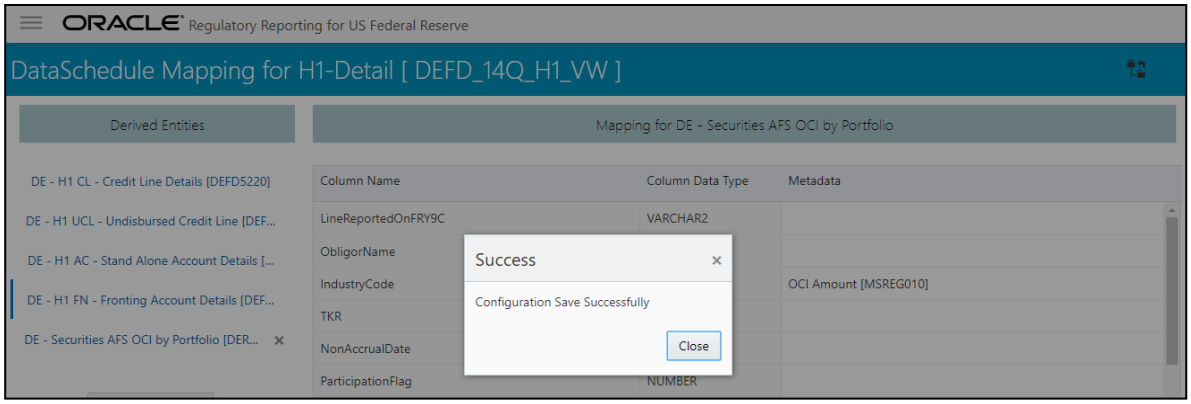


NOTE Ensure that the data type of the selected metadata matches the column data type.

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 77: Saving Mapping Configuration



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 to. This ensures that there can be direct adjustments made to MDRM(s) such that the values from both the derived entities are traceable and efficiently reported.

Topics:

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**

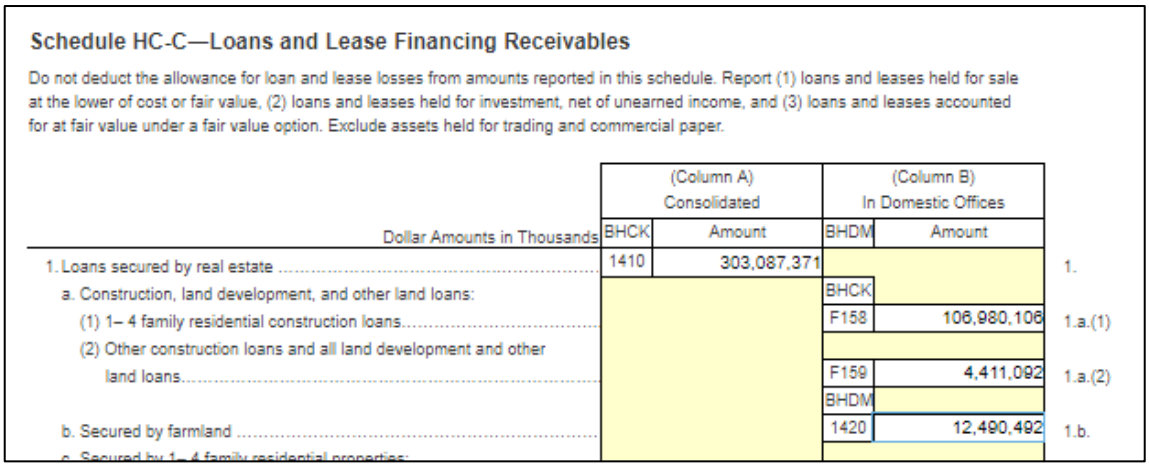
Line Item: **1.b Loans Secured by Real Estate / Secured by farmland**

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 78: Adjustment Feature



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.

Dollar Amounts in Thousands	(Column A) Consolidated BHCK	Amount	(Column B) In Domestic Offices BHDM	Amount	
1. Loans secured by real estate	1410	303,087,371			1.
a. Construction, land development, and other land loans:			BHCK		
(1) 1– 4 family residential construction loans			F158	106,980,106	1.a.(1)
(2) Other construction loans and all land development and other land loans			F159	4,411,092	1.a.(2)
			BHDM		
b. Secured by farmland			1420	12,490,492	1.b.
c. Secured by 1– 4 family residential properties:					

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

Topics:

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.

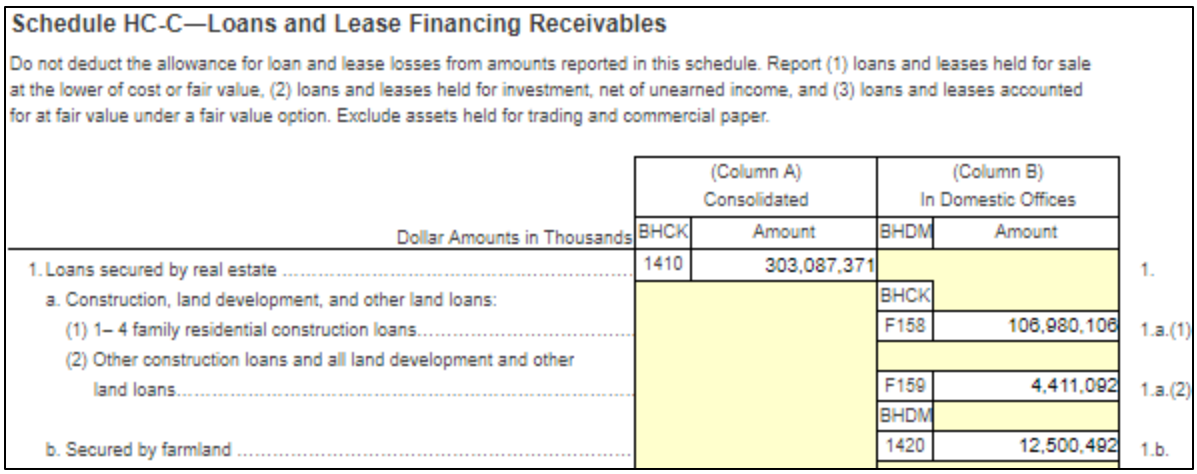
4.7.1.3 Lombard Verification

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

Figure 79: Lombard Adjustment Verification



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.

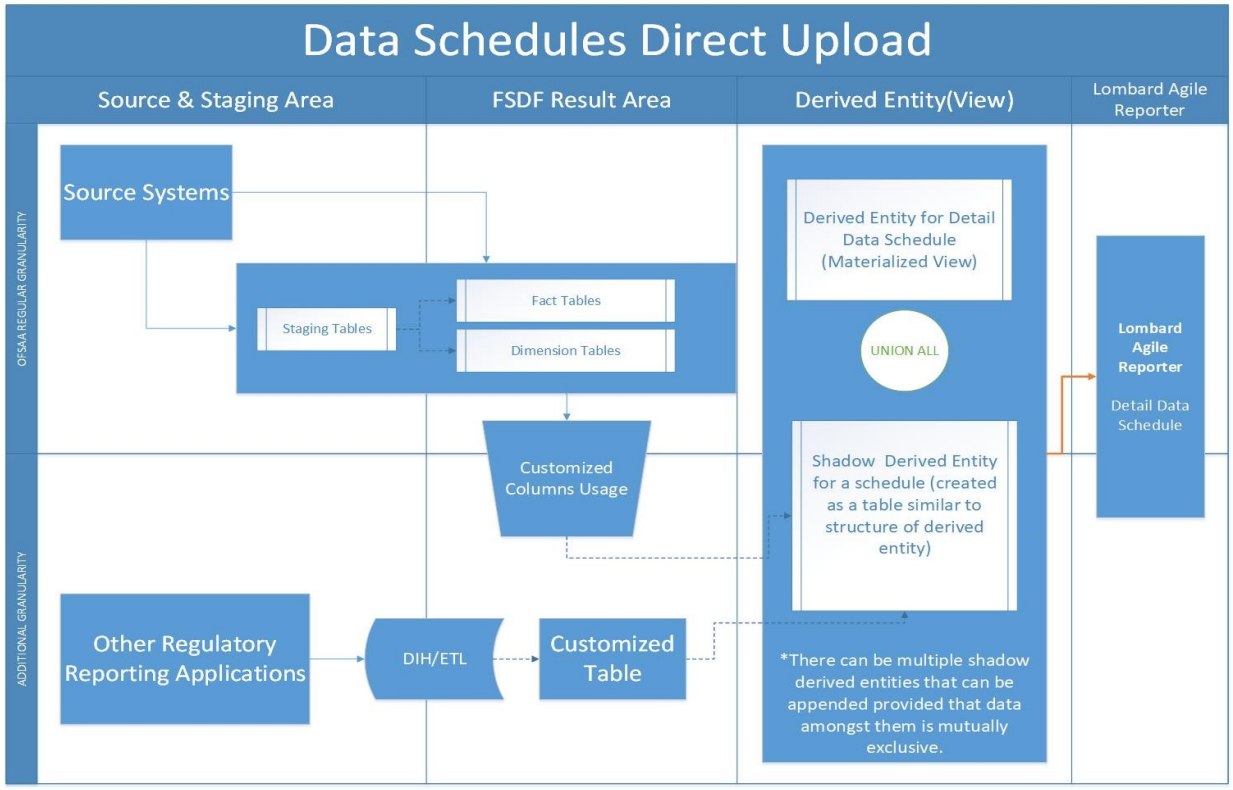
Dollar Amounts in Thousands	(Column A) Consolidated BHCK	Amount	(Column B) In Domestic Offices BHDM	Amount	
1. Loans secured by real estate	1410	303,087,371			1.
a. Construction, land development, and other land loans:			BHCK		
(1) 1– 4 family residential construction loans			F158	106,980,106	1.a.(1)
(2) Other construction loans and all land development and other land loans			F159	4,411,092	1.a.(2)
			BHDM		
b. Secured by farmland			1420	12,500,492	1.b.

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.

