



# Smart Reservation

## THE INTELLIGENT SOLUTION FOR ALLOCATION OF SALES ORDERS

With Smart Reservation optimal allocation of inventory on-hand is ensured and the delivery capability for sales orders is optimized to the best possible level. The solution can be implemented on top of all Dynamics AX versions as a Plug & Play module

### SMART RESERVATION

Smart Reservation is "smart" because it replaces the general reservation functionality with a much more intelligent allocation and reservation mechanism that does not blindly allocate the physical on-hand for the first coming sales orders regardless of their delivery dates. Smart reservation calculates the optimal allocation profile based on delivery dates, priorities, existing on-hand levels and coming receipts. This allocation profile is utilized by the "background reservation" to obtain physical reservations for the sales orders to which physical on-hand has been dedicated. This process is time-fence controlled, which means that physical reservations first kick in very close to the time where picking should be initiated. This methodology ensures an ultra-flexible system with maximum fulfillment of sales orders – it is simply the optimal allocation.

### SMART RESERVATION - KEY FEATURES

Real-time delivery capability calculation (optimal ATP)  
Optimal fulfilment of as many sales orders as possible. While taking priorities, delivery dates, quantities, on-hand levels and coming receipts into account, the optimizer will calculate the ultimate optimal allocation profile.

### TIME-FENCE CONTROLLED RESERVATION

Physical reservations are obtained by the background reservation component. The background reservation adopts and acts upon the optimal ATP profile so that only sales orders that according to the profile should allocate against physical on-hand are reserved.

### VISUAL OVERVIEW FOR COMPLETE SALES ORDERS

The optimal ATP calculation is performed real-time for complete sales orders and the result is visualized using "traffic lights" so you can rapidly, through the traffic light colors, get an overview of the delivery capability for complete sales orders.

Smart reservation is illustrated with a traffic light function that makes it quick and easy for the sales department to get an overview of the supply situation.

Green light means that a sales order line can be delivered on time and that it is logically allocated to physical inventory.

Yellow light means that a sales order line can be delivered on time, and that it is logically allocated against a coming receipt.

Red light means that a sales order line cannot be delivered on time. Simultaneously first possible delivery date is displayed.

### COCKPIT FOR MANAGING ORDER LINES

A red order line always means a disappointed customer who cannot get his product delivered at the desired time, so any red order line must be handled to ensure maximum customer satisfaction. The well-featured traffic light cockpit provides an overview of delivery possibilities and provides tools to adjust delivery dates, or re-prioritization so that no red order line / customer is left without attention.

#### SALES ORDER DETAILS

000785 : Birch Company

Lines Header | Open order

#### Related information

##### Traffic light allocation

●	4.00	
▲	10.00	8/15/2019
◆		

Sales order header

Sales order lines

+ Add line

+ Add lines

Add products

Remove

Sales order line

Traffic light

Financials

Inventory

Product and supply

✓	Green	Yellow	Red	Item number	Product name	Quantity	Unit	Delivery type	Site	Warehouse	Unit price	Net amount	Adj.
	<div></div>	<div></div>		W18072	Silver cable D807	14.00	ea	Stock	1	11	84.00	1,176.00	
		<div></div>		D22041	Midrange cabinet 220	4.00	ea	Stock	1	11	46.00	184.00	
	<div></div>			H47107	Silver socket Adv 107	2.00	ea	Stock	1	11	28.00	56.00	
	<div></div>			D19056	Highrange speaker ...	1.00	ea	Stock	1	11	44.00	44.00	
			<div></div>	K90922	Chrome spike 22	5.00	ea	Stock	1	11	9.60	48.00	

