# 8.06. Box management

### Added: Version 3.1

Boxing is telling mSupply which boxes you packed issued stock into. This is helpful for transport and providing more information to your customers. You can either manually pack items into boxes or have mSupply suggest an optimal pack for you.

## Manually packing boxes

On the transport tab of a customer invoice window, there are two methods for managing boxes.

- The simple method allows you to directly enter any Box identifiers in the **Boxes** column
  - To use this method you should **not** turn on the preference mentioned below. You simply click twice (slowly) in the box numbers column of the "Transport details" tab on a customer invoice and enter box numbers.
- If you want to assign exact quantities of each invoice line to a box or boxes, and also possibly record box weights and volumes, you need to:
  - Choose Special > Show Stores
  - $\circ\,$  Double-click on the store in question (you might only have one)
  - $\circ\,$  Click on the preferences tab
  - Check "Able to pack items into multiple boxes" see details on the 24.08. Virtual stores page.

The rest of this page assumes you're using mSupply with this preference checked.

## Setting up boxes

- Once you've created a customer invoice, and picked goods, the pickers should have marked the pick slip with what quantities of each item were put into what box.
- Now go to the **Transport** tab of your customer invoice.
- Click **Manage Boxes** (Note: if you haven't turned on the preference as above, these buttons are hidden)
- You'll see this window:

		Boxe	s for this invo	oice				
New Delete	Set wt & vol to calculated							
Description	Туре	Calculated vol (m3)	Calculated weight (kg)	Volume (m3)	Weight (kg)	Length (m)	Width (m)	Height (m)
								ŌK

- Click **New** to add boxes
- We suggest you keep box names short. e.g. 1, 2, 3, 4 or A, B, C, D
- Type a box name, click **OK & Next** (shortcut: the Enter key) to add another box.
- On the last box click **OK** to save and close the window.
- If you're Gary, you might have clicked **OK & Next** one too many times. In that case you can use

the **Cancel** button to close the window.

- Note that you can't have a blank box name, and you can't have two boxes on the same invoice with the same name (You can just use the same series of box names over and over on different invoices).
- If you make a mistake with a box name you can double-click a row to edit it.
- Click **OK** to close the Box Management window when you're done.

## **Using the Box Selected Button**

- In most cases you will be able to put the total contents of an invoice line in the one box.
- In that case, click on a row, or hold down <control> (Windows) or <command> (Mac) and click on multiple rows.
- In the example below we have highlighted rows 2, 3 and 4.

C	Manage bo	Box selected		Jnbox	)				
Lin	e Location	Item Name	Quan	Pack Size	Batch	Weight	Exp date	Sell Price	Box number
1		Salbutamol inhalation solution bottle	2	1	EX23	0	30/1/12	8.35	
		Salbutamol Inhaler 100mcg/dose			G92192		30/3/12	1.95	
		IV, Metronidazole inj 500mg/100mL			S13N5		30/5/13	6.44	
4		Water for injection inj 10mL	100	1	1004824	0	30/10/15	0.26	
5		Optium strips (glucose electrodes)	2	50	45001F594	0	30/10/12	36.31	

- Now click Box selected
- You'll be shown the "Pack selected boxes" window:

	Pack selected batches
There are 126 lines(s). Choos	item(s) left to be distributed from the selected invoice e desired box and click <ok> to proceed.</ok>
B 🗹	A B C D
	Cancel OK

- Choose the box for the items from the drop-down list.
- Click **OK** to close the window.
- You'll see the boxes column in the list has been filled out.

## Splitting a single invoice line over multiple boxes

- If you have bulky invoice lines or large quantities, you will need several boxes to hold the one line.
- Double-click the line to assign to boxes.
- Let's say in the example above, you got a supplementary request to increase the water for injection quantity from 100 to 2000. You go back to the "general" tab and do this. Now back on the transport tab you double-click the water for injection. This is what you would see:

00	Distribute Ite	ems Across	Boxes		
Distribute iter 1900 rema	m Water for injection inj 10mL (l aining packs to distribute	ine 4) across b	oxes		
<u>+</u>	*				
Add to box	Delete				
	Box Description	Quantity	Weight(kg)	Volume(m3)	
с		100	0	(	D
					- 11
				ОК	
					1

- Notice that at the top of the window "1900" is in red. That's the quantity still to distribute.
- Click the Add to box button.
- You'll see this window:

Distribute items across Boxes
Distribute item Water for injection inj 10mL (line 4) across boxes
Box: A +
Quantity: 1900 Available : 1900
Weight (kg): 0
Volume (m3): 19000
Cancel OK OK & Next

- Let's say we're going to put 1000 in box A and the remaining 900 in box B
  - Enter 1000 in the quantity field
  - Choose **A** from the drop-down list
  - Click OK & Next
  - $\circ\,$  Fill out the window to enter 900 in box **B** and click **OK** to close the window.
  - Now your window should look like this:

Add to box	Delete			
	Box Description	Quantity	Weight(kg)	Volume(m3)
2		100	0	0
4		1000	0	10000
3		900	0	9000

- You can double-click a row to edit it.
- To delete a row, click on it to highlight it, then click Delete
- Note that the weight and volume for the item will be calculated automatically if you have set them in the item details window, but you can also override the calculated weight/volume when you are assigning an item to a box.