Figure 80: 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 data schedule involves setting up a shadow derived entity which 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 shadow derived 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>>'
```

where 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:

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 is 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. FSI_DE_MIGRATION_UNION_INSERT.sql (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 `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

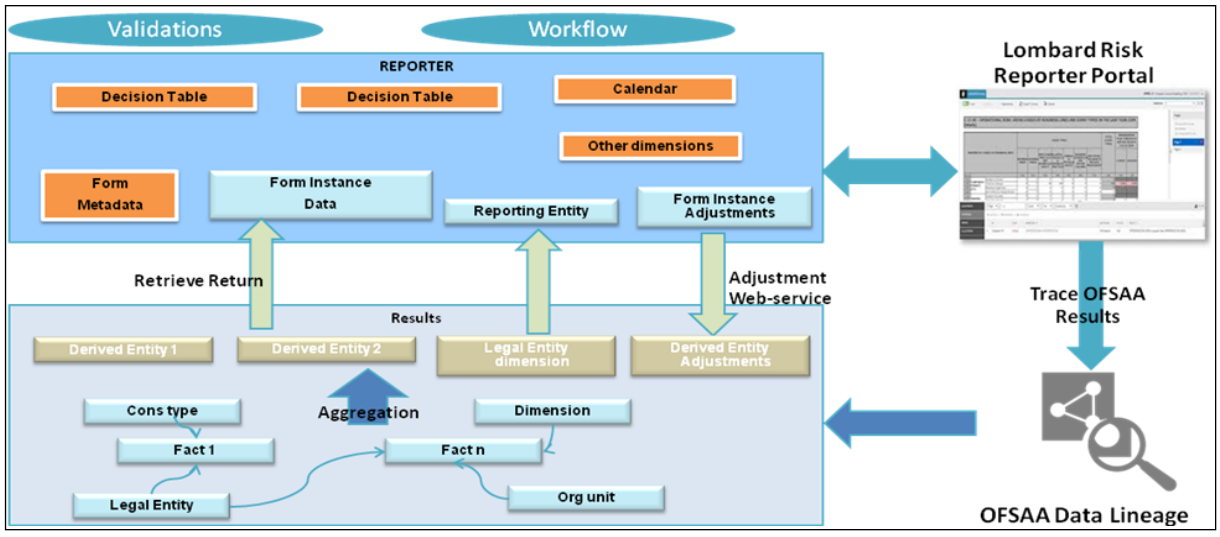
Execute the following script files to migrate in the Destination Environment:

1. VW_FSI_DE_MIGRATION_UNION_DE.sql
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 Lombard Risk

Figure 81 explains the flow of data between OFSAA and AgileREPORTER.

Figure 81: Data Flow between OFSAA and AgileREPORTER

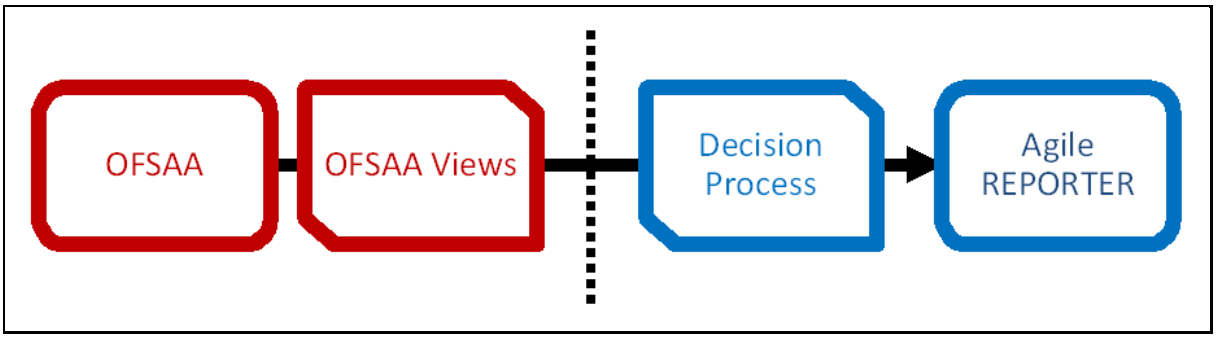


OFSAA provides the data to AgileREPORTER in the form of derived entities. The derived entity is an existing OFSAA higher-order metadata object and can be physicalized as a materialized view in the database. Derived entities store aggregated data from base fact entities specified in the dataset and have 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 82: 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 as 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:

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.

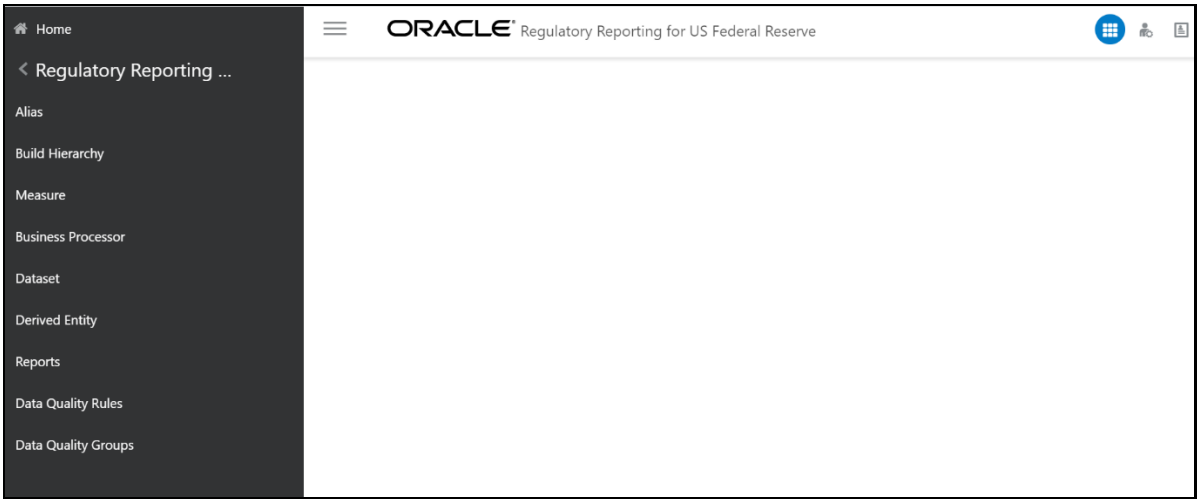
5.1 OFSAA Infrastructure

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 83: 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.

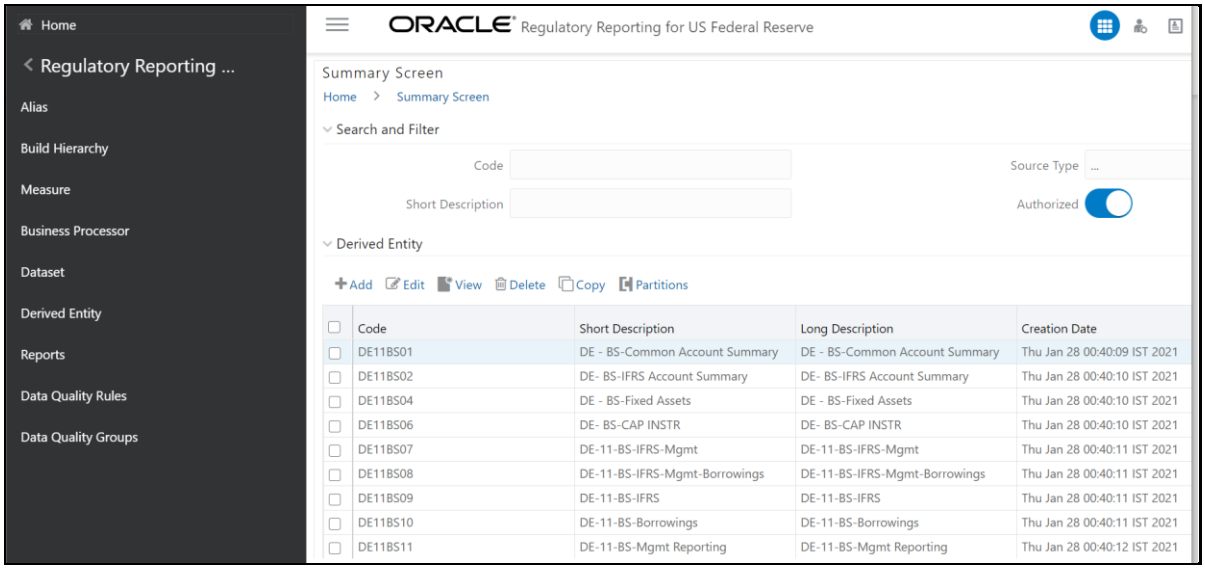
Derived Entities comprise the following:

- 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 Regulatory Reporting Metadata,** 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 84: Derived Entity Summary Page



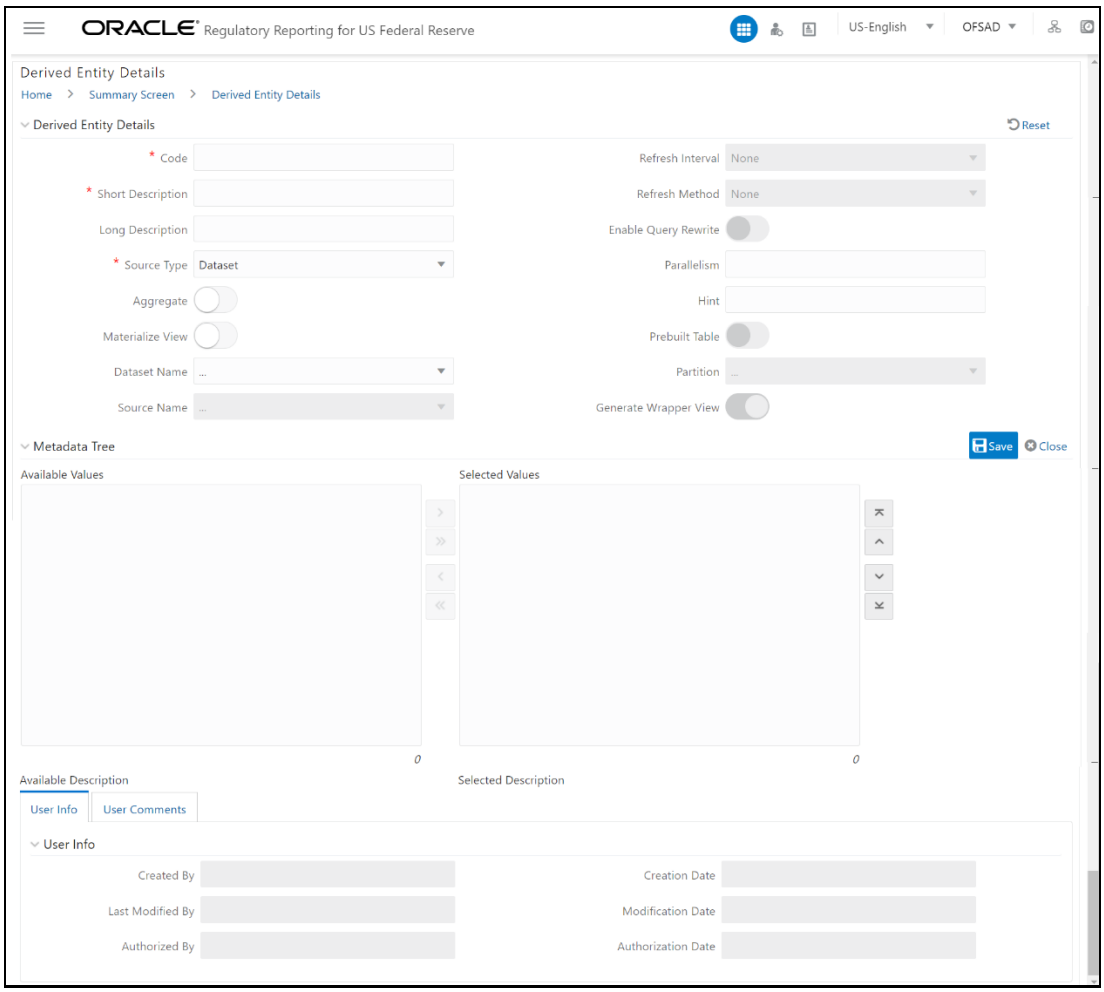
Derived Entities must have AS_OF_DATE and LEGAL_ENTITY as the mandatory dimensions. The rest of the structure of the derived entity can vary depending on the dimensions present. A metadata configuration table is present in AgileREPORTER to link the name of the column in the derived entity and dimension 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 85: 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 OFS Analytical Applications Infrastructure User Guide 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 (OHC) documentation library for detailed steps to incrementally refresh derived entities.

5.4 Rules 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 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 24: 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 25: 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	CC	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 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. 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 Process Modelling Framework Orchestration Guide.

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 Process Modelling Framework Orchestration Guide.

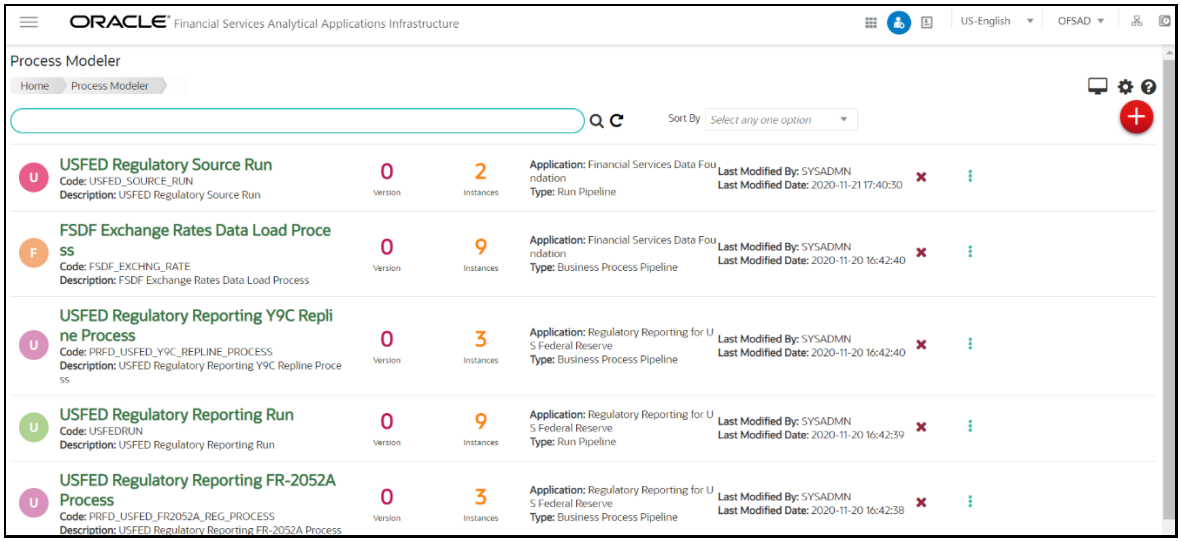
6.2.1 Selecting the Run Parameters and Executing the Run

After designing and saving the process flow diagram, the Process is listed in the *Process Modeler* page.

To select the Run parameters and execute the Run, follow this procedure:

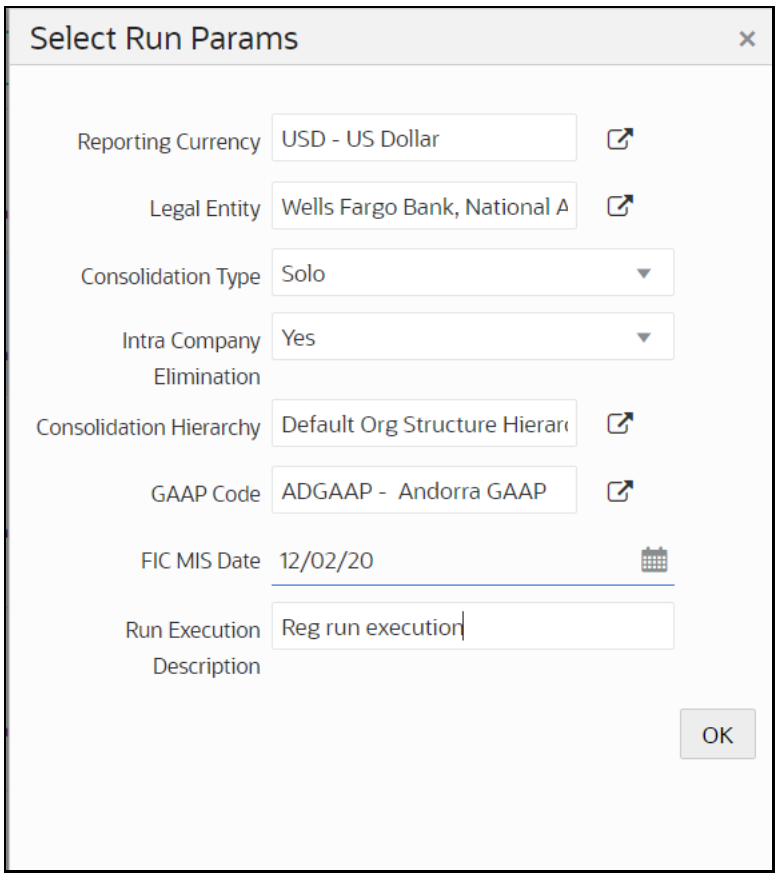
1. In the ***Process Modeler*** page, click **More** icon ⋮ corresponding to the Run Pipeline that must be executed.

Figure 86: Process Modeler Screen



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

Figure 87: Select Run Parameter Screen



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

Table 26: 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.
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.

Field Name	Description or Instruction
Run Execution Description	Enter a longer description of the Run.

4. 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.

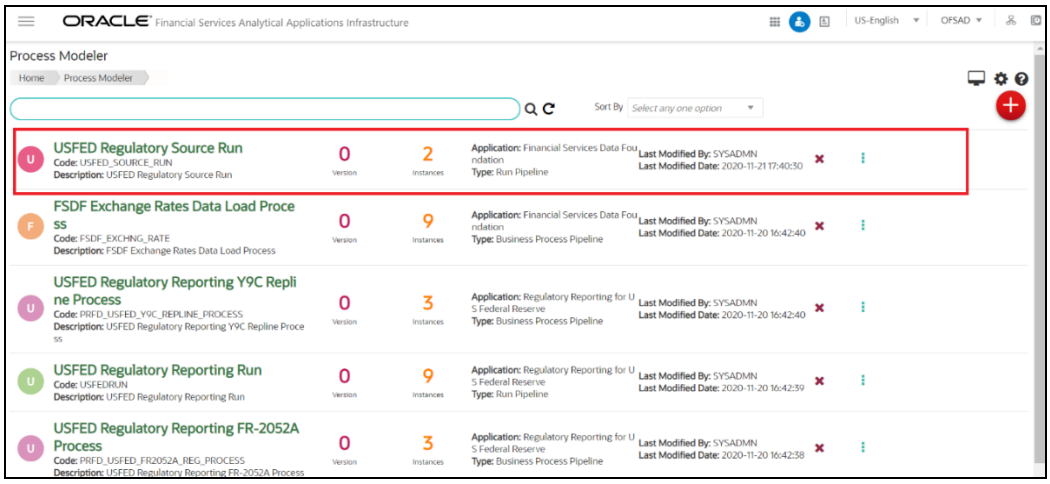
6.2.2 Verifying the Run Execution

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:

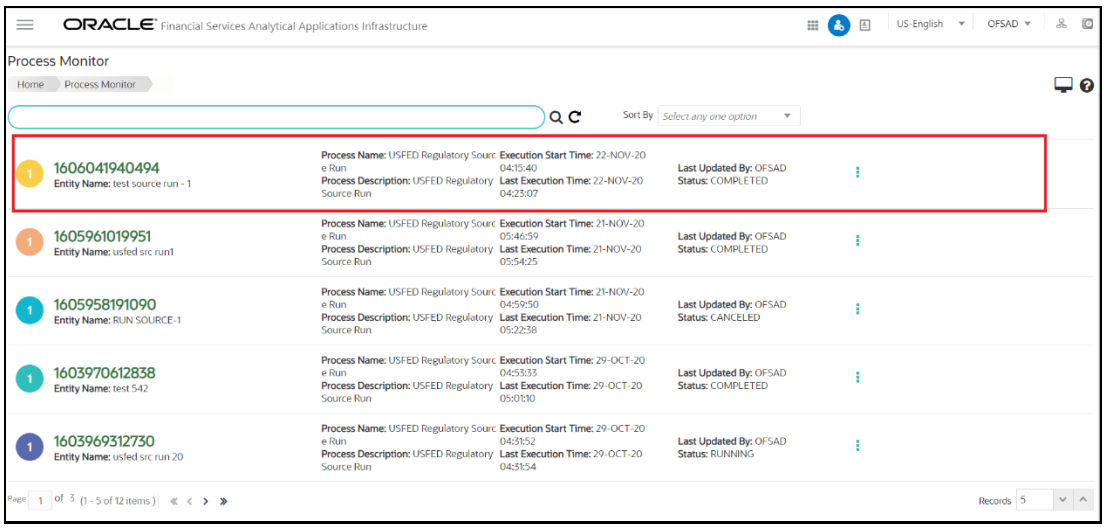
1. In the ***Process Modeler*** page, click **More** icon ⋮ corresponding to the Run Pipeline that must be verified. Click **Process Flow Monitor**.

Figure 88: 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.

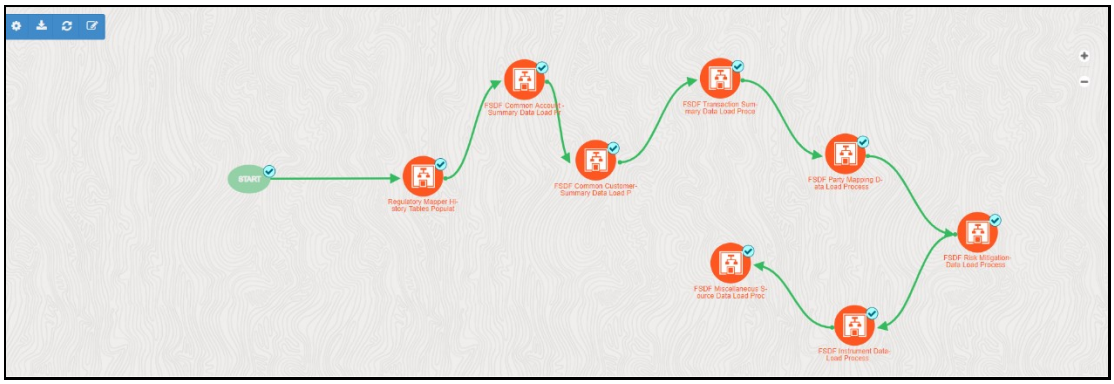
Figure 89: Process Monitor Screen



3. The process flow diagram window is displayed. The 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 90: Run Pipeline Process Flow Diagram



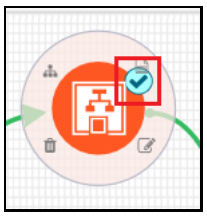
6.2.3 Verifying the Execution Logs

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

To verify the execution log, follow these steps:

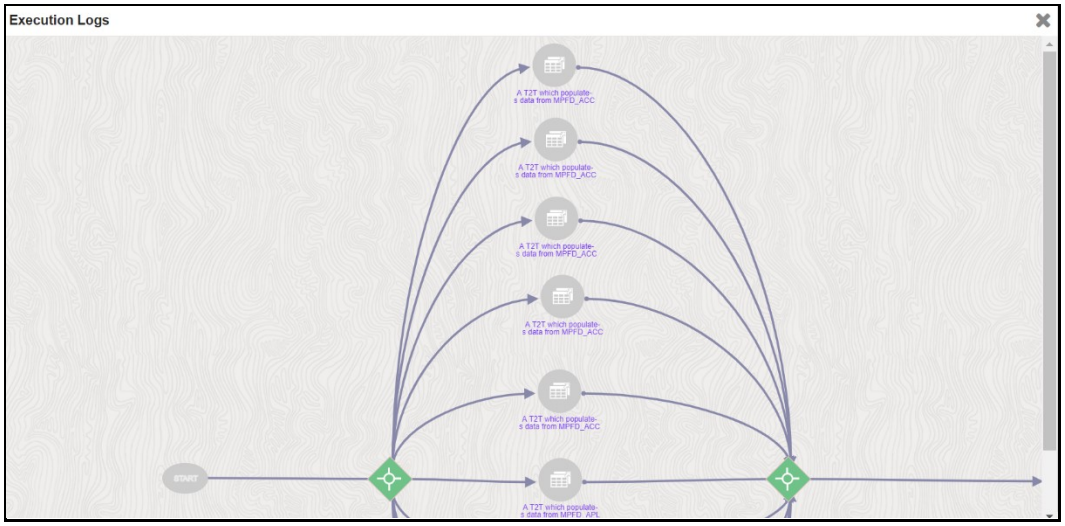
1. In the ***Process Monitor*** window, click the required process flow ID. The process flow diagram is displayed in a new window. Hover on the required Sub Pipeline. Four icons appear. Click the log Icon.

Figure 91: Sub Pipeline



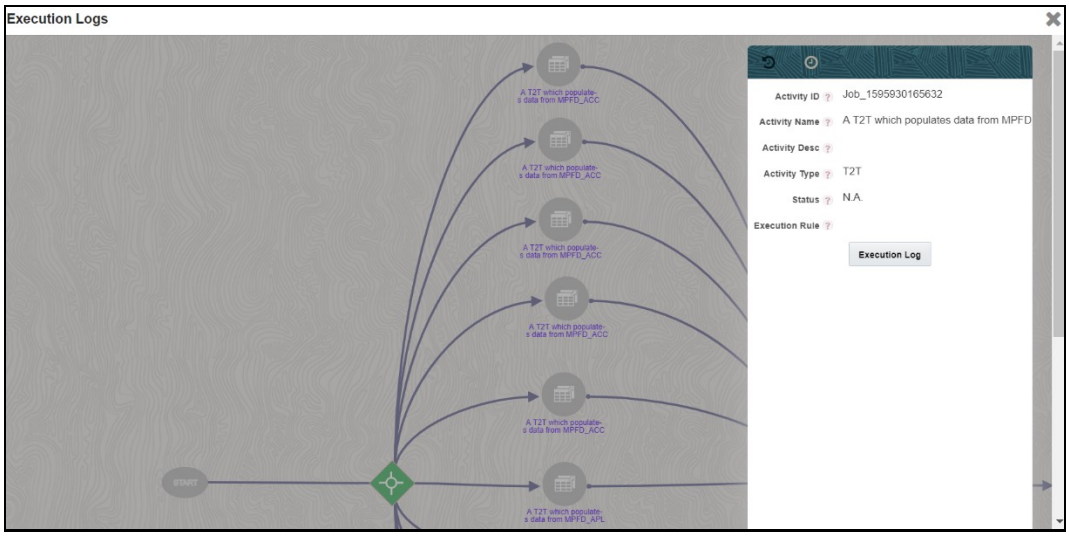
2. The ***Execution Logs*** window is displayed. Click the required metadata to verify the execution log.

Figure 92: Execution Logs



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

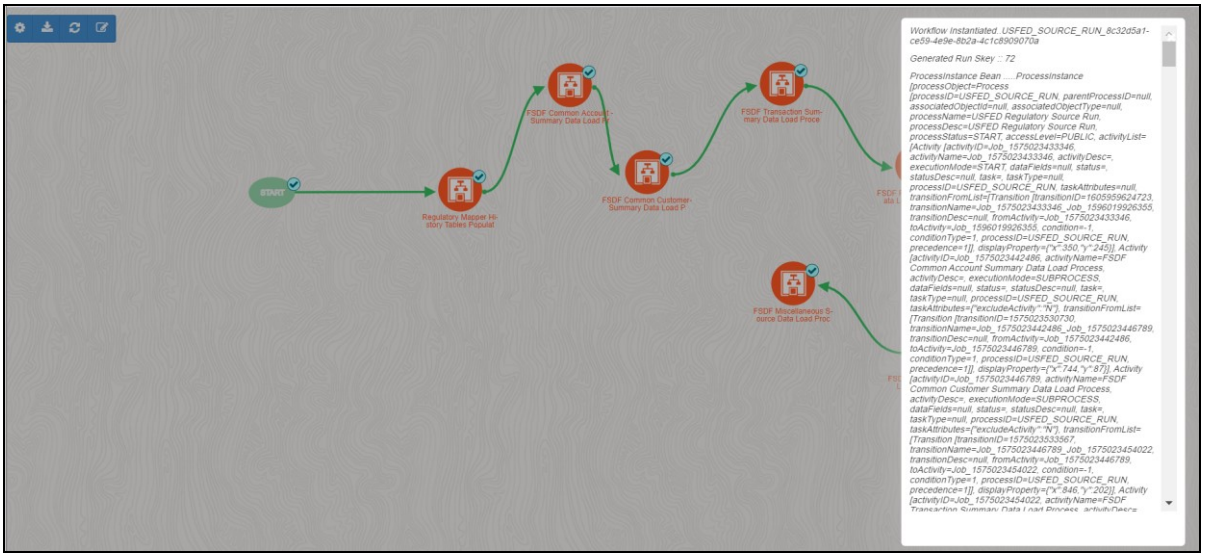
Figure 93: Activity Logs



4. 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 94: Run Execution Logs



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

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.

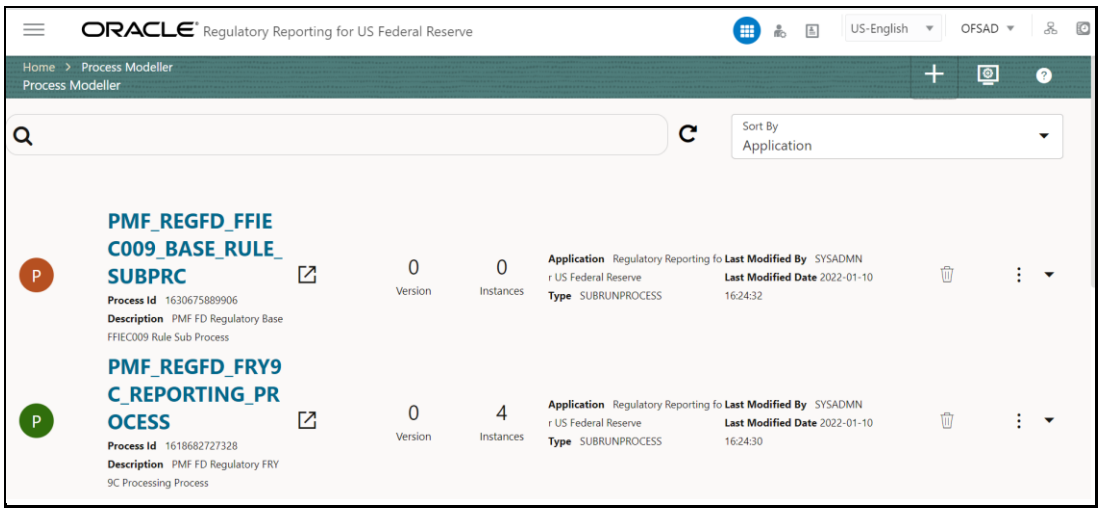
> **NOTE** The product direction is to start using the Process Modelling Framework Run pipelines for Regulatory Reporting Run executions instead of obsolete Reporting Run (RRF). The ready-to-use version of the Reporting Run (RRF) will no longer be updated in the Regulatory Reporting Installer. All the 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:

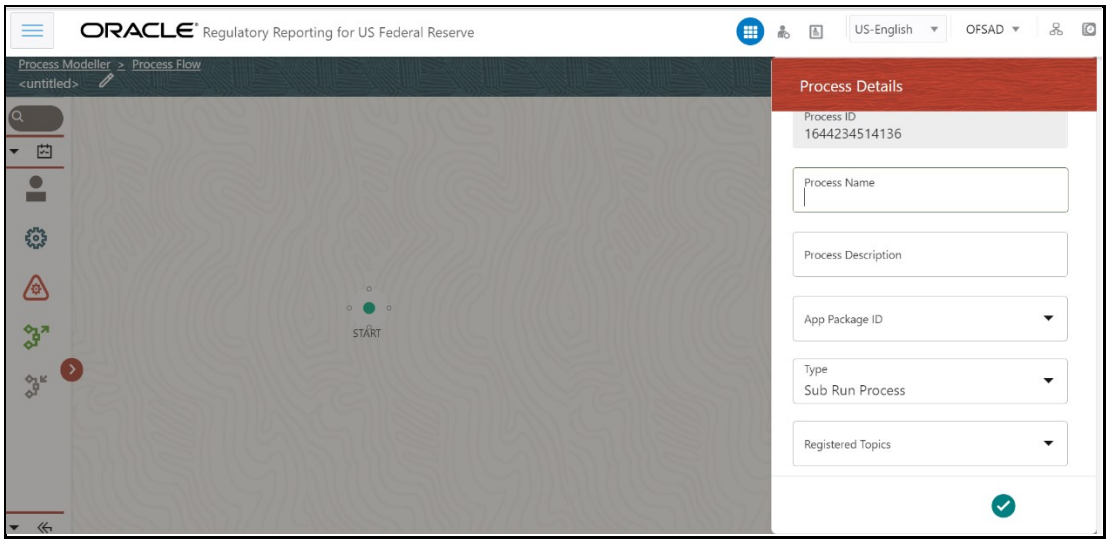
1. After logging into the OFSAAI applications page, navigate to **Regulatory Reporting for US Federal Reserve,** select **Process Modelling Framework** and then select **Process Modeller**.

Figure 95: 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 96: Process Details page



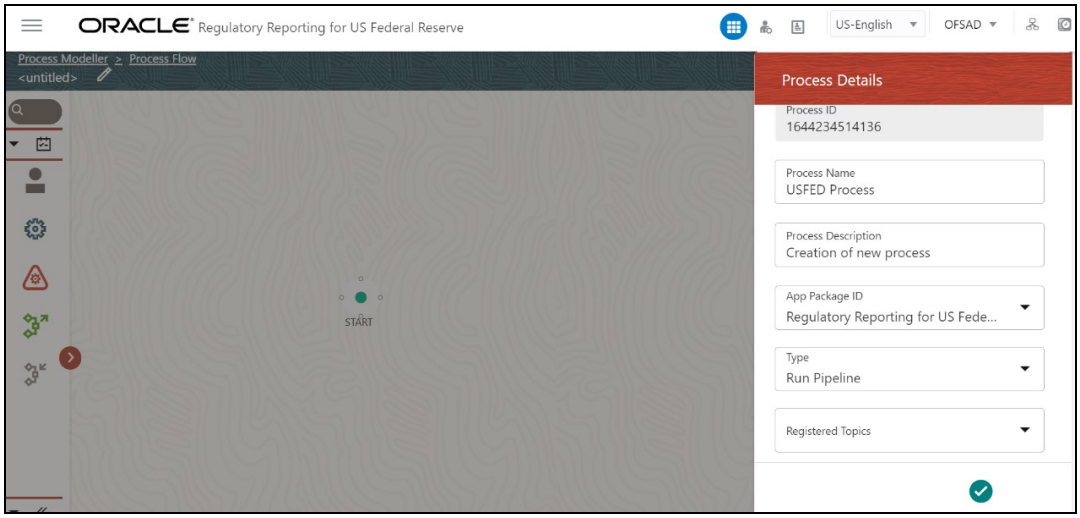
3. Select or enter the required values in the following mandatory fields.
Other fields in the **Updated Process Details** page can be ignored.

Table 27: 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 **as Regulatory Reporting for US Federal Reserve** from the dropdown list.
Type	Select the process type as Run Pipeline.

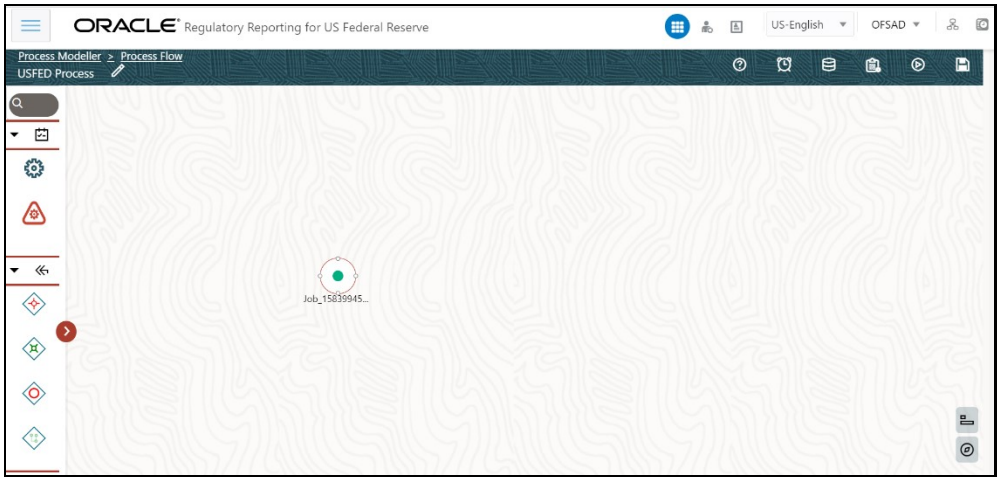
Field Name	Description or Instruction
Infodom	Select the infodom from the dropdown list.
Segment	Select the **USFED segment** from the dropdown list.

Figure 97: Updated Process Details page



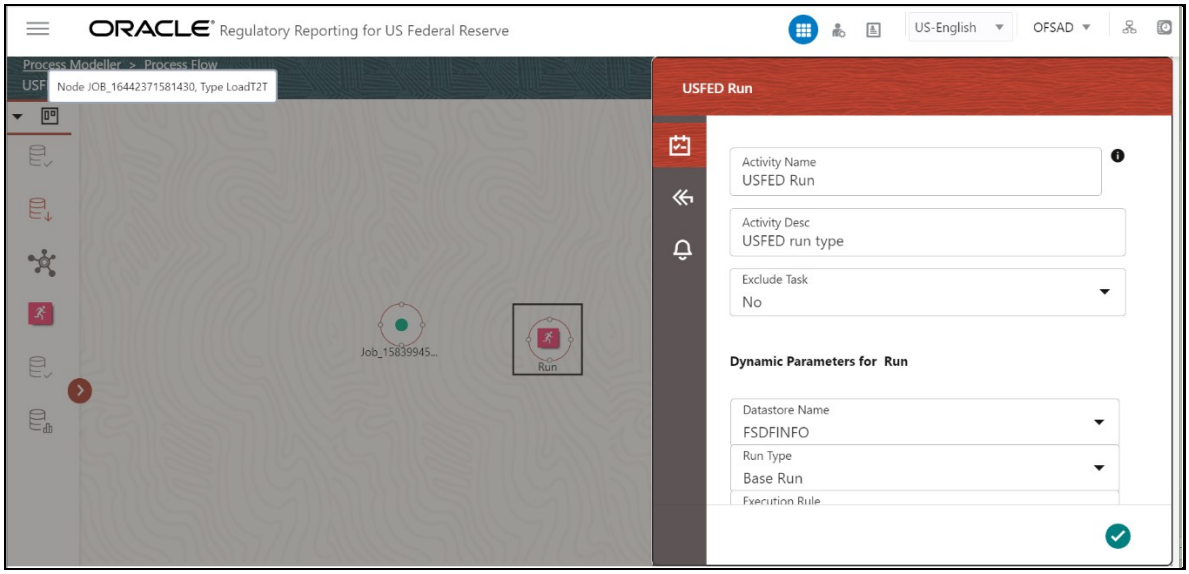
4. Click **OK** icon to save the created process. The Process Saved page is displayed.

Figure 98: 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 99: USFED Run Details page



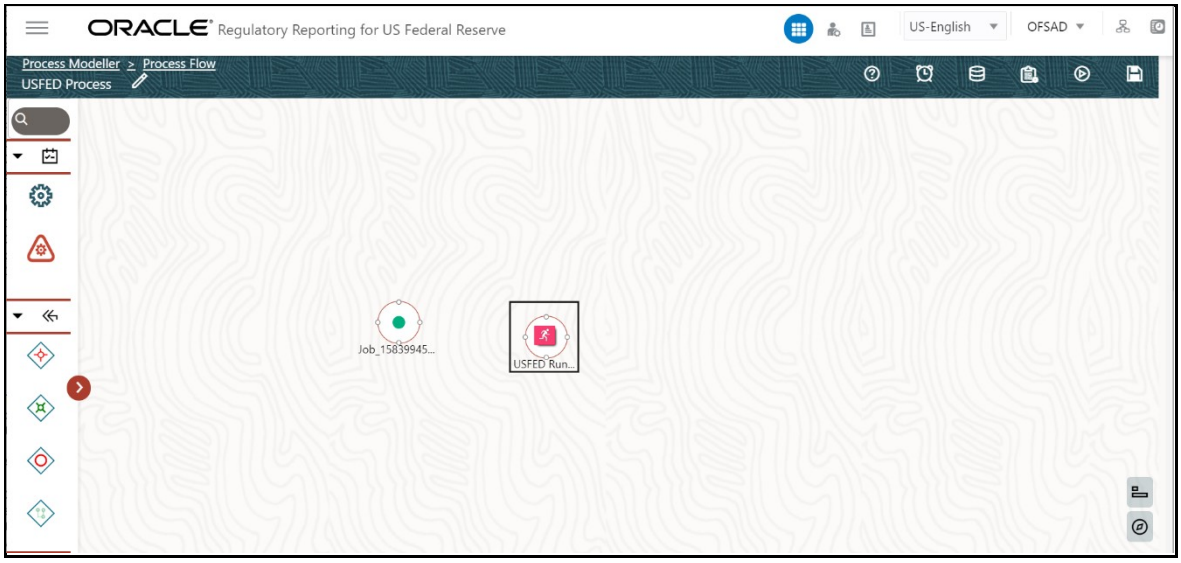
6. Select or enter the required values for each field as follows.

Table 28: 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 **No** from the dropdown list.
Dynamic Parameters for Run	
Datastore Name	Select the infodom from the dropdown list.
Run Type	Select the run type as **Base Run** from the dropdown list.
Execution Rule	Select the execution rule as **USFED Execution Run** from the dropdown list.
Run Parameters	Enter the runtime parameter as **WF_RUNSK**.

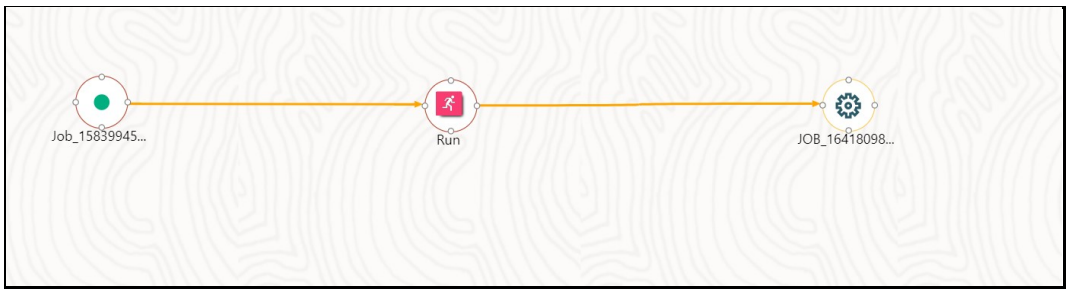
7. Click **OK** icon to save the entered run type node details.

Figure 100: USFED Run Type Saved Page



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

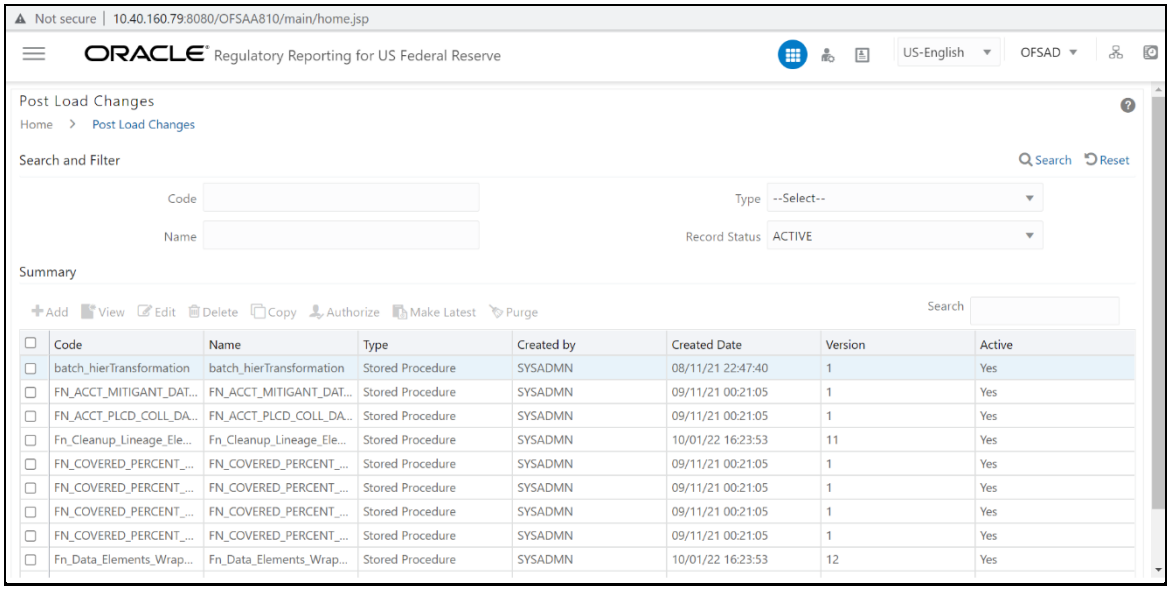
Figure 101: USFED Process Canvas page



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`.

Figure 102: Post Load Changes Page



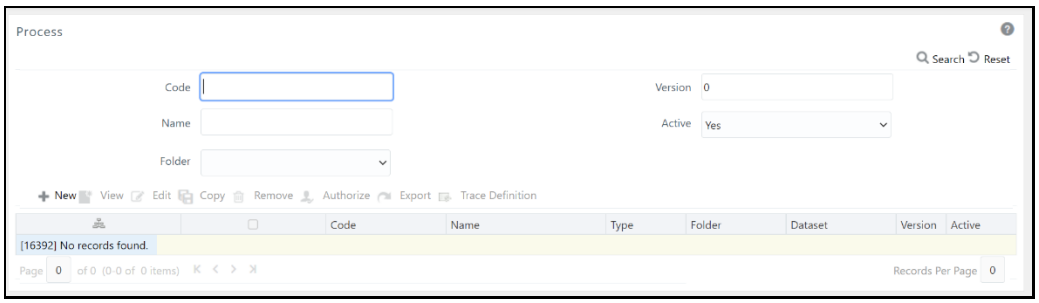
Alternatively, you can use the pre-defined Data Transformation to copy the Run parameters from PMF to RRF by executing the following scripts into the respective schema:

- Execute the PLC_FN_DT_COPY_PMF_RUN_TO_RRF.sql in the Config Schema after replacing ##INFODOM## with INFODOM.
- Execute the FN_DT_COPY_PMF_RUN_TO_RRF.sql in the Atomic Schema.
- Restart all the OFSAA services.

> **NOTE** If you are already using any Run parameters as additional parameters, then these parameters must be considered in the new DT that is created along with the one final parameter as `WF_RUNSK`.

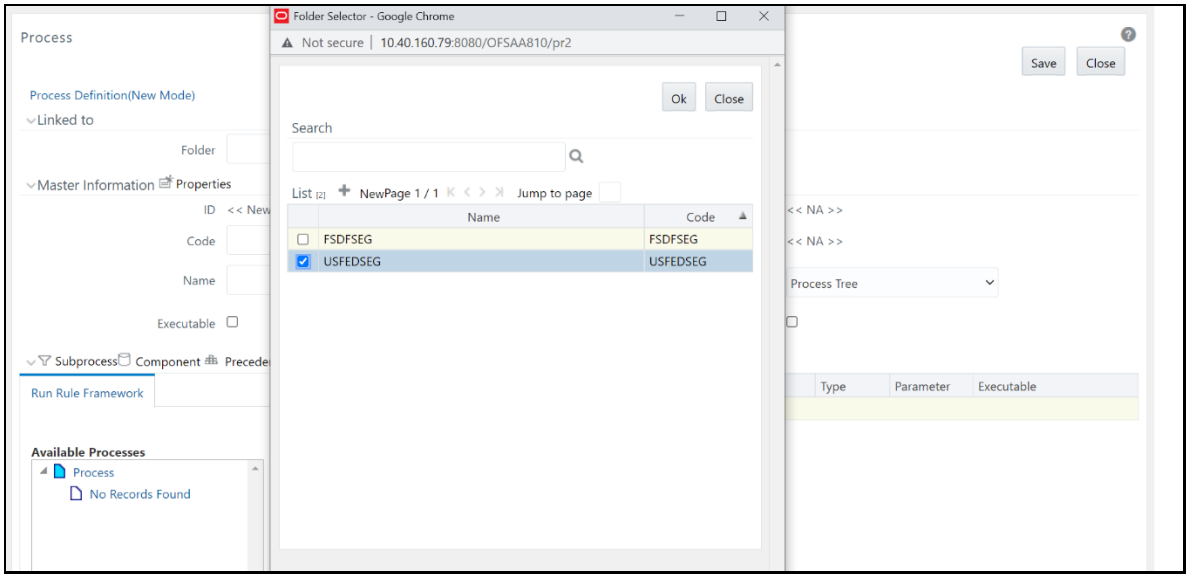
10. In the **Financial Services Data Foundation** application, select **Rule Run Framework**, and then select **Process**.

Figure 103: 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 104: Process Segment Selection Page

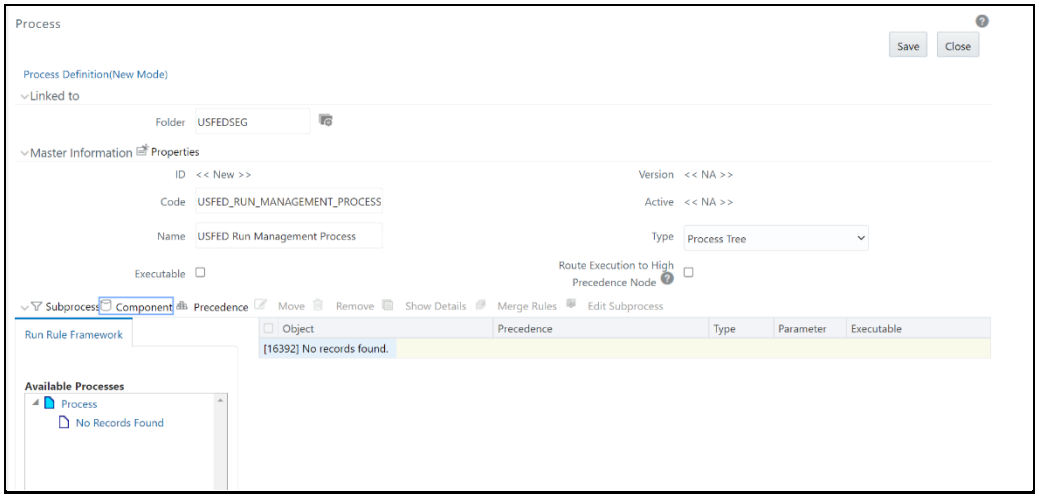


12. Select or enter the required values for each field as follows.

Table 29: USFED Run Details Fields and Descriptions

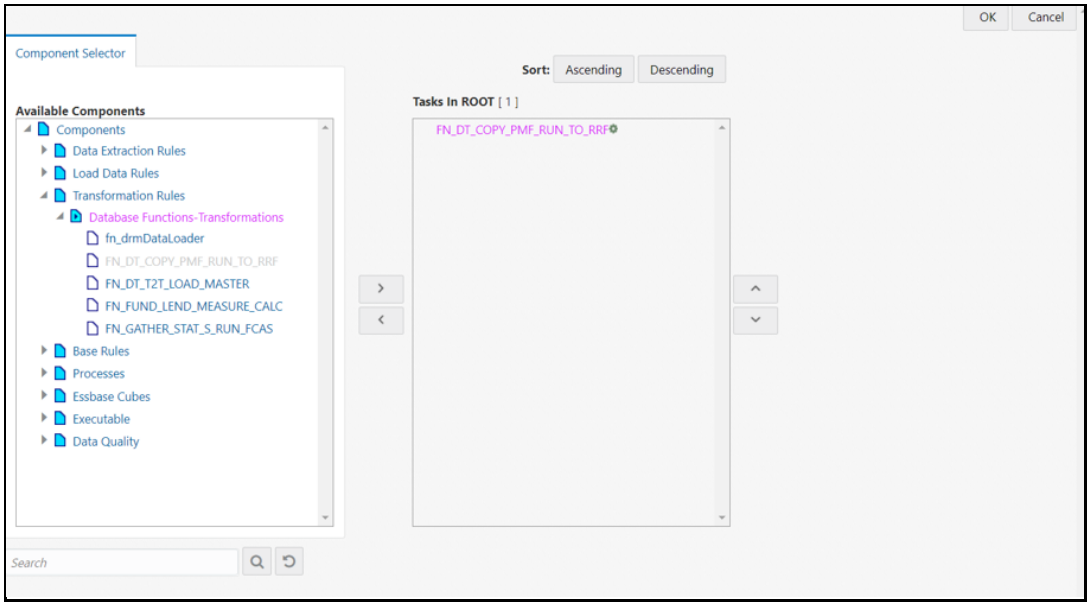
Field Name	Description or Instruction
Code	Enter the process code.
Name	Enter the process name.

Figure 105: Process Definition Page



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

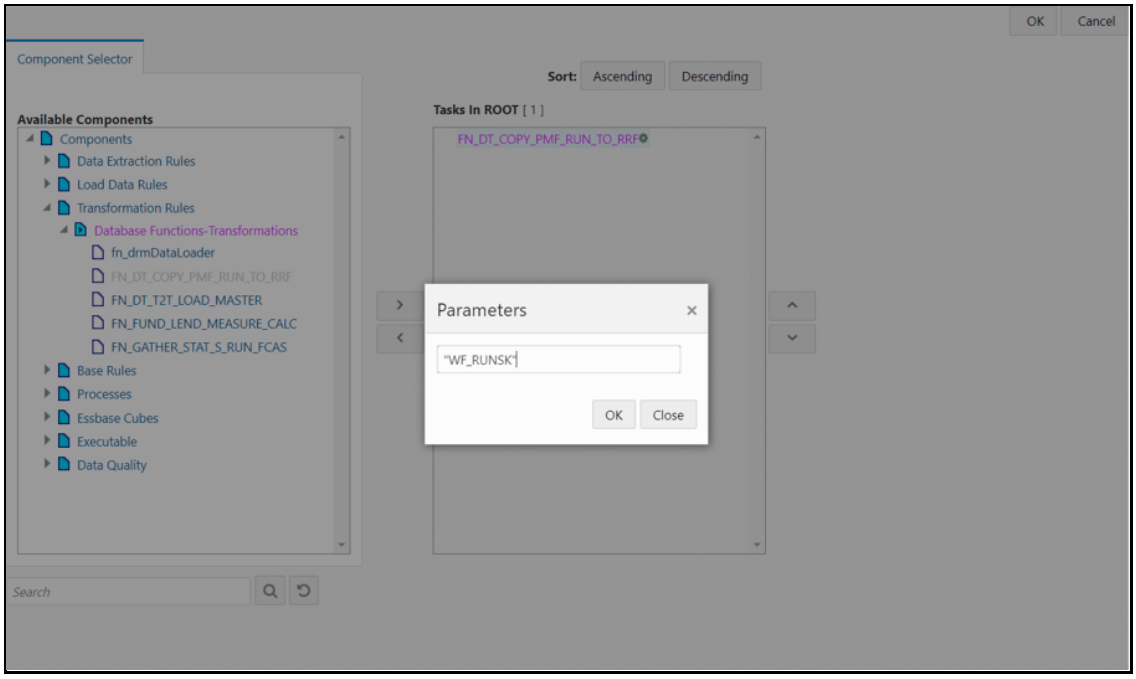
Figure 106: Component Selector Window



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.

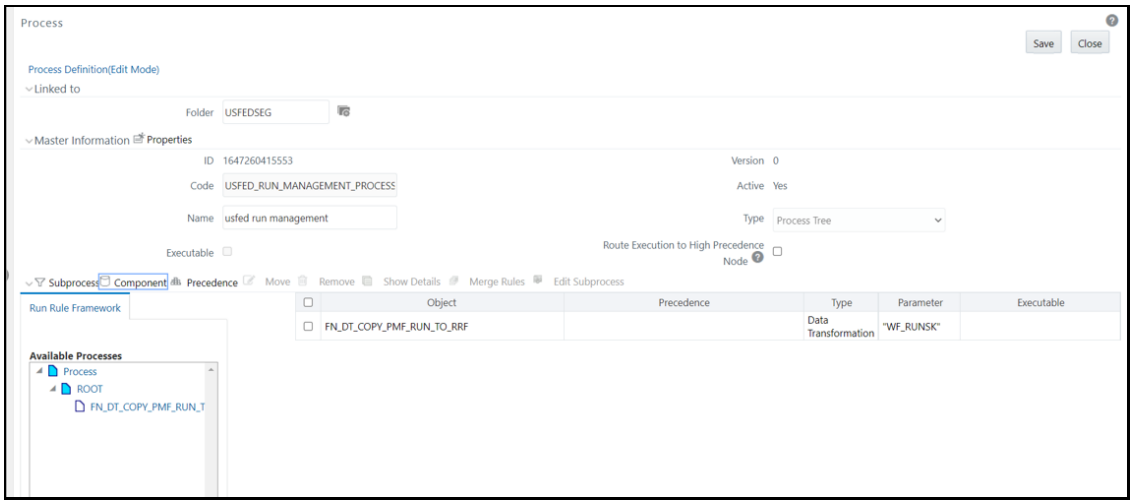
Figure 107: Add Parameter Window



