Oracle Financial Services Data Governance for US Regulatory Reporting

User Guide

Release 8.1.0.0.0

March 2021





Oracle Financial Services Data Governance for US Regulatory Reporting User Guide

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Document Control

| Version Number | Revision Date | Change Log |
|----------------|---------------|---|
| 1.0 | March 2021 | Created the document with instructions for the usage of the Oracle Financial Services Data Governance for US Regulatory Reporting Release 8.1.0.0.0 |

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Introduction 1

About the Guide 1.1

This section provides a brief description of the scope, the audience, the references, the organization of the user guide, and conventions incorporated into the user guide.

Scope of the Guide 1.2

The Oracle Financial Services Data Governance for US Regulatory Reporting User Guide explains the concepts of the Oracle Financial Services Data Governance for US Regulatory Reporting (DGUSRR) and provides step-by-step instructions for navigating through the application.

Intended Audience 1.3

Welcome to release 8.1.0.0.0 of the Oracle Financial Services Data Governance for US Regulatory Reporting User Guide. This manual is intended for the following audience:

Business Analysts and supervisors in financial institutions

Related Documents 1.4

Along with this user guide, you can also refer to the following documents in OHC **Documentation Library**

- Oracle Financial Services Data Governance for US Regulatory Reporting Installation Manual
- Oracle Financial Services Data Governance for US Regulatory Reporting Installation and Configuration Guide
- Oracle Financial Services Analytical Applications Infrastructure User Guide, Release 8.1.0.0.0 (OHC Documentation Library)

Introduction to Oracle Financial Services Data 2 **Governance for US Regulatory Reporting**

This chapter provides a brief overview of the BCBS 239 Principles and Oracle Financial Services Data Governance for US Regulatory Reporting (DGRR).

Overview of the Basel Committee on Banking 2.1 Supervision (BCBS) 239

The Basel Committee on Banking Supervision (BCBS) 239: Principles for Effective Risk Data Aggregation and Risk Reporting are also known as the 14 principles. These principles were developed because, many banks lack "the ability to aggregate risk exposures and identify concentrations quickly and accurately at the bank group level, across business lines, and between legal entities." The BCBS 239 framework is intended to strengthen the risk data aggregation and reporting practices of the banks. BCBS 239 is designed to drive more timely information and better strategic planning and reduce the impact of losses.

Oracle Financial Services Analytical Applications 2.2 Solution for BCBS 239 Regulations

The Oracle Financial Services Analytics Applications (OFSAA) unified platform creates a foundation to address the regulatory requirements and successful BCBS 239 compliance, by providing a common data infrastructure that:

- Builds a single source of truth
- Enables effective data usage
- Supports comprehensive and consolidated reporting

The following table describes the 14 principles of BCBS 239:

Table 1: BCBS 239 Principles Answered by Respective OFSAA Components

| BCBS 239 Principles Answered by Respective OFSAA Components | | |
|---|--|--|
| BCBS 239 Principle | Description | OFSA Application Catering to the Principle |
| BCBS Principle Category: Overard | ching Governance and Infrastruct | ure |
| Principle 1: Governance | Identification, assessment, and management of data quality risks to be a part of a bank's risk management framework. Risk data aggregation and risk reporting practices must be fully documented and validated, extended to new initiatives, unaffected by the organization structure. Awareness of the limitations of full risk data aggregation. | This principle is addressed by the Data Quality Framework and OFS Model Risk Management. |
| Principle 2: Data Architecture and IT Infrastructure | Integrated data taxonomies and architecture across the group. Establish roles and responsibilities to ensure adequate controls. | This principle is addressed by OFS Data Foundation, OFS Analytical Applications Infrastructure, and OFS Enterprise Modeling Framework. |
| BCBS Principle Category: Risk Da | ta Aggregation Capabilities | |
| Principle 3: Accuracy and Integrity | Ensure that the risk data aggregation is accurate and reliable with adequate controls, data reconciliation, and a single source of data for each risk type. Documentation of risk data aggregation process. Establish escalation channels and action plans. | This principle is addressed by OFS Analytical Applications Infrastructure, OFS Enterprise Modeling Framework, OFS Reconciliation Framework, OFS Data Foundation, and OFS Operational Risk. |
| Principle 4: Completeness | Capture all material risk data by the relevant dimensions. Any exceptions to completeness must be identified and documented. Consistent risk data aggregation capabilities. | This principle is addressed by OFS Data Foundation, OFS Analytical Applications Infrastructure, OFS Enterprise Modeling Framework, and all OFS Applications. |

| Principle 5: Timeliness | Generate aggregated data as per the desired frequency. | This principle is addressed by OFS Analytical Applications Infrastructure, OFS Applications, and Exadata Benchmarks. |
|--|--|---|
| BCBS 239 Principle | Description | OFSA Application Catering to the Principle |
| Principle 6: Adaptability | Flexibility to meet ad-hoc requests, especially during stress. Incorporate changes related to internal and external business factors and regulatory frameworks. Generate sub-sets of data based on specific dimensions. | This principle is addressed by all OFS Applications with OFS Data Foundation, OFS Analytical Applications Infrastructure, OFS Enterprise Modeling Framework. |
| BCBS Principle Category: Risk Re | porting Practices | |
| Principle 7: Accuracy | Reports must be reconciled with risk data, validations to be applied to the output, and exception reports to be displayed. Establish the reliability of approximations such as output from models, scenarios, and stress tests. | This principle is addressed by all the standalone OFS BI analytics applications and dashboards of all the OFS applications. |
| Principle 8: Comprehensiveness | Cover all material risks including credit, market, operational and liquidity risks, capital adequacy, stress testing. Exposure and position data, concentrations, limits, risk appetite. | This principle is addressed by all the standalone OFS BI analytics applications and dashboards of all the OFS applications. |
| Principle 9: Clarity and Usefulness | Reports must contain risk data, analysis, interpretation, and qualitative information. Customized to suit individual requirements. | This principle is addressed by all the standalone OFS BI analytics applications, and dashboards of all the OFS applications, and Oracle Business Intelligence Enterprise Edition (OBIEE). |

| Principle 10: Frequency Principle 11: Distribution | Produce reports at the desired frequency. Timely availability of reports under stress conditions. Make reports available to relevant stakeholders on time while maintaining confidentiality. | This principle is addressed by all the OFS BI analytics application, OFS applications which compute metrics, and OFS Enterprise Modeling Framework. This principle is addressed by all the standalone OFS BI analytics applications, and dashboards of all the OFS applications, and Oracle Business Intelligence Enterprise Edition (OBIEE). |
|--|--|--|
| BCBS Principle Category: Supervi | sory Review, Tools and Cooperati | on |
| BCBS 239 Principle | Description | OFSA Application Catering to the Principle |
| Principle 12: Review | Supervisors must: Review bank compliance with principles 1 to 11. Examine the results of internal and external audits. Test bank's data aggregation and reporting capabilities under normal and stress conditions. | This principle is addressed by OFS Data Governance for US Regulatory Reporting. |
| Principle 13: Remedial Actions and Supervisory Measures | Use of multiple tools for: Required remedial action Increased scrutiny Independent review Capital add-ons | This principle is addressed by OFS Data Governance for US Regulatory Reporting. |
| Principle 14: Home/Host cooperation | Supervisors of relevant jurisdictions must cooperate. Information and experiencesharing through bilateral or multilateral dialogue. | |

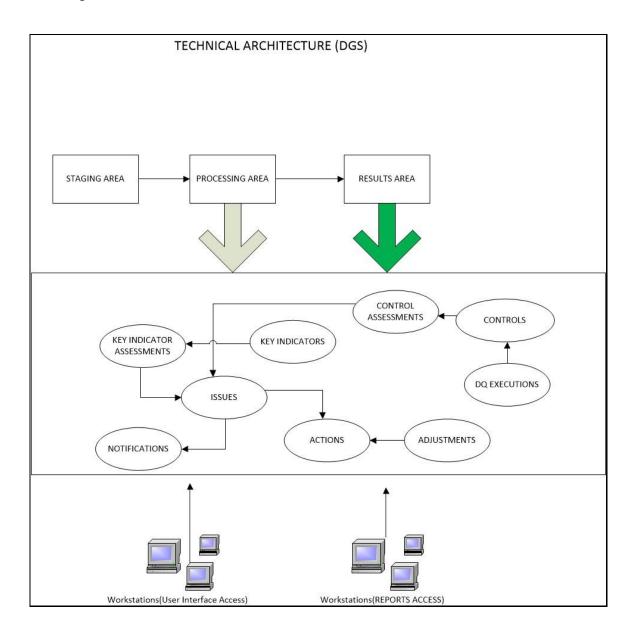
Overview of Data Governance for US Regulatory 2.3 **Reporting**

Data Governance for US Regulatory Reporting (DGUSRR) operationalizes the data governance process. The OFSAA DGUSRR enables financial institutions to map multiple data sources to a standard, common business glossary.

Additionally, DGUSRR enables you to:

- Identify all critical data elements.
- Track and monitor the data elements from their source to the eventual usage in reporting.
- Manage Regulatory submissions.
- Establish a governance process around the data elements and reporting process to offer greater visibility and increased confidence in the organization for the board of directors and regulators.
- Consolidate and collaborate across the enterprise providing a truly unified enterprise data management process.
- The following diagram provides a high-level workflow of the DG application.

Figure 1: Technical Architecture



The content provided to DGUSRR helps the customer to have access to over 20,000 business terms and definitions that form a part of the Metadata Glossary.

Important Features of Data Governance for US 2.4 **Regulatory Reporting**

The following are the key features:

- It provides a business glossary for standardization.
- Defines operational and quality controls on every data element and monitors the effectiveness of controls.
- Monitors all key metrics, trends, and variances on data elements.
- Defines maintain and track regulatory report submissions.
- Completes data quality dashboards.

3 Components of Data Governance for US Regulatory Reporting

The components of DGUSRR are listed as follows:

- Business Glossary: It maintains the business glossary for standardization along with the Business Terms.
- **Critical Data Elements**: It classifies the Business Terms as critical data elements with approval and review workflows.
- **Controls**: It defines the operational and quality controls on every data element and monitors the effectiveness of the control.
- **Key Indicators**: It monitors all the key metrics, trends of the metrics, variances, and so on for the data elements.
- **Issues and Actions**: It defines the issues and remediation action plans to resolve issues.
- **Process Monitoring**: It defines, maintains, and tracks the regulatory report submissions that include all the runs required for the submission.
- Adjustment Framework: It is a workflow process for posting last-mile adjustment at the MDRM level or data adjustment at the Stage level. Adjustment framework is invoked from Inbox->Task option.
- Metadata Report Extract: It enables you to view the complete lineage and relationship between metadata.

Business Terms 4

Business terms are individual terms present in a glossary. It includes a definition and several attributes that provide a complete description of the glossary.

Additionally, Business Terms provide associated knowledge, such as the user responsible for the term, the associated metrics, correct usage of the term, related terms, list of possible values for the term, and so on. OFSAA Glossary includes all the terms related to risk, performance, compliance, and insight pre-packaged with all the relevant information in them.

User Roles and Actions 4.1

All users are required to be mapped to the DGSAUTHGRP, DGSADMINGRP, and DGSANALYSTGRP groups along with their respective groups.

The following is the user role for Business Terms:

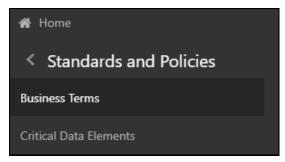
Business Term Viewer: Permits the user to view the Business Terms.

Viewing a Business Term 4.2

To view a Business Term, follow these steps:

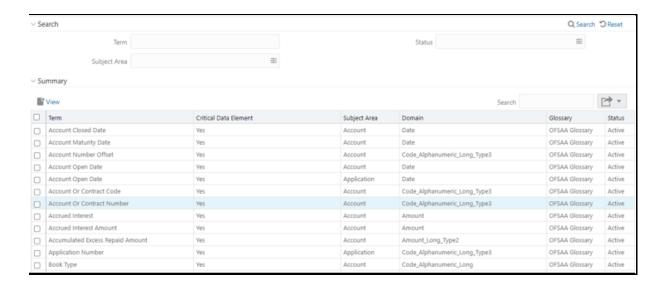
1. From the Financial Services Data Governance for US Regulatory Reporting window navigate to Standards and Policies and select Business Terms.

Figure 2: Standards and Policies - Business Terms



2. The Business Terms window is displayed.

Figure 3: Business Terms



- 3. In the **Search** section, enter the search details and click Q Search to view the results in the summary table.
- **4.** Enter the required **Business Term**.
- 5. Select the Status from the drop-down list. The status can be Draft, Pending Approval, or Active.
- **6.** Select the **Subject Area** from the drop-down list.

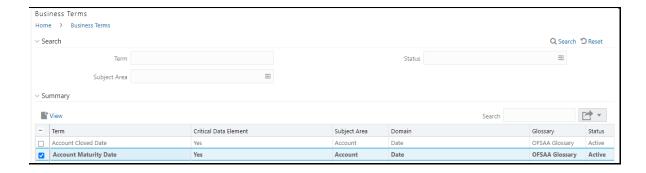
Figure 4: Business Terms Search



7. To view a Business Term, select a Business Term from the Summary table and click icon.



Figure 5: Business Terms - View

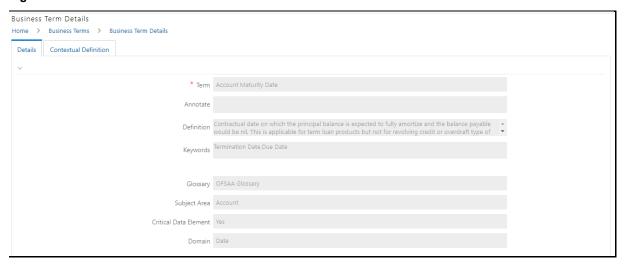


8. In the **Business Term Details** window, you can view the following Details:

Table 2: Business Term Details

| Fields | Description |
|-----------------------|--|
| Term | Name of the Business Term. |
| Annotate | A reference text for additional information on Business Term. |
| Definition | Brief description of the Business Term. |
| Keywords | Values to be used as keywords that are used to search the Business Term. |
| Glossary | Glossary Name. |
| Subject Area | Subject Area Name. |
| Critical Data Element | Glossary term is a critical data element or not. |
| Domain | Alphanumeric, Date, or Numeric. |

Figure 6: Business Term Details

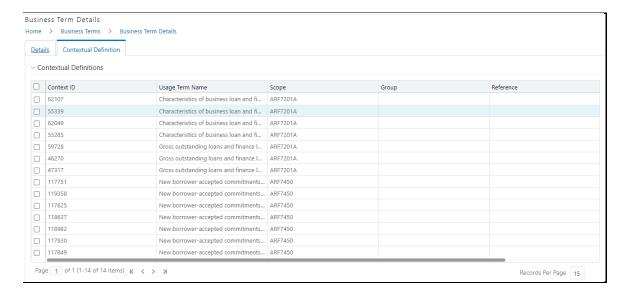


9. In the **Contextual Definition** window, you can view the following details:

Table 3: Contextual Definition

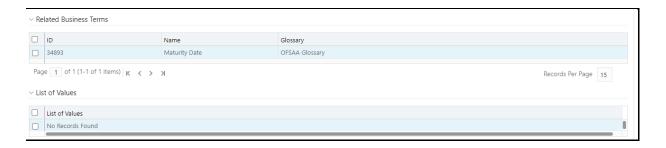
| Fields | Description |
|--------------------|--|
| Context Name | Related to other glossary identifiers (multiple contextual definitions for the glossary term). |
| Context Definition | Contextual definition of the glossary term from the perspective of source or application. |
| Context ID | A system-generated number. |
| Usage Term Name | The name of the context in which the term is used. |

Figure 7: Business Term Contextual Definition



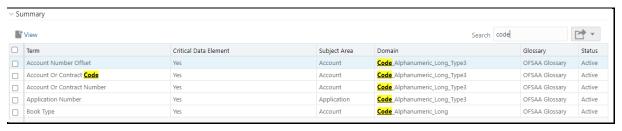
- 10. You can also view the Related Business Terms and List of Values associated with the Business Term.
- 11. The definition of Business Terms is generally designed to produce a common understanding of the meaning of the term for the entire organization irrespective of the business function. These are standard definitions and do not define the usage of the term in a specific context.
- 12. The Usage Term of Business Terms explains the terminology in the context of its usage. A terminology can have one or more usage terms based on the number of use cases that it applies to in the organization. Each usage of that particular term has its explanation of how and why it is used, along with the list of values for that specific context.

Figure 8: Related Business Terms and List of Values



- **13.** In the **Summary Table**, you can search for a particular Business Term from the summary table.
- **14.** For example, enter a search keyword "Code", the table lists the results with the matching keyword.

Figure 9: Business Terms Search



15. To export the summary table into an Excel or CSV file, in the Summary Table, click the **Export** drop-down. This downloads Business Term Summary details.

Critical Data Elements 5

Critical Data Elements are Business Terms that are critical for a specific business process. These terms and their values are vital and significant for specific processes, for example, regulatory reporting or management reporting.

These data elements are marked critical as per their context, justification, level of criticality, and approval for the classification. They are ensured to have additional rigor in their data quality checks, controls, and so on and have sufficient metrics around it to ensure timeliness and accuracy of the values.

Critical Data Elements (CDEs) are defined for each report in Regulatory Reporting. DGAPRA contains all CDEs for a particular report. The list of Critical Data Elements is identified for a particular report and the level of criticality will be defined and is stored in the FSI_GL_CDE_DETAILS table. These elements are monitored for accuracy and consistency of data within the Key Indicator and Control section.

User Roles and Actions 5.1

All the users are required to be mapped to the **DGSAUTHGRP**, **DGSADMINGRP**, and **DGSANALYSTGRP** groups along with their respective following groups.

The following is the user role for critical data elements:

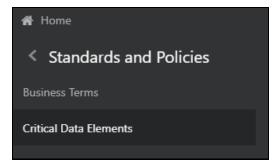
Critical Data Elements: Permits the user to view the critical data elements.

Viewing Critical Data Elements 5.2

To view a Critical Data Element, follow these steps:

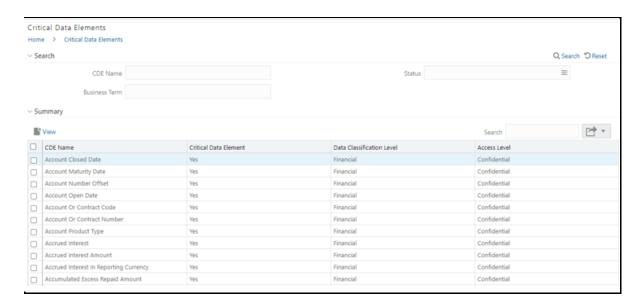
 From the Financial Services Data Governance for US Regulatory Reporting, window navigate to Standards and Policies and select Critical Data Element.

Figure 10: Standards and Policies - Critical Data Element



2. The Critical Data Element window is displayed.

Figure 11: Critical Data Element



- 3. In the **Search** section, enter the search details and click Q Search to view the results in the summary table.
- **4.** Enter the required CDE Name.
- **5.** Select the Status from the drop-down list. The status can be Draft, Pending Approval, or Active.
- **6.** Enter the Business Term.

