RESELLER DW INTEGRATION

By

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Contents

System Of Records

- RETAIL_SOR_AS (Oracle) – 19 tables
- RETAIL_SOR_NA (MySQL) – 19 tables
- RETAIL_SOR_EU (SqlServer) – 19 tables
- RETAIL_SOR_CAT (Postgres) – 12 tables
- RETAIL_SOR_PLAN (MySQL) – 2 tables
- CSVs, Excel Sheets (Tab delaminated, comma delaminated) – 25

SOR System

SOR

Target Datawarehouse

- **RETAIL_DW (Oracle)**
- 30 Tables
- 19 Dimensions
- 11 Facts
- Four Channels (Online, Store, Catalog, Resellers)
- Three Scenarios (Forecast, Budget, Actuals)
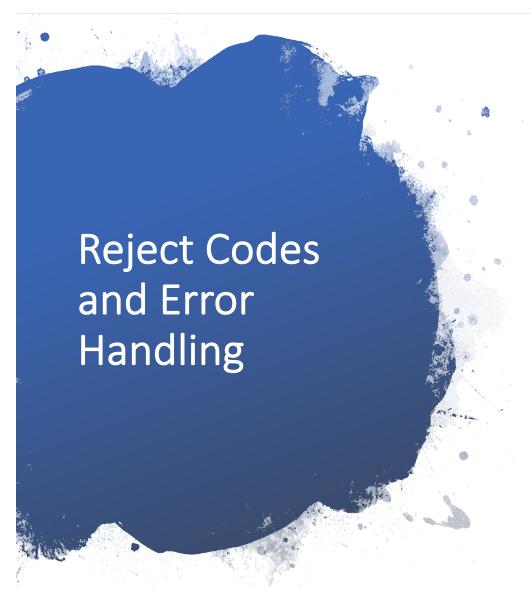
Observations in SOR

- Different unique key for product's table across all SORs e.g. ProductID, BrandID, ProductLabel

- Length of the values were different across SORs

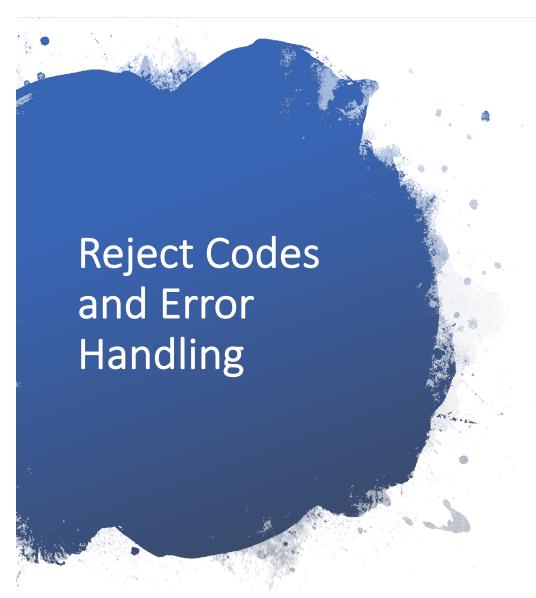- Data type for dates in the CSV and TXT files are not constant.

Data Profiling

- Changed the SOR Load and Update dates from TIMESTAMP to DATE for Oracle and PostgreSQL to load SOR_LOADDATE

- Converted data type values for DATES to DATE data type across all the CSVs and Text input files

- For SCDs DimProductPrice and DimProductCost we had to use SOR dimproduct (MySQL) as a bridge between input file price_cny_step_1_of_4 and DIMPRODUCT

- Converted all the possible columns in the target metadata from Big Decimal to INT

- Data Type csv contains all the column's data type which we kept constant across all the SORs and Target table depending upon the size of data