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

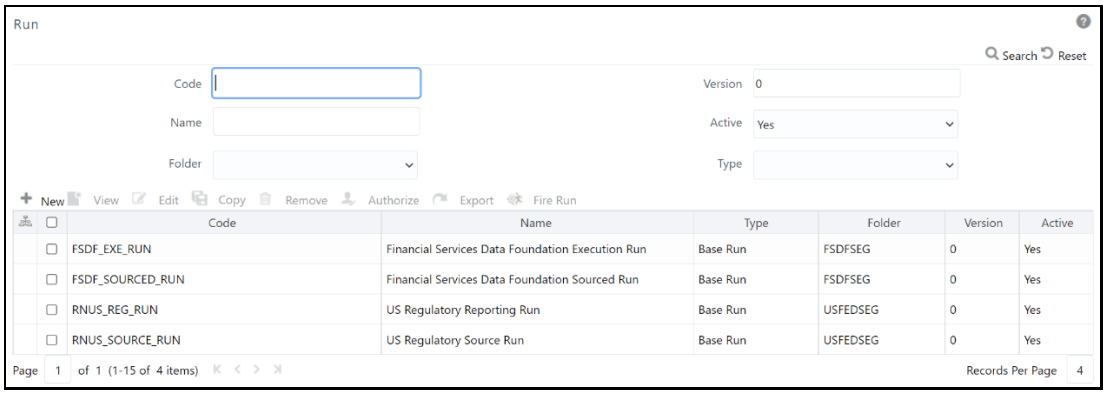
Figure 108: Process Definition Save page



18. Click **Save** button to save the process details.

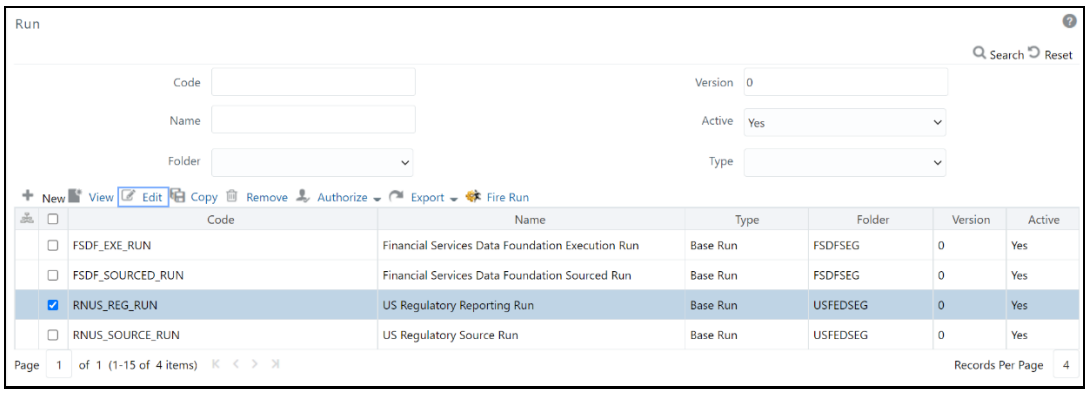
19. In the **Financial Services Data Foundation** application, select **Rule Run Framework**, and then select **Run**.

Figure 109: Run Summary Page



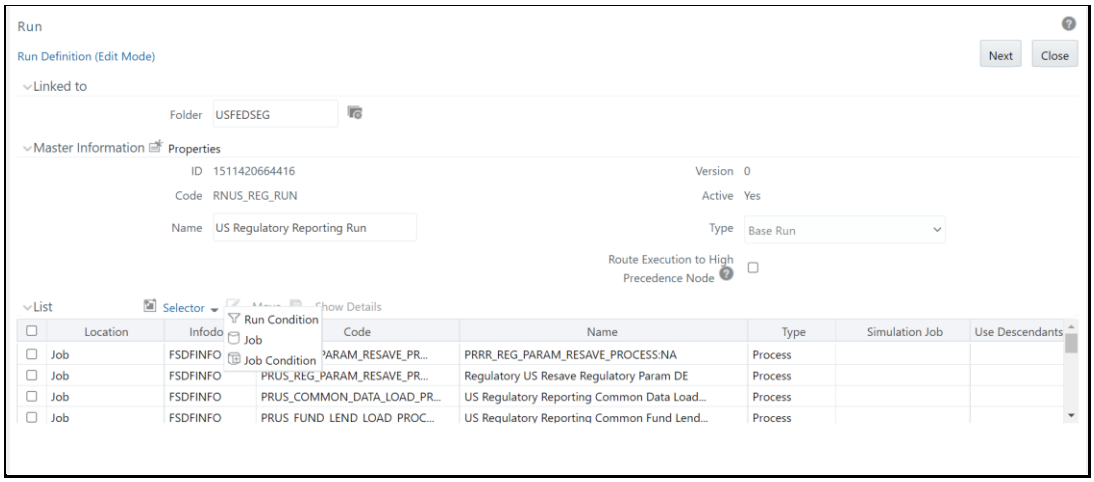
20. Select the **USFED Reporting Run** from the Run Summary page.

Figure 110: Run Summary Page



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

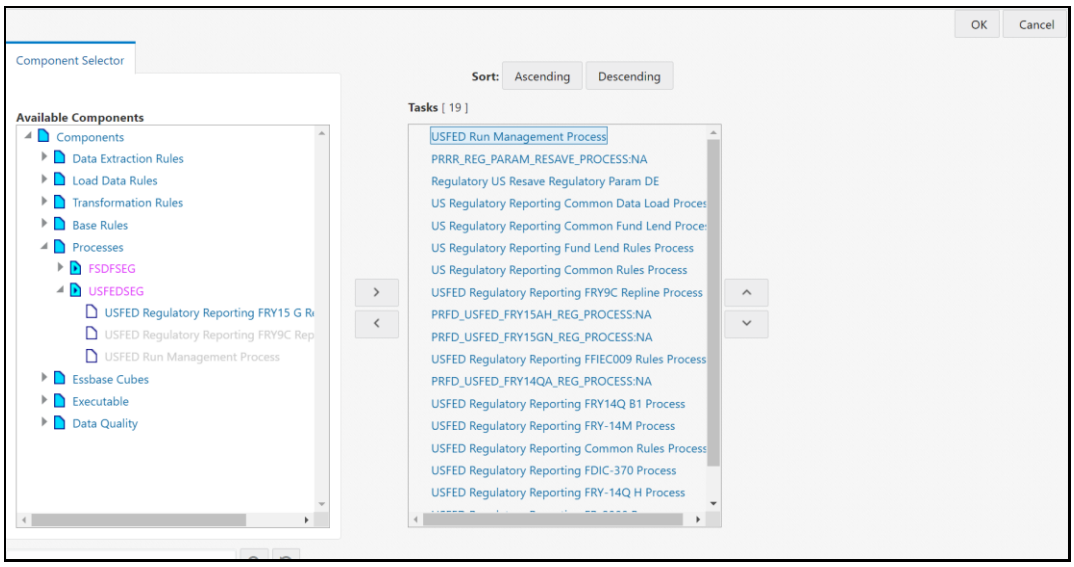
Figure 111: Edit Run Details page



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.

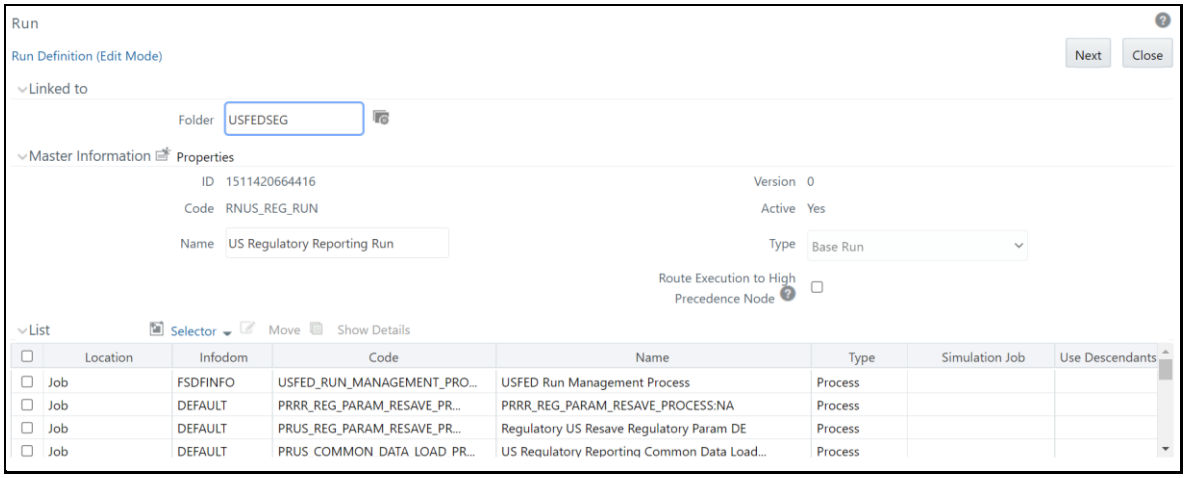
> **NOTE** The selected component must always be on top of the Tasks table. You can use the **Move Up** ^ icon to do the same.

Figure 112: Component Selector Run Window



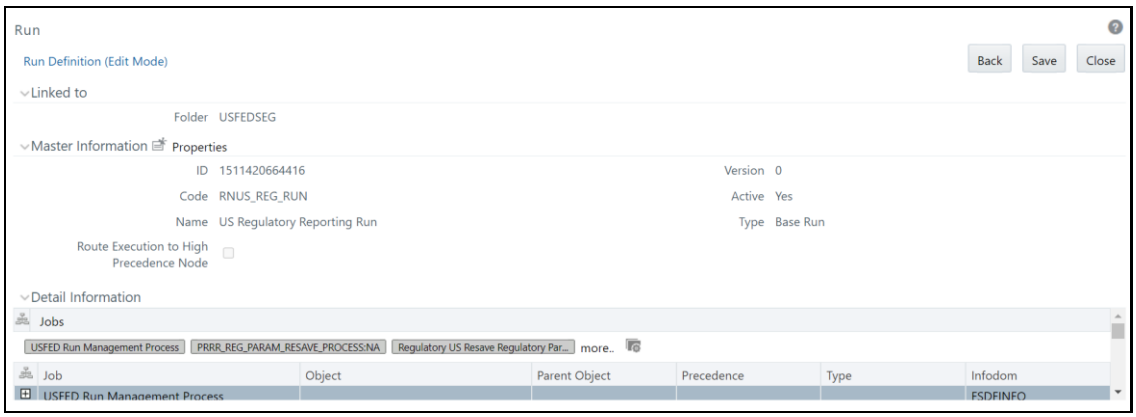
23. Click **Ok** button to save the run details. The updated Run Definition page is displayed.

Figure 113: Updated Run Definition Page



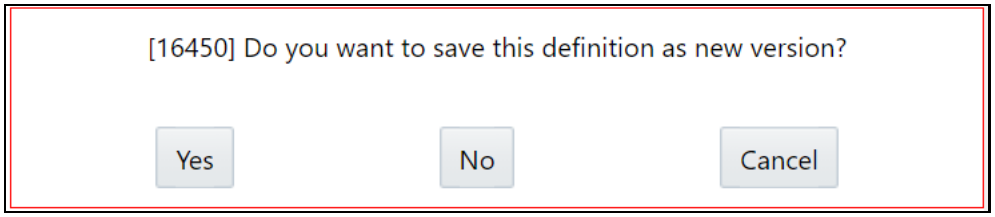
24. Click **Next** button to view the added process to the run. The Process Added to Run page is displayed.

Figure 114: Process Added to Run page



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

Figure 115: 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 Data Extracts

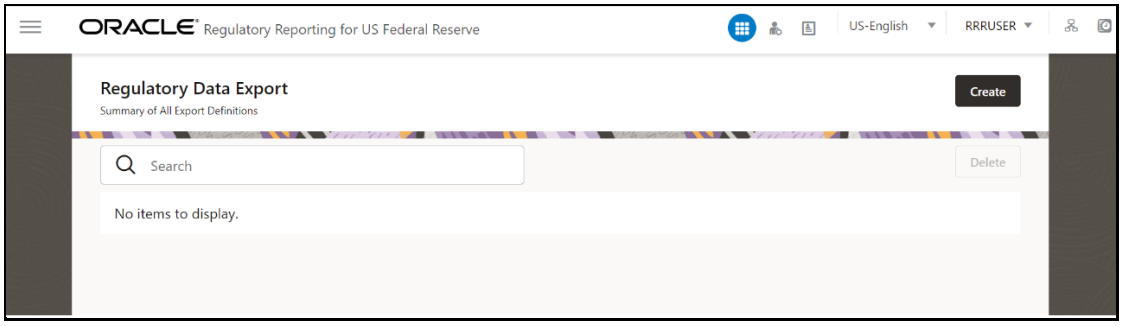
This chapter provides information on creating and executing data extract definitions to export the regulatory reporting data into .csv files. It allows you to export data for a specific report, or cells and schedules. You can also export the data from a Derived Entity.

7.1 Create an Export Definition

To create an export definition, perform the following steps:

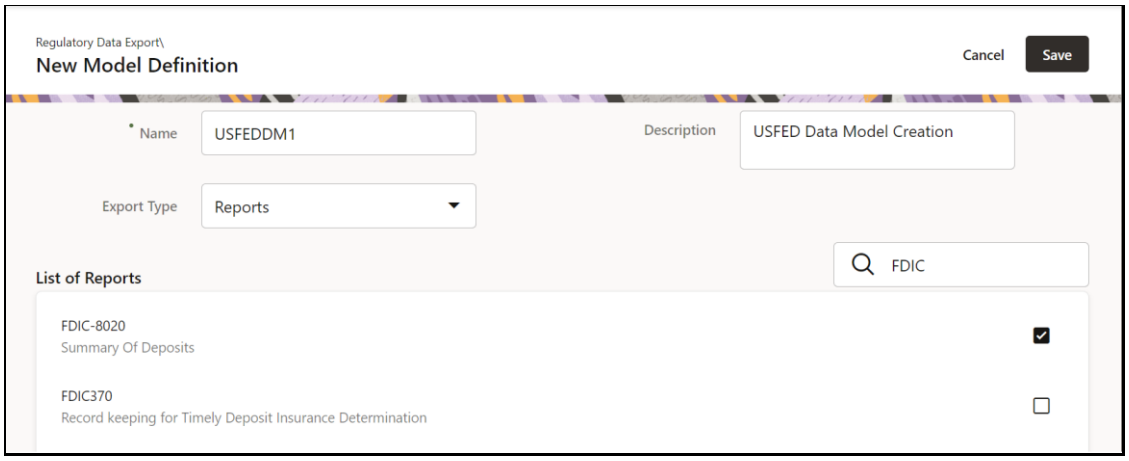
1. After logging into the OFSAAI applications page, navigate to **Regulatory Reporting for US Federal Reserve,** select **Data Extracts** and then select **Regulatory Data Extracts.**

Figure 116: Regulatory Data Export page



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

Figure 117: New Model Definition page



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

Table 30: Model Export Definition Fields and Descriptions

Field Name	Description or Instruction
Name	Enter the name of the new model definition.

Field Name	Description or Instruction
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.
5. 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 118: Regulatory Data Export Definitions Summary page

7.2 Edit and View an Export Definition

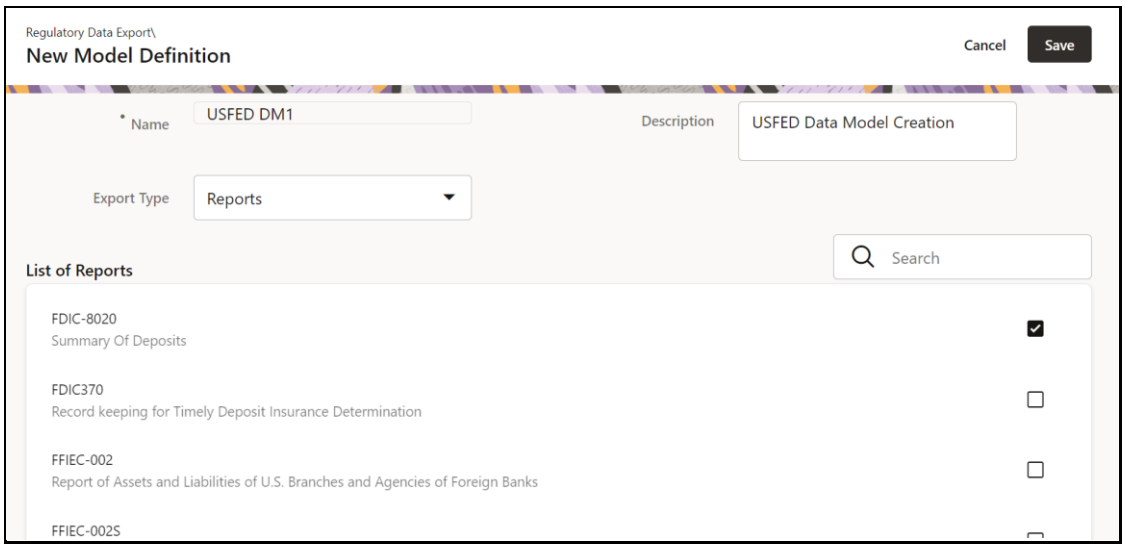
To edit and view an export definition, perform the following steps:

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

Figure 119: Regulatory Data Export Definitions Summary page

The Edit or View Export Definition page appears.

Figure 120: Edit or View Export Definition page



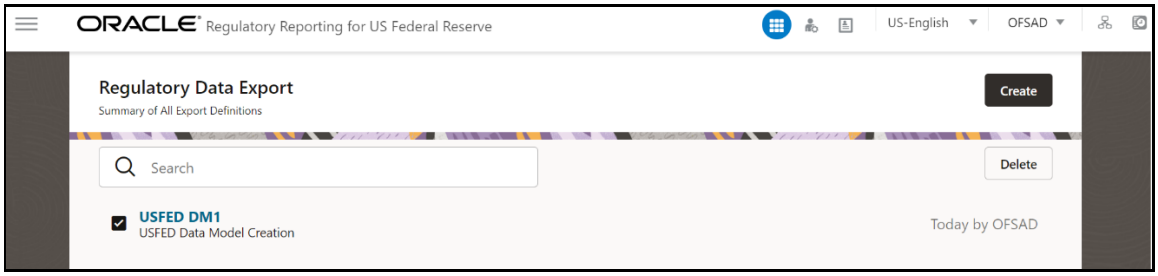
2. You can update the existing information if required and click **Save** to save the changes in the Export Definition or click **Cancel** to cancel if there is no modification in the Export Definition.

7.3 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 121: Delete Regulatory Data Export Definition page



2. Click **Delete** to delete the Export Definition.

7.4 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.

8 Metadata Lineage

This section helps you to navigate through the Metadata Lineage and guides you in tracing the Metadata Lineage tools such as Metadata Browser, Metadata Report and Data elements.

8.1 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 Application, 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.

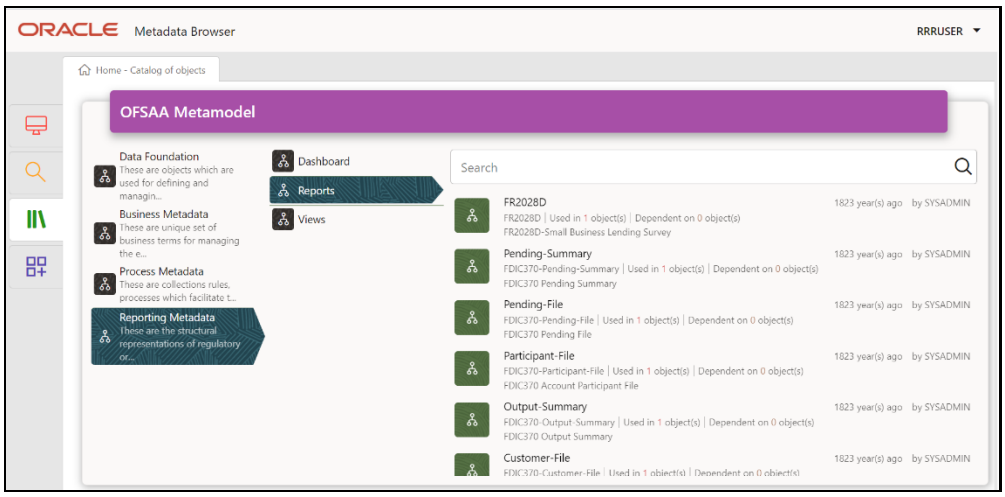
Analysts review the metadata used for a particular report schedule to verify the data. Data verification may require looking for metadata used in a given schedule or schedules in which particular metadata is used. Data Analysts and Reporting Analysts perform the report verification. Metadata refers to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

8.1.1 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:

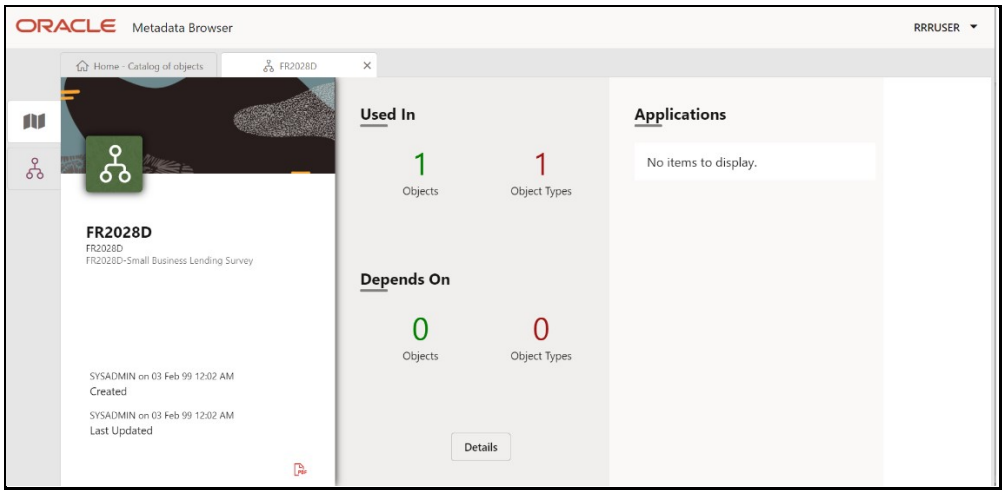
1. You can verify the data for related data elements in results using this information. Navigate to **Lineage**, select **Metadata Browser**, select **Catalog of Objects, select OFSAA Metamodel, select Reporting Metadata, and then select Reports**. The MDB Reporting Metadata screen is displayed.

Figure 122: MDB - Reporting Metadata Page



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

Figure 123: MDB - Reporting Metadata - Schedule View

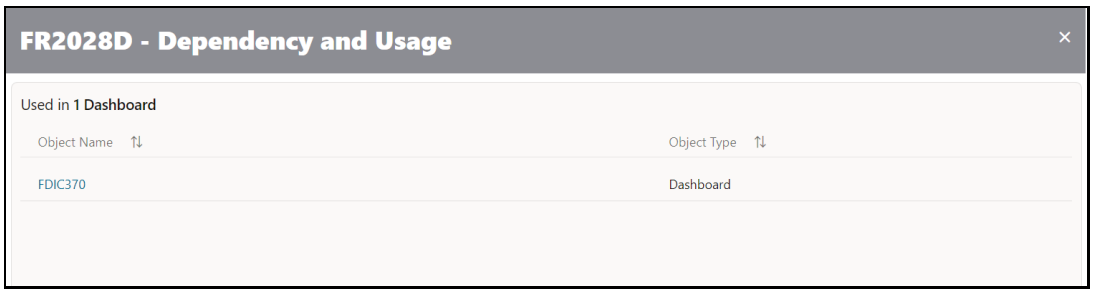


You can view the following information in the **Schedule Details** page:

- **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.

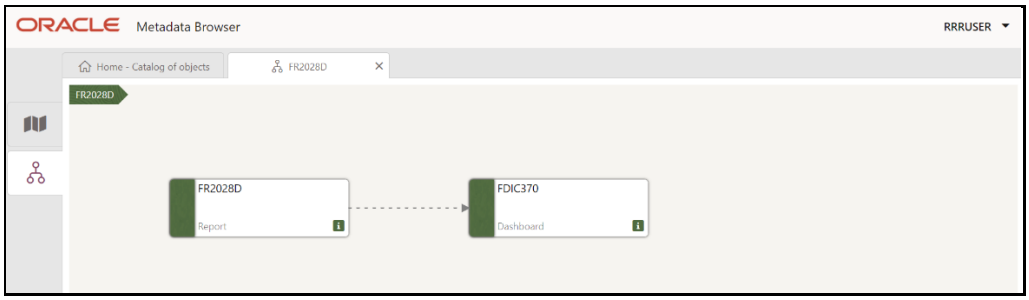
3. Click **Details** to view the dependency and usage information such as the **Object Name** and the **Object Type**.

Figure 124: MDB - Reporting Metadata - Schedule View 1



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

Figure 125: 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.

8.1.2 Business Metadata

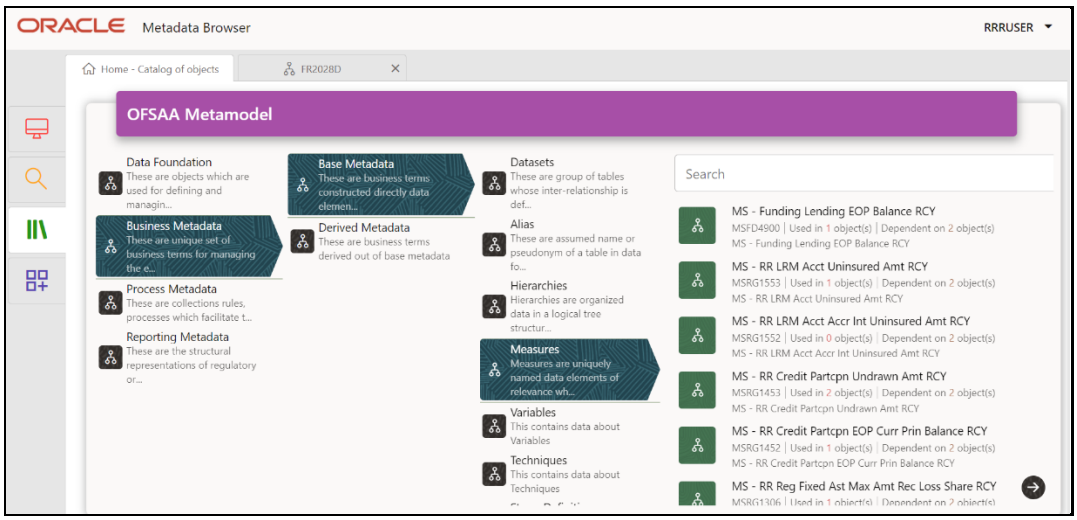
This section provides information on the Business metadata objects which include Base Metadata and Derived Metadata.

8.1.2.1 Base Metadata

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

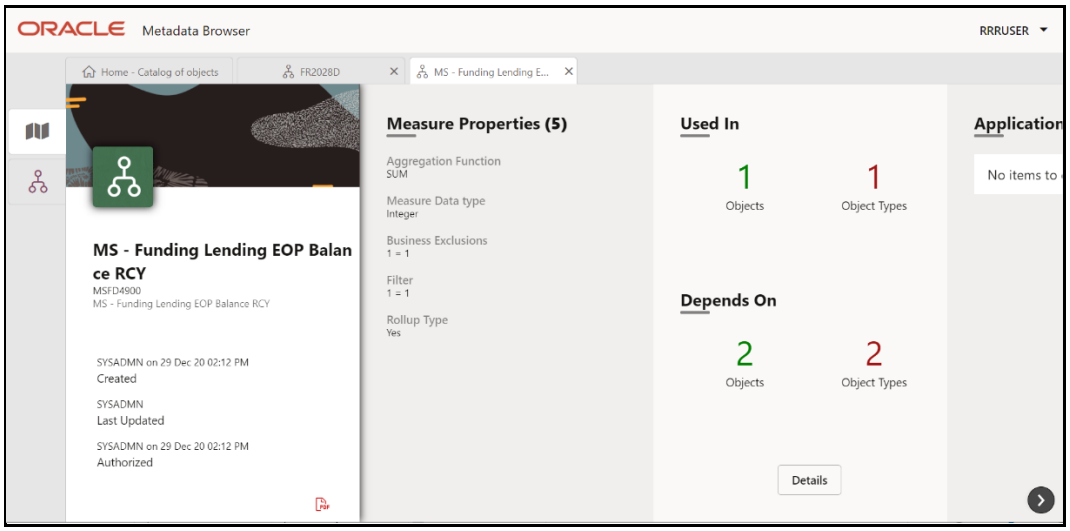
1. To view the measures, navigate to Catalog of **Objects, select OFSAA Metamodel, select Business Metadata,** select **Base Metadata,** and then select **Measures**. The MDB Business Metadata page is displayed.

Figure 126: MDB - Business Metadata - Measure View Page



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

Figure 127: MDB - Business Metadata Measure Details Page

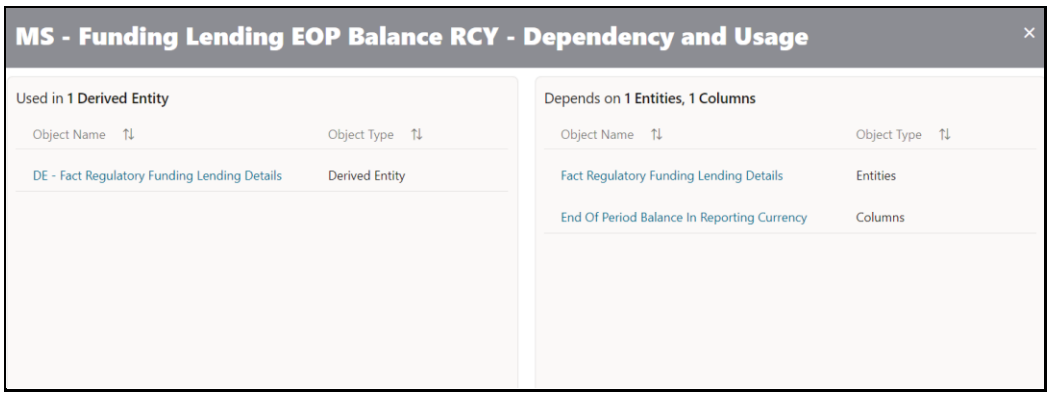


You can view the following information on this page:

- **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.

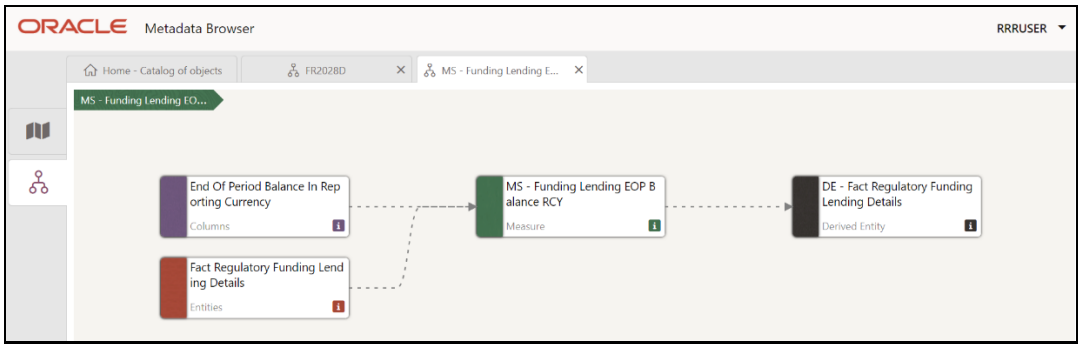
3. Click **Details** to view the measure dependency and usage information.

Figure 128: Measure Dependency and Usage Details Page



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

Figure 129: Business Metadata Measure Tree Page



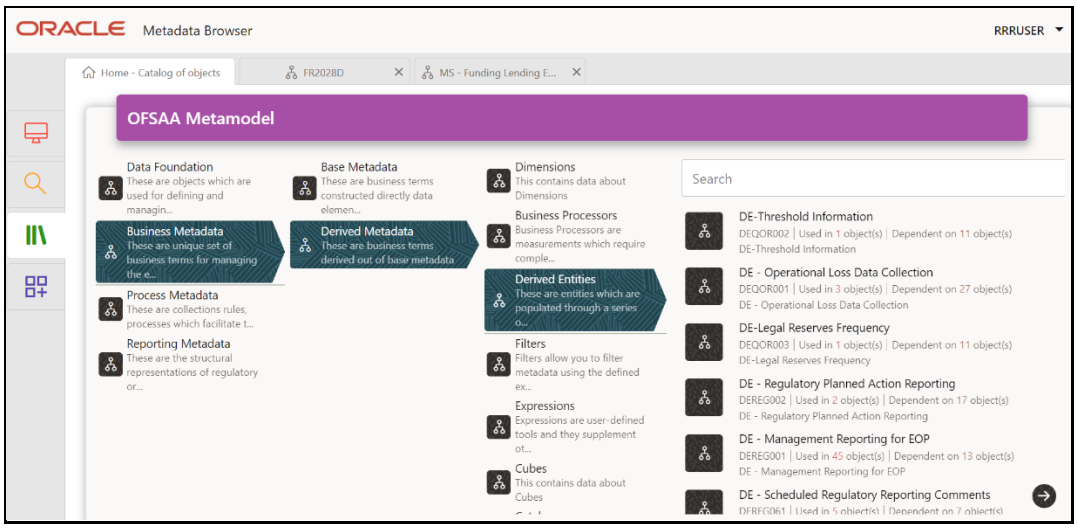
NOTE The similar steps as mentioned in this section are applicable for other metadata such as Business Metadata (Hierarchies, Measures, Variables, and so on) and Derived Metadata (Dimensions, Filters, and so on), Process Metadata (Process, Rules, and so on) and Data Foundation (Target Model, Sources,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

8.1.2.2 Derived Metadata

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

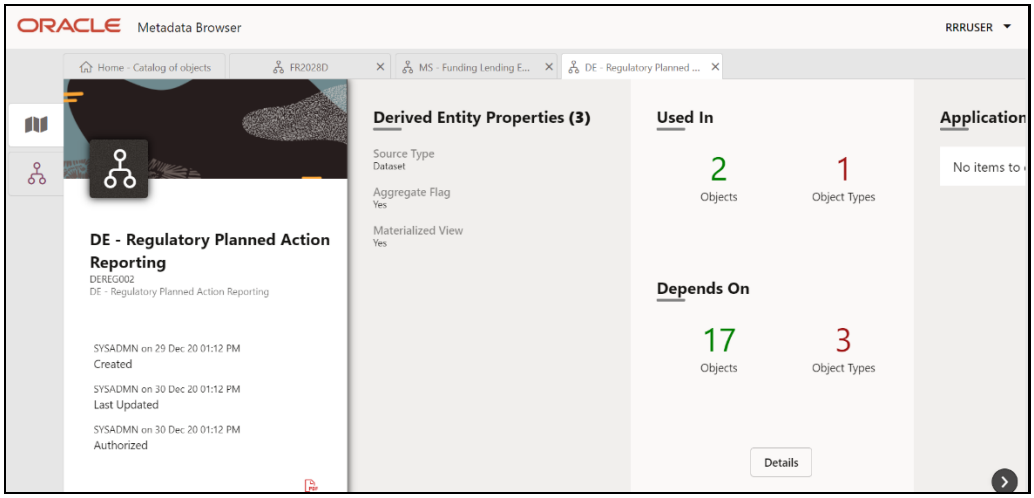
1. To view the schedule-wise derived entities, navigate to Catalog of **Objects, select OFSAA Metamodel,** select **Business Metadata,** select **Derived Metadata,** and then select **Derived Entities**.

Figure 130: MDB - Business Metadata – Derived Entity Page



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

Figure 131: Derived Entity Details Page

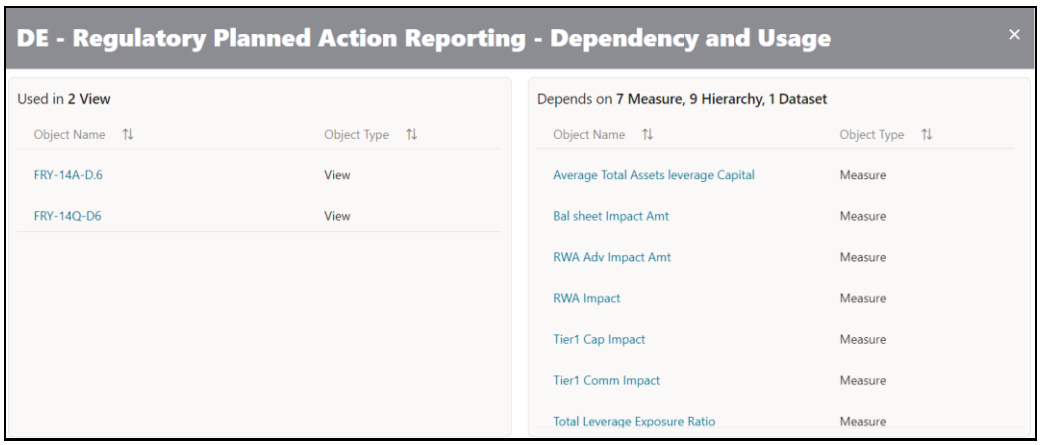


You can view the following information on this page:

- **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.

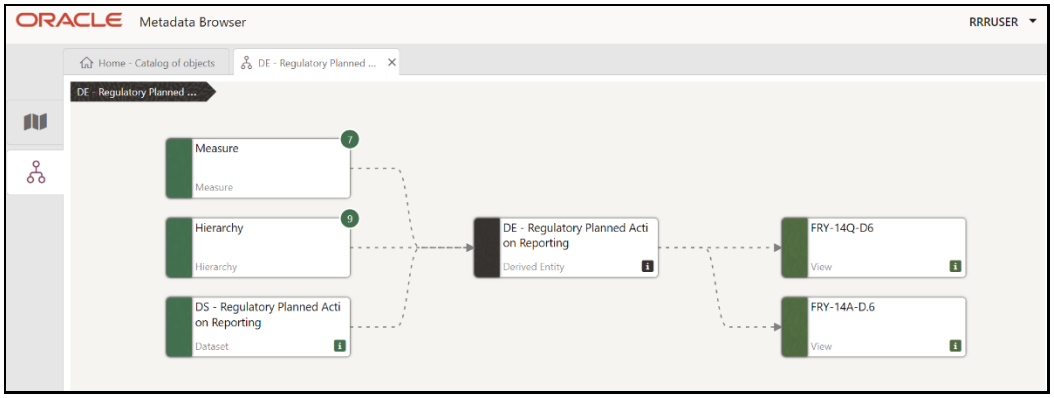
3. Click **Details** to view the derived entity dependency and usage information.

Figure 132: 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 133: Derived Entity Tree Structure Page



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

8.2 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.

8.2.1 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 31: Task1 (METADATA PARSER)

Sl. No.	Parameter	Description	List of Values	Default Value
1	P_FULL_PARSE	Full Parser Flag	Y/N	'Y'
2	P_INFODOM_NAME	Infodom Name	##INFODOM##	<Value of the Infodom where US FED is installed>. For example: 'FSDFINFO'

Table 32: 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 of the Infodom where US FED is installed>. For example: 'FSDFINFO'

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 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 **Process and Operations**, 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 **Process and Operations**, 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 one Run to be enabled in the FSI_DE_POP_RUN_LIST table in the Atomic Schema. By default, RGRNUSFED is enabled.

Table 33: Run Names for Metadata Parser

RUN NAME	INCLUDE RUN
RGRNUSFED	Y

Excluding Irrelevant Data Flows from Lineage Reports

For each Run, some of the Data Mappings can be functionally irrelevant. For these cases with respect to 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 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 34: Report Codes for Report Parser

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

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

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

8.2.2 Verifying Logs

Data Elements logs are generated in Atomic Schema under the **FSI_MESSAGE_LOGS** table.

Table 35: Data Element Logs

Tasks	Batch Run ID	Indication
Task1 (METADATA Parsing)	REGISTER_ELEMENTS_<Batch_Run_ID>	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 >	Processes Report Parsing. The message "Completed REPORT_TO_ELEMENTS" indicates that all the Report parsing is completed.

8.2.3 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
/
```

