

# BW - CO - Integrated Margin

- General presentation
  - Objective of the application
  - Usage information
  - History
- Roles & Access
  - Roles and access
  - Authorization objects
- Dataflow overview
  - Functional and Technical rules on Workbench + Reporting
  - Rules & Explanations
  - Dependencies with other applications
- Data loadings
  - Info providers and objects loaded
  - Loading frequency
  - Process chains:
- Tests in WB1 system:
  - Average performance
  - Record Keeping
- Reporting
  - Queries End User Documentation
  - Main queries
  - Main functionalities
  - Broadcast
- Maintenance
  - Known bugs
  - Recurring procedure
  - Planned Evolution

## General presentation

### Objective of the application

Functionnal Specification:

Integrated margin is originally calculated only in WBP side.

The goal is to calculate the integrated margin in CPX (like it's done in WBP with program Z\_M\_INT) with data from WPX and WBP and after this calcul, we must send back the data in WBP.

So, instead calculate Integrated Margin only in WBP, we will use data in WBP and in CPX.

**In CPX, program ZBW\_M\_INT & ZBW\_M\_INT\_ANALYSIS are a replication and adaptation (in name of tables for example) to programs Z\_M\_INT & ZBW\_M\_INT\_ANALYSIS in WBP.**

Apart differences on name of sources tables and internals tables, in program Z\_M\_INT (WBP) we make the calculation for key figures Integrated Duty (/bic/k\_intdut) and Integrated Freight (/bic/k\_intfrg) and not in program ZBW\_M\_INT (CPX) because with use data from CPX in WBP to calculate these keys figure.

Z\_INT\_COST is a transaction to see the result of integrated margin (she is linked to program **ZBW\_M\_INT\_ANALYSIS**).

In program ZBW\_M\_INT\_ANALYSIS, the calculation of integrated margin is done in module function ZBW\_M\_INT\_READ:

```

ABAP Editor: Display Include ZBW_M_INT_ANALYSISF02
ZBW_M_INT_ANALYSISF02 Active
292 APPEND l_range_costvar TO t_range_costvar_t.
293 l_range_costvar-low = k_costvar_z25.
294 APPEND l_range_costvar TO t_range_costvar_t.
295
296 * DATA SELECTION
297 CALL FUNCTION 'ZBW_M_INT_READ'
298 EXPORTING
299   i_p_fisc      = k_fiscper
300   i_p_t_rate   = k_rate_type
301   i_p_sim      = 'X'
302   i_p_pofile   = ''
303   i_p_size     = k_lot_size
304   i_p_size_unit = p_size_unit
305   i_p_currency = p_currency
306 CHANGING
307   i_range_var = t_range_costvar_t
308   i_range_matnr = t_range_c_matnr_t
309   i_range_plant = t_range_plant_t
310   t_simu      = lt_simu.
311
312 * ENDFORM. " get data

```

Tool Leader + IT leader of the application:

## Usage information

## History

## 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 |
|-----------|------------------|-------------|
|           |                  |             |
|           |                  |             |
|           |                  |             |

### Authorization objects

List of autorisation objects mandatory for the application.

| Authorization object | Explanation |
|----------------------|-------------|
|                      |             |
|                      |             |
|                      |             |

## Dataflow overview

DSO correspondence WBP - CPX :

| CPX      | WBP      |
|----------|----------|
| ABCOMM01 | ODS_PCP1 |

|          |          |
|----------|----------|
| ABCOMM02 | ODS_PCP2 |
| ABCOMM03 | ODS_PCP3 |
| ABCOMM04 | ODS_PCP5 |
| ABCOMM05 | ODS_PCP6 |
| ABCOMM06 | OSD_PCP4 |
| ABCOPA01 | DBCOPA24 |
| ABMARM01 | ODS_MARM |

## Functional and Technical rules on Workbench + Reporting

### Rules & Explanations

**In CPX, program ZBW\_M\_INT is a replication and adaptation (in name of tables for example) to program Z\_M\_INT in WBP.**

We must pay attention to table TVARVC for Z\_PERIOD\_IM\_HIST name: if LOW field is empty, the calculation of integrated margin will be done on current and current period - 1.

If the LOW field is filled (format MMMYYY), the chain will use this period to calculate the integrated margin (to be used in case of recalculation) (same rules in WBP system).

In DTP: ABCOMM06 (Vault) -> OH\_COMM01 - Delta, we have a filter to load only data with WX Source of data (to load only data who come from WPX system).

### Dependencies with other applications

## Data loadings

### Info providers and objects loaded

See data flow.

### Loading frequency

Monthly, after the execution of process chain RSP\_COPCP\_MONTHLY in WBP system (second day of workday).

### Process chains:

#### **PC\_CO\_PC\_MM\_04 - MM: META - M - Integrated Margin**

To calculate the Integrated Margin in WPX, we need some informations for WBP. To do that, in WBP we splitted chain RSP\_COPCP\_MONTHLY in two:

One chain in WBP: RSP\_COPCP\_MONTHLY load data in WBP and trigger the chain in CPX (PC\_CO\_PC\_MM\_04).

