



# INVENTORY II™

## Intelligent Reservation

Item reservation is far more than just allocating some on-hand levels in the warehouse; most companies require intelligence from the system to help prioritize the order in which on-hand levels are reserved and issued or to ensure that reservations do not apply unfair restrictions to on-hand levels in the warehouse. Inventory II offers a wide range of intelligent tools to ensure that the **right on-hand levels** are reserved at the **right time** and with the **right level of detail**.

### Rule based reservation levels

In standard Dynamics AX item reservations are applied on all physical dimensions and the physical items are pinpointed down to the most detailed level: Location, Pallet, Batch number, etc. There are a number of disadvantages related to that approach: As for the dimensions identifying the physical items, e.g. batch numbers and serial numbers, it typically does not make sense to allocate these at the time of order intake – such dimensions are most often decided by the person picking the physical items. As for the dimensions identifying where the physical items are stored, e.g. Location and Pallet, it typically applies unintended restrictions to the storage of items because the items are fixed to reside on this dimension set and cannot be transferred around.

With Inventory II all these disadvantages are gone as the inventory dimensions can be assigned in 3 steps:

1) At the time of order intake the first initial inventory dimensions are applied; e.g. just Warehouse thus leaving all other dimensions blank and so far undecided. This will allow for the warehouse staff to manage the storage in an efficient way:

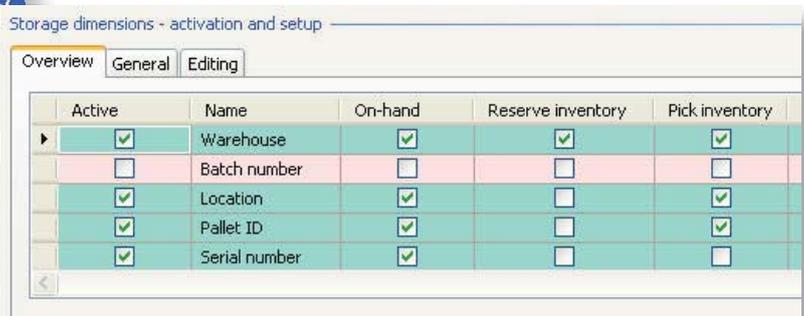
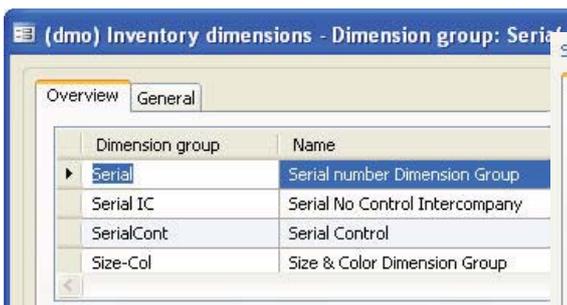
they can transfer items in the warehouse as no on-hand levels are fixed to their current position due to hard reservations.

2) Prior to the actual picking of items the reservation can be extended to include further inventory dimensions e.g. Location and Pallet. Inventory II will automatically locate where the on-hand levels reside now, e.g. find the location and pallet, and apply these to the reservation; now the picker knows where to find the items.

3) At the time of physical picking the remaining inventory dimensions are applied by the person doing the actual picking, e.g. by scanning serial numbers.

This flexibility is fully controlled in setup as the dimensions to be applied in each step are specified.

The philosophy of rule based reservation levels is all about postponing determination of inventory dimensions to the time where it makes sense to pinpoint these. Obviously this applies the maximum possible flexibility to on-hand levels in general.

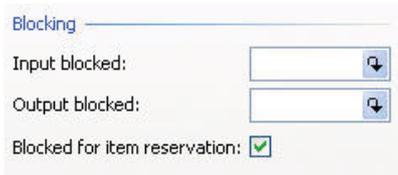


## Reservation order

Companies holding multiple on-hand levels in stock often have specific philosophies defining the order in which these on-hand levels should be reserved and issued out of inventory. Such philosophies are often based on age of the on-hand levels, attributes such as expiry dates or they could be based on strategies for having optimal picking routes to ensure maximum efficiency in the warehouse.

Inventory II allows for controlling this in a very detailed way and it's even possible to combine several such philosophies: One example is to have the reservation order optimized towards physical locations and within the optimal locations for picking have the items reserved according to a FIFO principle or according to expiry dates on batches to ensure that the older items are reserved and issued first.

This is fully controlled by the *assignment order* which is defined on the Inventory dimension groups. This is the order in which the system will reserve on-hand levels. For the components in the assignment order it's defined what the sorting criteria should be; e.g. the Sort code on the locations.



## Restriction rules

With Inventory II on-hand levels can be restricted in several different ways so that they appear unavailable for reservation. Often such restrictions are used to prevent reservation on on-hand levels which are somewhat damaged, e.g. expired batches, or to ensure that reservations are only applied on approved physical locations, e.g. picking locations – this is the perfect way to prevent reservation on e.g. upper-shelf locations.

## Time fence controlled reservation

Any physical reservation, detailed as well as less detailed, will reduce the available physical on-hand levels. The time fence controlled reservation allows for postponing physical reservations so that e.g. sales orders to be delivered in several months do not occupy physical inventory several months in advance. The background reservation in Inventory II can take over the job and ensure that such sales orders are automatically reserved when the time for delivery is near. *When* this reservation must take place is set up as a time fence and the system will automatically calculate when to auto-perform the physical reservation so that the delivery can be guaranteed.



## FSB Development

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

The Inventory II module for Microsoft Dynamics AX is an extension to the standard Inventory module. Inventory II applies speed and simplicity to the standard Inventory module. Inventory II is the right choice for companies looking for real-time advanced inventory management, high scale transaction volume capabilities or 24/7 operation. Inventory II is available for version 3.0, 4.0, 2009 and 2012 of Microsoft Dynamics AX.

Inventory II is sold via certified Dynamics AX partners in more than 30 countries. More than 150 Dynamics AX customers with over 15000 AX users have chosen Inventory II.

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