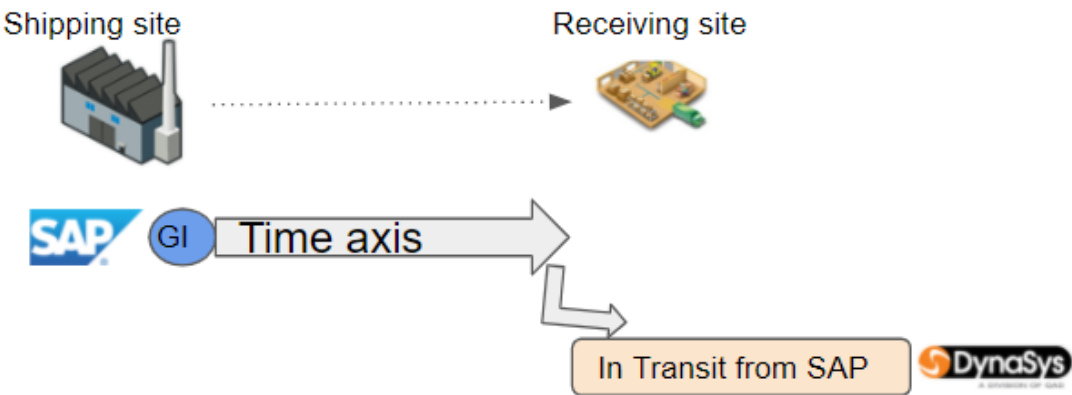


4. Transit Inventory in Dynasys

- Introduction - Types of Transit inventories in Dynasys

In Dynasys we manage 2 types of Transit Inventory:

> The One from SAP, what we have currently in transit between 2 sites at the moment we make the interface. This one is in ETA, the quantities are visible in arrival date (the month it is expected to arrive, data from SAP) and (depending on the design with the GBU) considered as an input of stock within that month.



example:

Shipping the 15Th of April

Current SAP shipment planned to be arrived the 20th May

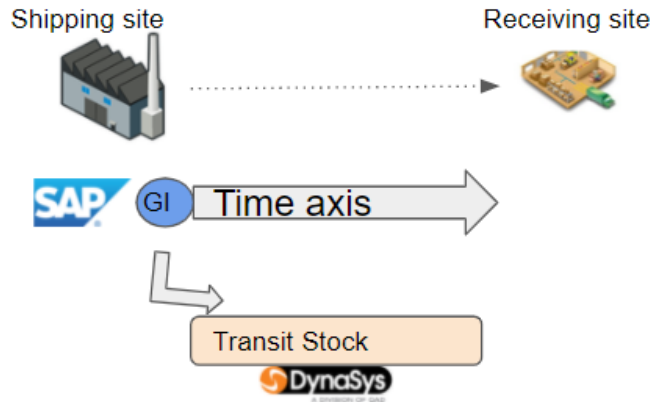
Current day is the 25th of April

Lead time in Dynasys is 1 month

What the Shipping site is seeing in Dynasys	April	May
Actuals Shipped	100 To	

What the receiving site is seeing in Dynasys	April	May
In Transit from SAP		100 to
Projected Inventory	0	100 to

> The one calculated by Dynasys, which is the quantity between 2 sites at the end of the period. It is not included in that **period's projected inventory**. It is visible in the Receipt site location, and calculated based on the Dynasys lead time in month(s).



What the Shipping site is seeing in Dynasys	April	May
Actuals Shipped	100 To	
Planned shipment		50 To

What the receiving site is seeing in Dynasys	April	May	June
In Transit from SAP		100 to	
Transit Stock	100 to	50 To	
Receipt Plan			50 To
Projected Inventory	0	100 to	150 To

- **Types of Flows in SAP and interface design**

> Stock Transfer Order ("Linked flow" **intra** GBU)

Standard transfer of stock between 2 sites in SAP. We have one single element which is the PO.

For receiving date, we take in consideration:

1. The confirmed date in the PO

Standard PO 4503983811 Created by Caroline LEBORGNE-HUBERT

Document Overview On Print Preview Messages Personal Setting

Standard PO 4503983811 Vendor 2146605 SOLVAY USA INC Doc. date 12.08.2020

Header

S..	Itm	A	I	Material	Short Text	PO Quantity	OU n	C Deliv. Date	Net Price	Curr...	Per	OPU	Matl Group	Pint	Pu
	10			107709	ORTHODIETHOXYBENZENE ..	14.400 KG	D	28.09.2020	..983,57	EUR	1.000	KG	SEMI FIN.&FI..	ZFR3 St. Fons	
	20			107709	ORTHODIETHOXYBENZENE ..	14.400 KG	D	19.10.2020	..983,57	EUR	1.000	KG	SEMI FIN.&FI..	ZFR3 St. Fons	

Item [10] 107709, ORTHODIETHOXYBENZENE HI PURITY...

Material Data Quantities/Weights Delivery Schedule Delivery Invoice Conditions Purchase Order History Texts Delivery Address **Confirmations** Ir

Conf. Control Inbound Del. manu. Order Ack. ☐ Acknowl.Reqd ☐ Rejection Ind.