The chain PC\_CO\_PC\_MM\_04 will load data from WPX and WBP (calculated in chain RSP\_COPCP\_MONTHLY) and calculate the integrated margin for Vault plant.

After that the data will be sent in WBP with help of webmethods and the chain PC\_INT\_MARGIN (WBP) will calculate the integrated margin with data from WBP and CPX.

[blocked URL](#)

Step 1: RSP\_COPCP\_MONTHLY (WBP)

Step 2: PC\_CO\_PC\_MM\_04 (CPX)

Step 3: PC\_INT\_MARGIN (WBP)

Document for changes in process chain in WBP side.

**PC\_CO\_PC\_MM\_04 - MM: META - M - Integrated Margin** is composed by three sub chains:

1. **PC\_CO\_PC\_MM\_01 - MM: TD - M - Acquisition Layer - Integrated Margin (Vault)**

Chain to load acquisitions DSO (by default with current month and current month -1):

- AACOMM01 - IM - Product Cost Items - Acquisition (source = WPX)
- AACOMM07 - IM - Product Cost Items - Acquisition (WB) (source = WBP)
- AACOMM02 - IM - Cost Element Matrix - Acquisition (source = WBP)
- AACOMM03 - IM - Released Costs Estimates - Acquisition (source = WBP)
- AACOMM04 - IM - Plant transfert Cost Transport - Acquisition (source = WBP)
- AACOPA01 - PA - Transport Costs & Duties - Acquisition (source = WBP)

In case where we need to reload previous month, a sub chain is used: **PC\_CO\_PC\_MM\_05 - MM: TD - M - Acquisition Layer - Integrated Margin Hist**

This chain will be executed only in case where in table TVARVC, for Z\_PERIOD\_IM\_HIST the LOW field is not empty, the process chains will use this month to calculate the integrated margin.

| MAN... | NAME             | TYPE | NU... | SI... | OPTI | LOW     | HIGH | CLIE_INDEP |
|--------|------------------|------|-------|-------|------|---------|------|------------|
| 110    | Z_PERIOD_IM_HIST | P    | 0000  | I     | EQ   | 0042019 |      |            |

**Be careful, if we don't want reload specific month, the low field for TVARVC table (name Z\_PERIOD\_IM\_HIST) must be empty.**

2. **PC\_CO\_PC\_MM\_02 - MM: TD - M - Propagation Layer - Integrated Margin (Vault)**

- APCOMM01 - IM - Product Cost Items - Propagation
- APCOMM02 - IM - Cost Element Matrix - Propagation
- APCOMM03 - IM - Released Cost Estimates - Propagation
- APCOMM04 - IM - Plant Transfert Cost Transport - Propagation
- APCOPA01 - PA - Transport Cost & Duties - Propagation

3. **PC\_CO\_PC\_MM\_03 - MM: TD - M - Business Layer - Integrated Margin (Vault)**

- ABCOMM01 - IM - Product Cost Items -Business
- ABCOMM02 - IM - Cost Element Matrix - Business
- ABCOMM03 - IM - Released Cost Estimates - Business
- ABCOMM04 - IM - Plant Transfert Cost Transport - Business
- ABCOPA01 - PA - Transport Cost & Duties - Business

After these three sub chains, we use program ZBW\_TVAVRC\_ZPERIOD to update TVARVC table for Z\_PERIODE, Z\_PERIODE-1 and Z\_PERIODE-2.

Then:

If in TVARVC LOW field is empty for Z\_PERIODE\_IM\_HIST, we execute program ZBW\_M\_INT with Z\_PERIODE1 variant (Z\_PERIODE-1 in tvarvc) and Z\_PERIODE\_M variant (Z\_PERIODE in tvarvc).

Else, if in TVARVC LOW field is not empty for Z\_PERIODE\_IM\_HIST, we execute program ZBW\_M\_INT for the period defined in TVARVC low field.

Program ZBW\_M\_INT will calculate the integrated margin and load the result in DSO ABCOMM05.

Data from DSO ABCOMM05 will be loaded in DSO ABCOMM06 and then in open hub destination OH\_COMM01.

When the open hub is finished, the chain execute the program ZBW\_REST\_SERVICE\_IM to sent information to give the go to webmethods to transfert the file OH\_COMM01.CSV (in directory /exploit/BW/integrated\_margin) from CPX to WBP.

**PC\_GLOBAL\_ATTR\_04 - Global: MD - D - Material unit of quantity (DSO)**

This chain needs to be lauched before the caulation of integrated margin to have last version of material unit quantity in DSO ABMARM01.

Normally this chain is launched every day.

**Program ZBW\_REST\_SERVICE\_IM:**

The goal of this program is to transfert some information (directory, hostname of source an target server...) to webmethod to trigger the transfert of flat file from CPX to WBP.

