Sales Revenue Forecast

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Objective

The objective is to deliver a Sales Costs query with Forecast prices in the next periods.

This query is used with Qlik in transparency Dashboards.

Sales data are coming from BW objects Dynasys or Picaso (No more Order Book since May 2024).

Roles & Access

Roles and access

List of application role + menu role and explanation if we have several applications role with specials rules.

Role Code	Role Description	Explanation
ZR_RCS_CA_M84	Forward Looking ICM - Sales	Role Menu

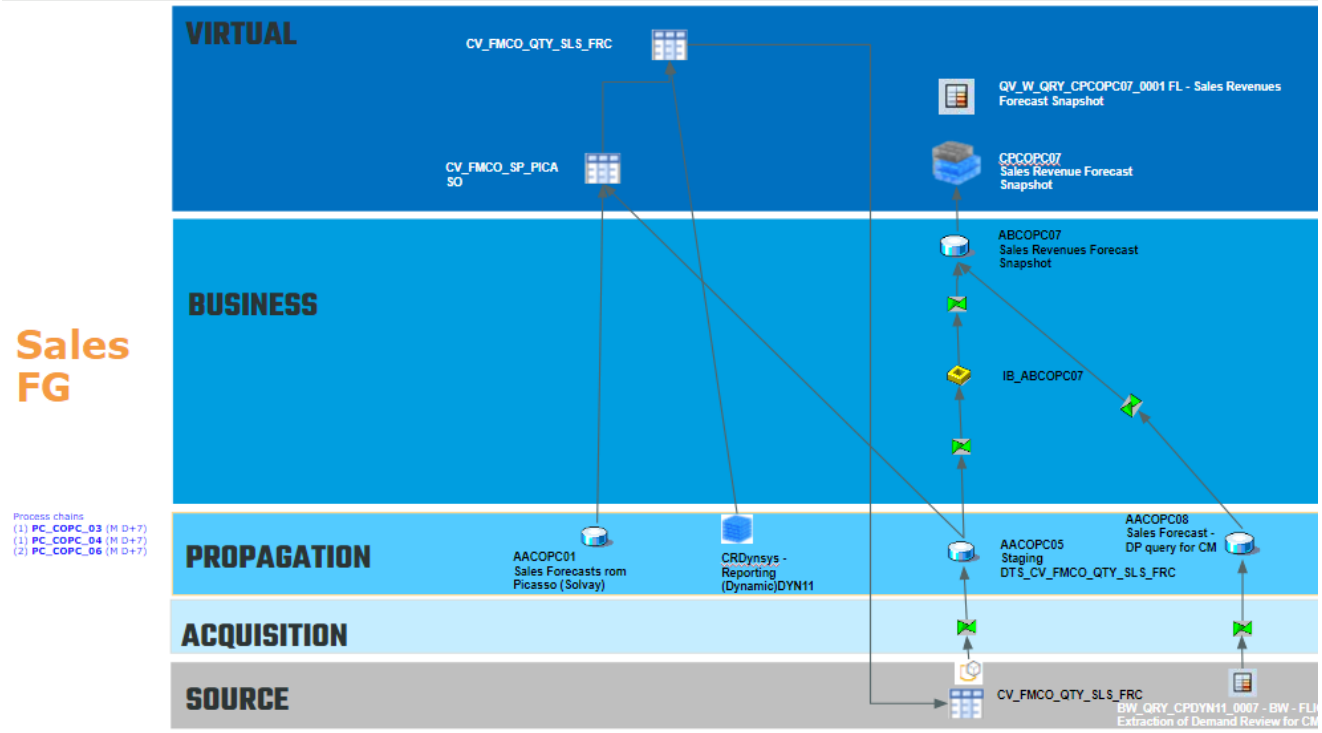
ZBI_RCS_CO_A04	Forward Looking ICM - Sales	Authorization objects

Authorization variables

List of authorization variables mandatory for the application.

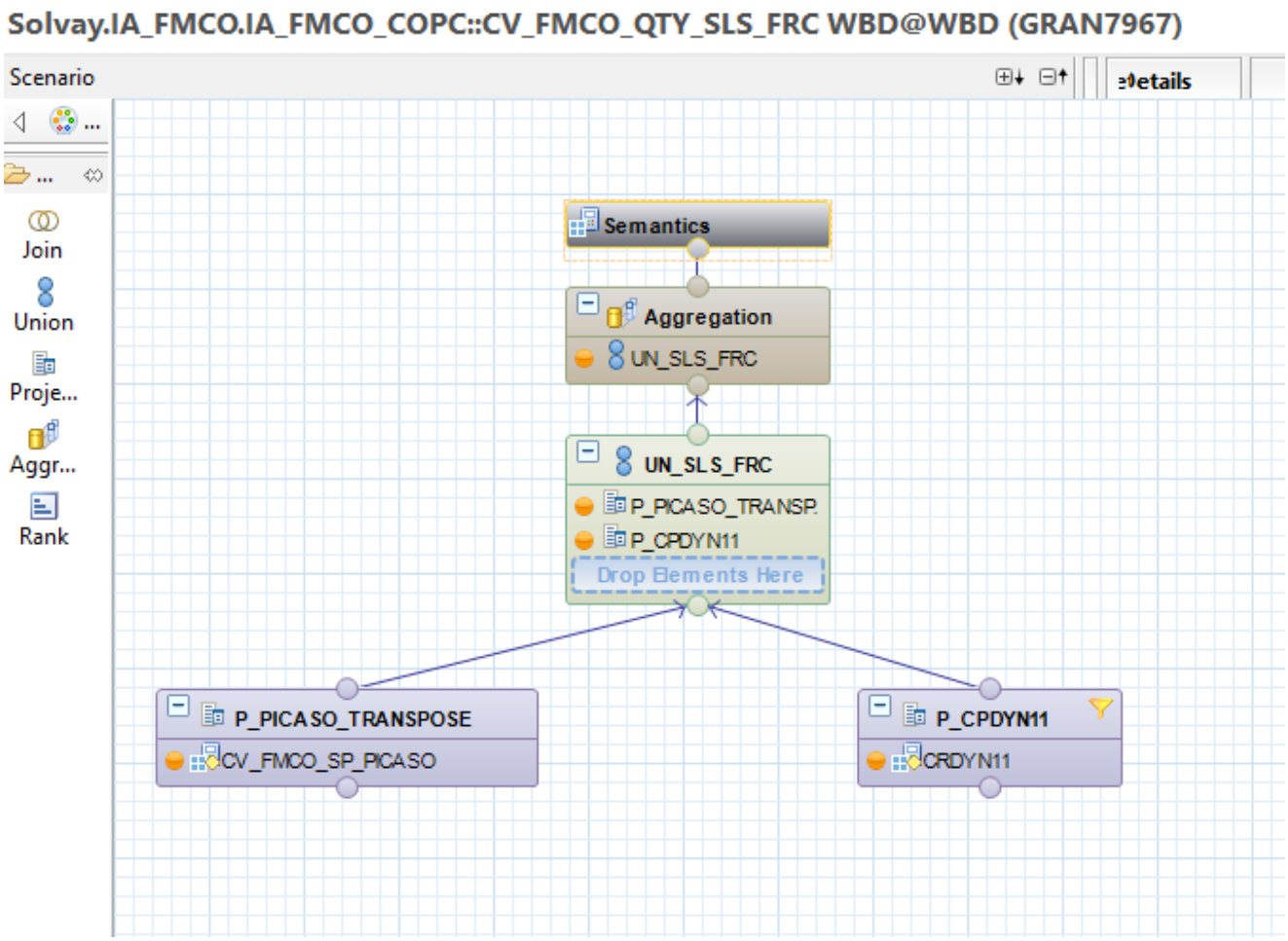
Authorization variables	Object
V_CPFCTR1_2_0006	CPFCTR1_2
V_C_PLANT_0012	C_PLANT
V_C_AUTHMA_0001	C_PLANT__C_AUTHMA

Dataflow overview



Source Layer

As showed in the data flow above the data source is a Main Calculation View CV_FMCO_QTY_SLS_FRC.



PICASO data is coming from view CV_FMCO_SP_PICASO detailed below (Projection P_PICASO_TRANSPOSE).

DYNASYS data is directly extracted from Infoprovider CRDYN11 (Projection P_CRDYN11).

Forecast quantity is the **Constrained Forecast**

It is populated with source field **K_DYN_034** (Final Forecast ETD) for GBUs Aroma (PA), Novecare (CS), and Technology Solutions (TS)

It is populated with source field **K_CONFOR** (Constrained Forecast) for all other GBUs

Another quantity field is the **Unconstrained Forecast** :

It is populated with source field **K_DYN_061** (Demand Review Quantity (ETD) for GBU Novecare (CS) - *(Field K_DYBUD (Budget) before December 17th 2024)*

It is populated with source field **K_DYN_044** (Sales Team Forecast ETD) for all other GBUs

Net Price from DYNASYS is :

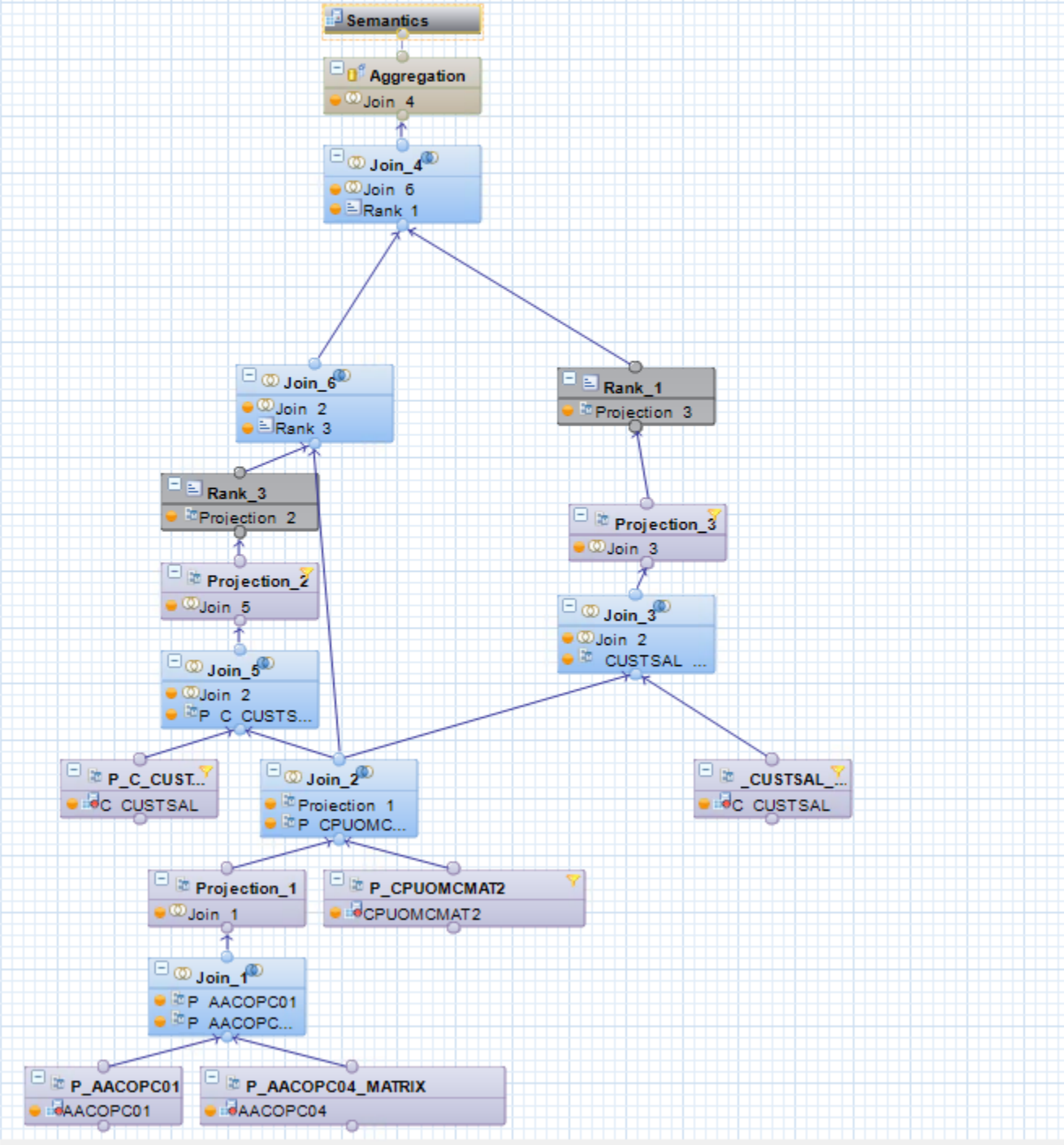
The **Sales Price [K_SALPEKG]** in **Local currency [0LOC_CURRCY]** to convert in EUR, for GBUs Aroma (PA), and Technology Solutions (TS)

