

# MOBILE WMS User Guide

Microsoft Dynamics 365
Business Central

Version 5.19

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# 1. Intro

This user guide explains how to work with the Mobile WMS app when integrating with Business Central.

The goal is to explain which areas the Mobile WMS app can be used for data entry and what happens in Business Central after the registrations have been posted on the mobile device.





# 2. Integration to Microsoft Dynamics 365 Business Central

The integration areas below allow the mobile device to be used for "Planned functions". Meaning functions based on processing Order documents in Business Central.

#### Receiving

- Purchase orders
- Inventory Put-aways
- Warehouse Put-aways
- Transfer orders
- Sales Return Orders

#### Picking

- Sales orders
- Inventory Picks
- Warehouse Picks
- o Transfer orders
- o Purchase Return Orders

#### Counting

- Physical Inventory journal
- Warehouse Physical Inventory journal

# Movements

- Warehouse Movements
- Inventory Movements

The Mobile WMS app also provides the following "Unplanned functions" (No Order document exist)

#### Unplanned count

Allows the user to count the quantity found on a bin

# Unplanned move

Allows the user to move an item from one bin to another

#### Adjust quantity

Allows the user to remove items from the inventory and provide a reason code

# • Lookup location content

Allows the user to lookup the content of a bin

# Item cross reference

Allows the user to associate a barcode with an item

#### Substitute items

Allows the user to lookup substitute items for an item

#### Locate item

Allows the user to lookup where an item is placed

#### **Bulk Move**

Allows the user to move everything in a bin to another bin



# 3. Receiving

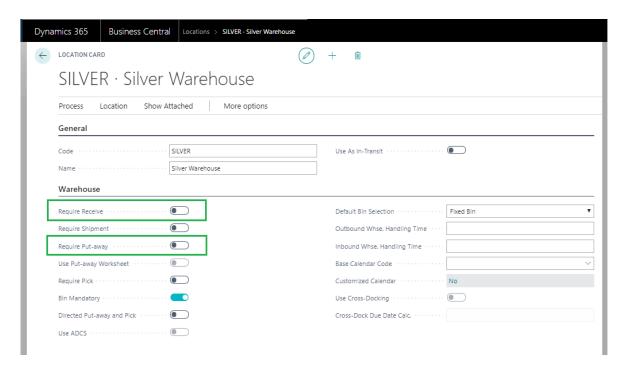
The Mobile WMS app can be used to register the receiving of items in many different ways in Business Central. It is the configuration of the location card that determines how the data is transferred to the mobile device.

#### 3.1 Purchase orders

For customers with simple warehouse requirements and without using the warehouse module, the Mobile WMS app can integrate directly to purchase orders in Business Central.

Purchase orders will be available for **Receiving** on the mobile device if:

- The purchase order is released
- The location code on the purchase order header is configured NOT to use Receipts or Put-aways



The user logged in on the mobile device is configured to work on this location
 This is done in the warehouse employee form

The typical work process is:

- 1. Create a new purchase order and release it
- 2. Receive the order using the mobile device

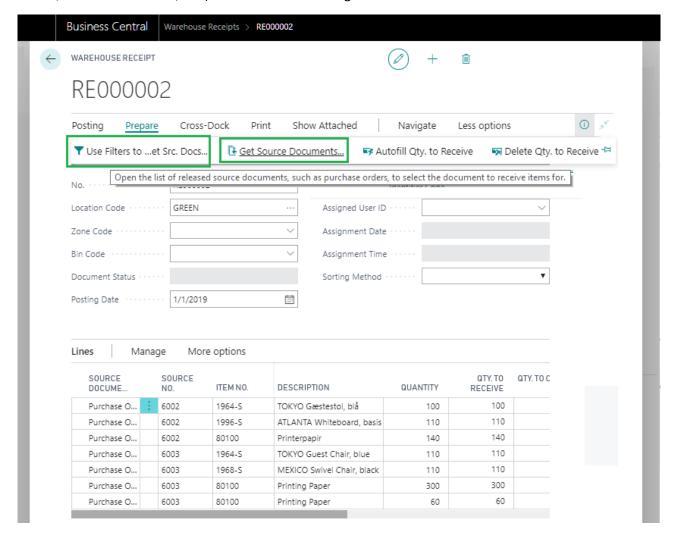
This is equivalent to:

- a. Fill out the "Qty. to receive" on each order line
- b. Register item tracking information (if needed) for each order line
- c. Register the bin code (if needed)
  - Note: splitting of purchase lines is not supported so only one bin can be registered on the mobile device. If it is needed to register received items in multiple bins then use Put-aways.
- d. Post the purchase order as received



# 3.2 Warehouse Receipts

The warehouse Receipts can either be used alone or together with the Put-away functionality. The receipt order allows the warehouse manager to get the order lines to receive from multiple sources (purchase orders, sales return orders, etc.). This can be done using the "Get source documents" functions.



A typical way to use the Warehouse Receipt is to group deliveries from a certain vendor or by shipping agent.

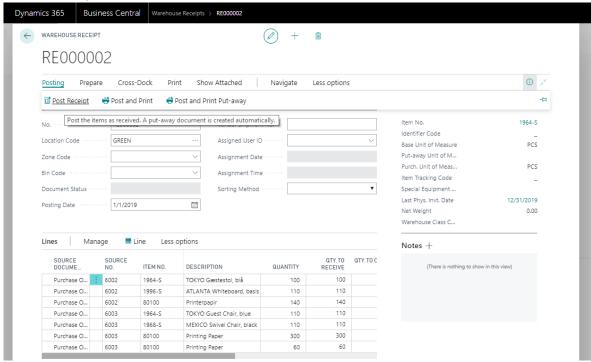
When the mobile device is used it is equivalent to performing the following operations in BC:

- 1. Set the "Qty. to Receive" fields
- Register item tracking information using "Item Tracking Lines"

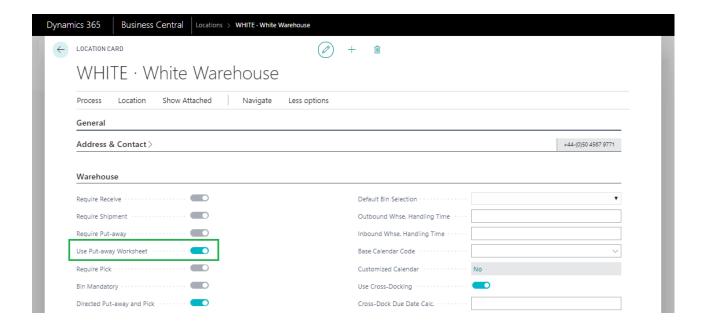




3. Post the receipt



If the location is setup to also use Put-aways then a Put-away order is automatically created when the receipt is posted. It is possible to post partial Receipts. Every time a receipt is posted a Put-away order is created. This can be helpful when handling large Receipts and you want someone else to start putting items away before the entire receipt is handled. To get full control over how the Put-away orders are created it is possible to use the Put-away Worksheet.



Note:

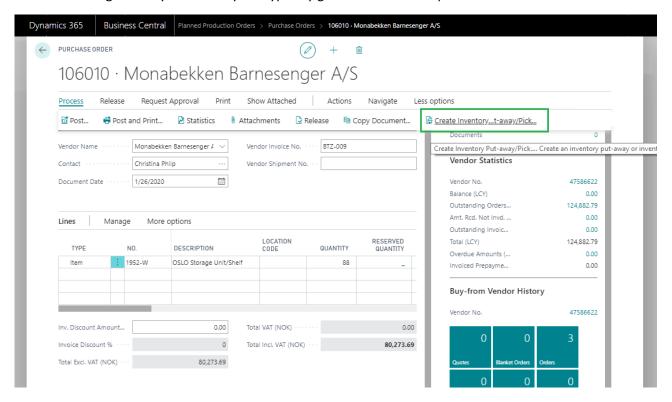
If warehouse Receipts are used without Put-aways then it is not possible to register the items in multiple bins per order line (split line).

Splitting a Receipt line is <u>not available</u> in standard Business Central.

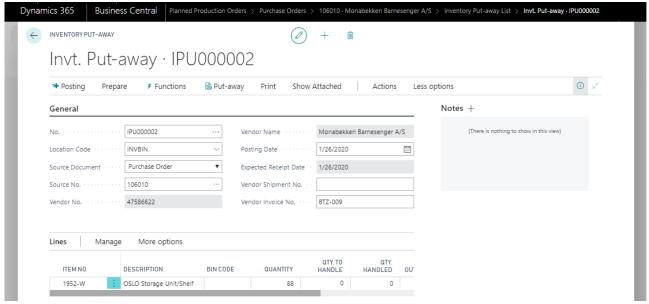


# 3.3 Inventory Put-aways

If the location is setup to only require Put-away then an inventory Put-away order is created to register the receipt of items in one step i.e. move the items directly into the bins. The inventory Put-away is used to handle receiving order by order. They are typically generated from the purchase order.



This creates an inventory put-way.

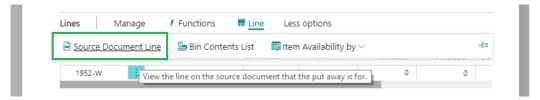


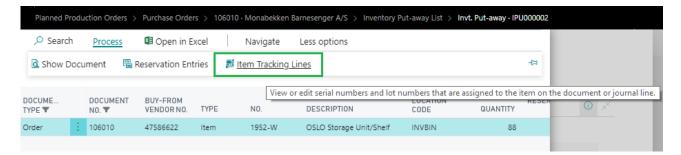
When the mobile device is used it is equivalent to performing the following operations in BC:

- 1. Set the "Qty. to Handle" fields
- 2. Register item tracking information

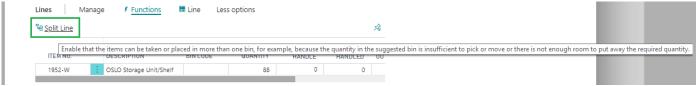
This is done on the source document line







3. Use the split line function to place the items in multiple bins



This is handled automatically when the mobile device has registered multiple bins for the same order line.