For that it's need to hafe an RFC destination "RFC\_MFT\_REST" (transaction sm59) where we defined the target host:

**RFC Destination RFC\_MFT\_REST**

Connection Test

RFC Destination:

Connection Type:  Description

Description

Description 1:

Description 2:

Description 3:

Administration | **Technical Settings** | Logon & Security | Special Options

Target System Settings

Target Host:  Service No.:

Path Prefix:

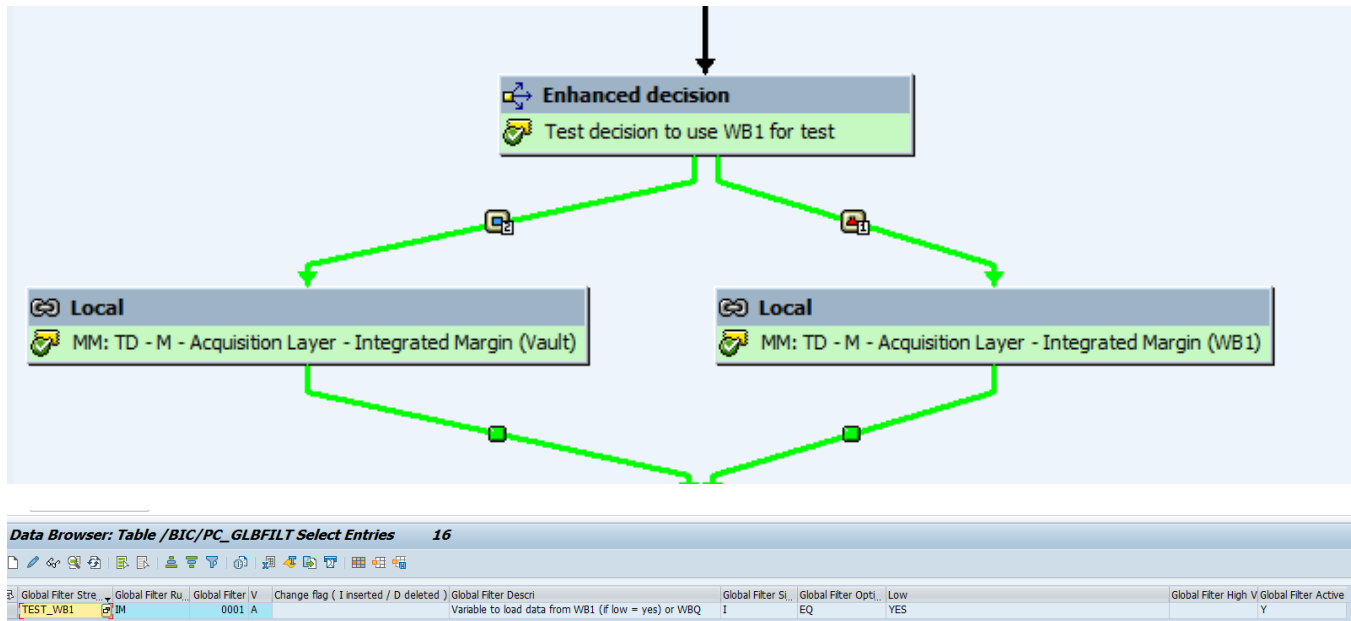
After in program ZBW\_REST\_SERVICE\_IM (inspired by program in [this](#) documentation) we defined the informations to send to Webmethods like:

- User and Password for webmethods
- Target host: defined in master data global filter (stream HOSTNAME) to have the good hostname in function of system (development, quality, production)
- SourceHost: defined directly in the program in function of system.
- Source FileName: '/exploit/BW/integrated\_margin/OH\_COMM01.CSV'.
- Source Archive: '/exploit/BW/archive/'.
- Target Dirrectiry: '/exploit/BW/Integrated\_Margin/'.

## Tests in WB1 system:

The tests will be done with WB1 system instead WBQ.

To load data from WB1 instead WBQ in process chain PC\_CO\_PC\_MM\_04 there is a decision process where the program will be read the master data global filter:



If low field = YES, the process chain will use DTP with WB1 source system instead WBQ.

This variable from mmaster global filter is also used in program ZBW\_REST\_SERVICE\_IM to define the target host:

```

117:  "change target host if we need to test with WB1 system.
118:  SELECT SINGLE /BIC/C_LOW FROM /BIC/PC_GLBFLT INTO C_LOW
119:  WHERE /BIC/C_STREAM = 'TEST_WB1'
120:  AND objvers      = 'A'
121:  AND /BIC/C_RULE = 'IM'
122:  AND /BIC/C_ACTIVE = 'Y'.
123:
124:  IF C_LOW = 'YES'.
125:    v_targethost = 'wb1sapr3_WB1_20'.
126:  ENDIF.

```

After the test and the transport in production, it will be necessary to at least put the LOW at NO. And if possible remove the decision process and sub chain WB1 from process chain PC\_CO\_PC\_MM\_04 to make it clearer and avoid mistakes (and comment the code in program ZBW\_REST\_SERVICE\_IM).

## 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

## Reporting

## Queries End User Documentation

## Main queries

## Main functionalities

## Broadcast

## Maintenance

## Known bugs

## Recurring procedure

## Planned Evolution