~~*The **Budget Price EUR/KG** ("Budget Net Sales" [K_BUDEUR] / "Budget qty in KG" [K_DYBUD]) in EUR, for GBU Novecare (CS)*~~ *(Deleted since December 2024)*

Below are the Calculation Views that make up the Main Calculation View CV_FMCO_QTY_SLS_FRC:

Solvay.IA_FMCO.IA_FMCO_COPC::CV_FMCO_SP_PICASO

Scenario



Dependencies with other applications

There is dependency on the following data flows.

Forecast sources :

DYNASYS - Reporting (Dynamic) : **CRDYN11**

Sales Forecasts from Picaso (Solvay) : **AACOPC01** and **AACOPC04**

DYN - Demand Planning AERO (Composite Materials) : **CPDYN11**

Price Conditions :

Price Records Extraction Table (Solvay) : **AACOPC02**

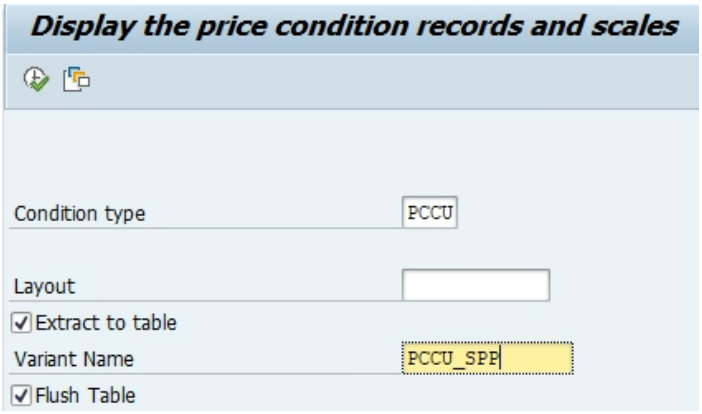
Price Records Extraction Table (Rhodia) : **AACOPC03**

Sales Unit Price Forecast : **APCOPC03**

Source table from SAP is **ZSD_ICM_PRICING** and is refreshed once a day in each system PF1 and WP1.

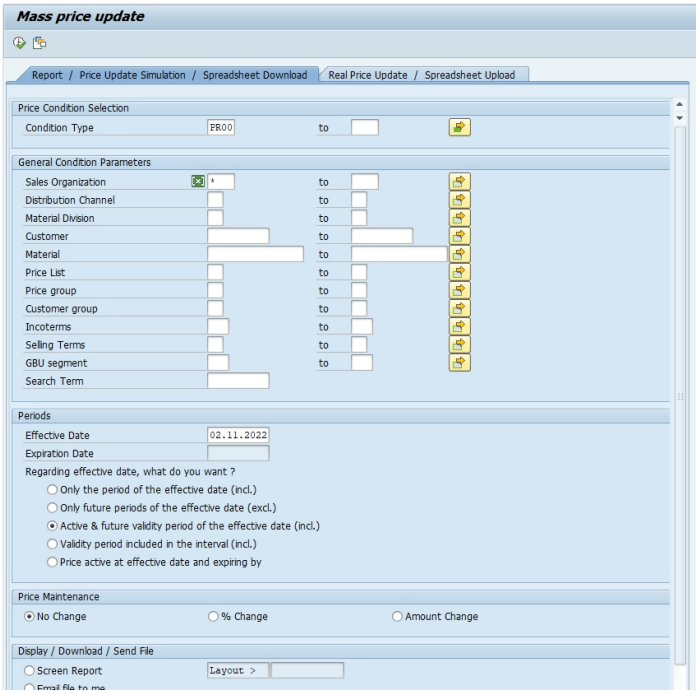
PF1 :

The program scheduled for refresh is **Z1V_PRICE_COND_RECORDS_LIST** with variant **SPP_PCCU**, which is submitting the extraction program **Z1V_PRICE_COND_SELECT_SCREEN** with variant **PCCU_SPP** (current year of validity).



WP1 :

The program scheduled for refresh is **ZWOCT03400** with variant **ICM_PRICE**.



Alternative Units of measure for quantity conversion :

GENERATED DATASTORE OBJECT (UNITS OF MEASURE): **UOMCMAT2**

Important : The generated DSO units of measure **UOMCMAT2** must be properly populated in the BW system, otherwise the Sales data loading will last hours, trying to access the Database for each CPC unit to convert.

This DSO is deleted and fully loaded daily, with Process Chain PC_UOMC_MAT_2.

Acquisition Layer

Data Loading:

Price Conditions are populated from PICASO and DYNASYS Datasources.

Infoprovider AACOPC02: Price Records Extraction Table (Solvay)

Datasource DTS_ZBW_ICM_PRICING built on table ZSD_ICM_PRICING from PF1 source system.

Infoprovider AACOPC03: Price Records Extraction Table (Rhodia)

Datasource DTS_ZBW_ICM_PRICING built on table ZSD_ICM_PRICING from WP1 source system.

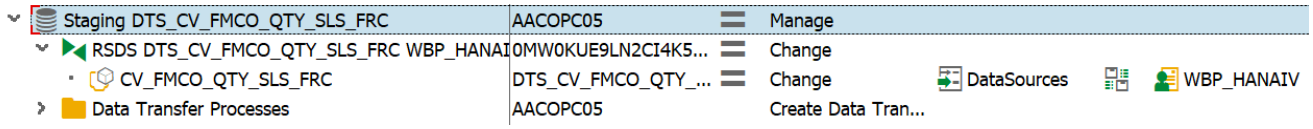
Infoprovider AACOPC01: Sales Forecasts from Picaso (Solvay)

Datasource DTS_ZBW_PICASO_PIR built on table Z1C_PICASO_PIR from PF1 source system.

Sales Forecast are populated from PICASO, DYNASYS and ORDERBOOK .

Infoprovider AACOPC05: Staging DTS_CV_FMCO_QTY_SLS_FRC

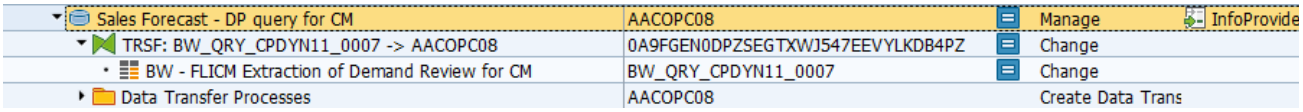
Datasource DTS_CV_FMCO_QTY_SLS_FRC built on Calculation View CV_FMCO_QTY_SLS_FRC from HANA.



Sales Forecast for Composite Materials GBU are populated from query "BW - FLICM Extraction of Demand Review for CM" (BW_QRY_CPDYN11_0007 (copy of BW_QRY_CPDYN11_0006)) .

Infoprovider AACOPC08: Sales Forecast - DP query for CM

Query **BW_QRY_CPDYN11_0007**



This source query is plugged directly to DYNASYS objects.

The extraction is done with a conversion in USD (CAR4, Calendar Month of each line as conversion date)

Fix from March 2025 : Conversion in USD replaces the conversion in EUR which was using inconsistent Fx rates from Dynasys.

Loading frequency

Daily

Propagation Layer

Data Loading:

Price Conditions sources are merged in Propagation layer.

Infoprovider APCOPC03: Sales Unit Price Forecast

Source currencies are converted to EUR.

Currency Conversion

Prices are converted from original currency to EUR by calling successively the 2 Function Modules below :

- BAPI_CURRENCY_CONV_TO_INTERNAL : To switch source value in internal format for specific currencies (KRW, IDR...)
  - Specific currencies are identified with less than 2 decimals in table TCURX
- CONVERT_TO_LOCAL_CURRENCY : To convert above result in EUR
  - Currency translation date used is the current date of loading

The date used for currency conversion is based on Global Filter Master Data parameter MONTH_DATE :

Table: /BIC/PC_GLBFILT

/BIC/C_STREAM	/BIC/C_RULE	/BIC/C_GLBFILT	OBJVERS	CHANGED	/BIC/C_DESC	/BIC/C_SIGN	/BIC/C_OPTION	/BIC/C_LOW	/BIC/C_HIGH	/BIC/C_ACTIVE
FMCO_COPC	MONTH_DATE	000	A		FL-ICM Shift month for Currency Conversion date	I	EQ	-1		Y

The LOW value is used to shift the actual date of loading to the number of months specified.

Here the current date June 12th 2023 will become May 12th 2023 as the conversion date to use.

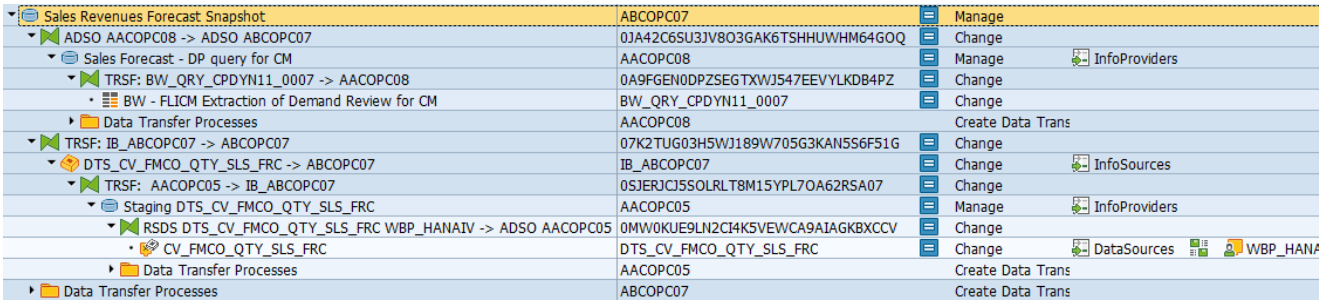
Loading frequency

Daily

Business Layer

Data Loading:

Infoprovider ABCOPC07:



Logic to retrieve the Sales Forecast Price:

Specific Routines

The logic detailed above takes place in the respective Transformations below :

- TRSF: AACOPC05 -> IB_ABCOPC07

  Update from May 2024 : The AMDP routine below has been deleted because the Invoice price is not used anymore from BW in the Transparency Dashboard.
  AMDP End Routine : To look for the last invoice according to CPC
  Warning : If the structure of the Infosource IB_ABCOPC07 is enhanced, the AMDP code must be adapted accordingly in the OUTTAB2 Select.