## Removing an invoice line from all boxes

- You can use the **Unbox** button to remove an invoice line from all boxes at once.
- Highlight one or more invoice lines.
- Click Unbox
- You're done.

## Seeing what is in a box

- If you click **Manage Boxes** and then double-click a box you will be shown a list of items in that box.
- You can also set the measured weight and volume in this window, which will usually be somewhat higher than the calculated weight/volume:

	мападе Бол	les	
Box name	Box 1		
Type	Please select	. 0	)
Packed length (m)	0	- <b>-</b>	
Packed width (m)	0	]	
Packed width (m)	0	]	
Packed height (m)	0		
Packed weight (kg)	0	]	5
Packed volume (m3)	0	]	Set wt & vol to
Current box contents			calculated
Description	Quantity	Weight (kg)	Volume (m3)
(COVID-19) Nasink Tubing, A	Ad 2	0	0
	Total in box:	0 kg	0 m3

## Printing packing list for each box

• We have custom printing forms available that will print packing lists for each box. Ask us for more details.

## Using mSupply to suggest an optimal pack

Rather than you manually entering which boxes the stock has gone into, mSupply can suggest an optimal pack for you. You can choose to accept or reject the pack it suggests. If you accept it, the stock is automatically packed into the boxes suggested and you can print out a guide for the packers to then follow this pack. Should you need to, you can still edit an optimal pack using the functionality described in the section above.

mSupply uses the volume of the stock and the volume of the boxes to determine what can be packed into which box so it needs both of these pieces of information. mSupply will also use the carton pack size to recognise manufacturer cartons and leave those out of the pack if you enter the carton pack size information when you receive stock.

### Setup

### Create the standard box types

Choose *Customer > Show box types* from the menus and this window will be displayed:

	Box t	ypes				
New						
Description	Length (m)	Width (m)	Height (m)	Volume (m3)	Number available	Is active
Large box	1.2	0.5	0.5	0.3	20	<b>V</b>
Medium box	0.8	0.5	0.4	0.16	20	<b>V</b>
Small box	0.75	0.4	0.3	0.09	15	<b>V</b>

The window displays the current box types defined in the system. You can create a new box type by clicking on the **New** button or you can edit an existing box type by double-clicking on it in the list.

If you click on the **New** button this window opens (if you double-click on a box type to edit it, the same window is opened but it is populated with the selected box type's details, which you can edit as required):

Description		
Length	0	m
Width	0	m
Height	0	m
Volume	0	m3
Is active 🗹		
Number available	0	

Enter the details in the various fields as follows:

- **Description:** The name of this box type (this is **not** the name that boxes of this type will be given when they are created. It is the name of the type of box only)
- Length: The length of boxes of this type in metres
- Width: The width of boxes of this type in metres
- **Height:** The height of boxes of this type in metres
- **Volume:** This is read only and will be calculated for you as the Length, Width and Height values are entered or edited. The value is shown in m<sup>3</sup> and is the volume available for filling with stock.
- **Is active checkbox:** Checked by default for new box types. If checked then this box type is used in suggested packs. If it is unchecked then this box type is not used in suggested packs.
- **Number available:** The number of boxes of this type that are available for packing goods into. The number is automatically decremented as boxes are used in packs. If it reaches 0 then boxes of this type are no longer used in suggested packs.

When you have finished entering or editing the information, click on the **OK** button to save the changes or the **Cancel** button to discard them. To save your changes and immediately add another box type or edit the next one in the list, click on the **OK & Next** button instead of the **OK** button.

### Set the box packing preferences for the store

There are some store dependant preferences which you can set, as described on the 26.07. Virtual stores page.

### Turn on the preference to use carton pack sizes

This is an optional step. If you don't want mSupply to recognise and exclude manufacturer supplied cartons from the pack (and therefore pack all lines on the customer invoice into boxes) then you can ignore this step.

To turn the preference on, choose *File* > *Preferences* from the menus and go to the *Invoices* 1 tab and check the **Show inner and outer pack fields** checkbox. The preference and what it does is described on the 16.03. Invoice preferences page.

