Technical Documentation - Corporate Business Services - Function costs report

Access Management

Roles & 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_M23	CBS - Functions costs	Role menu
ZBI_RCS_CO_A11	CBS Function Costs Reporting Analysis - End User role	End user role for Function reporting
ZBI_RCS_CO_A21	CBS Project costs Reporting Analysis - End User role	End user role for Project reporting

CBS is part of the **Controlling application** (Info Area AREA_F_CO in BW)
The first module of CBS for Functions costs is in the sub area AREA_F_FUNCT0 CBS - Fixed costs Analysis. The second module for Project costs in in the sub area AREA_F_CO_CBS_PS CBS - WBS Cost Analysis

Authorization Objects

List of authorization objects mandatory for the application.

Authorization object	Explanation
Authorization Scope (C_AUTHMA)	ZR_*_CA_P00
Company (C_COMPCDE)	ZR_*_CA_P01

See also file maintained by Authorization team : BW Catalog of Roles / link:

DataFlow

Overview

MPR_FC001:

MPR_FC002:

List of cubes MPR_FC001:

Cube	Description	Last month where new data was loaded in cube (updated at 09.19.2023)
CUB_FC007	Fixed costs Analysis (External data)	06.2021
CUB_FC002	Fixed costs Analysis Acetow	12.2017
CUB_FC004	Fixed costs Analysis CICC	09.2023
CUB_FC003	Fixed costs Analysis PIM	-
CUB_FC006	Fixed costs Analysis Rhodia	09.2023
CUB_FC005	Fixed costs Analysis Solvay	09.2023

List of provider MPR_FC002:

Cube	Description	Last month where new data was loaded in cube (updated at 09.19.2023)
ODSACCA9	Cost Center: Actual Costs through Delta Extraction Rhodia S	01.2014

ODS_CCA9	Cost Centers: Actual Costs Through Delta Extraction	09.2023
ODS8CCA9	Cost Centers: Actual Costs Through Delta Extraction - Acetow	02.2019
ODS7CCA9	Cost Centers: Actual Costs Through Delta Extraction - CICC	09.2019
ODS6CCA9	Cost Centers: Actual Costs Through Delta Extraction - Solvay	09.2023
ODS_OPA6	ODS_OPA6Orders: Actual Costs Through Delta Extraction	09.2023
ODS8OPA6	Orders: Actual Costs Through Delta Extraction - Acetow	02.2019
ODS7OPA6	Orders: Actual Costs Through Delta Extraction - CICC	01.2013
ODS6OPA6	Orders: Actual Costs Through Delta Extraction - Solvay	09.2023
ODS_WBS6	WBS Element - Actual Costs trough Delta Extraction	09.2023
ODS6WBS6	WBS Element - Actual Costs trough Delta Extraction - Solvay	09.2023

Objective of the application

CBS stands for '**C**orporate **B**usiness **S**ervices'

CBS is a dedicated Reporting tool built on SAP BW module. It allow to analyse **Functions fixed costs** on cost centers and on project.

History

Project done in 2012. It was the first project in BW mixing data from WP1 and PF1/PI1 systems.

Technical Rules on Workbench

Master data management

In the beginning of the project, we discovered that some objects may have same values but can be totally different in the ERP systems.