- TRSF: IB_ABCOPC07 -> ABCOPC07
  ABAP Start and End Routines : To look for Price Conditions according to CPC

Currency Conversion

Prices are converted from original currency to EUR by calling successively the 2 Function Modules below :

- BAPI_CURRENCY_CONV_TO_INTERNAL : To switch source value in internal format for specific currencies (KRW, IDR...)
  - Specific currencies are identified with less than 2 decimals in table TCURX
- CONVERT_TO_LOCAL_CURRENCY : To convert above result in EUR
  - Currency translation date used is the current date of loading

The date used for currency conversion is based on Global Filter Master Data parameter MONTH_DATE :

Table: /BIC/PC_GLBFILT

/BIC/C_STREAM	/BIC/C_RULE	/BIC/C_GLBFILT	OBJVERS	CHANGED	/BIC/C_DESC	/BIC/C_SIGN	/BIC/C_OPTION	/BIC/C_LOW	/BIC/C_HIGH	/BIC/C_ACTIVE
FMCO_COPC	MONTH_DATE	000	A		FL-ICM Shift month for Currency Conversion date	I	EQ	-1		Y

The LOW value is used to shift the actual date of loading to the number of months specified.

Here the current date June 12th 2023 will become May 12th 2023 as the conversion date to use.

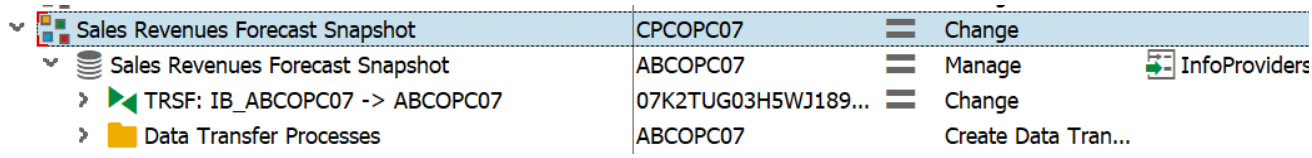
Loading frequency

Daily

Virtual Layer

Composite Providers

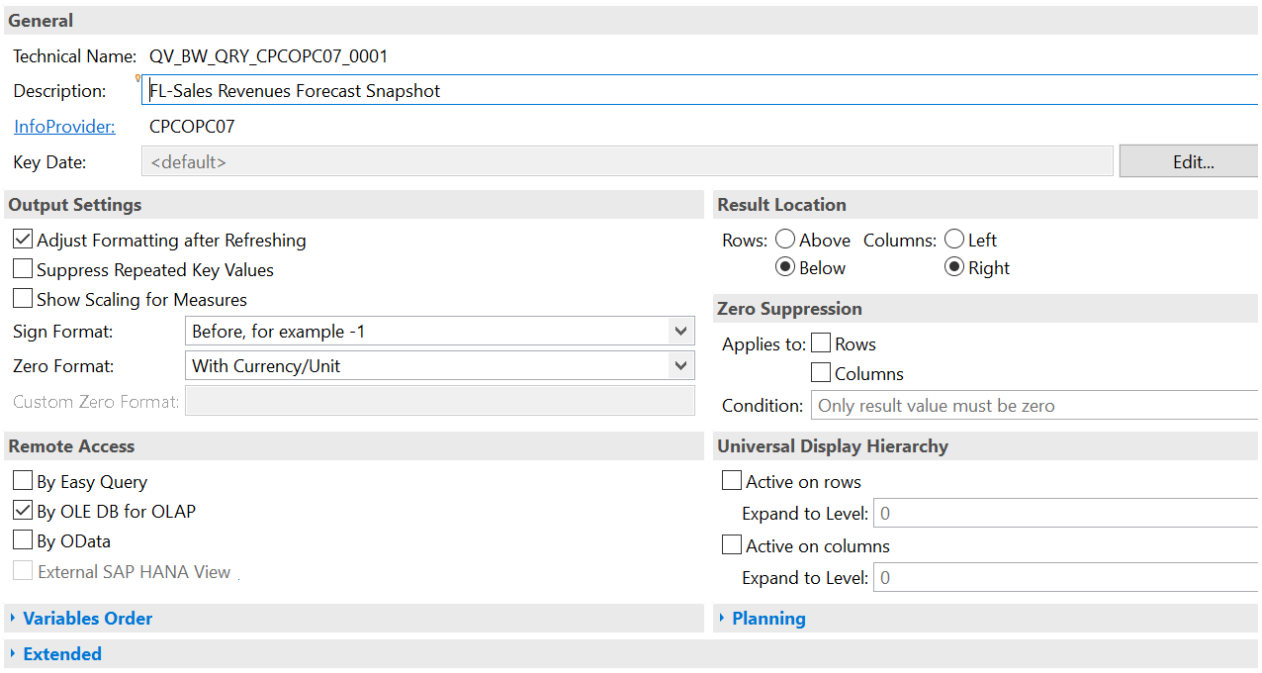
CPCOPC07



Reporting (BW Query for Qlik)

Description	*Sales Revenues Forecast Snapshot*
Technical Name	**QV_BW_QRY_CPCOPC07_0001**
Application	*COPC*
Info-provider	*CPCOPC07*
Usage type	*Qlik Source*
Expected users	

Global properties

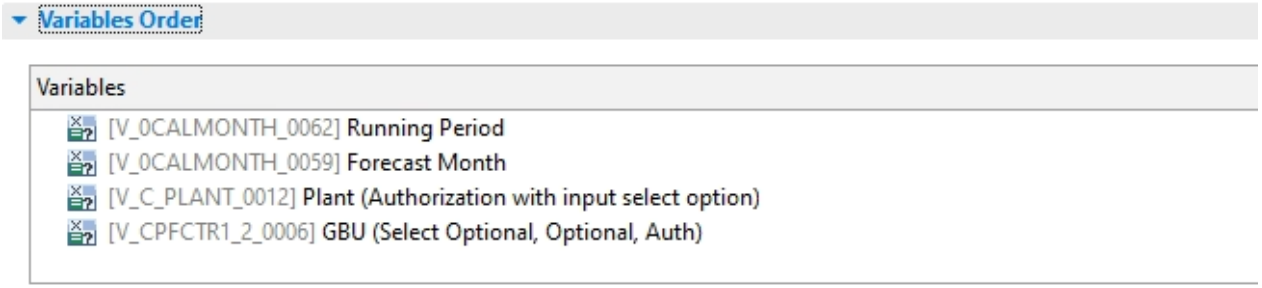


Variables

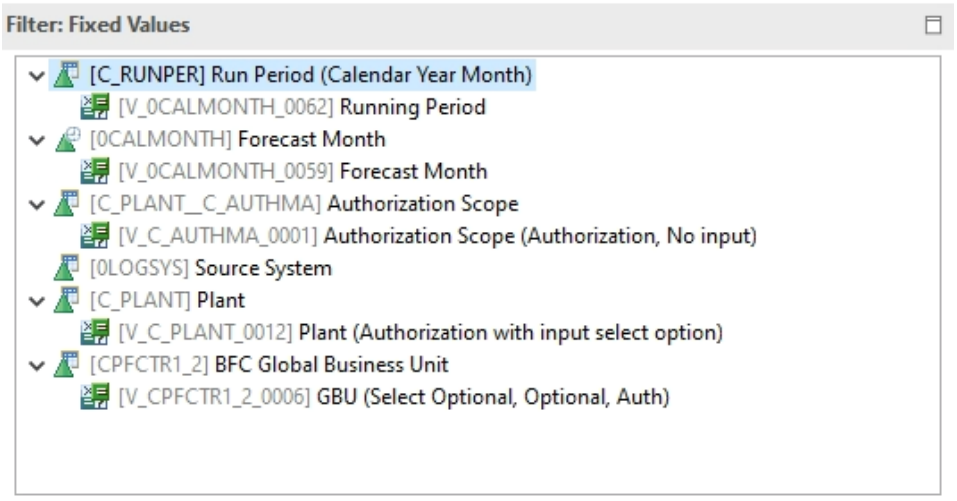
Definitions

Variable Name	Info-object	Selection Type	Required	Description /Explanation
V_C_AUTHMA_0001	C_AUTHMA	Authorization	No	Authorization Scope
V_C_PLANT_0012	C_PLANT	Authorization with Input	No	Plant
V_CPFCTR1_2_0006	CPFCTR1_2	Authorization with Input	No	GBU
V_0CALMONTH_0059	0CALMONTH	Interval	No	Forecast Month
V_0CALMONTH_0062	C_RUNPER	Interval	No	Run Period

