



Business Central Demo

innovation.experience.focus



Agenda

1. Theory

- a. ATP CTP

- b. Dates

2. Scenario's 'as requested'

- a. ATP

- b. CTP



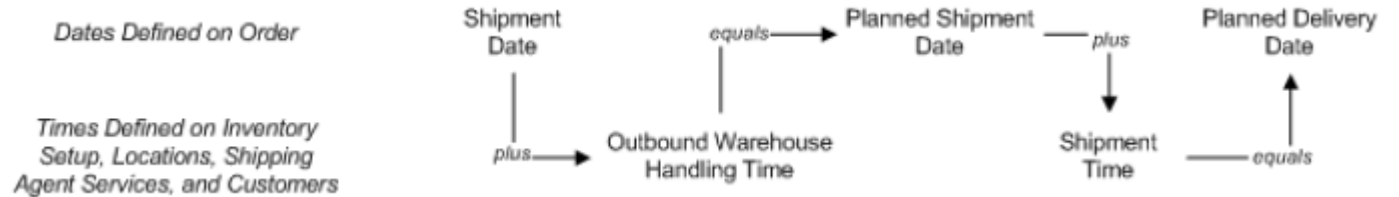
1a. ATP vs CTP

Function	Description
ATP	Calculate dates based on unreserved quantities or planned production, purchase, transfer and returns. = we hebben vrije voorraad of er staats iets gepland
CTP	Used when there is no unreserved quantity and when no supply is planned. Based on the estimated availability date of the item, the program will calculate the delivery date to the customer, create planning lines and reserve the inventory. = het is er niet, en het staat ook niet in de planning



1b. Date Calculations

Customer does not request a date or he is not promised a date:



Requested Delivery Date, separate field on sales order (line):

When the customer requests a specific delivery date, dates get calculated backwards:

- Requested delivery date – shipping time = planned shipment date
- Planned shipment date – outbound whs handling time = shipment date

If items are available to pick on the shipment date, then planned delivery date is set to requested delivery date.

If items are not available to pick on the shipment date, then a stockout warning is displayed.

Promised Delivery Date, separate field on sales order (line):

If you enter a date in promised delivery date, this date is substituted for the requested delivery date in above calculations. You can no longer amend requested delivery date.

Agenda

1. Theory
 - a. ATP CTP
 - b. Dates

- 2. Scenario's**
 - a. ATP (3)**
 - b. CTP



Dates Defined on Order

Times Defined on Inventory Setup, Locations, Shipping Agent Services, and Customers



2a. ATP Scenario 1 – Promise sales without requested delivery date Inventory is available

Given the following stock situation on 24.03, ALC200001 is available in LDP-SLS

Create Sales Order for location LDP-SLS => Shipment Date = today = 24.03. There is no outbound warehouse handling time and 3D delivery time from the customer cards => planned delivery date = 27.03

Items by Location

◀ Previous Set ▶ Next Set Page

Options

Show Items in Transit

Column Set UNSPECIFIED.LP

Show Column Name

No.†	EX-DL	EX-HE	LDP-DIE	LDP-SLS	LP
→ ALC20001	-	-	-	3 105	-
BOI90045	-	-	-	13 850	-
BOU90002	-	-	-	14 425	-
CAI90049	-	-	-	3 895	-
CF4667	-	-	-	14 570	-

Sales Order

LP00030 · Hydro Cleaning

Notifications: 5 Recurring sales lines exist for customer C00004. Do you want to insert them on this document? | Die moet altijd op voorhand betalen | OPGELET, Klant altijd orderbevestiging sturen | This customer has an overdue balance. | The customer's credit limit has been exceeded.