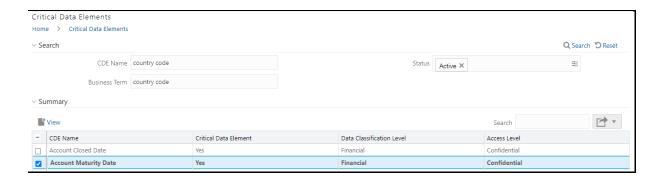
Figure 12: Critical Data Element Search



7. To view a CDE, select a CDE Name and click



Figure 13: Critical Data Element View

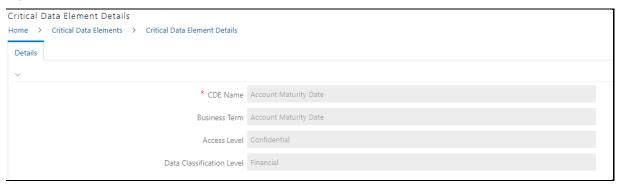


8. In the Critical Data Elements Details window, you can view the following details:

Table 4: Critical Data Elements Details

| Fields | Description |
|----------------------------|--|
| CDE Name* | CDE Name. |
| Business Term* | Business Term Name. |
| Access Level* | Access level: Public Confidential Restricted |
| Data Classification Level* | Data classification level from the drop-down list: Legal Financial PHI PII |

Figure 14: Critical Data Elements Details



9. You can also view the Entity Attribute Details associated with the CDE.

Figure 15: Entity Attribute Details



- **10.** In **Summary Table**, you can search for a particular CDE from the table.
- 11. For example, enter a search keyword "Code", the table lists the results with the matching keyword.

Figure 16: Critical Data Element Search



12. To export the summary table into an Excel or CSV file, in the Summary Table, click the Export . This downloads the CDE Summary details.

Key Indicator Assessment Configuration 6

The Key Indicator Assessment configuration UI helps the user to control the Report or Schedule or Cell to be processed for Variance analysis and Dashboard reporting. The UI also helps to update threshold breach percentage values alongside.

User Roles and Actions 6.1.1

All the users are required to be mapped to the **DGSAUTHGRP**, **DGSADMINGRP**, and **DGSANALYSTGRP** groups along with their respective following groups.

The following is the user role for key indicators:

DG Administration: Permits the user to view and edit the key indicator assessment configuration.

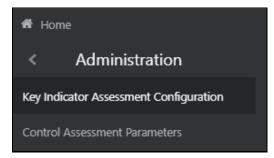
Configuring Key Indicators 6.1.2

To configure the key indicator, follow these steps:

NOTE By default, all the reports are included.

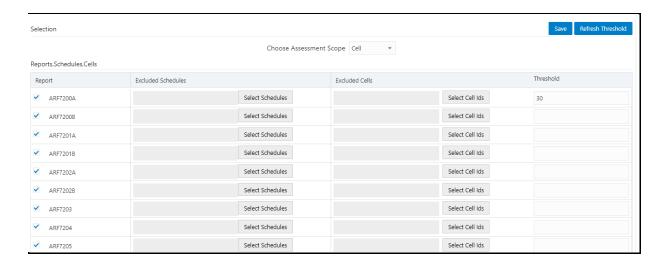
1. From Financial Services Data Governance for US Regulatory Reporting, window navigate to **Administration** and select **Key Indicator Assessment Configuration**.

Figure 17: Key Indicator Assessment Configuration



2. The **Key Indicator Assessment Configuration** window is displayed.

Figure 18: Key Indicator Assessment Configuration

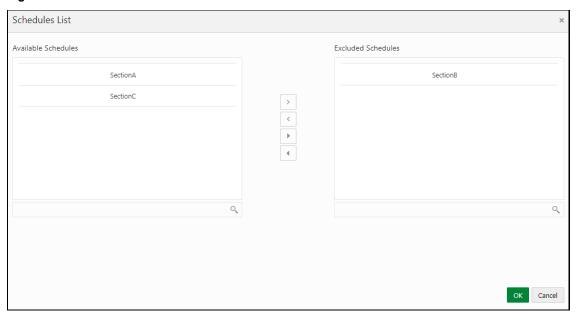


3. In the KI Assessment Configuration section, in the Report column, select the checkboxes for the reports whose schedules and cell IDs you want to exclude.

The **Select Schedules** and **Select Cell IDs** buttons are enabled.

4. For the report whose schedule you want to exclude, click the **Select Schedules** button.

Figure 19: Schedule List



5. In the **Schedules List** window, in the **Available Schedules** section, select the available

schedules that you want to exclude and then click the icon.

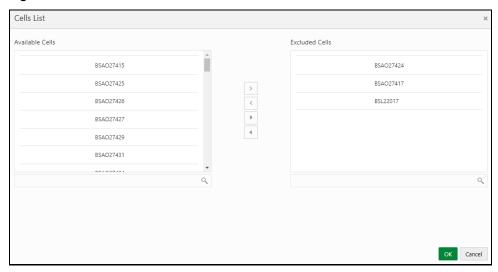
NOTE The groupings appear based on your configuration.

The excluded schedules appear in the **Excluded Schedules** section.

6. Click OK.

7. Additionally, for the report whose cell ID you want to exclude, click the **Select Cell IDs** button.

Figure 20: Cell List



8. In the Cells List window, in the Available Cells section, select the available cells that you want

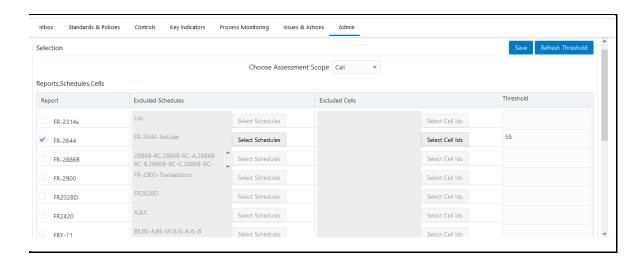


NOTE The groupings appear based on your configuration.

The excluded schedules appear in the **Excluded Cells** section.

- 9. Click OK.
- 10. To set the Alert Threshold Values at the Individual Report Level,
 - a. Select the report that you want to set the threshold for.
 - In the **Threshold** field, enter a value.
 - Click the **Refresh Threshold** button.
 - d. The threshold for all the cells associated with the report is updated with the new threshold value.

Figure 21: Refresh Threshold



Control Assessment Parameters

The maintenance has a list of seeded parameters that are dependent on the Data Quality Framework of OFSAAI. The outputs associated with these parameters are derived at the run time based on the Data Quality Profiling information within the Data Governance Studio. The screen also enables a user to define new Assessment Parameters that can participate in the Score and Rating calculation of the Assessment. The assessments for a particular control depends on the Parameter Type and Score Methodology.

User Roles and Actions 7.1

All the users are required to be mapped to the **DGSAUTHGRP**, **DGSADMINGRP**, and **DGSANALYSTGRP** groups along with their respective following groups.

The following is the user role for control assessment parameters:

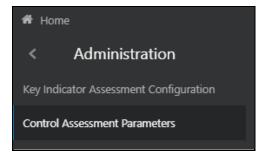
DG Administration: Permits the user to view and edit the control assessment parameters.

Configuring Control Assessment Parameters 7.2

To Control the Assessment Parameters, follow these steps:

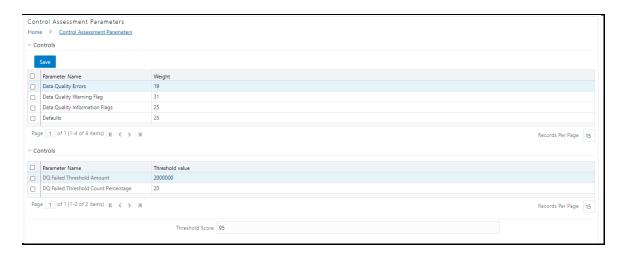
1. From Financial Services Data Governance for US Regulatory Reporting window navigate to Administration and select Control Assessment Parameters.

Figure 22: Administration



The **Control Assessment Parameters** window is displayed.

Figure 23: Control Assessment Parameters



- 2. In the Controls section, to edit the Weight of the Parameters, run the Control Assessment Parameters.sql script in the atomic schema.
- 3. The weight is altered in the Control Assessment Parameters window.

8 Controls

Control is a measure taken to mitigate a regulatory reporting risk. Control measures help an organization to avoid risks that may otherwise hamper a business due to inconsistency in reporting. Controls are defined to ensure that the data elements used for various business processes are accurate in value and obtained in time.

The controls identified for risk mitigation can be recorded and stored in a repository. This section helps in capturing Controls, and also assesses their effectiveness in avoiding the risks of reporting.

Control effectiveness establishes the confidence factor in data elements and their values.

• **Quality Controls:** They are used to assess data accuracy.

8.1 DQ Checks and Controls

Controls are defined on data elements based on the defined DQ rules. The effectiveness of these controls can be automatically assessed based on the DQ execution facts.

NOTE To view an issue and create an action, the user must be mapped to the following issue and action groups ACTNANLST, ISSUEADMN, ISSUEANLST, ISSASR, ACTASR, ACTVIEWER, ISSAPR in addition to other Control related groups.

The following are the types of **Data Quality Checks** and their definitions:

Table 5: Data Quality Checks

| Data Quality Check | Definition |
|---------------------------------------|---|
| Blank Value Check | Identifies if the base column is empty considering the blank space. |
| Column Reference/Specific Value Check | Compares the base column data with another column of the base table or with a specified direct value by using a list of pre-defined operators. |
| Data Length Check | Checks for the length of the base column data by using a minimum and maximum value, and identifies if it falls outside the specified range |
| Duplicate Check | Is used when a combination of the column is unique and identifies all duplicate data of a base table in terms of the columns selected for the duplicate check |
| List of Value Check | It can be used to verify values where a dimension/master table is not present. This check identifies if the base column data does not match with a value or specified code in a list of values. |
| NULL Value Check | Identifies if 'NULL' is specified in the base column. |

| Referential Integrity Check | Identifies all the base column data that has not been referenced by the selected column of the referenced table. Here, the user specifies the reference table and columns. | |
|-----------------------------|--|--|
| Range Check | Identifies if the base column data falls outside a specified range of a Minimum and Maximum value. | |

The controls are specific to reports. The DQs are defined in the DQ_CHECK_MASTER and DQ_GROUP_MAPPING tables.

NOTE The DQ rules are defined based on the Stage Table and Column mapped to a particular report.

8.2 User Roles and Actions

All the users are required to be mapped to **DGSAUTHGRP**, **DGSADMINGRP**, and **DGSANALYSTGRP** groups along with their respective individual groups.

The following is the user role for control viewer:

• **Control Viewer**: This allows the user to view an issue and create an action.

8.3 Control Creation through Batches

Perform the following steps to create a Control through Batches:

1. For control creation, the FSI_DGS_CONFIGURATION table has to be seeded first.

NOTE In the **N_LOOKUP_VALUE** column, you can modify the values in the CREATOR and the OWNER fields.

Figure 24: Control Creation through Batches

| ≣ | V_MODULE_NAME | V_LOOKUP_CODE | N_LOOKUP_VALUE | V_LOOKUP_CODE_DESC |
|---|---------------|----------------|--|---------------------------------------|
| • | CTL | COMMENT | The control has been newly created by system | Default Comments |
| | CTL | CREATOR | DGSUSER | User who created this control |
| | CTL | LOCALE | en_US | English |
| | CTL | OWNER | DGSUSER | User to whom this control is assigned |
| | CTL | UPDATE_COMMENT | DQ Updated - | Updation Comments |

2. Execute the batch DGS_DQ_CTL_BATCH, this batch contains the entire task that needs to be executed for control. See the OFS Data Governance Run Chart.

8.4 Quality Control Assessment

Pre-Requisites

- For performing Control Assessment, the Control Execution Details must be present.
- Execution Details can be DQ or User Defined Parameters related.
- The DQ-related parameters are available by default if DQ executions are done for that control.

Generate Assessments

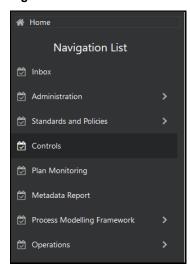
Execute the batch DGS_DQ_CTL_BATCH, this batch has the entire task, which needs to be executed for control. See the OFS Data Governance Run Chart.

8.5 Viewing Controls

To view the controls, follow these steps:

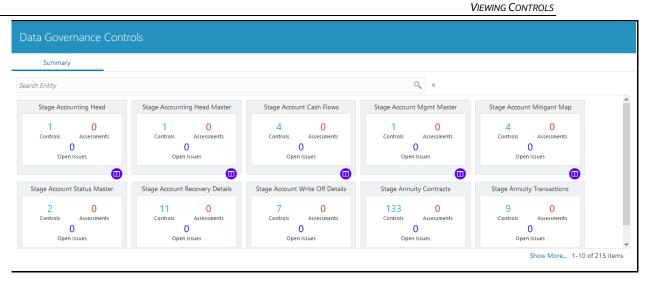
1. From Financial Services Data Governance for US Regulatory Reporting **window** navigate to Controls.

Figure 25: Controls



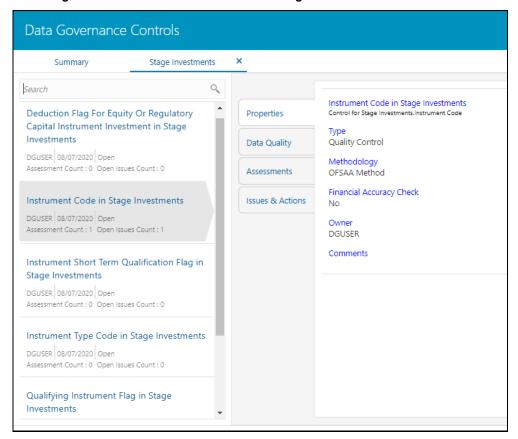
The Control summary window is displayed. After you execute the batch DGS_DQ_CTL_BATCH, the Control summary window displays the stage tables for which the controls are defined. It also displays the assessments and open issues if any.

Figure 26: Data Governance Controls



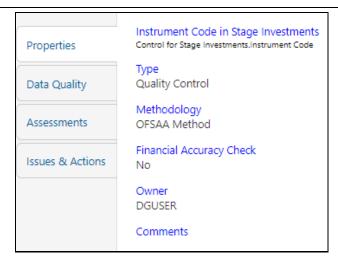
- 2. Select a stage table and then click View Controls to view the details.
- **3.** For example, the stage table "Stage Investment" and control "Instrument Code in Stage Investments" is selected here.

Figure 27: Data Governance Controls - Stage investments



4. Click Properties, to view the control properties.

Figure 28: Data Governance Controls - Properties



The control information is displayed:

- Name: Name of the control
- Type: Type of the Control Quality Control
- Methodology: Method used OFSAA Method
- Financial Accuracy Check: Yes or No
- Owner: Name of the Owner
- Comments: Add comments if any
- 5. Click Data Quality, to view the DQ information on which the control is created.

Figure 29: Data Governance Controls - Data Quality



The DQ information is displayed:

- DQ Name: Name of the DQ contributing to the control
- DQ Weight: Weight of the DQ contributing to the control. In case there is one DQ the number is 100. If there are more than one the number is divided to make it 100.
- Attribute: Name of the attribute on the entity column where the DQ is defined.
- Entity: Name of the stage table name.
- 6. Click Assessments, to view the Control Assessments.

Figure 30: Data Governance Controls - Assessments



The control assessment information is displayed:

- Effectiveness Score: Control Assessment Score
- Effectiveness Rating: Control Assessment Rating. It can be Ineffective or Effective depending on the effectiveness score.
- Effectiveness Status: Control Assessment Status
- Execution Date: Assessment date and time
- 7. Click Issues & Actions to view the system-generated issues created for control. To edit a system-generated issue, see section Editing an Issue.

Figure 31: Data Governance Controls - Issues & Actions



Editing an Issue 8.5.1

To edit an issue, follow these steps:

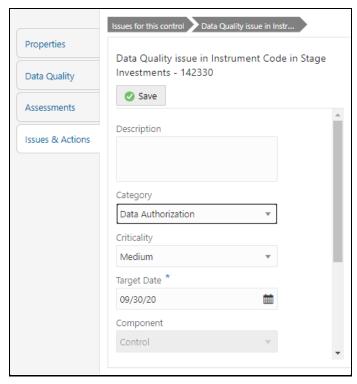
- 1. From Financial Services Data Governance for US Regulatory Reporting window navigate to Controls.
- 2. Select a stage table and then click View Controls to view the details.
- **3.** Click Issues & Actions. The system-generated issues for this control are displayed.

Figure 32: Data Governance Controls - Issues & Actions



4. Click the required issue to edit.

Figure 33: Data Governance Controls - Issues & Actions



- **5.** Enter the **Description**.
- **6.** Select the **Category** from the drop-down list:
 - **Data Authorization**
 - **Data Privacy**
 - **Data Security**
 - **Data Accuracy**
 - **Data Availability**
- **7.** Select the Criticality:
 - High
 - Medium
 - Low
- 8. Choose the Target Date from the Calendar



- **9.** Enter Comments if any.
- **10.** Select a file or drag and drop a file to **Attach** a document.
- **11.** Click **Save**. A confirmation message is displayed: Issue is saved successfully. This creates an issue for the particular action.

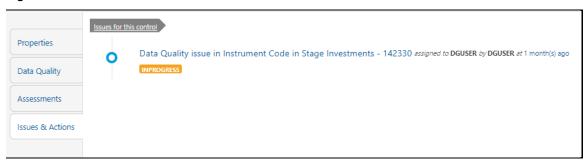
8.5.2 Creating an Action

The Issue Owner creates the required Actions for the system-generated Issue. Additionally, the Issue Owner is the Data Adjustment Creator.

To create a new action for the system-generated Issue, follow these steps:

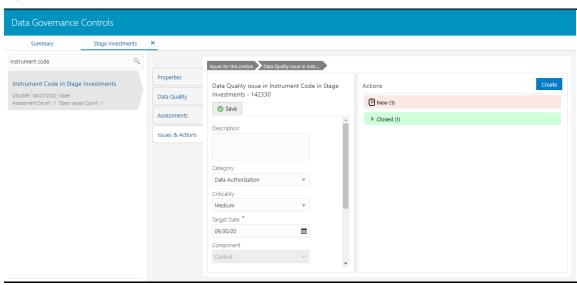
- From the Financial Services Data Governance Studio window, navigate to Controls.
- 2. Select a stage table and then click View Controls to view the details.
- 3. Click Issues & Actions. The Issus for this control is displayed with the details.

Figure 34: Data Governance Controls - Issues & Actions



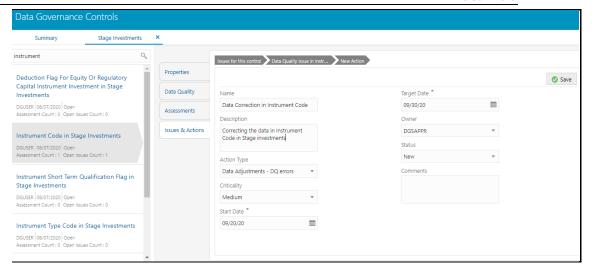
4. Click the required issue. The Actions pane is displayed.

Figure 35: Data Governance Controls - Actions



5. To create an action, in the Actions section click Create.

Figure 36: Data Governance Controls - New Actions



- **6.** Enter the **Name** and Description.
- **7.** Select the Action Type from the drop-down list:
 - a. Data Adjustments DQ errors
 - b. Data Adjustments Others
 - c. Data Adjustments Regulatory Reporting
 - d. Reconciliation Adjustments
 - e. Others
- **8.** Select the Criticality:
 - a. High
 - b. **Medium**
 - c. Low
- **9.** Choose the Start Date and Target Date from the Calendar target date must be within the Issue target date.
- **10.** Select the action Owner name from the drop-down list.
- **11.** Select the Status from the drop-down list:
 - a. New
 - b. InProgress
 - c. Closed
- **12.** Enter Comments if any and click **Save**. A confirmation message is displayed: Action saved successfully. This creates an action for the particular issue.

