

BoM - Bill Of Material

Data Object Definition

BOM (Bill of Material), is a cost-focused recipe of everything required to build a material, including energy and logistic related costs.

Deployment Status

This data is available in the Data Ocean as of Q4 2024.

Data Model

BOM related data, composed of both actuals and forecasts, are extracted through SAP BW queries(COPC04 and COPA06) where costs are available as monthly versions called “run periods”.

Each version (i.e. run period) is composed of one actual month and 18 forecast months:

Manufacturing Variable Costs

QV_BW_QRY_CPCOPC04_0001

Forecasts of variable costs for manufacturing each material, detailing all component costs. Such forecasts are consolidated as monthly versions.

Manufacturing Costs (can be called IVC -Integrated variable cost as well)

QVSBS_BW_QRY_MVCOPA06_0001

Historical (variable or fixed) costs for manufacturing each material. It only provides overall costs for variable costs, logistic and fixed costs.

BOM data in the Data Lake is composed of below tables/views:

1. V_FACT_bom_raw - This table/view will hold the BOM data(QV_BW_QRY_CPCOPC04_0001) in the RAW format as it is extracted from source (SAP-BW)
2. V_FACT_bom_flg_raw - This table/view will hold the BOM flc data(QVSBS_BW_QRY_MVCOPA06_0001) in the RAW format as it is extracted from source (SAP-BW)
3. V_FACT_bom_enriched - This table/view will combine and consolidate the historical and forecast data from both V_FACT_bom_raw and V_FACT_bom_flg_raw as a unique timeline

Project Space: gcp-sqo-data-pricing-d

See how this entity relates to the others in the [pricing data model here](#).

Additional Info & Comments

Data Flow

Loading process:

- Data will be refreshed from SAP-BW into data ocean on a daily basis
- Will extract forecast data from CPCOPC04 data latest month of transactions on a daily basis and refresh into data ocean. This will include next 24 months of data
- Will extract last 27months data from MVCOPA06 SAP-BW query
- Stage table will be partitioned on meta_stg_Insert_date
- ODS table will be partitioned on meta_ods_Insert_date
- FACT_bom_raw, FACT_bom_flg_raw and FACT_bom_enriched tables will be partitioned on running_month
- Refer below data flow diagram for in-detailed low level design of the flow.

<https://docs.google.com/drawings/d/1sC8p4J9RtrwRuKXOvgM3a-r4R4Bj5Hs0IJIVqEI9eYY/edit>
https://docs.google.com/drawings/d/1y1-_4lROiqBsFIJ_SMRCW-1pgoiREAZC--ceOlZojwU/edit

Refer below data flow diagram for low level data flow design:

Tables & Attributes

View ID: [gcp-sqo-data-pricing-d.DataOcean.V_FACT_bom_raw](#)

View ID: [gcp-sqo-data-pricing-d.DataOcean.V_FACT_bom_flg_raw](#)

View ID: [gcp-sqo-data-pricing-d.DataOcean.V_FACT_bom_enriched](#)