

BW RTR - Asset Optimization (pVelocity)

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General presentation

Objective of the application

This application is not really a BW application, but a collection of DSO to provide data to an external tool named pVelocity.

pVelocity is a tool which help the Novecare GBU to optimize their Assets.

In BW, we extract the data from RCS and then generate flat files on a WBP folder and it is the pVelocity tool which is transferring the file from BW to pVelo.

IT Leader is now Nathalie Manirakiza in the IS-RtR team

The Tool Leader is in the Novecare GBU.

Old link to google doc about Pvelocity :

<https://drive.google.com/drive/folders/1OUYHvBX3YNYTALY1QXgslrtjfZBEyX40>

Usage information

There is around 50 users on pVelocity tool WW, all working in the Novecare GBU.

They are Asset Manager, Industrial manager and also financial controllers.

History

This project was launch using BW as Hub because the pVelocity team was not allowed to extract data directly from RCS (WP1).

It was a kind of shadow project.

Roles & Access

There is no direct usage of the BW infoproviders, so no roles nor authorizations.

Dataflow overview

The data flow is very simple because in the main cases, it re-use existaing DSO which are already loaded for other applications.

Then an abap program generates the files in a text format.

The naming rule for the files is a prefix represented the content of the file, then "-" and then a timestamp, which is the dateTime (YYMMDDHHMMSS)

File name	File description	BW Source	Type of data
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CD	Distribution Channel	0DISTR_CHAN	Text
CDSA	CD x SA	C_CDSA	Master Data
COAREA	Controlling Area	0CO_AREA	Text
COMP	Companies	0COMP_CODE	Master data & Text
CURR	Exchange rate	TCURR table	Transactionnal
IECRA	IECRA	0G_CWWE01	Master Data
MARM	Material Alternative unit of measure	ODS_MARM	Master Data
MATNR	Material	C_MATNR	Master data & text
		C_MATPLNT	
PBOM	Standard production cost	ODS_PCP1	Transactionnal
PLANT	Plant	0PLANT	Master Data & Text
PROD	Produced quantity	ODS_PP01	Transactionnal
PROFITCTR	Profit Center	0PROFIT_CTR	Master Data & Text
RAWP	Raw material costs	ODS_PCP3	Transactionnal
RESOURCE	Resources Unit price	ODS_PCP8	Transactionnal
RSAL	Resales of the month	ODS_PA06	Transactionnal
SA	Division	0DIVISION	Text
SHIP	Sales of the month	ODS_PA06	Transactionnal
STDCOST	Standard cost by cost Elements	ODS_PCP7	Transactionnal
TRANSFER	Transfer movement between plants	ODS_IC01	Transactionnal
TVAPT	Sales documents item category	0ITEM_CATEG	Text
TVFKT	Sales billing type	0BILL_TYPE	Text
UOM	Unit of Mesure	T006 table	Master Data
VALSTR	Value Stream	C_VALSTR	Master Data & Text
VC	Standard Variable costs	ODS_PCP3	Transactionnal
ZSECT	Global Business Unit	C_ZSECT	Master Data & text
MMSTA	Material Status	C_MATPLNT	Master Data & Text.

Functional and Technical rules on Workbench + Reporting

Rules & Explanations

Text Files:

The text files are using the text of the info object and the target is to provide the description of some master data to pVelocity.

The structure of them is the following one:

CD: This file is given the short descriptions of the Distribution Channel

Interface File Field	Source table	Field / Data element	Type	Length	Description
DISTR_CHAN	/BI0 /TDISTR_CHAN	/BI0 /OIDISTR_CHAN	CHAR	2	Distribution Channel
TXTSH	/BI0 /TDISTR_CHAN	RSTXTSH	CHAR	20	Short Description

COAREA: This file is given the medium descriptions of the Controlling Area

Interface File Field	Source table	Field / Data element	Type	Length	Description
CO_AREA	/BI0/TCO_AREA	/BI0/OICO_AREA	CHAR	4	Controlling area
TXTMD	/BI0/TCO_AREA	RSTXTMD	CHAR	40	Medium Description

SA: This file is given the short descriptions of the Division

Interface File Field	Source table	Field / Data element	Type	Length	Description
DISTR_CHAN	/BIO /TDIVISION	/BIO /OIDIVISION	CHAR	2	Distribution Channel
TXTSH	/BIO /TDIVISION	RSTXTSH	CHAR	20	Short Description

TVAPT: This file is given the short descriptions of the Sales document item category

Only English language (=EN) is extracted

Interface File Field	Source table	Field / Data element	Type	Length	Description
LANGU	/BIO/TITEM_CATEG	LANGU	LANG	1	Language key
ITEM_CATEG	/BIO/TITEM_CATEG	/BIO/OIITEM_CATEG	CHAR	4	Sales document item category
TXTSH	/BIO/TITEM_CATEG	RSTXTSH	CHAR	20	Short Description

TVFKT: This file is given the short descriptions of the Billing type

Only English language (=EN) is extracted

Interface File Field	Source table	Field / Data element	Type	Length	Description
LANGU	/BIO/TBILL_TYPE	LANGU	LANG	1	Language key
BILL_TYPE	/BIO/TBILL_TYPE	/BIO/OIBILL_TYPE	CHAR	4	Billing type
TXTSH	/BIO/TBILL_TYPE	RSTXTSH	CHAR	20	Short Description

Master Data files:

CDSA: This file will provide the attributes and text of the CDxSA master data. This master data is used as the less level of the organizational sales structure.

Selected description is in English (/BIC/TC_CDSA LANGU = "E").

If English description is not available, then French description is to be selected (/BIC/TC_CDSA LANGU = "F").

Interface File Field	Source table	Field / Data element	Type	Length	Description
DIVISION	/BIC/PC_CDSA	/BIO/OIDIVISION	CHAR	2	Division
C_CDSA	/BIC/PC_CDSA	/BIC/C_CDSA	CHAR	2	Distribution Channel
		/BIC/OIC_CDSA			
G_CWWE01	/BIC/PC_CDSA	BIO/OIG_CWWE01	CHAR	10	IECRA
C_PFCTR1	/BIC/PC_CDSA	/BIC/C_PFCTR1	CHAR	20	1 - Global Business Unit
		/BIC/OIC_PFCTR1			
TXTMD	/BIC/TC_CDSA	RSTXTMD	CHAR	40	Medium Description

COMP: This file will provide the attributes and text of the Company master data. This master data is used to do the geographical grouping.