NOTE Based on the Action Type, the Data Adjustment details page is displayed during the Data Adjustments process for DQ errors or any other errors.

13. Select a file or drag and drop a file to **Attach** a document.

14. When a new action is created, it is listed under the Actions section under New status of the Issue. In the Status field, the issue can be closed when it is resolved. It is then moved to Closed status.

Figure 37: Data Governance Controls - New Actions



15. After an action is created, it is possible to create Data Adjustments. See section Data Adjustments for details.

8.6 Control Assessment Logic

Data Quality checks are grouped under the following types:

- Data Quality Errors Percentage of records that have failed the data quality checks.
- Data Quality Warning Flag Percentage of records that have passed but have a warning flag.
- Data Quality Information Flags Percentage of records that are passed but have an information flag.
- **Defaults** Percentage of records that are defaulted.

Configure the following parameters in the DGS application to evaluate the Data Quality effectiveness:

- Threshold Score
- DQ Weight percentage
- Parameter Weight Percentage

Threshold Score

The threshold score is the value configured to compare with the computed Total Control Score to evaluate the effectiveness or ineffectiveness of the Data Quality control.

Table 6: Threshold Score

| SI No. | Threshold Configuration | Weight |
|-----------|-------------------------|--------|
| 1 | Threshold Score | 50 |

DQ Weight Percentage

This value is configured based on the number of data quality checks mapped to a data quality control. For example, if there are four data quality checks mapped, then the data quality weight percentage is as displayed as follows:

Table 7: DQ Weight Percentage

| SI No. | Control ID | Data Quality ID | Weight |
|-----------|------------|---------------------|--------|
| 1 | 1 865675 | E1_STC_STLMT_DAT_01 | 25% |
| | | E1_STC_STLMT_DAT_02 | 25% |
| | | E1_STC_STLMT_DAT_03 | 25% |
| | | E1_STC_STLMT_DAT_04 | 25% |

Parameter Weight Percentage

Data quality checks are tagged as Error/Warning/Information/Default and each of these is given a weightage. The values are configurable from the DGS application.

Table 8: Parameter Weight Percentage

| SI no. | Data Quality Type | Weight |
|-----------|-----------------------------------|--------|
| 1 | Data Quality Errors | 20 |
| 2 | Data Quality Warning Flag | 30 |
| 3 | Data Quality Information Flags | 25 |
| 4 | Defaults | 25 |

Step 1.

Compute the DQ Failure Percentage for every single Data Quality in each Data Quality Type

DQ Failure - DQ1 Error = (Failed Record Count/Total Scan Record)*100 = (Failed Record Count/Total Scan Record)*100 DQ Failure - DQ1 Warning DQ Failure - DQ1 Information = (Failed Record Count/Total Scan Record)*100 DQ Failure - DQ1 Default = (Failed Record Count/Total Scan Record)*100

Step 2.

Compute the Cumulative Control Score

Control Score is the sum of DQ Failure * Parameter Weight for a DQ for each of the DQ Type multiplied into DQ Weight Parameter. Similarly, compute for each DQ is mapped to a DQ control. For Cumulative Control, Score adds Control Score for each DQ in a DQ control and then divides by 100.

Cumulative Control Score =

[[DQ1 Error * Parameter Weight] + [DQ1 Warning * Parameter Weight] + [DQ1 Info * Parameter Weight] + [DQ1 Defaults * Parameter Weight] * DQ1 weight] + [[DQn Error * Parameter Weight] + [DQn Warning * Parameter Weight] + [DQn Info * Parameter Weight] + [DQn Defaults * Parameter Weight] * DQn weight]] / 100

Step 3.

For each Data Quality control, the Total Control Score is computed as:

Total Control Score = 100 minus (**Cumulative Control Score**)

If the Total Control Score is equal to or above the Threshold Score, then the control is effective, and if below the Threshold Score it is Ineffective.

Data Quality Control Evaluation with GL Recon Validation

In case GL Recon Application is installed and measure data quality checks have financial validation check set as 'Y' then effective or ineffective evaluation is as follows:

Table 9: Data Quality Control Evaluation with GL Recon Validation

| SI No. | Data Quality Control Validation | Status |
|-----------|---|---------------------|
| 1 | IF GL Recon is installed, all reconciliations are passed, and the Total Control score is equal to or above the configured threshold | Control Effective |
| 2 | IF GL Recon is installed, any reconciliations fail, and the Total Control score is above the configured threshold. | Control Ineffective |
| 3 | IF GL Recon is installed, all reconciliations are passed, and the Total Control score is below the configured threshold. | Control Ineffective |
| 4 | IF GL Recon is installed, any reconciliations fail, and the Total Control score is below the configured threshold. | Control Ineffective |

9 Inbox

Any data issues identified in the OFSAA framework can be resolved through the Inbox->Task option by creating Issues and appropriate Actions. Data Issues such as Data Quality failures or Variance breaches or even known issues can be fixed using the Adjustment Framework option in Action. The adjustment entries posted are audit trailed and data traceability enabled.

The Inbox menu lists all the Tasks that is, Issue and Actions for a user. Issues can be created by the user or by a DG process or Reassigned tasks from another user. Actions are remediation tasks created by the user to resolve an issue. An Action can involve an Adjustment process to close the Action or Issue. The notification tab lists the latest tasks for the user.

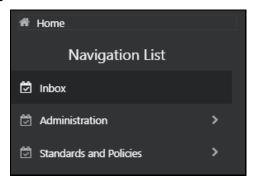
Inbox displays the summary of issues and actions performed over the last 14 days.

9.1 Logging an Issue

To log an issue or view or create tasks, issues, and actions, perform the following steps:

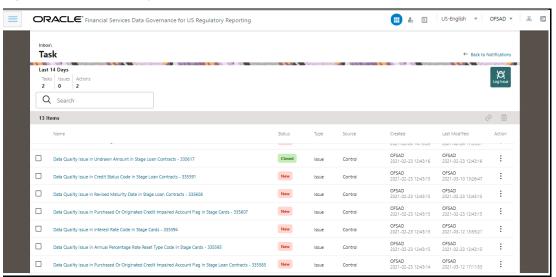
 From Financial Services Data Governance for US Regulatory Reporting window navigate Inbox and then click Go To Tasks.

Figure 38: Inbox



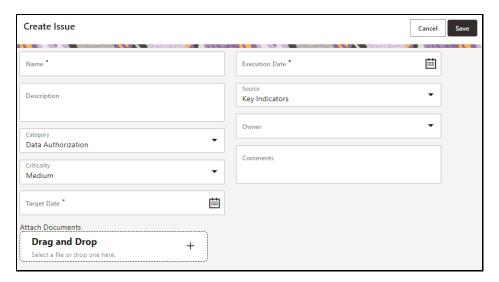
The Inbox Summary window is displayed with the list of tasks, issues, and actions.

Figure 39: Inbox Summary



2. Click icon to log an issue. The create window is displayed.

Figure 40: Create Issue



- 3. Enter Issue Name and Description.
- **4.** Select the **Category** from the drop-down list:
 - a. Data Authorization
 - b. **Data Privacy**
 - c. Data Security
 - d. Data Accuracy
 - e. Data Availability
 - f. Timeliness
- **5.** Select the Criticality:
 - a. **High**
 - b. **Medium**
 - c. Low
- **6.** Choose the Target Date from the Calendar
- 7. Choose the **Execution Date** from the Calendar
- **8.** Select the **Source** from the drop-down list:
 - a. Key Indicators
 - b. Controls
- **9.** Select the **Owner** from the drop-down list.
- **10.** Enter Comments if any.
- **11.** Select a file or drag and drop a file to **Attach** a document.
- 12. Click Save.

A new issue is created and is displayed under the inbox summary screen.

13. Click an existing issue.

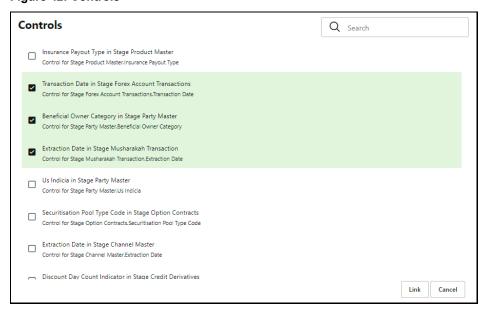
The following window is displayed.

Figure 41: Issues



- 14. Click Activity. Any comment that gets logged for an issue is displayed here.
- **15.** Click **Details**. See section **Editing an Issue** for information.
- **16.** Click **Actions**. See section <u>Creating an Action</u> for information.
- 17. Click Controls. You can create an action for an existing issue.
- **18.** Select an issue and click . The **Control** window is displayed with the control details that can be linked to the issue.

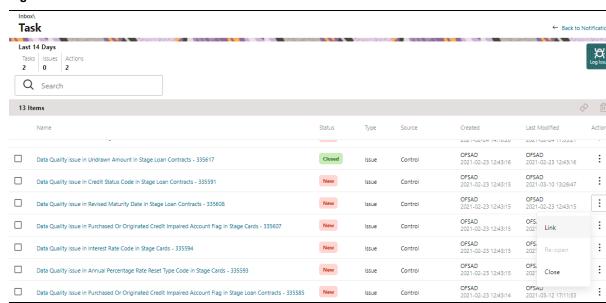
Figure 42: Controls



19. Select the controls and click **Link**. At any point in time, you can search for control in the search field.

- **20.** Select an issue or an action and click . A confirmation message is displayed. Click Yes to delete or click No to cancel the deletion.
- **21.** Note that, it is possible to delete an issue or an action that is in status 'New' and it is not possible to delete a closed issue or an action.
- **22.** Click against the required issue or an action to perform one of the following.

Figure 43: Task



23. If an Issue is in:

- a. New State, you can link or close an issue.
- b. **Closed** State, you can re-open an issue.
- c. **Re-open** State, you can close the issue.

24. If an Action is in:

- a. **New** State, you can close an action.
- b. Closed State, you can re-open an action.
- c. **Re-open** State, you can close the action.

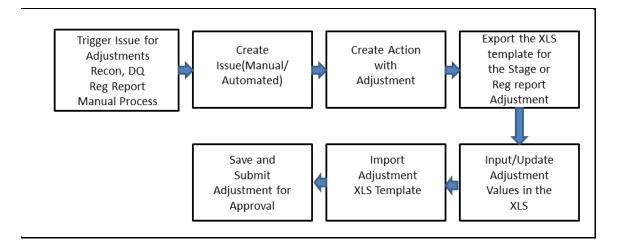
Data Adjustments 10

The Adjustment framework is a capability that is used to modify, as per business requirements, or correct issues, that have been found by various OFSAA components, in available data within FSDF. The adjustments are created when an issue and action are created. In turn, they are then used to track and report any operation that is performed on the data. All adjustments that are created must be executed through a batch.

The Data Adjustment process is illustrated in the following diagram:

For an Adjustment Creator:

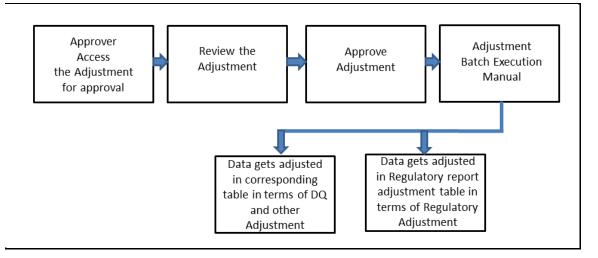
Figure 44: Data Adjustment Process



- **1.** The issue is triggered for adjustments.
- **2.** An issue is created.
- **3.** An action is created with the adjustment.
- **4.** The adjustment is configured and the template for the stage or the regulatory reporting template is exported.
- **5.** The Excel template is updated with the required inputs.
- **6.** The adjustment is then imported.
- 7. The adjustment is saved and submitted for approval to the Data Adjustment Approver.

For an Adjustment Approver:

Figure 45: Data Adjustment Process



- 1. The data adjustment Approver accesses the saved adjustment.
- **2.** The data adjustment is reviewed.
- **3.** The data adjustment is approved.
- **4.** The batch is executed manually for the data adjustment.
- If the data adjustment type is regulatory reporting, then the data is adjusted in the regulatory report adjustment table as per the data present in the regulatory reporting data adjustment.

OR

6. In the case of other data adjustment types, the data is adjusted in the corresponding tables as per the data in the data adjustment.

Types of Data Adjustments

You can create an issue for various reasons; lack of data accuracy, unavailable data, etc. Issues for these scenarios can be created for Controls or Key Indicators. After the issue is created, appropriate actions must be created with the associated Adjustment rules to resolve problems in the data. The adjustment process does not modify the data received from the source system; instead, it creates a new version of the record that is based on the load run ID. This ensures that FSDF always contains the original and all adjusted copies of the data for auditing and record keeping.

The supported action types are as follows:

Data Adjustments - DQ Errors

When a predefined Data Quality rule associated with a field in which control has breached the threshold occurs, a system-generated issue is created to highlight the data quality failure.

Reconciliation Adjustments

The adjustments to resolve reconciliation failures can be set in a system that contains the DG and Reconciliation framework within the same Infodom. When a predefined Reconciliation rule fails, a system-generated issue is created. After the issue is updated, you can create an action.

Data Adjustment - Others

These adjustments are set for known data issues for a set period than for scheduled executions or checks. An example of this scenario: a legacy source system that is unable to perform a transformation required by OFSAA due to cost or any other reasons. It is easier to adjust the data within OFSAA rather than in the source system.

Data Adjustments - Regulatory Reporting

You can set the adjustments to perform at the level of a reporting attribute than within the staging area. This adjustment enables you to create last-mile data corrections at the MDRM level.

Others

This is used for any other online or offline action that is to be performed to resolve a specific issue. These actions are created to maintain and track all efforts made to resolve an issue. They enable you to follow an issue to its closure, for reporting purposes, etc. This action type has no impact on adjustments.

NOTE

These adjustments are only available for existing customer accounts or MDRM codes.

User Roles and Actions for Data Adjustments 10.1

User Roles 10.1.1

The basic roles and the groups defined in the OFS DG application for Data Adjustment are:

Table 10: User Roles

| User Role | Group Code | Group Description | Role Code |
|-----------|----------------|---------------------------|------------|
| Creator | ADJCREATGRP | Adjustment Create | ADJCREATOR |
| | ADJGRPCREATOR | Adjustment Grp Creator | ADJGRPCREA |
| Approver | ADJAPPGRP | Adjustment Approver | ADJAPPROVE |
| | ADJGRPAPPROVER | Adjustment grp appr Group | ADJGRPAPPR |

Actions Performed by Users 10.1.2

The actions that can be executed by specific user roles in the OFS DG application for Data Adjustment are:

Table 11: Actions Performed by Users

| Action Performed | User Role |
|--|------------------------------|
| In the automated process, an Issue is generated by the system. | Assigned to the Issue Owner. |
| Creating Action for the system-generated Issue. | By the Issue Owner. |
| Creating Data Adjustment. | By the Action Owner. |

| Submitting Data Adjustment. | By the Action Owner (must contain the Adjustment creator role). |
|-----------------------------|---|
| Data Adjustment Approval. | By the Issue Owner (must contain the Adjustment approver role). |

NOTE

You must follow the sequence of steps described in the following sections.

Settings for Data Adjustments 10.2

The Issue Owner (Action Creator) may change ownership when required. The Issue Owner creates an Action of type Data Adjustment for this system-generated Issue and assigns it to the Action Owner. As a result, in Actions, the Data Adjustment grid appears. The Action Owner (Adjustment Creator) then creates the required Data Adjustment and makes data corrections for the failed Data Quality.

The Adjustment Creator submits Data Adjustment to the Adjustment Approver (Issue Owner). After the Issue Owner approves all the Data Adjustment definitions, the Data Adjustments are grouped in a Batch and executed at the level of that Issue. After the successful execution of these Data Adjustments, the Action Owners must mark the Action progress to 100% or mark the Action as completed.

Prerequisites for Data Adjustments 10.2.1

NOTE

For Regulatory Reporting before creating a Regulatory Reporting Data Adjustment, you can execute a KI assessment.

- Set the N_lookup_value ='Y' against v_lookup_code=' PRE_POST_ADJ_AUDIT_LOG' in the table fsi_dgs_configuration. This enables the View Adjustment Details in the **Issue & Action** screen, where you can view the pre and post-adjustment data.
- An Action must be created for the system-generated Issues. See section, Creating an Action for details.

Creating a Data Adjustment 10.3

The Action Owner is the Data Adjustment Creator. The Actions are of type Data Adjustment. Therefore, the Data Adjustment grid appears in this section.

NOTE

If you have selected the Action Type as Others, then the Adjustments section does not appear.

To create a Data Adjustment, follow these steps:

- 1. Log in to the application as the Action Owner (Data Adjustment Creator).
- 2. From Financial Services Data Governance for US Regulatory Reporting window navigate to Controls.
- 3. Select a stage table and then click View Controls to view the details.



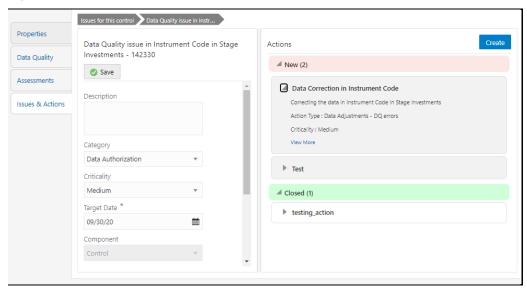
- Click Issues & Actions.
- In the **Issues** for this control, click the required system-generated Issue **ID**. The Actions section is displayed.

Figure 46: Issues & Actions



6. In the Actions, select the required issue to View More details. The Data Adjustments section is displayed.

Figure 47: Issues & Actions



7. In the **Data Adjustments** section, click **Create**. The Adjustment Rule Details window is displayed.

Figure 48: Issues & Actions



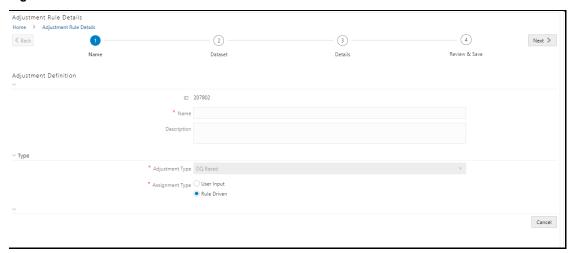
- **8.** Depending on the type of adjustment, create a data adjustment. For details see, sections:
 - a. Create a Data Adjustment DQ Errors based Data Adjustment
 - b. Create a Data Adjustment Business based Adjustment
 - c. Create a Data Adjustment Regulatory Reporting based Adjustment

10.3.1 Create a Data Adjustment - Data Quality Errors based Data Adjustment

To create a data adjustment for the action type Data Adjustments - Data Quality Errors, follow these steps:

- 1. From the Issues & **Actions** page, under an action created, click **View More**.
- **2.** On the Data Adjustment page, click Create. The Adjustments Rule Details window is displayed.
- **3.** In the **Adjustment Rule Details** window, enter values in the **Name** and **Description** fields.