## 4. Post the Put-away



When the inventory Put-away order is posted the items are available for picking.

# 3.4 Warehouse Put-aways

The Warehouse Put-aways can be created in two ways:

1. When posting a Warehouse Receipt

#### 2. Using the Put-away Worksheet

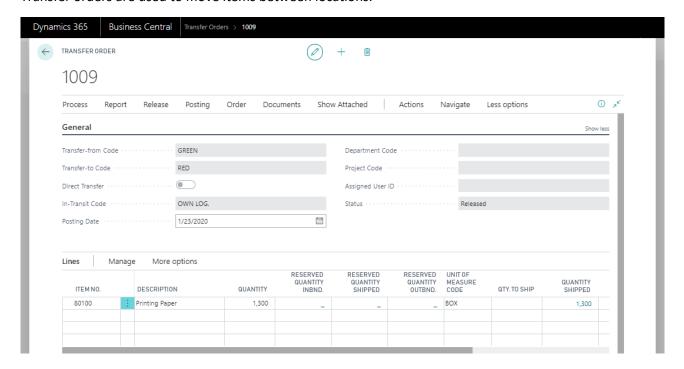
The Put-away Worksheet can get lines from posted warehouse Receipts and group the Put-aways tasks into optimal tasks.

The handling of the Warehouse Put-away is identical to the inventory Put-away.



#### 3.5 Transfer orders

Transfer orders are used to move items between locations.



The standard workflow for a Transfer order is:

#### 1. Create the Transfer order

You specify which location to send from and which location to receive the items in.

#### 2. Send the items from the sending location

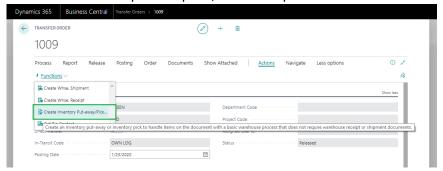
This can be handled in 3 ways:

a. Directly on the Transfer order

If the location is setup NOT to use shipments or picks

b. From an Inventory Pick

If the location is setup to use picks, but not shipments.

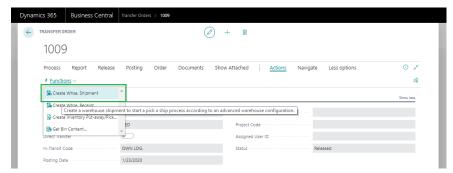


When the Inventory Pick is posted the Transfer order is sent. Now the receive part of the Transfer order must be created. When using the mobile device this is performed automatically.

# c. From a warehouse shipment

If the location is setup to use shipments.





When the shipment is posted the Transfer order is sent. Now the receive part of the Transfer order must be created. When using the mobile device this is performed automatically.

# 3. Receive the items in the receiving location

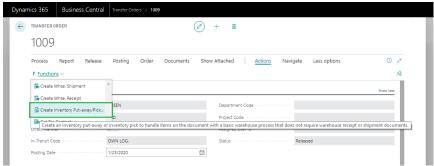
This can be handled in 3 ways:

#### a. Directly on the Transfer order

If the location is setup NOT to use Receipts or Put-aways

# b. From an inventory Put-away

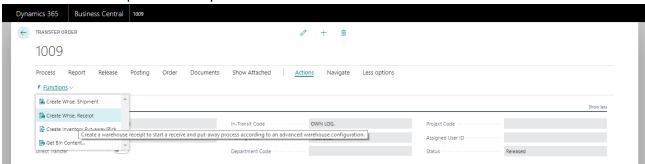
If the location is setup to use Put-away, but not receipt.



When the inventory Put-away is posted the Transfer order is finished.

# c. From a Warehouse Receipt

If the location is setup to use Receipts.



When the receipt is posted the Transfer order is finished.



#### 3.6 Sales Return Orders

For customers with simple warehouse requirements and without using the warehouse module, the Mobile WMS app can integrate directly to sales return orders in Business Central.

Sales return orders will be available for **Receive** on the mobile device if:

- The order is released
- The location code on the order header is configured NOT to use Receipts or Put-aways
- The user logged in on the mobile device is configured to work on this location
   This is done in the warehouse employee form

The typical work process is:

- 1. Create a new sales return order and release it
- 2. Receive the order using the mobile device

This is equivalent to:

- a. Fill out the "Qty. to receive" on each order line
- b. Register item tracking information (if needed) for each order line
- c. Register the bin code (if needed)
  - Note: splitting of sales return lines is not supported so only one bin can be registered on the mobile device. If it is needed to register received items in multiple bins then use Putaways.
- d. Post the sales return order as received

It is very similar to a purchase order, but the lines have a "Return Reason Code" on them. The business process is:

- 1. A customer calls in with a complaint about a received product
- 2. The service person creates a sales return order based on the original sales order
- The service person registers the return reason code on the line(s)
   Note: The return reason code is set in Business Central and not on the mobile device
- 4. The customer then ships the items back
- 5. The items are received using the mobile device
- 6. A credit memo is issued to the customer



# 3.7 Mobile: Receiving items

In the following scenario the receive process is shown as a two-step process (i.e. using warehouse Receipts and Warehouse Put-aways in Business Central).

This example shows the complete workflow, but it can also be carried out in one step, when not using Putaway.

# The high-level steps are:

- 1. Handle the Warehouse Receipt
- 2. Handle the Warehouse Put-away

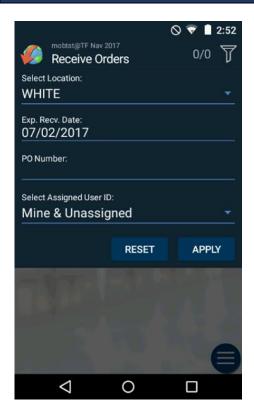


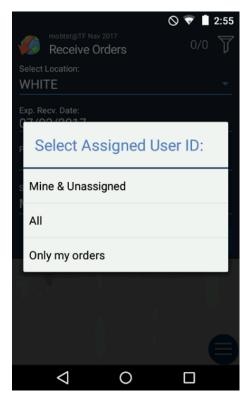
The receive module is accessed from the main menu seen on the screenshot. When the user activates the receive module an empty order list screen is displayed with the filter opened.

The items available on the main menu can be configured to only show the desired items.



# 3.8 Mobile: Receive Order filters





The purpose of the filter is to limit the number of orders sent out to the mobile device. In the standard configuration the user can filter on:

#### Location

The user can select a specific location or select all to see for all locations.

# • Expected receive date

All orders before or equal to this date are included.

#### PO Number

Here the user can filter on a specific purchase order. If there is no Warehouse Receipt document for the purchase order it will be created automatically.

#### • Assigned User ID

Here the user can choose All to see everything, or the user can choose Only my orders. Default is Mine & Unassigned.

#### Note:

It is possible to add / remove the filters displayed on this screen by changing the configuration in Business Central.

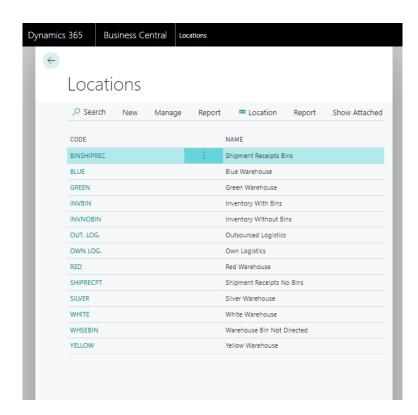
An example of this could be to add a filter for a reference number / order number.

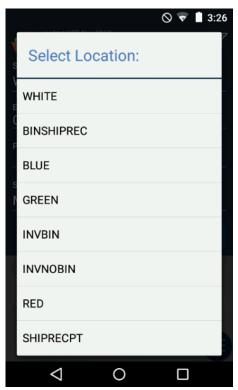
When the user clicks the <Apply> button the mobile device will show the list of receive orders.

The filter can be opened at any time, on the order list screen, by clicking the filter icon in the top right corner.

**Note:** The locations available to the user correspond to the locations the user has been setup to use in the warehouse employee screen in Business Central. The default location is the first entry in the list.

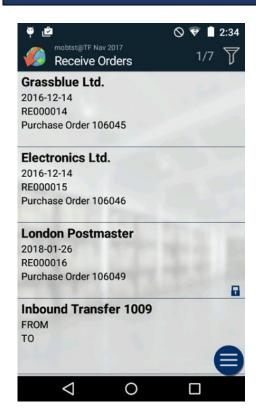








# 3.9 Mobile: Receive Order list



The order list shows the available receive orders within the selected filter. The orders are downloaded directly from Business Central.

The information displayed for each order can be changed in Business Central to fit your specific requirements.

The list can show orders of the following types:

- Warehouse Receipts
- Purchase orders
- Transfer orders ready to be received
- Sales Return Orders

If the location where the items are received is setup not to use Receipts or Put-aways then the list of receive orders will also contain purchase and Transfer orders. The work process on the mobile device is identical for all order types.

#### Selecting the right order

The user can use the scanner of the mobile device to select the right order to work on. In the standard setup the user can scan the barcode of one of the received items. The mobile device will then filter the list of orders to only show the orders containing this item. This will typically result in a very limited set of orders.

**Note:** The filter functionality when scanning can be changed in Business Central to allow filtering on any scanned value. E.g. scanning an order reference number.

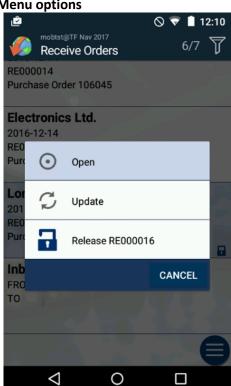
The order is opened by touching the order line in the list. Whether this needs to be done once or twice, is defined in the configuration file for the mobile device, and the default is to double touch. When the line is opened the order lines are downloaded to the mobile device.