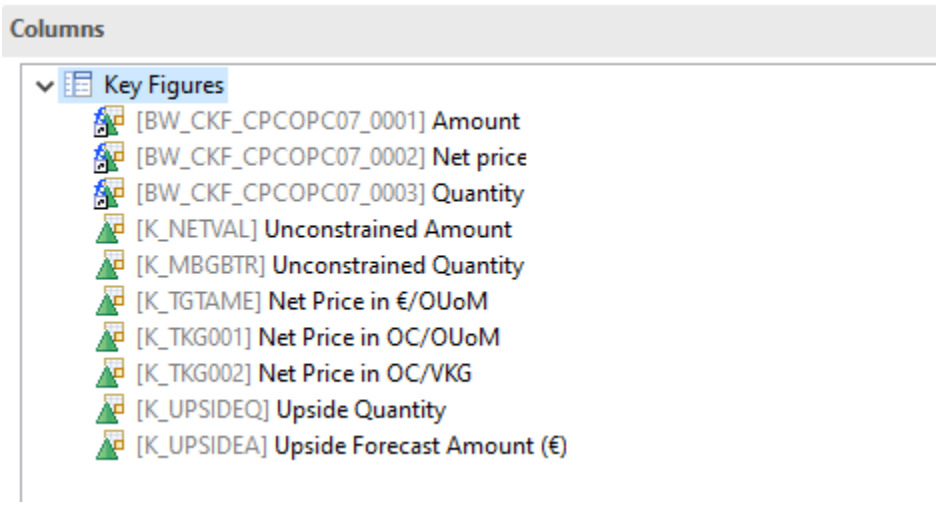
Variable Sequence

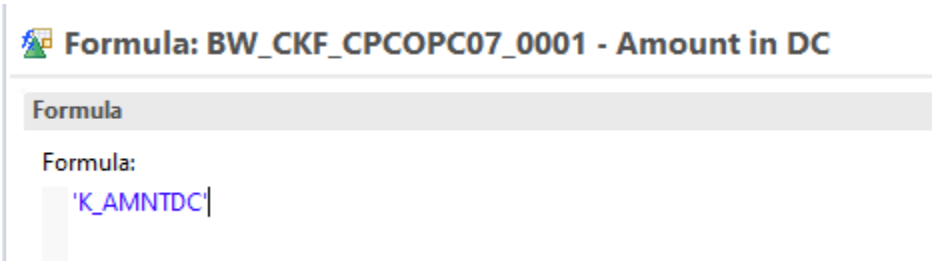


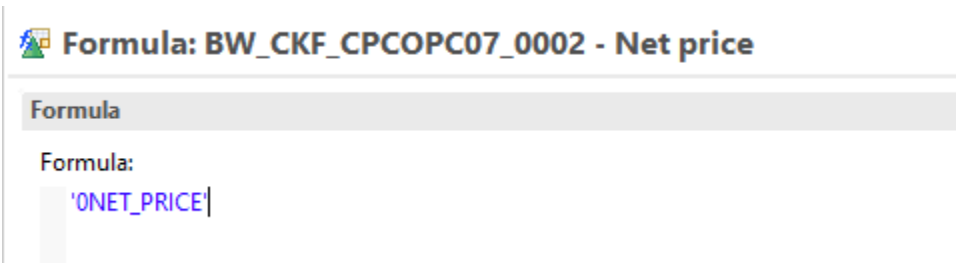
Filters

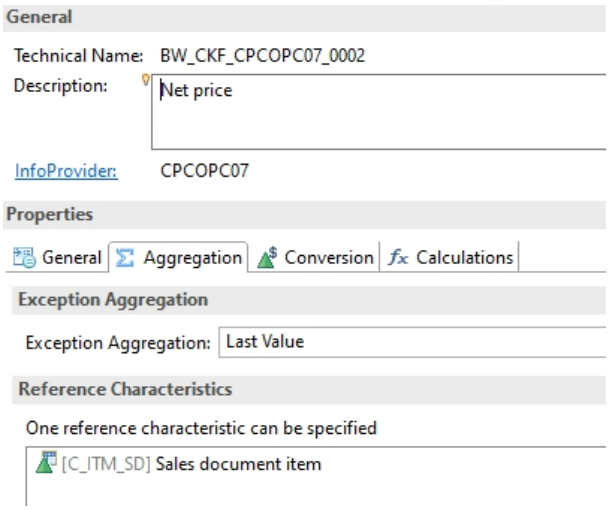

Filter: Fixed Values
[C_RUNPER] Run Period (Calendar Year Month)
[V_0CALMONTH_0062] Running Period
[0CALMONTH] Forecast Month
[V_0CALMONTH_0059] Forecast Month
[C_PLANT__C_AUTHMA] Authorization Scope
[V_C_AUTHMA_0001] Authorization Scope (Authorization, No input)
[0LOGSYS] Source System
[C_PLANT] Plant
[V_C_PLANT_0012] Plant (Authorization with input select option)
[CPFCTR1_2] BFC Global Business Unit
[V_CPFCTR1_2_0006] GBU (Select Optional, Optional, Auth)

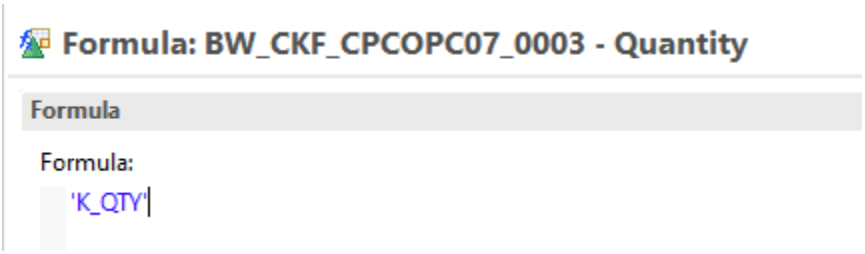
Key figures


Columns
Key Figures
[BW_CKF_CPCOPC07_0001] Amount
[BW_CKF_CPCOPC07_0002] Net price
[BW_CKF_CPCOPC07_0003] Quantity
[K_NETVAL] Unconstrained Amount
[K_MBGBTR] Unconstrained Quantity
[K_TGTAME] Net Price in €/OUoM
[K_TKG001] Net Price in OC/OUoM
[K_TKG002] Net Price in OC/VKG
[K_UPSIDEQ] Upside Quantity
[K_UPSIDEA] Upside Forecast Amount (€)


Formula: BW_CKF_CPCOPC07_0001 - Amount in DC
Formula
Formula:
'K_AMNTDC'


Formula: BW_CKF_CPCOPC07_0002 - Net price
Formula
Formula:
'0NET_PRICE'

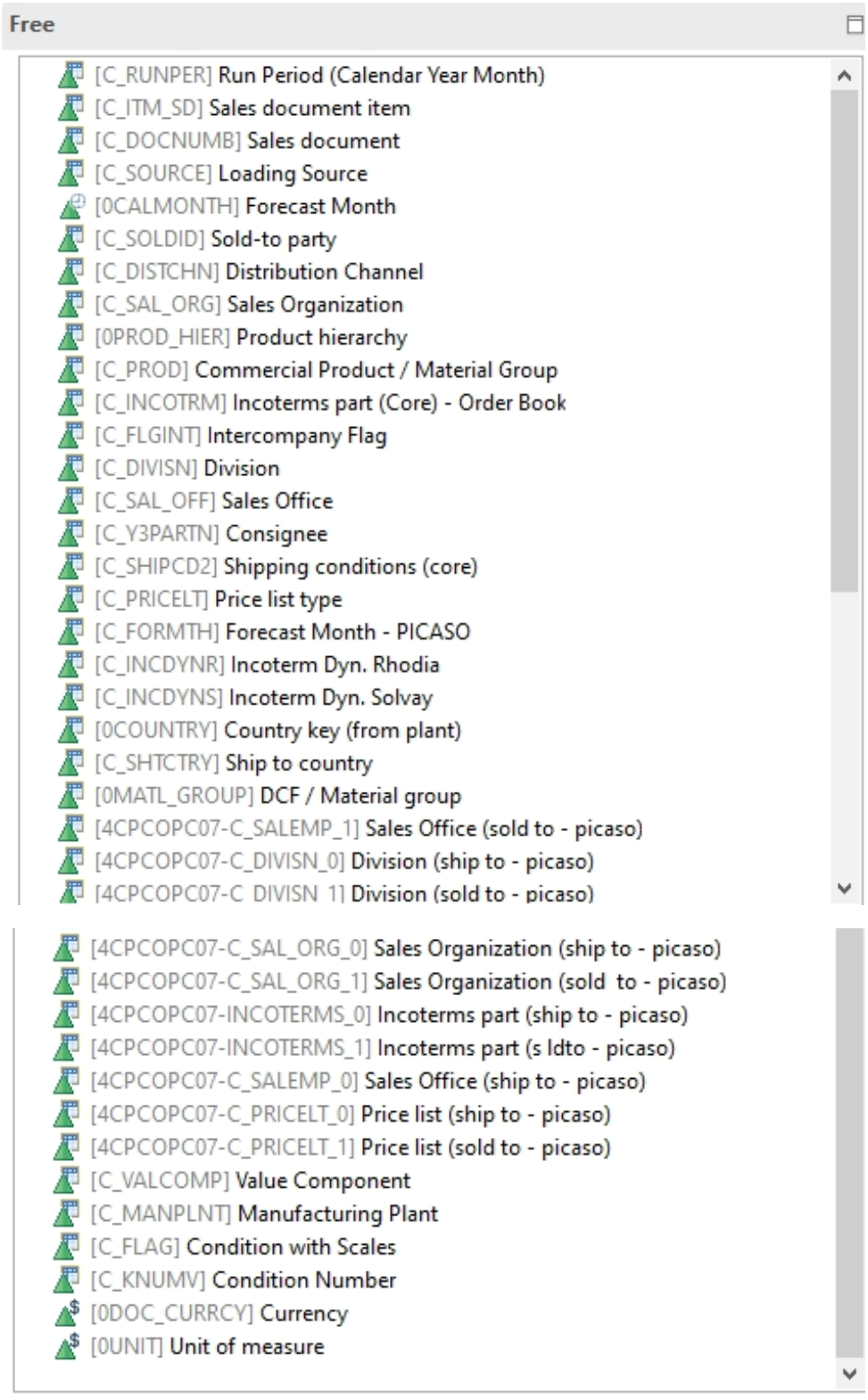


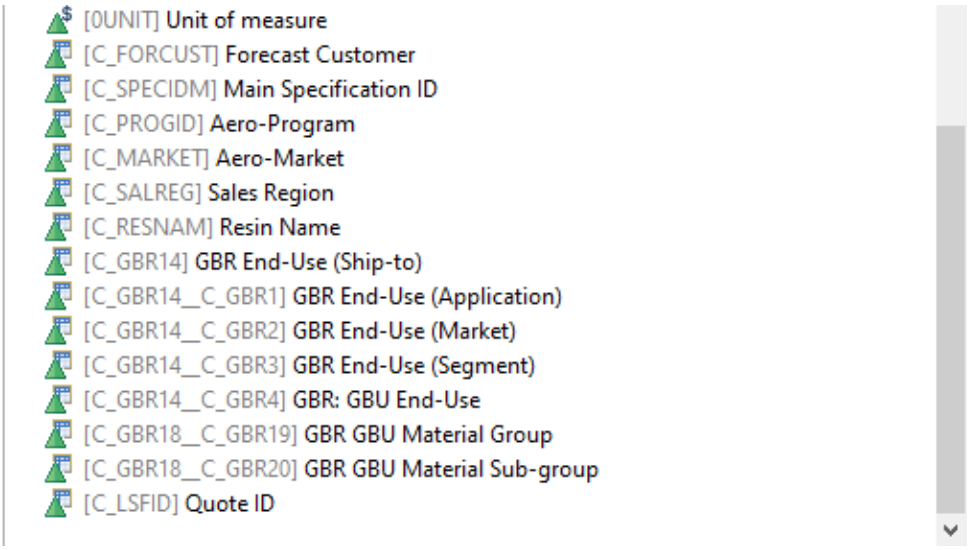


Characteristics

Rows

- [0LOGSYS] Source System
- [CPFCTR1_2] BFC Global Business Unit
- [C_PLANT] Plant
- [C_MATNR2] Material
- [C_SHIPTID] Ship-to party (Core)
- [CPFCTR2_2] BFC Group of activities
- [C_MAGNITU] BFC Activity
- [C_SALEMP] Sales Rep
  - [C_SALEMPD] Sales Rep Name
  - [0TCTEMAIL] Sales Rep email
- [C_MATNR2__C_FMPRD] Product Family Code
- [C_SHIPKA] Ship-to KA
- [C_ENTSEG2] Enterprise Segment
- [C_GBUZONE__C_ZONEH1] Ship-to GBU zone 1
- [C_GBUZONE__C_ZONEH2] Ship-to GBU zone 2
- [C_DYN_087] Customer Group
- [C_KOTABN] Condition Table
- [C_KSCHL] Condition Ttype
- [C_STOFLAG] Ship/Sold-to Flag
- [0DATEFROM] Condition Start Date
- [0DATETO] Condition End Date
- [0CURRENCY] Original Currency
- [0BASE_UOM] Original Unit of Measure


