

### Prepare for Picking. Reservation

The Warehouse Worker will transfer the items to the outbound location on the pallet, so the requested output order quantity is divided to parts that will fit the pallet capacity.

In Axapta, we can set up the pallet capacity per item. Unfortunately, if an item is received in different units, we can't set up the pallet capacity for items in a specific unit. For example, a pallet 42\*42 contains 50 boxes of cakes containing 100 cakes each which equals to the total amount of 5000 cakes, but the same pallet may contain 1 package of cake containing 6000 cakes.

In this training, we will not set up the pallet capacity for items. It means that all pallet types can include all quantities of Bottle and Can items.

The pallets and physical dimensions of items are set up under **Inventory management > Common Forms > Item details** > find Bottle item > **Setup** tab > **Warehouse management** field group.

Axapta defines a picking location automatically. The available quantity on location is taken into account. But in what sequence the location will be searched?

In our demo data, picking locations are searched in the following sequence:

1. Bulk locations that contain full pallets with required items. A full pallet will be transferred from a bulk location to the outbound location.
2. Default (or primary) item picking location. This is set up under **Inventory management > Common Forms > Item details** > find necessary item > **Setup** button > **Warehouse items** > find necessary dimension combination > **Locations** tab > **Picking location setup** field group > **Picking location** field. Note: For the Bottle item, it is the 01-03-01-1 location, for the Can item, it is also the 01-03-01-1 location.
3. All picking locations
4. All bulk locations
5. Inbound locations
6. Outbound locations

When a full pallet is found in a bulk location, a pallet transport from this bulk location to the outbound location is created. This type of picking is called a direct picking or an output transport.

If an item to be shipped is stored on different pallets located in different locations or in primary picking location, a picking route is created. A picking route contains picking lines with the information about picking locations and quantity available to pick. The Warehouse Worker uses a picking route to fill one pallet and transport it to the outbound location.

When the Warehouse Worker goes to the picking location, the system must guarantee that the necessary item quantity will be available (not picked by another employee). So, when a picking location is found, the planned picked quantity is reserved. The reserved quantity can't be taken from the location for other purpose.

## Shipment

In Axapta, the sequence in which a picking location is searched is called “shipment reservation sequence” because during the reservation process, a picking location is searched and the quantity is reserved. Shipment reservation sequence is set up in the shipment template and is transferred to the shipment when it created.

The shipment reservation sequence is attached to the template under **Inventory management > Setup > Distribution > Shipment templates > General tab > Reservation field group > Sequence ID** field.

The shipment reservation sequence is set up under **Inventory management > Setup > Distribution > Shipment reservation sequences** (it contains the setup for sequence combination per warehouse).

The shipment reservation combination is set up under **Inventory management > Setup > Distribution > Shipment reservation combinations**.

Sequence	Reservation method	Refill	Ordered
1	Output transport – All bulk locations	<input type="checkbox"/>	<input type="checkbox"/>
2	Picking route – Item picking location	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3	Picking route – All picking locations	<input type="checkbox"/>	<input type="checkbox"/>
4	Picking route – All bulk locations	<input type="checkbox"/>	<input type="checkbox"/>
5	Picking route – All inbound locations	<input type="checkbox"/>	<input type="checkbox"/>
6	Picking route – All outbound locations	<input type="checkbox"/>	<input type="checkbox"/>

Figure 14.10 Shipment reservation combinations form

We can see that a shipment reservation combination presented in the form is the same as we discuss.