#### **Order locking**

The lock symbol, illustrated on the third order, tells the user if someone else is working on the order. If the user selects a locked order, a warning is displayed, telling the user who is working on the order. The locking functionality is used to prevent unintentionally selecting an order handled by another user. If the user still wants to work on the order after seeing the warning, the order can be opened in the menu by selecting "Release [order#]" to unlock the order. The menu is opened either by clicking the round blue menu button, or long-pressing on the line.

Menu options



#### Open

Opens the selected order

#### **Update**

Gets the latest orders from Business Central

#### Release

Unlocks a locked order

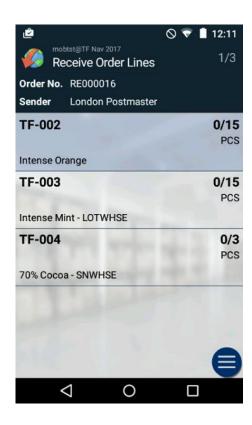
#### Cancel

Closes the menu



# 3.10 Mobile: Receive Order lines

When the order lines have been downloaded to the mobile device the order lines can be registered while the mobile device is disconnected from the server. An example of this is if the mobile device is used in an area without wireless network coverage (e.g. inside a container).



This screen shows the order lines for the selected order. In this case it's for receipt order RE000016 and there are 3 order lines.

The main work process is:

- 1. Scan one of the received items
- 2. The corresponding order line is selected
- 3. Register values on the order line
  - Batch number
  - Expiration date
  - Serial number
  - Quantity
  - Bin
- 4. Post the order

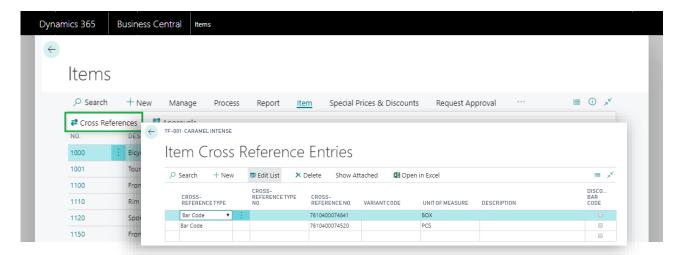
**Note:** Bin is only necessary if the location is configured to use bins and if Receipts are used without Put-away (if Receipts and Put-aways are used together the received items are all placed in the receive bin. This bin is not registered on the mobile device because it is the same for all order lines.

#### Selecting an order line

The fastest and most reliable way to select an order line is to scan the barcode of an item. If the barcode is not available, the user can simply touch the line twice. On devices with a physical keyboard, the up/down arrows can be used, opening the order line by pressing the enter button. This starts the registration process for the order line.



The barcodes associated with an item is defined as a cross reference for that item.



There can be multiple barcodes associated with an item.

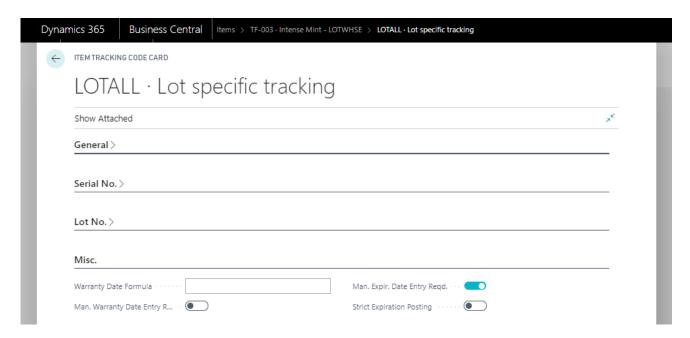
Note:

The "Item Cross Reference" feature on the mobile device can be used to add these references. The optimal way is to get this information in electronic format from your vendors and import these values.



#### **Registering expiration dates**

If the item requires Lot / serial number registration the mobile device can be configured to also register the expiration date for the Lot / serial number. This is done by setting the "Man. Expir. Date Entry" checkbox on the item tracking code. Field is in newer versions named "Require Expiration Dates".



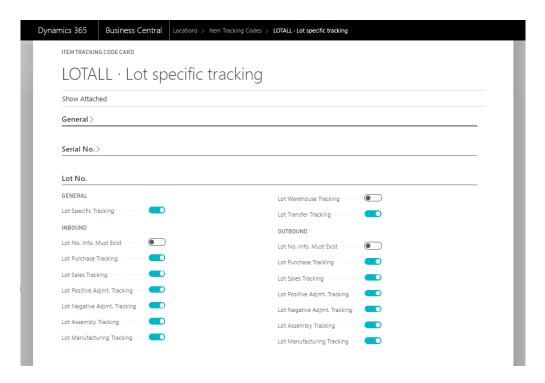
The expiration date can be changed by touching the current date, which will show a calendar.



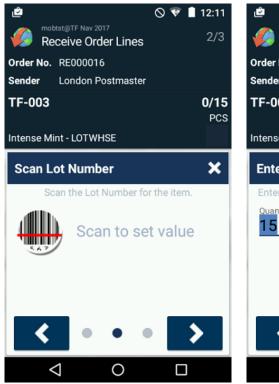


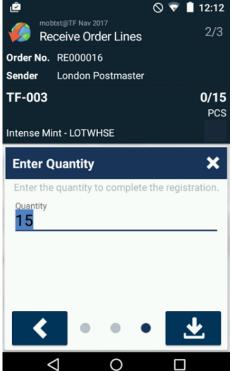
#### **Registering Lot numbers**

If the item tracking code for the item on the order line has been setup to register Lot numbers then the mobile device will ask the user to enter a Lot number.



The user can either scan or manually register the Lot number, after which the quantity will be requested.

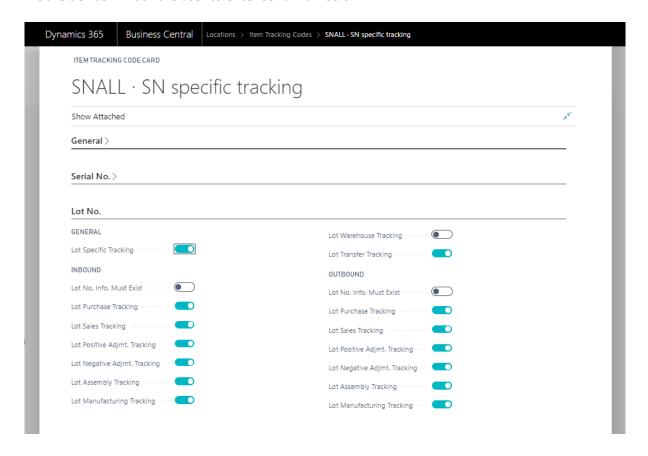




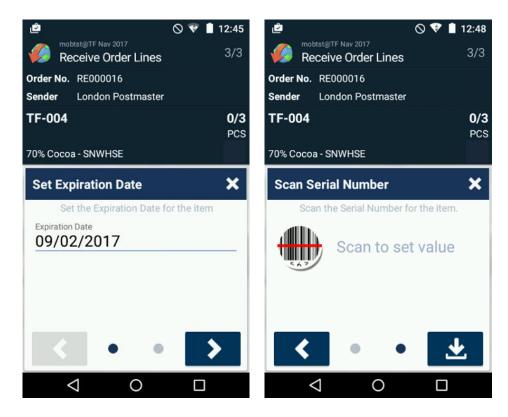


#### **Register serial numbers**

If the item tracking code for the item on the order line has been setup to register serial numbers then the mobile device will ask the user to enter serial numbers.







Serial numbers can be registered with or without an expiration date and will only ask the user for it if it is enabled.

The user can either scan or manually register the serial number. When serial numbers are registered the user is not allowed to enter a quantity since a serial number is equal to a quantity of one.

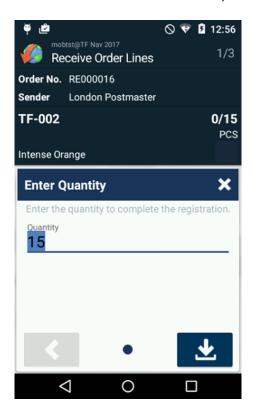
When a serial number is registered the quantity is automatically incremented by one.

Note: It is not possible to handle items that are setup to use both serial and Lot numbers



#### Registering the quantity

If the item on the order line is setup not to use item tracking then the user is asked to enter the quantity.



The mobile device always suggests the quantity remaining to fulfill the quantity on the order line. The quantity can be registered in multiple steps e.g. if multiple Lot numbers are received. In that case the registration procedure is repeated for each Lot number.

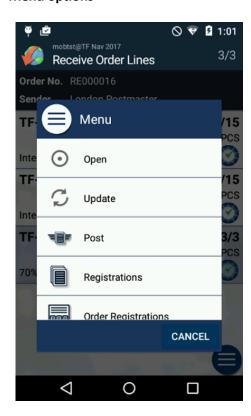
To accept the quantity, the user can either click the icon with the arrow pointing down on the right or simply scan the next item to receive. By scanning the next item the mobile device will automatically register the entered quantity and select the next order line in one step. This will allow the user to perform the registrations faster and without touching the screen.

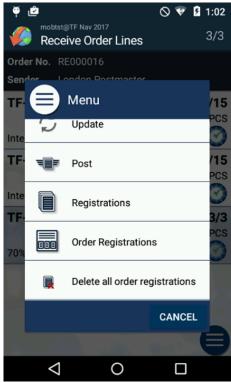
#### Note:

In situations where it is very important that the correct items are picked it is possible to configure the mobile device to make the user scan each item instead of entering a quantity. In this case the mobile device will increment the quantity by one every time the user scans the item barcode.



#### Menu options





#### Open

Opens the order line and starts the registration process.

#### **Update**

If someone changes the order lines in Business Central after they have been downloaded to the mobile device then the "Update order lines" feature can be used to refresh the downloaded order lines.