Free
[C_RUNPER] Run Period (Calendar Year Month)
[C_ITM_SD] Sales document item
[C_DOCNUMB] Sales document
[C_SOURCE] Loading Source
[0CALMONTH] Forecast Month
[C_SOLDID] Sold-to party
[C_DISTCHN] Distribution Channel
[C_SAL_ORG] Sales Organization
[0PROD_HIER] Product hierarchy
[C_PROD] Commercial Product / Material Group
[C_INCOTRM] Incoterms part (Core) - Order Book
[C_FLGINT] Intercompany Flag
[C_DIVISN] Division
[C_SAL_OFF] Sales Office
[C_Y3PARTN] Consignee
[C_SHIPCD2] Shipping conditions (core)
[C_PRICELT] Price list type
[C_FORMTH] Forecast Month - PICASO
[C_INCDYNR] Incoterm Dyn. Rhodia
[C_INCDYNS] Incoterm Dyn. Solvay
[0COUNTRY] Country key (from plant)
[C_SHTCTRY] Ship to country
[0MATL_GROUP] DCF / Material group
[4CPCOPC07-C_SALEMP_1] Sales Office (sold to - picaso)
[4CPCOPC07-C_DIVISN_0] Division (ship to - picaso)
[4CPCOPC07-C_DIVISN_1] Division (sold to - picaso)
[4CPCOPC07-C_SAL_ORG_0] Sales Organization (ship to - picaso)
[4CPCOPC07-C_SAL_ORG_1] Sales Organization (sold to - picaso)
[4CPCOPC07-INCOTERMS_0] Incoterms part (ship to - picaso)
[4CPCOPC07-INCOTERMS_1] Incoterms part (s ldto - picaso)
[4CPCOPC07-C_SALEMP_0] Sales Office (ship to - picaso)
[4CPCOPC07-C_PRICELT_0] Price list (ship to - picaso)
[4CPCOPC07-C_PRICELT_1] Price list (sold to - picaso)
[C_VALCOMP] Value Component
[C_MANPLNT] Manufacturing Plant
[C_FLAG] Condition with Scales
[C_KNUMV] Condition Number
[0DOC_CURRCY] Currency
[0UNIT] Unit of measure



Cells

N/A

Conditions

N/A

Exceptions

N/A

Reporting (BW Queries for Analysis)

For Sales analysis purposes in BW, the Workbook **BW_WBK_FL_SAP_COND** is created with a tab for each query below :

BW_QRY_APCOPC03_0001 SAP Price Conditions in EUR

Built on ADSO **APCOPC03** in the Propagation layer.

This query gives the full structure of Price Conditions extracted from both SAP systems PF1 and WP1.

Condition amounts are converted in EUR, but condition units are the original ones.

Sources of this ADSO are ADSO **AACOPC02** and ADSO **AACOPC03**.

BW_QRY_AACOPC02_0001 SAP Price Conditions Solvay

Built on ADSO **AACOPC02** in the Acquisition layer.

This query gives the condition amount in the original currency, extracted from SAP system PF1.

The source is a SAP specific table **ZSD_ICM_PRICING** on the PF1 system.

BW_QRY_AACOPC03_0001 SAP Price Conditions Rhodia

Built on ADSO **AACOPC03** in the Acquisition layer.

This query gives the condition amount in the original currency, extracted from SAP system WP1.

The source is a SAP specific table **ZSD_ICM_PRICING** on the WP1 system.

The Workbook must be manually refreshed, with an accurate selection in each query part, to reduce the volume of data displayed.

Selection variables can not be merged between the 3 queries, since the objects are not the same in the corresponding ADSO, due to a different BW layer (Infoobjects vs Fields).

Prompt selections

The workbook is not refreshed by default on opening, in order to prompt the 3 Datasources independently if needed.

It is a very time consuming process to display the SAP Price Conditions of a global Run (around 300.000 records for active conditions only).

Running period and active ranges are filled by default, but you must use additional selections to restrict the scope, and get a result in a reasonable time.

In the global prompt (all Datasources), you will see 3 blocks (one for each Datasource) with the relevant selections for each.

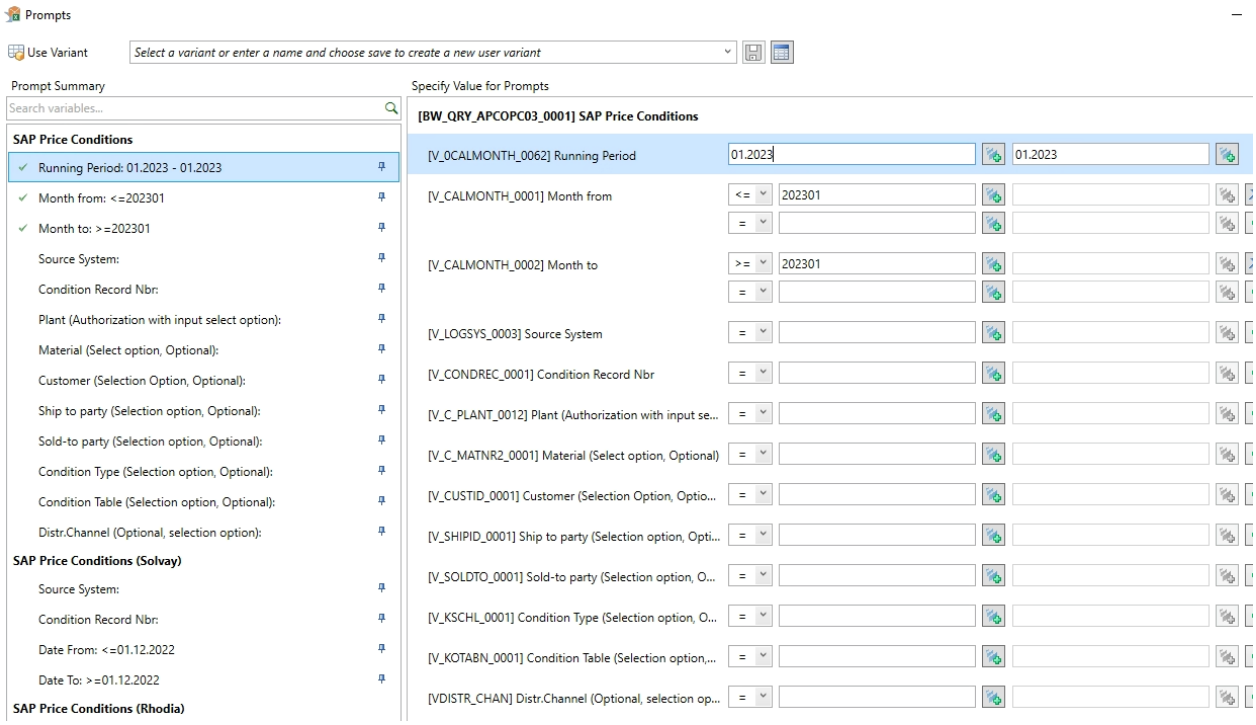
Selection variables can not be merged for these Datasources, since objects in query are not the same (Fields vs Infoobjects).

Therefore, you should repeat same selections for each Datasource in each relevant block.

Running Period = Monthly Snapshot of the SAP Price Conditions.

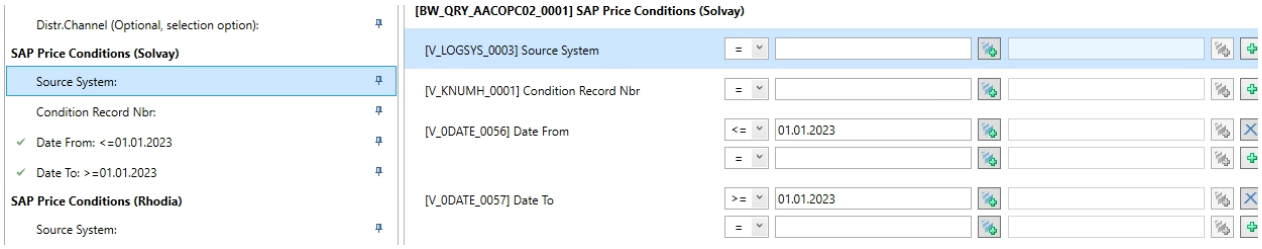
Month from = Always use to the Running Period, to exclude conditions not active yet.

Month to = Always use to the Running Period, to exclude conditions not active anymore.



Date from = Always use to the first day of the Running Period, to exclude conditions not active yet.

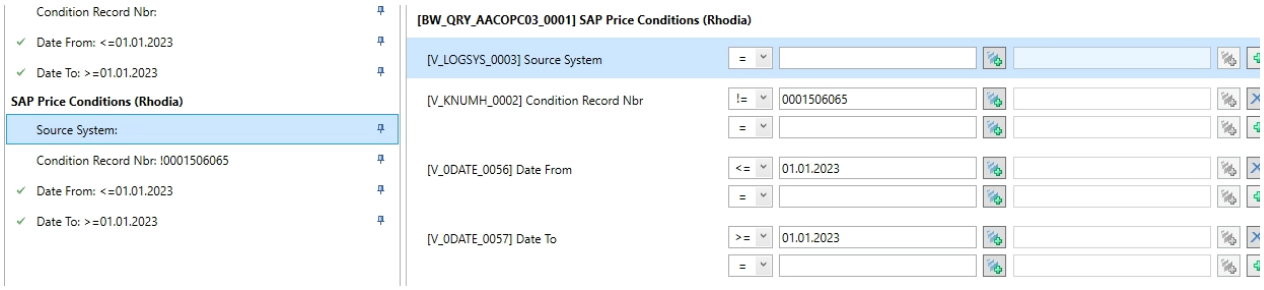
Date to = Always use to the first day of the Running Period, to exclude conditions not active anymore.



Condition Record Nbr Always exclude number 0001506065 which is a condition in % leading to a unit check failure.

Date from = Always use to the first day of the Running Period, to exclude conditions not active yet.