Interface File Field	Source table	Field / Data element	Type	Length	Description	Comment
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COMP_CODE	/BI0 /PCOMP_CODE	/BI0/OICOMP_CODE	CHAR	4	Company code	
TXTMD	/BI0/TCOMP_CODE	RSTXTMD	CHAR	40	Medium description	Description starts wit "ZZZZ" for inactive companies
COMPANY	/BI0 /PCOMP_CODE	/BI0/OICOMPANY	CHAR	4	Company	
COUNTRY	/BI0 /PCOMP_CODE	/BI0/OICOUNTRY	CHAR	3	Country key	
CURRENCY	/BI0 /PCOMP_CODE	/BI0/OICURRENCY	CHAR	5	Currency key	
C_ZONE	/BI0 /PCOMP_CODE	/BIC/C_ZONE /BIC/OIC_ZONE	CHAR	2	Magnitude Geographie/Zone	
C_STAT_SL	/BIC/C_STAT_SL	/BIC/OIC_STAT_SL	CHAR	4	Status of Trading Partner (Accnt doc)	1=Integrated company 2=Equity Company 3=Other company or Proportionally Integrated
C_FGPTOB	/BI0 /PCOMP_CODE	/BIC/C_FGPTOB /BIC /OIC_FGPTOB	CHAR	1	Flag for Obsolete Object	
CO_AREA	/BI0 /PCOMP_CODE	/BI0/OICO_AREA	CHAR	4	Controlling area	

IECRA: This file will provide the attributes and text of the IECRA master data. This master data is used as the second less level of the organizational sales structure, as a grouping of CDxSA.

Selected description is in English (/BI0/TG_CWWE01 LANGU = "E").

If English description is not available, then French description is to be selected (/BI0/TG_CWWE01 LANGU = "F").

Interface File Field	Source table	Field / Data element	Type	Length	Description	Comment
G_CWWE01	/BI0/PG_CWWE01	/BI0/OIG_CWWE01	CHAR	10	IECRA	Key
TXTSH	/BI0/TG_CWWE01	RSTXTSH	CHAR	20	Sort Description	
C_PFCTR1	/BI0/PG_CWWE01	/BIC/C_PFCTR1 /BIC/OIC_PFCTR1	CHAR	20	1 - Global Business Unit	For information/reference

MARM: This file will provide by material, the different conversion rate to the alternative unit of measure.

Interface File Field	Source table	Field / Data element	Type	Length	Description	
C_MATNR	ODS_MARM	C_MATNR	CHAR	18	Material number	
MEINH	ODS_MARM	U_MEINH	CHAR	3	Alternative unit of measure	
UMREZ	ODS_MARM	K_UMREZ	DEC	9	Numerator for conversion	
UMREN	ODS_MARM	K_UMREN	DEC	9	Denominator for conversion	

MATNR: This table provides the relationship between C_MATNR and DIVISION. A C_MATNR belongs to only one DIVISION (SA). This table will be used to update/replace the DIVISON in SHIP.txt and RSAL.txt.

Selected description is in English (/BIC/TC_MATNR LANGU = "E").

If English description is not available, then French description is to be selected (/BIC/TC_MATNR LANGU = "F").

The size of data can be restricted by selecting only materials belonging to Novocare and Silica CGU by testing of C_PFCTR1 from C_MATPLNT:

- Novocare : ZSECT00011
- Silica : ZSECT00067

Then updated DIVISION will permit updating of IECRA and GBU for the key CDSA in these files.

Interface File Field	Source table	Field / Data element	Type	Length	Description	Comment
C_MATNR	/BIC/PC_MATNR	/BIC/C_MATNR /BIC/OIC_MATNR	CHAR	18	Material code	key
TXTMD	/BIC/TC_MATNR	RSTXTMD	CHAR	40	Medium Description	
BASE_UOM	/BIC/PC_MATNR	/BI0/OIBASE_UOM	CHAR	3	Base Unit of Measure	

BASIC_MATL	/BIC/PC_MATNR	/BI0/OIBASIC_MATL	CHAR	14	Basic material (basic constituent of a material)	
DIVISION	/BIC/PC_MATNR	/BI0/OIDIVISION	CHAR	2	Division (SA)	
C_PFCSTR1	/BIC/PC_MATPLNT	/BIC/C_PFCSTR1 /BIC/OIC_PFCSTR1	CHAR	20	1 - Global Business Unit	
G_CWWE01	/BIC/PC_MATPLNT	/BI0/OIG_CWWE01	CHAR	10	IECRA	
C_VALSTR	/BIC/PC_MATPLNT	/BIC/C_VALSTR /BIC/OIC_VALSTR	CHAR	10	Value Stream	
C_PROD	/BIC/PC_MATNR	/BIC/C_PROD /BIC/OIC_PROD	CHAR	18	Commercial Product	
CO_AREA	/BIC/PC_MATNR	/BI0/OICO_AREA	CHAR	4	Controlling area	
PROFIT_CTR	/BIC/PC_MATNR	/BI0/OIPROFIT_CTR	CHAR	10	Profit Center	
UNIT_DIM	/BIC/PC_MATNR	UNIT_DIM	UNIT	3	Profit Center	
UNIT_OF_WT	/BIC/PC_MATNR	/BI0/OIUNIT_OF_WT	UNIT	3	Weight unit	
VOLUME	/BIC/PC_MATNR	/BI0/OIVOLUME	QUAN	17	Volume	
VOLUMEUNIT	/BIC/PC_MATNR	/BI0/OIVOLUMEUNIT	UNIT	3	Volume unit	
DEL_FLAG	/BIC/PC_MATNR	/BI0/OIDEL_FLAG	CHAR	1	Deletion flag for all material data of a plant	
C_MATGRP	BIC/PC_MATPLNT	/BIC/C_MATGRP /BIC/OIC_MATGRP	CHAR	10	Enterprise Material Grouping	
C_MATSGRP	BIC/PC_MATPLNT	/BIC/C_MATSGRP /BIC/OIC_MATSGRP	CHAR	10	Enterprise Material Sub Grouping	
C_MMSTA	BIC/PC_MATPLNT	/BIC/OIC_MMSTA	CHAR	2	Material Status	
PLANT	BIC/PC_MATPLNT	/BI0/OPLANT	CHAR	4	Plant	

PLANT: PLANT file provides the complete plant list and its correspondent description, zone, Distribution Channel, Controlling Area and etc.

