

# RESELLER DW INTEGRATION

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# 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

A large, abstract blue watercolor splash graphic on the left side of the slide, with the text 'Target Datawarehouse' overlaid in white.

# 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

SCD component editor

filter

**Unused**

SCD\_CURRENT\_FLAG  
SCD\_INEFFECTIVEDATE  
SCD\_PRODUCTPRICESK

**Source keys**

PRODUCTSK

**Surrogate keys**

name SCD\_PRODUCTPRICESK  
creation DB Sequence  
complement DIMPRODUCTPRICE\_SEQ

**Type 0 fields**

DI\_CREATEDATE

**Type 1 fields**

**Type 2 fields**

UNITPRICE

**Versioning**

type	name	creation	complement
start	SCD_EFFECTIVED	Input field	SCD_EFFECTIVED/
end	SCD_INEFFECTIVE	Fixed year value	9999
<input type="checkbox"/> version	scd_version		
<input checked="" type="checkbox"/> active	SCD_CURRENT_F		

**Type 3 fields**

current value	previous value

OK Cancel

Refer Scd Example document for more details



SCD Example