Figure 49: Issues & Actions



- **4.** Select the Assignment Type as either **User Input** or **Rule Driven**.
- 5. For User Input:
 - a. In the Adjustment Entity drop-down, select a value.

b. In the **Select Filter** section, enter values in the following fields:

Table 12: Select Filter Fields

| Field | Description |
|------------------|--|
| Filter Type | Select a value from the drop-down box. |
| Filter Attribute | Select a value from the drop-down box. |
| Hierarchy Name | Select a value from the drop-down box. |
| Hierarchy Values | Select a value from the drop-down box. |
| Hierarchy | Select a value from the drop-down box. |

- c. Click Next.
- d. Select Add Expression.
- e. In the **Add Expression** window, in the Line Item, Business Processor drop-downs, select the required values.
- f. In the **Expression** field, enter the expression, and then select **OK**.
- g. Click **Next**, and then click **Save**.
- h. In the **Manual Data** section, select **Export**.
- i. In the **Export** window, in the **MIS Date** section, select a date for which the data is available, and then click **Export**.
- j. Save the Excel file to your system.
- k. Enter values in the required rows and then save the Excel.
- In the Manual Data section, in the ID column, select the required ID and then click Import.
- m. In the **Import** window, attach the Excel that you added data to, and then click **Upload**.
- n. Click Import.
- o. Click **Submit** if you want to send the **Data Adjustment** for approval or click **Save**.

6. For Rule Driven:

- a. To go to the next section, click **Next** or click **Dataset**.
- b. In the **Select** Data Quality dropdown box, select the required Data Quality value. This Data Adjustment is being created for this failed Data Quality.
- c. Click Next.
- d. Click **Add Expression**.
- e. In the **Add Expression** window, enter values in the following fields:

Table 13: Add Expression Fields

| Field | Description |
|--------|--|
| String | Select a value from the drop-down box. |

| Date and Time | Select a value from the drop-down box. |
|------------------------|--|
| Aggregate | Select a value from the drop-down box. |
| Others | Select a value from the drop-down box. |
| Mathematical | Select a value from the drop-down box. |
| Concatenation | Select a value from the drop-down box. |
| Mathematical operators | Select a value from the drop-down box. |
| Others | Select a value from the drop-down box. |
| Comparison | Select a value from the drop-down box. |
| Logical Operators | Select a value from the drop-down box. |
| Expression | Enter an expression. |

- f. Click OK.
- g. Click Next.
- h. In the **Review and Save** section, click **Save**.

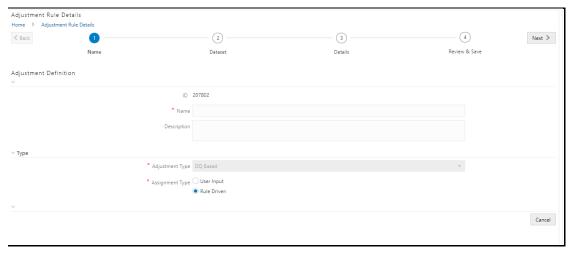
The Data Adjustment for the action has been created.

10.3.2 Create a Data Adjustment - Business based Adjustment

To create a data adjustment for the action type Data Adjustments - Others, perform the following steps:

- 1. From the Issues & **Actions** page, under an action created, click **View More**.
- **2.** On the Data Adjustment page, click Create. The Adjustments Rule Details window is displayed.
- 3. In the **Adjustment Rule Details** window, enter values in the **Name** and **Description** fields.

Figure 50: Adjustment Rule Details



- **4.** Select the Assignment Type as either **User Input** or **Rule Driven**.
- 5. For User Input:

- a. In the **Adjustment Entity** drop-down, select the entity or table for which the adjustment must be performed.
- b. In the **Select Filter** section, enter values in the following fields:

Table 14: Select Filter Fields

| Field | Description |
|------------------|--|
| Filter Type | Select a value from the drop-down box. |
| Filter Attribute | Select a value from the drop-down box. |
| Hierarchy Name | Select a value from the drop-down box. |
| Hierarchy Values | Select a value from the drop-down box. |
| Hierarchy | Select a value from the drop-down box. |

- c. Click Next.
- d. Select Add Attribute.
- e. In the **Add Column** window, in the **Target Attribute** drop-down, select a value and then click **OK**. The target attribute displays the columns based on the selected entity.
- f. Click **Next**, and then click **Save**.
- In the **Manual Data** section, select **Export**.
- h. In the **Export** window, in the **MIS Date** section, select a date the entity has data, and then click **Export**.
- Save the Excel file to your system.
- Enter values in the specific columns as per the selected target attribute, and then save the Excel.
- k. In the Manual Data section, in the ID column, select the required ID and then click **Import**.
- In the **Import** window, attach the Excel that you added data to, and then click Upload.
- m. Click Import.
- n. Click **Submit** if you want to send the **Data Adjustment** for approval, or click Save.

6. For Rule Driven:

- a. To go to the next section, click **Next** or click **Dataset**.
- b. In the Adjustment Entity, Filter Type, Filter Attribute, Hierarchy Name, and **Hierarchy** drop-down boxes, select a value.
- c. Click Next.
- d. Click **Add Expression**.
- e. In the **Add Expression** window, enter values in the following fields:

Table 15: Add Expression Fields

| Field | Description |
|------------------------|--|
| Column | Select a value from the drop-down box. |
| String | Select a value from the drop-down box. |
| Date and Time | Select a value from the drop-down box. |
| Aggregate | Select a value from the drop-down box. |
| Others | Select a value from the drop-down box. |
| Mathematical | Select a value from the drop-down box. |
| Concatenation | Select a value from the drop-down box. |
| Mathematical operators | Select a value from the drop-down box. |
| Others | Select a value from the drop-down box. |
| Comparison | Select a value from the drop-down box. |
| Logical Operators | Select a value from the drop-down box. |
| Expression | Enter an expression. |

- f. Click OK.
- g. Click Next.
- h. In the Review and Save section, click Save.

The Data Adjustment for the action has been created.

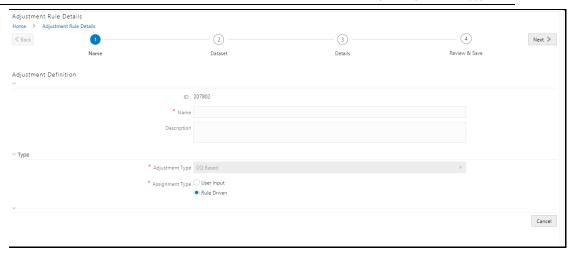
10.3.3 Create a Data Adjustment - Regulatory Reporting based Adjustment

To create a data adjustment for the action type Data Adjustments - Regulatory Reporting, perform the following steps:

NOTE You can create a data adjustment for a regulatory reporting-based adjustment, only if the actions are in a new status.

- 1. From the Issues & **Actions** page, under an action created, click **View More**.
- **2.** In the Data Adjustment page, click Create. The Adjustments Rule Details window is displayed.
- **3.** In the **Adjustment Rule Details** window, enter values in the **Name** and **Description** fields.

Figure 51: Adjustment Rule Details



4. Select the Assignment Type as either **User Input** or **Rule Driven**.

5. For **User Input**:

- a. In the Select Report section, in the **Report** and **Schedule** drop-downs, select the required report and schedule.
- b. Click Next.
- c. In the **Data Update** section, select **Add Line Item**.
- d. In the **Add Line Item** window, in the **Line Item** drop-down, select a value, and then click **OK**.
- e. Click **Next**, and then click **Save**.
- f. In the Manual Data section, select Export.
- g. In the **Export** window, in the **MIS Date** section, select the date for which the assessment has been performed, and then click **Export**.
- h. Save the Excel file to your system.
- i. Enter the adjustment amount in the column **N_ADJUSTED_AMT**, and then save the Excel.
- In the Manual Data section, in the Id column, select the required ID and then click Import.
- In the **Import** window, attach the Excel that you added data to, and then click **Upload**.
- Click Import.
- m. Click **Submit** if you want to send the **Data Adjustment** for approval or click **Save**.

6. For Rule Driven:

- a. To go to the next section, click **Next** or click **Dataset**.
- b. In the **Adjustment Entity**, **Report**, **Schedule**, and **Dataset** drop-down boxes select a value.
- c. Click Next.
- d. Click Add Expression.

e. In the **Add Expression** window, enter values in the following fields:

Table 16: Add Expression Fields

| Field | Description |
|------------------------|---|
| Line Item | Select a value from the drop-down box. |
| Expression Type | Select either Business Processor or Build Expression. |
| Build Processor | Select a value from the drop-down box. This field is only available if you selected the Expression type as <i>Build Expression</i> . |
| Measure | Select a value from the drop-down box. This field is only available if you selected the Expression type as <i>Business Processor</i> . |
| Business Processor | Select a value from the drop-down box. This field is only available if you selected the Expression type as Business Processor. |
| Aggregate | Select a value from the drop-down box. This field is only available if you selected the Expression type as <i>Business Processor</i> . |
| Comparison | Select a value from the drop-down box. This field is only available if you selected the Expression type as Business Processor. |
| Logical Operators | Select a value from the drop-down box. This field is only available if you selected the Expression type as <i>Business Processor</i> . |
| Others | Select a value from the drop-down box. This field is only available if you selected the Expression type as Business Processor. |
| Date and Time | Select a value from the drop-down box. This field is only available if you selected the Expression type as Business Processor. |
| Mathematical | Select a value from the drop-down box. This field is only available if you selected the Expression type as Business Processor. |
| Others | Select a value from the drop-down box. This field is only available if you selected the Expression type as Business Processor. |
| String | Select a value from the drop-down box. This field is only available if you selected the Expression type as Business Processor. |
| Mathematical operators | Select a value from the drop-down box. This field is only available if you selected the Expression type as <i>Business Processor</i> . |
| Concatenation | Select a value from the drop-down box. This field is only available if you selected the Expression type as Business Processor. |

| Field | Description |
|------------|----------------------|
| Expression | Enter an expression. |

- 7. Click OK.
- 8. Click Next.
- **9.** In the **Review and Save** section, click **Save**. The Data Adjustment for the action is created.

10.3.3.1 Export and Import Data Updates

NOTE

These steps are only applicable if your adjustment is of the User Input type.

In the **Review & Save** tab, Exporting User Input Type Data Adjustment:

- **1.** To export (download from the application) a record from the User Input type Data Adjustment, click **Export**.
- 2. In the **Export** window, select the **MIS Date** for which you are downloading the record to make the data corrections.
- **3.** Click **Export**, and then close the **Export** window. An excel file is downloaded to your system.
- 4. In the downloaded (exported) excel file, you can make the required data corrections.
- **5.** Save the changes made to the file.

In the **Review & Save** tab, Importing User Input Type Data Adjustment:

- To import (upload to the application) the updated excel file for the User Input type Data Adjustment, select the Manual Data ID of the required record, and then click Import.
- **2.** To search for the updated, excel file, open and attach it, click **Attach**.
- To upload this, excel file, click **Upload**.
 After a successful upload, an acknowledgment message is displayed.
- **4.** To import the uploaded Excel file into the application, click **Import**.

NOTE

After you successfully import a file, its status appears as *Imported*.

10.3.3.2 Save and Submit a Data Adjustment

- 1. To save this Data Adjustment record, select the checkbox against the imported record, and then click **Save**. A confirmation message is displayed, confirming that the adjustment details were successfully saved.
- 2. Click OK.
- **3.** To submit this Data Adjustment for approval to the Adjustment Approver, click **Submit**.

A confirmation message is displayed, confirming that the adjustment details are saved successfully.

- 4. Click **OK**. The **Adjustment Rules Details** page automatically closes.
- **5.** For user input, to send the imported file for approval to the Approver, you must select the checkbox against the record and then click **Save**.
- **6.** In the **View Adjustment Details** page, click **Refresh**. The newly created Data Adjustment is in the Pending Approval state.
- **7.** After you click **Save**, if do not submit the Data Adjustment for approval, the Status of the Data Adjustment is in the Draft state. To move the Status from *Draft* to *Pending Approval*, open the Data Adjustment, and click **Submit**.

10.3.3.3 View the Pre and Post Adjusted Data

To view the pre and post adjusted data, follow these steps:

- 1. From Financial Services Data Governance for US Regulatory Reporting window navigate to Controls.
- 2. Select a stage table and then click **View Controls** to view the details.
- 3. Click Issues & Actions.

The Issues Summary window is displayed.

Figure 52: Issue Summary



4. Click View Adjustment Details.

The Data Adjustment Summary window is displayed. In the **Actions** window, the action that was created for the issue is displayed.

Figure 53: Data Adjustment Summary



5. Click the required **Action**.

The adjustments that are defined for the actions are displayed.

6. Click the required adjustment. The pre and post-adjusted data is displayed.

Figure 54: Adjustment Details



NOTE

For the Data Adjustment - Regulatory Reporting, only the adjusted data appears.

10.4 Approve or Reject Data Adjustments

To view, and approve or reject the Data Adjustment, perform the following steps:

- 1. Log in to the application as the **Action Owner** (Data Adjustment Creator).
- **2.** From **Financial Services Data Governance for US Regulatory Reporting** window, navigate to **Controls**.
- **3.** Select a stage table and then click **View Controls** to view the details.
- Click Issues & Actions.
- **5.** In the **Issues** for this control, click the required system-generated Issue **ID**. The Actions section is displayed.
- **6.** In the **Actions** section, in the **ID** column, click the required Action ID.
- 7. In the **Action Details** page In the **Adjustments** section, select the required **Data Adjustment** which is in the Pending Approval state.
- **8.** To open this Data Adjustment details, click **View**.
- 9. In the Adjustment Rule Details window, click the Review & Save tab.
- 10. Select the Manual Data Id, and then click **Download**. The data correction records file uploaded to the system, by the Data Adjustment Creator, is downloaded to your system.
- 11. Verify the data records and in the **Comments** field, type the required comments.
- **12.** To approve the Data Adjustment, in the Comment field, enter a comment, and click **Approve**. The **Adjustment Rule Details** window automatically closes.
- **13.** In the **Action Details** page, in the **Adjustments** section, click **Refresh**. The status of the Data Adjustment is changed to the *Approved* state. In the account of Data

Adjustment Creator, the state of this Data Adjustment is updated to the *Approved* state.

Or

To reject the Data Adjustment, in the Comment field, enter a comment and click **Reject**. The **Adjustment Rule Details** window automatically closes.

14. In the **Action Details** page, in the **Adjustments** section, click **Refresh**. For a rejected Data Adjustment, the state is changed to *Draft*.

10.5 Modify a Rejected Data Adjustment

If the Data Adjustment is rejected perform the following steps:

- 1. Log in to the application as the **Action Owner** (Data Adjustment Creator).
- 2. From Financial Services Data Governance for US Regulatory Reporting window navigate to Controls.
- 3. Select a stage table and then click **View Controls** to view the details.
- 4. Click Issues & Actions.
- **5.** In the **Issues** for this control, click the required system-generated Issue **ID**. The Actions section is displayed.
- **6.** In the **Actions** section, in the **ID** column, click the required Action ID.
- 7. In the **Adjustment Rule Details** page, in the **Review & Save** tab, make the required changes.
- **8.** To save this Data Adjustment record, click **Save**. A confirmation message appears, confirming that the adjustment details are saved successfully.
- 9. Click OK.
- **10**. To re-submit this Data Adjustment for approval to the Adjustment Approver, click **Submit**.

A confirmation message appears, confirming that the adjustment details have been successfully updated.

11. Click **OK**.

The **Adjustment Rules Details** page automatically closes.

12. Log in as a Data Adjustment Approver and approve this Data Adjustment.

10.6 Executing a Data Adjustment Batch

After creating Data Adjustments, perform these procedures to check the Data Quality of the data corrections made during the Data Adjustment process.

Execution of Adjustments

The adjustments defined by using the steps mentioned earlier are executed through the batch. The executable DataAdjustment.sh must be executed with a list of parameters. Note that an adjustment is considered for execution for the MIS data for which the data adjustment has been done.

10.6.1 Triggering the Adjustment Batch

NOTE

Only an issue owner can trigger the adjustment batch.

To trigger the adjustment batch from the Issue screen, follow these steps:

- 1. From Financial Services Data Governance for US Regulatory Reporting window navigate to Controls.
- 2. Select a stage table and then click **View Controls** to view the details.
- 3. Click Issues & Actions.

The system-generated issues for this control are displayed.

- **4.** Select an issue for which the adjustment is created and click **Run**. The **Adjustment Run Parameters** window is displayed. The Issue Name is displayed as default.
- 5. Click to select the **MISDATE** for execution.

 The RunSkey is automatically selected based on the MIS date.
- **6.** Click to select the **Legal Entity Code** from the list of hierarchy.

NOTE

If the hierarchy is not displayed, resave the hierarchy HIREG004 Org Structure Entity Code.

7. Click Execute.

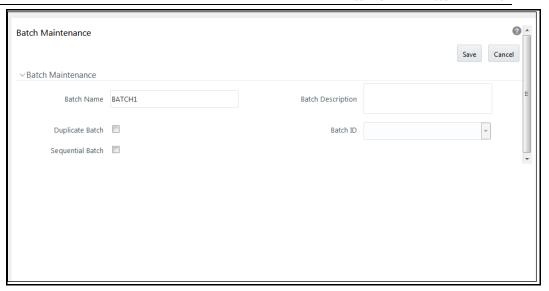
This automatically creates a batch and is executed. The Batch Monitor status displays as successful.

10.6.2 Creating a New Batch and a Task

For all other types of adjustments, create a new Batch, perform the following steps:

- 1. From Financial Services Data Governance for US Regulatory Reporting window navigate to Operations and then select Batch Maintenance.
- 2. To create a Batch, in the Batch Name section, click the + Add icon.

Figure 55: Batch Maintenance



- 3. In the **Add Batch Definition** window, enter the batch name and the batch description, and then click **Save**.
- **4.** In the **Batch Maintenance** pane, in the **Batch Name** section, select the Batch Name checkbox associated with the newly created batch. The **Task Details** section appears which lists the tasks corresponding to the selected Batch Name.
- **5.** To add a new task to the newly created batch, click the **Add** icon.
- **6.** In the **Task Definition** window In the **Components** dropdown box, select the **RUN EXECUTABLE** value.
- 7. The values are automatically generated for the **Datastore Type**, **Datastore Name**, and **IP Address** fields.
- **8.** In the **Executable** field, enter the value **DataAdjustment.sh**, <ISSUE NAME>, <USER>, <RUNSKEY>, <LEGAL ENTITY>.

NOTE Except for the data adjustment for regulatory reporting, which will require all five values, the other data adjustments will only require values for <ISSUE NAME> and <USER>. The <RUNSKEY> and <LEGAL ENTITY> parameters can be placed as *NA*.

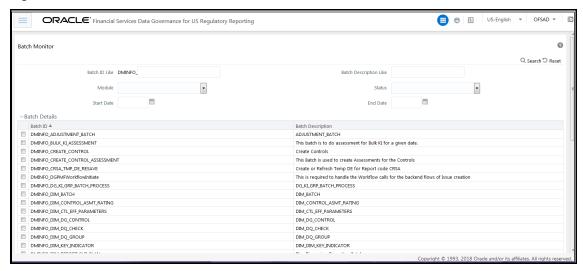
- **9.** For the **Wait** field, select either **Y** or **N** as required.
- 10. For the Batch Parameter field, select Y.
- **11.** Enter the required details in all the other fields.
- 12. Click Save.
- **13.** A new Task for the new Batch is created. You can run this Batch in the **Batch Execution** section.

10.6.3 Monitoring the Data Adjustment Batch through the Batch Monitor Pane

To monitor the data adjustment batch through the Batch Monitor pane follows these steps:

- 1. From Financial Services Data Governance for US Regulatory Reporting window navigate to Operations and the select **Batch Monitor**.
- **2.** The **Batch Monitor** pane appears on the right-hand side.

Figure 56: Batch Monitor



- 3. In the Batch Details section, select the Batch ID which was executed during the Batch Execution.
- 4. In the Batch, Run Details section, click the Information Date drop-down and then select the MIS Date. This is the date on which the Data Quality had failed at the staging.
- 5. Click the **Batch Run ID** dropdown box and select the required value.
- 6. Click the **Start Monitoring** icon.
- 7. The Batch Status, Task Details, and Event Log sections appear in addition to the existing details in the **Batch Monitor** pane.
- **8.** Select any task in the **Task Details** section to view its Event Log details.
- 9. After the successful execution of the data adjustment batch, the Action Owners must mark the action progress to 100% or mark the Action as completed.