#### **Post**

When the user has registered the received items the "Post" menu is clicked. This sends the registrations to Business Central where they are processed.

#### Registrations

If the user wants to see or modify the registrations for an order line the "Registrations" menu item is clicked. This displays the registrations in a new screen. In this screen the registrations can be modified or deleted.

#### **Order Registrations**

If the receive order is configured to register information relating to the entire order (not just an order line) then the mobile device can collect this information. An example of this is to collect the delivery note number.

If order registrations are used the user can activate this menu item. If the information has not been entered when the post is activated then the mobile device will automatically ask for the order registrations before the user is allowed to perform the post.

#### **Delete all order registrations**

By clicking this menu item all registrations for ALL order lines are deleted.

#### Cancel

Closes the menu and displays the order lines.

#### Note

Pressing the Android back button navigates back to the order list screen. This is used to leave an order without sending any registrations to Business Central. If registrations have been made on any order line the mobile device will warn the user.



The user can return to the order at any time to complete it and to send the registrations to Business Central. A scenario where this is used is if the user needs to temporarily stop the handling of one order to handle a more important order.

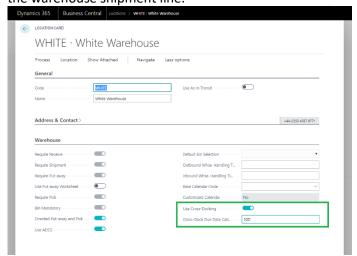
When the receive order has been posted a Put-away order is automatically generated in Business Central (if the location is configured to use Put-aways). The Put-away order is handled using the Put-away module on the mobile device. It can be handled by the same person who performed the receive, but typically it is carried out by someone else.

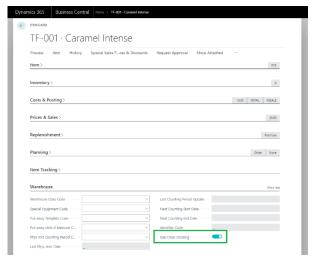
#### **Posting errors**

If a posting error occurs in Business Central the posting error is displayed on the mobile device and the user must correct the information. An example of this is if the user has received a serial number that already exists.

# 3.10.1 Mobile: Calculate Cross-docking

Cross-docking functionality is available, if the location uses "Require Receive" and "Require Put-away". If the location and the item card specifies that cross-docking is used, the receive process will automatically calculate the quantity to cross-dock. The calculation will remove manually entered cross-dock quantity on the warehouse shipment line.





The cross-dock calculation uses the working date + the date formula entered in "Cross-Dock Due Date Calc." (+10 days in this example).

Only released sales lines with "Shipment Date" equal or prior to this will apply.

The working date of the mobile device is normally the current date.



# 4. Putting away

# 4.1 Mobile: Put-away items

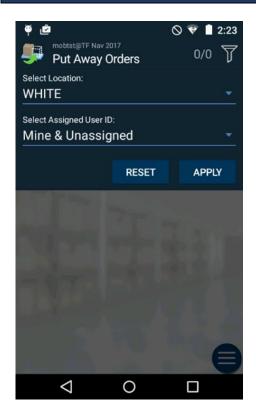


The Put-away module is accessed from the main menu seen on the screenshot. When the user activates the Put-away module an empty order list screen is displayed with the filter opened.

The items available on the main menu can be configured to only show the desired items.



# 4.2 Mobile: Put-away Order filters



The purpose of the filter screen is to limit the number of orders sent out to the mobile device. In the standard configuration the user can filter on:

#### Location

The user can select a specific location or select all to see for all locations.

# Assigned User ID

Here the user can choose All to see everything, or the user can choose Only my orders. Default is Mine & Unassigned.

#### Note:

It is possible to add / remove the filters displayed on this screen by changing the configuration in Business Central.

An example of this could be to add a filter for a reference number / order number.

It is also possible to remove the entire filter screen if it does not add value.

When the user clicks the <Apply> button the mobile device will show the list of Put-away orders.

#### Note:

The locations available to the user correspond to the locations the user has been setup to use in the warehouse employee screen in Business Central.

The default location is the first entry in the list.



# 4.3 Mobile: Put-away Order list



The order list shows the available Put-aways within the selected filter. The orders are downloaded directly from Business Central.

The information displayed for each order can be changed in Business Central to fit your specific requirements.

The list can show orders of the following types:

- Warehouse Put-aways
- Inventory Put-aways

The work process on the mobile device is identical for all order types.

#### Selecting the right order

The user can use the scanner of the mobile device to select the right order to work on. In the standard setup the user can scan the barcode of one of the items to Put-away. The mobile device will then filter the list of orders to only show the orders containing this item. This will typically result in a very limited set of orders.

**Note:** The filter functionality when scanning can be changed in Business Central to allow filtering on any scanned value. E.g. scanning an order reference number.

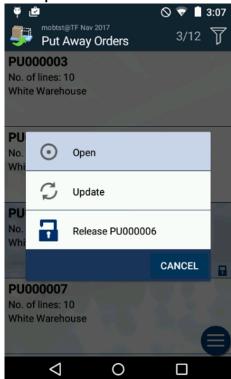
The order is opened by touching the order line in the list. Whether this needs to be done once or twice, is defined in the configuration file for the mobile device, and the default is to double touch. When the line is opened the order lines are downloaded to the mobile device.

## **Order locking**

The lock symbol, illustrated on the third order, tells the user if someone else is working on the order. If the user selects a locked order, a warning is displayed, telling the user who is working on the order. The locking functionality is used to prevent unintentionally selecting an order handled by another user. If the user still wants to work on the order after seeing the warning, the order can be opened in the menu by selecting "Release [order#]" to unlock the order. The menu is opened either by clicking the round blue menu button, or long-pressing on the line.



Menu options



#### Open

Opens the selected order

#### **Update**

Gets the latest orders from Business Central

#### Release

Unlocks a locked order

#### Cancel

Closes the menu and shows the order list

# 4.4 Mobile: Put-away Order lines

When the order lines have been downloaded to the mobile device the order lines can be registered while the mobile device is disconnected from the server. An example of this is if the mobile device is used in an area without wireless network coverage (e.g. inside a container).



This screen shows the order lines for the selected order. In this case it's for Put-away order PU000003 and there are 5 order lines.

The main work process is:

- 1. Scan one of the items
- 2. The corresponding order line is selected
- 3. Register values on the order line
  - Batch number
  - Expiration date
  - Serial number
  - Quantity
  - Bin
- 4. Post the order

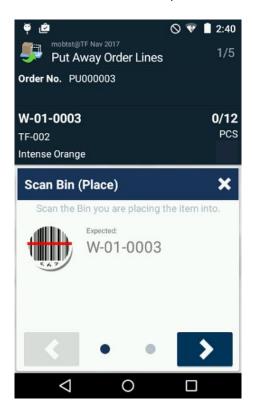


#### Selecting an order line

The fastest and most reliable way to select an order line is to scan the barcode of an item. If the barcode is not available, the user can simply touch the line twice. On devices with a physical keyboard, the up/down arrows can be used, opening the order line by pressing the enter button. This starts the registration process for the order line.

#### **Registering bins**

When the item is Put-away the user must register the bin where the item is placed.



If a bin is suggested by Business Central the user must validate that the items are placed in the correct bin. This is typically done by scanning the barcode on the shelf. If the barcode is not available, the user can press the barcode symbol and enter the value manually.

Note:

In the standard setup the user can register another bin. In this scenario a warning is displayed, but the user can override it and register the new bin anyway. It is also possible to block using another bin or allow it without showing a warning.

If a bin is not suggested by Business Central then the user can enter any value.

Note:

It is possible to register more than one bin. The quantity for each bin is registered. When the registrations are posted in Business Central the line is automatically split.



# **Registering Lot numbers**

The Lot number tracking works the same way as for receive orders.

#### **Registering expiration dates**

Expiration dates are handled in the same way as for receive orders.

**Note:** If the expiration date has already been registered on a receive order then the user is not

asked to enter it again. Then it is only necessary to enter the Lot number.

#### **Register serial numbers**

The serial number tracking works the same way as for receive orders.

# Registering the quantity

The quantity registrations works the same way as for receive orders.

# Menu options

The menu options are the same as for receive orders.

#### Posting the order

When the order lines have been handled the user activates the "Post" menu item and the registrations are sent to Business Central. Afterwards the items are available for picking.



# 5. Picking

The Mobile WMS app supports registering the picking of items in several different set-ups.

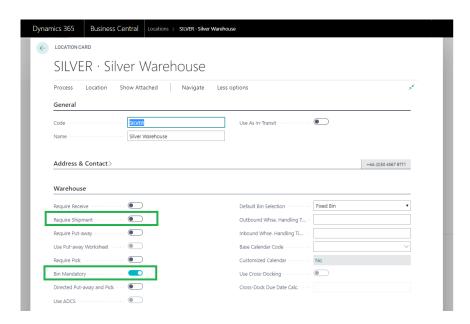
It is the configuration of the **Location card** that determines how the data is transferred to the mobile device.

# 5.1 Sales orders

For customers with simple warehouse requirements and without using the warehouse module, the Mobile WMS app can integrate directly to sales orders in Business Central.

Sales orders will be available for Picking on the mobile device if:

- The sales order is released
- The location code on the sales order header is configured NOT to use shipments or picks



The user logged in on the mobile device is configured to work on this location
 This is done in the warehouse employee form

The typical work process is:

- 1. Create a new sales order and release it
- 2. Ship the order using the mobile device

This is equivalent to:

- a. Fill out the "Qty. to ship" on each order line
- b. Register item tracking information (if needed) for each order line
- c. Register the bin code (if needed)
  - Note: splitting of sales lines is not supported. Only one bin can be registered on the mobile device. If it is needed to register picked items from multiple bins then use picks.
- d. Post the sales order as shipped



## 5.2 Warehouse Shipments

The Mobile WMS Solution can handle 3 different ways to use the warehouse shipments.

