

# BW - Ship-pad report

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## 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 :

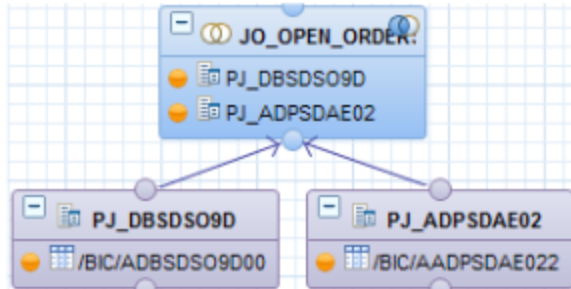
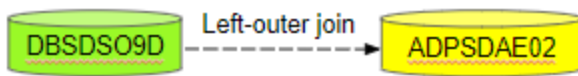
[Template Application name DataFlow](#)

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

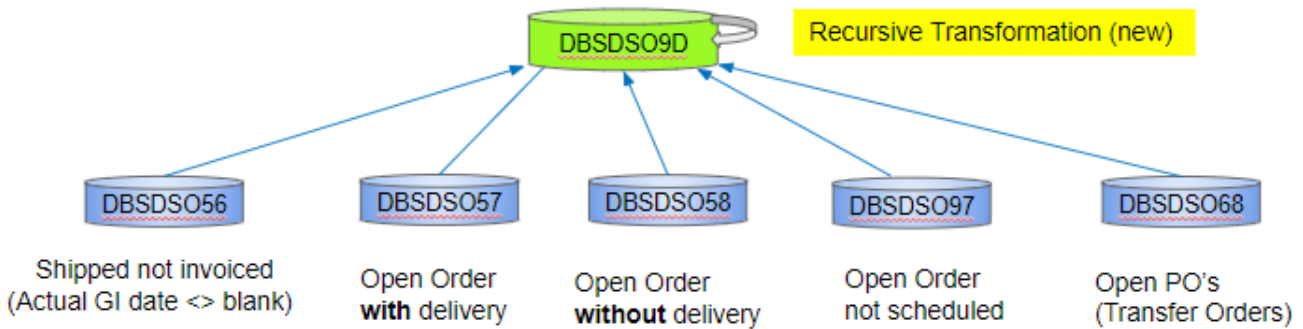


For Sales Order, the "rest to be delivered" (K\_NONDEL) is stored, at delivery line level, in DBSDSO9D.

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

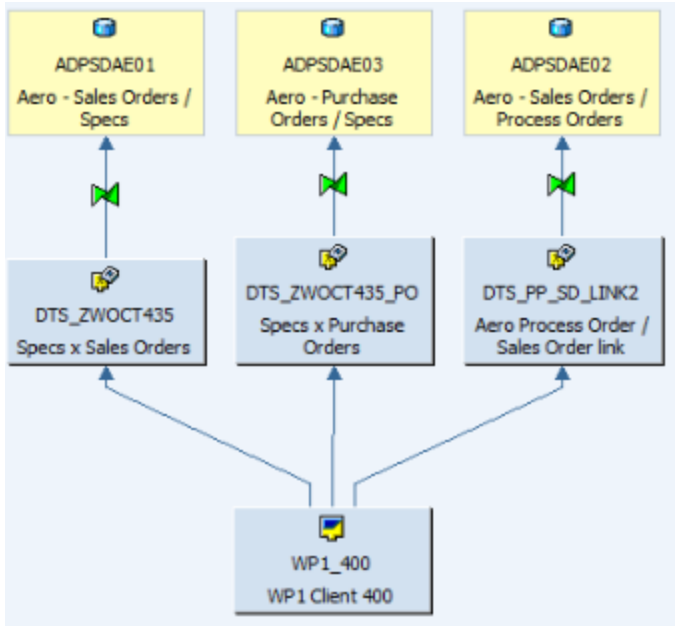
- DBSDSO66 - to get PO quantity / Confirmed quantity (by schedule line)
- DBSDSO69 - to get Delivery quantity

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.

