

# Qlik Documentation

## Scope

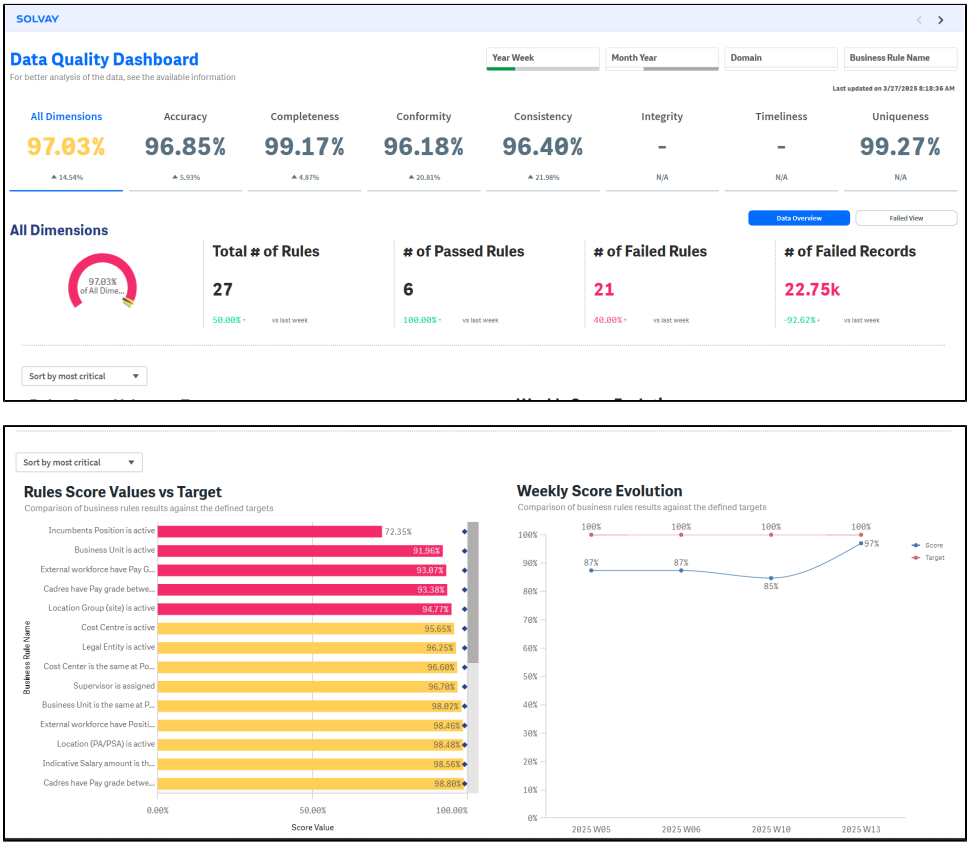
Data displayed starting December 2024, and updated with a weekly reload frequency

## Reload Frequency

Reload frequency is weekly, on Monday.

## Screens

### 1. Data Overview Screen:



On top of the screen the title and the filters for Year Week, Month Year, Domain and Business Rule Name are placed, followed by a timestamp for the last update. Followed by information on different KPIs presented using a top-down approach explain in the KPIs section.

### 2. Failed View Screen:

| All Failed Rules Details (21 results)                                     |            |           |                |                                 |                                                                                                                                           |                  |                   |                    |  |
|---------------------------------------------------------------------------|------------|-----------|----------------|---------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|------------------|-------------------|--------------------|--|
| Further details regarding the rules within the selected Quality Dimension |            |           |                |                                 |                                                                                                                                           |                  |                   |                    |  |
| Domain                                                                    | Month Year | Year Week | Dimens... Name | Business Rule Name              | Functional Description                                                                                                                    | Source System(s) | Failed Table(s)   | Failed Column      |  |
| Human Resources                                                           | Mar-2025   | 2025 W13  | Consistency    | Incumbents Position is active   | The status of the object "Position" to which an active employee is allocated is active                                                    | successfactors   | V_PositionJobInfo | PositionStatus     |  |
| Human Resources                                                           | Mar-2025   | 2025 W13  | Conformity     | Business Unit is active         | The status of the object "Business Unit" to which an active (Employee Status is Active or Active leave ) employee is allocated is active. | successfactors   | V_EmpBusiness     | BusinessUnitStatus |  |
| Human Resources                                                           | Mar-2025   | 2025 W13  | Conformity     | Location Group (site) is active | The status of the object "Location Group" to which an active employee is allocated is active                                              | successfactors   | V_EmpJob_Loc...   | Status             |  |