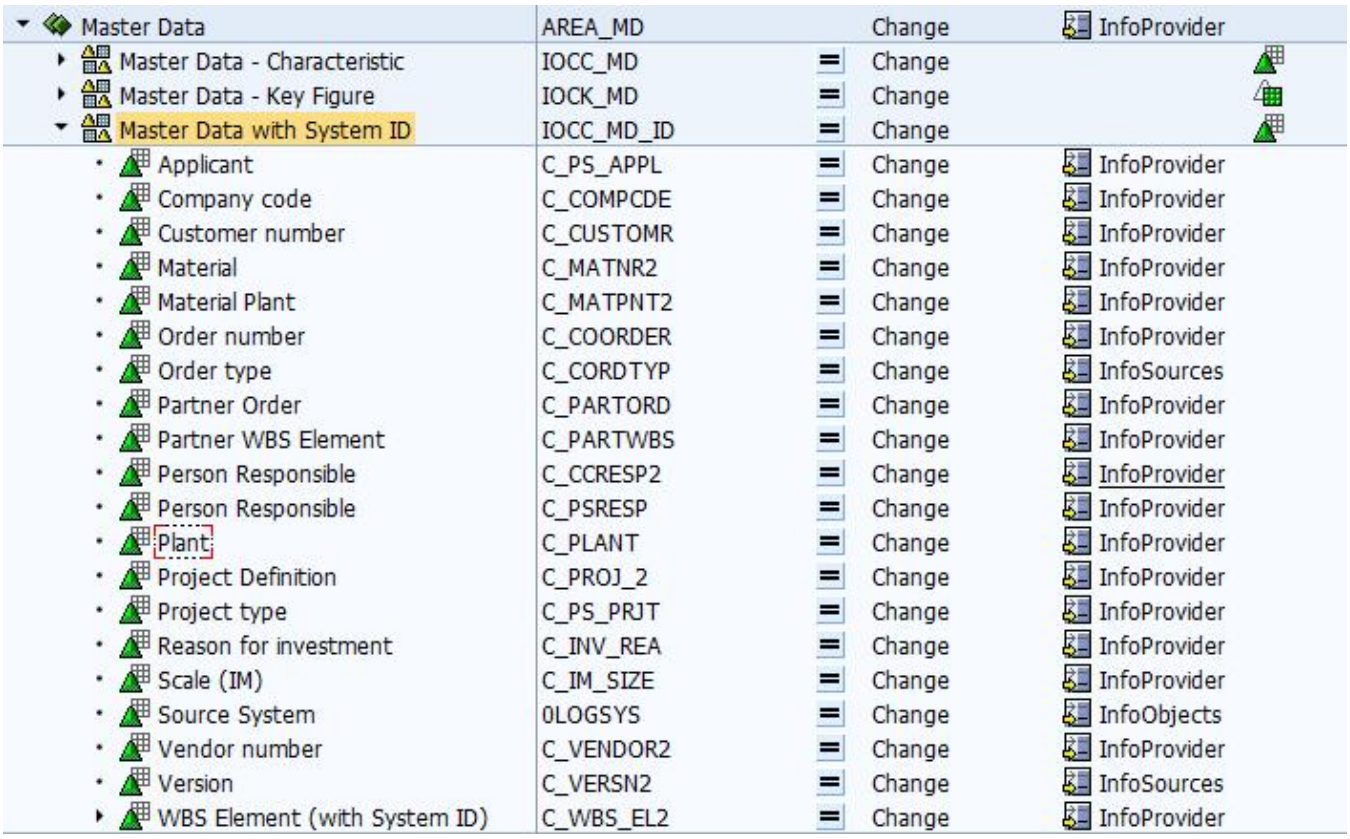
Ex: for company code:
6068 is referring to Rhodia UK in Rhodia's ERP but in Solvay's ERP it refers to Polyera Corp.

To avoid issues in the data, we decided to create new info objects with the system ID in the key 0LOGSYS.

Here is the list of all objects created

-Company code: **C_COMPCDE** previous object: 0COMP_CODE)
-Plant: **C_PLANT** (previous object: 0PLANT)
-Order number **C_COORDER** (previous object: 0COORDER)
-Order type **C_CORDTYP** (previous object: 0COORD_TYPE)
-WBS element **C_WBS_EL2** (previous object: C_WBS_ELE)
-Project number **C_PROJ_2** (previous object: C_PROJECT)
-Partner WBS element **C_PARTWBS** (previous object: 0PART_WBSEL)
-Partner order **C_PARTORD** (previous object: 0PART_COORD)
-Person responsible **C_PSRESP** (previous object: 0PS_RESPNO)
-Person responsible **C_CCRESP2** (previous object: C_CCRESP)
-Version **C_VERSN2** (previous object: 0VERSION)
-Vendor number **C_VENDOR2** (previous object: 0CREDITOR)
-Customer number **C_CUSTOMR** (previous object: 0DEBITOR)
-Material number **C_MATNR2** (previous object: C_MATNR)
-Material plant **C_MATPNT2** (previous object: C_MATPLNT)
-WBS element scale **C_IM_SIZE** (previous object: 0IM_SIZE)
-WBS element investment reason **C_INV_REA** (previous object: 0INV_REASON)
-WBS element applicant **C_PS_APPL** (previous object: 0PS_APPLNO)
-WBS element project type **C_PS_PRJT** (previous object: 0PS_PRJTYPE)

We have created a new catalog IOCC_MD_ID in the info objects where we will store the info objects with the System ID in key



Functional and Technical rules

Cost center hierarchies

Click on the Cost Center Hiearchies page.

Cost element hierarchies

Click on the Cost Element Hiearchies page.

Family of the WBS element

Click on the Family assignment page.