Process Approve Release Posting Prepare Order Request Approval Print/Send Navigate Actions Related Fewer options

General

Customer No. C00004	Your Reference	Toiling Order Type
Customer Name Hydro Cleaning	Salesperson Code HBA	Prepayments
Currency Code	Assigned User ID HARMONIZE-ITGUNTHER	Initial
Contact Jan Jaap Plieters De Vries	Assigned Logistic User ID	Outstanding
Posting Date 24/03/2021	Status Open	Payed
Requested Delivery Date	Location Code LDP-SLS	Created At

Lines Manage Line Order Fewer options

Type	No.	Line Discount %	Line Amount Excl. VAT	Toiling Source No.	Toiling Source Line No.	Qty. to Ship	Quantity Shipped	Qty. to Invoice	Quantity Invoiced	Promised Delivery Date	Requested Delivery Date	Planned Delivery Date	Planned Shipment Date	Shipment Date	Shipping Time	Outbound Whse. Handling Time
→ Item	ALC20001	*	-	-	0	100		100				27/03/2021	24/03/2021	24/03/2021	3D	X



2a. ATP Scenario 2 – Request Items not yet available for shipping

Sales for item not yet available, but there is a receipt pending

Given the following stock situation on 24.03:
Our item is not available in LP.

Items by Location

Options

Show Items in Transit Column Set UNSPECIFIED.LP

Show Column Name

No. 1	EX-DL	EX-HE	LDP-DIE	LDP-SLS	LP
→ ALC20001	-	-	-	3 105	-
BOI90045	-	-	-	13 850	-
BOU90002	-	-	-	14 425	-
CAI90049	-	-	-	3 895	-
CF4667	-	-	-	14 570	-

Sales order in LP ... no stock ... however there is a promised receipt (purchase order) on 01.04 => inbound 1D => 02.04. Create the sales order, and we get a stockout warning saying the earliest available date is 02.04.

Sales Order LP00029 · Hydro Cle

View - Availability Check - ALC20001 · ALCOOL 96° BIO LITRE

Manage Item Create Purchase Invoice Create Purchase Order

Inventory

Available Inventory (LP) 0 All locations 3 105

Inventory Shortage -2

Details

No. ALC20001

Description ALCOOL 96° BIO LITRE

Current Quantity 2

Earliest Availability Date 2/04/2021

Substitutes Exist No

Unit of Measure Code KG

So now you know you can set the shipment date on the sales order to 02.04. With no outbound whs. handling and 3D delivery, the planned delivery 05.04



2a. ATP Scenario 3 – Meet the requested delivery date

Sales for item not yet available, but there is a receipt pending

Given the following stock situation on 24.03:
Item is not available in LP

Items by Location

Options

Show Items in Transit Column Set UNSPECIFIED_LP

Show Column Name

No. 1	EX-DL	EX-HE	LDP-DIE	LDP-SLS	LP
→ ALC20001	-	-	-	3 105	-
BOI90045	-	-	-	13 850	-
BOU90002	-	-	-	14 425	-
CAI90049	-	-	-	3 895	-
CF4667	-	-	-	14 570	-

Customer asks if we can deliver 01.05. Item is not available in LDP, but there is a promised receipt on 01.04 => inbound 1D => 02.04. Create the sales order, and we get a stockout warning saying the earliest available date is 02.04. Set requested delivery date to 01.05, system calculates backwards to calculate the shipment date. No warning, all is fine.

Sales Order LP00029 · Hydro Cleaning

Process Approve Release Posting Prepare Order Request Approval Print/Send Navigate Actions Related Fewer options

Currency Code Jan Jaap Pieters De Vries Posting Date 23/03/2021 Requested Delivery Date Your Reference Salesperson Code HBA Assigned User ID HARMONIZE-IT,GUNTHER

Location Code LP Tolling Order Type Prepayments Initial Outstanding Payed Created At 23/03/2021 21:34

Lines	Manage	Line	Order	Fewer options	Quantity Shipped	Qty. to Invoice	Quantity Invoiced	Promised Delivery Date	Requested Delivery Date	Planned Delivery Date	Planned Shipment Date	Shipment Date	Shipping Time
→	Item	ALC20001				2			1/05/2021	1/05/2021	28/04/2021	28/04/2021	3D

Note: Red arrows in the original image point from the Requested Delivery Date (1/05/2021) to the Planned Delivery Date (1/05/2021) and the Planned Shipment Date (28/04/2021).