NOTE

Based on the adjustment type, check the tables against which the adjustments have been passed.

Plan Monitoring 11

This chapter explains the process of identifying the reporting plan.

User Roles and Actions 11.1

All the users need to be mapped to **DGSAUTHGRP**, **DGSADMINGRP** and **DGSANALYSTGRP**, along with **DGSPSI**.

Creating a Reporting Plan 11.2

The reporting plan provides an overview of the timelines for the regulatory submission. It is activity-specific. For example, the plan for the regulatory report submission of one activity is different from another. The plan includes the scope and schedule for tracking and completion.

To create a reporting plan, define the name, purpose, owner, and additional attributes for the plan. Additionally, you need to define the OFSAA runs and the scope of the plan. You can choose any OFSAA run as the scope and derive the tasks from all the runs in the scope.

Data Governance for US Regulatory Reporting facilitates the mapping of OFSAA Runs to the plans. For the created plan, the user can link the Runs by selecting the Runs. All the selected Runs are displayed in the Plan Monitoring screen.

The Runs available as a part of the applications can be made visible in Data Governance for US Regulatory Reporting.

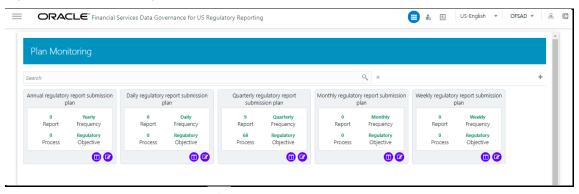
Metadata Publish is required to publish the Run related information.

Data Governance for US Regulatory Reporting facilitates the mapping of Tasks to Runs in the **Plan** section. Click the Run. This allows you to select the tasks. The Task Selection window is displayed. All the tasks under the selected Run are displayed. The selected tasks can be seen in the Task List in the Plan Monitoring window.

To create a Reporting Plan, perform the following steps:

1. From the Financial Services Data Governance for US Regulatory Reporting window navigate to Plan Monitoring.

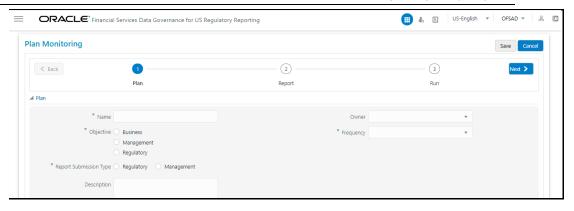
Figure 57: Plan Monitoring



In the Plan Monitoring, click the

Create Plan icon.

Figure 58: Plan Monitoring



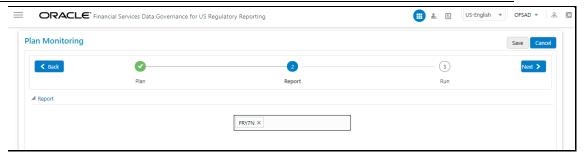
2. In the **Plan Monitoring** window, enter the required information in the available fields.

Table 17: Plan Monitoring

| Fields=' | Description |
|---|--|
| Fields marked in blue asterisk(*) are mandatory | |
| Name* | Provide a short description of the plan. |
| Objective* | Select an objective from the drop-down box: • Business • Management • Regulatory |
| Owner* | Select the owner of the plan such as who is the user that is responsible for tracking the plan to closure. |
| Report Submission Type* | Select the plan type from the drop-down box: • Regulatory Report Submission • Management Report Submission |
| Description | Provide a description of the plan. |
| Frequency* | Select a frequency for the plan from the drop-down box: • Yearly • Half Yearly • Quarterly • Monthly • Custom • Daily • Fortnightly • Weekly |

- 3. Click Next.
- **4.** Select a **Report** from the drop-down. The reports displayed in the drop-down are the reports configured in the application.

Figure 59: Plan Monitoring



- 5. Click Next.
- Select the Run from the drop-down.The selected Run is displayed under Run Details.

Figure 60: Plan Monitoring



Click Run Name to add a task.The Task Selection window is displayed.

Figure 61: Task Selection



- **8.** Select the required task and click **Apply**. The selected task is displayed under the Task List.
- 9. Click Save.

The newly created plan appears under the Plan Monitoring summary window. A

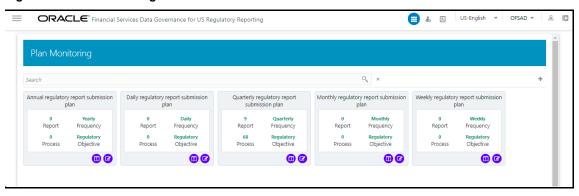
confirmation message is displayed: Monitoring a Reporting Plan. After submission, the reporting plan is monitored for the completion of individual tasks.

Viewing and Editing a Reporting Plan 11.3

To view or edit a Reporting Plan, perform the following steps:

1. From the Financial Services Data Governance for US Regulatory Reporting window navigate to Plan Monitoring.

Figure 62: Plan Monitoring - View



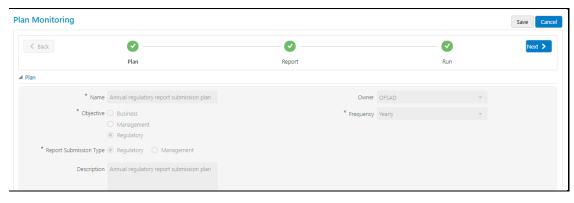
2. To view an already created Plan, in the Plan Monitoring summary window, click



3.

The fields are not editable.

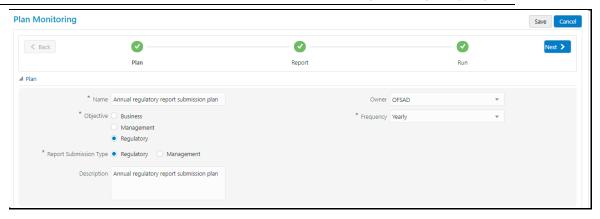
Figure 63: Plan Monitoring - View



4. To edit an existing plan, in the **Plan Monitoring summary window**, click the icon.



Figure 64: Plan Monitoring - View



5. Edit the required fields and then click **Save**.

12 Dashboards

The dashboards provide reports for various sections in the DGRR Application.

12.1 Data Quality Dashboards

The Data Quality Rules for Dashboards must be executed through batches only and not through the DQ screen.

For Data Quality refer to the OFS Data Governance Run Chart and execute the batch DGS_DQ_BATCH, DataProfile for the date on which the data quality check needs to be executed. Refer to the OFS Data Governance Run Chart for further details.

Based on the Data Quality check defined in the DQ framework of AAAI, the dashboard generates the reports. These are predefined values. The dashboard also generates the reports based on the check type the user wants to analyze the data with.

The Data Quality Dashboard provides data based on selecting the desired Date and the following list of drop-downs:

- Batch Name
- DQ Group Name
- DQ Type
- Date
- Iteration

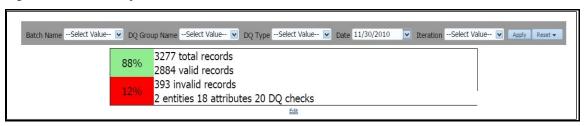
Click **Apply** to generate the reports.

Click **Reset** to reset the values.

The first grid displays the following data:

- Pass DQ percentage (Green shows the pass DQ %)
- Fail DQ percentage (Red shows the failed DQ %)
- Number of Total Records
- Number of Valid Records
- Number of Invalid Records
- Number of entities, attributes, and DQ checks

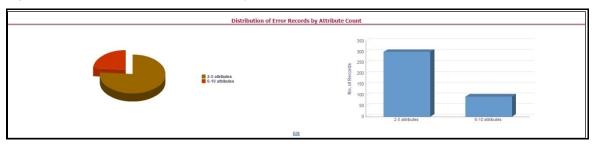
Figure 65: Data Quality Dashboard



12.1.1 Distribution of Error Records by the Attribute Count

This analysis displays the distribution of error records based on a range of attribute counts in the form of pie charts and bar graphs.

Figure 66: Distribution of Error Records by the Attribute Count



Click either on the pie chart or bar graph to drill down to view the following details:

- Entity
- Attributes
- DQ Check Type Name
- Percentage of Rejected Records Count

Click **Attributes** to display the following:

- Data Profile: It displays 2 analyses:
 - Data Profile: A tabular representation of the following data based on the Entity-Attribute Name:
 - Count Distinct values
 - Count Null Values
 - Max Value
 - Mean Value
 - Minimum Value
 - Outliers Greater than 2x mean
 - Outliers Less than 2x mean
 - Total Row Count

Figure 67: Data Profile



- Trend of Data Profile: This report shows the trend of data profiling in a 6-month interval from the selected date. It is a Graphical representation of the following data based on the Entity-Attribute Name:
 - Count Distinct values
 - Count Null Values
 - Total Row Count

Figure 68: Trend of Data Profile



- Data Bucket: It displays 2 analyses:
 - Data Bucket: This is the tabular representation of the following data based on Dimension Table:
 - Node Code
 - Distribution Count

Figure 69: Data Buckets



- Trend of Data Bucket: This report shows the trend of the data profiling in a 6-month interval from the selected date. It is a graphical representation of the Distribution Count and Node Codes against time intervals. The Trend of Data Buckets includes two types of graphs:
 - Bar Graph
 - Line Graph

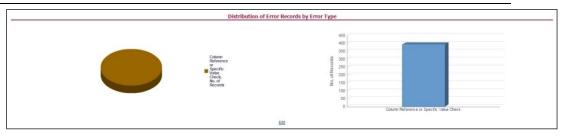
Figure 70: Trend of Data Buckets



12.1.2 Distribution of Error Records by Error Type

This analysis displays the distribution of error records based on the error type.

Figure 71: Distribution of Error Records by Error Type



Click either the pie chart or the bar graph to get a drill down to view the following details:

- Entity
- Attributes
- DQ Check Type Name
- Percentage of Rejected Records Count

Click Attributes to view the following:

- Data Profile: It displays two analyses:
 - Data Profile: A tabular representation of the following data based on the Entity-Attribute Name:
 - Count Distinct values
 - Count Null Values
 - Max Value
 - Mean Value
 - Minimum Value
 - Outliers Greater than 2x mean
 - Outliers Less than 2x mean
 - Total Row Count

Figure 72: Data Profile



- Trend of Data Profile: A graphical representation of the following data based on the Entity-Attribute Name:
 - Count Distinct values
 - Count Null Values
 - Total Row Count
- Data Bucket: It displays two analysis:

- Data Bucket: The tabular representation of the following data based on the **Dimension Table:**
 - Node Code
 - **Distribution Count**

Figure 73: Data Bucket

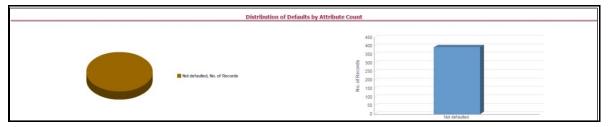


- Trend of Data Bucket: Graphical representation of the Distribution Count and Node Codes against time intervals. The Trend of Data Buckets includes two types of graphs:
 - Bar Graph
 - Line Graph

Distribution of Defaults by Attribute Count 12.1.3

This analysis displays the distribution of default records based on the attribute count.

Figure 74: Distribution of Defaults by Attribute Count



Click either the pie chart or bar graph to get a drill down which displays the following details:

- **Entity**
- **Attributes**
- DQ Check Type Name
- Percentage of Rejected Records Count

Click **Attributes** to display the following:

Data Profile: It displays two analysis:

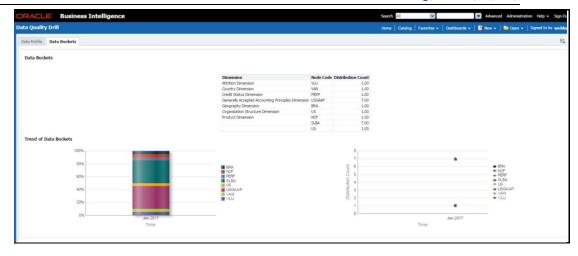
- Data Profile: A tabular representation of the following data based on Entity-Attribute Name:
 - Count Distinct values
 - Count Null Values
 - Max Value
 - Mean Value
 - Minimum Value
 - Outliers Greater than 2x mean
 - Outliers Less than 2x mean
 - Total Row Count

Figure 75: Data Profile



- Trend of Data Profile: Graphical representation of the following data based on the Entity-Attribute Name:
 - Count Distinct values
 - Count Null Values
 - Total Row Count
- Data Bucket: It displays two analysis:
 - Data Bucket: The tabular representation of the following data based on the Dimension Table:
 - Node Code
 - Distribution Count

Figure 76: Data Buckets



- Trend of Data Bucket: A graphical representation of the Distribution Count and Node Codes against time intervals. The Trend of Data Buckets includes two types of graphs:
 - Bar Graph
 - Line Graph

12.1.4 Data Quality Exception Report

Populating Data for DQ Exception Report (Data Quality Dashboard)

Before verifying the Data Quality Exception Report dashboard (DQ Dashboard), follow these steps:

- 1. Navigate to Common Tasks > Operations > Batch Maintenance.
- Select the DGS_DQ_CTL_BATCH batch. See OFS Data Governance Run Chart for more details.

NOTE The FSI_DGS_DQ_BALANCE_COL_MAP table will have the configuration details required for DQ-Exception amount calculations.

It consists of the following columns.

Table 18: Data Quality Exception Report

| Column Name | Description |
|----------------------|---|
| V_DQ_STG_TBL | Column to store Stage Table Name |
| V_DQ_STG_BAL_AMT_COL | Column to store Data Quality Exception Balance Column to be used for DQ-Exception Amount Calculations |
| V_PK_REFERENCE_COL | Column to store Primary Key of the Stage Table |

By default, the tables are packaged with the following metadata configurations.

Table 19: Data Quality Exception Report

| V_DQ_STG_TBL | V_DQ_STG_BAL_AMT_COL | V_PK_REFERENCE_COL | |
|----------------------------|--|---------------------|--|
| STG_BORROWINGS | N_EOP_BAL | V_ACCOUNT_NUMBER | |
| STG_CARDS | N_EOP_BAL | V_ACCOUNT_NUMBER | |
| STG_CASA | N_EOP_BAL | V_ACCOUNT_NUMBER | |
| STG_COMMITMENT_CONTRACTS | N_COMMITMENT_AMT | V_CONTRACT_CODE | |
| STG_CREDIT_LINE_DETAILS | N_LINE_UTILIZED_AMT | V_CREDIT_LINE_CODE | |
| STG_FORWARDS | N_EOP_BAL | V_CONTRACT_CODE | |
| STG_INVESTMENTS | N_EOP_BAL | V_ACCOUNT_NUMBER | |
| STG_LC_CONTRACTS | CONTRACTS N_EOP_BAL V_ | | |
| STG_LEASES_CONTRACTS | N_EOP_BAL | V_ACCOUNT_NUMBER | |
| STG_LOAN_CONTRACTS | N_EOP_BAL | V_ACCOUNT_NUMBER | |
| STG_OD_ACCOUNTS | G_OD_ACCOUNTS N_EOP_BAL V_ACCOUNT_NUMB | | |
| STG_REPO_CONTRACTS | N_EOP_BAL | V_CONTRACT_CODE | |
| STG_TD_CONTRACTS | N_EOP_BAL | V_CONTRACT_CODE | |
| STG_ACCT_RECOVERY_DETAILS | N_PRIN_RECOVERY_AMT | N_PRIN_RECOVERY_AMT | |
| STG_ACCT_WRITE_OFF_DETAILS | N_PRIN_WRITE_OFF_AMT | V_ACCOUNT_NUMBER | |

NOTE

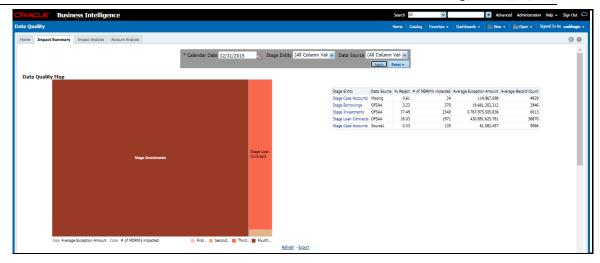
Before running the DGS_DQ_CTL_BATCH, ensure the required configuration details are updated and available in the FSI_DGS_DQ_BALANCE_COL_MAP table.

The enhanced Data Quality Control functionality analyzes the impact of Data Quality failure on Regulatory Reporting based on Data Source. The report helps analyze the impact of Data Quality failure on a Cell value, and there is an option to drill down to account granularity to identify failed accounts. The analysis provides a Dashboard, Summary report, and Data Quality drill down report.

The following are the reports provided under **Impact Summary**.

- Impact Summary Data Quality Impact Detail
- Click the Data Quality Map or the Stage Entity, to view the Impact Analysis.

Figure 77: Impact Summary



Or, click the DQ Code under Data Quality Impact Detail to view the Impact Analysis.

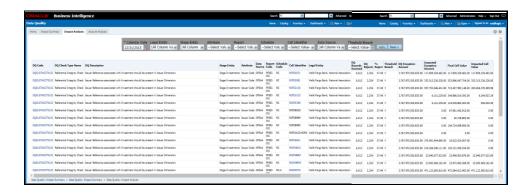
Figure 78: Data Quality Impact Detail



Impact Analysis - Summary Drill-Down Report

For the Stage, Table selected the DQ Codes, Cell Identifiers, Legal Entity, DQ details, Threshold Breach, Impacted Exception Amount, Final Cell value, and Impacted Cell Value are displayed.

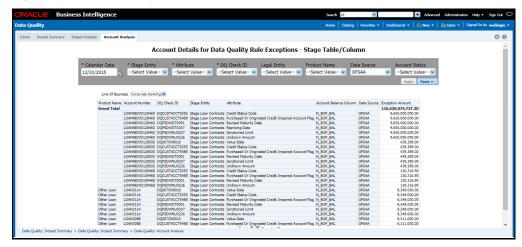
Figure 79: Impact Analysis



Account Analysis Drill-Down Report

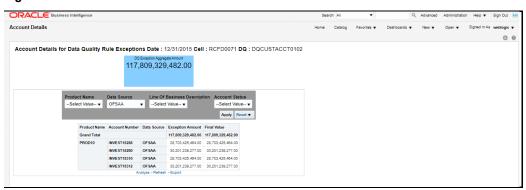
Click the **DQ Code** link in **Impact Analysis** to view the **Account Analysis Report**. This report displays the Account Number associated and the Exception Amount for the Account Balance based on the Data Source.

Figure 80: Account Analysis



Click the Cell Identifier link in Impact Analysis to view the Cell drill-down report.

Figure 81: Account Details



12.2 Controls Dashboard

Execute the batches corresponding to Controls to view the Controls dashboards. For Controls Dashboard refer to the <u>OFS Data Governance Run Chart</u> and execute the batch DGS_DQ_CTL_BATCH for the date on which the control and assessment need to be executed. Refer to the <u>OFS Data Governance Run Chart</u> for further details.

This section displays two dashboard pages:

- Summary
- Controls by Regulatory Reports

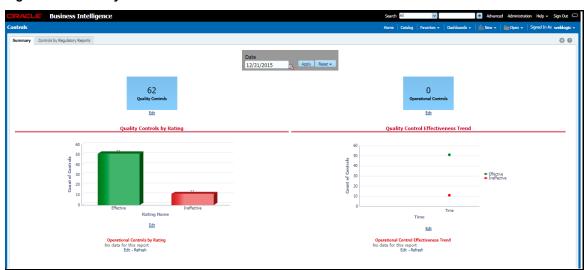
12.2.1 Summary

Select the date to generate the dashboard reports.

