

Technical Document - Historical Data

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Access Management

Roles & Access

Role Code	Role Description	Explanation
ZBI_RCS_SD_A01	Application role for Global Sales project / SD data / Orderbook	Role for the application
ZR_RCS_CA_M49	SD - Sales and Distribution	Role menu for the application

Authorization Objects

List of authorization objects mandatory for the application.

Authorization object	Explanation
CPFCTR1_2	GBU
C_COMPCDE	Legal company
C_SAL_OF	Sales office

WARNING: For the PO part the notion of sales offices doesn't exist. The restriction in sales offices will not be considered for the reports PO and PO+SO.

Data Flow

Overview

Sales order

This part of Global Sales is used to have the historical data (last 3 years) for:

- Sales orders
- Schedule lines
- Delivery
- Shipment
- Billing

Sales documents types

Sales order

All the sales documents types are in the historic. Regarding the sales document type, a sales order line can be in one of the categories below:

- Sales
- Return
- Consignment
- Credit/Debit memo

The categories are stored in the object C_DOCTYP2 with the attribute C_GRPDOC. The attribute is updated manually.

IMPORTANT: This concept of categories isn't standard. It was created for Global Sales.

Delivery

All the delivery types are in the historic. Nothing is done to group the delivery type.

Billing

All the billing document types are in the historic. Regarding the billing document type, a billing line can be in one of the categories below:

- Sales
- Pro Format
- Inter-company

The categories are stored in the object C_BILLTYP with the attribute C_BILLCL. The attribute is updated manually.

IMPORTANT: This concept of categories isn't standard. It was created for Global Sales. An exclusion is done between the propagation layer and the business to don't have the billing Pro-format..

Data flow

The data flow is based on the LSA method. The data visualization is done on the multiproviders:

- MVSDSO44 (MP: Global Sales) for the aggregated queries.
- MVSDSO45 (MP: Detail Jump Query) for the detailed queries.

Global Sales data layers:

- Propagation Layer
- Business Layer
- Reporting Layer
- Virtual Layer
- Master Data

See the [data flow](#) of the multiprovider MVSDSO44 (MP: Global Sales) :

See the [data flow](#) of the multiprovider MVSDSO45 (MP: Global Sales) :

Propagation layer

List of infoproviders used by the Historical data:

DSO tech. name	DSO description	DTS tech. name	DTS description	Comments
DPDSO02	Sales Document Item Data (Solvay)	2LIS_11_VAITEM	Sales Document Item Data	Global Sales
DPDSO42	Sales Document Item Data (Rhodia)	2LIS_11_VAITEM	Sales Document Item Data	Global Sales
DPDSO04	Sales Document Order Delivery (Solvay)	2LIS_11_V_SSL	Sales Document Order Delivery	Global Sales
DPDSO44	Sales Document Order Delivery (Rhodia)	2LIS_11_V_SSL	Sales Document Order Delivery	Global Sales
DPD001	Deliveries (Solvay)	2LIS_12_VCITEM	Delivery Item Data	Global Sales
DPDSO71	Deliveries (Rhodia)	2LIS_12_VCITEM	Delivery Item Data	Global Sales
DPDSO07	Billing Document Item Data (Solvay)	2LIS_13_VDITEM	Billing Document Item Data	Global Sales
DPDSO47	Billing Document Item Data (Rhodia)	2LIS_13_VDITEM	Billing Document Item Data	Global Sales
DPAPO001	APO Forecast	9AF_DP_SOURCE 9AH_DP_SOURCE3 9AN_DP_SOURCE	F_DP / F_POS1 H_DP / H_POS1 N_DP / N_POS1	DYNASYS
DPDYN20	DYNASYS Forecast			DYNASYS
DPDSO14	Output messages for eInvoicing (Solvay)	0FSSC_SLA_1	Message Status Data for FSSC	Global Sales
DPDSO54	Output messages for eInvoicing (Rhodia)	0FSSC_SLA_1	Message Status Data for FSSC	Global Sales