8.2.4 User Access

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

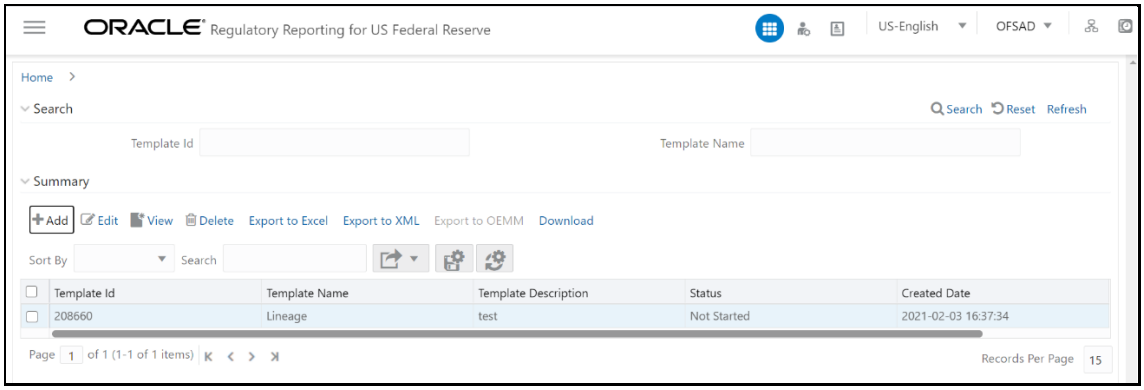
1. MDR View Group: To see Metadata Report Extract with View permissions.
2. MDR Owner Group: To create templates in Metadata Report Extract.

8.2.5 Create and Export Metadata Report Templates

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

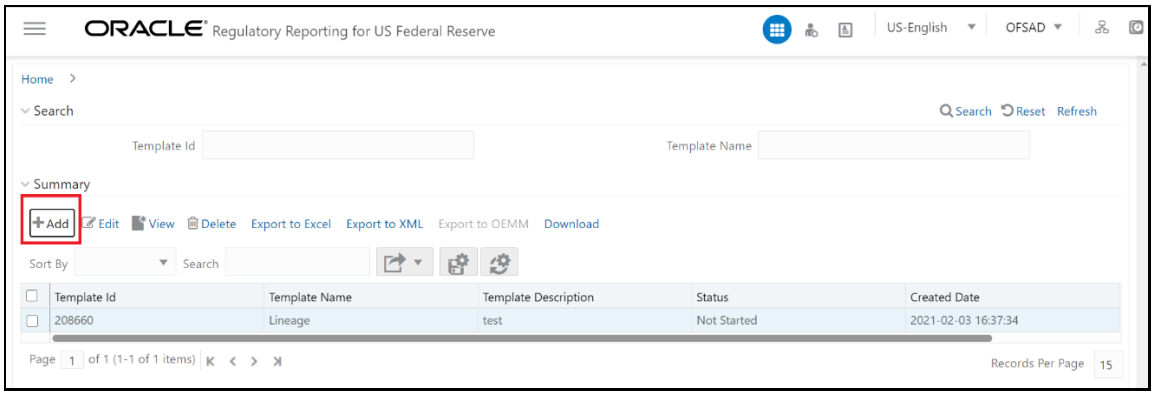
1. Navigate to **Lineage** and then select **Metadata Report**.

Figure 134: Metadata Report Template Summary page



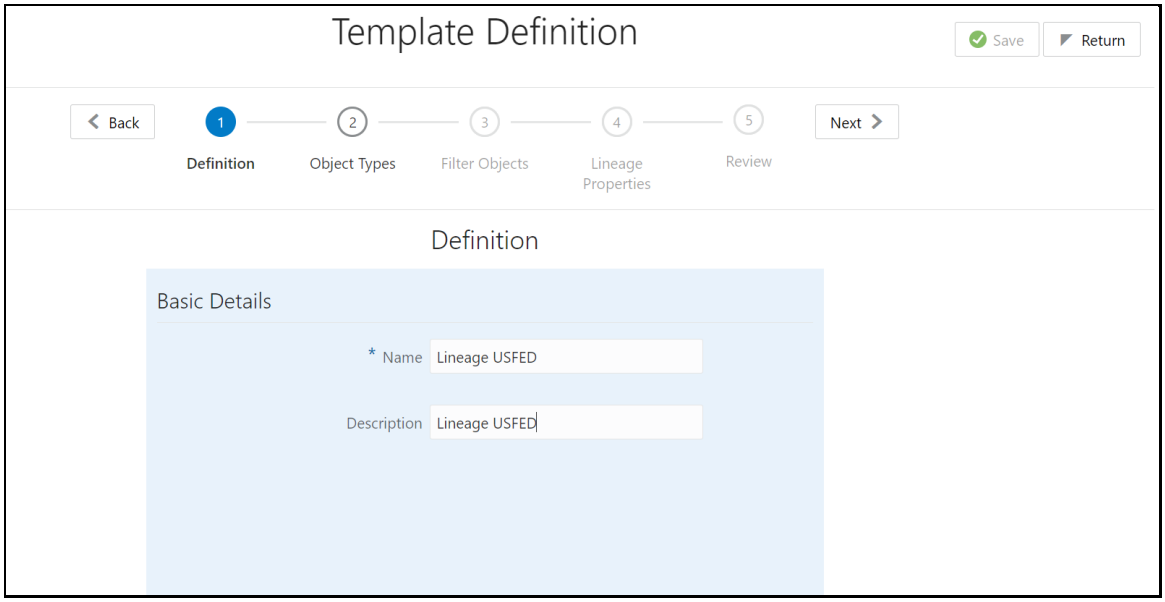
2. Click **Add** icon, in *Summary* screen, to create a new Metadata Report Template.

Figure 135: Add Metadata Report Template page



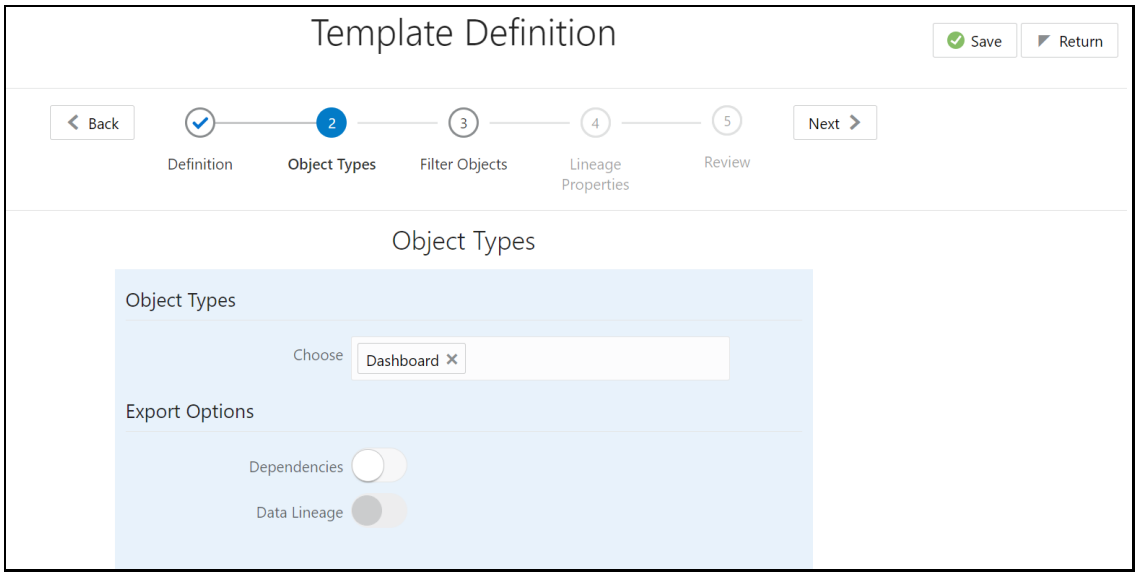
3. Provide the **Name** and **Description** for the new template in the *Template Definition* page.

Figure 136: Template Definition window



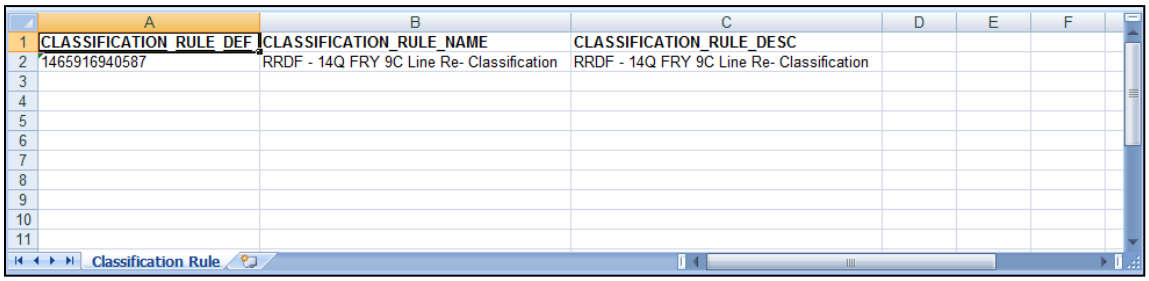
4. Select the desired object from the **Object Type** dropdown to be exported.
5. **Individual** report generates only the basic properties of the object selected, that is, name and description. **Relational** report generates detailed information up to the Entities level if Dependencies is chosen; and up to the Staging Columns level, if Data Lineage is selected along with Dependencies.
6. **Dependencies**: 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 element that is identified by dependencies.
8. For Individual Report: In the Export Options, do not select Dependencies or Data Lineage.

Figure 137: Object Types window



9. The exported sample report for Individual is as follows:

Figure 138: Individual Sample Report

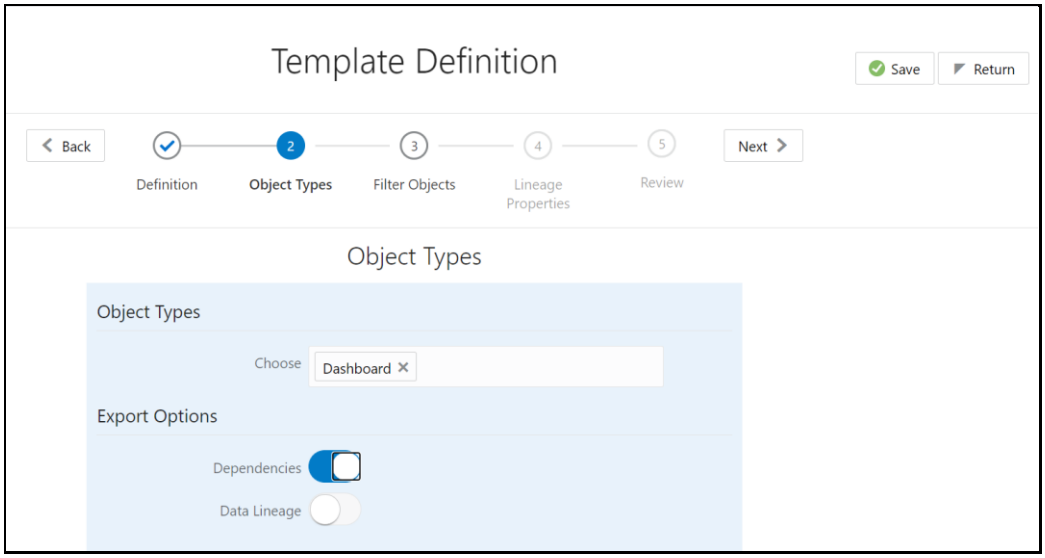


	A	B	C	D	E	F
1	CLASSIFICATION_RULE_DEF	CLASSIFICATION_RULE_NAME	CLASSIFICATION_RULE_DESC			
2	1465916940587	RRDF - 14Q FRY 9C Line Re- Classification	RRDF - 14Q FRY 9C Line Re- Classification			
3						
4						
5						
6						
7						
8						
9						
10						
11						

Classification Rule

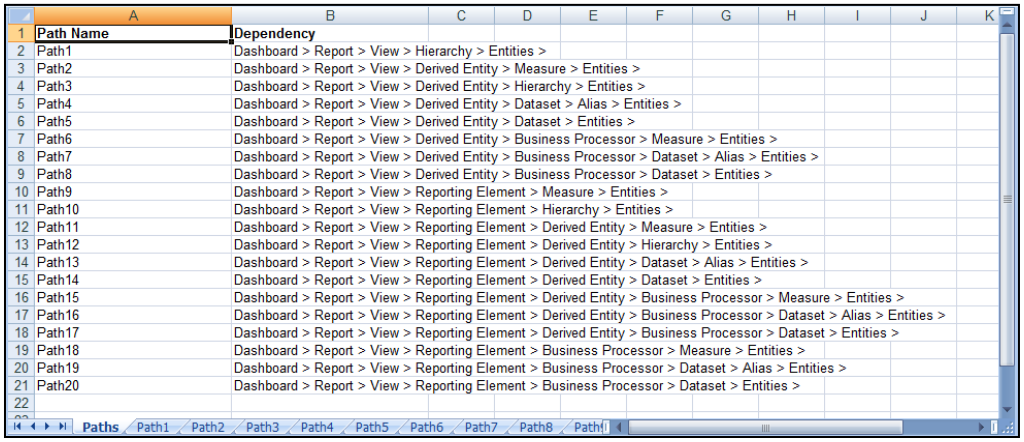
For Relational Report: In the **Export Options**, select **Dependencies**.