The controlling area is not provided in the monthly extract files. So Controlling Area Code will be updated from this file based on plant because each plant has only one Controlling Area Code.

Plant's short description is a substring of medium description, without the company name an separation character.

For not active plants, short description = complete medium description starting with "ZZZZ", unchanged.

Examples from table '/BI0/TPLANT':

[blocked URL](#)

Remarks: The program P_Velocity is executed only with a list of plant which are included in the Variant => Data loading chapter.

Interface File Field	Source table	Field / Data element	Type	Length	Description	Comment
PLANT	/BI0 /PPLANT	/BI0/OIPLANT	CHAR	4	Plant	Plant is the key.
TXTMD	/BI0 /TPLANT	RSTXTMD	CHAR	40	Medium Description	

TXTSD			CHAR	40	Short Description	Calculated, substring from RSTXTMD, starting after the special separation character (/ , 6...) Ex.: 3865 / Melle -> Melle TXTSD=TXT MD form "ZZZZ" plants
COUNTRY	/BI0 /PPLANT	/BI0 /OICOUNTRY	CHAR	3	Country key	
C_ZONE	/BI0 /PPLANT	/BIC/C_ZONE /BIC/OIC_ZONE	CHAR	2	Magnitude Geography /Zone	
DISTR_CHAN	/BI0 /PPLANT	/BI0 /OIDISTR_CHAN	CHAR	2	Distribution Channel	
FACTCAL_ID	/BI0 /PPLANT	/BI0 /OIFACTCAL_ID	CHAR	2	Factory Calendar ID	
LOC_CURRCY	/BI0 /PPLANT	/BI0 /OIOLOC_CURRCY	CUKY	5	Local currency	
PURCH_ORG	/BI0 /PPLANT	/BI0 /OIPURCH_ORG	CHAR	4	RCS / Purchase Organisation	
REGION	/BI0 /PPLANT	/BI0/OIREGION	CHAR	5	Region (State, Province, County)	
SALESORG	/BI0 /PPLANT	/BI0 /OISALESORG	CHAR	4	Sales Organization	
C_SITE	/BI0 /PPLANT	/BIC/C_SITE /BIC/OIC_SITE	CHAR	5	Geography / Geographic site	
COMP_CODE	/BI0 /PPLANT	/BI0 /OICOMP_CODE	CHAR	4	Company code	
C_OPE_ENT	/BI0 /PPLANT	/BIC /C_OPE_ENT /BIC /OIC_OPE_ENT	CHAR	2	Operating Enterprise	

CO_AREA	/BI0 /PPLANT	/BI0 /OICO_AREA	CHAR	4	Controlling area	Each plant has only one Controlling Area code.
C_FGPTOB	/BI0 /PPLANT	/BIC/C_FGPTOB /BIC /OIC_FGPTOB	CHAR	1	Flag for Obsolete Object	
C_CPCRCY	/BI0 /PPLANT	/BIC/C_CPCRCY /BIC /OIC_CPCRCY	CHAR	5	Currency of the Company	

PROFITCTR: This file provides GBU and values stream info based on a concatenated key Controlling Area + Profit Centre. It will be used to update GBU value.

Profit Center is associated to plant + material.

Selected description is in English (/BI0/TPROFIT_CTR LANGU = "E").

If English description is not available, then French description is to be selected (/BI0/TPROFIT_CTR LANGU = "F").

Interface File Field	Source table	Field / Data element	Typ e	Le ngth	Descript ion	Co mm ent
CO_AREA	/BI0 /PPROFIT_CTR	/BI0 /OICO_AREA	CH AR	4	Controlli ng area	Key
PROFIT_ CTR	/BI0 /PPROFIT_CTR	/BI0 /OIPROFIT_C TR	CH AR	10	Profit Center	Key
TXTSH	/BI0 /TPROFIT_CTR	RSTXTSH	CH AR	20	Short descripti on	
TXTMD	/BI0 /TPROFIT_CTR	RSTXTMD	CH AR	40	Medium descripti on	
DATETO	/BI0 /TPROFIT_CTR	RSDATETO	DA TS	8	Valid-to date	
C_VALSTR	/BI0 /PPROFIT_CTR	/BIC /C_VALSTR /BIC /OIC_VALSTR	CH AR	10	Value Stream	

C_ZSECT	/BI0 /PPROFIT_CTR	/BIC /C_ZSECT /BIC /OIC_ZSECT	CH AR	20	Global Business Unit	
C_PFCTR1	/BI0 /PPROFIT_CTR	/BIC /C_PFCTR1 /BIC /OIC_PFCTR1	CH AR	20	1 - Global Business Unit	For info rma tion / refe rence
G_CWWE01	/BI0 /PPROFIT_CTR	/BI0 /OIG_CWWE01	CH AR	10	IECRA	
C_TVALSTR	/BI0 /PPROFIT_CTR	/BIC /C_TVALSTR /BIC /OIC_TVALSTR	CH AR	4	Technolo gy Value Stream	
PLANT	/BI0 /PPROFIT_CTR	/BI0 /OIPLANT	CH AR	4	Plant	
COMP_CODE	/BI0 /PPROFIT_CTR	/BI0 /OICOMP_CODE	CH AR	4	Compan y code	
C_OPE_ENT	/BI0 /PPROFIT_CTR	/BIC /C_OPE_ENT /BIC /OIC_OPE_ENT	CH AR	20	Operatin g Enterprise	

UOM: This file contains all the attributes of the unit of measure. The target is to provide to the pVelocity tool all the necessary information to convert one unit of measure to another to be able to calculate integrated costs.