Usage of Responsible cost centers and Cost centers

During the month, costs of WBS elements and CO orders are managed at the WBS or Order level.
Example below (theorical) :

	11.07.2016	12.07.2016	13.07.2016
WBS element KT	100 €	100 €	100 €

Costs have been created on this WBS element. The WBS element is linked to STELLAR project and has IT-BW as resp cost center.
Those data will be loaded in BW via 0CO_OM_WBS_6 data source up to CUB_FC006.

Data will be available in the queries using Responsible cost center (query during the month).

At the end of the month, an accountant will transfert all the costs of the WBS elements to the cost center STELLAR. This record will be loaded via 0CO_OM_CCA_9 also up to CUB_FC006.

At 31.07.2016, query end of the month will display the 300€ costs on cost center STELLAR and query during the month will display it on resp cc IT-BW

WBP	31.07.2016
COST CENTER IT - BW	300 €
COST CENTER STELLAR	300 €

Position of the person responsible and user responsible of the cost centers

The position of the person responsible (c_posit) corresponds to a position in the SRM7 organisational structure. It is coming from the person responsible field (verak) of the cost center MD in WP1/PF1 which not always contains a position (some companies doesn't use SRM7 for purchasing), so we check the existence of the position in c_posit MD before to update it in the BW cost center MD (C_COSTCTR).

The user responsible field is not filled in WP1 Cost center MD and although it is filled in PF1, the field is not updated when they are changes in SRM7. So, the user responsible is determined in BW, and corresponds to the BIP login of the position of the person responsible (attribute c_biposit of c_posit).

The BIP login of the position in c_posit MD is updated from SRM7, using the Function Module ZWPU_GET_POSITIONS_CC in order to share the same rule with ECC reports (ZWFA119 for WP1 and ZZR_WPUR043 for PF1). FM ZWPU_GET_POSITIONS_CC checks the validity of the user in SRM7, in consequence, even when the organisational structure shows a user for a position, the user could be undetermined in the FM if not valid. If the FM finds multiple users for a position, which is not normal, the attribute BIP login of the position in BW is set to "ERROR_MULTI".

Technical rules

Since the service pack update cause the H/S flag of data source 0CO_OM_CCA_9 change the concept of +/- sign (Note 65075), which cause the sign in WP1 was opposite. For PF1, we didn't apply the service pack yet (as of Nov 2021) because we afraid that it will impact to many program.

For WP1, we decided to modify only user exit **Z_FORM_0CO_OM_CCA_9** to overwrite the sign from table COEP by following criteria

```
SELECT  SINGLE low
  INTO v_comp
  FROM tvarvc
  WHERE name =  'ZWBW_CO_CCA_9_COMP'
    AND low  = l_s_ICCTRCSTA1-bukrs.

  IF v_comp IS  NOT  INITIAL .
   SELECT  SINGLE BEKNZ
     INTO l_s_ICCTRCSTA1-seknz
     FROM COEP
     WHERE kokrs = l_s_ICCTRCSTA1-kokrs
       AND belnr = l_s_ICCTRCSTA1-belnr
       AND buzei = l_s_ICCTRCSTA1-buzei
       AND objnr LIKE  'KS%'
       AND vrgng =  'KAMV'
       AND parob LIKE  'KS%' .
  ENDIF .
```

We can specific the company code by table TVARVC and maintain the list via tcode TVARVC in WP1:

Data Browser: Table TVARVC Select Entries 8

Client	Variable Name	Selection type	Number	INCL/EXCL	Option	Field Value
400	ZWBW_CO_CCA_9_COMP	S	0000	I	EQ	6343
400	ZWBW_CO_CCA_9_COMP	S	0001	I	EQ	6375
400	ZWBW_CO_CCA_9_COMP	S	0002	I	EQ	6511
400	ZWBW_CO_CCA_9_COMP	S	0003	I	EQ	6864
400	ZWBW_CO_CCA_9_COMP	S	0004	I	EQ	7523
400	ZWBW_CO_CCA_9_COMP	S	0005	I	EQ	7580
400	ZWBW_CO_CCA_9_COMP	S	0999	I	EQ	*
400	ZWBW_CO_CCA_9_COMP	S	9999	I	EQ	*

BW and ERP systems

- WBD (BW Development) is linked to WD1 (RCS development), DI1 (CICC development), DF1 (Solvay development), TS2 (Acetow Test)
- WBQ (BW Quality) is linked to WQ1 (RCS quality), QI1 (CICC quality), QF1 (Solvay quality) and TS2 (Acetow Test)
- WBP (BW Production) is linked to WP1 (RCS Production), PI1 (CICC Production), PF1 (Solvay Production), RHO (Acetow Production)