Figure 139: Export Options



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

Figure 140: Relational Sample Report



Path Name	Dependency
Path1	Dashboard > Report > View > Hierarchy > Entities >
Path2	Dashboard > Report > View > Derived Entity > Measure > Entities >
Path3	Dashboard > Report > View > Derived Entity > Hierarchy > Entities >
Path4	Dashboard > Report > View > Derived Entity > Dataset > Alias > Entities >
Path5	Dashboard > Report > View > Derived Entity > Dataset > Entities >
Path6	Dashboard > Report > View > Derived Entity > Business Processor > Measure > Entities >
Path7	Dashboard > Report > View > Derived Entity > Business Processor > Dataset > Alias > Entities >
Path8	Dashboard > Report > View > Derived Entity > Business Processor > Dataset > Entities >
Path9	Dashboard > Report > View > Reporting Element > Measure > Entities >
Path10	Dashboard > Report > View > Reporting Element > Hierarchy > Entities >
Path11	Dashboard > Report > View > Reporting Element > Derived Entity > Measure > Entities >
Path12	Dashboard > Report > View > Reporting Element > Derived Entity > Hierarchy > Entities >
Path13	Dashboard > Report > View > Reporting Element > Derived Entity > Dataset > Alias > Entities >
Path14	Dashboard > Report > View > Reporting Element > Derived Entity > Dataset > Entities >
Path15	Dashboard > Report > View > Reporting Element > Derived Entity > Business Processor > Measure > Entities >
Path16	Dashboard > Report > View > Reporting Element > Derived Entity > Business Processor > Dataset > Alias > Entities >
Path17	Dashboard > Report > View > Reporting Element > Derived Entity > Business Processor > Dataset > Entities >
Path18	Dashboard > Report > View > Reporting Element > Business Processor > Measure > Entities >
Path19	Dashboard > Report > View > Reporting Element > Business Processor > Dataset > Alias > Entities >
Path20	Dashboard > Report > View > Reporting Element > Business Processor > Dataset > Entities >

Paths | Path1 | Path2 | Path3 | Path4 | Path5 | Path6 | Path7 | Path8

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.

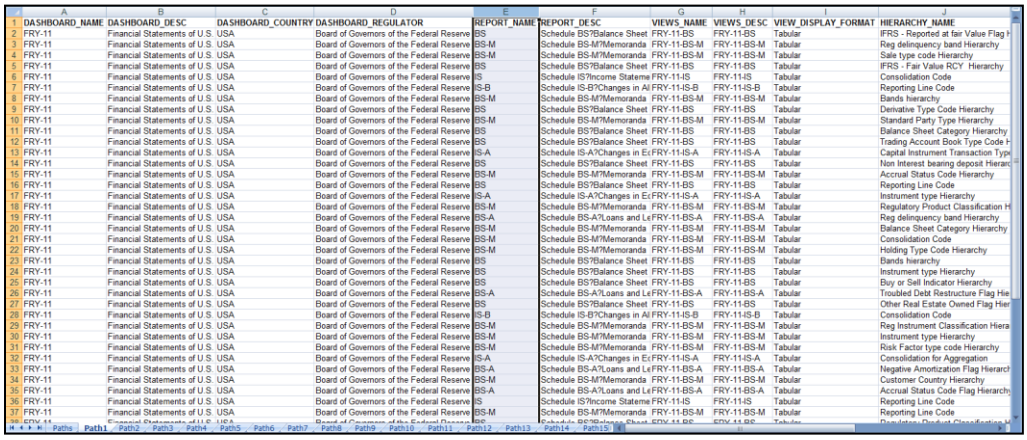
    For every dependent object type displayed in each path sheet, the following columns are displayed:

    - 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.

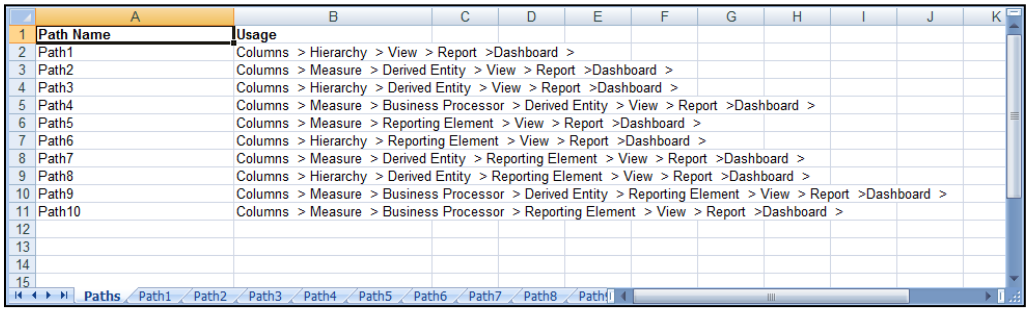
Figure 141: Path 1 Object Type



	A	B	C	D	E	F	G	H	I	J
1	DASHBOARD_NAME	DASHBOARD_DESC	DASHBOARD_COUNTRY	DASHBOARD_REGULATOR	REPORT_NAME	REPORT_DESC	VIEWS_NAME	VIEWS_DESC	VIEW_DISPLAY_FORMAT	HIERARCHY_NAME
2	FRY-11	Financial Statements of U.S.	USA	Board of Governors of the Federal Reserve	BS	Schedule BS?Balance Sheet	FRY-11-BS	FRY-11-BS	Tabular	IFRS - Reported at fair Value Flag H
3	FRY-11	Financial Statements of U.S.	USA	Board of Governors of the Federal Reserve	BS-M	Schedule BS-M?Memoranda	FRY-11-BS-M	FRY-11-BS-M	Tabular	Reg delinquency band Hierarchy
4	FRY-11	Financial Statements of U.S.	USA	Board of Governors of the Federal Reserve	BS-M	Schedule BS-M?Memoranda	FRY-11-BS-M	FRY-11-BS-M	Tabular	Sale type code Hierarchy
5	FRY-11	Financial Statements of U.S.	USA	Board of Governors of the Federal Reserve	BS	Schedule BS?Balance Sheet	FRY-11-BS	FRY-11-BS	Tabular	IFRS - Fair Value RCY Hierarchy
6	FRY-11	Financial Statements of U.S.	USA	Board of Governors of the Federal Reserve	IS	Schedule IS?Income Stateme	FRY-11-IS	FRY-11-IS	Tabular	Consolidation Code
7	FRY-11	Financial Statements of U.S.	USA	Board of Governors of the Federal Reserve	IS-B	Schedule IS-B?Changes in Al	FRY-11-IS-B	FRY-11-IS-B	Tabular	Reporting Line Code
8	FRY-11	Financial Statements of U.S.	USA	Board of Governors of the Federal Reserve	BS-M	Schedule BS-M?Memoranda	FRY-11-BS-M	FRY-11-BS-M	Tabular	Bands hierarchy
9	FRY-11	Financial Statements of U.S.	USA	Board of Governors of the Federal Reserve	BS	Schedule BS?Balance Sheet	FRY-11-BS	FRY-11-BS	Tabular	Derivative Type Code Hierarchy
10	FRY-11	Financial Statements of U.S.	USA	Board of Governors of the Federal Reserve	BS-M	Schedule BS-M?Memoranda	FRY-11-BS-M	FRY-11-BS-M	Tabular	Standard Party Type Hierarchy
11	FRY-11	Financial Statements of U.S.	USA	Board of Governors of the Federal Reserve	BS	Schedule BS?Balance Sheet	FRY-11-BS	FRY-11-BS	Tabular	Balance Sheet Category Hierarchy
12	FRY-11	Financial Statements of U.S.	USA	Board of Governors of the Federal Reserve	BS	Schedule BS?Balance Sheet	FRY-11-BS	FRY-11-BS	Tabular	Trading Account Book Type Code H
13	FRY-11	Financial Statements of U.S.	USA	Board of Governors of the Federal Reserve	IS-A	Schedule IS-A?Changes in Ec	FRY-11-IS-A	FRY-11-IS-A	Tabular	Capital Instrument Transaction Type
14	FRY-11	Financial Statements of U.S.	USA	Board of Governors of the Federal Reserve	BS	Schedule BS?Balance Sheet	FRY-11-BS	FRY-11-BS	Tabular	Non Interest bearing deposit Hierarc
15	FRY-11	Financial Statements of U.S.	USA	Board of Governors of the Federal Reserve	BS-M	Schedule BS-M?Memoranda	FRY-11-BS-M	FRY-11-BS-M	Tabular	Accrual Status Code Hierarchy
16	FRY-11	Financial Statements of U.S.	USA	Board of Governors of the Federal Reserve	BS	Schedule BS?Balance Sheet	FRY-11-BS	FRY-11-BS	Tabular	Reporting Line Code
17	FRY-11	Financial Statements of U.S.	USA	Board of Governors of the Federal Reserve	IS-A	Schedule IS-A?Changes in Ec	FRY-11-IS-A	FRY-11-IS-A	Tabular	Instrument type Hierarchy
18	FRY-11	Financial Statements of U.S.	USA	Board of Governors of the Federal Reserve	BS-M	Schedule BS-M?Memoranda	FRY-11-BS-M	FRY-11-BS-M	Tabular	Regulatory Product Classification H
19	FRY-11	Financial Statements of U.S.	USA	Board of Governors of the Federal Reserve	BS-A	Schedule BS-A?Loans and Le	FRY-11-BS-A	FRY-11-BS-A	Tabular	Reg delinquency band Hierarchy
20	FRY-11	Financial Statements of U.S.	USA	Board of Governors of the Federal Reserve	BS-M	Schedule BS-M?Memoranda	FRY-11-BS-M	FRY-11-BS-M	Tabular	Balance Sheet Category Hierarchy
21	FRY-11	Financial Statements of U.S.	USA	Board of Governors of the Federal Reserve	BS-M	Schedule BS-M?Memoranda	FRY-11-BS-M	FRY-11-BS-M	Tabular	Consolidation Code
22	FRY-11	Financial Statements of U.S.	USA	Board of Governors of the Federal Reserve	BS-M	Schedule BS-M?Memoranda	FRY-11-BS-M	FRY-11-BS-M	Tabular	Holding Type Code Hierarchy
23	FRY-11	Financial Statements of U.S.	USA	Board of Governors of the Federal Reserve	BS	Schedule BS?Balance Sheet	FRY-11-BS	FRY-11-BS	Tabular	Bands hierarchy
24	FRY-11	Financial Statements of U.S.	USA	Board of Governors of the Federal Reserve	BS	Schedule BS?Balance Sheet	FRY-11-BS	FRY-11-BS	Tabular	Instrument type Hierarchy
25	FRY-11	Financial Statements of U.S.	USA	Board of Governors of the Federal Reserve	BS	Schedule BS?Balance Sheet	FRY-11-BS	FRY-11-BS	Tabular	Buy or Sell Indicator Hierarchy
26	FRY-11	Financial Statements of U.S.	USA	Board of Governors of the Federal Reserve	BS-A	Schedule BS-A?Loans and Le	FRY-11-BS-A	FRY-11-BS-A	Tabular	Troubled Debt Restructure Flag Hie
27	FRY-11	Financial Statements of U.S.	USA	Board of Governors of the Federal Reserve	BS	Schedule BS?Balance Sheet	FRY-11-BS	FRY-11-BS	Tabular	Other Real Estate Owned Flag Hier
28	FRY-11	Financial Statements of U.S.	USA	Board of Governors of the Federal Reserve	IS-B	Schedule IS-B?Changes in Al	FRY-11-IS-B	FRY-11-IS-B	Tabular	Consolidation Code
29	FRY-11	Financial Statements of U.S.	USA	Board of Governors of the Federal Reserve	BS-M	Schedule BS-M?Memoranda	FRY-11-BS-M	FRY-11-BS-M	Tabular	Reg Instrument Classification Hiera
30	FRY-11	Financial Statements of U.S.	USA	Board of Governors of the Federal Reserve	BS-M	Schedule BS-M?Memoranda	FRY-11-BS-M	FRY-11-BS-M	Tabular	Instrument type Hierarchy
31	FRY-11	Financial Statements of U.S.	USA	Board of Governors of the Federal Reserve	BS-M	Schedule BS-M?Memoranda	FRY-11-BS-M	FRY-11-BS-M	Tabular	Risk Factor type code Hierarchy
32	FRY-11	Financial Statements of U.S.	USA	Board of Governors of the Federal Reserve	IS-A	Schedule IS-A?Changes in Ec	FRY-11-IS-A	FRY-11-IS-A	Tabular	Consolidation for Aggregation
33	FRY-11	Financial Statements of U.S.	USA	Board of Governors of the Federal Reserve	BS-A	Schedule BS-A?Loans and Le	FRY-11-BS-A	FRY-11-BS-A	Tabular	Negative Amortization Flag Hierarch
34	FRY-11	Financial Statements of U.S.	USA	Board of Governors of the Federal Reserve	BS-M	Schedule BS-M?Memoranda	FRY-11-BS-M	FRY-11-BS-M	Tabular	Customer Country Hierarchy
35	FRY-11	Financial Statements of U.S.	USA	Board of Governors of the Federal Reserve	BS-A	Schedule BS-A?Loans and Le	FRY-11-BS-A	FRY-11-BS-A	Tabular	Accrual Status Code Flag Hierarchy
36	FRY-11	Financial Statements of U.S.	USA	Board of Governors of the Federal Reserve	IS	Schedule IS?Income Stateme	FRY-11-IS	FRY-11-IS	Tabular	Reporting Line Code
37	FRY-11	Financial Statements of U.S.	USA	Board of Governors of the Federal Reserve	BS-M	Schedule BS-M?Memoranda	FRY-11-BS-M	FRY-11-BS-M	Tabular	Reporting Line Code

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

Figure 142: Usage Sample Report

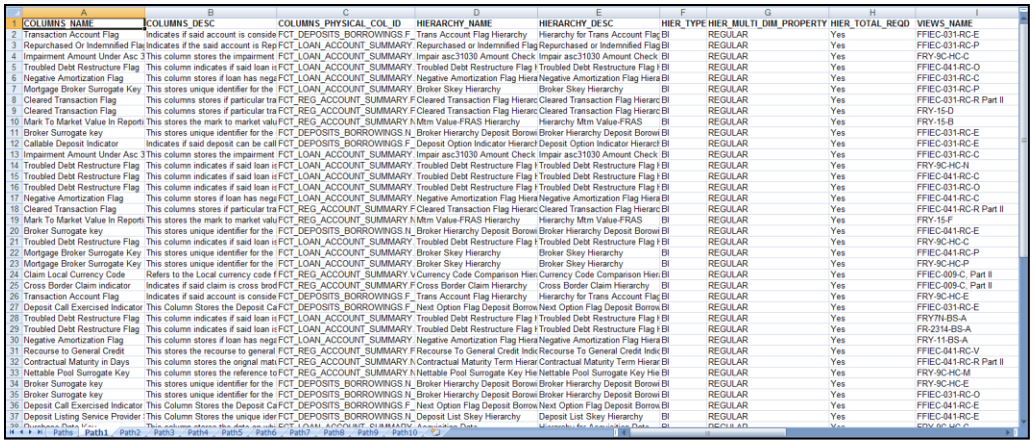


	A	B
1	Path Name	Usage
2	Path1	Columns > Hierarchy > View > Report >Dashboard >
3	Path2	Columns > Measure > Derived Entity > View > Report >Dashboard >
4	Path3	Columns > Hierarchy > Derived Entity > View > Report >Dashboard >
5	Path4	Columns > Measure > Business Processor > Derived Entity > View > Report >Dashboard >
6	Path5	Columns > Measure > Reporting Element > View > Report >Dashboard >
7	Path6	Columns > Hierarchy > Reporting Element > View > Report >Dashboard >
8	Path7	Columns > Measure > Derived Entity > Reporting Element > View > Report >Dashboard >
9	Path8	Columns > Hierarchy > Derived Entity > Reporting Element > View > Report >Dashboard >
10	Path9	Columns > Measure > Business Processor > Derived Entity > Reporting Element > View > Report >Dashboard >
11	Path10	Columns > Measure > Business Processor > Reporting Element > View > Report >Dashboard >
12		
13		
14		
15		

Paths | Path1 | Path2 | Path3 | Path4 | Path5 | Path6 | Path7 | Path8 | Path9

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 143: Patch Selection Sheet

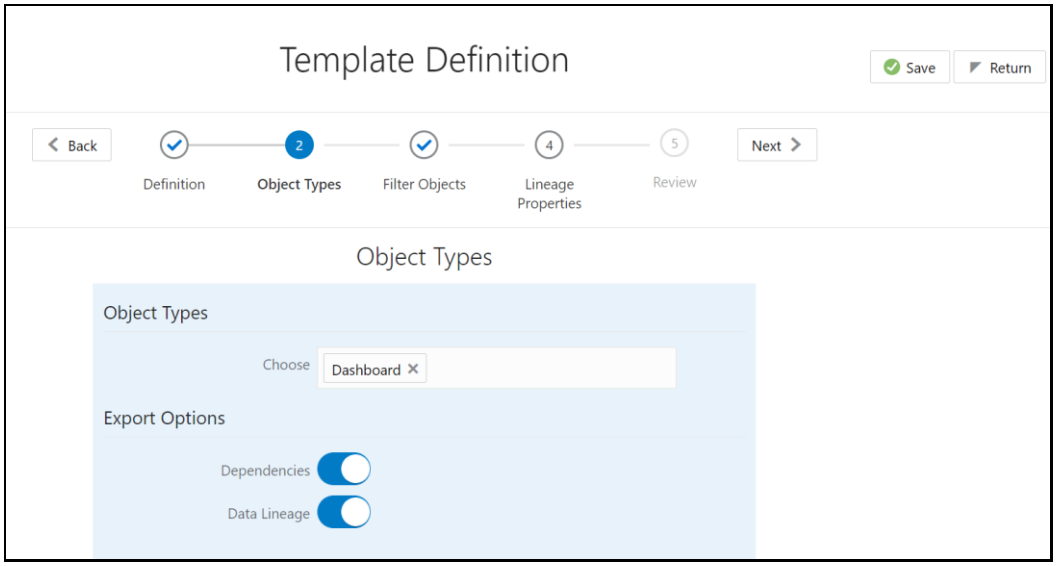


COLUMNS_NAME	COLUMNS_DESC	COLUMNS_PHYSICAL_COL_ID	HIERARCHY_NAME	HIERARCHY_DESC	HIER_TYPE	HIER_MULTI_DIM_PROPERTY	HIER_TOTAL_REQD	VIEWS_NAME
Transaction Account Flag	Indicates if said account is conside	FCT_DEPOSITS_BORROWINGS.F_	Trans Account Flag Hierarchy	Hierarchy for Trans Account Flag	BI	REGULAR	Yes	FFIEC-031-RC-E
Repurchased Or Indemnified Flag	Indicates if the said account is Rep	FCT_LOAN_ACCOUNT_SUMMARY.	Repurchased or Indemnified Flag	Repurchased or Indemnified Flag	BI	REGULAR	Yes	FFIEC-031-RC-P
Impairment Amount Under Asc 3	This column stores the impairment	FCT_LOAN_ACCOUNT_SUMMARY.	Impair asc31030 Amount Check	Impair asc31030 Amount Check	BI	REGULAR	Yes	FRY-9C-HC-C
Troubled Debt Restructure Flag	This column indicates if said loan is	FCT_LOAN_ACCOUNT_SUMMARY.	Troubled Debt Restructure Flag H	Troubled Debt Restructure Flag H	BI	REGULAR	Yes	FFIEC-041-RC-O
Negative Amortization Flag	This column stores if loan has nega	FCT_LOAN_ACCOUNT_SUMMARY.	Negative Amortization Flag Hiera	Negative Amortization Flag Hiera	BI	REGULAR	Yes	FFIEC-031-RC-C
Mortgage Broker Surrogate Key	This stores unique identifier for the	FCT_LOAN_ACCOUNT_SUMMARY.	Broker Skey Hierarchy	Broker Skey Hierarchy	BI	REGULAR	Yes	FFIEC-031-RC-P
Cleared Transaction Flag	This columns stores if particular tra	FCT_REG_ACCOUNT_SUMMARY.F	Cleared Transaction Flag Hierarc	Cleared Transaction Flag Hierarc	BI	REGULAR	Yes	FFIEC-031-RC-R Part II
Cleared Transaction Flag	This columns stores if particular tra	FCT_REG_ACCOUNT_SUMMARY.F	Cleared Transaction Flag Hierarc	Cleared Transaction Flag Hierarc	BI	REGULAR	Yes	FRY-15-D
Mark To Market Value In Reporti	This stores the mark to market valu	FCT_REG_ACCOUNT_SUMMARY.N	Mtm Value-FRAS Hierarchy	Hierarchy Mtm Value-FRAS	BI	REGULAR	Yes	FRY-15-B
Broker Surrogate key	This stores unique identifier for the	FCT_DEPOSITS_BORROWINGS.N_	Broker Hierarchy Deposit Borrow	Broker Hierarchy Deposit Borrow	BI	REGULAR	Yes	FFIEC-031-RC-E
Callable Deposit Indicator	Indicates if said deposit can be call	FCT_DEPOSITS_BORROWINGS.F_	Deposit Option Indicator Hierarcl	Deposit Option Indicator Hierarcl	BI	REGULAR	Yes	FFIEC-031-RC-E
Impairment Amount Under Asc 3	This column stores the impairment	FCT_LOAN_ACCOUNT_SUMMARY.	Impair asc31030 Amount Check	Impair asc31030 Amount Check	BI	REGULAR	Yes	FFIEC-031-RC-C
Troubled Debt Restructure Flag	This column indicates if said loan is	FCT_LOAN_ACCOUNT_SUMMARY.	Troubled Debt Restructure Flag H	Troubled Debt Restructure Flag H	BI	REGULAR	Yes	FRY-9C-HC-N
Troubled Debt Restructure Flag	This column indicates if said loan is	FCT_LOAN_ACCOUNT_SUMMARY.	Troubled Debt Restructure Flag H	Troubled Debt Restructure Flag H	BI	REGULAR	Yes	FFIEC-041-RC-C
Troubled Debt Restructure Flag	This column indicates if said loan is	FCT_LOAN_ACCOUNT_SUMMARY.	Troubled Debt Restructure Flag H	Troubled Debt Restructure Flag H	BI	REGULAR	Yes	FFIEC-031-RC-O
Negative Amortization Flag	This column stores if loan has nega	FCT_LOAN_ACCOUNT_SUMMARY.	Negative Amortization Flag Hiera	Negative Amortization Flag Hiera	BI	REGULAR	Yes	FFIEC-041-RC-C
Cleared Transaction Flag	This columns stores if particular tra	FCT_REG_ACCOUNT_SUMMARY.F	Cleared Transaction Flag Hierarc	Cleared Transaction Flag Hierarc	BI	REGULAR	Yes	FFIEC-041-RC-R Part II
Mark To Market Value In Reporti	This stores the mark to market valu	FCT_REG_ACCOUNT_SUMMARY.N	Mtm Value-FRAS Hierarchy	Hierarchy Mtm Value-FRAS	BI	REGULAR	Yes	FRY-15-F
Broker Surrogate key	This stores unique identifier for the	FCT_DEPOSITS_BORROWINGS.N_	Broker Hierarchy Deposit Borrow	Broker Hierarchy Deposit Borrow	BI	REGULAR	Yes	FFIEC-041-RC-E
Troubled Debt Restructure Flag	This column indicates if said loan is	FCT_LOAN_ACCOUNT_SUMMARY.	Troubled Debt Restructure Flag H	Troubled Debt Restructure Flag H	BI	REGULAR	Yes	FRY-9C-HC-C
Mortgage Broker Surrogate Key	This stores unique identifier for the	FCT_LOAN_ACCOUNT_SUMMARY.	Broker Skey Hierarchy	Broker Skey Hierarchy	BI	REGULAR	Yes	FFIEC-041-RC-P
Mortgage Broker Surrogate Key	This stores unique identifier for the	FCT_LOAN_ACCOUNT_SUMMARY.	Broker Skey Hierarchy	Broker Skey Hierarchy	BI	REGULAR	Yes	FRY-9C-HC-P
Claim Local Currency Code	Refers to the Local currency code f	FCT_REG_ACCOUNT_SUMMARY.V	Currency Code Comparison Hier	Currency Code Comparison Hier	BI	REGULAR	Yes	FFIEC-009-C, Part II
Cross Border Claim indicator	Indicates if said claim is cross brod	FCT_REG_ACCOUNT_SUMMARY.F	Cross Border Claim Hierarchy	Cross Border Claim Hierarchy	BI	REGULAR	Yes	FFIEC-009-C, Part II
Transaction Account Flag	Indicates if said account is conside	FCT_DEPOSITS_BORROWINGS.F_	Trans Account Flag Hierarchy	Hierarchy for Trans Account Flag	BI	REGULAR	Yes	FRY-9C-HC-E
Deposit Call Exercised Indicator	This Column Stores the Deposit Ca	FCT_DEPOSITS_BORROWINGS.F_	Next Option Flag Deposit Borrow	Next Option Flag Deposit Borrow	BI	REGULAR	Yes	FFIEC-031-RC-E
Troubled Debt Restructure Flag	This column indicates if said loan is	FCT_LOAN_ACCOUNT_SUMMARY.	Troubled Debt Restructure Flag H	Troubled Debt Restructure Flag H	BI	REGULAR	Yes	FRY7N-BS-A
Troubled Debt Restructure Flag	This column indicates if said loan is	FCT_LOAN_ACCOUNT_SUMMARY.	Troubled Debt Restructure Flag H	Troubled Debt Restructure Flag H	BI	REGULAR	Yes	FR-2314-BS-A
Negative Amortization Flag	This column stores if loan has nega	FCT_LOAN_ACCOUNT_SUMMARY.	Negative Amortization Flag Hiera	Negative Amortization Flag Hiera	BI	REGULAR	Yes	FRY-11-BS-A
Recourse to General Credit	This stores the recourse to general	FCT_REG_ACCOUNT_SUMMARY.F	Recourse To General Credit Indic	Recourse To General Credit Indic	BI	REGULAR	Yes	FFIEC-041-RC-V
Contractual Maturity in Days	This column stores the orignal matu	FCT_REG_ACCOUNT_SUMMARY.N	Contractual Maturity Term Hierar	Contractual Maturity Term Hierar	BI	REGULAR	Yes	FFIEC-041-RC-R Part II
Nettable Pool Surrogate Key	This column stores the reference to	FCT_REG_ACCOUNT_SUMMARY.N	Nettable Pool Surrogate Key Hie	Nettable Pool Surrogate Key Hie	BI	REGULAR	Yes	FRY-9C-HC-M
Broker Surrogate key	This stores unique identifier for the	FCT_DEPOSITS_BORROWINGS.N_	Broker Hierarchy Deposit Borrow	Broker Hierarchy Deposit Borrow	BI	REGULAR	Yes	FRY-9C-HC-E
Broker Surrogate key	This stores unique identifier for the	FCT_DEPOSITS_BORROWINGS.N_	Broker Hierarchy Deposit Borrow	Broker Hierarchy Deposit Borrow	BI	REGULAR	Yes	FFIEC-031-RC-O
Deposit Call Exercised Indicator	This Column Stores the Deposit Ca	FCT_DEPOSITS_BORROWINGS.F_	Next Option Flag Deposit Borrow	Next Option Flag Deposit Borrow	BI	REGULAR	Yes	FFIEC-041-RC-E
Deposit Listing Service Provider	This Column Stores the unique iden	FCT_DEPOSITS_BORROWINGS.N_	Deposit List Skey Hierarchy	Deposit List Skey Hierarchy	BI	REGULAR	Yes	FFIEC-041-RC-E

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

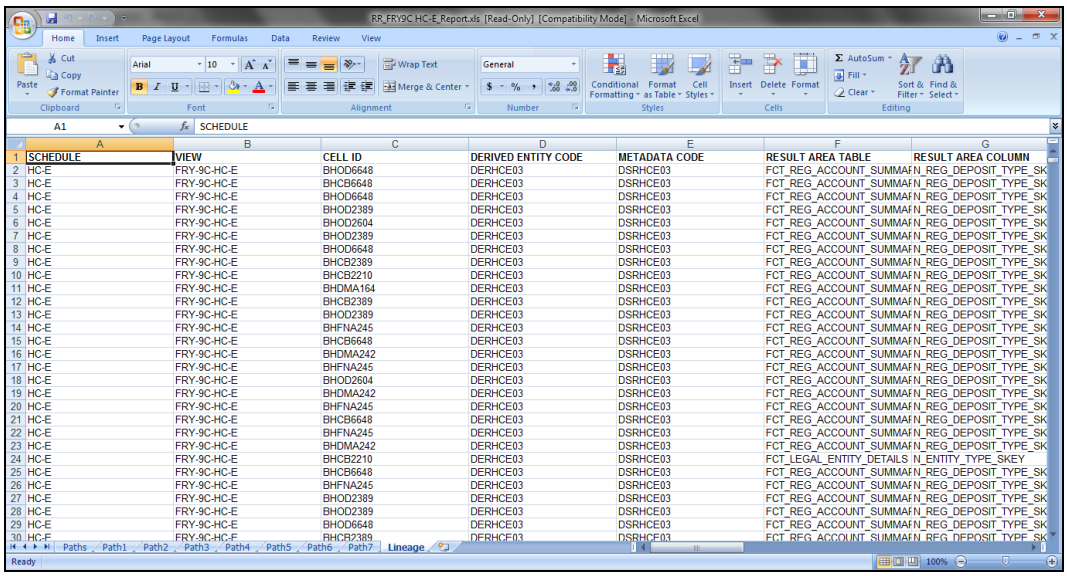
    Data Lineage can be selected only if **Dependencies** option is chosen.
    The minimum memory settings to run lineage reports should be
    `export JAVA_OPTS="-Xms1024m -Xmx8192m"`

Figure 144: 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).