The work process using both shipments and picks is:

#### 1. Create a shipment and add the relevant order lines to ship together

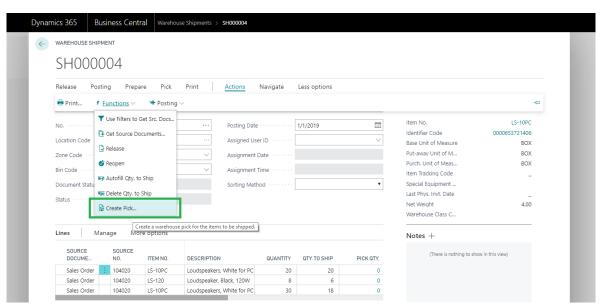
The shipment can contain lines from many different sales orders based on criteria like customer, shipping agent, etc.

#### 2. Create one or more picks from the shipment

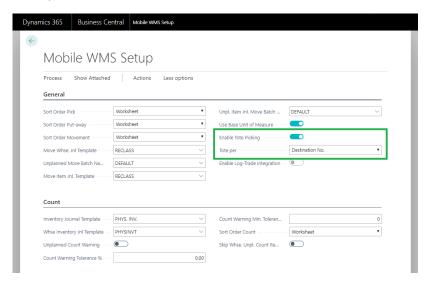
The pick work sheet can be used to generate the pick orders based on criteria like customer, zone, etc.

- 3. The picks are handled using the mobile devices
- 4. When everything is picked the shipment is finished in Business Central This typically includes printing the delivery documents and booking a shipping agent

**Note:** It is possible to automate the shipping process when the pick order is posted from the mobile device, but this typically requires integration to 3<sup>rd</sup> party shipping solutions like LogTrade.



**Note:** If you setup the Mobile WMS to use Tote pick, the shipment will not be finished in step 4. (see futher in chapter 4)

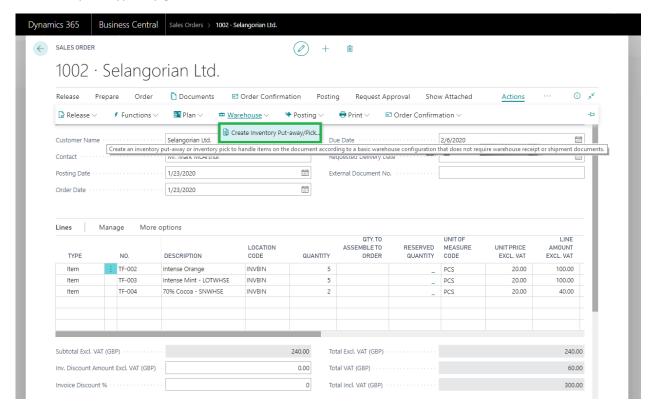


Note: If you have a location to require shipment but NOT require pick you will only create the shipment

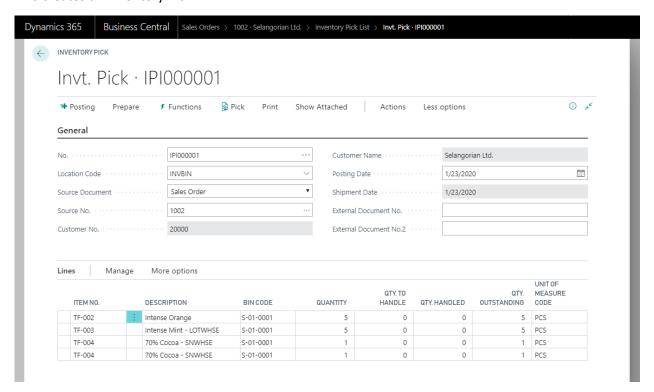


# 5.3 Inventory picks

If the location is setup to only require pick then an Inventory Pick order is created to register the shipment of items in one step i.e. deliver the items directly. The Inventory Pick is used to handle picking order by order. They are typically generated from the sales order.



This creates an Inventory Pick.



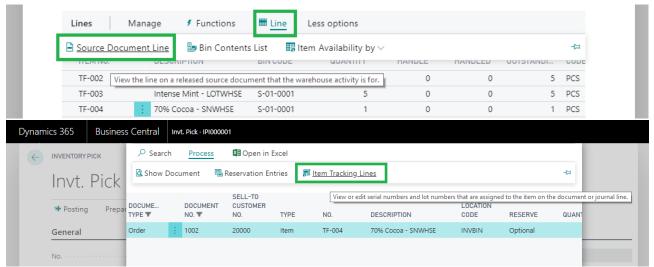


When the mobile device is used it is equivalent to performing the following operations in BC:

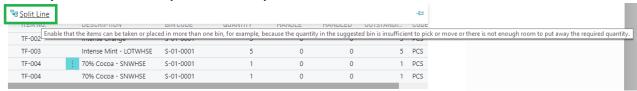
### 5. Set the "Qty. to Handle" fields

## 6. Register item tracking information

This is done on the source document line

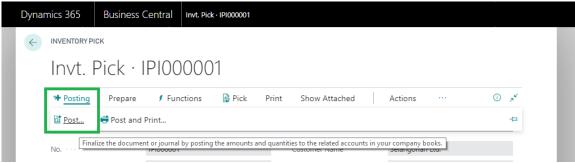


7. Use the split line function to pick from multiple bins



This is handled automatically when the mobile device has registered multiple bins for the same order line.

# 8. Post the pick



When the Inventory Pick order is posted the items have been delivered.

## 5.4 Warehouse picks

The Warehouse Picks can be created in two ways:

# 1. From a warehouse shipment

# 2. Using the pick Worksheet

The pick Worksheet can get lines from warehouse shipments and group the shipment lines into optimal tasks.

The handling of the Warehouse Pick is identical to the Inventory Pick.



# 5.5 Transfer orders

See section 3.5 for details.

# 5.6 Purchase Return Orders

For customers with simple warehouse requirements and without using the warehouse module, the Mobile WMS app can integrate directly to Purchase Return orders in Business Central.

Purchase Return orders will be available for **Picking** on the mobile device if:

- The purchase return order is released
- The location code on the purchase return order header is configured NOT to use shipments or picks
- The user logged in on the mobile device is configured to work on this location
   This is done in the warehouse employee form

The typical work process is:

- 3. Create a new purchase return order and release it
- 4. Ship the order using the mobile device

This is equivalent to:

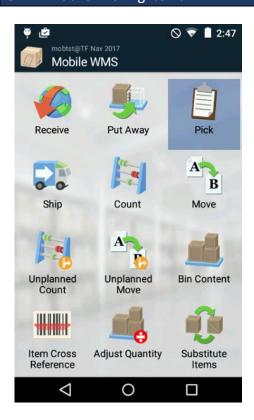
- a. Fill out the "Qty. to ship" on each order line
- b. Register item tracking information (if needed) for each order line
- c. Register the bin code (if needed)
  - Note: Splitting of sales lines is not supported. Only one bin can be registered on the mobile device. If it is needed to register picked items from multiple bins then use picks.
- d. Post the sales order as shipped

It is very similar to a sales order, but the lines have a "Return Reason Code" on them. The business process is:

- 1. The purchaser calls a vendor with a complaint about a received product
- 2. The purchaser creates a purchase return order based on the original purchase order
- 3. The purchaser registers the return reason code on the line(s)
  - Note: The return reason code is set in Business Central and not on the mobile device
- 4. The items are shipped using the mobile device



# 5.7 Mobile: Picking items

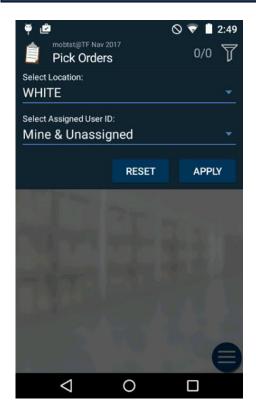


The pick module is accessed from the main menu seen on the screenshot. When the user activates the pick module an empty order list screen is displayed with the filter opened.

The items available on the main menu can be configured to only show the desired items.



# 5.8 Mobile: Pick Order filters



The purpose of the filter screen is to limit the number of orders sent out to the mobile device. In the standard configuration the user can filter on:

#### Location

The user can select a specific location or select all to see for all locations.

## • Assigned User ID

Here the user can choose All to see everything,

or the user can choose Only my orders. Default

is Mine & Unassigned.

#### Note:

It is possible to add / remove the filters displayed on this screen by changing the configuration in Business Central.

An example of this could be to add a filter for a reference number / order number.

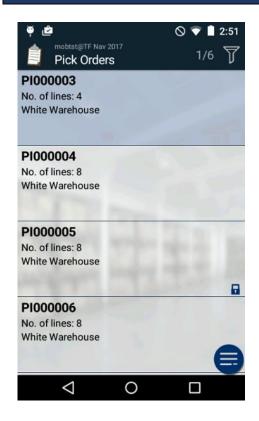
It is also possible to remove the entire filter screen if it does not add value.

When the user clicks the <Apply> button the mobile device will show the list of pick orders.

**Note:** The locations available to the user correspond to the locations the user has been setup to use in the warehouse employee screen in Business Central. The default location is the first entry in the list.



# 5.9 Mobile: Pick Order list



The order list shows the available pick orders within the selected filter. The orders are downloaded directly from Business Central.

The information displayed for each order can be changed in Business Central to fit your specific requirements.

The list can show orders of the following types:

- Warehouse picks
- Inventory picks
- Sales orders
- Purchase Return Orders

The work process on the mobile device is identical for all order types.

### Selecting the right order

The user can use the scanner of the mobile device to select the right order to work on. In the standard setup the user can scan the barcode of one of the items to pick. The mobile device will then filter the list of orders to only show the orders containing this item. This will typically result in a very limited set of orders.