The following are the types of Controls that appear as the Performance Tiles in the **Controls** module:

- **Total Controls:** Provides the number of total controls present in the system.
- Quality Control: Provides the number of Quality controls present in the system.
- Operational Control: Provides the number of operational controls present in the system.
- **Ineffective Controls:** Provides the number of ineffective controls present in the system.
- **Issues:** Provides the number of issues present in the system.
- **Action:** Provides the number of actions present in the system.

Figure 82: Summary



12.2.1.1 Quality Controls by Rating

This section provides the graphical representation of the Number of Controls against Quality Controls. The following are the types of Rating Names:

- Effective
- Ineffective

Figure 83: Quality Controls by Rating



Click the graphs to view the drill-down Control Assessment reports. The following data appears under the Control Assessment Details dashboard:

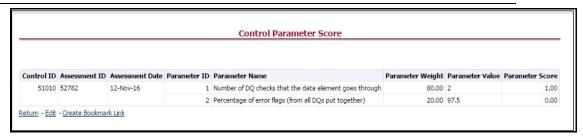
- Control ID
- Control Name
- Number of DQ checks
- Assessment ID
- **Assessment Date**
- **Effective Score**
- Rating Name

Figure 84: Control Assessment Details



In the Assessment ID column, click the required link to view the drill-down Control Parameter Score.

Figure 85: Control Parameter Score



12.2.1.2 Quality Control Effectiveness Trend

This section provides the graphical representation of the Number of Quality Controls within six months from the selected date.

Quality Control Effectiveness Trend

240
200
120
120
80
40
0
Time

Time

Edit

Figure 86: Quality Control Effectiveness Trend

Click the graphs to view the drill-down **Control Assessment** reports.

The following data appears under the Control Assessment dashboard:

- Control ID
- Control Name
- Number of DQ checks
- Assessment ID
- Assessment Date
- Effective Score
- Rating Name

Click Assessment ID to view the drill-down Control Parameter Score.

12.2.1.3 Operational Controls by Rating

This section provides the graphical representation of the Number of Controls against Operational Controls. The following are the types of Rating Names:

Effective

Ineffective

Figure 87: Operational Controls by Rating



Click the graphs to view the drill-down **Control Assessment** reports. The following data appears under the Control Assessment dashboard:

- Control ID
- Control Name
- Number of DQ checks
- Assessment ID
- Assessment Date
- Effective Score
- Rating Name

Click Assessment ID to view the drill-down Control Parameter Score.

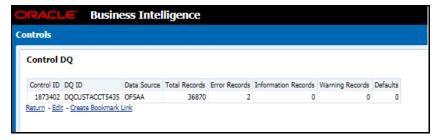
12.2.1.4 Data Quality Controls

This section displays the Data Quality associated with the control along with the data source and the number of scanned records and error information and warning.

To open this report, follow these steps:

- 1. From the **Dashboards**, select **Controls**.
- 2. Click **Quality Controls** and then select a required Control ID. This displays the data quality associated with the control with their data source along with total records scanned and error records.

Figure 88: Control DQ



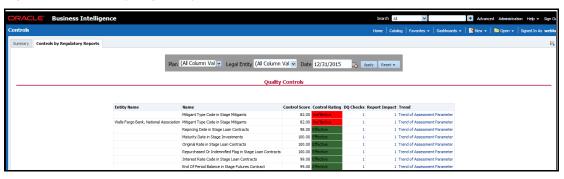
Controls by Regulatory Reports 12.2.2

Select the desired Regulatory Report and Date and then click Apply to view the Control **Assessment Analysis** dashboard.

The following details are listed in the Control Assessment Analysis report:

- Rating Name
- Reporting Line Item

Figure 89: Controls by Regulatory Reports



Key Indicators Dashboards 12.3

Key Indicators dashboard displays the various types of reports based on the analysis of the Key Indicators in the system. For the Key Indicators, Dashboards refer to the OFS Data Governance Run Chart and execute the batch DGS_KI_BATCH for the date on which the Key Indicator needs to be executed. Refer to the OFS Data Governance Run Chart for further details.

NOTE

The Key Indicators dashboard will reflect only those KIs for which the report or schedules or cells have been configured in the KI configuration.

The Key Indicators Dashboard provides data based on selecting the values from the following list of drop-downs:

- Jurisdiction
- Report Code
- Schedule Code
- Cell ID
- Legal Entity
- Date

Click **Apply** to generate the reports.

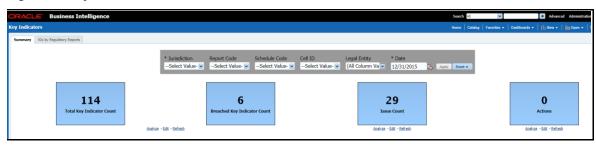
Click **Reset** to reset the values.

12.3.1 Key Indicators - Summary

The **Summary** tab consists of these performance tiles:

- Total Key Indicator Count: Displays the total number of Key Indicators.
- **Breached Key Indicator Count:** Displays the total number of Breached Key Indicators.
- **Issue Count:** Displays the total number of Issue-based Key Indicators.
- Actions: Displays the total number of Action based Key Indicators.

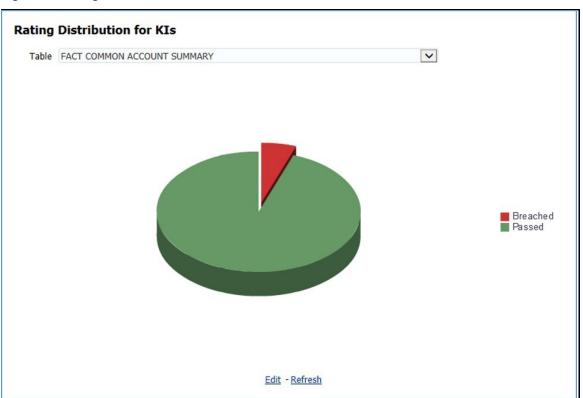
Figure 90: Key Indicators



These are the KI Summary dashboard sections:

 Rating Distribution for KIs: Displays the latest rating distribution for the assessed Key Indicators.

Figure 91: Rating Distribution for KIs



KI Trends by Entities: Displays the trend of the latest entities for the assessed Key Indicators.

KI Trends by Entities 100% 80% 60% ■ Breached ■ Passed 40% 20% Wells Fargo Bank, National Association Entity Edit - Refresh

Figure 92: KI Trends by Entities

KI Trends across multiple executions: Displays the latest trend across multiple executions for the assessed Key Indicators.

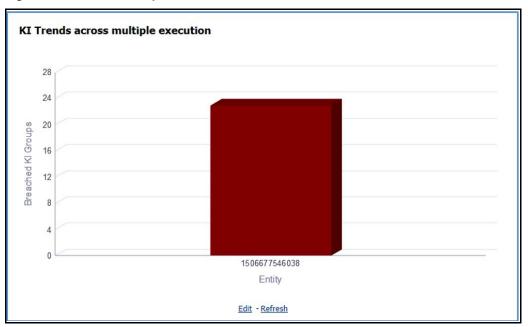


Figure 93: KI across multiple executions

Issues and Actions:

Figure 94: Issues and Actions

| Actions | | |
|------------------|---------------|--------------------------|
| Name | Created By | Target Date |
| ADj errors | S EBAUSER | 3/19/2018 12:00:00 AM |
| for Data iers | EBAUSER | 3/15/2018 12:00:00 AM |
| OQ errors | EBAUSER | 3/15/2018 12:00:00 AM |
| or others | EBAUSER | 3/15/2018 12:00:00 AM |
| | Edit - Refre | <u>sh</u> |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

12.3.1.1 Viewing Key Indicator Details

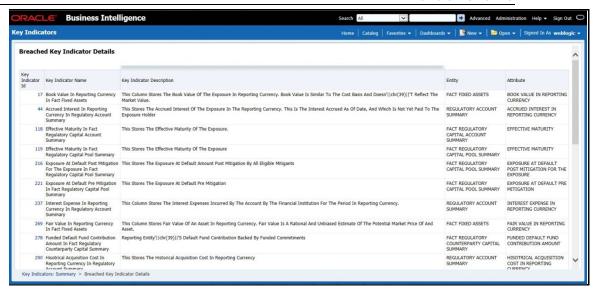
• To view the Key Indicator details:

To view the Key Indicator details for a performance tile, click that performance tile.

The following Key Indicator details appear:

- Key Indicator ID
- Key Indicator Name
- Key Indicator Description
- Entity
- Attribute

Figure 95: Breached Key Indicator Details



To view the **Key Indicator Conditions** details for a Key Indicator, click the required **Key Indicator ID**.

The **Key Indicator Conditions** page with dashboards appears.

Figure 96: Key Indicator Conditions



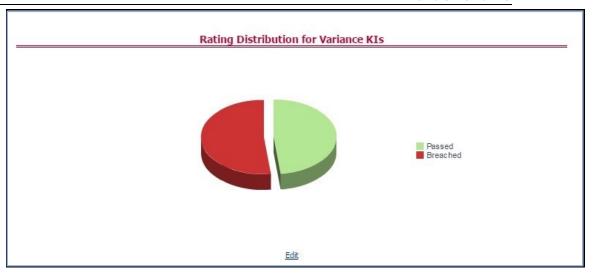
12.3.1.2 Viewing Key Indicator Conditions Details

The **Key Indicator Conditions** page displays different Conditions based on which Key Indicators are assessed.

These are the sections of the Key Indicator Conditions dashboards:

Rating Distribution for Variance KIs: This report displays the latest rating distribution for the assessed Variance Key Indicators.

Figure 97: Rating Distribution for Variance KIs



Trend of Rating Distribution for Variance KIs: For the assessed Variance Key Indicators, this report displays the trend of the latest rating distribution.

Trend of Rating Distribution for Variance KIs

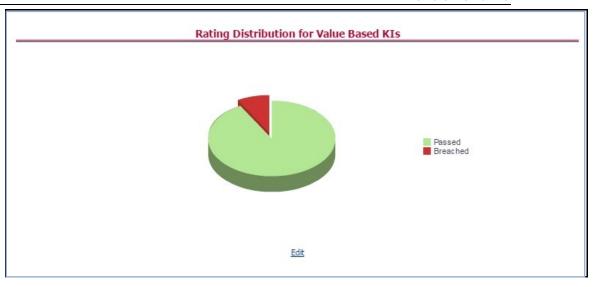
160
140
120
100
80
60
40
20
Jan-2011
Time

Edit

Figure 98: Trend of Rating Distribution for Variance KIs

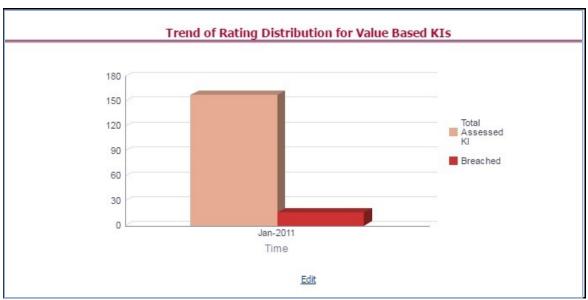
Rating Distribution for Value-Based KIs: This report displays the latest rating distribution for the assessed Value-Based Key Indicators.

Figure 99: Rating Distribution for Value-Based KIs



• **Trend of Rating Distribution for Value-Based KIs:** This report displays the trend of the latest rating distribution for the assessed Value-Based Key Indicators.

Figure 100: Trend of Rating Distribution for Value-Based KIs

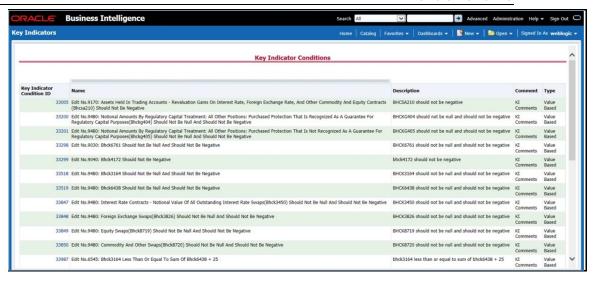


To view the Key Indicator Conditions details:

To view the Key Indicator Conditions details for a performance tile, click that performance tile. The following Key Indicator Conditions details appear:

- Key Indicator Condition ID
- Name
- Description
- Comment
- Type

Figure 101: Key Indicator Conditions



To view the **Assessment Details** page for a required Key Indicator Condition, click the corresponding **Key Indicator Condition ID**.

The **Assessment Details** page appears with the following details:

- Assessment ID: This is the Assessment ID corresponding to the selected Key Indicator ID.
- Key Indicator ID: This is the selected Key Indicator ID.

Current Period Value: The current period value for the selected Key Indicator ID.

- Previous Period Value: The previous period value for the selected Key Indicator ID.
- Variance: The difference in Current and Previous Period Value for the selected Key Indicator ID.

Variance %: The percentage of Variance based on the Previous Period value.

- RAG Score: The RAG value of the selected Key Indicator depending on the various values.
- **Status**: The status of the selected Key Indicators depending on the various values.

Figure 102: Assessment Details



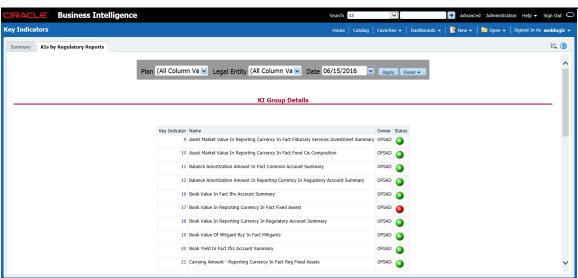
12.3.2 KIs by Regulatory Reports

The **KIs by Regulatory Reporting** page displays the Key Indicator Group Details with the following columns:

- Key Indicator
- Name
- Owner
- Status

To view the above-mentioned column values for a particular report, select the required report name in the **Plan** dropdown box, and column name in the **Legal Entity** dropdown box. Click **Apply**. A list of KI Group Details appears.

Figure 103: KIs by Regulatory Reporting



For the required Key Indicator, to view the Variance Analysis, Validation Check Analysis, and Trend Analysis, click any Key Indicator number. These details appear at the bottom of the page:

Variance Analysis: Variance Analysis provides these data for the selected report:

- Report: Displays the reporting line item for the selected report.
- **Schedule**: Displays the schedule code for the respective reporting line item.

Cell Reference: Displays the cell ID for the respective reporting line item.

- **KI Condition**: Displays the KI condition name.
- Current Value: Provides the current period value for the respective Reporting line item.

Previous Value: Provides the previous period value for the respective Reporting line item.

- Variance %: Displays the percentage of Variance based on Previous Value.
- **Status**: The status of the selected Key Indicators depending on the various values.

Dependent KIs: Displays the other Key Indicators on which this cell ID is dependent.

To view the Assessment details of the selected Key Indicator, click **Dependent KIs**. The Assessment Details page appears.

Validation Checks: Displays all the Value-based Key Indicators associated with that Key Indicator Group key. For the selected report, these details appear:

Report: Displays the reporting line item for the selected report.

Schedule: Displays the schedule code for the respective reporting line item.

- **Cell Reference**: This displays the cell ID for the respective reporting line item.
- **KI Condition**: Displays the KI condition name.

Status: The status of the selected Key Indicators depending on the various values.

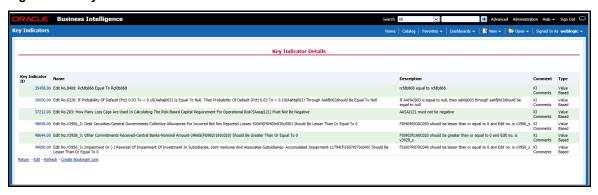
- Dependent KIs: Displays the other Key Indicators on which this cell ID is dependent.
- Trend Analysis: Displays the trend of total assessed Key Indicators and breached Key Indicators for a particular time interval.

Figure 104: Trend Analysis



To view the **Key Indicator Details** drill down report, click the graph points.

Figure 105: Key Indicator Details



In the **Key Indicator ID** column, click the link of the required KI ID to view the **Assessment Details** report.

Regulatory Report Monitoring 12.4

Select a Plan Name from the dropdown, and then select a date from the calendar and click **Apply** to view the Regulatory Report Monitoring.

The following values appear in terms of Performance Tiles:

- **Reporting Elements with Errors:** Displays the percentage of Reporting Elements with Errors.
- Reporting Elements with a breach in Variance Indicators: Displays the percentage of Reporting Elements associated with breached Variance Key Indicators.
- Reporting Elements with a breach in Key Indicators: Displays the percentage of Reporting Elements associated with breached Key Indicators.
- Reporting Elements with Control Failures: Displays the percentage of Reporting Elements associated with failed controls.
- **Issues in total:** Displays the total number of issues associated with Controls and KI.
- **Outstanding Issues:** Displays the total number of open issues.

Figure 106: Regulatory Report Monitoring



Regulatory Report Monitoring dashboard displays the following grids:

- Plan Analysis by Report
- Issue and Action Tracking

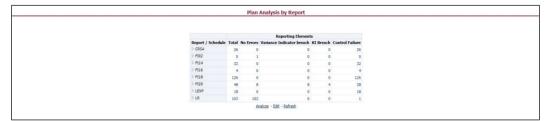
Plan Analysis by Report 12.4.1

This analysis displays reports, schedules, and count of Reporting Elements associated with the selected Plan.

- 1. Select the **Report Name** from the drop-down to view the following data:
 - **Report/Schedule Name:** Displays the name of the report/schedule.
 - **Total:** Displays the number of reporting elements linked to a schedule.
 - **No Errors:** Displays the number of reporting elements without errors.
 - **Variance Indicator Breach:** Displays the number of reporting elements linked to the breached Variance Indicators.
 - KI Breach: Displays the number of reporting elements linked to the breached Value-Based Key Indicators.

 Control Failure: Displays the number of reporting elements linked to failed controls.

Figure 107: Plan Analysis by Report



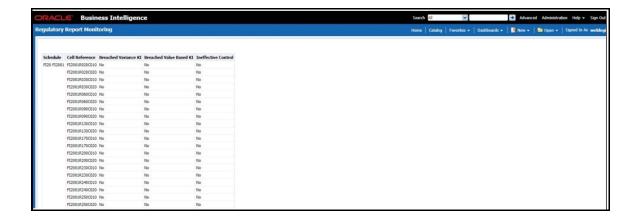
- **2.** Click **Total** associated with each schedule to display the Reporting Element drilldown Report. The following details appear:
 - Schedule: Displays the name of the schedule.
 - Cell Reference: Displays the reporting elements associated with the schedule.
 - Breached Variance KI: Displays if there are any Breached Variance KIs.
 - Breached Value-Based KI: Displays if there are any Breached Value-Based KIs.
 - Ineffective Control: Displays if there are any Ineffective Controls.

Figure 108: Regulatory Report Monitoring



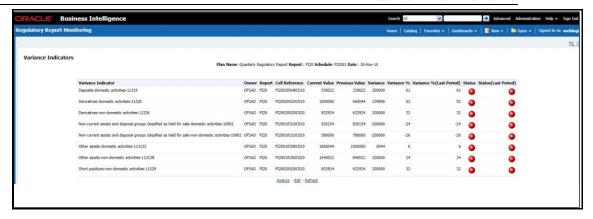
- **3.** Click **No Errors** associated with each schedule to display the Reporting Element drill-down Report. The following details appear:
 - Schedule: Displays the name of the schedule.
 - Cell Reference: Displays the reporting elements associated with the schedule.
 - Breached Variance KI: Displays if there are any Breached Variance KIs.
 - Breached Value-Based KI: Displays if there are any Breached Value-Based KIs.
 - Ineffective Control: Displays if there are any Ineffective Controls.