table	field	description	example1	example2
T006	MANDT	Client	110	110
T006	MSEHI	Int. meas. unit	LB	TOZ
T006				
T006	KZEX3	3-char.ext.unit	X	X
T006	KZEX6	6-char.ext.unit	X	X
T006	ANDEC	Decimal.pl.rnd.	3	0
T006	KZKEH	Commercial unit	X	X
T006	KZWOB	Value bsd cmmt		
T006	KZ1EH	(1) unit		
T006	KZ2EH	(2) unit		
T006	DIMID	Dimension	MASS	MASS
T006	ZAHL	Numerator	24445	311035

T006	NENNR	Denominator	53892	10
T006	EXP10	Exponent	0	6-
T006	ADDKO	Additive const.	0	0
T006	EXPON	fl. pt. exp.	0	0
T006	DECAN	Decimal places	0	0
T006	ISOCODE	ISO code	LBR	APZ
T006	PRIMARY	Primary code	X	X
T006	TEMP UNIT	Temperature un.		
T006	FAMUNIT	Un.of meas.fam.		
T006	PRESS UNIT	Pressure Unit		
T006	MSEH3	Commercial	LB	TOZ
T006	MSEH6	Technical	lb	TOZ
T006	MSEHT	Meas. unit text	US pound	Troy ounce
T006	MSEHL	Unit text	US pound	Troy ounce

table	field	description	example
T006D	MANDT	Client	110
T006D	DIMID	Dimension	MASS
T006D	LENG	Length	0
T006D	MASS	Mass	1
T006D	TIMEX	Time	0
T006D	ECURR	elec. current	0
T006D	TEMP	Temperature	0
T006D	MOLQU	Mole quantity	0
T006D	LIGHT	Luminous intensity	0
T006D	MSSIE	SI unit	KG
T006D	TEMP DEP	Temperature-Depend.	
T006D	PRESS DEP	Pressure-Dependent	
T006D	TXDIM	Dimension text	Mass

Conceptual information :

To use those tables inform the dimension and the unit of measure that you need to convert in T006:

Example1 : mass / LB

In this example, $1 \text{ lb} = 24445/53893 = 0,453 \text{ kg}$

Example2= mass/TOZ

In this example, $1 \text{ toz} = 311035/10000000 = 0,031 \text{ kg}$

The base of unit of measure defined in the System International (kg) is obtained in the table T006D.

VALSTR: This file will provide the attributes and text of the Value Stream.

Selected description is in English (/BI0/TPROFIT_CTR LANGU = "E").

If English description is not available, then French description is to be selected (/BI0/TPROFIT_CTR LANGU = "F").

Interface File Field	Source table	Field / Data element	Ty pe	Le ng th	Descripti on	Co mm ent
C_VALSTR	/BIC /PC_VALSTR	/BIC /OIC_VALSTR	C H AR	10	Value Stream	Key
TXTSH	/BIC /TC_VALSTR	RSTXTSH	C H AR	20	Short Descripti on	
TXTMD	/BIC /TC_VALSTR	RSTXTMD	C H AR	40	Medium Descripti on	
C_TVALSTR	/BIC /PC_VALSTR	/BIC /C_TVALSTR /BIC /OIC_TVALSTR	C H AR	4	Technolo gy Value Stream	
PLANT	/BIC /PC_VALSTR	/BI0 /OIPLANT	C H AR	4	Plant	
C_PFCTR1	/BIC /PC_VALSTR	/BIC /OIC_PFCTR1	C H AR	20	1 - Global Business Unit	
CURRENCY	/BIC /PC_VALSTR	/BI0 /OICURRENCY	C U KY	5	Currency key	
C_TYPEVS	/BIC /PC_VALSTR	/BIC /C_TYPEVS /BIC /OIC_TYPEVS	C H AR	20	Value Stream Type	
C_GEOSITE	/BIC /PC_VALSTR	/BIC /C_GEOSITE /BIC /OIC_GEOSITE	C H AR	20	Value Stream Geograph ical site	

ZSECT: This file will provide the description and attributes of the Global Business Unit

Selected description is in English (/BIC/TC_ZSECT LANGU = "E").

If English description is not available, then French description is to be selected (/BIC/TC_ZSECT LANGU = "F").

Interface File Field	Source table	Field / Data element	Type	Length	Description	Comment
C_ZSECT	/BIC /PC_ZSECT	/BIC /C_ZSECT /BIC /OIC_ZSECT	CHAR	20	Global Business Unit	
TXMTD	/BIC /TC_ZSECT	RSTXTMD	CHAR	40	Medium description	
C_FGPTOB	/BIC /PC_ZSECT	/BIC /C_FGPTOB /BIC /OIC_FGPTOB	CHAR	1	Flag for Obsolete Object	

Transactionnal data:

CURR: Exchange rate

Select all occurrences in table TCURR with KURST = M and create a file

table	field	description	Type	example
tcurr	MANDT	Client	T	110
tcurr	KURST	Exch.rate type	T	M
tcurr	FCURR	From currency	T	USD
tcurr	TCURR	To-currency	T	CAD
tcurr	GDATU	Valid from	T	30.09.2007
tcurr				
tcurr	UKURS	Exchange Rate	N	1,00404
tcurr	FFACT	Ratio (from)	N	0
tcurr	TFACT	Ratio (to)	N	0

To use the exchange rate proceed : inform the FCURR and TCURR and valid date from .

If the valid date is not informed in the file, use the exchange rate of the last date less than the date informed.

PBOM: Standard production cost

The file is generated from the ODS_PCP1 DSO. In addition to the variant, there is no specific selection.

This file is used today in P_Velocity interface in order to inform the standard cost of the product produced in the month.
(ZBW_KEKO_CKIS)

For byproducts/co-products the OI_MENGE is negative

Technical field name	Description	Type
FISCPER	Fiscal year / period (Month)	T
PLANT	Plant	T
C_MATNR	Material (Number + Description)	T
C_PRODVER	Production Version	T
ACTTYPE	Activity Type (Number + Description)	T
C_COMPNT	BOM Component (Number + Description)	T
WORKCENTER	Work Center/Resource (Number + Description)	T
BASE_UOM	Base Unit of Measure	T
UNIT	Unit of measure	T
OI_MENGE	Quantity	N
LOTSIZE_IT	Lot Size	N
DIVISION	Division (code & Desc.) will com from CO-PA	T
PRCTR	Profit center	T

PROD: Produced quantity

The file is generated from the ODS_PP01 DSO. In addition to the variant, there is no specific selection.

