

BW - Ship-pad report

- 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
 - New fields Aero - Sales Order
 - New fields Aero - Purchase Order
 - New loads into order line master data (C_ITM_SD / C_ITM_GS)
 - Sales Orders x Process Orders
 - Passed Specs
 - One-time customer
 - GTS data (ECCN numbers & ITAR category)
 - Wave 2 and 3 - Enhancements
 - Batch
 - Linked Quantity
 - % Linked
 - Usage Decision Complete (Concatenated)
 - Unrestricted (Concatenated)
 - Process Order WPX (Concatenated)
 - Sched Prod End (Concatenated)
 - Sched Prod Start (Concatenated)
 - Parent Batch WPX (Concatenated)
 - Backlog
 - Make to Stock
 - Dependencies with other applications
- Data loadings
 - Info providers and objects loaded
 - Loading frequency
 - 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

The ship-pad report is based on "**Order Book - To be Issued (SO + PO)**", that includes Sales and Transfer orders.

The scope of the report are all open orders that haven't been issued (without Actual Goods Issue date).

Rejected Order lines and Order Lines with "rest to be delivered" below the Tolerance are EXCLUDED from the report.

Tool Leader + IT leader of the application:

Craig Wanamaker + Diogo Paiva

Usage information

History

In order to meet ship-pad requirements, several elements were incorporated into existing Order Book.



Roles & Access

Roles and access

Same role from Global Sales

Role Code	Role Description	Explanation
ZR_RCS_CA_M49	SD - Sales and Distribution	role menu for the application

Authorization objects

List of autorisation objects mandatory for the application.

Authorization object	Explanation

Dataflow overview

Reporting documentation drive folder:

<https://drive.google.com/drive/folders/0B0qn89R0RGdqYkZZOFZyYXIXVke>

Example of dataflow overview :

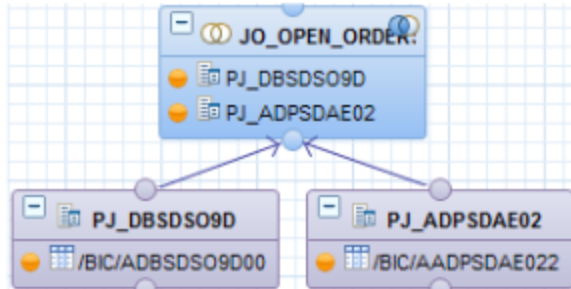
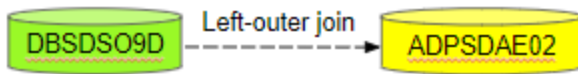
[Template Application name DataFlow](#)

New Composite Provider **CPSDAE03** based on HANA Calculation View **CV_SD_AE_CPSDAE03**

Initially joins DSOs below:

SO+PO ORDER BOOK
- OPEN ORDER

AERO - SALES ORDERS /
PROCESS ORDERS

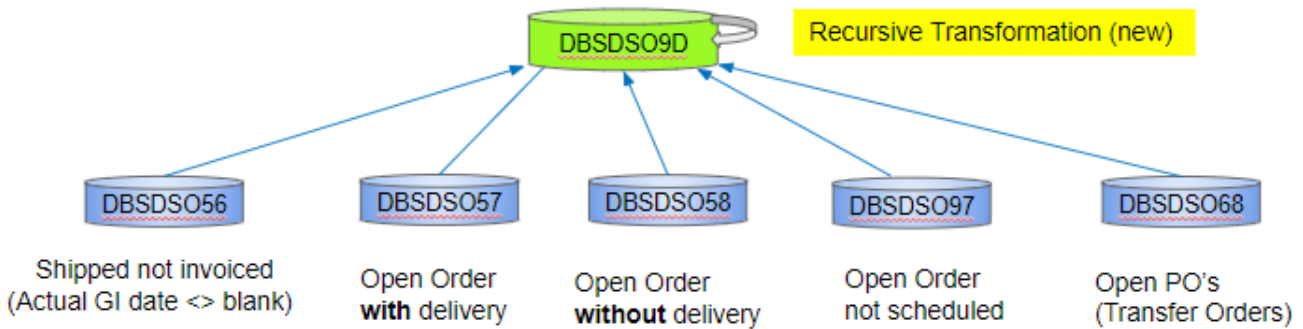


For Sales Order, the "rest to be delivered" (K_NONDEL) is stored, at delivery line level, in DBSDSO9D.