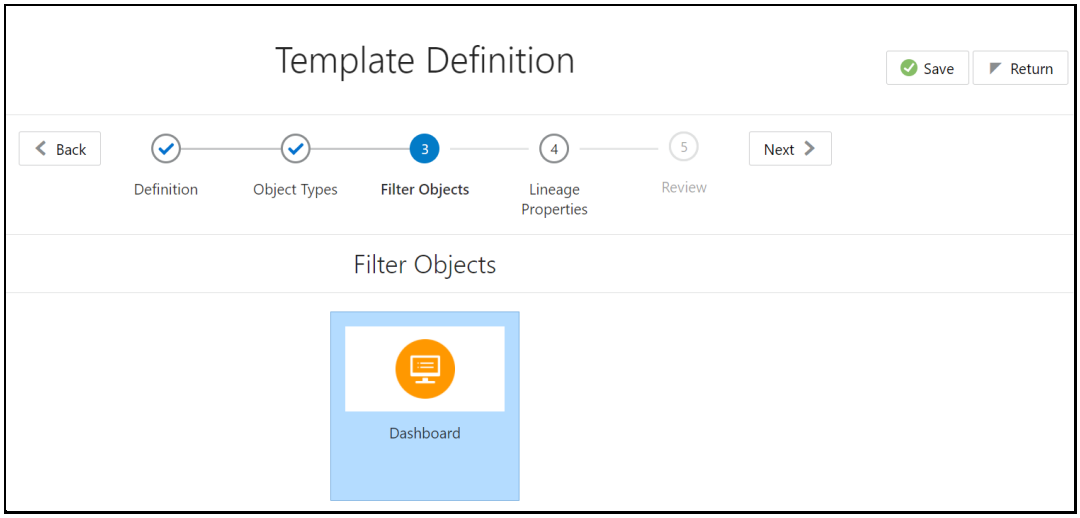
Figure 145: Lineage Details



SCHEDULE	VIEW	CELL ID	DERIVED ENTITY CODE	METADATA CODE	RESULT AREA TABLE	RESULT AREA COLUMN
HC-E	FRY-9C-HC-E	BHOD6648	DERHCE03	DSRHCE03	FCT_REG_ACCOUNT_SUMMA	N_REG_DEPOSIT_TYPE_SK
HC-E	FRY-9C-HC-E	BHCB6648	DERHCE03	DSRHCE03	FCT_REG_ACCOUNT_SUMMA	N_REG_DEPOSIT_TYPE_SK
HC-E	FRY-9C-HC-E	BHOD6648	DERHCE03	DSRHCE03	FCT_REG_ACCOUNT_SUMMA	N_REG_DEPOSIT_TYPE_SK
HC-E	FRY-9C-HC-E	BHOD2389	DERHCE03	DSRHCE03	FCT_REG_ACCOUNT_SUMMA	N_REG_DEPOSIT_TYPE_SK
HC-E	FRY-9C-HC-E	BHOD2604	DERHCE03	DSRHCE03	FCT_REG_ACCOUNT_SUMMA	N_REG_DEPOSIT_TYPE_SK
HC-E	FRY-9C-HC-E	BHOD2389	DERHCE03	DSRHCE03	FCT_REG_ACCOUNT_SUMMA	N_REG_DEPOSIT_TYPE_SK
HC-E	FRY-9C-HC-E	BHOD6648	DERHCE03	DSRHCE03	FCT_REG_ACCOUNT_SUMMA	N_REG_DEPOSIT_TYPE_SK
HC-E	FRY-9C-HC-E	BHCB2389	DERHCE03	DSRHCE03	FCT_REG_ACCOUNT_SUMMA	N_REG_DEPOSIT_TYPE_SK
HC-E	FRY-9C-HC-E	BHCB2210	DERHCE03	DSRHCE03	FCT_REG_ACCOUNT_SUMMA	N_REG_DEPOSIT_TYPE_SK
HC-E	FRY-9C-HC-E	BHDMA164	DERHCE03	DSRHCE03	FCT_REG_ACCOUNT_SUMMA	N_REG_DEPOSIT_TYPE_SK
HC-E	FRY-9C-HC-E	BHCB2389	DERHCE03	DSRHCE03	FCT_REG_ACCOUNT_SUMMA	N_REG_DEPOSIT_TYPE_SK
HC-E	FRY-9C-HC-E	BHOD2389	DERHCE03	DSRHCE03	FCT_REG_ACCOUNT_SUMMA	N_REG_DEPOSIT_TYPE_SK
HC-E	FRY-9C-HC-E	BHFNA245	DERHCE03	DSRHCE03	FCT_REG_ACCOUNT_SUMMA	N_REG_DEPOSIT_TYPE_SK
HC-E	FRY-9C-HC-E	BHCB6648	DERHCE03	DSRHCE03	FCT_REG_ACCOUNT_SUMMA	N_REG_DEPOSIT_TYPE_SK
HC-E	FRY-9C-HC-E	BHDMA242	DERHCE03	DSRHCE03	FCT_REG_ACCOUNT_SUMMA	N_REG_DEPOSIT_TYPE_SK
HC-E	FRY-9C-HC-E	BHFNA245	DERHCE03	DSRHCE03	FCT_REG_ACCOUNT_SUMMA	N_REG_DEPOSIT_TYPE_SK
HC-E	FRY-9C-HC-E	BHOD2604	DERHCE03	DSRHCE03	FCT_REG_ACCOUNT_SUMMA	N_REG_DEPOSIT_TYPE_SK
HC-E	FRY-9C-HC-E	BHDMA242	DERHCE03	DSRHCE03	FCT_REG_ACCOUNT_SUMMA	N_REG_DEPOSIT_TYPE_SK
HC-E	FRY-9C-HC-E	BHFNA245	DERHCE03	DSRHCE03	FCT_REG_ACCOUNT_SUMMA	N_REG_DEPOSIT_TYPE_SK
HC-E	FRY-9C-HC-E	BHCB6648	DERHCE03	DSRHCE03	FCT_REG_ACCOUNT_SUMMA	N_REG_DEPOSIT_TYPE_SK
HC-E	FRY-9C-HC-E	BHFNA245	DERHCE03	DSRHCE03	FCT_REG_ACCOUNT_SUMMA	N_REG_DEPOSIT_TYPE_SK
HC-E	FRY-9C-HC-E	BHDMA242	DERHCE03	DSRHCE03	FCT_REG_ACCOUNT_SUMMA	N_REG_DEPOSIT_TYPE_SK
HC-E	FRY-9C-HC-E	BHCB2210	DERHCE03	DSRHCE03	FCT_LEGAL_ENTITY_DETAILS	N_ENTITY_TYPE_SKEY
HC-E	FRY-9C-HC-E	BHCB6648	DERHCE03	DSRHCE03	FCT_REG_ACCOUNT_SUMMA	N_REG_DEPOSIT_TYPE_SK
HC-E	FRY-9C-HC-E	BHFNA245	DERHCE03	DSRHCE03	FCT_REG_ACCOUNT_SUMMA	N_REG_DEPOSIT_TYPE_SK
HC-E	FRY-9C-HC-E	BHOD2389	DERHCE03	DSRHCE03	FCT_REG_ACCOUNT_SUMMA	N_REG_DEPOSIT_TYPE_SK
HC-E	FRY-9C-HC-E	BHOD2389	DERHCE03	DSRHCE03	FCT_REG_ACCOUNT_SUMMA	N_REG_DEPOSIT_TYPE_SK
HC-E	FRY-9C-HC-E	BHOD6648	DERHCE03	DSRHCE03	FCT_REG_ACCOUNT_SUMMA	N_REG_DEPOSIT_TYPE_SK
HC-E	FRY-9C-HC-E	BHCB2389	DERHCE03	DSRHCE03	FCT_REG_ACCOUNT_SUMMA	N_REG_DEPOSIT_TYPE_SK

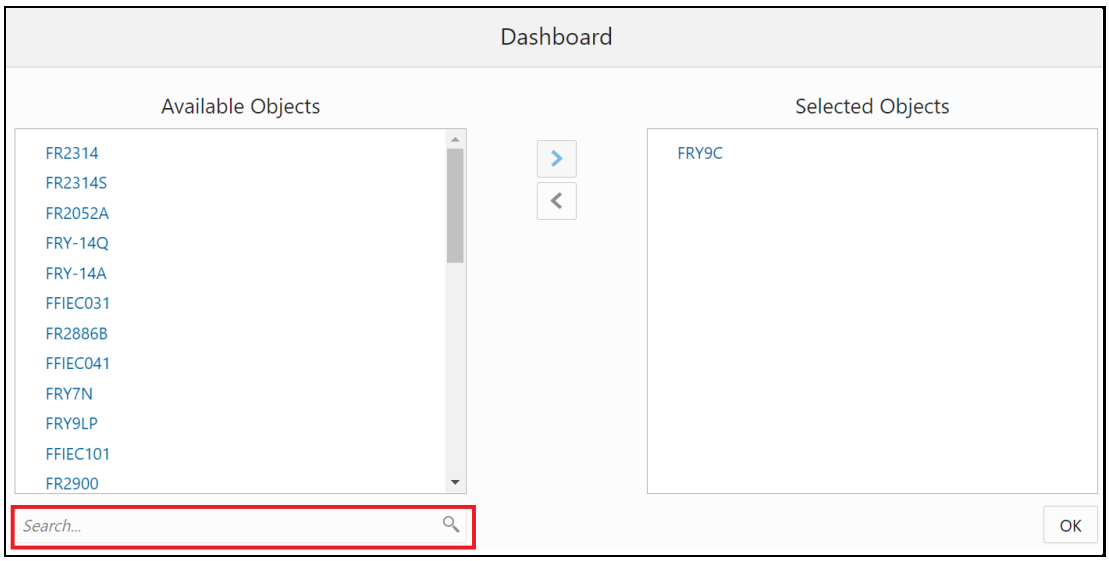
14. Select **Filter Objects** to see the selected objects.

Figure 146: 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.

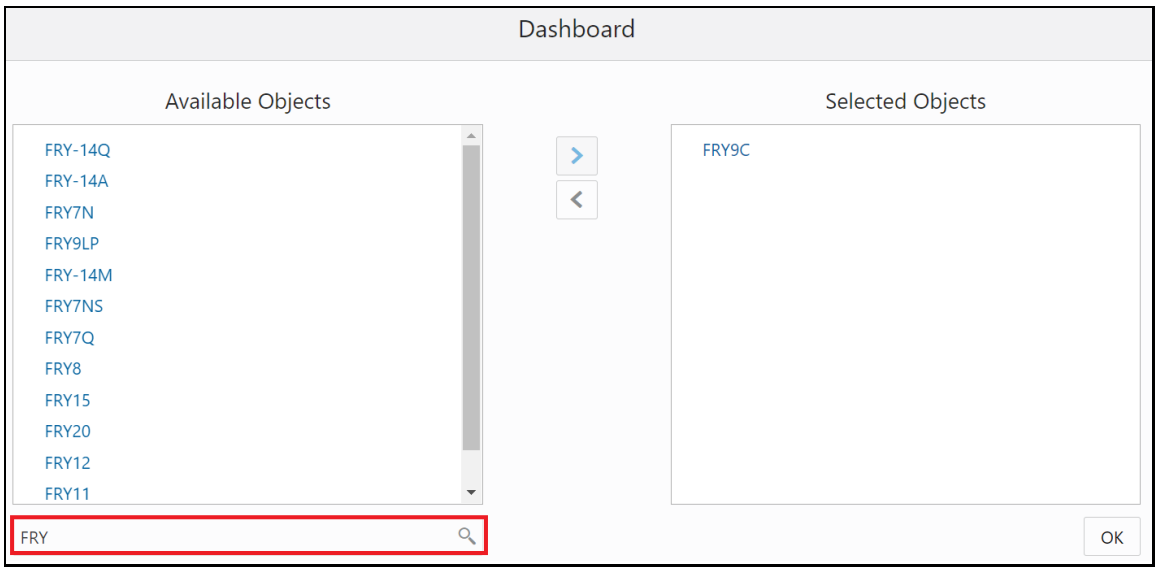
Figure 147: Object Selection window



16. When the object list is huge, use the Search option as shown above. Type 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 148: 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 36: Lineage Properties

Sl. 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

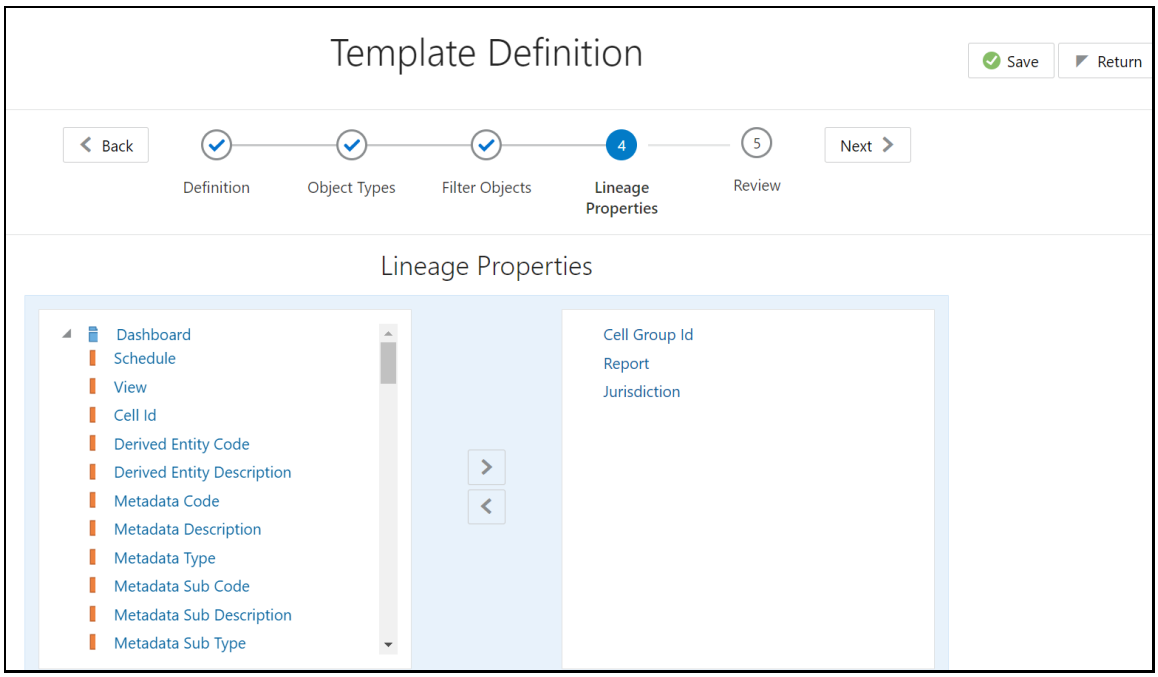
Sl. No.	Lineage Property	Property Description
		Metadata Sub Code. The Results Area Table Type represents how the table is populated. For example: Data Flow, Seeded Data, and so on.
17	Result Area Table	Stores the Results Area Table the Lineage Report generated for the given Cell ID, Cell Group ID, Derived 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.

Sl. 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 Level6 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 Level6 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.

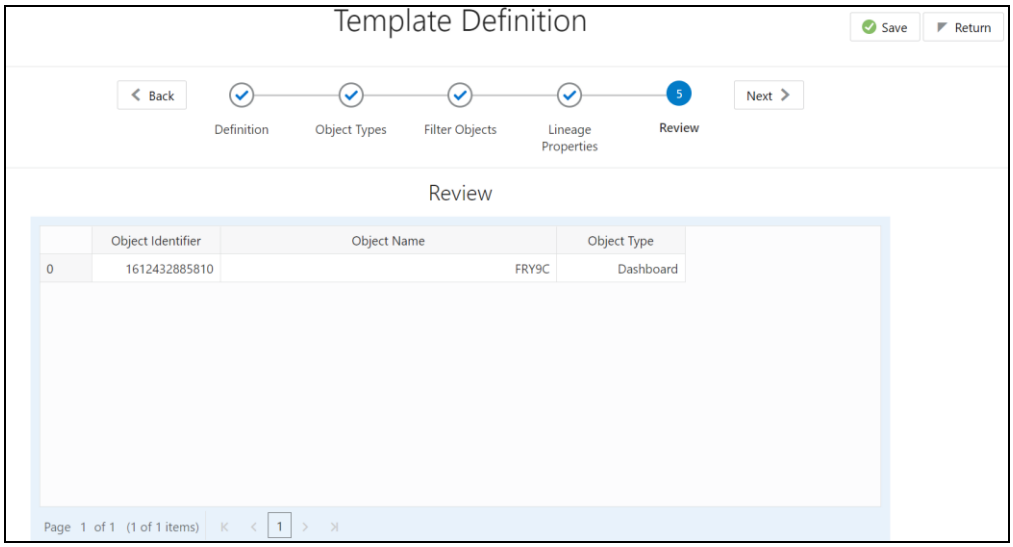
Sl. No.	Lineage Property	Property Description
70	Lineage Data Flow Name Level10	Stores the Level10 Data Flow Name of Lineage Report generated for populating the Level9 Source Table and Column.
71	Lineage Data Flow Type Level10	Stores the Level10 Data Flow Type of Lineage Report generated for populating 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 with respect to 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 with respect to 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 with respect to 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 with respect to Target Metadata Member Code in Results Area. This is the derived representation of the Target Metadata Member Code in the Results Area.

Figure 149: Lineage Properties window



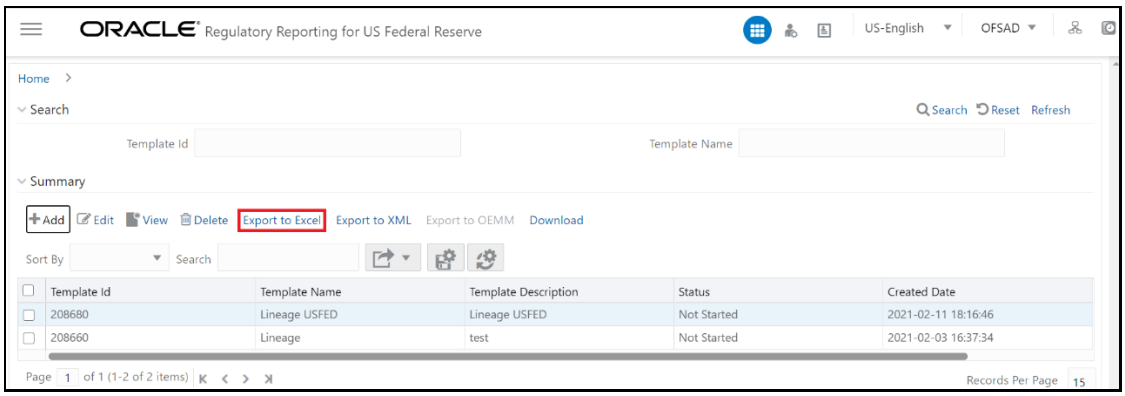
18. Review the **Template Definition** once and click **Save**.

Figure 150: Template Definition Review window



19. Click **Return** to go to the *Summary* page.

Figure 151: Template Definition Summary-Export to Excel page



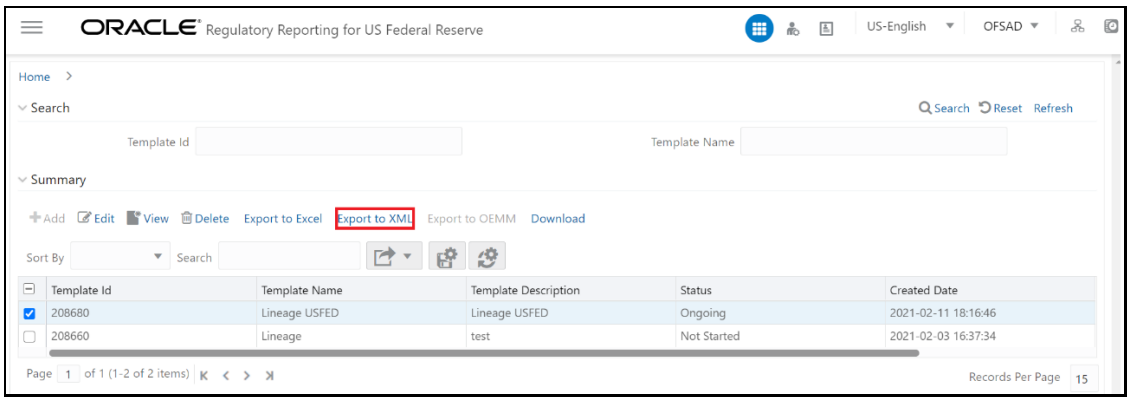
20. Select a **template** in the **Template List** in the **Summary** screen and click **Export to Excel** to export the desired objects in Excel Sheet format.

    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.

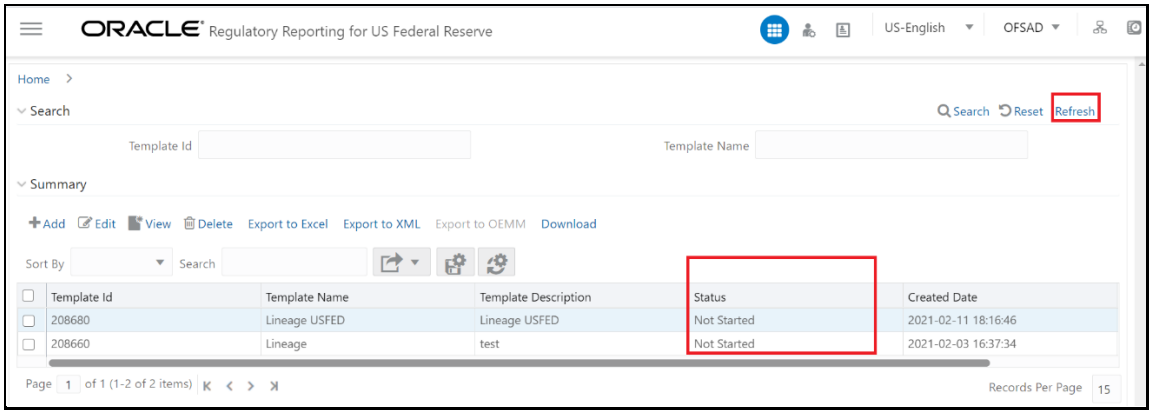
    MDB Publish must be triggered before executing the **Export to XML** option.

Figure 152: Template Definition Summary-Export to 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 153: 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. Query for each path and if data present for this path

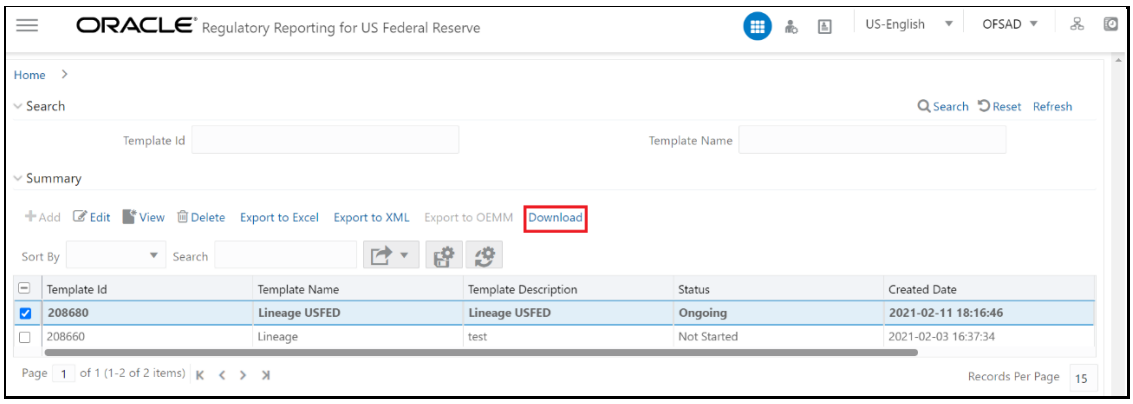
c. Lineage query

d. Status of excel output creation

e. 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 154: 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.

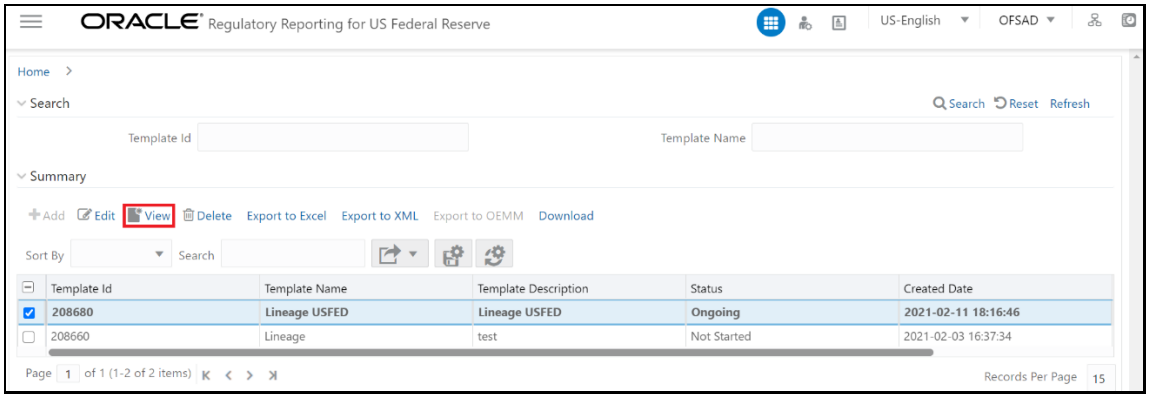
1. MDR View Group: To see Metadata Report Extract with View permissions.
2. MDR Owner Group: To create templates in Metadata Report Extract.

8.2.6 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 **View** icon to view the generated Metadata Report Templates excel report (after the export status shows as completed).

Figure 155: Template Definition Summary View Page



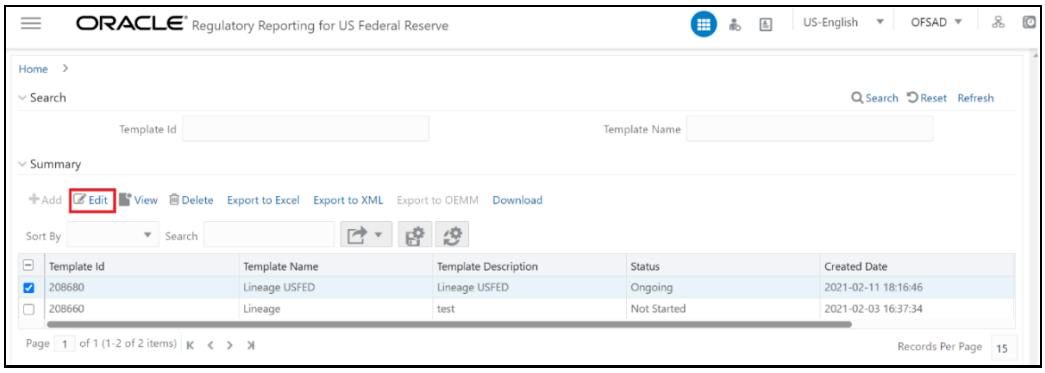
The Metadata Report Templates excel report is opened in view-only mode.

8.2.7 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 **Edit** icon to modify the generated Metadata Report Templates excel report (after the export status shows as completed).

Figure 156: Template Definition Summary Edit page

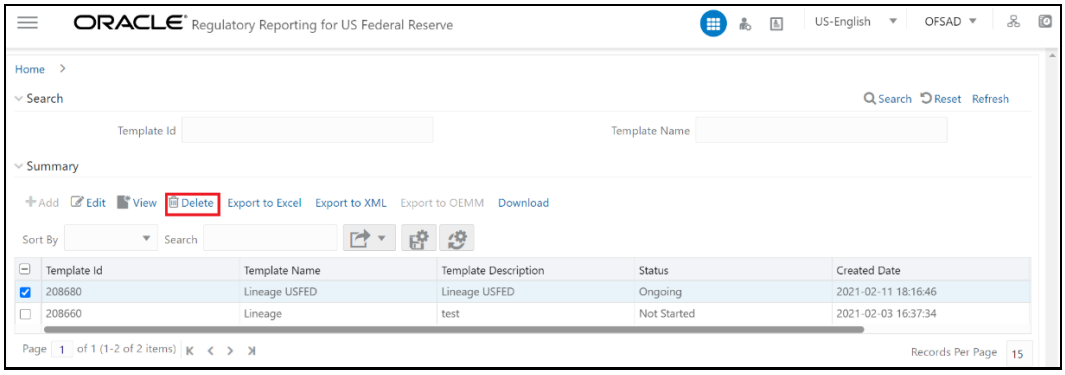


8.2.8 Delete Metadata Report Templates

Perform the following steps to delete the Metadata Report Templates:

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

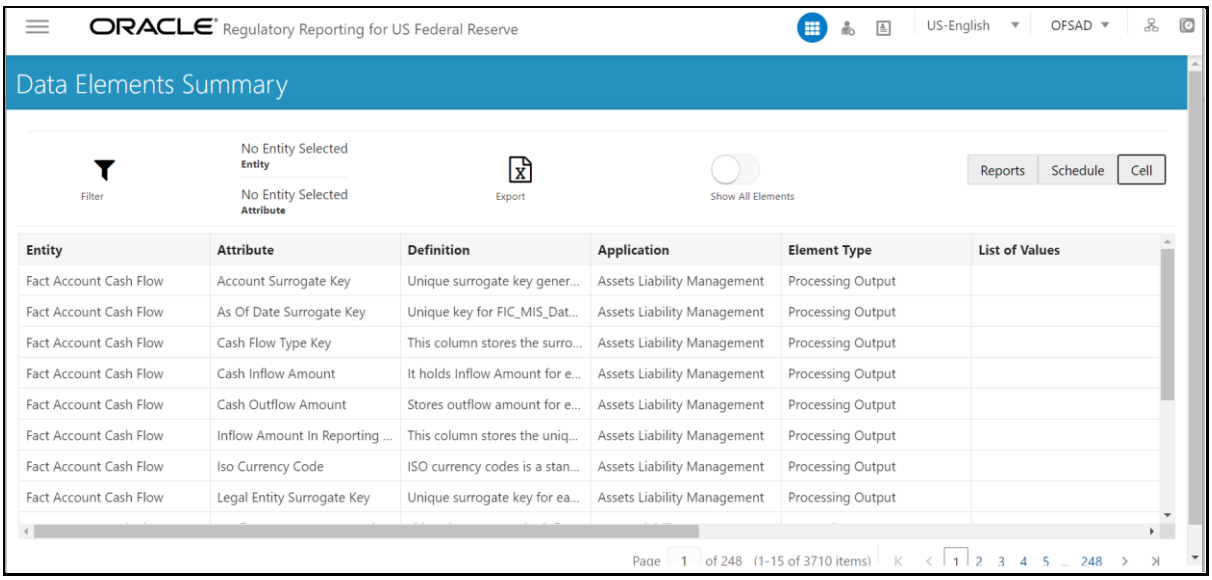
Figure 157: Template Definition Summary Delete page



8.3 Viewing Data Elements Summary

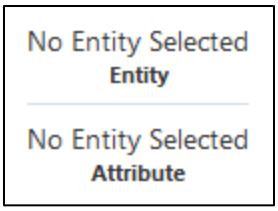
Select **Data Elements Summary** from the main navigation menu to view all the Data Elements.