DPSDTR22	TR Prop: Shipments & Deliveries (Solvay)	2LIS_08TRTLP	Shipment: Delivery Item Data per Section	From TIERS
DPSDTR02	TR Prop: Shipments & Deliveries (Rhodia)	2LIS_08TRTLP	Shipment: Delivery Item Data per Section	From TIERS
DPSDTR28	TR Prop: Shipments & Deliveries Status 1-4 (Solvay)	DTS_BW_SHIP_SBS	Extract Shipment doc overall status 1 to 4	From TIERS
DPSDTR08	TR Prop: Shipments & Deliveries Status 1-4 (Rhodia)	DTS_BW_SHIP_SBS	Extract Shipment doc overall status 1 to 4	From TIERS

Technical point: We never use the propagation layer for reporting. No SIDs are generated in the propagation layer.

- Settings - Type of DataStore Object SID Generation - Unique Data Records - Set Quality Status to 'OK' Automatically - Options for 3.x Data Flows	Standard Never Create SIDs ☐ ☒
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Business layer

List of infoproviders used by the Historical data:

DSO tech. name	DSO description	source DSO tech. name	source DSO description
BDSDSO11	SO Global: Sales Document Item Data (Solvay)	DPSDSO02	Sales Document Item Data (Solvay)
DBSDSO08	SO Global: Sales Document Schedule Line (Solvay)	DPSDSO05	Sales Document Schedule Line (Solvay)
BDSDSO14	SO Global: Deliveries (Solvay)	DPSD001	Deliveries (Solvay)
DBSDSO06	SO Global: Invoices (Solvay)	DPSDSO07	Billing Document Item Data (Solvay)
DBSDSO13	SO: PRE ATP Dates (Solvay)	DBSDSO08	SO Global: Sales Document Schedule Line (Solvay)
DBSDSO05	SO: ATP Dates (Solvay)	DBSDSO13	SO: PRE ATP Dates (Solvay)
DBSDSO09	SO global: Shipments status 1 to 7 (Solvay)	DPSDTR22 DPSDTR28	TR Prop: Shipments & Deliveries (Solvay) TR Prop: Shipments & Deliveries Status 1-4 (Solvay)
DBSDSO10	SO global: Deliveries and Shipment to the customer (Solvay)	DBSDSO09	SO global: Shipments status 1 to 7 (Solvay)
DBAPO001	APO: Forecast	DPAPO001	APO Forecast
BDSDSO51	SO Global: Sales Document Item Data (Rhodia)	DPSDSO42	Sales Document Item Data (Rhodia)
DBSDSO48	SO Global: Sales Document Schedule Line (Rhodia)	DPSDSO45	Sales Document Schedule Line (Rhodia)
DBSDSO54	SO Global: Deliveries (Rhodia)	DPSDSO71	Deliveries (Rhodia)
DBSDSO46	SO Global: Invoices (Rhodia)	DPSDSO47	Billing Document Item Data (Rhodia)
DBSDSO53	SO: PRE ATP Dates (Rhodia)	DBSDSO48	SO Global: Sales Document Schedule Line (Rhodia)
DBSDSO45	SO: ATP Dates (Rhodia)	DBSDSO53	SO: PRE ATP Dates (Rhodia)
DBSDSO49	SO global: Shipments status 1 to 7 (Rhodia)	DPSDTR02 DPSDTR08	TR Prop: Shipments & Deliveries (Rhodia) TR Prop: Shipments & Deliveries Status 1-4 (Rhodia)
DBSDSO50	SO global: Deliveries and Shipment to the customer (Rhodia)	DBSDSO49	SO global: Shipments status 1 to 7 (Rhodia)
DBDYN20	DYNASYS: Forecast	DPDYN04	Dynasys Forecast
BDSDSO11	SO Global: Sales Document Item Data (Solvay)	DPSDSO02	Sales Document Item Data (Solvay)
DBSDSO08	SO Global: Sales Document Schedule Line (Solvay)	DPSDSO05	Sales Document Schedule Line (Solvay)