For Purchase Orders, it is calculated dynamically in the view accessing tables below:

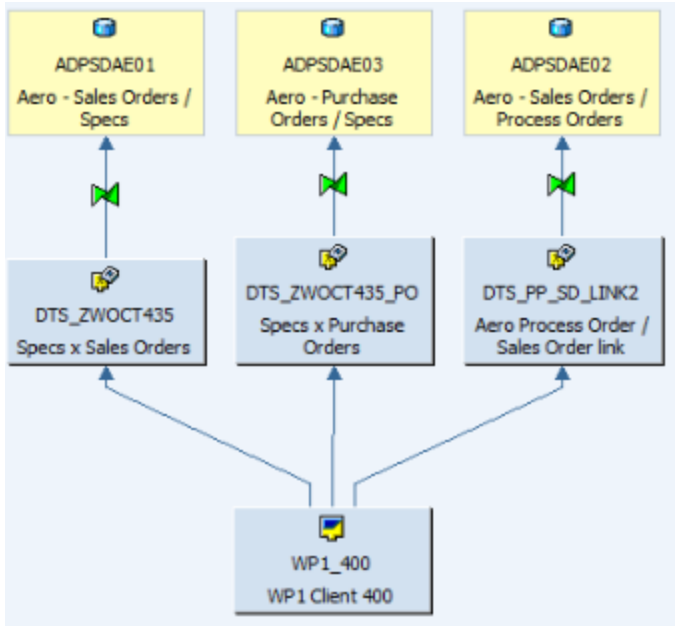
- DBSDSO66 - to get PO quantity / Confirmed quantity (by schedule line)
- DBSDSO69 - to get Delivery quantity

New fields were added to DBSDSO9D and populated in Transformations below



- Orders already shipped (DBSDSO56) are not relevant for Ship-pad. They are excluded in the query using filter "Actual GI date = blank".
- New recursive Transformation was created to populate "Passed Specs flag".

New Advanced DSOs::



Functional and Technical rules on Workbench + Reporting Rules & Explanations

New fields Aero - Sales Order

In WP1, new fields specific for Aero were added in VBAP (tab "Additional data B")

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They are then loaded as attributes in **C_ITM_SD** master data.

In the case of specs, which can be multiple for one order line (table ZWOCT435), they are first loaded into DSO ADPSDAE01 and then concatenated as attribute C_SPECLIS in C_ITM_SD.

New fields Aero - Purchase Order

In WP1, new fields specific for Aero were added in EKPO (tab "Aero Specific information")

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They are then loaded as attributes in **C_ITM_GS** master data.

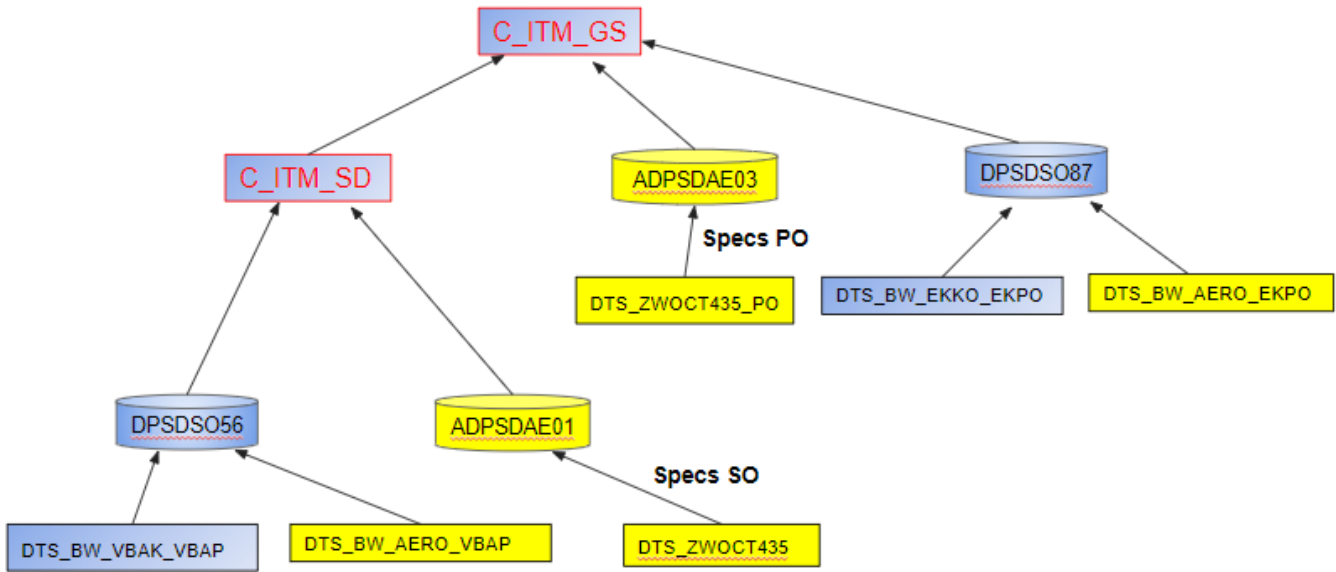
In the case of specs, which can be multiple for PO item, they are first loaded into DSO ADPSDAE03 and then concatenated as attribute C_SPECLIS in C_ITM_GS.