When the preference is turned on, don't forget to tell the users to enter the carton pack size in the **Quan per inner** field on a supplier invoice when stock is received. Unlike volume per pack, there is no way to add the inner pack size to stock lines that have already been received because this could potentially lead to internal ledger errors.

### Enter volume information when receiving goods

Not really a setup step but you need to make sure users know they must enter the volume per pack of stock as it is received. If there is no volume against stock then mSupply will just put it all in the first available box!

Volume per pack for each line of stock is entered at the time stock is received on a:

• Supplier invoice in the Volume per pack field shown on the 7.01. Supplier invoices page or

• **Goods received note** in the Volume per pack field shown on the 7.02. Goods receipts page.

You can also edit an existing line of stock to add its volume per pack at any time by using the *Edit stock line* window, as described on the 4.01.05 Items - Stock tab page.

## Getting a suggested pack

To create a suggested pack, go to the *Transport details* of a customer invoice and click on the **Suggest boxes** button shown here:

•	•					Custo	omer inv	oice						
L	Name Their ref	CAL Anse-	à-Foleur	922301	Con	firm date (	00/00/00					Colour		Black
				22301								Invoice: 3		
C	omment					Category	None		0			Entry date: 29	/09/202	2
												Goods received: 0		
												Requisition: 0		
												Status: sg		
												Entered by: m5	iupply Su	pport
									_			Store: Ma	in wareh	ouse
	Orders	unitten data	00100100	General Summar	y by Item	Summary	by Batch	Transport deta	3	Documents	Log	Ship method	None	
	order v	writtveni Glabe		order received date	00/00/00	_	34	ip care 00/00/	00			and method	NUTE	
E	xpected	arrival date	00/00/00	Actual arrival date	00/00/00	_						Responsible officer	None	0
1	Managel	boxes	Box selected	Unbox		iuggest box	kes							
ne	Location	1	Item Name		Quan	Pack Size	Batch	Weight		Exp date	Sell Price	Box	xes	
4	3D02C	Test item	01 500mg tab		23	1000	ABCD123	4	0	31/05/2024	2.13			
5		Test item	02 1mg/1ml inj		20	10	ewqu67	8	0	31/07/2026	1.43			
2		Test item	03 1g cap		10	15	2XCV123	4	0	31/08/2025	3.56			
									Т					
												Total Item Weig	ht O	
Ľ	Print	labels								OK & N	ext	Delete	0	ĸ

mSupply will calculate the suggested pack and display it in a new window like this:

Box	Туре	% full	% empty	Item	Pack size	Number of packs	Batch	Expiry date
	Manufacturer carton	100	0	Test item 01 500mg tab	1000	12	ABCD1234	31/05/2024
	Manufacturer carton	100	0	Test item 02 1mg/1ml inj	10	10	ewqrtyu678	31/07/2026
	Manufacturer carton	100	0	Test item 02 1mg/1ml inj	10	10	ewqrtyu678	31/07/2026
	Medium box	100	0	Test item 03 1g cap	25	1	ZXCV1234	31/08/2025
				Test item 01 500mg tab	1000	2	ABCD1234	31/05/2024
	Medium box	100	0	Test item 03 1g cap	25	1	ZXCV1234	31/08/2025
				Test item 01 500mg tab	1000	2	ABCD1234	31/05/2024
	Medium box	100	0	Test item 03 1g cap	25	1	ZXCV1234	31/08/2025
				Test item 01 500mg tab	1000	2	ABCD1234	31/05/2024
1	Medium box	100	0	Test item 03 1g cap	25	1	ZXCV1234	31/08/2025
				Test item 01 500mg tab	1000	2	ABCD1234	31/05/2024
	Medium box	100	0	Test item 03 1g cap	25	1	ZXCV1234	31/08/2025
				Test item 01 500mg tab	1000	2	ABCD1234	31/05/2024
5	Medium box	80	20	Test item 03 1g cap	25	1	ZXCV1234	31/08/2025
				Test item 01 500mg tab	1000	1	ABCD1234	31/05/2024
,	Medium box	60	40	Test item 03 1g cap	25	1	ZXCV1234	31/08/2025
8	Medium box	60	40	Test item 03 1g cap	25	1	ZXCV1234	31/08/2025
9	Medium box	60	40	Test item 03 1g cap	25	1	ZXCV1234	31/08/2025
10	Medium box	60	40	Test item 03 1g cap	25	1	ZXCV1234	31/08/2025

MORE INFORMATION COMING SOON!

### Previous: 8.05. Transferring goods to another store || Next: 8.07. Stock control methods for your customers

#### From: https://docs.msupply.org.nz/ - mSupply documentation wiki

Permanent link: https://docs.msupply.org.nz/issuing\_goods:boxes?rev=1673957721



Last update: 2023/01/17 12:15