Agenda

1. Theory
 - a. ATP CTP
 - b. Dates

- 2. Scenario's**
 - a. ATP (3)
 - b. CTP (4)**



2b. CTP Scenario 1 – CTP No Stock – No Raw Materials at hand

Create Sales Order for end product. Availability check shows no date, indicating there is no stock and no supply to meet the demand.

View - Availability Check - LP-FP-TBAPC-030D3BB · T_MELANOCT 30T ↗ ✕

Manage [Item](#) [Create Purchase Invoice](#) [Create Purchase Order](#)

The available inventory for item LP-FP-TBAPC-030D3BB is lower than the entered quantity at this location.

Inventory

Available Inventory (LP) ..	0	All locations	0
Inventory Shortage	-3 000		

Details

No.	LP-FP-TBAPC-030D3BB
Description	T_MELANOCT 30T
Current Quantity	3 000
Earliest Availability Date	

Run CTP

Edit - Order Promising Lines - Sales Order

Manage Accept Available-to-Promise Capable-to-Promise Open in Excel

No.		LP00031							
Item No.	Description	Requested Delivery Date	Requested Shipment Date ↑	Planned Delivery Date	Original Shipment Date	Earliest Shipment Date	Quantity	Required Quantity	
→ LP-FP-TBAPC...	T_MELANOCT 30T		24/03/2021	13/04/2021	24/03/2021	9/04/2021	3 000	3 000	






2b. CTP Scenario 1 – CTP No Stock – No Raw Materials at hand


Planning Worksheet populated: item Vitamine D3 has 14D lead time, all other products requested for same date, production scheduled as of delivery of all components (slowest rules)

Planning Worksheets

✓ Saved   

Name STANDAARD ...

Manage Process Prepare Line Item Item Availability by  Open in Excel | Actions Related Fewer options  

Warning	No.	Action Message	Acc... Acti... Mes...	Original Due Date	Due Date	Starting Date-Time	Ending Date-Time	Description	Original Quantity	MPS Order	Quantity	Vendor No.	Ref. Ord Type
	LP-FP-TBAPC...	New	<input checked="" type="checkbox"/>		9/04/2021	8/04/2021 16:00	8/04/2021 16:00			<input type="checkbox"/>	3 000		Prod. O
	LP-SF1-MBHB...	New	<input checked="" type="checkbox"/>		8/04/2021	8/04/2021 12:08	8/04/2021 16:00			<input type="checkbox"/>	9 450		Prod. O
	LP-SF2-MBBP...	New	<input checked="" type="checkbox"/>		8/04/2021	8/04/2021 12:08	8/04/2021 12:08			<input type="checkbox"/>	94 500		Prod. O
	LP-SF3-CON_...	New	<input checked="" type="checkbox"/>		8/04/2021	8/04/2021 10:08	8/04/2021 12:08			<input type="checkbox"/>	94 500		Prod. O
	LP-RM-MELA...	New	<input checked="" type="checkbox"/>		8/04/2021	31/03/2021 0:00	7/04/2021 23:59			<input type="checkbox"/>	1		Purchas
	LP-RM-VITA...	New	<input checked="" type="checkbox"/>		8/04/2021	31/03/2021 0:00	7/04/2021 23:59			<input type="checkbox"/>	1		Purchas
	LP-RM-VITA...	New	<input checked="" type="checkbox"/>		8/04/2021	31/03/2021 0:00	7/04/2021 23:59			<input type="checkbox"/>	1		Purchas
	LP-RM-VITA...	New	<input checked="" type="checkbox"/>		8/04/2021	31/03/2021 0:00	7/04/2021 23:59			<input type="checkbox"/>	1		Purchas
	LP-RM-VITA...	New	<input checked="" type="checkbox"/>		8/04/2021	31/03/2021 0:00	7/04/2021 23:59			<input type="checkbox"/>	1		Purchas
	LP-RM-VIT B1...	New	<input checked="" type="checkbox"/>		8/04/2021	31/03/2021 0:00	7/04/2021 23:59			<input type="checkbox"/>	1		Purchas
-	⋮ LP-RM-VITA...	New	<input checked="" type="checkbox"/>		8/04/2021	24/03/2021 0:00	7/04/2021 23:59 			<input type="checkbox"/>	1	V00006	Purchas
	LP-RM-ZINK ...	New	<input checked="" type="checkbox"/>		8/04/2021	31/03/2021 0:00	7/04/2021 23:59			<input type="checkbox"/>	2		Purchas
	LP-RM-MAG...	New	<input checked="" type="checkbox"/>		8/04/2021	31/03/2021 0:00	7/04/2021 23:59			<input type="checkbox"/>	67		Purchas
	LP-RM-MAG...	New	<input checked="" type="checkbox"/>		8/04/2021	31/03/2021 0:00	7/04/2021 23:59			<input type="checkbox"/>	1 456		Purchas



