

BW OTC - IM Stocks (WBP) (WP1 Flow)

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General presentation

Objective of the application

This application allows 4 kinds of data reporting :

- Reports on the inventory levels (quantity / value) at a given time
- Reports on the material movements (simple ones)
- Reports on the unit prices used for the material valuations
- Reports that mix several of those 3 first sources (Ex : Turnover calculations with needs both inventory level and material issue movements)

Tool Leader + IT leader of the application: Functionally this application is shared between Indus/RTR/OTC/PtP, but it's overall the owner is PtP. Current Reporting Coordinator is Duarte Costa.



IM and PP Application link

It's important to note that the PP (Production Planning) and IM (Stocks) applications are very linked since they share data and share the same info-area AREA_MMIC. See "Dependencies" paragraph for more info.

Usage information

The tool is used by several types and areas of users :

- Financial controllers (values)
- Supply chain (Quantities, movements)
- Warehouse managers (Quantities)
- Maintenance (Industrial suppliers levels)

Used worldwide by hundreds of users.

Only has RCS data.

History

Created before 2006. No significant changes since on the dataflow.

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_M03	IM Stocks	Menu role
ZR_RCS_IM_A01	Stock Analysis - Super User Role	Should no longer be given - Gives user access to query creation on area AREA_MD, AREA_MMIC
ZR_RCS_IM_A02	Stock Analysis - End User Role	Gives user access to queries on area AREA_MD, AREA_MMIC
ZR_RCS_IM_A03	Stock Analysis - Key User Role	Gives user access to queries on area AREA_MD, AREA_MMIC + Access to add/remove items from menu ZR_RCS_CA_M03

Authorization objects

List of autorisation objects mandatory for the application.

Authorization object	Explanation
Company Code	Company of the plant which holds the material

Dataflow overview

Reporting documentation drive folder:

<https://drive.google.com/drive/folders/1NsKbz-S0FtzMddWjNuOdIbd5QgYWU73d>

Example of dataflow overview :

[Template Application name DataFlow](#)

Functional and Technical rules on Workbench + Reporting

Rules & Explanations

Dependencies with other applications

The stocks application is very linked to the PP Production planning --> The PP application also uses the MPR_IC001 cube.

For queries in that cube, the distinction between what goes to PP and what goes to IM is :

- If the query uses the CUB_PP01 or CUB_PP02 data --> PP Query
- If the query uses the material movements values/quantites and TRANSLATES them into categories like "production, consumption..." then it's PP.
If it's only value/quantity then IM.

Data loadings

Info providers

Code	Name	Explanation
CUB_C OPC1	Material Prices	Contains the monthly individual material prices (Moving Average and Standard). Used for the MAP alert query and broadcasts
CUB_I C002	Material movements	Contains the material movements from ODS_IC002. Used only by the VS (Value Stream) application and may be removed if VS is decommissioned.
CUB_I C001	Material stock	Cube to report the stock levels - Here the key figures are cumulative and use both the material movements + revaluations to get the correct values.

MPR_IC001	Material stock / movement	MPR which combines the material movements, the stock levels and several PP infoproviders - Although it was used in the past for stocks queries, only PP queries should be created on it. Use MPR_IC004 for stock queries related to stock level and material movements.
MPR_IC004	Stock Movements	This replaces the MPR_IC001. MPR_IC001 should only be used for PP queries.
DSOE_NTPR	Enterprise Product (PEP Source Sys)	Used to copy from the BO GBR univers database the Ent Grp and Sub-group material master data
DSR_IC01	Material Movement - APD (Direct Update)	?? - Data loaded from a query via APD - Used for EHS (REACH) - Not part of the stocks application
DSR_IC02	Material Movement - APD - REACH (Direct Update)	?? - Data loaded from a query via APD - Used for EHS (REACH) - Not part of the stocks application
OCOPC_O01	Material Prices	Contains the monthly individual material prices (Moving Average and Standard). ODS for the CUB_COPC1 cube.
ODS_IC01	Material movements	Contains all the material documents - All the inventory movements with historical values
DSOPL_TPR	Plant Product (PEP Source Sys)	Used to copy from the BO GBR univers database the Operational Asset and Sub-group material master data
ODS_IC02	Revaluations	Contains the revaluation documents - This is used to update the material movement values so that the stocks levels (in CUB_IC001) are correct with the end of month values.
DSO_IC07	Variance in Stock Between BW & RCS	Loads data from the WP1_400 system in order to, when necessary, compare the ERP stock values with the BW stock values. Used only to check for mistakes. Usually after january 1st.