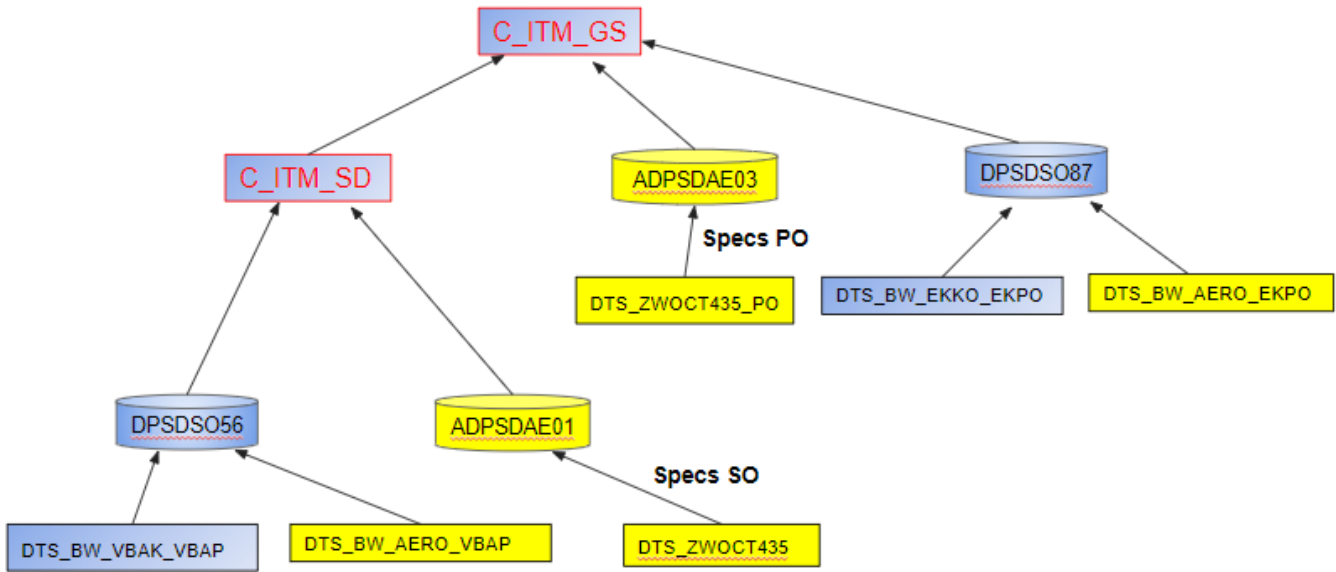
In the case of specs, which can be multiple for PO item, they are first loaded into DSO ADPSDAE03 and then concatenated as attribute C\_SPECLIS in C\_ITM\_GS.

**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
30 Z_IM_001 Parent lot	C_LOBTEXT 24 C_LOBTEXT 00 Text
31 Z_IM_002 Sub-lot	C_SALEPOT 25 C_SALEPOT 00 Sales POT
32 Z_IM_048 Net	C_POTEDAT 26 C_POTEDAT 00 Sales Potential Date
33 Z_IM_052 Net UOM	C_QM_TEXT 27 C_QM_TEXT 00 Text
34 Z_IM_031 Previous Creel Position	C_QRB_ACT 28 C_QRB_ACT 00 Action
35 Z_IM_049 Length	C_BMGR 29 C_BMGR 00 BMGR Input
36 Z_IM_012 Process Order Number	C_PRINPUT 30 C_PRINPUT 00 Prod Input
37 Z_IM_045 Production Finish Date	C_TEINPUT 31 C_TEINPUT 00 Tech Input
38 Z_IM_046 Production Finish Time	C_FLGCROS 32 C_FLGCROS 00 Flag Cross System
39 Z_IM_029 Winder Number #	C_CROSSYS 33 C_CROSSYS 00 Cross Source System
40 Z_IM_028 Metering Pump #	C_ZUSTD 34 C_ZUSTD 00 Batch in Restricted-Use Stock
41 Z_IM_047 Carbon Spool Winder	C_B_SDOC 35 C_B_SDOC 00 Batch Attr - Sales Document
42 Z_IM_030 Creel Position	C_B_SITM 36 C_B_SITM 00 Batch Attr - Sales Item
43 Z_IM_036 Doff	QQUANTITY 37 QQUANTITY 00 Quantity
44 Z_IM_004 Sales Document	OUNIT 38 OUNIT 00 Unit of measure
45 Z_IM_005 Sales doc. item	C_PRCSORD 39 C_PRCSORD 00 Process Order Number
46 CUOBJ_BM Int. object no.	
47 CLABS Unrestricted	
48 Z_IM_006 Target quantity	
49 Z_IM_007 Target qty UoM	

## 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

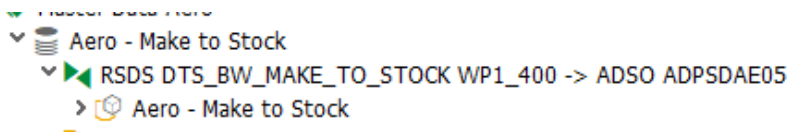
Credit block (C\_CRDBLK) is empty, A or D

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

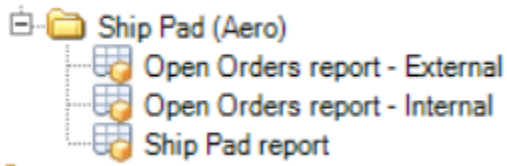
Key Figure	Estimation
~ Average Process Chain Runtime	
~ Average nb of rows loaded per load	
~ Total nb of rows loaded (if full)	
~ Average Runtime for 10k lines	

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