Technical field name	Description	Type
PLANT	Plant (Number + Description)	T
PRODORER	Manufacturing Order	T
C_MATNR	Material	T
BASE_UOM	Base Unit of Measure	T
CALDAY	Calendar Day	T
GR_QTY	Actual goods receipt quantity	N
PRCTR	Profit center	T
AUFK-ZZMDV01	Resource (production line used in the PO)	T

RAWP: Raw material price

The file is generated from the ODS_PCP3 DSO. In addition to the variant, there is no specific selection.

Technical field name	Description	Type
PLANT	Plant	T
FISCPER	Fiscal year / period (Month)	T
C_MATNR	Material	T
CURRENCY	Currency key	T
UNIT	Unit of measure	T
AMOUNT	Amount	N

LOTSIZE_IT	Lot Size	N
PRCTR	Profit center	T

RESOURCE: Resources Unit price

The file is generated from the ODS_PCP8 DSO. In addition to the variant, there is no specific selection.

Obtain the resource identification OBJID in table CRHD selecting the occurrences by :

- OBJTY = A
- VERWE = 0008 or 0009
- WERKS = informed (all plants of Z028 CA)

With the OBJID read table CRCO in order to obtain the cost center / activity :

Select every occurrence of OBJID with CA/cost center / activity not equal spaces.

For each occurrence selected of CRCO , read table CSSL with fields KOKRS , KOSTL, LSTAR and GJAHR = year informed (reference date) , in order to obtain the OBJNR.

Finally, with OBJNR , GJAHR and VERSN = 0 , obtain the unit price in table COST.

The prices and unit price are informed by month with the Controlling area currency (in Z028 = USD).

table	field	description	example
CRHD	OBJTY	Object type	A
CRHD	OBJID	Object ID	
CRHD	ARBPL	Work center	ABRERU1
CRHD	WERKS	Plant	242
CRHD	VERWE	Work center cat	8
CRTX	KTEXT	description	Regen Furnace Unit1
CRCO	KOKRS	CO Area	Z028
CRCO	KOSTL	Cost Center	0242-1012
CRCO	LSTAR	Activity Type	MACHI
CSSL	OBJNR	Object number	KLZ0280242-1012 MACHI
CSSL	LEINH	Activity unit	H
COST	LEDNR	Ledger	0
COST	GJAHR	Fiscal Year	2008
COST	WRTTP	Value Type	1
COST	VERSN	Version	0
COST	TARKZ	Price indicator	1
COST	PERBL	Period block	16
COST	VRGNG	Bus.Transaction	RKP2
COST	TKG001	Total price in CA currency	22
COST	TKG002	Total price in CA currency	22
COST	TKG003	Total price in CA currency	22
COST	TKG004	Total price in CA currency	22
COST	TKG005	Total price in CA currency	22
COST	TKG006	Total price in CA currency	22
COST	TKG007	Total price in CA currency	22
COST	TKG008	Total price in CA currency	22
COST	TKG009	Total price in CA currency	22
COST	TKG010	Total price in CA currency	22
COST	TKG011	Total price in CA currency	22
COST	TKG012	Total price in CA currency	22
COST	TKG013	Total price in CA currency	0
COST	TKG014	Total price in CA currency	0
COST	TKG015	Total price in CA currency	0

COST	TKG016	Total price in CA currency	0
COST	TKE001	Price unit in CA currency	1
COST	TKE002	Price unit in CA currency	1
COST	TKE003	Price unit in CA currency	1
COST	TKE004	Price unit in CA currency	1
COST	TKE005	Price unit in CA currency	1
COST	TKE006	Price unit in CA currency	1
COST	TKE007	Price unit in CA currency	1
COST	TKE008	Price unit in CA currency	1
COST	TKE009	Price unit in CA currency	1
COST	TKE010	Price unit in CA currency	1
COST	TKE011	Price unit in CA currency	1
COST	TKE012	Price unit in CA currency	1
COST	TKE013	Price unit in CA currency	1
COST	TKE014	Price unit in CA currency	1
COST	TKE015	Price unit in CA currency	1
COST	TKE016	Price unit in CA currency	1

RSAL: Resales of the month

The file is generated from the ODS_PA06 DSO.

This file is used today in the P_Velocity interface in order to inform the resales in the month.

This file was created for Mustang version , selection :

IF VAL_CLASS=Z130 or if ITEM_CATEG=(TAS or TASG or TAB) => file RSAL otherwise file SHIP.

Technical field name	Description	Type
C_MATNR	Material	T
REFER_DOC	Document number of the reference document	T
SALESORG	Sales Organization	T
DISTR_CHAN	Distribution Channel	T
PLANT	Plant	T
SHIP_TO	Ship-To Party (Number + Description + city)	T
PSTNG_DATE	Posting date in the document	T
DOC_NUMBER	Sales document	T
Product line 00	GBR: Product line (Number + Description)	T
Commercial Product	GBR: Commercial Product (Number + Description)	T
G_CWWE13	Ship-to country	T
G_CWWE10	Movement type	T
CUSTOMER	Customer number (Number + Description)	T
CURRENCY	Currency key	T
G_UVVA01	Un Qty invoice	T
G_AVVB00	B00 Net Sales	N
G_AVVB20	B20 Add N.Sales Int	N
G_AVVC00	C00 Rebates	N
Net Sales Calculated	'B00 Net Sales' + 'B20 Add N.Sales Int' + 'C00 Rebates'	N
G_AVVC10	C10 Sales Commission	N

G_AVVC20	C20 Freight (Prov)	N
G_AVVD00	D00 VC Variable Cost	N
Contribution Calculated	'Net Sales Calculated' - 'C10 Sales Commission' - 'C20 Freight (Prov)' - 'D00 VC Variable Cost'	N
G_AVVF00	F00 DEP Depreciation	N
G_AVVE00	E00 FC Fixed Costs	N
G_QVVA01	Qty invoice	N
G_AVVB10	B10 Net Sales Corr.	N
G_AVVC05	C05 Cash dis cust SD	N
G_AVVC06	C06 Cash dis cust FI	N
G_CWWE01	IECRA (Number + Description)	T
C_MATNR	Only Description of the material	T
REGION	State (attribute of the customer)	T
CITY	City of the customer (attribute)	T
SALES_GRP	Sales Group (Code and description)	T
DIVISION	Division (code & Desc.) will com from CO-PA	T
PRCTR (from COPA)	Profit center	T
VBAK-ERNAM	Sales order's responsible person	T
AUFNR (From COPA)	Sales order number	T
PSTYV (From COPA)	Sales document item category	T
FKART (From COPA)	Billing type	T

SHIP: Sales of the month

The file is generated from the ODS_PA06 DSO.