Figure 109: Regulatory Report Monitoring



- **4.** Click **Variance Indicator Breach** associated with each schedule to display the Variance Indicators and Issue Details Variance Based Indicators drill-down Report. The following details appear in Variance Based Indicators:
 - Plan Name
 - Report Name
 - Schedule
 - Date
 - Variance Indicator
 - Owner
 - Report
 - Cell Reference
 - Current Value
 - Previous Value
 - Variance
 - Variance %
 - Variance % (Last Period)
 - Status
 - Status (Last Period)

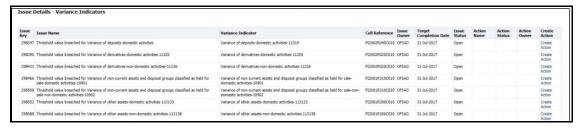
Figure 110: Variance Indicators



The following details appear in Issue Details-Variance Based Indicators:

- Issue Key
- Issue Name
- Variance Indicator
- Cell Reference
- Issue Owner
- Target Completion Date
- Issue Status
- Action Name
- Action Status
- Action Owner
- Create Action

Figure 111: Issue Details-Variance Based Indicators



- **5.** Click **KI Breach** associated with each schedule to display Value-Based Indicators and Issue Details Value-Based Indicators drill-down Report. The following details appear in Value-Based Indicators:
 - Plan Name
 - Report
 - Schedule
 - Date
 - Name
 - Owner

- Report
- Cell Reference
- Status
- Status (Last Period)

Figure 112: Value Based Indicators



The following details appear in Issue Details - Value-Based Indicators:

- Issue Name
- **Key Indicator**
- Cell Reference
- Issue Owner
- **Target Completion Date**
- Issue Status
- **Action Name**
- **Action Status**
- **Action Owner**
- Create Action

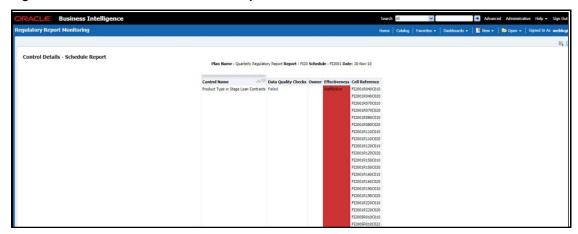
Figure 113: Value Based Indicators



- 6. Click Control Failure associated with each schedule to display Control details and Issue Details – Value-Based Indicators drill-down Report. The following details appear in Control Details:
 - Plan Name
 - Report
 - Schedule
 - Date
 - Control Name

- Data Quality Checks
- Owner
- Effectiveness
- Cell Reference

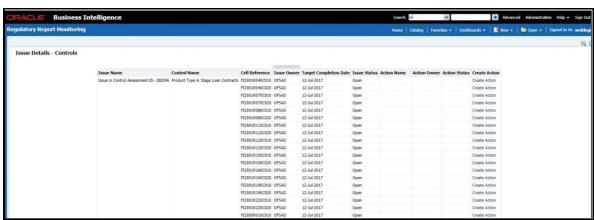
Figure 114: Control Details - Schedule Report



The following details appear in Issue Details - Controls:

- Issue Name
- Control Name
- Cell Reference
- Issue Owner
- Target Completion Date
- Issue Status
- Action Name
- Action Status
- Action Owner
- Create Action

Figure 115: Issue Details - Controls



- **7.** Click **Data Quality Checks** associated with each Control to display the following Data Quality Details:
 - ID
 - DQ Check
 - Type
 - Result
 - Entity
 - Attribute

Figure 116: Data Quality Checks



12.4.2 Create a New Issue

Click the **Create a New Issue** hyperlink to navigate to the OFSAA Create Issue page where the user can log a new issue.

Figure 117: Create a New Issue



12.4.3 Create Action

Click **Create Action** hyperlink to navigate to the OFSAA Create Action page where the user can create an action.

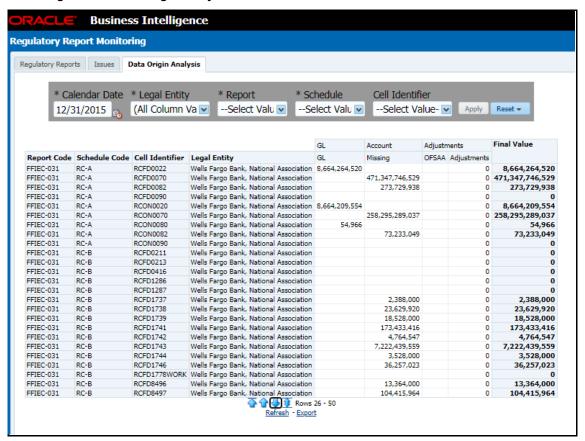
Figure 118: Create Action



12.4.4 Data Origin Analysis

This report enables users to validate the regulatory reporting of cell values by SOR Data.

Figure 119: Data Origin Analysis



12.5 Scenario Analysis Dashboard

This section contains two dashboard pages:

- Scenario Analysis Dashboard
- Details

12.5.1 Scenario Analysis Dashboard

The Scenario Analysis Dashboard provides data based on the following list of drop-downs:

- Legal Entity
- Date
- Click Apply to generate the reports.
- Click Reset to reset the values.

12.5.1.1 Scenario Analysis

In the **Choose a Line Item** drop-down box, select a line item and then click **Apply** to generate the report.

Click Reset to reset the values.

This grid displays the following data:

- Scenario
- Actual

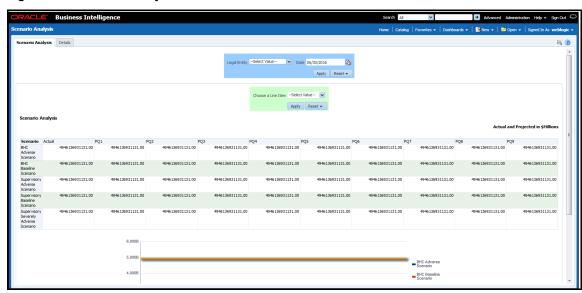
This report displays the actual and projected amount in millions (dollars) for each scenario in a tabular format for a selected line item.

The second grid displays the following data:

- BHC Adverse Scenario
- BHC Baseline Scenario

This report displays the same data in a line graph format.

Figure 120: Scenario Analysis



12.5.2 Details Dashboard

In the **Choose a Line Item** drop-down box, select a line item and then click **Apply** to generate the report.

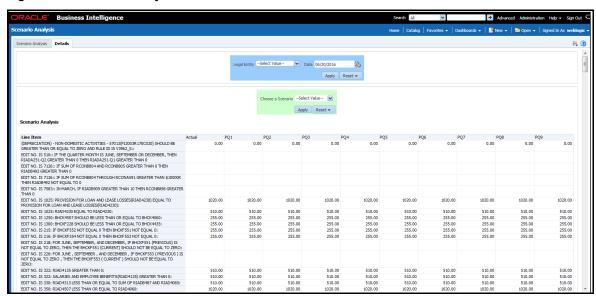
Click **Reset** to reset the values.

This grid displays the following data:

- Scenario
- Actual

This report shows the actual and projected amount in millions (dollars) for a scenario in a tabular format for a selected line item.

Figure 121: Scenario Analysis



12.6 Validation Checks Dashboard

This section contains two dashboard pages:

- Validation Checks Dashboard
- Cross Report Validation Dashboard

12.6.1 Validation Checks Dashboard

The Validation Checks Dashboard provides data based on selecting the values from the following list of drop-downs:

- Legal Entity
- Date
- Report
- Schedule

Click **Apply** to generate the reports.

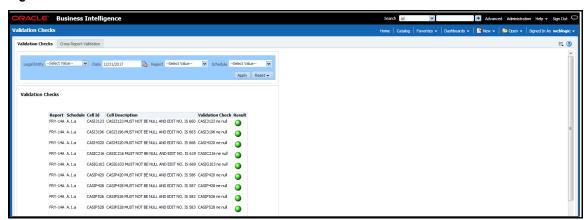
Click **Reset** to reset the values.

The generated report contains the following details:

- **Report:** Provides the value that you selected in the **Report** drop-down box.
- **Schedule:** Provides the value that you selected in the **Schedule** drop-down box.

- Cell Id: Provides the ID of the cell.
- **Cell Description:** Provides a description of the cell.
- Validation Check: Provides a validation check on the cell.
- Result: Provides the result of the validation, which can be either Pass or Failed.

Figure 122: Validation Checks



12.6.2 Cross Report Validation Dashboard

The Validation Checks Dashboard provides data based on selecting the values from the following list of drop-downs:

- Legal Entity
- Date
- Report 1
- Report 2

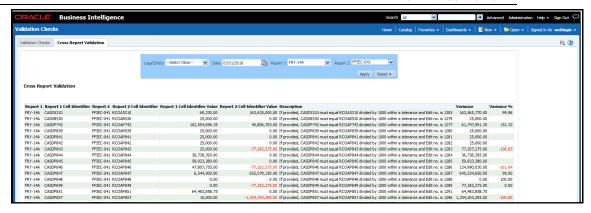
Click **Apply** to generate the reports.

Click **Reset** to reset the values.

The generated report contains the following details:

- **Report 1:** Provides the value that you selected in the **Report 1** drop-down box.
- Report 1 Cell Identifier: Provides the ID of the Report 1 cell.
- Report 2: Provides the value that you selected in the Report 2 drop-down box.
- Report 2 Cell Identifier: Provides the ID of the Report 1 cell.
- Report 1 Cell Identifier Value: Provides the identifier value of the Report 1 cell.
- **Report 2 Cell Identifier Value:** Provides the identifier value of the Report 2 cell.
- **Description:** Provides a description of the report
- Variance: Provides the value of the variance between the reports.
- Variance %: Provides the percentage value of the variance between the reports.

Figure 123: Cross Report Validation Dashboard



12.7 Variance Analysis Dashboard

Variance analysis the process of identifying the causes of variations in the MDRM values between current and prior periods. It helps understand why fluctuations happen and what can or must be done to reduce the adverse variance. This eventually helps in finalizing the report cell (MDRM) values.

Variance analysis helps users identify threshold breaches set at the Report/Cell level before generating the final numbers. Based on the breached cell values, you can decide the course of action by either rectifying it using Cell level adjustment or take no action. This enables you to confidently submit the final numbers to the regulators.

Prerequisites

- 1. The Indicator assessment must be performed before verifying the variance analysis dashboard. Execute the batch DGS_KI_BATCH for the date on which the data needs to be analyzed. Refer to the KI assessment section for more details.
- 2. Execute the account granularity batch ACCT_MAPPER_INSERT for generating Accounts, Accounts Writeoff, and Accounts Recovery. Account granularity currently supports FRY-11, FR-2314, FRY7N, FRY9LP. For more details on the parameter to be passed for generating the account level granularity, refer to the section Populating Data for Account Drill down Granularity (Variance Analysis dashboard).
- **3.** Execute the Account and Party granularity batch ACCT_MAPPER_INSERT for generating the account and party. The account and party granularity are for the report FDIC 370. For more details on the parameter to be passed for generating the account and party level granularity, refer to the section Populating Data for Account Drill down Granularity (Variance Analysis dashboard).

12.7.1 Populating Data for Account Drill down Granularity (Variance Analysis dashboard)

Perform the following steps for the Variance Analysis dashboard before verifying the dashboard. After selecting Financial Services Data Governance for the preferred jurisdiction, navigate to Applications.

NOTE

Note the following:

- Account granularity generation is only for the reports FRY-11, FR-2314, FRY7N, and, FRY9LP.
- Account and Party granularity generation are only for the report (FDIC 370).
- Variance analysis drill-down feature is not enabled for the cells which are count-based.
- 1. Navigate to Common Tasks > Operations > Batch Maintenance.
- 2. Select the required batch. See OFS Data Governance Run Chart for more details.

NOTE

- The batch ACCT_MAPPER_INSERT is used to load data from inter-mediatory tables of Account drill down with the matching Account number.
- The data must be available in the fct_gl_data for the Repline granularity. The data must be moved to the fct_gl_data by executing the T2T as a part of the FSDFF run.

Viewing the Variance Analysis Dashboard **12.7.2**

The Variance Analysis Dashboard provides data based on selecting the values from the following list of drop-downs:

- **Report**: Based on the KI configuration this drop-down is populated. Select a preconfigured report.
- **Schedule**: Based on the KI configuration this drop-down is populated. Select a schedule.
- **Cell Identifier:** Based on the KI configuration this drop-down is populated. Select a cell identifier.
- **Entity Name**: Select an entity name.
- *Current Date: Select a date on which the assessment has been done.
- Variance %: Select a variance %
- **Variance Amount Between**: Enter the Variance Amount range.
- **Breached**: Select 'Yes' or 'No' or both.

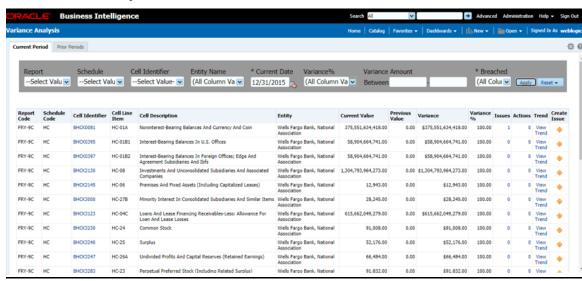
NOTE

Ensure you have configured the Key Indicators. Refer to the Configure a Key Indicator section.

- 1. Click **Apply** to generate the reports.
- 2. Click **Reset** to reset the values. The generated report contains the following details:
 - Report Code: Provides report code of the cell.
 - Schedule Code: Provides schedule code of the cell.
 - Cell Identifier: Provides the MDRM code of the cell.

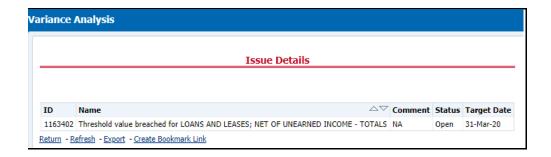
- Cell Line Item: Provides line item of the cell.
- **Cell Description:** Provides the description of the code.
- Entity: The entity for which the assessment was done.
- Current Value: Provides the current value of the assessment.
- **Previous Value:** Provides the previous value of the assessment.
- **Variance:** Provides the difference between the current and previous values.
- **Variance** %: Provides the percentage value of the variance.

Figure 124: Variance Analysis Dashboard



• **Issues:** Provides the count of issues against each cell. There is a drill-down that displays the details of the issues.

Figure 125: Variance Analysis - Issue Details



Actions: Provides the actions taken for each issue. The drill-down shows the
action count.

Figure 126: Variance Analysis - Issue Details



- Trend: Displays the graphical representation of the assessment across time.
 You can select between:
 - Trend for All Dates
 - Trend for Date Range

NOTE Trend graphs can be exported to PDF and Excel.

Figure 127: Trend

Create Issue: Create an issue from the dashboard itself against any cell
irrespective of whether it has been breached or not. This issue can be modified
on the <u>DG Issues</u> page. After you create an issue through this method, you can
view the number of created issues in the OBI dashboard.

NOTE

Before you create an issue, ensure that you have launched the DG application.

To create an issue through the Dashboards Page, perform the following steps:

- a. In the **Create Issue** column, click the icon.
- b. In the Issue Details page, enter values in the Name and Comments field.
- c. Click Save Draft.

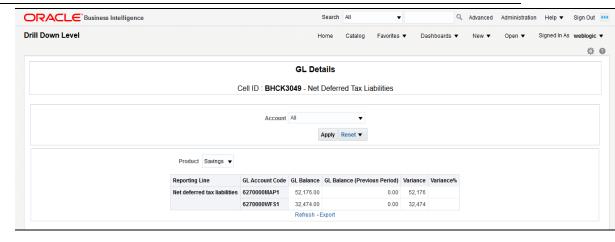
This drill-down is only available for FRY-9C, FFIEC-031, FFIEC-041, and FDIC370

d. In the **Cell** Identifier column, select the link.

You can view the following information:

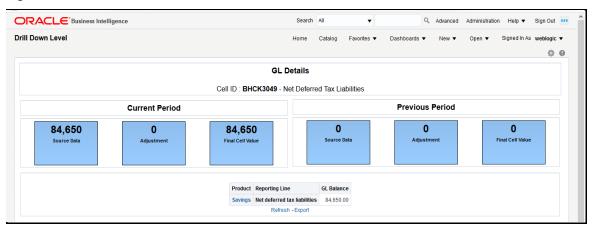
GL Details: Provides the GL account details along with the cell ID.

Figure 128: GL Details



 The current and previous period values for the source data, adjustment, and final cell value. The data in the final cell is a combination of the source and adjustment data.

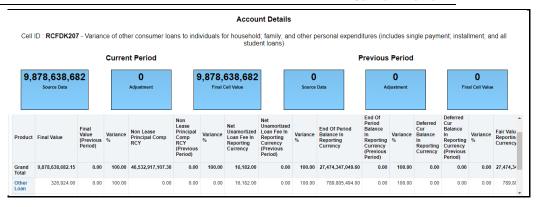
Figure 129: GL Details



NOTE Measure the value displayed at the product level is the variance amount.

The **Final Value** and **Final Value** (**Previous Period**) to the **Intermediate** and **Account** drill-down templates are displayed. The values from these cells tie back to the current and previous values in the tile. The column totals defined at each level ties back to the previous level.

Figure 130: Account Details



12.7.2.1 Dimensions Supported in Variance Analysis drill-down

The following dimensions are supported in the variance analysis drill-down:

- Account Name
- Account Country Name
- Currency Name
- Data Source
- Issuer Name
- Entity Name
- Line of Business
- Organization Unit Name
- Party Name
- Product
- Product Type
- Region Description
- Regulatory Instrument Classification
- Regulatory Party Name
- Regulatory Product Classification

12.8 Data Schedule Dashboard

The data schedule dashboard includes all student loan details as defined in the FR Y-9C, Schedule HC-C, lines. This covers the student's loan for the segments which includes educational qualification and age. The A 10 reports are part of this dashboard. This dashboard provides the following three options:

- Data Schedule Report
- Trend Analysis
- Edit Check Analysis

For more information, see Data Schedule Dashboard in OBIEE to view the A 10 reports.

12.9 Integrating Agile Reporter with Data Governance Variance Analysis Dashboard

Agile Reporter can be integrated with Data Governance Variance Analysis reports from the Agile Reporter - Dashboard and Analysis Agile Reporter - Module Integration features.

12.9.1 Launching Data Governance Variance Analysis Dashboard with Agile Reporter

To launch the Data Governance Variance Analysis Dashboard with Agile Reporter, follow these steps:

- 1. Log in to Agile Reporter with valid credentials.
- **2.** Click the **Dashboard** tab and then click the retrieved report link.
- 3. Under Pages, select any schedule.



- 4. Click the cell value and then click **OFSAA Current Analysis**
- **5.** This opens the Variance Analysis Summary Agile Reporter window with the details of the selected cell.
- **6.** For more information on how to configure this, see the **Integrating Agile Reporter** with **Data Governance Variance Analysis** section in the <u>Oracle Financial Services</u> Data Management Installation Manual.

12.9.2 Launching Data Governance Variance Analysis from Agile Reporter Analysis

To launch Data Governance Variance Analysis from Agile Reporter Analysis, follow these steps:

- 1. Log in to **Agile Reporter** with valid credentials.
- 2. Under Select Return, enter the required details and then click **Create**.
- 3. Under Cell Reference, click Name and then click OFSAA Variance Analysis.
- **4.** This opens the Variance Analysis Summary Agile Reporter window with the details of the selected cell.
- **5.** For more information on how to configure this, see the Integrating Agile Reporter with Data Governance Variance Analysis section in the <u>Oracle Financial Services</u> <u>Data Management Installation Manual</u>.