Reporting layer

List of infoproviders used by the Historical data:

CUBE tech. name	CUBE description	source DSO tech. name	source DSO description	Comments
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CRSDSO06	SO: Sales order aggregated (Solvay)	DBSDSO11	SO Global: Sales Document Item Data (Solvay)	
CRSDSO05	SO Global: Deliveries aggregated (Solvay)	DBSDSO14	SO Global: Deliveries (Solvay)	
CRSDSO03	SO Global: Invoices aggregated (Solvay)	DBSDSO06	SO Global: Invoices (Solvay)	
CRAPO001	APO: Forecast (monthly)	DBAPO001	APO: Forecast	
CRSDSO45	SO Global: Deliveries aggregated (Rhodia)	DBSDSO41	SO Global: Sales Document Item Data (Rhodia)	
CRSDSO43	SO Global: Invoices aggregated (Rhodia)	DBSDSO44	SO Global: Deliveries (Rhodia)	
CRSDSO46	SO: Sales order aggregated (Rhodia)	DBSDSO46	SO Global: Invoices (Rhodia)	
CRSDSO22	SO Global Sales: Contribution (Rhodia)			
CRSDSO23	SO Global Sales: Contribution (Solvay)			

Virtual layer

List of infoproviders used by the Historical data:

multiprovider tech. name	multiprovider description	source tech. name	source description	Comments
MVSDSO44	MP: Global Sales	CRAPO001	APO: Forecast (monthly)	
		CRSDSO05	SO Global: Deliveries aggregated (Solvay)	
		CRSDSO03	SO Global: Invoices aggregated (Solvay)	
		CRSDSO06	SO: Sales order aggregated (Solvay)	
		CRSDSO22	SO Global Sales: Contribution (Rhodia)	
		CRSDSO23	SO Global Sales: Contribution (Solvay)	
		CRSDSO45	SO Global: Deliveries aggregated (Rhodia)	
		CRSDSO43	SO Global: Invoices aggregated (Rhodia)	
		CRSDSO46	SO: Sales order aggregated (Rhodia)	
MVSDSO45	MP: Detail Jump Query	DBSDSO14	SO Global: Deliveries (Solvay)	
		DBSDSO06	SO Global: Invoices (Solvay)	
		DBSDSO11	SO Global: Sales Document Item Data (Solvay)	
		DBSDSO08	SO Global: Sales Document Schedule Line (Solvay)	
		DBSDSO10	SO global: Deliveries and Shipment to the customer (Solvay)	
		DBSDSO54	SO Global: Deliveries (Rhodia)	
		DBSDSO46	SO Global: Invoices (Rhodia)	
		DBSDSO51	SO Global: Sales Document Item Data (Rhodia)	
		DBSDSO48	SO Global: Sales Document Schedule Line (Rhodia)	
		DBSDSO50	SO global: Deliveries and Shipment to the customer (Rhodia)	

PO's transfers

The data flow is based on the LSA method. The data visualization is done on the multiproviders MVSDSO42 (MP: Global PO (Global Sales)) and MVSDSO43 (MP: Detail PO Jump (Global Sales)).

Global Sales data layers:

- Propagation Layer
- Business Layer
- Reporting Layer
- Virtual Layer

See the [data flow](#) of the multiprovider MVSDSO42 (MP: Global PO (Global Sales)):

See the [data flow](#) of the multiprovider MVSDSO43 (MP: Detail PO Jump (Global Sales)):

Propagation layer

IMPORTANT: To build the PO's transfers order book, we use data coming from the propagation of SPRINT.