**Note:** The filter functionality when scanning can be changed in Business Central to allow filtering on any scanned value. E.g. scanning an order reference number.

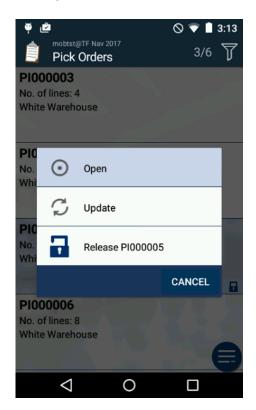
The order is opened by touching the order line in the list. Whether this needs to be done once or twice, is defined in the configuration file for the mobile device, and the default is to double touch. When the line is opened the order lines are downloaded to the mobile device.

## **Order locking**

The lock symbol, illustrated on the third order, tells the user if someone else is working on the order. If the user selects a locked order, a warning is displayed, telling the user who is working on the order. The locking functionality is used to prevent unintentionally selecting an order handled by another user. If the user still wants to work on the order after seeing the warning, the order can be opened in the menu by selecting "Release [order#]" to unlock the order. The menu is opened either by clicking the round blue menu button, or long-pressing on the line.



# Menu options



# Open

Opens the selected order

# **Update**

Gets the latest orders from Business Central

## Release

Unlocks a locked order

# Cancel

Closes the menu and shows the order list



# 5.10 Mobile: Pick Order lines

When the order lines have been downloaded to the mobile device the order lines can be registered while the mobile device is disconnected from the server. An example of this is if the mobile device is used in an area without wireless network coverage (e.g. inside a container).



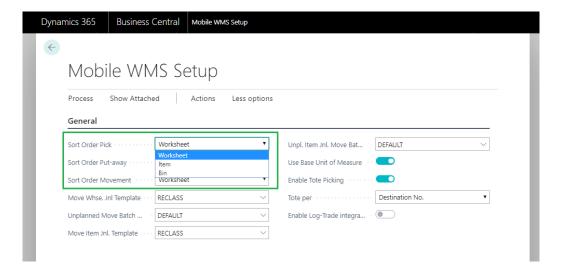
This screen shows the order lines for the selected order. In this case it's for Put-away order PI000005 and there are 4 order lines.

The main work process is:

- 1. Scan one of the items
- 2. The corresponding order line is selected
- 3. Register values on the order line
  - Batch number
  - Serial number
  - Quantity
  - Bin
- 4. Post the order

## Sorting the order lines

The sorting of the order lines is defined in Business Central. There are multiple ways to do this. The goal of the sorting is to guide the picker through the most optimal route in the warehouse. The Mobile WMS setup screen defines the sort order.

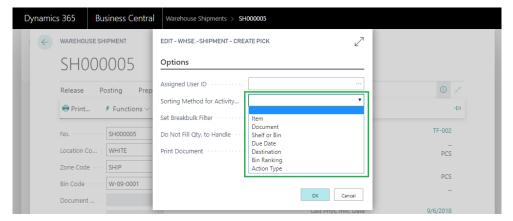


There are three options:

## Worksheet

This is the standard configuration. Selecting this option will sort the order lines according the what was selected when the pick order was created. If the pick is created from the shipment the user has the options in below:





## Item

Sort the order lines by item number

#### • Bin

Sort the order lines by bin.

This is not typically not the shortest route through the warehouse. Use the bin ranking feature to get the optimal route.

## Selecting an order line

The fastest and most reliable way to select an order line is to scan the barcode of an item. If the barcode is not available, the user can simply touch the line twice. On devices with a physical keyboard, the up/down arrows can be used, opening the order line by pressing the enter button. This starts the registration process for the order line.



#### **Registering bins**

The user must register the bin the items are taken from.



If a bin is suggested by Business Central the user must validate that the items are picked from the correct bin. This is typically done by scanning the barcode on the shelf. If the barcode is not available the user can press the barcode symbol and enter the value manually.

**Note:** In the standard setup the user is allowed to pick from another bin. In this scenario a warning is displayed, but the user can override it and register the new bin anyway. It is also possible to block using another bin or allow it without showing a warning.

If a bin is not suggested by Business Central then the user can enter any value.

Note:

It is possible to register more than one bin. The quantity for each bin is registered. When the registrations are posted in Business Central the line is automatically split.

## **Registering Lot numbers**

The Lot number tracking works the same way as for receive orders.

## **Registering expiration dates**

Expiration dates are not registered on pick orders. Only the Lot or serial numbers are registered (they contain the expiration date information)

# **Register serial numbers**

The serial number tracking works the same way as for receive orders.

## Registering the quantity

The quantity registrations works the same way as for receive orders.

## Menu options

The menu options are the same as for receive orders.

## Posting the order

When the order lines have been handled the user activates the "Post" menu item and the registrations are sent to Business Central.



# 6. Shipping

The Mobile WMS app can be used to register and post the shipment of items.

#### Note:

When using Warehouse Shipment AND Warehouse Pick, the shipment is finalized and posted in Business Central client, NOT the Mobile WMS app.

# 6.1 Mobile: Ship without Pick

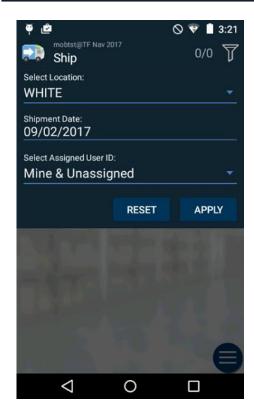


The ship module is accessed from the main menu seen on the screenshot. When the user activates the ship module a filter screen is displayed.

The items available on the main menu can be configured to only show the desired items.



# 6.2 Mobile: Ship filters



The purpose of the filter screen is to limit the number of orders sent out to the mobile device. In the standard configuration the user can filter on:

#### Location

The user can select a specific location or select all to see for all locations.

## • Shipment Date

All orders before or equal to this date are included.

## Assigned User ID

Here the user can choose All to see everything, or the user can choose Only my orders. Default is Mine & Unassigned.

### Note:

It is possible to add/remove the filters displayed on this screen by changing the configuration in BC.

- An example of this could be to add a filter for a reference number / order number
- It is also possible to remove the entire Filter Screen

When the user clicks the <OK> button the mobile device will show the list of shipment orders.

**Note:** The locations available to the user correspond to the locations the user has been setup to use in the warehouse employee screen in Business Central. The default location is the first entry in the list.



# 6.3 Mobile: Ship Order list



The order list shows the available shipment orders within the selected filter. The orders are downloaded directly from Business Central.

The information displayed for each order can be changed in Business Central to fit your specific requirements.

The list can show orders of the following types:

• Warehouse Shipment

## Selecting the right order

The user can use the scanner of the mobile device to select the right order to work on. In the standard setup the user can scan the barcode of one of the items to ship. The mobile device will then filter the list of orders to only show the orders containing this item. This will typically result in a very limited set of orders.

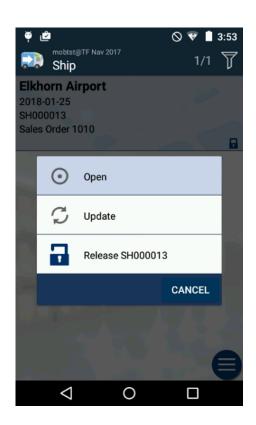
**Note:** The filter functionality when scanning can be changed in Business Central to allow filtering on any scanned value. E.g. scanning an order reference number.

The order is opened by touching the order line in the list. Whether this needs to be done once or twice, is defined in the configuration file for the mobile device, and the default is to double touch. When the line is opened the order lines are downloaded to the mobile device.

# **Order locking**

The lock symbol, tells the user if someone else is working on the order. If the user selects a locked order, a warning is displayed, telling the user who is working on the order. The locking functionality is used to prevent unintentionally selecting an order handled by another user. If the user still wants to work on the order after seeing the warning, the order can be opened in the menu by selecting "Release [order#]" to unlock the order. The menu is opened either by clicking the round blue menu button, or long-pressing on the line.





# Open

Opens the selected order

# **Update**

Gets the latest orders from Business Central

# Release

Unlocks a locked order

## Cancel

Closes the menu and shows the order list



# 6.4 Mobile: Ship order lines

When the order lines have been downloaded to the mobile device the order lines can be registered while the mobile device is disconnected from the server. An example of this is if the mobile device is used in an area without wireless network coverage (e.g. inside a container).



This screen shows the order lines for the selected order. In this case it's for ship order SH000013 and there are 4 order lines.

The main work process is:

- 1. Scan one of the items
- 2. The corresponding order line is selected
- 3. Register values on the order line
  - Batch number
  - Serial number
  - Quantity
  - Bin
- 4. Post the order

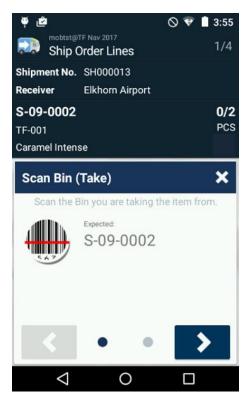
# Selecting an order line

The fastest and most reliable way to select an order line is to scan the barcode of an item. If the barcode is not available, the user can simply touch the line twice. On devices with a physical keyboard, the up/down arrows can be used, opening the order line by pressing the enter button. This starts the registration process for the order line.



## **Registering bins**

The user must register the bin the items are taken from.



If a bin is suggested by Business Central the user must validate that the items are picked from the correct bin. This is typically done by scanning the barcode on the shelf. If the barcode is not available the user can press the barcode symbol and enter the value manually.

#### Note:

In the standard setup the user is allowed to pick from another bin. In this scenario a warning is displayed, but the user can override it and register the new bin anyway. It is also possible to block using another bin or allow it without showing a warning.

If a bin is not suggested by Business Central then the user can enter any value.

#### **Registering Lot numbers**

The Lot number tracking works the same way as for receive orders.