13 Metadata Report

The Metadata Report 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 sheets. 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.

13.1 Prerequisites

The following executions must be performed before using the Metadata Report 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
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_REPORT_LINEAGE_DETL
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

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:

Data Elements Wrapper Execution for Data Flow and Reports 13.1.1 <INFODOM>_POP_DATA_ELEMENTS_USFED

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

- b. 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 20: Task1 (METADATA PARSER)

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

Table 21: 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 infodom="" of="" the="" where<br="">US FED is installed>. For example: 'FSDFINFO'</value> |

- **5. Full METADATA Parsing [Default Mode]** (if the P_FULL_PARSE parameter is 'Y', then the parsing happens for the entire METADATA and Run Elements for the Run(s) enabled in FSI_DE_POP_RUN_LIST table in the Atomic Schema).
- 6. 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 Maintainance screen as follows:

- a. Log in to Oracle Financial Services Analytical Applications interface with your credentials.
- b. Navigate to Applications → Financial Services Data Foundation →
 Operations → 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:

7. **US FED Jurisidciton 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).

| NOTE | Even if | the | P_JU | RISDICTION | N parar | neter | in |
|------|---------------------|----------|---------|---------------|-------------|-------|--------|
| | <infodom></infodom> | _POP_DAT | A_ELEN | MENTS_USF | ED Batch is | loade | d, the |
| | Dashboards | which | get | parsed | depend | on | the |
| | FSI_DE_POP_ | REPORT_L | IST tab | le in the Ato | omic Schem | ıa. | |

8. 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 as follows:

- a. Log in to Oracle Financial Services Analytical Applications interface with your credentials.
- b. Navigate to Applications → Financial Services Data Foundation → Operations → 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.

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

Enabling Run for METADATA Parsing

Every execution for METADATA Parsing requires a minimum of one Run to be enabled in the FSI_DE_POP_RUN_LIST table in the Atomic Schema. By default, RGRNUSFED is enabled.

Table 22: Enabling Run for METADATA Parsing

| RUN NAME | INCLUDE RUN |
|-----------|-------------|
| RGRNUSFED | Υ |

Excluding Irrelevant Data Flows from Lineage Reports

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

Enabling Reports for REPORT Parsing

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

Table 23: Dashboard ID Details

| DASHBOARD ID | JURISDICTION CODE | REPORT CODE | INCLUDE REPORT |
|--------------|-------------------|-------------|----------------|
| 1 | USFED | FRY-9C | Υ |
| 2 | USFED | FRY-9LP | Υ |
| 3 | USFED | FRY-11 | Υ |
| 4 | USFED | FRY-11s | Υ |
| 5 | USFED | FR-2314 | Υ |
| 6 | USFED | FR-2314s | Υ |
| 7 | USFED | FFIEC-031 | Υ |
| 8 | USFED | FFIEC-041 | Υ |
| 9 | USFED | FRY-7N | Υ |
| 10 | USFED | FRY-7NS | Υ |

By Default All Dashboards are enabled and if you wish to parse particular Dashboards, modify the FSI_DE_POP_REPORT_LIST table in the Atomic Schema by enabling/disabling the "Include Report Column".

Executing SELECTED tasks of <INFODOM>_POP_DATA_ELEMENTS_USFED Batch

By Default, the <INFODOM>_POP_DATA_ELEMENTS_USFED Batch contains both the tasks, that is, METADATA Parsing and REPORT Parsing. You can use the platform feature of the EXCLUDE / INCLUDE Batch Task for the Optional execution of required tasks.

13.1.1.1 Data Elements Wrapper Exeuction for Data Flow www.elements.pdf www.elements.pdf<

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

a. Parameters used in **<INFODOM>_POP_DATA_ELEMENTS_DGS** Batch

The default parameters used in the **<INFODOM>_POP_DATA_ELEMENTS_ DGS** batch are:

Table 24: Task1 (METADATA PARSER)

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

Execution Types for METADATA Parsing in <INFODOM>_POP_DATA_ELEMENTS_DGS Batch

- 1. **Full METADATA Parsing [Default Mode]** (if the P_FULL_PARSE parameter is 'Y', then the parsing happens for the entire METADATA and Run Elements for the Run(s) enabled in FSI_DE_POP_RUN_LIST table in the Atomic Schema).
- 2. Incremental METADATA Parsing [Optional Mode. Batch Parameter to Be Modified] (if the P_FULL_PARSE parameter is 'N', then the parsing happens for

changed METADATA and Run Elements for the Run(s) enabled in FSI_DE_POP_RUN_LIST table in the Atomic Schema).

You can edit the parameters by accessing the Batch Maintainance screen as follows:

- a. Log in to Oracle Financial Services Analytical Applications interface with your credentials.
- b. Navigate to Applications → Data Governance → Operations → Batch Maintenance
- c. Select Batch Name (<INFODOM>_POP_DATA_ELEMENTS_DGS)
- 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.

13.1.2 Verifying Logs

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

Table 25: FSI_MESSAGE_LOGS table

| Tasks | Batch Run ID | Indication |
|-----------------------------|--|--|
| Task1 (METADATA Parsing) | REGISTER_ELEMENTS_ <batch_r un_id=""></batch_r> | Processes Metadata Parsing. The message "Completed REISTER_ELEMENTS" indicates that the Metadata parsing is completed with Registration. |
| Task2 (REPORT Parsing) | REPORT_TO_ELEMENTS_ <batch_run_id></batch_run_id> | Processes Report Parsing. The message "Completed REPORT_TO_ELEMENTS" indicates that all the Report parsing is completed. |

13.1.3 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
- FSI_DE_REPORT_LINEAGE_DETL

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
/
```

13.2 User Access

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

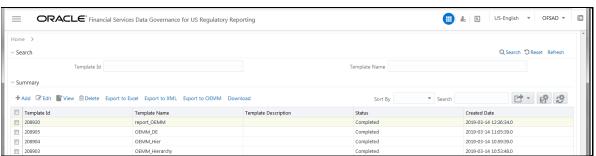
- a. MDR View Group: To see Metadata Report Extract with View permissions.
- b. MDR Owner Group: To create templates in Metadata Report Extract.

13.3 Create and Export Metadata Report Templates for XML and Excel

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

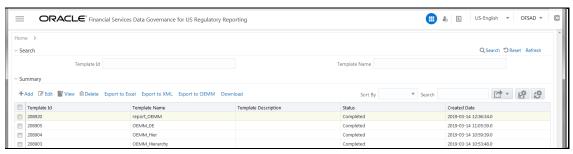
1. Navigate to Common Tasks → Metadata Report.

Figure 131: Metadata Report



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

Figure 132: Metadata Report



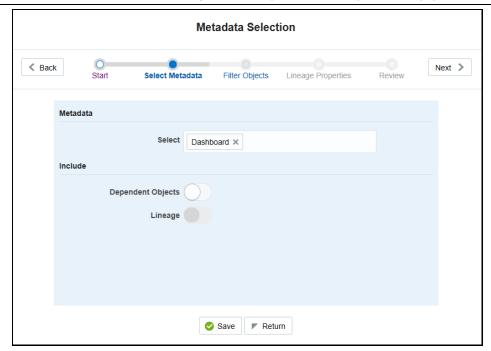
3. Provide the Name and Description for the new template on the Template Definition page.

Figure 133: Metadata Selection



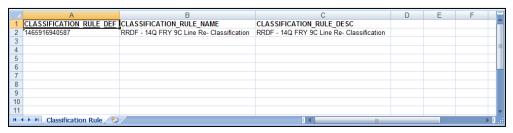
- **4.** Select the desired object from the Object Type drop-down to be exported.
- The individual report generates only the basic properties of the object selected, that is, name and description. The relational report generates detailed information up to the Entities level if Dependencies is chosen,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

Figure 134: Metadata Selection



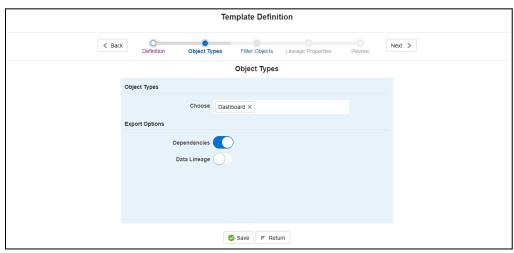
9. The exported sample report for Individual is as follows:

Figure 135: Exported Sample Report



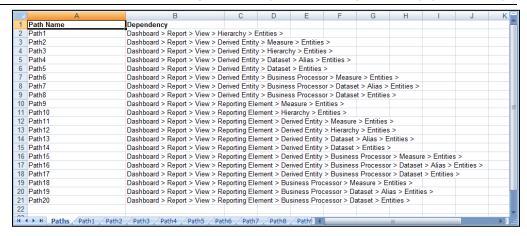
10. For Relational Report: In the Export Options, select Dependencies.

Figure 136: Template Definition



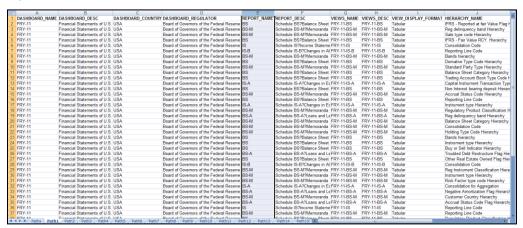
11. The exported sample report for Relational is as follows:

Figure 137: Exported Sample Report



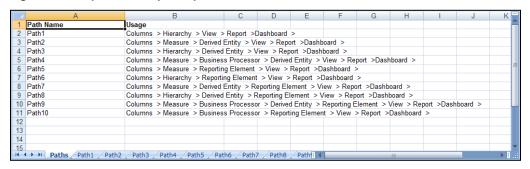
- **12.** The first sheet shows the different Paths and their Dependencies up to the Entities level. Select the required Path sheet at the bottom to view the dependencies.
 - Each path tells how the dependency/usage is derived from dashboard to entity or vice versa involving various OFSAA object types like Derived Entity, Hierarchies, Datasets, Measures, and so on.
- **13.** These paths are generated by the system using data already published in MDB dependency tables as part of the OFSAA MDB object publish.
- **14.** For every dependent object type displayed in each path sheet, the following columns appear:
 - Object type name
 - Object type description
 - One of many Object-specific properties (optional)
- 15. 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. It continues followed by Hierarchy Objects name, description, and properties up to the Entities level.

Figure 138: Exported Sample Report



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

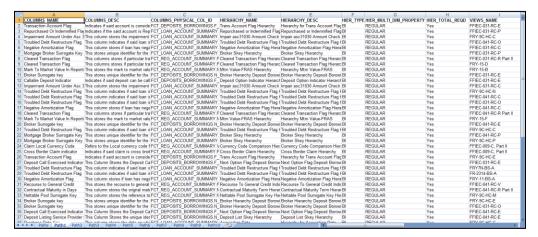
Figure 139: Exported Sample Report



NOTE

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

Figure 140: Exported Sample Report

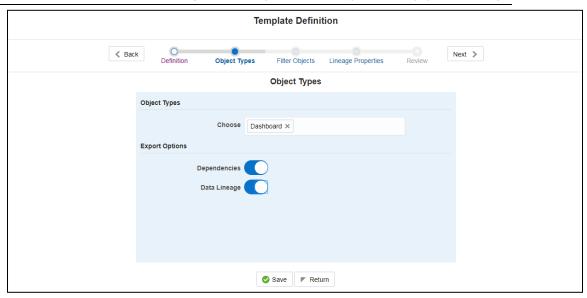


17. Select Data Lineage in Template Definition → Choose Object Type to export the lineage details up to the Staging Columns level.

NOTE

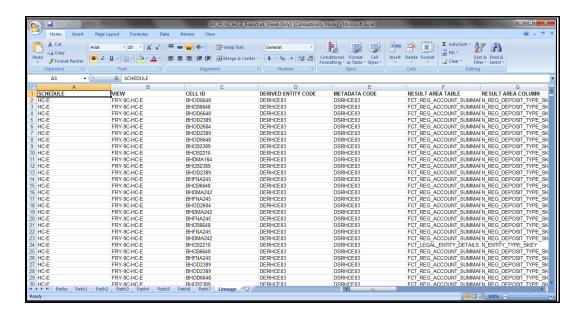
Data Lineage can be selected only if you have opted for the Dependencies feature. The minimum memory settings to run lineage reports must be export JAVA_OPTS="-Xms1024m - Xmx8192m".

Figure 141: Template Definition



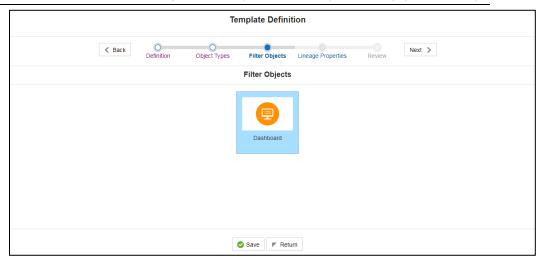
18. Data Lineage is generated as a separate sheet in the generated Relational report along with the Dependencies. Select the Lineage sheet to view the Data Lineage (up to Staging column level).

Figure 142: Exported Sample Report



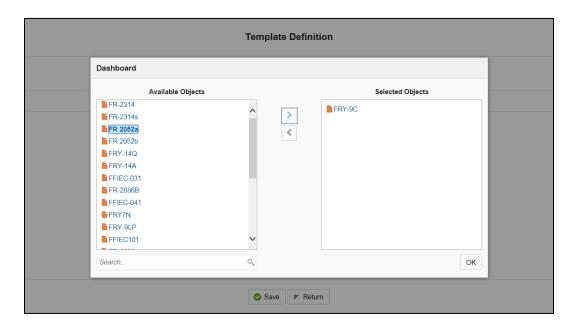
19. Select Filter Objects to see the selected objects.

Figure 143: Template Definition



20. 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 144: Dashboard

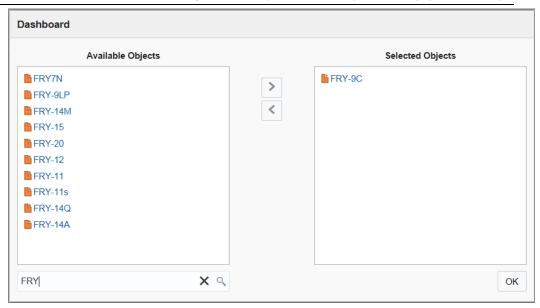


21. When the object list is huge, use the Search option as shown above. Type first three letters of the Filter Object name and the relevant Filter Objects appear.

NOTE

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

Figure 145: Dashboard



- **22.** Select the Lineage Properties required to be generated.
- **23.** The following Lineage Properties (columns) are available in the Metadata Report Screen.

Table 26: 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 either direct Metadata (Metadata Sub Code will be the same Metadata Code) or derived Metadata Code like Datasets/Expressions. |

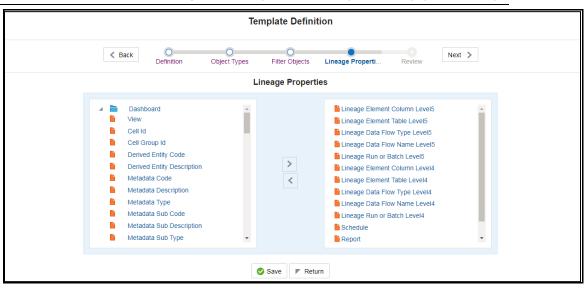
| Sl. No. | Lineage Property | Property Description |
|---------|----------------------------------|--|
| 13 | Metadata Sub Description | Stores the Metadata Sub Description of the Lineage Report generated for the given Cell ID, Cell Group ID, Derived Entity, and Metadata Code. Metadata Sub Code represents either direct Metadata (Metadata Sub Code will be 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 either direct Metadata (Metadata Sub Code will be 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 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. |

| Sl. No. | Lineage Property | Property Description |
|---------|----------------------------------|---|
| 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. |
| 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. |

| Sl. No. | Lineage Property | Property Description |
|---------|----------------------------------|---|
| 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. |
| 50 | Lineage Data Flow Name Level6 | Stores the Leveló Data Flow Name of Lineage Report generated for populating the Level5 Source Table and Column. |
| 51 | Lineage Data Flow Type Level6 | Stores the Leveló Data Flow Type of Lineage Report generated for populating the Level5 Source Table and Column. |
| 52 | Lineage Element Table Level6 | Stores the Leveló Source Table of Lineage Report generated for populating the Level5 Source Table and Column. |
| 53 | Lineage Element Column Level6 | Stores the Leveló 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. |

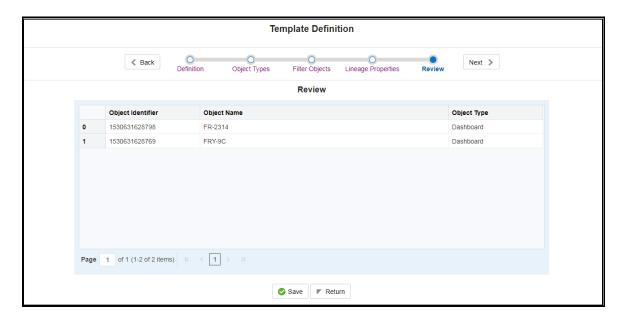
| Sl. No. | Lineage Property | Property Description |
|---------|-----------------------------------|--|
| 67 | Lineage Element Table Level9 | Stores the Level9 Source Table of Lineage Report generated for populating the Level8 Source Table and Column. |
| 68 | Lineage Element Column Level9 | Stores 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. |
| 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 for 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 for 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 for 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 for Target Metadata Member Code in Results Area. This is the derived representation of the Target Metadata Member Code in the Results Area. |

Figure 146: Template Definition



24. Review the Template Definition and click Save.

Figure 147: Template Definition



- **25.** Click Return to go to the Summary page.
- **26.** 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.

NOTE MDB Publish must be triggered before executing the Export to Excel option.

- **27.** 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.
- 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.
- c. 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
- For XML Export:
 - Not Started
 - Check the Metadata Export folder in the server

NOTE This is to distinguish the XML extract from the Excel export. XML cannot be downloaded from the UI.

- **28.** 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.
- User Access

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

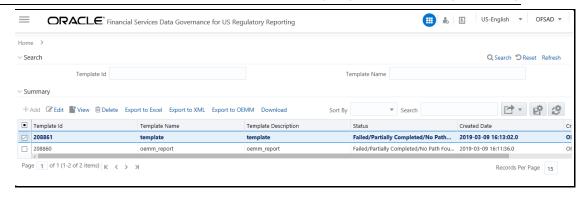
- a. MDR View Group: To see Metadata Report Extract with View permissions.
- b. MDR Owner Group: To create templates in Metadata Report Extract.

13.4 View Metadata Report Templates

Perform the following steps to view the Metadata Report Templates:

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

Figure 148: Metadata Report



NOTE

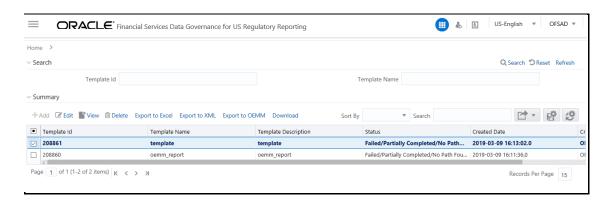
The Metadata Report Templates excel report is opened in view-only mode.

13.5 Modify or Edit Metadata Report Templates

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

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

Figure 149: Metadata Report



13.6 Delete Metadata Report Templates

Perform the following steps to delete the Metadata Report Templates:

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

Figure 150: Metadata Report

DELETE METADATA REPORT TEMPLATES



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- Are the examples correct? Do you need more examples?
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