List of infoproviders used by the PO's transfers order book:

DSO tech. name	DSO description	DTS tech. name	DTS description	Comments
DPSD001	Deliveries (Solvay)	2LIS_12_VCITM	Delivery Item Data	Global Sales
DPSDSO07	Billing Document Item Data (Solvay)	2LIS_13_VDITM	Billing Document Item Data	Global Sales
DP_PUSL2	PO: Schedule line (Solvay)	2LIS_02_SCL	Purchasing data (schedule line level)	SPRINT
DPSDSO71	Deliveries (Rhodia)	2LIS_12_VCITM	Delivery Item Data	Global Sales
DPSDSO47	Billing Document Item Data (Rhodia)	2LIS_13_VDITM	Billing Document Item Data	Global Sales
DP_PUSL1	PO: Schedule line (Rhodia)	2LIS_02_SCL	Purchasing data (schedule line level)	SPRINT

Business layer

List of infoproviders used by the PO's transfers order book:

DSO tech. name	DSO description	source DSO tech. name	source DSO description
DBSDSO26	PO: Transfers orders sched. line (Solvay)	DP_PUSL2	PO: Schedule line (Solvay)
DBSDSO27	PO: Transfers orders Invoices (Solvay)	DPSDSO07	Billing Document Item Data (Solvay)
DBSDSO29	PO Global: Transfers orders delivery (Solvay)	DPSD001	Deliveries (Solvay)
DBSDSO66	PO: Transfers orders sched. line (Rhodia)	DP_PUSL1	PO: Schedule line (Rhodia)
DBSDSO67	PO: Transfers orders Invoices (Rhodia)	DPSDSO47	Billing Document Item Data (Rhodia)
DBSDSO69	PO Global: Transfers orders delivery (Rhodia)	DPSDSO71	Deliveries (Rhodia)

Reporting layer

List of infoproviders used by the PO's transfers order book:

CUBE tech. name	CUBE description	source CUBE tech. name	source CUBE description
CRSDSO17	PO Global: Order line aggregated (Solvay)	DBSDSO30	PO: Order line Transfers orders (Solvay)
CRSDSO04	PO Global: Deliveries aggregated (Solvay)	DBSDSO29	PO Global: Transfers orders delivery (Solvay)
CRSDSO07	PO Global: Invoices aggregated (Solvay)	DBSDSO27	PO: Transfers orders Invoices (Solvay)
CRSDSO57	PO Global: Order line aggregated (Rhodia)	DBSDSO70	PO: Order line Transfers orders (Rhodia)
CRSDSO54	PO Global: Deliveries aggregated (Rhodia)	DBSDSO69	PO Global: Transfers orders delivery (Rhodia)
CRSDSO47	PO Global: Invoices aggregated (Rhodia)	DBSDSO67	PO: Transfers orders Invoices (Rhodia)

Virtual layer

List of infoproviders used by the Historical data PO's transfers:

MP tech. name	MP description	source CUBE tech. name	source CUBE description
MVSDSO42	MP: Global PO	CRSDSO04	PO Global: Deliveries aggregated (Solvay)
		CRSDSO07	PO Global: Invoices aggregated (Solvay)
		CRSDSO17	PO Global: Order line aggregated (Solvay)
		CRSDSO44	PO Global: Deliveries aggregated (Rhodia)
		CRSDSO47	PO Global: Invoices aggregated (Rhodia)
		CRSDSO57	PO Global: Order line aggregated (Rhodia)
MVSDSO43	MP: Detail PO Jump (Global Sales)	DBSDSO69	PO Global: Transfers orders delivery (Rhodia)
		DBSDSO29	PO Global: Transfers orders delivery (Solvay)
		DBSDSO70	PO: Order line Transfers orders (Rhodia)
		DBSDSO30	PO: Order line Transfers orders (Solvay)
		DBSDSO67	PO: Transfers orders Invoices (Rhodia)
		DBSDSO27	PO: Transfers orders Invoices (Solvay)

Core rules

PO's transfers

Purchase order documents types

All the rules used in Global Sales were determined by SAP experts.