- PIM system is not used anymore

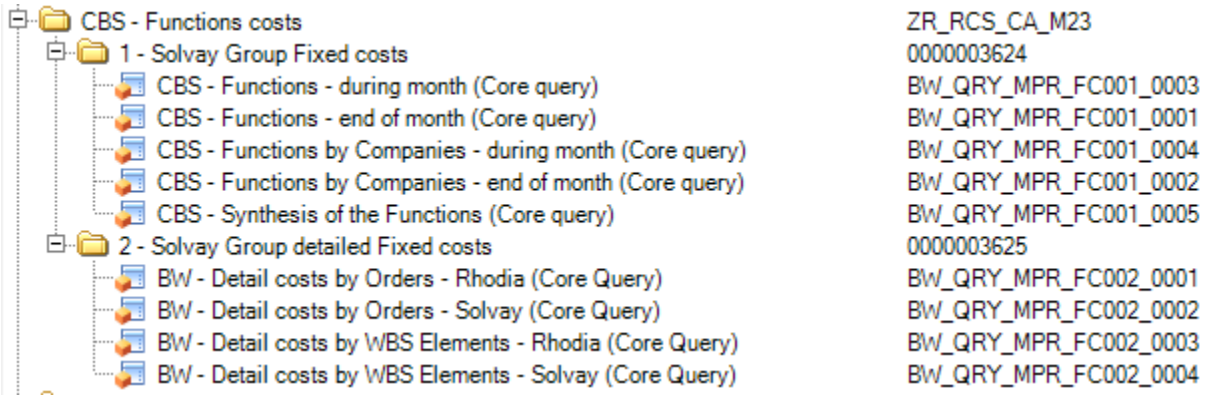
Reporting

Queries End User Documentation

Link to user guide

https://drive.google.com/file/d/1h4RMrmL5MR0plRCW0aqKelxvNKrVw-7J/view

Main queries



Dependencies with other applications

CBS applications is dependant with

- **FC2** Fixed Costs (obsolete) now replaced by FC GBU Fixed costs
- **PS / CAPEX** Project costs (common DSO)
- **CO** Profitability (comme DSO ODS_OPA06)

Data loading

Info providers and objects loaded

MPR_FC001

Process chain	Provider loaded	Frequency	Time start	Duration
PC_FC_CYTEC_003	CUB_FC007	At demand (transaction)		
RSP_COOM_OTHER	CUB_FC005 CUB_FC002	Daily (not week-end)	2:30 am	15 min
RSV_COOM_CCA_OTHER	CUB_FC005 CUB_FC002 CUB_FC004	Daily (not saturday)	2:00 am	15 min
PC_FC_D4	CUB_FC006	Working Day 2, 3 and 4	1 pm 8 pm	5 min
RSP_COOM	CUB_FC006	Daily (not saturday)	1:15 am	20 min
RPC_FC2_BUDGET_1	CUB_FC006	Wednesday	7 am	1h30

PC_FIXED_COST_BUDGET	CUB_FC006	Working Day 2, 3 and 4	1 pm 8 pm	5 min

MPR_FC002:

Process chain	Provider loaded	Frequency	Time start	Duration
PC_FC_D4	ODS_CCA9 ODS_OPA6	Working Day 2, 3 and 4	1 pm 8 pm	5 min
RSV_COOM_CCA	ODS_CCA9	daily 1:30 am		10min
RSV_COOM_CCA_OTHER	ODS6CCA9 ODS6OPA6	Daily (not saturday)	2:00 am	15 min
RSP_COOM	ODS_OPA6 ODS_WBS6	Daily (not week-end)	2:30 am	15 min
RSP_COOM_OTHER	ODS6WBS6	Daily (not week-end)	2:30 am	15 min

Record Keeping

We have data since beginning of 2012 and we never made clean-up.

Main functionnalities

Jump query available

Data Quality Control

Data come from SAP system. To compare data between BW and sources systems, check propagation layers.

Operational Documentation

Procedures

<Describe the recurring procedures needed to operate the application (eg. start/pause/terminate/restart the app processes, data preparation, data ingestion, ETL, data visualization, data export, other manual activities)>

Scheduling

<Describe the scheduling in place for the application (eg. existing jobs, trigger time/event based, dependencies)>

Monitoring

<Describe the monitoring checks to confirm the application is performing well (eg. check the overall status, check performance metrics like runtime/data volume/memory/disk/CPU, maintain and react to alerts/notifications)>

Error Handling

<Describe how to handle errors (eg. error codes, description and respective resolution, alert users)>

Known Bugs

<List the existing bugs, its criticity, workarounds and resolution plan.>

Roadmap

<List past & future evolutions for the application (including links to MED/FSD/TSD)>