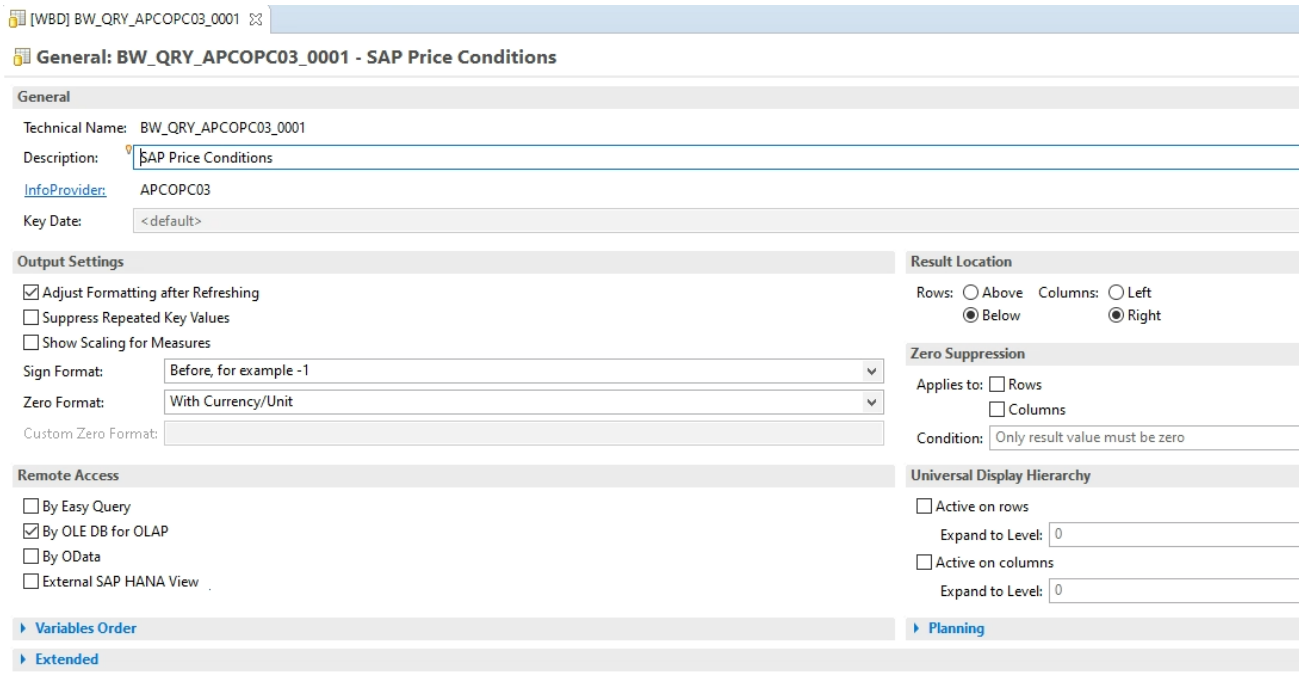
Date to = Always use to the first day of the Running Period, to exclude conditions not active anymore.



Workbook details

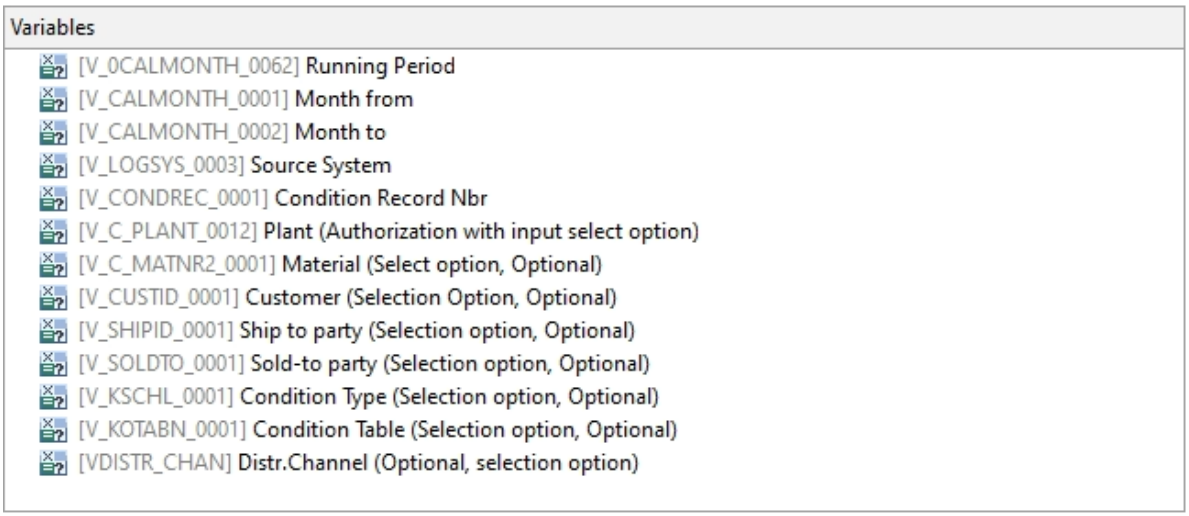
Description	*Sales Price Conditions in EUR*
Technical Name	**BW_QRY_APCOPC03_0001**
Application	*COPC*
Info-provider	*APCOPC03*
Usage type	*BW Analysis*
Expected users	*IT users*