| All Failed Rules Details (21 results)                                     |                   |                    |                          |                     |                 |              |             |                                                                                                                                                       |  |
|---------------------------------------------------------------------------|-------------------|--------------------|--------------------------|---------------------|-----------------|--------------|-------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Further details regarding the rules within the selected Quality Dimension |                   |                    |                          |                     |                 |              |             |                                                                                                                                                       |  |
| n(s)                                                                      | Failed Table(s)   | Failed Column      | Number of Failed Records | Percentage of Error | Orange Baseline | Score Target | Rule Weight | URL to the Failed Records                                                                                                                             |  |
| ssfactors                                                                 | V_PositionJobInfo | PositionStatus     | 9,780                    | 27.65%              | 95.00%          | 100.00%      | 15          | <a href="https://drive.google.com/file/d/1fMPkiK0...usp=drivesdk">https://drive.google.com/file/d/1fMPkiK0...usp=drivesdk</a>                         |  |
| ssfactors                                                                 | V_EmpBusiness     | BusinessUnitStatus | 2,750                    | 8.04%               | 95.00%          | 100.00%      | 15          | <a href="https://drive.google.com/file/d/1TVTBHG...JX937VY/view?usp=drivesdk">https://drive.google.com/file/d/1TVTBHG...JX937VY/view?usp=drivesdk</a> |  |
| ssfactors                                                                 | V_EmpJob_Loc...   | Status             | 1,868                    | 5.23%               | 95.00%          | 100.00%      | 15          | <a href="https://drive.google.com/file/d/10lOHIZhx...usp=drivesdk">https://drive.google.com/file/d/10lOHIZhx...usp=drivesdk</a>                       |  |

Users can navigate to the second screen for failed data by clicking on the Failed View action button. The failed view displays a table with all the failed rules along with their information such as the date, business rule name, DQ dimensions, Source System, Failed Table(s), Failed Column(s), Number of Failed Records, % of Error, Orange Baseline, Score Target, Rule Weight and Query to Failed Records with a link to navigate to failed data in a Google sheet.

## Filters

The following filters can be applied on the dashboard to display data as per the user selection"

1. Year Week
2. Month Year
3. Domain
4. Business Rule Name

## KPIs

As mentioned, the Data Overview screen has a top down approach in presenting the information. The top section displays information on high-level KPIs for 7 industry standard data quality dimensions and the overall performance.

Then the following section has gauge chart that illustrates the overall score visually, segmented into the contributing metrics. The section also presents key statistics with comparisons to previous months such as the # of rules in all domains, # of Passed rules, # of failed rules, and # of failed records.

Finally, scrolling down to the bottom in the same screen displays detailed information on rule level for score values vs. targets, as well as, the score over month evolution. All DQ rules displayed on the dashboard were specified by the data stewards of every domain.

Color Cues are as follows:

- Red: indicates a problematic or critically falling areas.
- Orange: areas needing improvements
- Green: Passing Rules.