## **Registering expiration dates**

Expiration dates are not registered on ship orders. Only the Lot or serial numbers are registered (they contain the expiration date information)

## **Register serial numbers**

The serial number tracking works the same way as for receive orders.

## Registering the quantity

The quantity registrations works the same way as for receive orders.

#### Menu options

The menu options are the same as for receive orders.

#### Posting the order

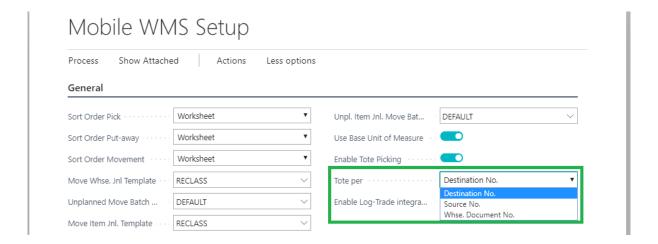
When the order lines have been handled the user activates the "Post" menu item and the registrations are sent to Business Central.



# 7. Tote Picking & Shipping

The Mobile WMS app can be used to register Tote shipping when the "Enable Tote Picking" is selected in the "Mobile WMS Setup".

The background for this function was to be able to create one shipment and one pick for multiple customers and then separate the orders/customers by the Tote ID's.



There are 3 different ways of collecting the Tote ID's:

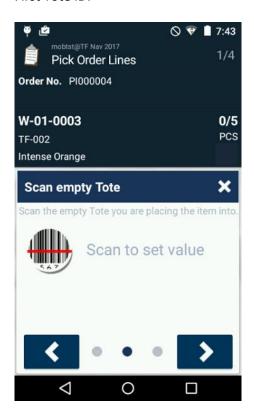
Tote Per – setting	Effect
Destination No.	Tote ID's per Recipient Customer
Source No.	Tote ID's per Sales Order
Whse. Document No.	Tote ID's per Warehouse Shipment document



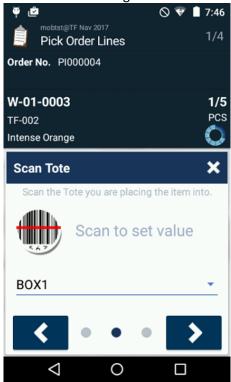
# 7.1 Mobile: Tote Pick

When "Enable Tote Picking" is active, the pick process will be as described in the "Pick Items" section with one extra step as shown below:

# First Tote ID:

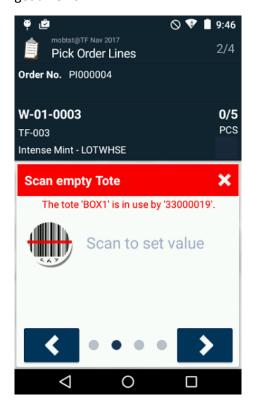


# After first Tote ID registered:

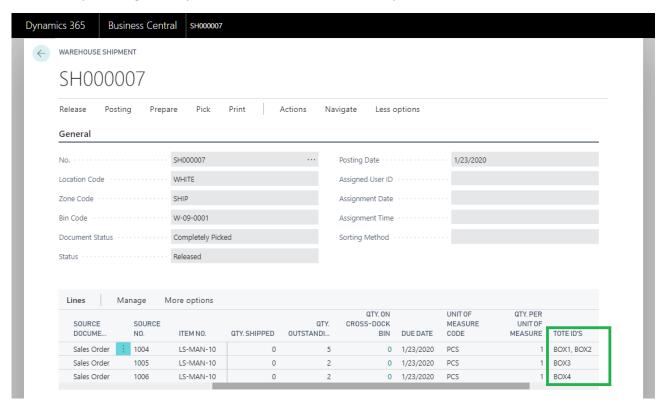




If the user enters a Tote ID that is already used for another customer on the same pick/shipment they will get an error:



When then pick is registered you will see the ToteID's on the shipment in BC:





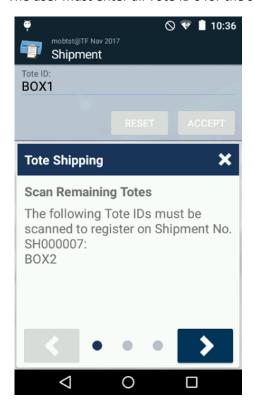
# 7.2 Mobile: Tote Shipping

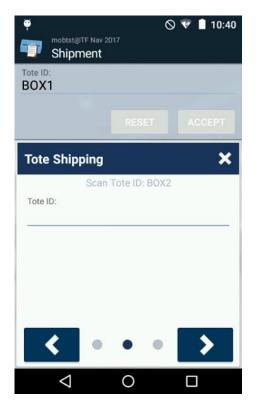
After this you can complete the shipments through the Tote Shipping menu on the mobile device.



The Tote Shipping module is accessed from the main menu seen on the screenshot. Is only used if Tote Pick is activated to post the shipment.

The user must enter all Tote ID's for the shipment:

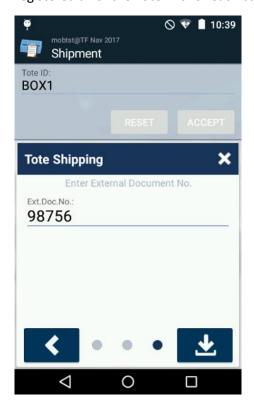


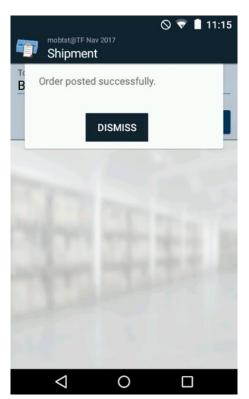




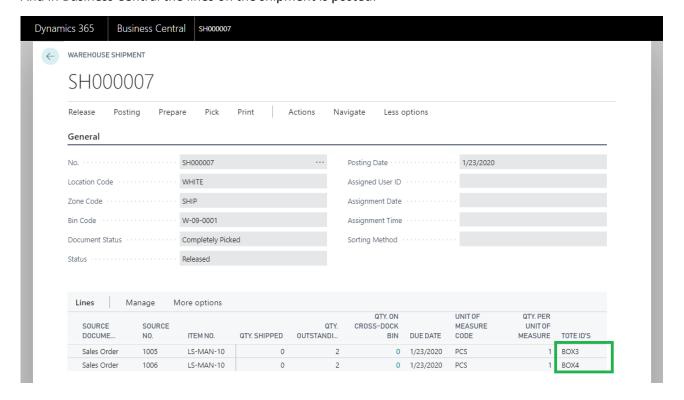
By default the user will be asked to enter an Ext. Doc. No. per shipment.

If you have multiple customers on the same pick/shipment the shipments will be posted when the user has registered all of the Tote ID's for each customer.





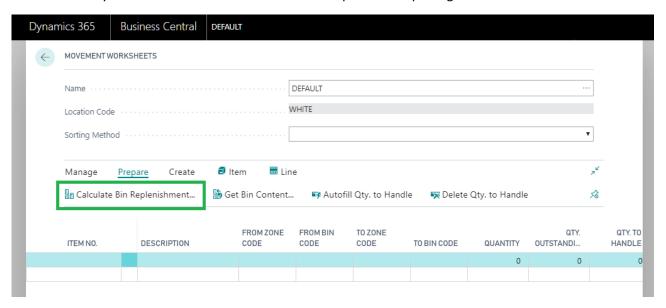
And in Business Central the lines on the shipment is posted:

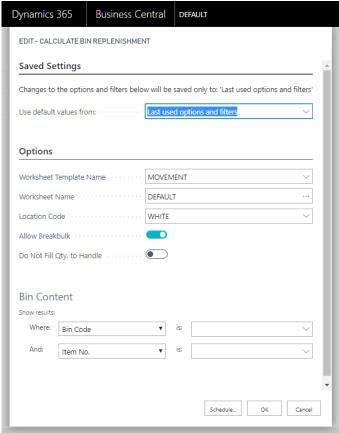




# 8. Planned movements

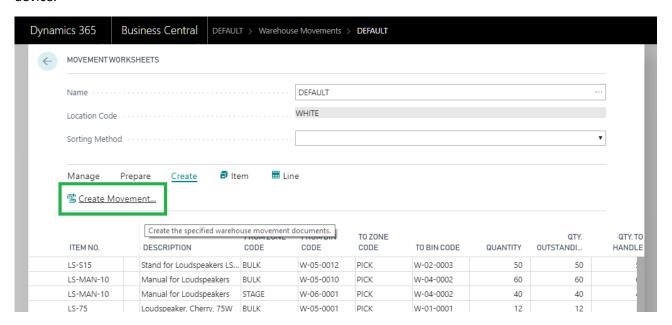
The planned movements are typically generated as part of the replenishment process where items are moved from the storage area into the picking area. In Business Central you use the Movement Worksheet to automatically calculate the movements needed to replenish the picking area.



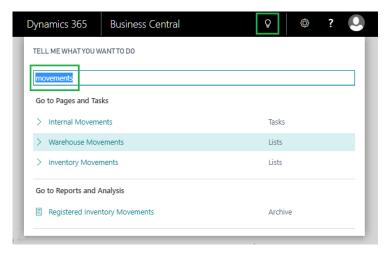


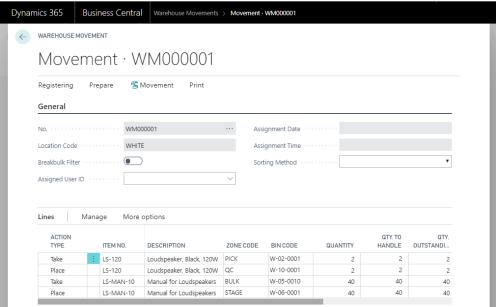


The user can now use the "Create Movement" function to create move orders to be handled on the mobile device.