C	D	Delivery Date	Time	Quantity	Reference	Created on	Inb. Deliv.	Itm	HL It...	Batch	Quantity Reduced	M	MPN material
A	D	28.10.2020		6.400		28.10.2020	194402048	10	0		0	☒	107709
A	D	28.10.2020		800		28.10.2020	194402048	900001	10	BOD2001501	800	☒	
A	D	28.10.2020		7.200		28.10.2020	194402048	900002	10	BOD2024501	7.200	☒	

2. Or, if no confirmation, the one from the Schedule delivery

Standard PO 4503983811 Created by Caroline LEBORGNE-HUBERT

Document Overview On Print Preview Messages Personal Setting

Standard PO 4503983811 Vendor 2146605 SOLVAY USA INC

Header

S..	Itm	A	I	Material	Short Text	PO Quantity	OU n	C Deliv. Date	Net Price
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	20			107709	ORTHODIETHOXYBENZENE ..	14.400 KG	D	19.10.2020	..983,57

Item [20] 107709, ORTHODIETHOXYBENZENE HI PURITY...

Material Data Quantities/Weights **Delivery Schedule** Delivery Invoice Conditions Purchase

S..	C	Delivery Date	Sched. Qty	Time	Stat. Del. Dte	Committed d...	Committed Quantity
D		19.10.2020	14.400		19.10.2020	21.09.2020	
D		19.10.2020			19.10.2020	21.09.2020	14.400

The quantities are considered as "In-Transit" until the Goods Receipt in SAP.

Dates in past (up to 3 months) are considered in DIP in the current month .

> Unlinked flow (Intra GBU)

Unlinked flows are separated Purchase orders (to a Vendor X) and sales orders (to a customer Y) between two sites.

Example: Nota Fiscale Brazil

Today, we are not able to make the link easily.

For Dynasys project, we have implemented a specific Table in SAP to try to make the link between for "1 material-1 receiving Site" (table named ZMATVENDOR). This table is managed by SBS manually for the moment (automatic feed in progress).

Process to feed Dynasys:

Once the GI has been processed, we take the delivery date from the Outbound delivery document as the reference for Arrival date.

Example: Novecare - Fentamine from Asia 8160 to Itatiba Brazil 8227

In MD04 we retrieve the original PO - with the requested delivery date.

Show Overview Tree

Material descriptionStatusDelivery Priority

Material

128560

FENTAMINE DMA897 BULK(CN)

Plant

8227

MRP Type

Z3

Material Type

ZMAT

Unit

KG

Individual List

Product Group

Cross-Plant View

A..	Date	MRP el...	MRP element data	Exception	Receipt/Reqmt	Available Qty	St...	Su...	R...
	12.05.2021	Stock				7.361			0
	15.04.2021	POitem	4504054737/00010	07	18.000	25.361			255
	13.05.2021	----->	End of Planning Time Fe...						0
	23.05.2021	DepReq	317578		2.611,319-	22.749,681	BRTQ		0
	04.06.2021	POitem	4504102448/00010	15	18.000	40.749,681			255
	21.06.2021	DepReq	317578		1.232,154-	39.517,527	BRTQ		0
	24.06.2021	DepReq	317578		1.232,154-	38.285,373	BRTQ		0
	26.06.2021	DepReq	317578		1.232,154-	37.053,219	BRTQ		0
	28.06.2021	DepReq	317578		1.232,154-	35.821,065	BRTQ		0

The shipments has been done, the delivery date from the sales order is 17th May.

Outbound delivery 85938831

Display: Header Details

Post Goods Issue

Ship-To Party

2038075

RHODIA BRASIL SA / AV CAETANO DE ABREU 55, PARTE / ITATIBA - SP

Processing

Picking

Loading

Shipment

Foreign Trade/Customs

Financial Processing

Administration

Partner

Texts

Conditions

Dates

Parcel Tracking

Dates

Picking	06.04.2021	00:00	Billing Date	09.04.2021
Trans. Planning	30.03.2021	00:00	Billing date	
Loading	07.04.2021	00:00		
Planned GI	07.04.2021	00:00		
Delivery Date	17.05.2021	00:00		

Scheduling

Overall Status

Document Status	Checked		
Picking	☒ Fully picked	TransPhng	☒ Complete trans.plan.
WM Activities	☒ WM trsf ord confmd	Dec. Whse	☒ Not Relevant
Confirmation	☒ Fully confirm PickRq		☒ Change Management
Pack	☒ Packing not required	POD status	☒ Not Relevant
Goods Issue	☒ Completed	IntcoBll	☒ Not Relevant
Bll.Docs.	☒ Fully invoiced	Credit	☒ Not performed

This one is the reference for Dynasys:

128560R@8227R

Total

1400 Intransit inventory in receipt date (KG)

Horizon																				
0 / 469 / 2118x154x1	±M02-2021	±M03-2021	±M04-2021	±M05-2021	02/05/21	03/05/21	04/05/21	05/05/21	06/05/21	07/05/21	08/05/21	09/05/21	10/05/21	11/05/21	12/05/21	13/05/21	14/05/21	15/05/21	16/05/21	17/05/21
	Total M02-2021	Total M03-2021	Total M04-2021	01/05/21																18 000

Potential Issues:

Delivery date from the sale order is the reference.