Figure 158: Data Elements Summary



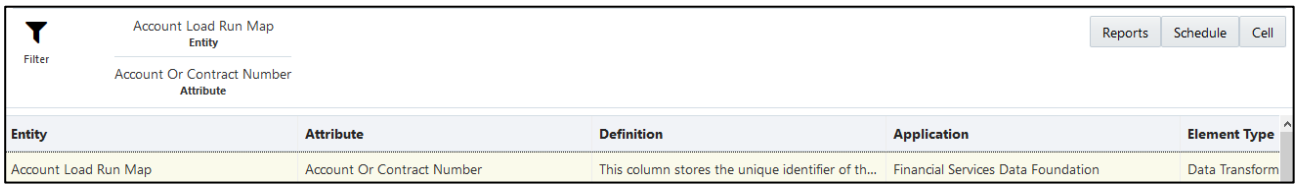
By default, the page displays all the data elements.

Figure 159: Selection Panel



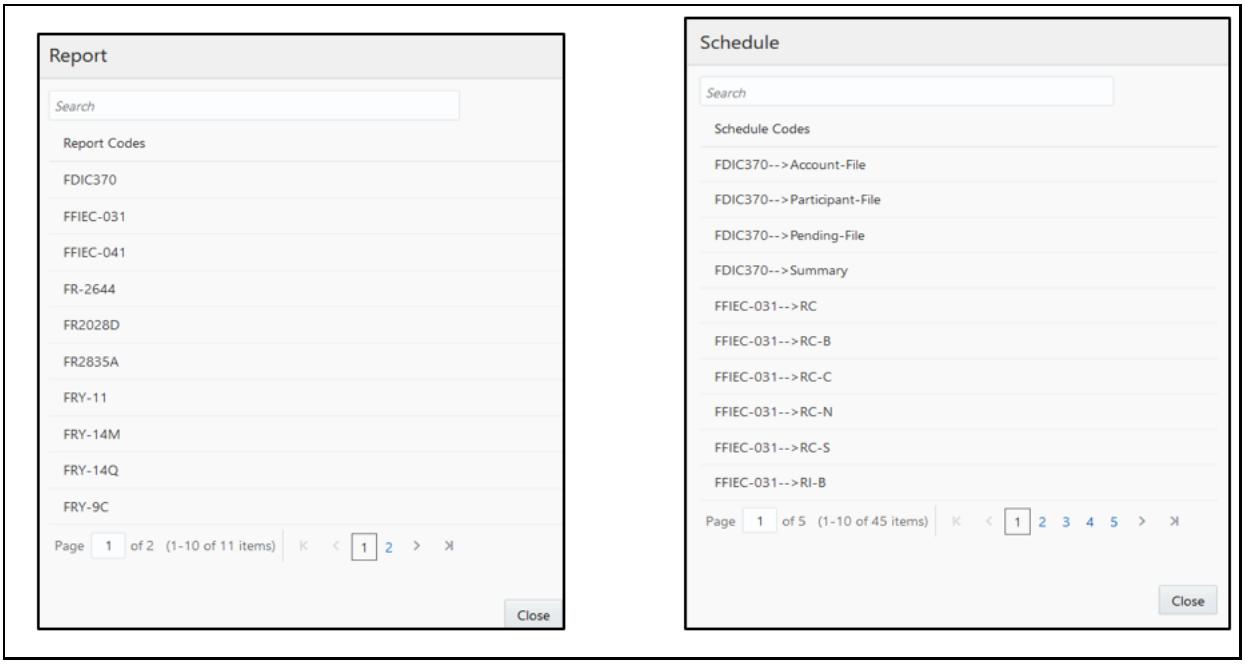
Click a row and the selection panel displays the selected entity and attribute.

Figure 160: Selected Entity



The tabs on the right can be used to view reports, schedules, and cells as shown in Figure 160, which are utilized for the selected data element.

Figure 161: Report or Schedule View



NOTE For Viewing Data Elements and Viewing Data Elements Summary, Data Elements batch execution is required for the screen to function.

9 Report Submission

This chapter provides an understanding of the report submission process.

Topics:

9.1 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.

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

9.3 Report Templates to be used in AgileREPORTER

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

Table 37: 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_V20

Report or Schedule Name	Report Template
FFIEC-041	FFIEC041_V20
FFIEC-101	FFIEC101_V2
FR-2052A	FR2052A_V4
FR-2314	FR2314_V5
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[1]	FR2900_V4
FR Y-11	FRY11_V5
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_V2

1 **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 is 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).

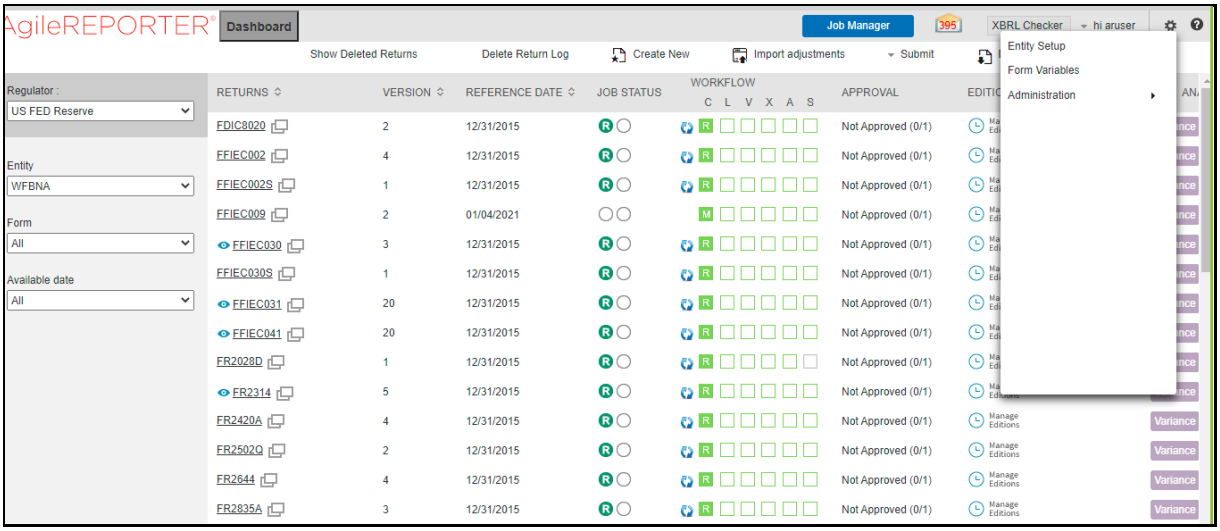
Report Name	Report Template
FR Y-14QA INTFM	FRY14QAINTFM_V2
FR Y-14QA INTHE	FRY14QAINTHE_V2
FR Y-14QA INTL OTH CONS	FRY14QAINTLOTHCONS_V2
FR Y-14QA INTSB	FRY14QAINTSB_V2
FR Y-14QA STUDENT	FRY14QASTUDENT_V2
FR Y-14QA US OTH CONS	FRY14QAUSOTHCONS_V2
FR Y-14QA USSB	FRY14QAUSSB_V2
FR Y-14Q BAL	FRY14QBAL_V4
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
FR Y-14Q RETAIL INTAUTO	FRY14QAINTAUTO_V2

Report Name	Report Template
FR Y-14Q RETAIL INTCARD	FRY14QAINTCARD_V2
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_V2
FR Y-14Q RETAIL US OTHCONS	FRY14QAUSOTHCONS_V2
FR Y-14Q RETAIL USSB	FRY14QAUSSB_V2
FR Y-14Q SEC	FRY14QSEC_V5
FR Y-14Q SUPMNT	FRY14QSUPMNT_V2
FR Y-14Q TRADING	FRY14QTRADING_V3
FR Y-15	FRY15_V6
FR Y-20	FRY20_V2
FR Y-7N	FRY7N_V4
FR Y-7NS	FRY7NS_V1
FR Y-7Q	FRY7Q_V2
FR Y-9C	FRY9C_V13
FR Y-9LP	FRY9LP_V7

9.4 Supported Report Template Version and Activation Date

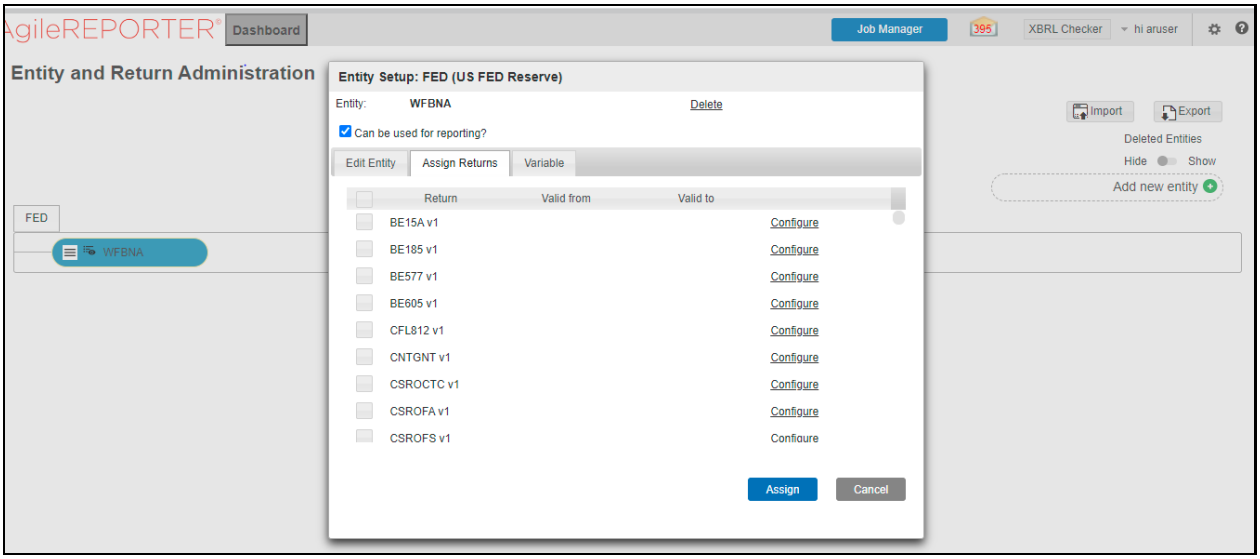
The AgileREPORTER contains the details of the Report template version and the activation date of the same. This can be accessed by selecting the Entity setup option in the Settings menu which enables you to Add, Modify, and Delete Entities. Click on an existing Entity to access report templates according to version and the activation date, and assign the necessary privileges as required.

Figure 162: AgileREPORTER Entity Setup



Click on a created Entity to access report templates according to version and the activation date, and assign the necessary privileges as required.

Figure 163: AgileREPORTER Entity Setup: US FED Reserve



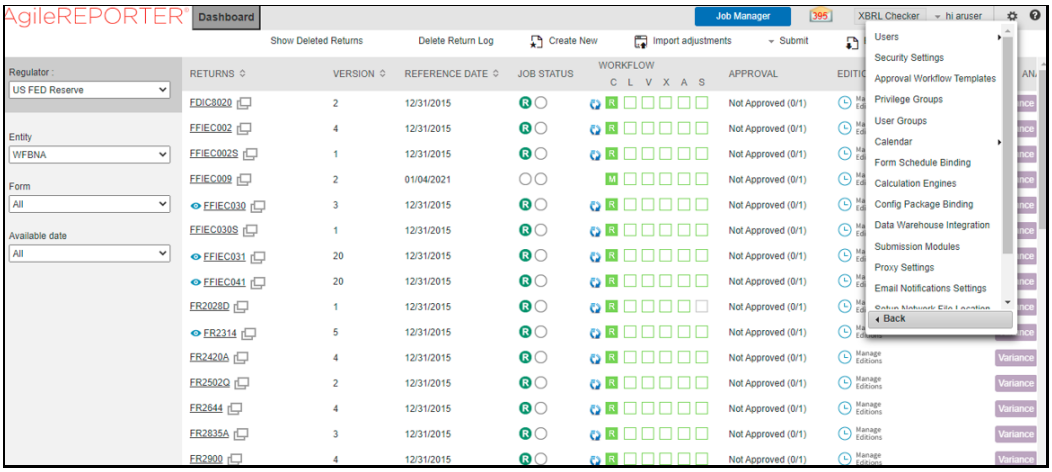
10 Maintenance

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 activity. The following steps help to assess the impact (You can replace the measure, dimension for existing data warehousing configuration pack using the following process):

1. Choosing different execution as a final. After report verification, if the requirement is to change the execution, then you must visit 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 164: 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>>/<<OFSAA_CONTEXT>>/OFSAADrilldown/drilldownreport.jsp?cellid=${cellId}&infodom=<<INFODOM>>&legalentity=${entityCode}&run=${run}&date=${referenceDate}&regulator=${regulatoryPrefix}&report=${formCode}

Example:

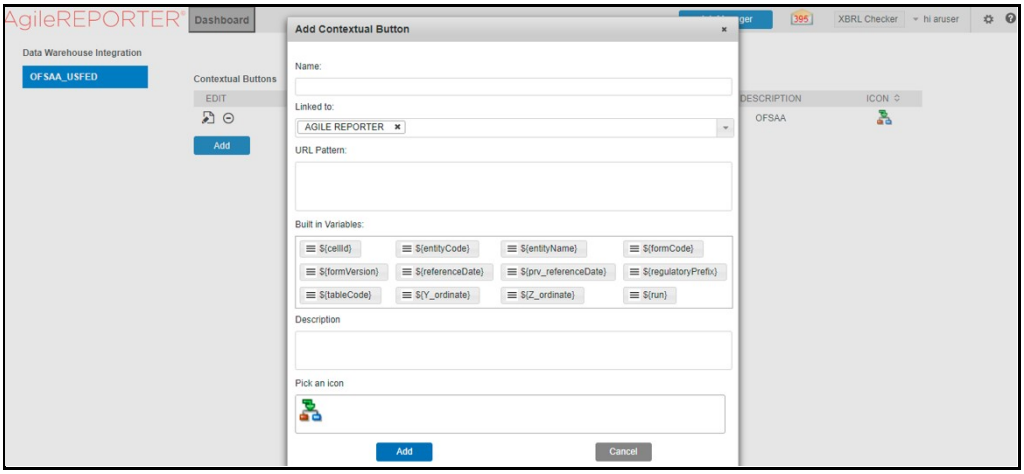
http://127.0.0.1:8080/ofsaa/OFSAADrilldown/drilldown.jsp?cellid=${cellId}&infodom=OFSFSDFINFO&legalentity=${entityCode}&run=${run}&date=${referenceDate}&regulator=${regulatoryPrefix}&report=${formCode}

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

ii. Select an icon.

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

Figure 165: Adding Contextual Button



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

NOTE

- See AgileREPORTER user documentation for details.

11 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.

11.1 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.

11.2 Configuration Steps

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

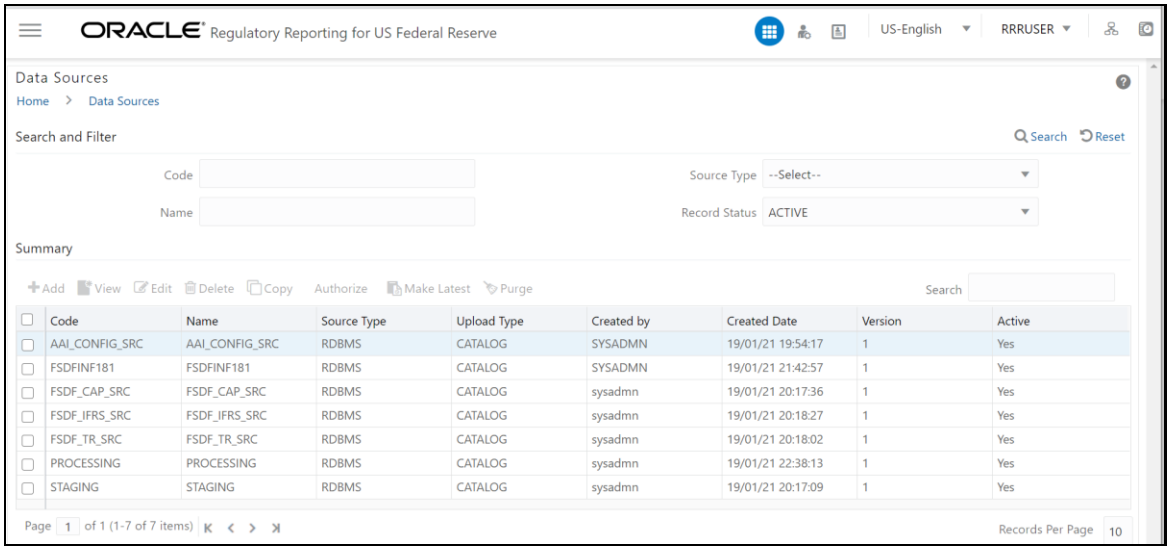
11.2.1 Source Model Generation

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

Figure 166: Regulatory Reporting Us Federal Reserve page

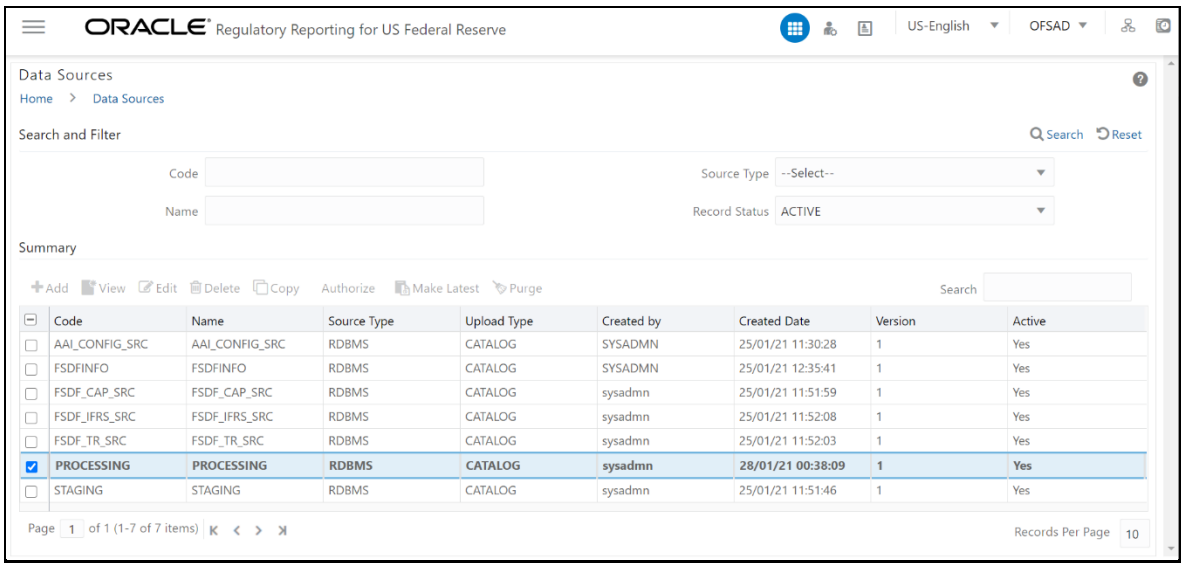
2. Navigate to **Data Management Framework** and select **Data Sources**. A new window is displayed as follows.

Figure 167: Data Sources page



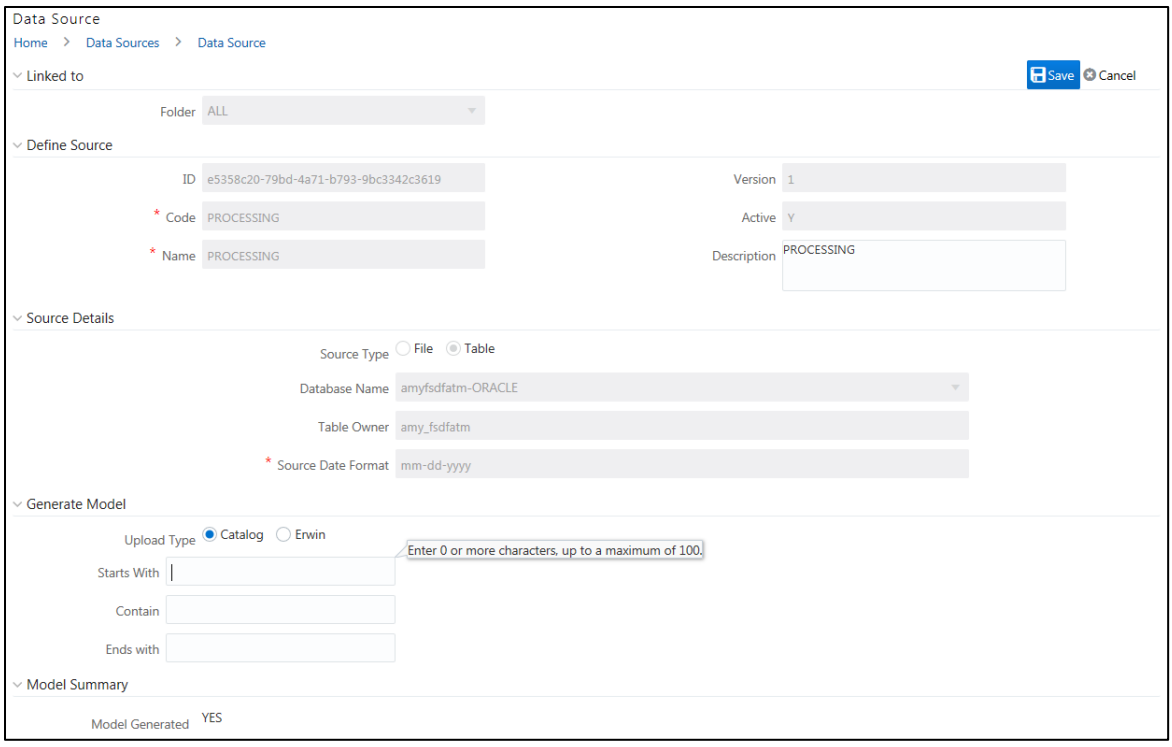
3. In the *Summary* pane, select **PROCESSING** and click **Edit** icon. A new edit pane is displayed.

Figure 168: Data Sources Edit page



4. Select **Catalog** and enter the required details.

Figure 169: Generate Model Catalog Details page



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

11.2.2 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';

11.3 Execution Steps

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

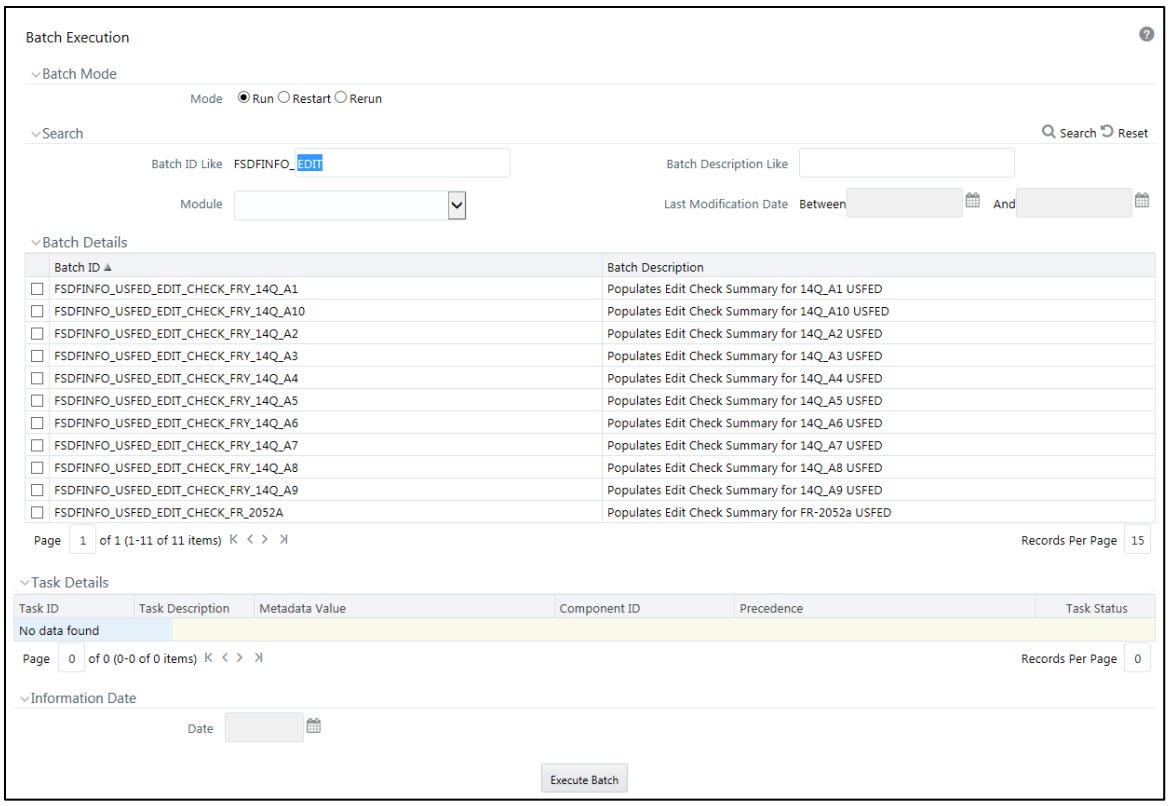
FSDFINFO_USFED_EDIT_CHECK_FR_2052A batch.

11.4 How to Execute the Batches?

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

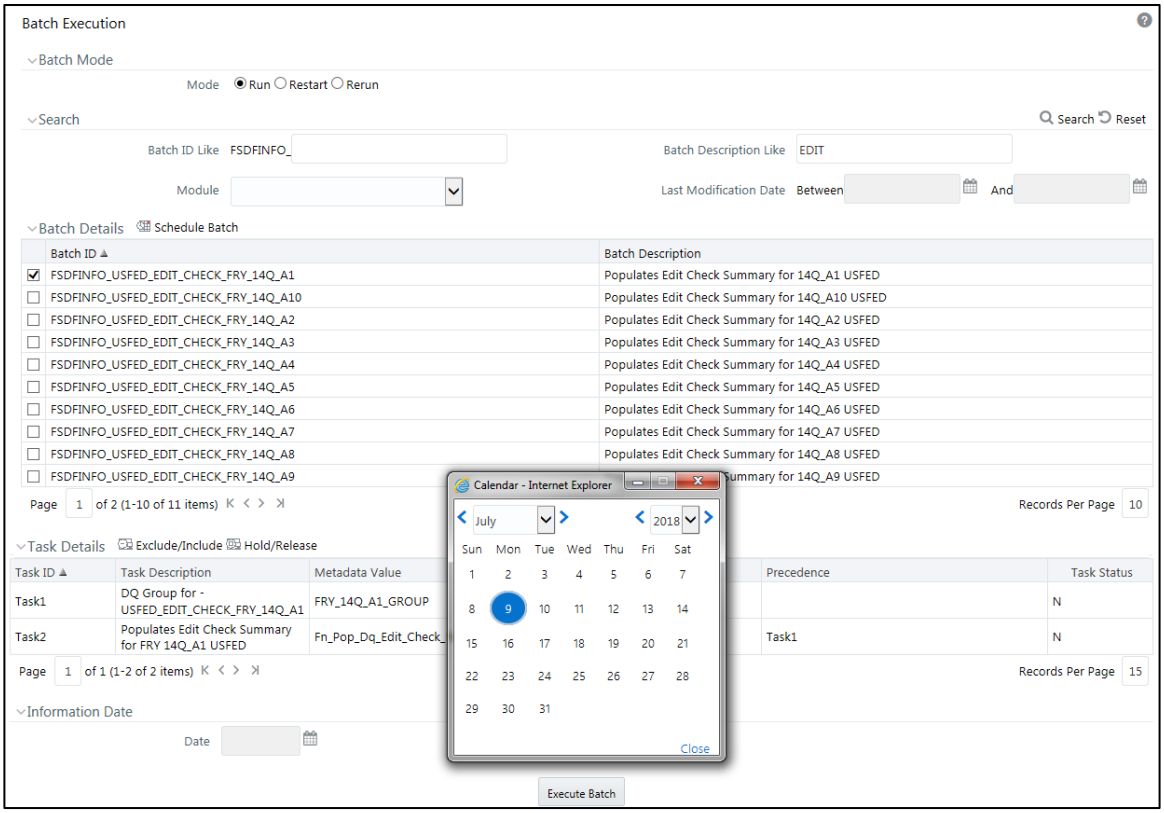
1. Log in to OFSAA application GUI.
2. Navigate to **Regulatory Reporting for US Federal Reserve**, select **Process and Operations**, select **Operations**, and then select **Batch Execution**. The Batch Execution window is displayed as follows.