Global properties

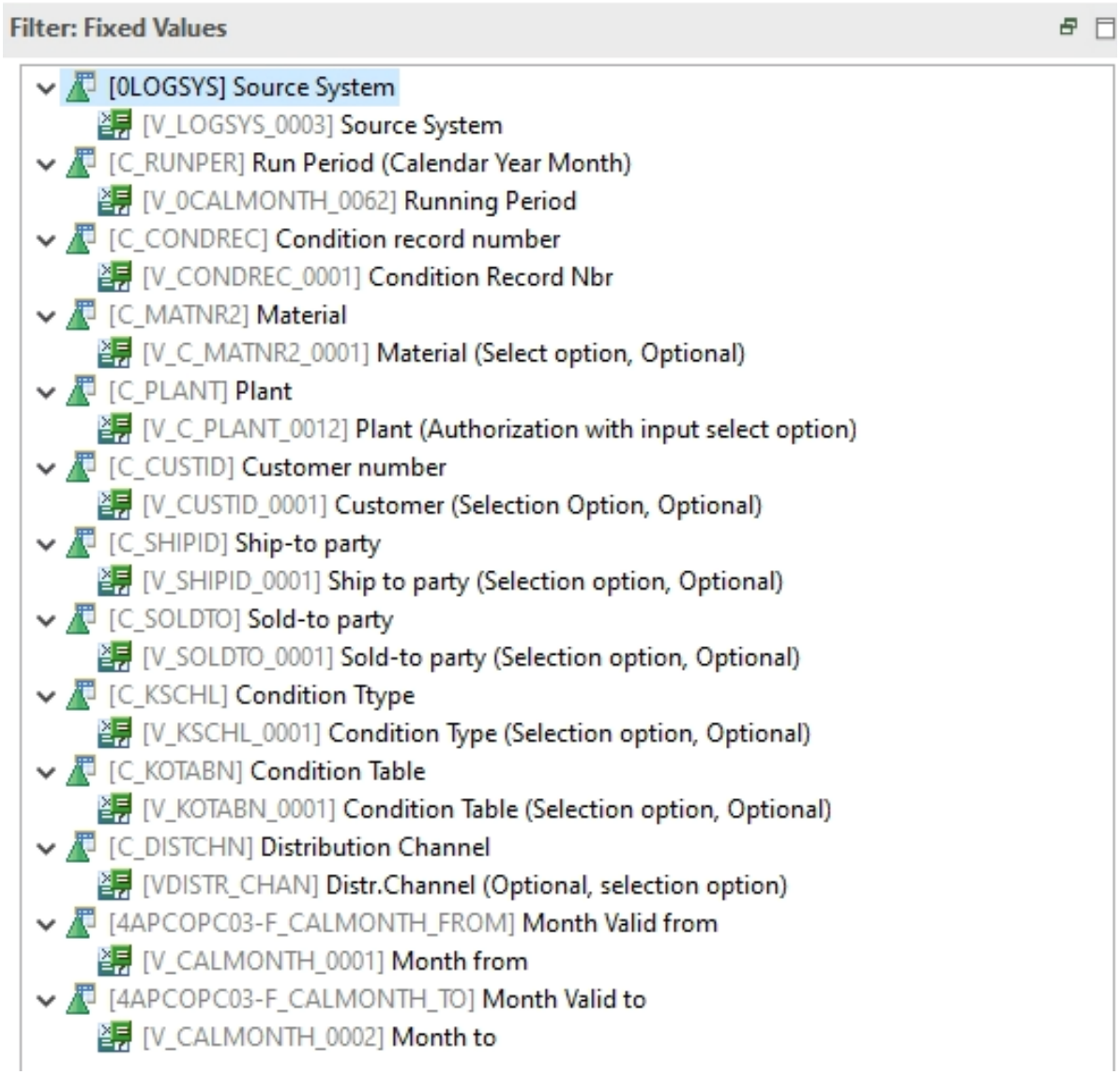


Variables

Definitions

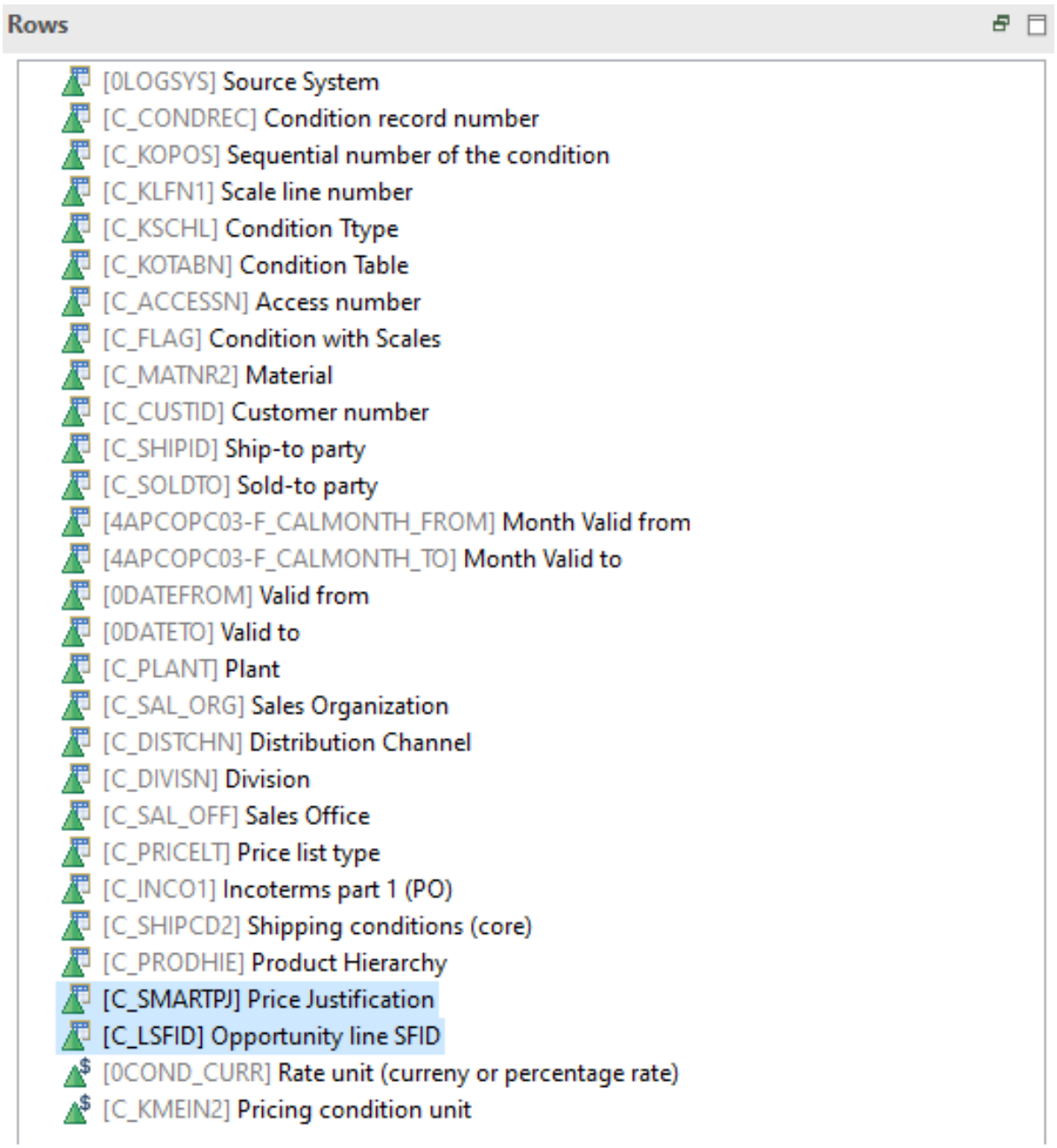


Filters



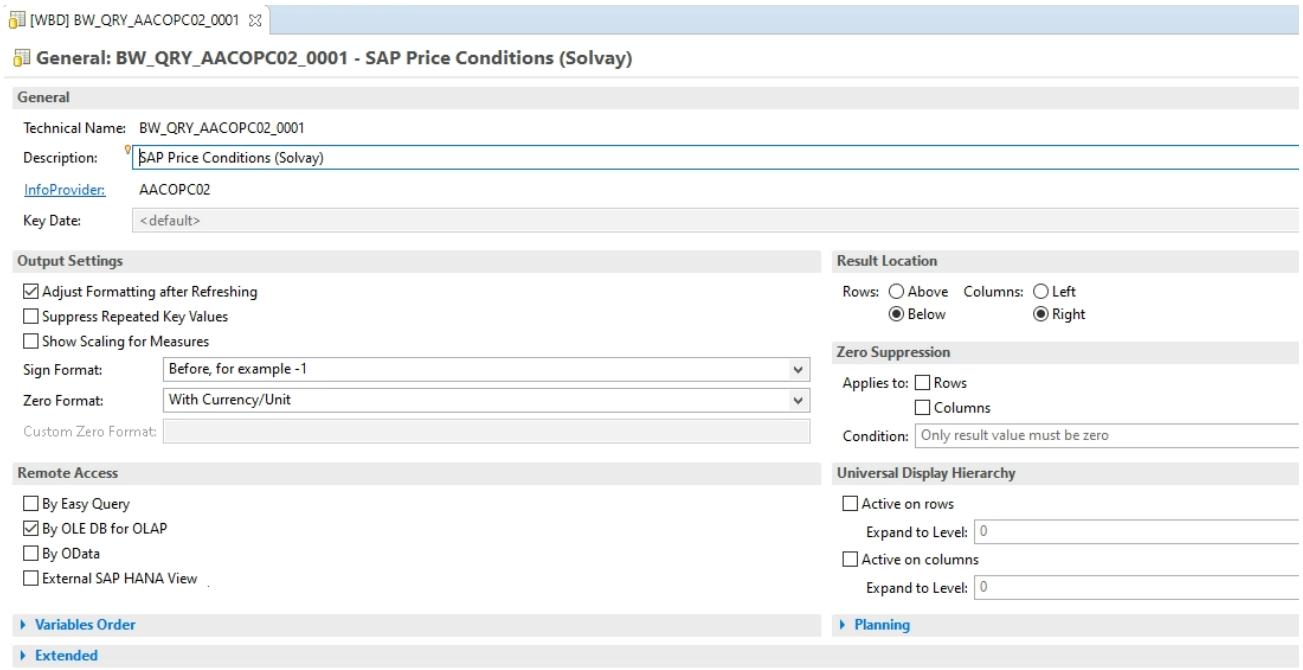
Key figures

Characteristics



Description	*Sales Price Conditions Solvay*
Technical Name	**BW_QRY_AACOPC02_0001**
Application	*COPC*
Info-provider	*AACOPC02*
Usage type	*BW Analysis*
Expected users	*IT users*

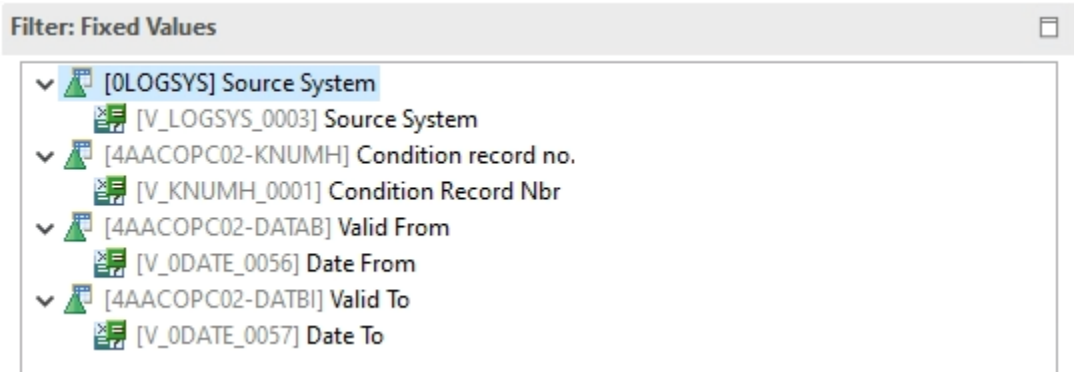
Global properties



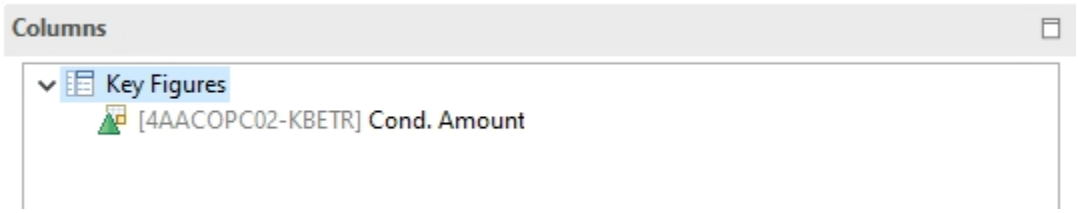
Variables

Definitions

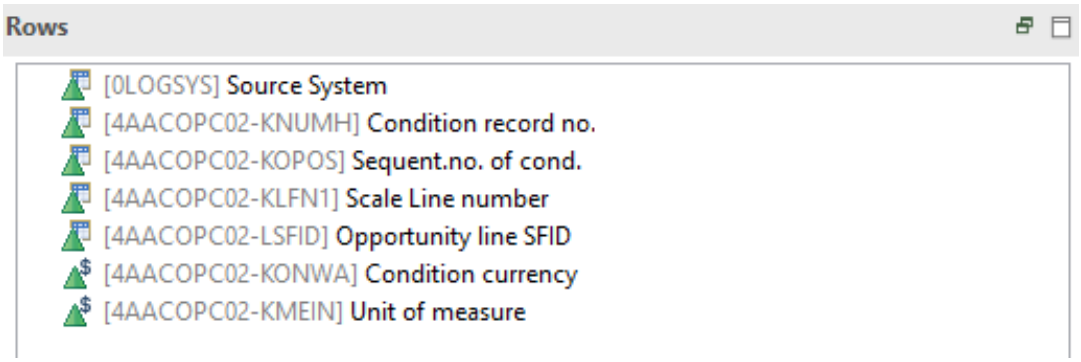
Filters



Key figures

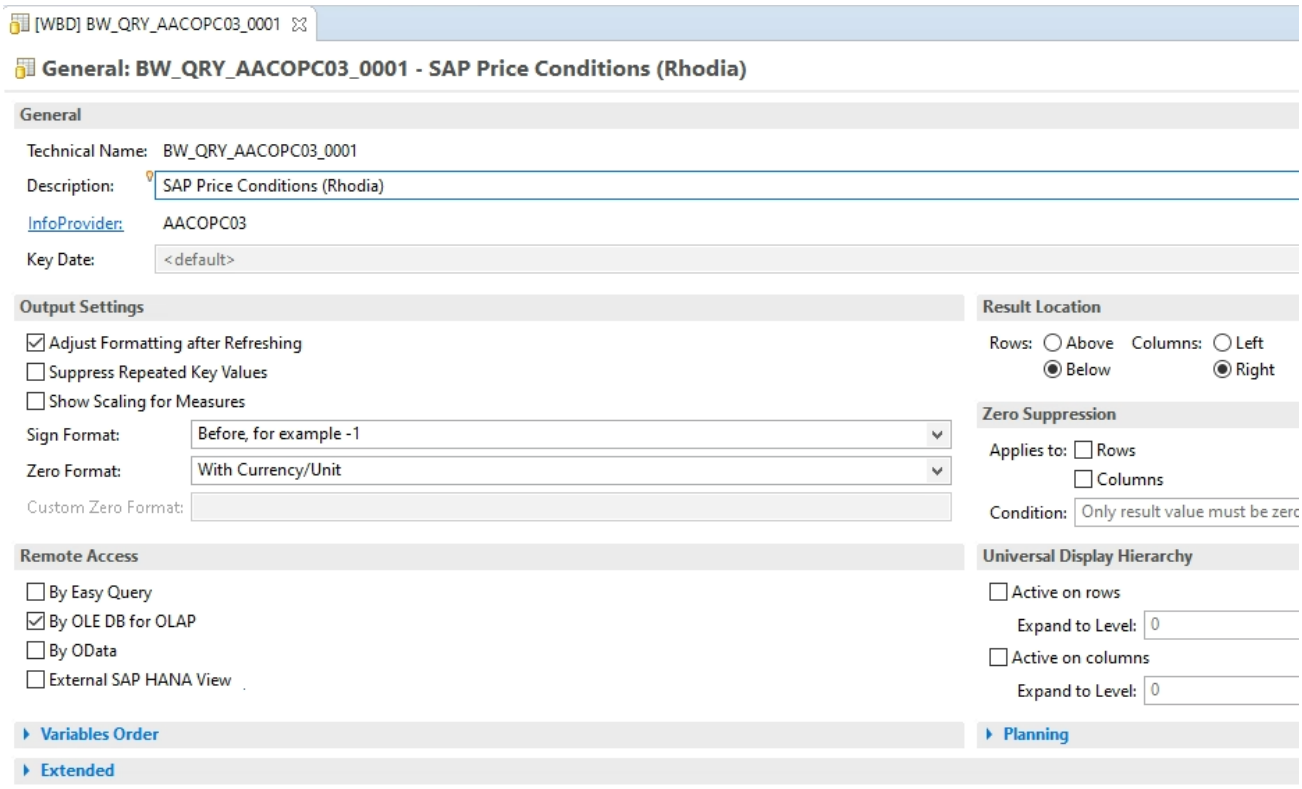


Characteristics



Description	*Sales Price Conditions Rhodia*
Technical Name	**BW_QRY_AACOPC03_0001**
Application	*COPC*
Info-provider	*AACOPC03*
Usage type	*BW Analysis*
Expected users	*IT users*