## REPLICATING OPTIMAL ATP

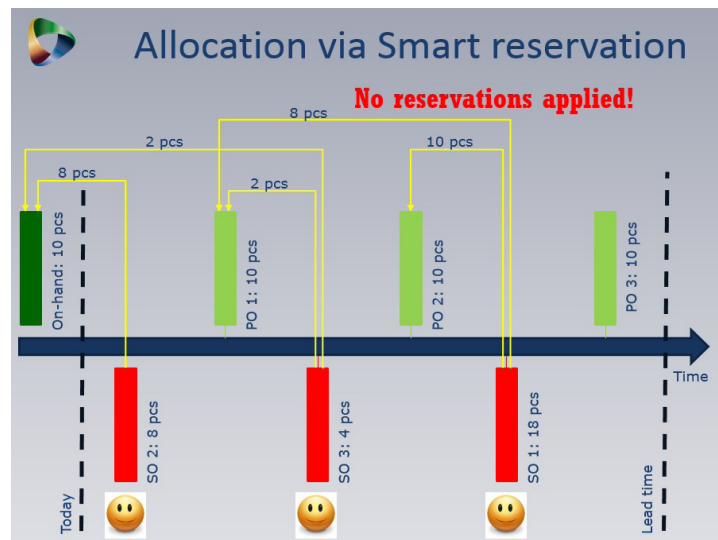
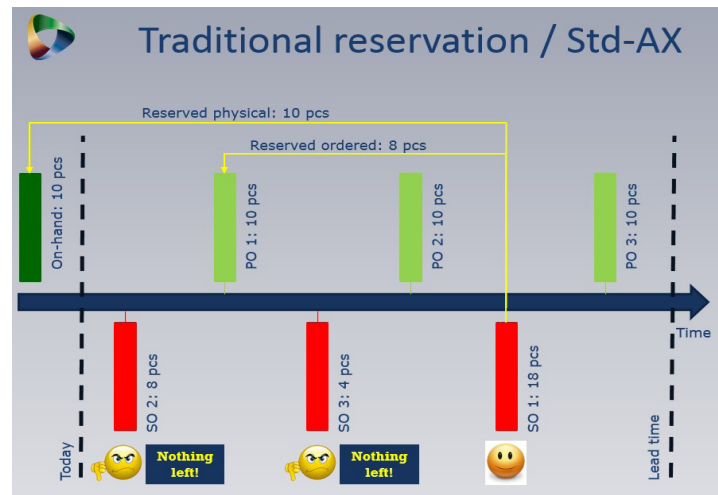
The optimal ATP profile is always calculated "on-request", for example when you open the order form, the traffic light colors are always 100% accurate. It also means that the profile is always based on the current distribution of issue transactions, receipt transactions and on-hand levels in the database. In order to make the calculated result available for any third party stakeholders, for example in a web shop, the profile can be replicated into an availability table that can be populated directly to a web shop. In addition to express instant availability, the table also holds information around possible future delivery dates and on-hand levels in case of shortfalls. The replication table can be kept "real-time updated" so that the data are never more than, for example one minute old.

## SMART RESERVATION VERSUS STANDARD AX

In standard AX reservations will always be based on a "first come, first serve" basis. The first sales order will therefore always reserve against the physical stock, regardless of the delivery date.

In the standard AX scenario in upper right corner will Order 1 reserve all the existing on-hand levels as well as most of the delivery of Purchase 1. The result is that Order 2 and Order 3 cannot be delivered on time as Order 1 - despite later delivery date - has allocated all of the on-hand levels, which could have met these.

In the Allocation via Smart reservation scenario, all customers will be able to get their goods on time because Smart reservation is able to calculate the optimal allocation and with the support of the background reservation ensure that the correct sales orders are reserved against physical on-hand when the dispatch process is close to be initiated. Logistics department is therefore released from the ongoing tampering with reservations for satisfying customers.



SMART RESERVATION is developed in collaboration with Abena, Trespass, Dr. Martens, Svendsens Sport and Rosendahl Design Group. Per Munk Nielsen (Logistics Director at Rosendahl) says: "I have as responsible for the logistics department for years spent a lot of time rearranging reservations to ensure that my customers receive their goods on time, these days are over after we got Smart Reservation. The solution has released a lot of resources in logistics and customer service departments".



## FSB Development

FSB Development is a software company developing modules for Microsoft Dynamics AX.

The Smart reservation module for Microsoft Dynamics AX is an extension to standard Dynamics AX Logistic modules. Smart reservation is the right choice for companies looking for real-time advanced inventory management.

Smart reservation is available for version 4.0, 2009, 2012 and D365 of Microsoft Dynamics AX.

FSB Development's AX modules are sold via certified Dynamics AX partners in more than 30 countries. More than 150 Dynamics AX customers with over 15000 AX users have chosen an AX module from FSB Development.

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