# Sections and Data Model

## 1. Main section:

Sections

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Main

Section access

Data Model

Exit

```
1  SET ThousandSep=',';
2  SET DecimalSep='.';
3  SET MoneyThousandSep=',';
4  SET MoneyDecimalSep='.';
5  SET MoneyFormat='$#,##0.00;-$$#,##0.00';
6  SET TimeFormat='h:mm:ss TT';
7  SET DateFormat='M/D/YYYY';
8  SET TimestampFormat='M/D/YYYY h:mm:ss[.fff] TT';
9  SET FirstWeekDay=6;
10 SET BrokenWeeks=1;
11 SET ReferenceDay=0;
12 SET FirstMonthOfYear=1;
13 SET CollationLocale='en-US';
14 SET CreateSearchIndexOnReload=1;
15 SET MonthNames='Jan;Feb;Mar;Apr;May;Jun;Jul;Aug;Sep;Oct;Nov;Dec';
16 SET LongMonthNames='January;February;March;April;May;June;July;August;September;October;November;December';
17 SET DayNames='Mon;Tue;Wed;Thu;Fri;Sat;Sun';
18 SET LongDayNames='Monday;Tuesday;Wednesday;Thursday;Friday;Saturday;Sunday';
19 SET NumericalAbbreviation='3:k;6:M;9:G;12:T;15:P;18:E;21:Z;24:Y;-3:m;-6:μ;-9:n;-12:p;-15:f;-18:a;-21:z;-24:y';
20
21 set env = 'DEV';
22
23 if env = 'DEV' then
24     SET googleConnection = 'prj-data-dq-selfservice-dev';
25 ElseIf env = 'TST' then
26     SET googleConnection = 'prj-data-dq-selfservice-test';
27 ElseIf env = 'PRD' then
28     SET googleConnection = 'prj-data-dq-selfservice-prod';
29 Else
30     SET googleConnection = 'prj-data-dq-selfservice-prod';
31 EndIf;
32
33 map1:
34 mapping
35 LOAD * Inline [
36 Domain_old, Domain_new
37 SUPPLY CHAIN MARKETING & SALES, MARKETING & SALES
38 Supply Chain Marketing & Sales, MARKETING & SALES
39 SUPPLY CHAIN MARKETING & SALES / PURCHASING SERVICE LINE, MARKETING & SALES
40 MATERIALS & STRUCTURE, STRUCTURES & SHARED
41 Materials and Structure, STRUCTURES & SHARED
42 ] ;
```

## 2 Section access :

## Sections



Main

Section access



Data Model

Exit

```
1  AUTHORIZATION:
2  Load
3  *,
4  SECU_LOG as MASTER_DATA_DOMAIN_MAJ;
5  Load
6  *,
7  ApplyMap('map1',SECU_LOG_aux) as SECU_LOG
8  ;
9  LOAD Upper(ACCESS) AS ACCESS_LOG,
10         Upper(USERID) AS USERID_LOG,
11         if(FC_FUNCTION='ALL',Trim(SubField((
12         'FINANCE;
13         HUMAN RESOURCES;
14         INDUSTRIAL AND R&I;
15         MATERIALS & STRUCTURE;
16         SUPPLY CHAIN MARKETING & SALES;
17         PURCHASING SERVICE LINE;
18         SUPPLY CHAIN MARKETING & SALES / PURCHASING SERVICE LINE'
19         ),',')) , Trim(SubField(FC_FUNCTION,',')) ) AS SECU_LOG_aux
20 FROM [lib://Shared Sense/Solvay Data\Security\SECURITY_PROD.QVD](qvd)
21 Where (match(APP,'ALL') and Upper(ACCESS)='ADMIN' ) or (match(APP,'DATA_CUSTODIAN'));
22
23 Section Access;
24
25
26 SECURITY:
27 Load ACCESS_LOG      AS ACCESS,
28         USERID_LOG    AS USERID,
29         SECU_LOG       AS MASTER_DATA_DOMAIN_MAJ
30 Resident AUTHORIZATION;
31
32 Section Application;
33
```