- CUB_STSA, CUB_MSAM, DSO_CU61, DSO_STSA, DSR_IC03, DSO_MD04, DSO_MSAM are part of the PP application (Info-area is shared with the PP application)
- CUB_IC005 contains FIGL data and is in fact not really part of the stocks but of the Working Capital application.
- CUB_IC006, IS_IC04, IST_FIGL, MPR_IC003 and ODS_IC10 could be deleted as no longer used.

Master Data

Appart from the standard master data used in the stocks, there are a few which are important for queries to work properly :

- C_BATCH - The attributes are used in the [BW - Inventory Aging Report \(Core Query\)](#) and in quantity conversion in the Stock Evolution queries.
- C_MATPUVT - Has the last december unit price for all material/plant/Valuation type which is used in the value calculations in the [BW - Physical Inventory Coverage Rate](#) query.
- C_MATSTLO - Has the flags that show if material/storage location has been inventoried or not this year and last year. Used in the [BW - Physical Inventory Coverage Rate](#) query.

Loading frequency

The stock level / stock movements part of the flow follows the [D4 frequently loaded data schedule](#).

The material prices part of the flow is on a daily full update (Note though that the extractor, in full, only provides current, previous and last december periods data)

C_MATPUVT has to be loaded manually on january each year to update the unit price.

Average performance

Key Figure	Estimation
~ Average Process Chain Runtime	
~ Average nb of rows loaded per load	
~ Total nb of rows loaded (if full)	
~ Average Runtime for 10k lines	

Record Keeping

All history MUST be kept : the stocks level queries are all using cumulative key figures so it's necessary to keep all documents.

Reporting

Queries End User Documentation

See documentation in the public wiki : [IM - Stocks \(WBP\)](#)

Main queries

See list of queries in the public wiki documentation :

[IM - Stocks \(WBP\)](#)

Main functionalities

The most important thing to understand in this application is the different between the infoproviders with cumulative key figures and those without.

The ODS_IC01, ODS_IC02, CUB_IC002 for example are not using cumulative key figures : When you filter on january, you will see the documents posted in january. These are used to report on the activity (movements) on a given period.

The CUB_IC001 uses special cumulative key figures : When you filter on january, you won't get the documents posted in january but a cumulative value of all the documents posted since the beginning up to and including January. This is to report on the stock level at a given date.

Broadcast

The main broadcasts are :

- Inventory Coverage Rate
 - The "4GQ8WDQKNABL93XBWN40L7CJ0" workbook is beeing broadcasted. IMPORTANT : It's a 3.5 workbook ! It will not show in Analysis.
 - Settings should start by "BCAST_ICR"
 - This sends a workbook with the calculated Physical Inventory Coverage.
 - **Monthly** to site controllers.
 - Ex Setting : BCAST_ICR_7673
 - As of July 2016, it's sent to about 50 users, via 96 broadcast settings.
- PMP Alerts
 - The query "BW_QRY_ODS_OCOPC_O01_001" is broadcasted
 - **Daily** to site controllers
 - This sends each day the list of material/plants for which the Moving Average Price has changed by more than X % between last month and current month.
 - Settings should start by "BCAST_PMP"
 - As of July 2016, about 28 broadcasts settings to 30 users

Maintenance

Known bugs

In the past we had sometimes issues on the 1st of January each year due to a few documents not being correctly loaded in the delta.

Note that the stock level cube (CUB_IC001) is VERY sensitive to loading errors : if a document is missing on day D, it will affect ALL the results after day D since all the key figures are cumulative.

Recurring procedure

- **Yearly Manual load of C_MATPUVT** : This master data has to be loaded once per year in january manually from OCO_PC_ACT_05 (Used for the physical inventory queries)
- **January Inventory value Check** : Usually in beginning of january a check is done to verify the stock values from CUB_IC001 to the RCS system. This is due to the fact that several years in a row, we had issues with documents not beeing correctly included in the delta for the 1st of january. It can be done manually by comparing the stock value at a given date by company but a small dataflow was created to help : See more info here [Inventory Check : Comparing MSEG vs BW](#)

Planned Evolution

As of 25/07/2016 there is no consolidated stock application with all ERPs, but [Anon](#), [Kasemvilas](#) is working on adding the PF1 data into a new inventory dataflow.