2b. CTP Scenario 1 – CTP No Stock – No Raw Materials at hand

Carry out action messages creates purchase order and production order.

Delaying raw materials gives error saying that the purchase is reserved for production order.



Delaying production order gives error saying that it is not possible due to the reservation.



2b. CTP Scenario 2 – CTP No Stock – No Raw Materials at hand

Purchase for 1 raw material is due tomorrow 25.03

Expected PO

Purchase Order ✎ +

PO000040 · Vivichem BV

Process	Release	Posting	Order	Request Approval	Print/Send	Navigate	Actions	Related
Assigned User ID	HARMONIZE-IT\GUNTHER							Outstan
Assigned Logistic User ID								Payed
Status	Open							Your Re
Location Code	LP							

Lines	Manage	Line	Functions	Order	Fewer options	
Type	No.	Quantity Invoiced	Expected Receipt Date	Requested Receipt Date	Promised Receipt Date	Planned Receipt Date
→ Item	⋮ LP-RM-VITAMINE D3		25/03/2021		25/03/2021	24/03/2021

Run CTP: production now ready 02.04, delivery 06.04. Lets accept and check the requisition worksheet.

Edit - Order Promising Lines - Sales Order

Manage Accept Available-to-Promise Capable-to-Promise Open in Excel

No. LP00031

Item No.	Description	Requested Delivery Date	Requested Shipment Date ↑	Planned Delivery Date	Original Shipment Date	Earliest Shipment Date
→ LP-FP-TBAPC-...	⋮ T_MELANOCT 30T		24/03/2021	6/04/2021	24/03/2021	2/04/2021




2b. CTP Scenario 2 – CTP No Stock – No Raw Materials at hand Purchase for 1 raw material is due tomorrow 25.03

Goods are ordered today 24.03, lead time of 7D assures all is here in time so production can start the day after. Note that Vitamine D3 is not in the list, as we have a planned unreserved PO due tomorrow.

Planning Worksheets ✓ Saved

Name STANDAARD

Manage Process Prepare Line Item Item Availability by  Open in Excel | Actions Related Fewer options