> BW will consider Actuals Receipt when this delivery date will be past, even though the order is still in transit. => In Dynasys we don't see the InTransit - the quantities are missing and requested to be replenished in the planning.

> BW will consider In-Transit when this delivery date will be in the future, even though the order is already arrived. => In Dynasys, we consider those InTransit on top of the inventories (and already arrived!)

> Unlinked flow (cross GBU)

As all GBUs are not in the same database, it appears complicated to include the cross GBU as "In-Transit" field in Dynasys. We are limited by the data available (SKUs and Sites).

Example: TS and Novecare flows - TS is in DIP2 and Novecare DIP 3

=> That's why we have decided to exploit those Cross-GBUs flows as "External Purchase Order" for the receiving site. The limit is we don't know if products are "In-Transit" or "still to be shipped".

> WP1 - PF1

Today with SAP we are not able to make the link between Material@Site PF1 and Material@Site WP1.

It means we cannot define the InTransit quantities.

=> Those flow are considered as "External Purchase orders", whatever it is shipped physically, or not yet shipped. We will take the visibility of Purchase Order in MD04 at receipt site.

- **Actuals Transit (end of month)**

We can get from SAP the Actuals end of month Transit only for Standard stock transfer orders.

The Transit for "unlinked" flows and WP&-PF1 flows are not available.

For SILICA we have developped a specific design (inside Dynasys) in order to get those missing data.

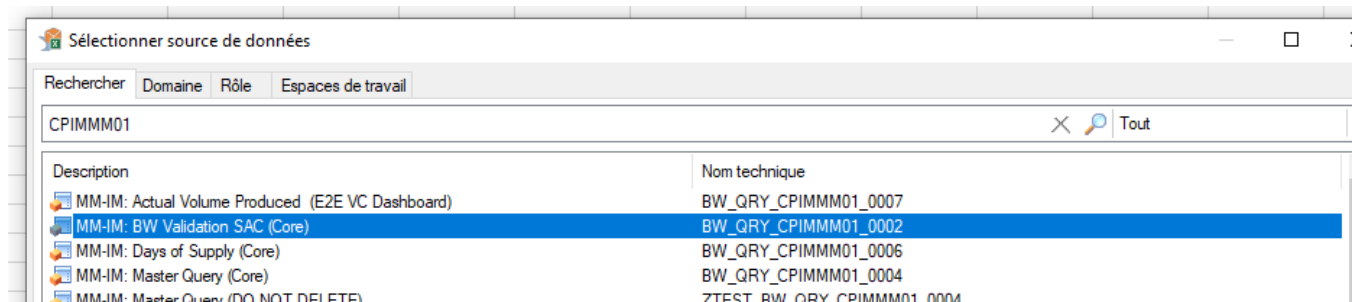
=> We archive the picture of the last day of the month

If necessary, we can develop it for other GBUs

- **BW Report for Finance purpose which is different from Dynasys perspective**

There is an existing BW report for Transit stock in a Financial perspective.

This report makes the difference between Outbound In Transit, and Inbound In Transit. But we do not have the information of the 2nd Site.



Description	Nom technique
MM-IM: Actual Volume Produced (E2E VC Dashboard)	BW_QRY_CPIMMM01_0007
MM-IM: BW Validation SAC (Core)	BW_QRY_CPIMMM01_0002
MM-IM: Days of Supply (Core)	BW_QRY_CPIMMM01_0006
MM-IM: Master Query (Core)	BW_QRY_CPIMMM01_0004
MM-IM: Master Query (DO NOT DELI FTP)	ZTEST BW QRY CPIMMM01 0004

Sales order 2916556/ Outbound delivery 0085822932

For finance, as long as the revenue recognition is done, this is not outbound GIT in Korea (8279)

Document	On	Status
▼  Standard Order 0002916556	28.07.2020	Completed
▼  ➔ Outbound delivery 0085822932	05.11.2020	Completed
▼  Shipment 0004421662	05.11.2020	Shipment started
▪  Handling unit 0043803435	05.11.2020	
▪  Shipment 0004421663	05.11.2020	Comple.t.status set
▪  WMS transfer order 0001016051	06.11.2020	Completed
▪  Confirmation of service 3112932000	06.11.2020	Completed
▪  GD goods issue:delvy 4935812653	06.11.2020	complete
▪  Pro Forma Inv f Dlv 0200863151	06.11.2020	Completed
▼  Invoice 0090604133	06.11.2020	Completed
▪  Accounting document 0090604133	06.11.2020	Not cleared

For S&OP purpose, we have developed a specific interface calculated thru BW.

[Link to Interface documentation](#)

[Link to the Planning Elements interfaced and rules](#)