IMPORTANT:

Solvay:

- PO's types UB and NB, the vendor must be flagged as intra-group. Exception is done for purchase organization. The exception is done with the technical object C_POSD.*

It's implemented in the start routine of the transformation:DP_PUSL2 -> DBSDSO26;

Consider only the records which exist in C_POSD with LOGSYS = DP_PUSL2.LOGSYS and C_PUR_ORG = DP_PUSL2.C_PUR_ORG and C_VENDID.C_FLGINT !="

Rhodia:

- PO's types UB and NB, the purchase organization 3200 is used for the type UB. The purchase organization 3001 to 3008, 3200 and 3400 are used for the type NB.*

It's implemented in the start routine of the transformation:DP_PUSL1 -> DBSDSO66; Consider only the records which exist in C_POSD with LOGSYS = DP_PUSL1.LOGSYS and C_POSD = DP_PUSL1.C_BSART(Purchase Doc Type) and C_PUR_ORG = DP_PUSL1.C_PUR_ORG

Purchase order

Global Sales uses the data coming from SPRINT to have the PO's transfers order.

- DP_PUSL1(PO : Schedule Line (Rhodia))
- DP_PUSL2(PO : Schedule Line (Solvay))

Delivery

The deliveries are coming from the DSO DBSDSO29 "PO Global: Transfers orders delivery (Solvay)".

The deliveries are coming from the DSO DBSDSO69 "PO Global: Transfers orders delivery (Rhodia)".

Billing

The billing are coming from the DSO DBSDSO27 "PO: Transfers orders Invoices (Solvay)".

The billing are coming from the DSO DBSDSO67 "PO: Transfers orders Invoices (Rhodia)".

IMPORTANT:

- Transfers done with the PO type UB is always done between the same GBU.*
- Transfers done with the PO type NB is always done between Solvay's entities.*

Master data

The master data used, is the master data of SPRINT, with the object C_PO_ITM (Purchase Order Item). Please refer to SPRINT documentation for more detail.

Reporting

The reporting is based on Core workbooks based on Core queries.

The core workbooks give an aggregated view, to have information on the documents detail jumps are done.

IMPORTANT: The core queries are not published on the role menu. Only the workbooks are published on the role menu, folder Historical data.

Sales order

The core queries are used to build the workbooks and to have the detail at the documents lines level (jumps).

Workbook		Query	
Historical Data: Deliveries (Detailed)	BW_WBK_MVSDSO45_SD0002	BW - Deliveries details (Core jump)	BW_QRY_MVSDSO45_SD0002

Historical Data: Invoices (Detailed)	BW_WBK_MVSDSO45_SD0001	BW - Invoices details (Core jump)	BW_QRY_MVSDSO45_SD0001
Historical Data: Invoices (Document Flow Detailed)	BW_WBK_MVSDSO45_SD0005	BW - Invoices document flow details (Core jump)	BW_QRY_MVSDSO45_SD0005
Historical Data: Invoices (Document Flow)	BW_WBK_MVSDSO45_SD0006	BW - Invoices documents flow (Core jump)	BW_QRY_MVSDSO45_SD0006
Historical Data: Sales Order (Detailed)	BW_WBK_MVSDSO45_SD0003	BW - Sales order details (Core jump)	BW_QRY_MVSDSO45_SD0003
Historical Data: Sales Order (Document Flow) by Last Req GI Date (detailed)	BW_WBK_MVSDSO45_SD0008	BW - Order (Documents flow) by last Req GI (Core)	BW_QRY_MVSDSO45_SD0008
Historical Data: Sales Order by Last Req GI Date (detailed)	BW_WBK_MVSDSO45_SD0007	BW - Sales order details per Last Req GI date (Core jump)	BW_QRY_MVSDSO45_SD0007
Historical Data: Schedule line (Detailed)	BW_WBK_MVSDSO45_SD0004	BW - Schedule line details (Core jump)	BW_QRY_MVSDSO45_SD0004
		BW - Invoices details (QlikView)	QV_BW_QRY_MVSDSO45_SD0001
Historical Data: Consignments Overview	BW_WBK_MVSDSO44_SD0006	Historical Data: Consignments Overview (Core query)	BW_QRY_MVSDSO44_SD0006
Historical Data: eCommerce	BW_WBK_MVSDSO44_SD0007	Historical Data: eCommerce (Core query)	BW_QRY_MVSDSO44_SD0007
Historical Data: Manual Pricing	BW_WBK_MVSDSO44_SD0005	Historical Data: Manual pricing (Core query)	BW_QRY_MVSDSO44_SD0005
Historical Data: Sales Deliveries	BW_WBK_MVSDSO44_SD0001	Historical Data: Sales deliveries (Core query)	BW_QRY_MVSDSO44_SD0001
Historical Data: Sales Invoices	BW_WBK_MVSDSO44_SD0003	Historical Data: Sales Invoices (Core query)	BW_QRY_MVSDSO44_SD0003
Historical Data: Sales Order	BW_WBK_MVSDSO44_SD0002	Historical Data: Sales Orders (Core query)	BW_QRY_MVSDSO44_SD0002
Historical Data: Sales overview	BW_WBK_MVSDSO44_SD0004	Historical Data: Sales Overview (Core query)	BW_QRY_MVSDSO44_SD0004