### 3. Data Model

Sections

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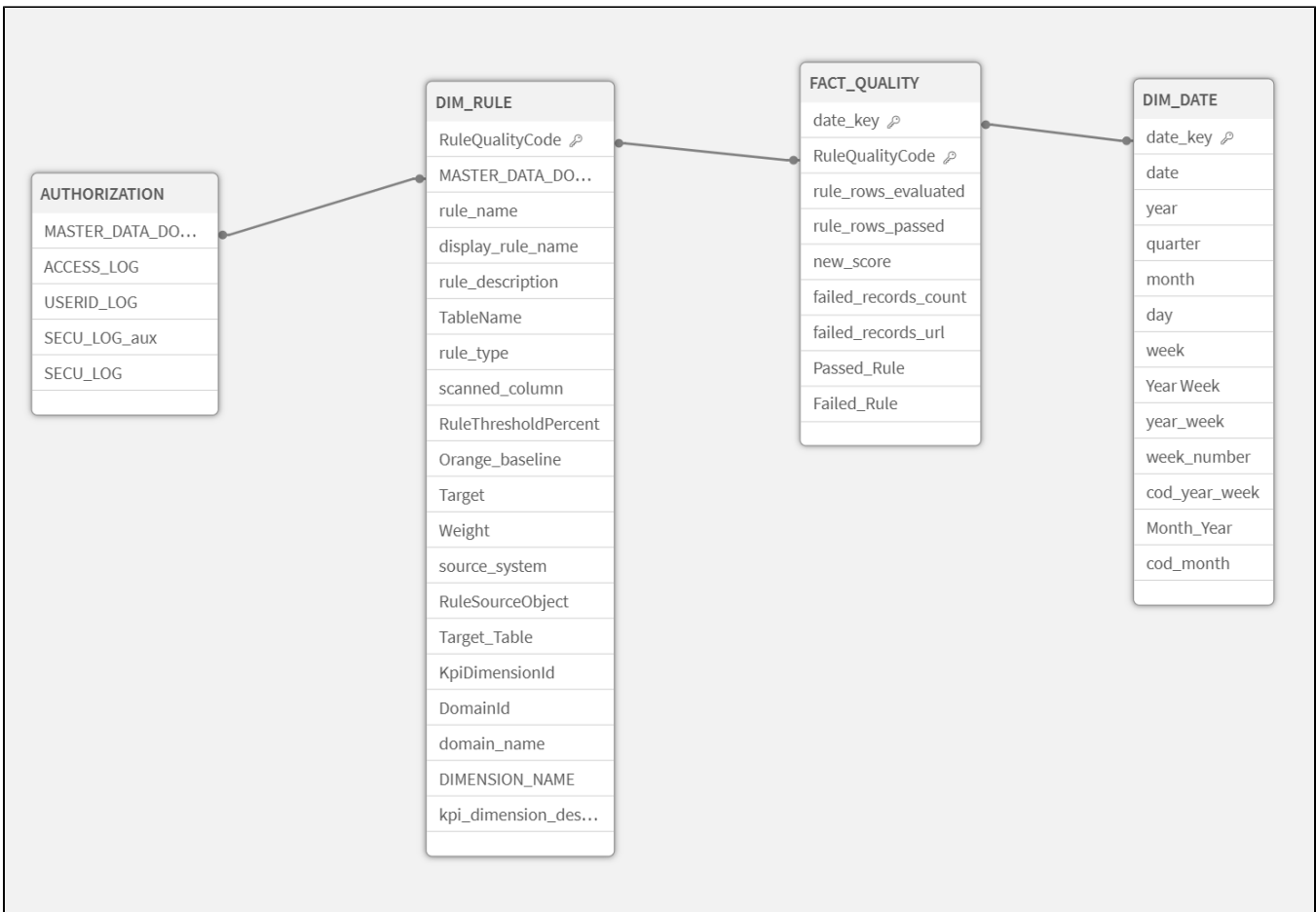
Main

Section access

Data Model

Exit

```
1 LIB CONNECT TO 'Google BigQuery';
2
3 DIM_RULE:
4 LOAD RuleQualityCode,
5     RuleName as rule_name,
6     RuleName as display_rule_name,
7     RuleDescription as rule_description,
8     TableName,
9     RuleType as rule_type,
10    RuleColumn as scanned_column,
11    RuleThresholdPercent,
12    RuleScoreBasis as Orange_baseline,
13    RuleScoreTarget as Target,
14    RuleWeight as Weight,
15    RuleSourceSystem as source_system,
16    RuleSourceObject,
17    RuleSourceObject as Target_Table,
18    KpiDimensionId,
19    DomainId,
20    DomainName as domain_name,
21    upper(DomainName) as MASTER_DATA_DOMAIN_MAJ,
22    kpi_dimension_name as DIMENSION_NAME,
23    kpi_dimension_description;
24 SQL SELECT RuleQualityCode,
25     RuleName,
26     RuleDescription,
27     TableName,
28     RuleType,
29     RuleColumn,
30     RuleThresholdPercent,
31     RuleScoreBasis,
32     RuleScoreTarget,
33     RuleWeight,
34     RuleSourceSystem,
35     RuleSourceObject,
36     KpiDimensionId,
37     DomainId,
38     DomainName,
39     kpi_dimension_name,
40     kpi_dimension_description
41 FROM $(googleConnection).DPL.V_RULE_QUALITY
42 ;
43
```



## Transformations done inside Qlik

No Major transformations done inside Qlik.

## User security enforced in Qlik

Access controls are enforced to ensure users of every domain can only see their relevant rules.