This file will contain only the sales without the resales since they will be in the new RSAL file.

Conceptual information for P-Velocity : Identification of freight costs in the late differentiation flow : select PSTYV =TAPS , and qty = 0. (not select qty # zero).

PLANT – is the distribution plant.

Plant Code from the PRCTR (1 st four characters) – is the plant where the transaction will be grouped under for profit analysis and the plant code showed in the plant-list in the pV. This is also the plant code to link with the PBOM

Here the list of sales document item category table TVAPT (341 items) :

table	field	description	Type	example
TVAPT	MANDT	Client	T	110
TVAPT	SPRAS	Language	T	EN
TVAPT	PSTYV	Item category	T	AES
TVAPT	VTEXT	Description	T	Atn from serv.order

Here the list of sales billing type table (92 items):

table	field	description	Type	example
TVFKT	MANDT	Client	T	110
TVFKT	SPRAS	Language	T	EN
TVFKT	FKART	Billing Type	T	B1
TVFKT	VTEXT	Description	T	Rebate Credit Memo

Technical field name	Description	Type
C_MATNR	Material	T
REFER_DOC	Document number of the reference document	T
SALESORG	Sales Organization	T
DISTR_CHAN	Distribution Channel	T
PLANT	Plant	T
SHIP_TO	Ship-To Party (Number + Description + city)	T
PSTNG_DATE	Posting date in the document	T
DOC_NUMBER	Sales document	T
Product line 00	GBR: Product line (Number + Description)	T
Commercial Product	GBR: Commercial Product (Number + Description)	T
G_CWWE13	Ship-to country	T
G_CWWE10	Movement type	T
CUSTOMER	Customer number (Number + Description)	T
CURRENCY	Currency key	T
G_UVVA01	Un Qty invoice	T
G_AVVB00	B00 Net Sales	N
G_AVVB20	B20 Add N.Sales Int	N
G_AVVC00	C00 Rebates	N
Net Sales Calculated	'B00 Net Sales' + 'B20 Add N.Sales Int' + 'C00 Rebates'	N
G_AVVC10	C10 Sales Commission	N
G_AVVC20	C20 Freight (Prov)	N
G_AVVD00	D00 VC Variable Cost	N
Contribution Calculated	'Net Sales Calculated' - 'C10 Sales Commission' - 'C20 Freight (Prov)' - 'D00 VC Variable Cost'	N
G_AVVF00	F00 DEP Depreciation	N
G_AVVE00	E00 FC Fixed Costs	N
G_QVVA01	Qty invoice	N
G_AVVB10	B10 Net Sales Corr.	N
G_AVVC05	C05 Cash dis cust SD	N
G_AVVC06	C06 Cash dis cust FI	N
G_CWWE01	IECRA (Number + Description)	T
C_MATNR	Only Description of the material	T
REGION	State (attribute of the customer)	T
CITY	City of the customer (attribute)	T
SALES_GRP	Sales Group (Code and description)	T
DIVISION	Division (code & Desc.) will com from CO-PA	T
PRCTR (From COPA)	Profit center	T
VBAK-ERNAM	Sales order's responsible person	T
AUFNR (From COPA)	Sales order number	T
PSTYV (From COPA)	Sales document item category	T
FKART (From COPA)	Billing type	T

STDCOST: Standard cost by cost Elements

The file is generated from the ODS_PCP7 DSO.

This file is used to provide the split of COGS in raw material cost, variable utilities , fix utilities , labor , maintenance , toll manufacturing, overhead and depreciation.

The cost elements of the material represents the split of the cost of raw materials , intermediates products , utilities and fixed costs and depreciation consumed until this production phase.

In order to obtain the cogs split by cost element , the link with the table SHIP and RSAL need to be done by : cocode / shipping plant / material code.

Do not forget to convert the standard cost estimate calculated by production lot size to the standard cost by qty sold.

For billing type IV the cost is informed in the SHIP file only (the inter company cost is composed by standard cost + management fees + freight costs which are informed in the pricing procedure).

For item category TAS the cost is informed in the RSAL file only (the origin is the price purchase).

Use always the fields KST001 , 3 , 5 , 7 , 9 , 11 , 13 , 15 , 17.

Mapping of the KSTxxx item to the P&L rows

P&L Item	Mapping to KSTxxx	Deduced from source file
Sales Kg	G_QVVA01	SHIP
Sales Value	NET_SALES_CALCULATED + G_AVVB10 + G_AVVC05 + G_AVVC06	SHIP
Freight	G_AVVC20	SHIP
Net Sales	NET_SALES_CALCULATED - G_AVVC20	SHIP
Raw Mat	KST001 / LOSGR * G_QVVA01	STDCOST & InvoiceQty(SHIP)
Var OH	(KST003+KST005) / LOSGR * G_QVVA01	STDCOST & InvoiceQty(SHIP)
Packaging	KST009 / LOSGR * G_QVVA01	STDCOST & InvoiceQty(SHIP)
T.Variable	Raw Mat + Var OH + Packaging	Calculation
CM	Net Sales - T.Variable	Calculation
Direct Labor	KST007 / LOSGR * G_QVVA01	STDCOST & InvoiceQty(SHIP)
Depreciation	KST017 / LOSGR * G_QVVA01	STDCOST & InvoiceQty(SHIP)
Fixed OH	(KST011+KST013+KST015) / LOSGR * G_QVVA01	STDCOST & InvoiceQty(SHIP)
T.Fixed	Direct Labor + Depreciation + Fixed OH	Calculation
GM	CM - T.Fixed	Calculation