PO's transfers

Workbook		Query	
Historical Data: PO's Transfer deliveries (Detailed)	BW_WBK_MVSDSO43_SD0001	DETAIL: Transfers PO deliveries (Core jump)	BW_QRY_MVSDSO43_SD0001
Historical Data: PO's Transfer invoices (Detailed)	BW_WBK_MVSDSO43_SD0003	DETAIL: Transfers PO invoices (Core jump)	BW_QRY_MVSDSO43_SD0003
Historical Data: PO's Transfer orders (Detailed)	BW_WBK_MVSDSO43_SD0002	DETAIL: Transfers PO orders (Core jump)	BW_QRY_MVSDSO43_SD0002
Historical Data: PO's transfer deliveries	BW_WBK_MVSDSO42_SD0001	Historical data: PO's deliveries (core)	BW_QRY_MVSDSO42_SD0001
Historical Data: PO's transfer invoices	BW_WBK_MVSDSO42_SD0003	Historical data: PO's invoices (core)	BW_QRY_MVSDSO42_SD0003
Historical Data: PO's transfer orders	BW_WBK_MVSDSO42_SD0002	Historical data: PO's orders (core)	BW_QRY_MVSDSO42_SD0002

IMPORTANT: The calendar Year/month corresponding to:

- the last requested GI date for the sales orders part
- the actual GI date for the sales deliveries part
- the billing document date for the billing part

Data loading

IMPORTANT: The same process chain is used to update the Sales order and the Historical sales data.

IMPORTANT: The same process chain is used to update the PO's (transfers) order book and the Historical PO's (transfers) data.

Main Process Chain	Final Info Provider	Frequency	Start Time	Duration
PC_GLOBAL_SALES_MAIN	CRSDSO41, 42...	Daily	~1:30am CET	~3.5h
PC_SD_MAIN	CRSDSO01, 02...	Daily	~2:00am CET	~1h
PC_GL_SALES_MAIN_PO	CRSDSO51, 52...	Daily	~6:00am CET	~1h
PC_OBAS_TRANSFERS_MAIN	CRSDSO11, 12...	Daily	~6:00am CET	~0.5h

Data Quality Controls

Data comes from SAP system. To compare data between BW and sources systems, check propagation layers.

Operational Documentation

Procedures

<Describe the recurring procedures needed to operate the application (eg. start/pause/terminate/restart the app processes, data preparation, data ingestion, ETL, data visualization, data export, other manual activities)>

Scheduling

<Describe the scheduling in place for the application (eg. existing jobs, trigger time/event based, dependencies)>

Monitoring

<Describe the monitoring checks to confirm the application is performing well (eg. check the overall status, check performance metrics like runtime /data volume/memory/disk/CPU, maintain and react to alerts/notifications)>

Error Handling

<Describe how to handle errors (eg. error codes, description and respective resolution, alert users)>

Known Bugs

<List the existing bugs, its criticality, workarounds and resolution plan.>

Roadmap

<List past & future evolutions for the application (including links to MED/FSD/TSD)>