- Had to append zeros and trimmed values in the for joining product tables

Data type conversion
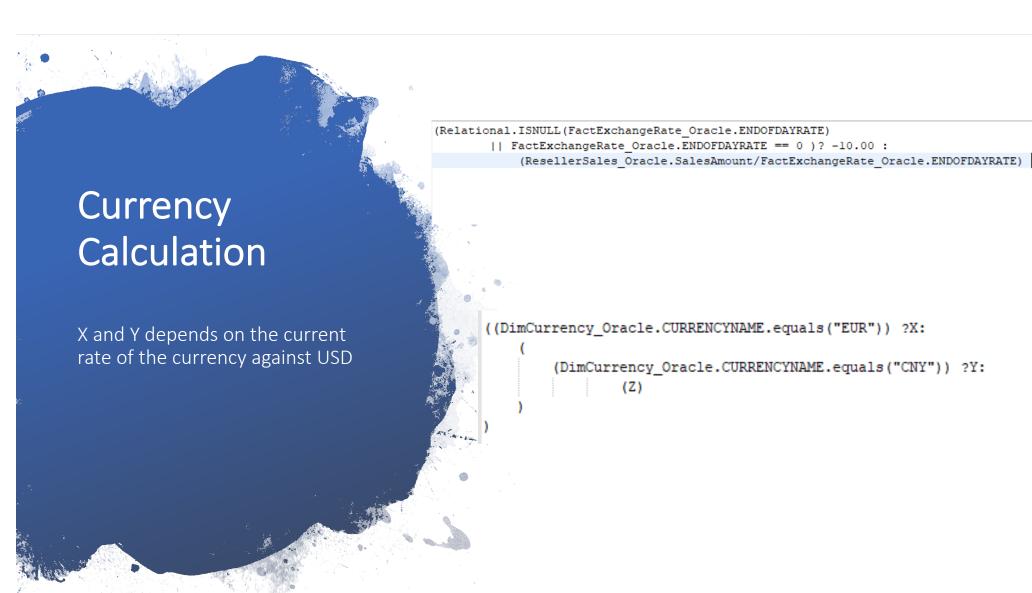
Reject Codes and Error Handling

- Reject Codes are used to catch bad data, missing values or invalid data present in the facts rejects

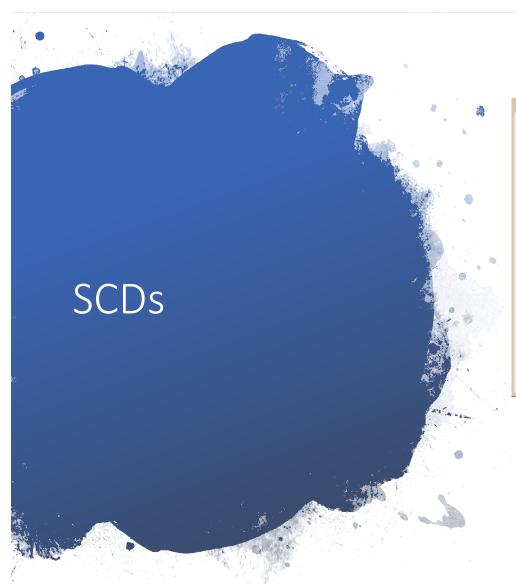- Reject Reasons help you understand the bad data in detail

Reject Codes

Reject Codes and Error Handling

- Handled null values using Relation.ISNULL function and applied code 99 if nulls are found
- Refer Error handling document for more details

Error Handling

Currency Calculation

X and Y depends on the current rate of the currency against USD

```
(Relational.ISNULL(FactExchangeRate_Oracle.ENDOFDAYRATE)
    || FactExchangeRate_Oracle.ENDOFDAYRATE == 0 )? -10.00 :
        (ResellerSales_Oracle.SalesAmount/FactExchangeRate_Oracle.ENDOFDAYRATE) |
```

```
((DimCurrency_Oracle.CURRENCYNAME.equals("EUR")) ?X:
    (
        (DimCurrency_Oracle.CURRENCYNAME.equals("CNY")) ?Y:
            (Z)
    )
)
```
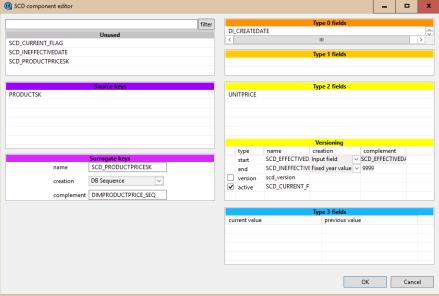
SCDs

- SCDs stands for Slowly Changing Dimensions

- SCDs are used in the data integration to track changing values of unit cost and unit price

- SCD TYPE 2 is implemented to integrate the tables DIMPRODUCTPRICE and DIMPRODUCTCOST

SCDs

Refer Scd Example document for more details

SCD Example