Structure of the file:

table	field	description	detail	example
KEKO	MANDT	Client		260
KEKO	BZOBJ	Reference Obj.		0
KEKO	KALNR	ProdCostEst.No.		100103934
KEKO	KALKA	Costing Type		1
KEKO	KADKY	Costing Date		01.10.2007
KEKO	TVERS	Costing Version		1
KEKO	BWVAR	Valuation Variant		ZFO
KEKO	KKZMA	Additive Costs		
KEKO	MATNR	Material		38771
KEKO	WERKS	Plant		294
KEKO	KOKRS	CO Area		Z028
KEKO	KADAT	Cstg Date From		30.10.2007
KEKO	BIDAT	Costing Date To		31.12.9999
KEKO	KADAM	Cstg Date From		
KEKO	BIDAM	Costing Date To		

KEKO	BWDAT	Valuation Date		30.10.2007
KEKO	ALDAT	Qty Struc. Date		30.10.2007
KEKO	BEDAT	Requiremts Date		
KEKO	VERID	Prod. Version		
KEKO	STNUM	BOM		
KEKO	STLAN	Usage		
KEKO	STALT	Alternative		
KEKO	STCNT	0 Counter		0
KEKO	PLNNR	Group		
KEKO	PLNTY	Task List Type		
KEKO	PLNAL	Group Counter		
KEKO	PLNCT	0 Counter (PLN		0
KEKO	LOEKZ	Deletion Indic.		
KEKO	LOSGR	Cstg Lot Size	lot size used in the std cost calculation	39.682,800
KEKO	MEINS	Base Unit		LB
KEKO	FEH STA	Costing Status		FR
KEKO	FREIG	Release		X
KEKO	SOBSL	SpecProcuremKey		CY
KEKO	SOBES	Spec. procuremt		7
KEKO	SOWRK	SpclPrcmntPlant		7315
KEKO	PRCTR	Profit Center		7424-10449
KEKO	KURST	Exch. Rate Type		M
KEKO	HWAER	Local Currency		USD
KEKO	FWAER KPF	Currency		USD
KEPH	KST001	Cost Field	Raw Materials TOT	31.855,52
KEPH	KST002	Cost Field	Raw Materials FC	0
KEPH	KST003	Cost Field	Toll Manufacturing TOT	71,52
KEPH	KST004	Cost Field	Toll Manufacturing FC	0
KEPH	KST005	Cost Field	Utilities - TOT (variable)	1.128,47
KEPH	KST006	Cost Field	Utilities - FC	0
KEPH	KST007	Cost Field	Labor Costs TOT	1.138,44
KEPH	KST008	Cost Field	Labor Costs FC	1.138,44
KEPH	KST009	Cost Field	Supplies & Misc. TOT	0
KEPH	KST010	Cost Field	Supplies & Misc. FC	0
KEPH	KST011	Cost Field	Maintenance TOT	7.327,81
KEPH	KST012	Cost Field	Maintenance FC	7.327,81
KEPH	KST013	Cost Field	Overheads TOT	0
KEPH	KST014	Cost Field	Overheads FC	0
KEPH	KST015	Cost Field	Utilities -TOT (fixed)	0
KEPH	KST016	Cost Field	Utilities -FC	0
KEPH	KST017	Cost Field	Depreciation TOT	2.579,16
KEPH	KST018	Cost Field	Depreciation FC	2.579,16
KEPH	KST019	Cost Field	not used	0
KEPH	KST020	Cost Field	not used	0

TRANSFER: Transfer movement between plants

The file is generated from the ODS_PCP8 DSO is used to analyse the flow of products between plants.

The extraction will take in to account the MM movements detailed in the next steps and theirs reverse movements :

INTRACO:

- for the month informed (use for select the documents in MKBF) , select the transfer movements in table MSEG : 301, 302, 303, 351, 641, 642, 647, 648, 671, 672, 677, 678, 833, 861, 862 with XAUTO = space

INTERCO:

- For the month informed (use for select the documents in MKBF) , select the next movements in table MSEG , considering all the occurrences with the same material document code : 645, 646, 675, 676

(for every one there are 2 occurrences with the same material document number : 645 + 101 , 646 + 102 , 675 + 161 , 676 + 162 , 643 +101 , 673+ 161 , 644 + 674, 102 + 162)

Save the table with the movements :

table	field	description	Type	Example	
mseg	MANDT	Client	T	110	
mseg	MBLNR	Material Doc.	T	4900005052	
mseg	MJAHR	Mat. Doc. Year	T	2002	
mseg	ZEILE	Item	T	1	
mkpf	BUDAT	posting date	T		
mseg	LINE ID	Line ID	T	1	
mseg	PARENT ID	Parent ID	T	0	
mseg	LINE DEPTH	Level	T	0	
mseg	BWART	Movement Type	T	301	
mseg	XAUTO	Auto. created	T		
mseg	MATNR	Material	T	36015	
mseg	WERKS	Plant	T	2299	
mseg	SHKZG	Debit/Credit	T	H	H=credit S=debit
mseg	MENGE	Quantity	N	1.000	
mseg	MEINS	Base Unit	T	KG	
mseg	ERFMG	Quantity in UnE	N	1.000	
mseg	ERFME	Unit of Entry	T	KG	
mseg	BUKRS	Company Code	T	7388	
mseg	UMMAT	Receiving mat.	T	36015	
mseg	UMWRK	Receiving plant	T	212	is empty for mov INTERCO
mseg	LIFNR	Vendor	T		
mseg	KUNNR	Customer	T		
mseg	WEMPF	Goods recipient	T		
mseg	PRCTR	Profit center	T		
mseg	PPRCTR	Partner Profit center	T		
mseg	EBELN	Purchase order	T		
mseg	EBELP	Item number of purchase document	T		

For Intraco :

- when the debit/credit = H : werks is the sending plant and umwrk is the receiving plant
- when the debit/credit = S : werks is the receiving plant and umwrk is the sending plant

For Interco :

Work with the 2 occurrences with the same material document number :

- Mov 645, 675 , 101, 161 and their reverses 646, 676, 102, 162 :
- when the debit/credit = H : werks is the sending plant
- when the debit/credit = S : werks is the receiving plant

Work with the 2 occurrences with the same purchase order / item number :

- Mov 643, 101 , 673, 161 and their reverses 644, 674, 102, 162 :
- when the debit/credit = H : werks is the sending plant
- when the debit/credit = S : werks is the receiving plant

Dependencies with other applications

Of course this application is very dependant of the others, because it uses a lot of DSO which already loaded by other applications.