C_ITM_GS is the master data used in ship-pad report because it contains both Sales Order and Purchase Orders.

Data that comes from Sales Order item (VBAP) goes first to C_ITM_SD and then to C_ITM_GS.

Data that comes from Purchase Order item (EKPO) goes directly to C_ITM_GS.

New loads into order line master data (C_ITM_SD / C_ITM_GS)



(Objects in yellow were created during Solstice project)

Sales Orders x Process Orders

Some columns from ship-pad report bring production planning information (like workcenter, parent batch).

The link between Sales Orders and Process Orders comes from table **Z1C_PP_SD_LINK** in WP1 and is stored in DSO **ADPSDAE02**.

One sales order can be linked with multiple process orders.

In ship-pad report, this will generate additional lines, but the key figures from the order line are then repeated in each line of the report.

Passed Specs

New attribute **C_PASSPEC** was added to **C_BATCH2** master data and stores the passed specs (concatenated) from the batch.

Then the spec list from order line is compared against this batch attribute to generate **“Passed specs flag (Y/N)”** in ship-pad report.

Passed Specs (batch) is calculated at batch level comparing the spec list from order line with the passed specs from batch.

So you can have different values (Y or N) by batch, for the same order line, as in example below

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This is calculated in Transformation **DBSDSO57** -> **DBSDSO9D**.

Passed Specs (order) is an overall flag by order line.

If any of “passed specs (batch) is “N”, then “passed specs (order) = ‘N’.

This is calculated in Recursive Transformation into **DBSDSO9D**.

One-time customer

For one-time customers (VBPA-XCPDK = 'X'), same customer code can have different names, stored at sales order level.

New DSO AASDAE03R was created to store one-time customer name at order level. It's used as a lookup when loading data into DBSDSO9D.

If customer is found in this DSO, get its name from here, else get it from customer master data.

GTS data (ECCN numbers & ITAR category)

It's populated in DBSDSO9D via lookup in DP_GTS92 with material + following filters:

EU ECCN

Legal Regulation : DUALE

Numbering Scheme: EUECCN

US ECCN

Legal Regulation : EAR

Numbering Scheme: USECCN

ITAR Category

Legal Regulation : ITAR

Numbering Scheme: USITAR

Wave 2 and 3 - Enhancements

Batch

In the first Ship Pad Version, the batch data was retrieved from Delivery level, but users wants to see the Batches before the delivery creation and its possible according to the data from SAP transaction , ZWIM023 which was loaded in BW as C_BATCH2 attributes.

Source	Target
Material Batch (DTS_C_BATCH)	Batch number (C_BATCH2)
Version	Active
Active Version	Executable

Source	Target
Z_IM_001	Parent lot
Z_IM_002	Sub-lot
Z_IM_048	Net
Z_IM_052	Net UOM
Z_IM_031	Previous Creel Position
Z_IM_049	Length
Z_IM_012	Process Order Number
Z_IM_045	Production Finish Date
Z_IM_046	Production Finish Time
Z_IM_029	Winder Number #
Z_IM_028	Metering Pump #
Z_IM_047	Carbon Spool Winder
Z_IM_030	Creel Position
Z_IM_036	Doff
Z_IM_004	Sales Document
Z_IM_005	Sales doc. item
CUOBJ_BM	Int. object no.
CLABS	Unrestricted
Z_IM_006	Target quantity
Z_IM_007	Target qty UoM

Target	Source
C_LOBTEXT	00 Text
C_SALEPOT	Sales POT
C_POTEDAT	Sales Potential Date
C_QM_TEXT	Text
C_QRB_ACT	Action
C_BMGR	BMGR Input
C_PRINPUT	Prod Input
C_TEINPUT	Tech Input
C_FLGCROS	Flag Cross System
C_CROSSYS	Cross Source System
C_ZUSTD	Batch in Restricted-Use Stock
C_B_SDOC	Batch Attr - Sales Document
C_B_SITM	Batch Attr - Sales Item
OQUANTITY	Quantity
OUNIT	Unit of measure
C_PRCSORD	Process Order Number

Linked Quantity

Quantity available in the SAP transaction ZWIM023.