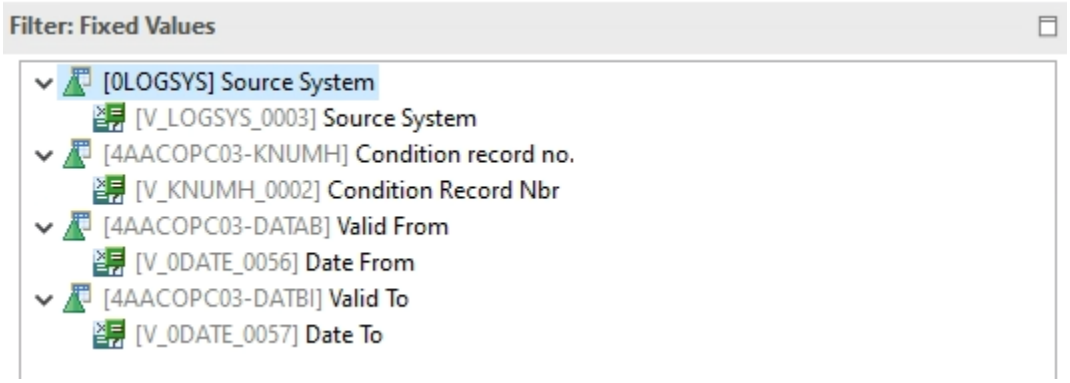
Global properties



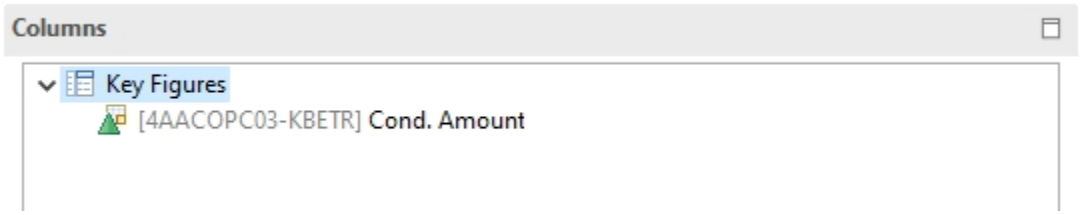
Variables

Definitions

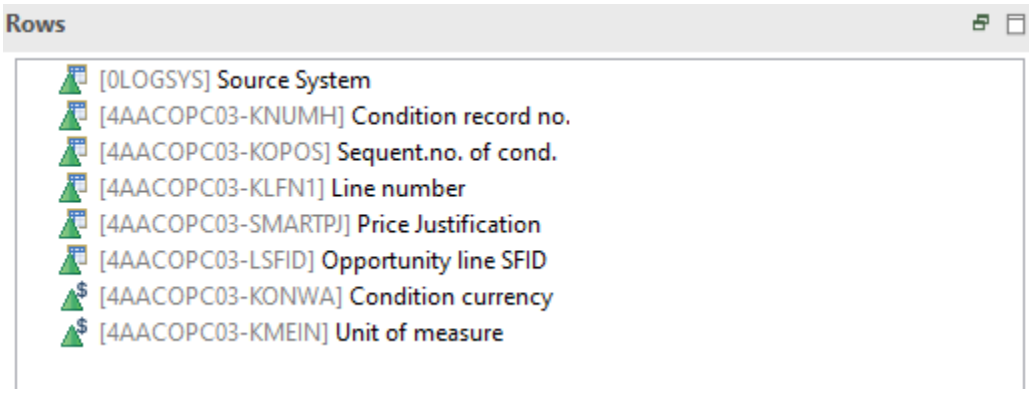
Filters



Key figures



Characteristics



Process Chains

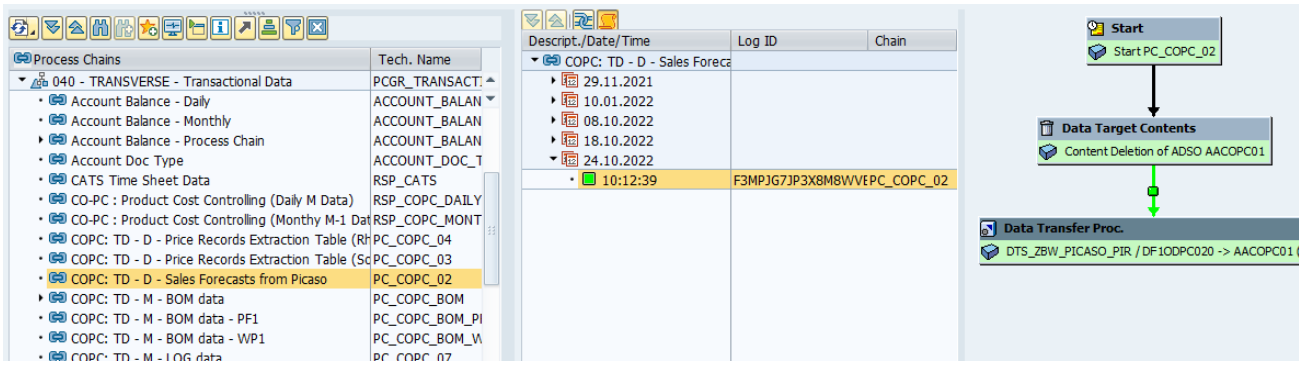
Process Chains below are scheduled in BW daily.

Transparency extraction from BW is scheduled daily every morning.

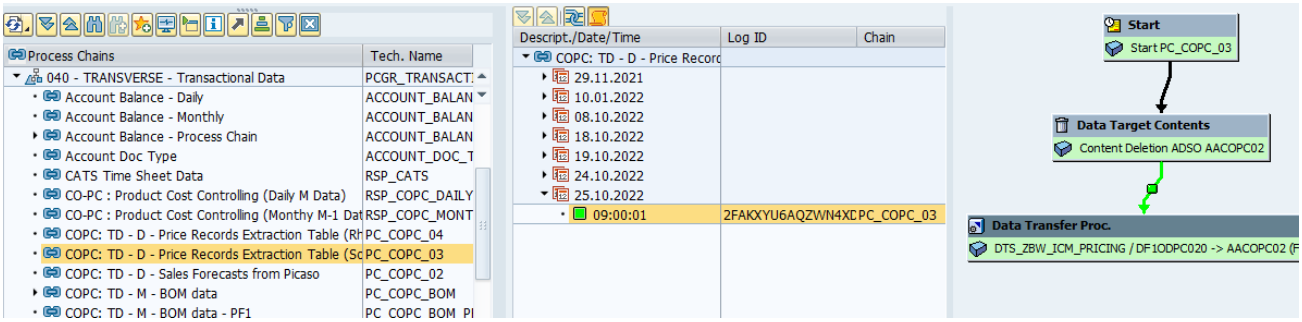
Manual Loading procedure for a monthly Run:

Execution of 4 PCs directly from RSPC transaction (Starters are scheduled in Immediate mode).

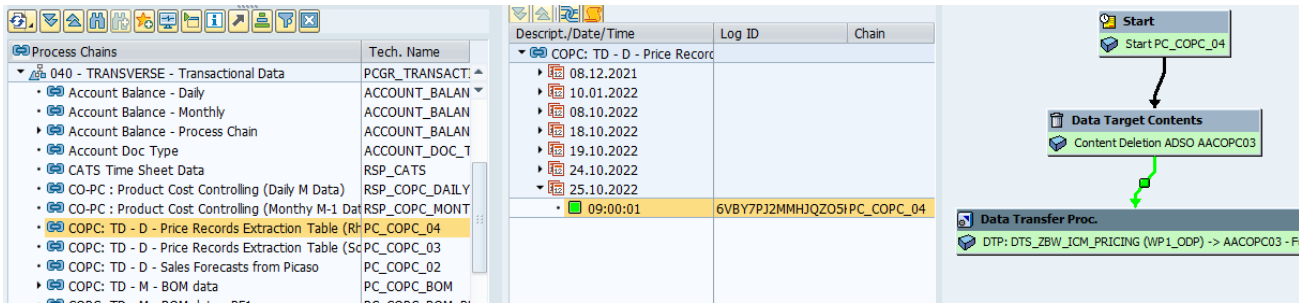
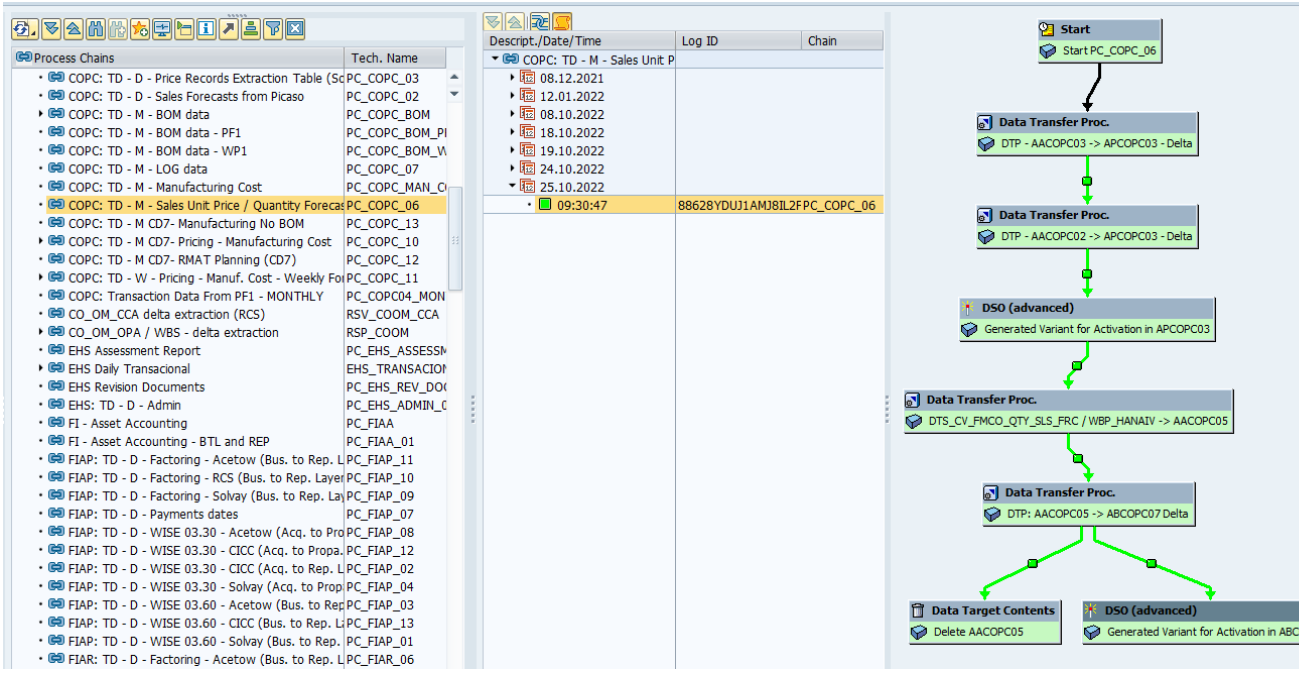
- Execution of **PC_COPC_02** (COPC: TD - D - Sales Forecasts from Picaso)
  => 2 minutes



- Execution of **PC_COPC_03** (COPC: TD - D - Price Records Extraction Table (Solvay))
  => 2 minutes



- Execution of **PC_COPC_04** (COPC: TD - D - Price Records Extraction Table (Rhodia))
  => 5 minutes



- Execution of **PC_COPC_06** (COPC: TD - M - Sales Unit Price / Quantity Forecast)
  => 30 minutes