Master data and texts are shared with all the other application.

Here are the dependance of the other applications:

- PROD file from ODS_PP01 used in the Production reporting application
- PBOM file from ODS_PCP1 used in the CO-PC (Cost production) reporting

- RAWP file from ODS_PCP3 used in the CO-PC (Cost production) reporting
- SHIP and RSAL files from ODS_PA06 used in the RCS KPIs dashboard
- STDCOST file from ODS_PCP7 used in the integrated margin solution
- RESSOURCE file from ODS_PCP8 used in the integrated margin solution
- TRANSFER file from ODS_IC01 used in the stock and working Capital applications

MMSTA: Material Status

The file is generated from the C_MATPLNT will display the status of the Material with respective to plant.

1. Leading zeros are removed only from the "MAT PLANT" column
2. only values where "MMSTA" column are filled are material and plant combinations that are deactivated. Therefore, Rows removed where MMSTA are empty.
3. Rows extracted only where MARC-LVORM = X.
4. This extract will be restricted to Novecare scope means ERP GBU = CS OR ZSECT00011 OR ZSECT00078.

Structure of the file:

table	field	description	detail	example
C_MATPLNT	PLANT	Plant		0087
C_MATPLNT	MAT_PLANT	Material Plant.		00000000000011830
C_MATPLNT	MATL_STATUS	Material status		Z5

Data loadings

Info providers and objects loaded

Info providers which are loaded are shared with other applications.

Once they are loaded, the big abap report Z_PVELOCITY is launched 3 times with the 3 different variants to generate 3 sets of files for the 3 different periods.

Files generated

The files which are generated are for the current month, the previous month and even month -2 in order to have all the cost corrections.

The specific folder is visible in AL11 transaction and is /exploit/BW/CIS

Directory: /exploit/BW/CIS							
Useable	View...	Chang...	Length	Owner	Lastchange	Lastchan...	File Name
X			2721890	wbpadm	04.07.2016	08:45:08	VC--20160704083239.txt
X			39082	wbpadm		08:44:52	COMP--20160704083239.txt
X			14509519	wbpadm			MATNR--20160704083239.txt
X			44455	wbpadm		08:43:22	IECRA--20160704083239.txt
X			1012596	wbpadm		08:43:21	PROFITCTR--20160704083239...
X			49102	wbpadm			VALSTR--20160704083239.txt
X			237889	wbpadm		08:43:18	CDSA--20160704083239.txt
X			1818	wbpadm			COAREA--20160704083239.txt
X			7549	wbpadm		08:43:15	CD--20160704083239.txt
X			820059	wbpadm			MARM--20160704083239.txt
X			203598	wbpadm			PLANT--20160704083239.txt
X			13104	wbpadm			SA--20160704083239.txt
X			5867	wbpadm			ZSECT--20160704083239.txt
X			387283	wbpadm		08:43:11	CURR--20160704083239.txt
X			10561	wbpadm			TVAPT--20160704083239.txt
X			1369	wbpadm			TVFKT--20160704083239.txt
X			142965	wbpadm			UOM--20160704083239.txt
X			380634	wbpadm		08:43:10	TRANSFERS--20160704083239...
X			922426	wbpadm		08:40:34	RESOURCE--20160704083239.txt
X			6705434	wbpadm			STDCOST--20160704083239.txt
X			2388469	wbpadm		08:40:32	RAWP--20160704083239.txt
X			14889310	wbpadm		08:38:25	PBOM--20160704083239.txt
X			848277	wbpadm		08:38:09	PROD--20160704083239.txt
X			1897417	wbpadm		08:37:58	RSAL--20160704083239.txt
X			19050067	wbpadm			SHIP--20160704083239.txt
X			2733985	wbpadm		08:32:38	VC--20160704081507.txt
X			39082	wbpadm		08:32:21	COMP--20160704081507.txt

There is 3 processes which will launch the same abap report (Z_PVELOCITY) with 3 different variants:

- Z_NOVE_PER
- Z_NOVE_PER-1
- Z_NOVE_PER-2

Process Display: ABAP Program

Variant ☐ MAJ Novecare current period
Last Changed By S8053083 **Changed On** 16.10.2015 **At** 16:48:58

Call Mode	Called From
☒ Synchronous ☐ Asynchronous	☒ Local ☐ Destination

Program to Call

☒ **Program**

Program Name
Program Variant

☐ **Scheduled Program**

Event
Parameters

For each Variant, we have the following information to set:

Programme de création de fichiers pour PVelocity/Ospiate

Selection Parameters

Parameters

Plant			
Beginning fiscal period :	☒		
Ending fiscal period :	☒		
Materials to Delete PBOM			
Materials to Delete Others			

Beginning fiscal period and **Ending fiscal period** are automatically set to the correct value via a variable.

Plant: They are the plant belonging to Novecare GBU, some of them are shared with other GBUs

Material to Delete PBOM: They are material which are not extracted to the PBOM file

Material to Delete Others: They are material which are not extracted to the SHIP and RSAL files

All the values of the variant are also included in this GSheet: https://drive.google.com/drive/folders/1_h23A4P8kaLgiT1gV1R-hck4ReDKp_fs

Loading frequency

There is a dedicated process chain to load specific data or to update the target where we need to generate the files and it generated the file launching a big abap report.

040 - TRANSVERSE - Chains for interfaces - file: INTERFACES				Change
•	GENERATE EHS FILES	EHS_FILES		Change
▶	Integrated Margin	RSP_COPCP_MONT...		Change
▶	PVELOCITY	RSP_PVELOCITY		Change

The process chain is launched once a month, the second working day at 07:00 CET.

Workday/time

Factory calendar	14
Workday	2
Time	07:00:00
Do not execute before	01.04.2014

Workday relative to

- ☒ Beginning of month
- ☐ End of month

Period
Months

Reporting

No direct reporting on this application, just a hub to generate flat files

Planned Evolution

Nothing is planned as evolution

Maintenance

This application is not requested a lot of maintenance, it is stable.

Once a year, we have to delete the historical files because they are consuming space in the folder.