% Linked

Formula at query level: $(\text{Linked quantity} / \text{Document Item Quantity}) * 100$

Estimate GI Date

New field available in order to provide always a GI date for the Order Line, because when data comes from Open Order Not Scheduled DSO (DBSDSO97) the To Be Invoiced date has a constant value 01.01.1900.

This field is based in a formula at Calculation View level where it checks if the C_FLAG is Marked, if YES then considers the Goods Issue Date (GI_DATE), otherwise keep the To Be Invoiced Date (C_TBIDAT2).

Note: C_FLAG is marked only when the data comes from Open Order Not Scheduled DSO (DBSDSO97) .

Note: The next fields have been defined in the DBSDSO9D self loop transformation (Rec DBSDSO9D -> ODSO DBSDSO9D)

Usage Decision Complete (Concatenated)

Check the batch attribute (C_LOBMUD), Y if all batches linked do the Sales Order/Transfer Order Item have 'R04 A' , if one of them is N, then N.

Unrestricted (Concatenated)

Check the batch attribute (C_ZUSTD), Y if all batches linked do the Sales Order/Transfer Order Item have Y, if one of them is N, then N.

Process Order WPX (Concatenated)

Concatenates all the Process Order documents available to the Sales Order/Transfer Order Item.

Sched Prod End (Concatenated)

Concatenates all the Schedule Production End dates available to the Sales Order/Transfer Order Item.

Sched Prod Start (Concatenated)

Concatenates all the Schedule Production Start dates available to the Sales Order/Transfer Order Item.

Parent Batch WPX (Concatenated)

Concatenates all the Parent Batches available to the Sales Order/Transfer Order Item.

Backlog

Y - Last Requested Goods Issue date (C_LSTRQGI) is less then Current day

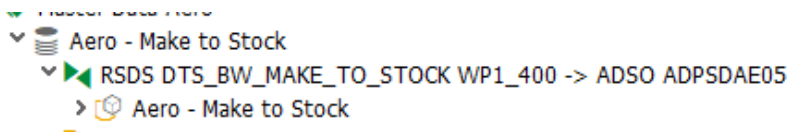
Credit block (C_CRDBLK) is empty, A or D

Delivery blockings (C_DELBLK and C_DELBLK2) are empty

N - Other conditions

Make to Stock

New extractor created to load data from SAP tables KONDH911 and KONDH.



```

DTS_BW_MAKE_TO_STOCK
ADPSDAE05
0C0YZ6LH71QSJNM3K0301PZ61UV59UK2
DTS_BW_MAKE_TO_STOCK

```

Definition:

KONDH-CHMVS	Make to Stock
913	MTO+SPEC
914	MTS
915	MTS+SPEC

Dependencies with other applications

Data loadings

Info providers and objects loaded

Loading frequency

Average performance

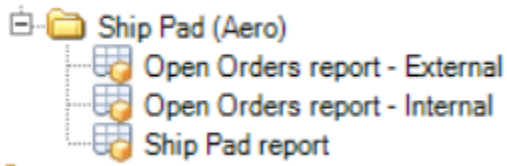
Key Figure	Estimation
~ Average Process Chain Runtime	
~ Average nb of rows loaded per load	
~ Total nb of rows loaded (if full)	
~ Average Runtime for 10k lines	

Record Keeping

Reporting

Queries End User Documentation

Workbooks:



ZR_RCS_CA_M49
BW_WBK_CPSDAE03_0002
BW_WBK_CPSDAE03_0003
BW_WBK_CPSDAE03_0001

Main queries

- BW_QRY_CPSDAE03_0001 – Ship pad report
- BW_QRY_CPSDAE03_0002 – Open Order – External
- BW_QRY_CPSDAE03_0003 – Open Order – Internal

Last 2 queries include only Sales Order (filter on C_ITM_GS-C_SDCATEG = 'SO').

Main functionalities

Broadcast

Maintenance

Known bugs

Recurring procedure

Planned Evolution