Warning	No.	Action Message	Acc... Acti... Mes...	Original Due Date	Due Date	Starting Date-Time	Ending Date-Time	Original Quantity	MPS Order	Quantity	V
	:	LP-FP-TBAPC...	New <input checked="" type="checkbox"/>		2/04/2021	1/04/2021 16:00	1/04/2021 16:00		<input type="checkbox"/>	3 000	
		LP-SF1-MBHB...	New <input checked="" type="checkbox"/>		1/04/2021	1/04/2021 12:08	1/04/2021 16:00		<input type="checkbox"/>	9 450	
		LP-SF2-MBBP...	New <input checked="" type="checkbox"/>		1/04/2021	1/04/2021 12:08	1/04/2021 12:08		<input type="checkbox"/>	94 500	
		LP-SF3-CON_...	New <input checked="" type="checkbox"/>		1/04/2021	1/04/2021 10:08	1/04/2021 12:08		<input type="checkbox"/>	94 500	
		LP-RM-MELA...	New <input checked="" type="checkbox"/>		1/04/2021	24/03/2021 0:00	31/03/2021 23:59		<input type="checkbox"/>	1	
		LP-RM-VITA...	New <input checked="" type="checkbox"/>		1/04/2021	24/03/2021 0:00	31/03/2021 23:59		<input type="checkbox"/>	1	
		LP-RM-VITA...	New <input checked="" type="checkbox"/>		1/04/2021	24/03/2021 0:00	31/03/2021 23:59		<input type="checkbox"/>	1	
		LP-RM-VITA...	New <input checked="" type="checkbox"/>		1/04/2021	24/03/2021 0:00	31/03/2021 23:59		<input type="checkbox"/>	1	
		LP-RM-VITA...	New <input checked="" type="checkbox"/>		1/04/2021	24/03/2021 0:00	31/03/2021 23:59		<input type="checkbox"/>	1	
		LP-RM-VIT B1...	New <input checked="" type="checkbox"/>		1/04/2021	24/03/2021 0:00	31/03/2021 23:59		<input type="checkbox"/>	1	
		LP-RM-ZINK ...	New <input checked="" type="checkbox"/>		1/04/2021	24/03/2021 0:00	31/03/2021 23:59		<input type="checkbox"/>	2	
		LP-RM-MAG...	New <input checked="" type="checkbox"/>		1/04/2021	24/03/2021 0:00	31/03/2021 23:59		<input type="checkbox"/>	67	
		LP-RM-MAG...	New <input checked="" type="checkbox"/>		1/04/2021	24/03/2021 0:00	31/03/2021 23:59		<input type="checkbox"/>	1 456	
		LP-RM-MCCV...	New <input checked="" type="checkbox"/>		1/04/2021	24/03/2021 0:00	31/03/2021 23:59		<input type="checkbox"/>	59 764	

14



2b. CTP Scenario 3 – CTP No Stock – No Raw Materials at hand Purchase for ALL raw materials are due tomorrow 25.03

PO for all raw materials, due tomorrow

Purchase Order



PO000040 · Vivichem BV

Lines | Manage | Line | Functions | Order | Fewer options

Type	Quantity Invoiced	Expected Receipt Date	Requested Receipt Date	Promised Receipt Date	Planned Receipt Date
→ Item		25/03/2021		25/03/2021	24/03/2021
Item		25/03/2021			24/03/2021
Item		25/03/2021			24/03/2021
Item		25/03/2021			24/03/2021
Item		25/03/2021			24/03/2021
Item		25/03/2021			24/03/2021
Item		25/03/2021			24/03/2021
Item		25/03/2021			24/03/2021
Item		25/03/2021			24/03/2021
Item		25/03/2021			24/03/2021

Run CTP : we can ship in 2 days from now

No. LP00031

Item No.	Description	Requested Delivery Date	Requested Shipment Date ↑	Planned Delivery Date	Original Shipment Date	Earliest Shipment Date	Quantity
→ LP-FP-TBAPC...	T_MELANOCT 30T		26/03/2021	30/03/2021	26/03/2021	26/03/2021	3 000

Planning worksheets suggests to produce, no longer to purchase:

Warning	No.	Action Message	Acti... Mes...	Original Due Date	Due Date	Starting Date-Time	Ending Date-Time	Description	Original Quantity	MPS Order	Quantity	Unit of Measure Code	Ven
	LP-FP-TBAPC...	New	<input checked="" type="checkbox"/>	26/03/2021	26/03/2021	25/03/2021 16:00	25/03/2021 16:00	T_MELANOCT 30T		<input type="checkbox"/>	3 000	STUKS	
	LP-SF1-MBHB...	New	<input checked="" type="checkbox"/>	25/03/2021	25/03/2021	25/03/2021 12:08	25/03/2021 16:00	Blister Melanocit		<input type="checkbox"/>	9 450	STUKS	
	LP-SF2-MBBP...	New	<input checked="" type="checkbox"/>	25/03/2021	25/03/2021	25/03/2021 12:08	25/03/2021 12:08	Concentraat Tablet		<input type="checkbox"/>	94 500	STUKS	
	LP-SF3-CON...	New	<input checked="" type="checkbox"/>	25/03/2021	25/03/2021	25/03/2021 10:08	25/03/2021 12:08	CON_MELANOCT (Melph...		<input type="checkbox"/>	94 500	GR	



2b. CTP Scenario 4 – CTP No Stock – All Raw Materials at hand

Same as CTP Scenario 3