Figure 170: 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 171: Batch Details page



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

11.5 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 38: 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 39: 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 Transformation	FSI_EDIT_CHECK_5_LOG
6	Symmetry of Intercompany Transactions	Data Transformation	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 Transformation	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 Transformation	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 40: 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 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	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 41: 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	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 42: 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	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>
```

11.6 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	–

11.7 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 43: 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)

12 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.

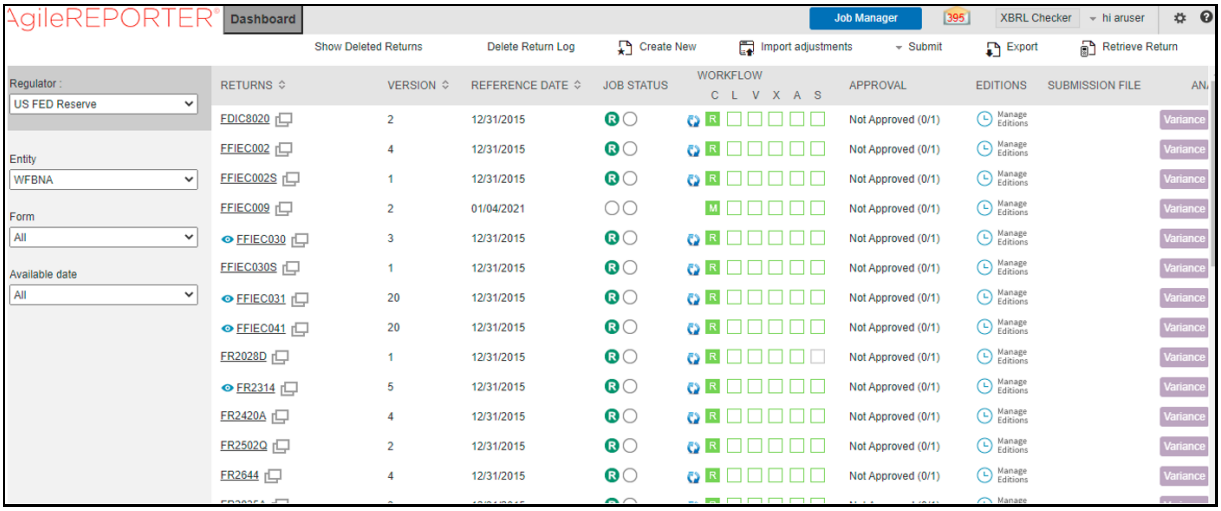
This section provides detailed guidelines on how to troubleshoot the data issues tracing back the data flow from AgileREPORTER.

Topics:

12.1 Prerequisites

It is assumed that you can log in and see the following menus and respective reports in AgileREPORTER.

Figure 172: AgileREPORTER



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

12.2 Troubleshooting Use Cases

This section provides information about the various troubleshooting use cases in AgileREPORTER.

Topics:

12.2.1 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.

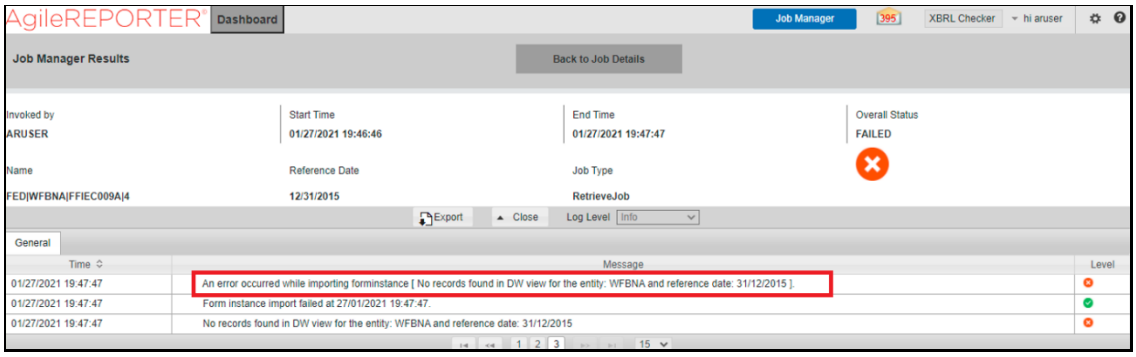
If the process mentioned in Installation Manual is correctly followed and still report list is not available, then you are requested to log in the bug or service request with VERMEG (Lombard Risk).

12.2.2 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:

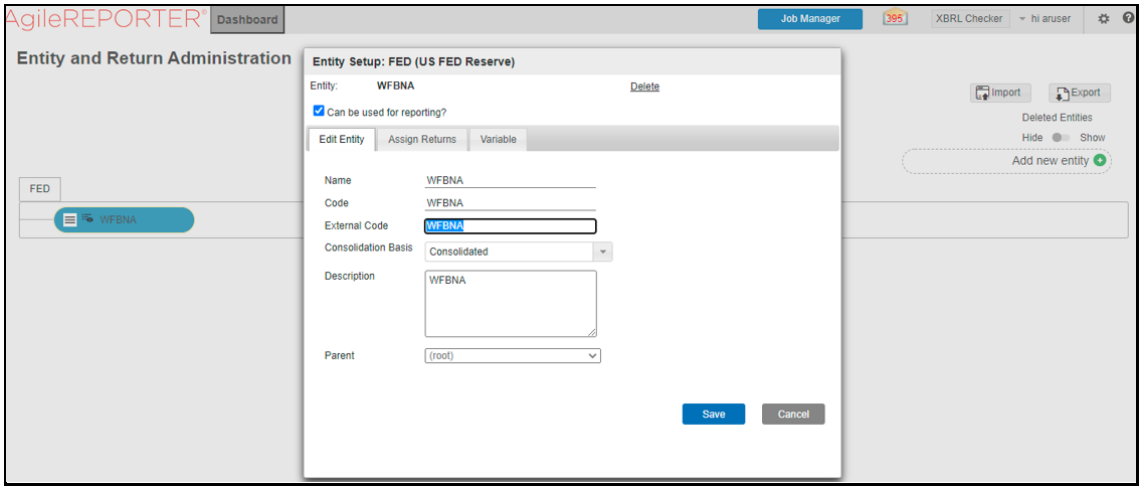
1. Data in RUNEXESUMM view in the Atomic Schema is not matching with the Lombard retrieval that includes Date, Run, Entity or Entity's Consolidation Type.

Figure 173: Data in RUNEXESUMM View



2. External Code is not matching with the Code for Entity as per OFSAA.

Figure 174: Code for Entity



12.2.3 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 unable to generate the report.

12.2.3.1 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 175: Fetching Null Values

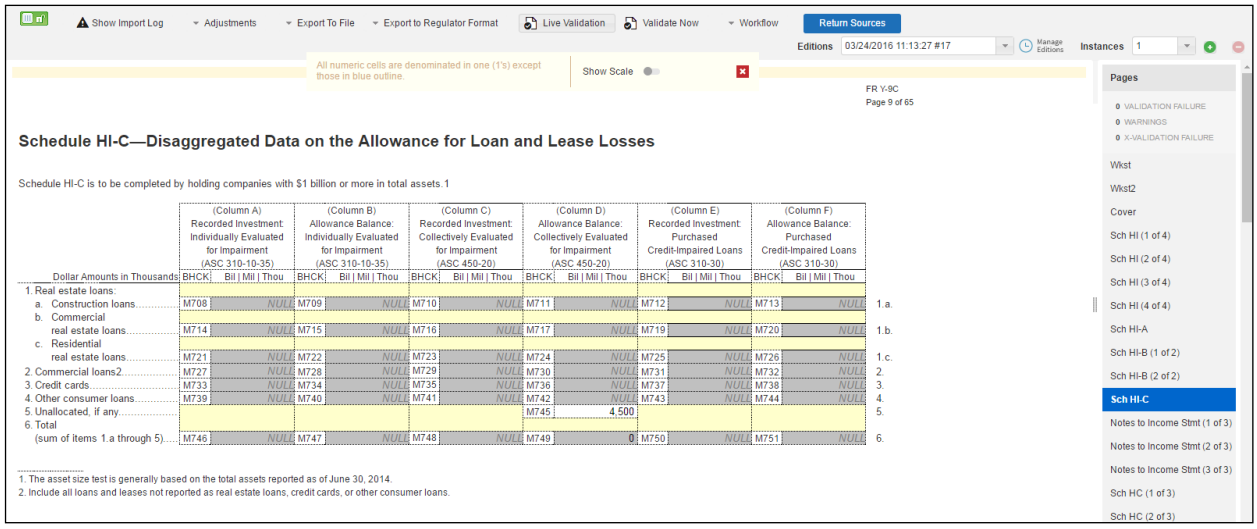
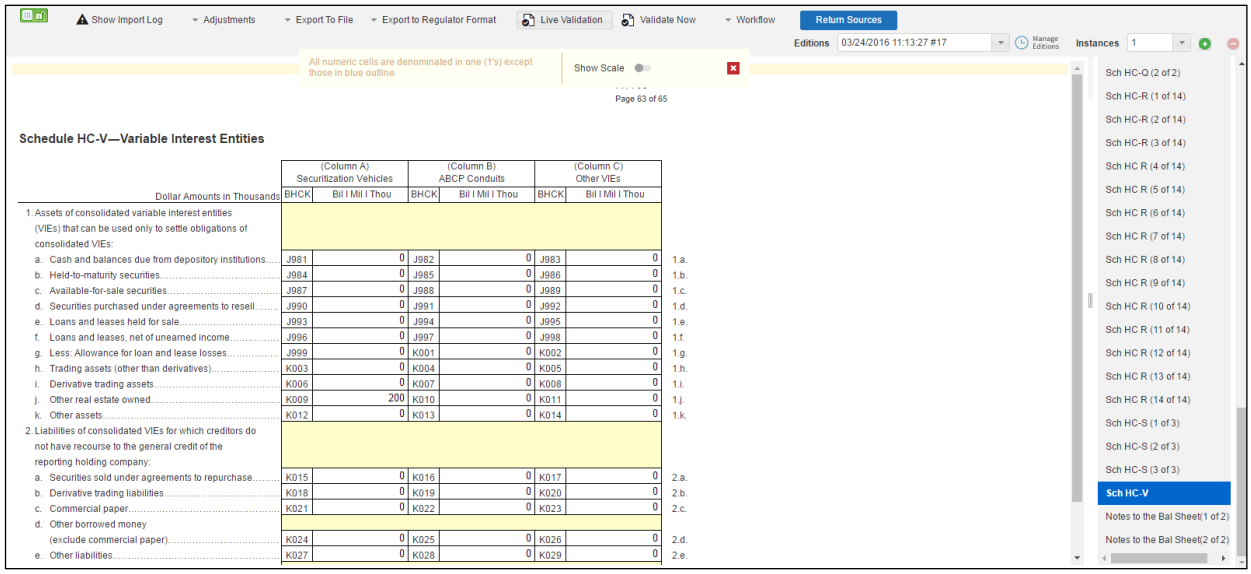


Figure 176: Fetching Zero Values



Dollar Amounts in Thousands	(Column A) Securitization Vehicles BHCK	(Column A) Securitization Vehicles Bil I Mil I Thou	(Column B) ABCP Conduits BHCK	(Column B) ABCP Conduits Bil I Mil I Thou	(Column C) Other VIEs BHCK	(Column C) Other VIEs Bil I Mil I Thou	
1. Assets of consolidated variable interest entities (VIEs) that can be used only to settle obligations of consolidated VIEs:							
a. Cash and balances due from depository institutions	J981	0	J982	0	J983	0	1.a.
b. Held-to-maturity securities	J984	0	J985	0	J986	0	1.b.
c. Available-for-sale securities	J987	0	J988	0	J989	0	1.c.
d. Securities purchased under agreements to resell	J990	0	J991	0	J992	0	1.d.
e. Loans and leases held for sale	J993	0	J994	0	J995	0	1.e.
f. Loans and leases, net of unearned income	J996	0	J997	0	J998	0	1.f.
g. Less: Allowance for loan and lease losses	J999	0	K001	0	K002	0	1.g.
h. Trading assets (other than derivatives)	K003	0	K004	0	K005	0	1.h.
i. Derivative trading assets	K006	0	K007	0	K008	0	1.i.
j. Other real estate owned	K009	200	K010	0	K011	0	1.j.
k. Other assets	K012	0	K013	0	K014	0	1.k.
2. Liabilities of consolidated VIEs for which creditors do not have recourse to the general credit of the reporting holding company:							
a. Securities sold under agreements to repurchase	K015	0	K016	0	K017	0	2.a.
b. Derivative trading liabilities	K018	0	K019	0	K020	0	2.b.
c. Commercial paper	K021	0	K022	0	K023	0	2.c.
d. Other borrowed money (exclude commercial paper)	K024	0	K025	0	K026	0	2.d.
e. Other liabilities	K027	0	K028	0	K029	0	2.e.

You must validate as:

1. Derived Entity has data:
   a. Execute the Derived Entity or Materialized views to check if Derived Entity has data or not.
   b. If 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 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.

12.2.4 Data Available in AgileREPORTER but Not as Expected

This use case 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. Particular cell referred here is BHDMK169 –

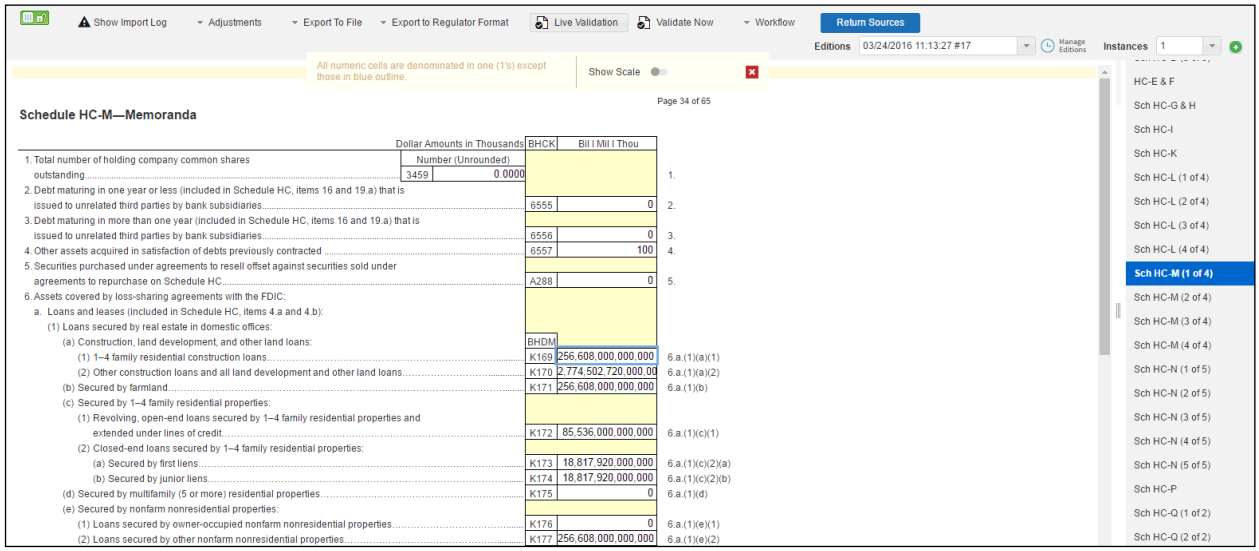
6.a. Loans and leases (included in Schedule HC, items 4.a and 4.b):

(1) Loans secured by real estate in domestic offices:

(a) Construction, land development, and other land loans:

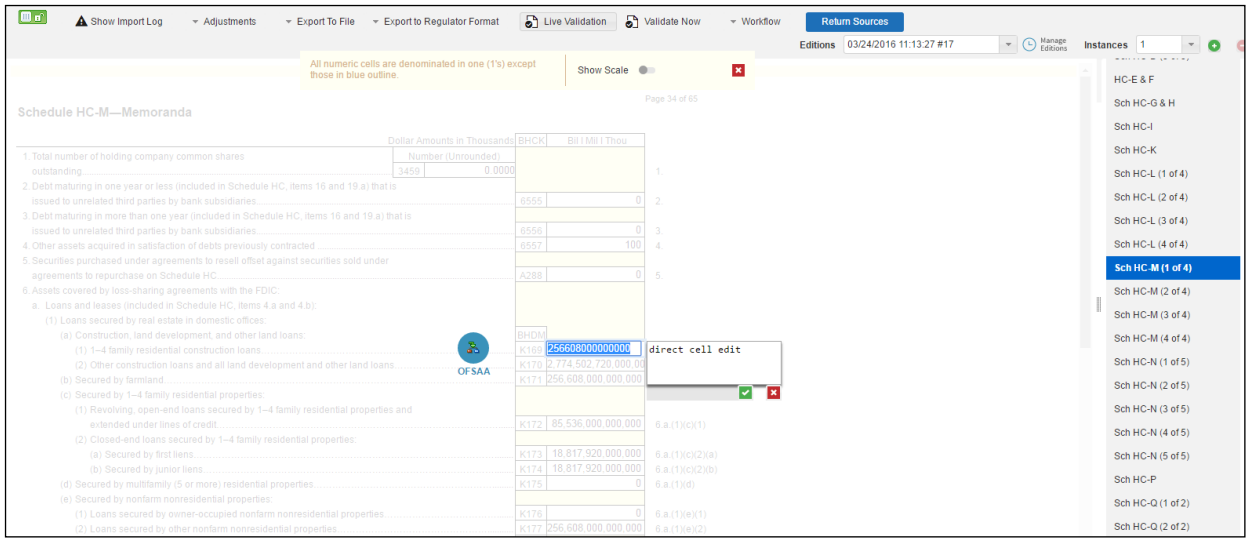
(1) 1–4 family residential construction loans

Figure 177: 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 178.

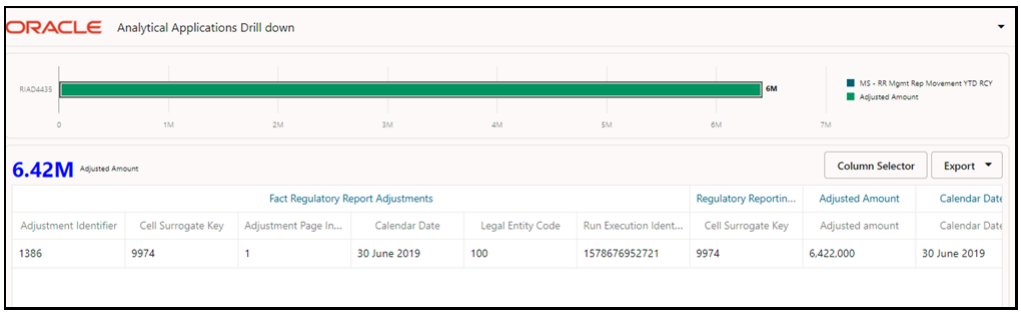
Figure 178: Drill Down OFSAA Icon



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 179: AgileREPORTER Drill Down



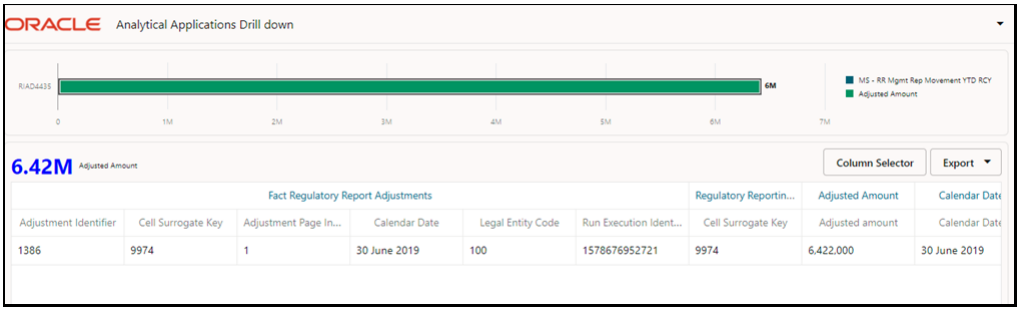
The top pane of this screen shows the following information which helps to connect the AgileREPORTER aggregated data to OFSAA references.

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 the measure values, scroll rightwards using the horizontal scroll bar at the bottom. On the extreme right, adjusted amount are displayed as shown in Figure 180:

Figure 180: 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

12.2.4.1 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.

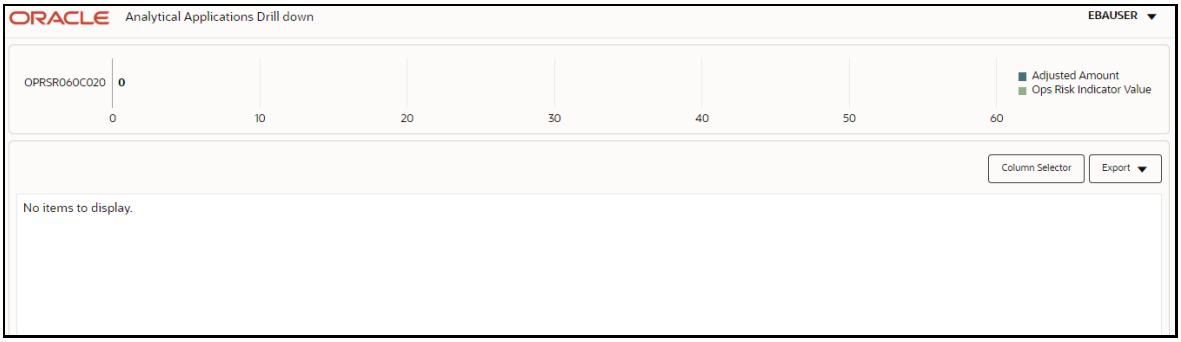
Any deviation from expectations can be then checked back for:

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 sequence 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.

12.2.4.2 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 181: Drill Down Data Unavailable

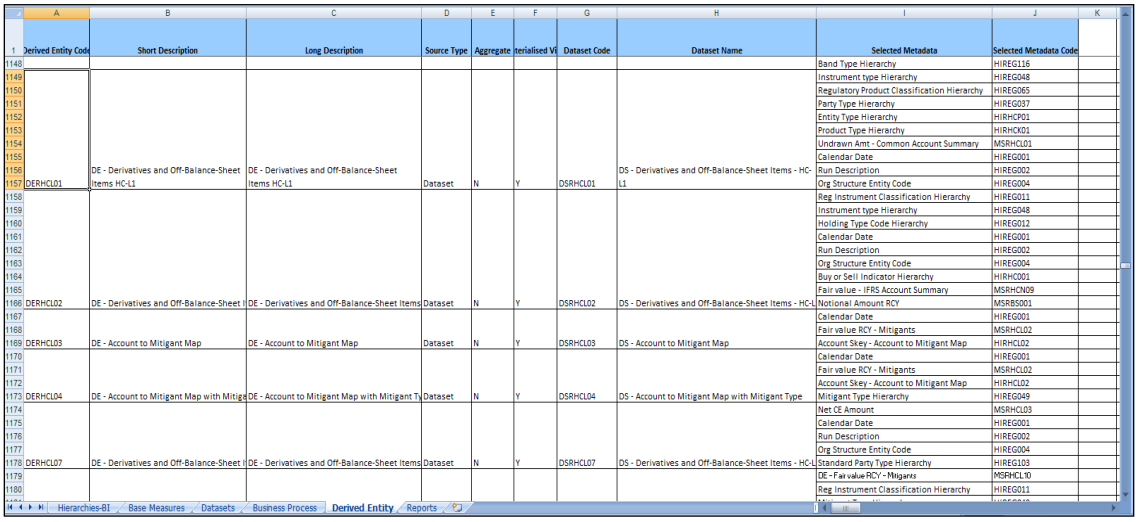


There can be a few reasons why the Drill down screen does not show the data:

1. Internet connection is timed out or broken down - in this case clicking Data Lineage on AgileREPORTER results in a Drill down 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 Derived Entity code shown at the beginning of the Dsrill 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 182:

Figure 182: Business Metadata-1

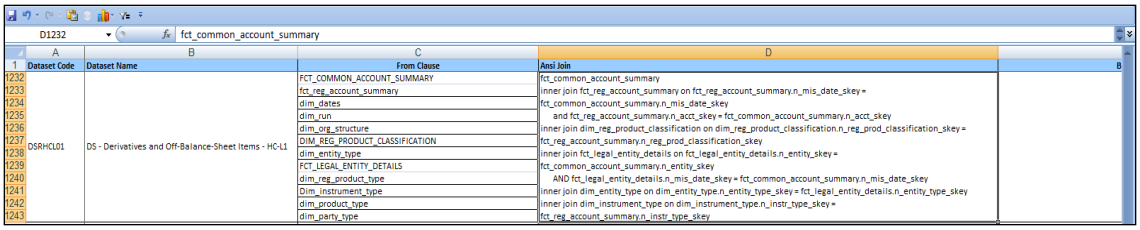


	A	B	C	D	E	F	G	H	I	J	K
1	Derived Entity Code	Short Description	Long Description	Source Type	Aggregate	terialised Vi	Dataset Code	Dataset Name	Selected Metadata	Selected Metadata Code	
1148									Band Type Hierarchy	HIREG116	
1149									Instrument type Hierarchy	HIREG048	
1150									Regulatory Product Classification Hierarchy	HIREG065	
1151									Party Type Hierarchy	HIREG037	
1152									Entity Type Hierarchy	HIRHCP01	
1153									Product Type Hierarchy	HIRHCK01	
1154									Undrawn Amt - Common Account Summary	MSRHCL01	
1155									Calendar Date	HIREG001	
1156		DE - Derivatives and Off-Balance-Sheet	DE - Derivatives and Off-Balance-Sheet					DS - Derivatives and Off-Balance-Sheet Items - HC-	Run Description	HIREG002	
1157	DERHCL01	Items HC-L1	Items HC-L1	Dataset	N	Y	DSRHCL01	L1	Org Structure Entity Code	HIREG004	
1158									Reg Instrument Classification Hierarchy	HIREG011	
1159									Instrument type Hierarchy	HIREG048	
1160									Holding Type Code Hierarchy	HIREG012	
1161									Calendar Date	HIREG001	
1162									Run Description	HIREG002	
1163									Org Structure Entity Code	HIREG004	
1164									Buy or Sell Indicator Hierarchy	HIRHC001	
1165									Fair value - IFRS Account Summary	MSRHCN09	
1166	DERHCL02	DE - Derivatives and Off-Balance-Sheet I	DE - Derivatives and Off-Balance-Sheet Items	Dataset	N	Y	DSRHCL02	DS - Derivatives and Off-Balance-Sheet Items - HC-L	Notional Amount RCY	MSRBS001	
1167									Calendar Date	HIREG001	
1168									Fair value RCY - Mitigants	MSRHCL02	
1169	DERHCL03	DE - Account to Mitigant Map	DE - Account to Mitigant Map	Dataset	N	Y	DSRHCL03	DS - Account to Mitigant Map	Account Skey - Account to Mitigant Map	HIRHCL02	
1170									Calendar Date	HIREG001	
1171									Fair value RCY - Mitigants	MSRHCL02	
1172									Account Skey - Account to Mitigant Map	HIRHCL02	
1173	DERHCL04	DE - Account to Mitigant Map with Mitiga	DE - Account to Mitigant Map with Mitigant Ty	Dataset	N	Y	DSRHCL04	DS - Account to Mitigant Map with Mitigant Type	Mitigant Type Hierarchy	HIREG049	
1174									Net CE Amount	MSRHCL03	
1175									Calendar Date	HIREG001	
1176									Run Description	HIREG002	
1177									Org Structure Entity Code	HIREG004	
1178	DERHCL07	DE - Derivatives and Off-Balance-Sheet I	DE - Derivatives and Off-Balance-Sheet Items	Dataset	N	Y	DSRHCL07	DS - Derivatives and Off-Balance-Sheet Items - HC-L	Standard Party Type Hierarchy	HIREG103	
1179									DE - Fair value RCY - Mitigants	MSRHCL10	
1180									Reg Instrument Classification Hierarchy	HIREG011	

Hierarchies-BI | Base Measures | Datasets | Business Process | Derived Entity | Reports

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 183: Business Metadata-2



D1232 | fx | fct_common_account_summary

	A	B	C	D
1	Dataset Code	Dataset Name	From Clause	Ansi Join
1232			FCT_COMMON_ACCOUNT_SUMMARY	fct_common_account_summary
1233			fct_reg_account_summary	inner join fct_reg_account_summary on fct_reg_account_summary.n_mis_date_skey =
1234			dim_dates	fct_common_account_summary.n_mis_date_skey
1235			dim_run	and fct_reg_account_summary.n_acct_skey = fct_common_account_summary.n_acct_skey
1236			dim_org_structure	inner join dim_reg_product_classification on dim_reg_product_classification.n_reg_prod_classification_skey =
1237	DSRHCL01	DS - Derivatives and Off-Balance-Sheet Items - HC-L1	DIM_REG_PRODUCT_CLASSIFICATION	fct_reg_account_summary.n_reg_prod_classification_skey
1238			dim_entity_type	inner join fct_legal_entity_details on fct_legal_entity_details.n_entity_skey =
1239			FCT_LEGAL_ENTITY_DETAILS	fct_common_account_summary.n_entity_skey
1240			dim_reg_product_type	AND fct_legal_entity_details.n_mis_date_skey = fct_common_account_summary.n_mis_date_skey
1241			Dim_instrument_type	inner join dim_entity_type on dim_entity_type.n_entity_type_skey = fct_legal_entity_details.n_entity_type_skey
1242			dim_product_type	inner join dim_instrument_type on dim_instrument_type.n_instr_type_skey =
1243			dim_party_type	fct_reg_account_summary.n_instr_type_skey

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.

13 Appendix 1

The FR Y-14Q A10 (Retail Student Loan) report is enhanced to support back dated execution and the segment reclassification reporting layer.

As part of the enhancement, there are new Derived Entities and T2Ts are created without modifying the existing metadata that supports FR Y-14Q A10.

For customers already filing the FR Y-14Q A10

As part of this enhancement, both data flow related and reporting related metadata are introduced, but to support existing immediate filing requirements, the OFSAA Lombard integration package (Configuration package) will continue to have existing metadata-based integration. The existing process of FR Y-14Q **PRFD_USFED_FRY14Q_REG_PROCESS** (USFED Regulatory Reporting FR Y-14Q process) will continue to exist in the system to support the existing integration package but the same will not be a part of the ready-to-use run. Customers can have this process in their custom run for the filing requirements. From 8.0.9.7.0 release onwards, the integration package will start referring only the new metadata.

As part of this enhancement, the FR Y-14Q process is split into two processes, that are PRFD_USFED_FRY14QA_REG_PROCESS (USFED Regulatory FRY14Q A Retail Process) and PRFD_USFED_FRY14QH_REG_PROCESS (USFED Regulatory Reporting FR Y-14Q H Process).

FR Y-14Q A process refers to the new enhanced reclassification and other related data flow for FR Y-14Q A report and FR Y-14 Q H process refers to the existing FR Y-14Q H related data flow. You can either use FR Y-14Q A or FR Y-14Q H or the existing FR Y-14Q REG processes.

To minimize the sourcing impact, the product also supports a migration data transformation (DT) which can be plugged along with new FR Y-14Q A process which allows you to use the existing sourcing requirements and report using the new metadata.

13.1 FR Y-14Q A10 Data Migration

The migration steps using the existing sourcing and new metadata are as follows:

1. The **FSI_RR_MIGRATION_SETUP** table will be created as part of the installer in atomic schema and contains the source and target columns for migration.
2. The default value for the column **UPDATE_OPTION** is **N**, that means no migration is enabled for the mentioned source-target columns.

   If you want to migrate the data from the source to target columns, then update the column **UPDATE_OPTION** to either **U** or **O**. Here, the value **U** means upgrading the null value in the target columns and **O** means Overriding all the target values irrespective of null values.

After updating the **FSI_RR_MIGRATION_SETUP** table with either **O** or **U**, then add the process **PMUS_FRY14Q_A_MIGRATION_PROCESS** before the **PRFD_USFED_FRY14QA_REG_PROCESS** to enable the migration as part of the run execution.

OFSAA Support

Raise a Service Request (SR) in My Oracle Support (MOS) for queries related to the OFSAA applications.

Send Us Your Comments

Oracle welcomes your comments and suggestions on the quality and usefulness of this publication. Your input is an important part of the information used for revision.

- Did you find any errors?
- 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.