#### The movements are found here:



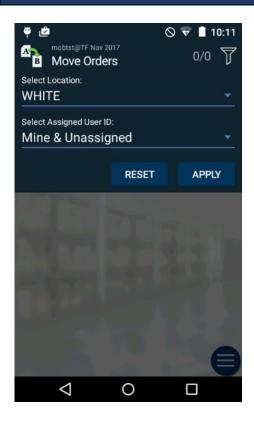




To locate the move order on the mobile device the user activates the "Move" function on the main menu.



# 8.1 Mobile: Move filter



The purpose of the filter screen is to limit the number of orders sent out to the mobile device. In the standard configuration the user can filter on:

## Location

The user can select a specific location or select all to see for all locations.

## Assigned User ID

Here the user can choose All to see everything,

or the user can choose Only my orders. Default

is Mine & Unassigned.

## Note:

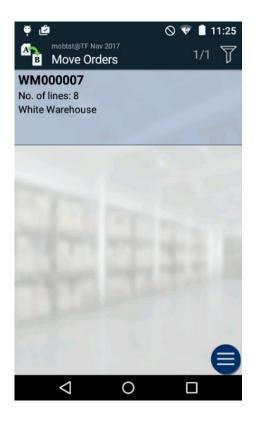
It is possible to add / remove the filters displayed on this screen by changing the configuration in Business Central.

An example of this could be to add a filter for a reference number / order number.

It is also possible to remove the entire filter screen if it does not add value.



# 8.2 Mobile: Move order list

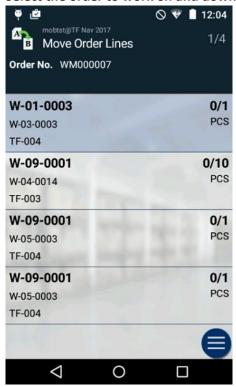


The work process for handling movements is very similar to the other order types, but there is one important difference. Since the items are being moved from one bin to another the user must validate both bins before the registration is complete.

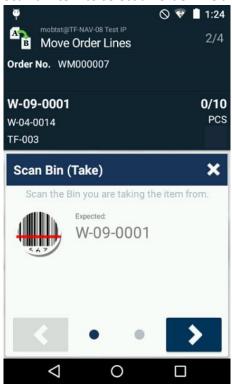


# **Work process**

1. Select the order to work on and download the order lines



2. Scan an item to select an order line and then verify the bin to move the item from





# 3. Enter the quantity to move



# 4. Finish the move or pick up another item

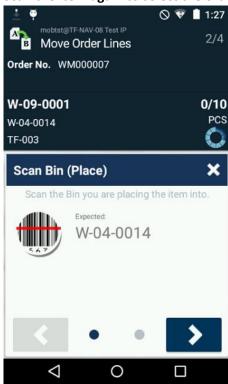
The move process consists of two parts. Picking up the item to move and placing the item. These are two separate work processes. The purpose of this is to allow the user to pick up multiple items and delay the placement procedure.





In the screenshot above the first line has completed the "take" procedure, but before the registration is complete the user must also complete the "place" procedure. The user can decide if he wants to take another item or finish the move of the first item first. In the next step the user has decided to finish the movement of the first item.

5. Scan the item again to select the order line and verify the bin where the item is placed

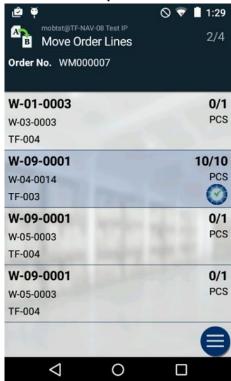


6. Enter the quantity to place





7. The move is complete



Repeat the process for the other order lines and finish the order by posting it.

Note:

It is possible to register multiple "from bins" and "to bins" during the move. When the registrations are sent to Business Central they original move lines are automatically split.



# 9. Physical Inventory Recordings

You can take a physical inventory of your items by using physical inventory order and physical inventory recording documents.

The **Physical Inventory Order** page is used to organize the complete inventory counting project, for example one per location. The **Physical Inventory Recording** page is used by to communicate and capture the actual counting of items. You can create multiple recordings for one order, for example to distribute groups of items to different employees.

#### Note:

This procedure describes how to perform a physical inventory using documents, a method that provides more control and supports distributing the counting to multiple employees. You can also perform the task by using journals, the **Phys. Inventory Journals** and **Whse. Phys. Inventory Journals**. For more information, see "Planned inventory counting".

Note that if you use the Bins or Zones functionality, then you cannot use physical inventory orders. Instead, use **Whse. Phys. Inventory Journal** page to count your warehouse entries before synchronizing them with item ledger entries.

Counting inventory by using documents consist of the following overall steps:

- 1. Create a physical inventory order with expected item quantities prefilled.
- 2. Generate one or more physical inventory recordings from the order.
- 3. Use Mobile WMS to capture item quantities and set recordings to **Finished**.
- 4. Complete and post the physical inventory order.



# 9.1 How To create a physical inventory order

A physical inventory order is a complete document that consists of a physical inventory order header and some physical inventory order lines. The information on a physical inventory header describes how to take the physical inventory. The physical inventory order lines contain the information about the items and their locations.

To create the physical inventory order lines, you typically use the **Calculate Lines** function to reflect the current inventory as lines on the order.

- 1. Choose the icon, enter **Physical Inventory Orders**, and then choose the related link.
- 2. Choose the New action.
- 3. Fill in the required fields on the **General** FastTab. Hover over a field to read a short description.
- 4. Choose the Calculate Lines action.
- 5. Select options as necessary.
- 6. Set filters, for example, to only include a subset of items to be counted with the first recording.

#### Tip:

To plan for multiple employees to count the inventory, it is advisable to set different filters each time you use the **Calculate Lines** action to only fill the order with the subset of inventory items that one user will be recording. Then as you generate multiple physical inventory recordings for multiple employees, you minimize the risk of counting items twice. For more information, see the "To create a physical inventory recording" section.

7. Choose the **OK** button.

A line for each item that exists on the chosen location and per the set filters and options is inserted on the order. For items that are set up for item tracking, the **Use Item Tracking** check box is selected, and information about the expected quantity of serial and lot numbers is available by choosing the **Lines** action and then **Item Tracking Lines**. For more information, see the "Handling Item Tracking when Counting Inventory" section.

You can now proceed to create one or more recordings, which are instructions to the employees who perform the actual counting.



# 9.2 How To create a physical inventory recording

For each physical inventory order, you can create one or more physical inventory recording documents on which employees enters the counted quantities through Mobile WMS.

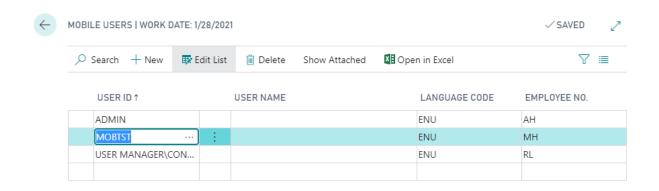
By default, a recording is created for all the lines on the related physical inventory order. To avoid that two employees count the same items in case of distributed counting, it is advisable to gradually fill the physical inventory order by setting filters on the **Calculate Lines** batch job (see the "How To create a physical inventory order" section) and then create the physical inventory recording while selecting the **Only Lines**Not in **Recordings** check box. This setting makes sure that each new recording that you create only contains different items than the ones on other recordings.

- On a Physical Inventory Order page that contains lines for the items to be counted in one recording, choose the Make New Recording action.
- 2. Select options and set filters as necessary.
- 3. Choose the **OK** button.

A physical inventory recording document is created.

- 4. For every set of items to be counted, load them on the related physical inventory order and repeat steps 1 through 3 with the **Only Lines Not in Recordings** check box selected.
- 5. Choose the **Recordings** action to open the **Phys. Inventory Recording List** page.
- 6. Open the relevant recording.
- 7. On the **General** FastTab, fill in the fields as necessary. For Instance, fill in Person Responsible to assign **Recording** to a specific person.

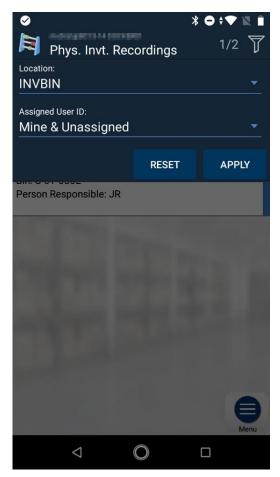
**Note:** Person Reponsible uses the **Employee** table instead of the **Warehouse Employee** table. To be able to link an **Employee** to a **Mobile User**, you will have to assign an **Employee No.** to **Mobile Users.** 





# 9.3 Mobile: Receive Order filters

The purpose of the filter is to limit the number of orders sent out to the mobile device. In the standard configuration the user can filter on:



#### Location

The user can select a specific location or select all to see for all locations.

# Assigned User ID

Here the user can choose All to see everything, or the user can choose Only my orders. Default is Mine & Unassigned.

#### Note:

It is possible to add / remove the filters displayed on this screen by changing the configuration in Business Central.

The filter can be opened at any time, on the order list screen, by clicking the filter icon in the top right corner.

## Note:

The locations available to the user correspond to the locations the user has been setup to use in the warehouse employee screen in Business Central. The default location is the first entry in the list.



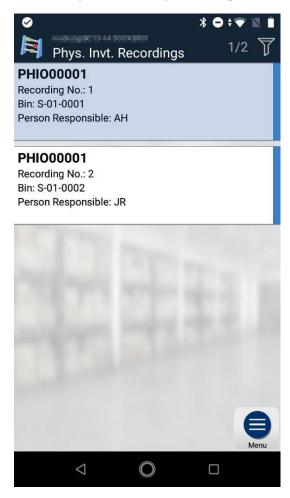
# 9.4 Making registrations using the mobile devices

The planned Physical Inventory Recordings are now available from the "Phys. Inventory Recording" menu.





The available Physical Inventory Recordings are shown in the order list.



The list only shows Recordings that meets the following criteria:

- The status is "Open"
- The Recording contains lines that are not marked as "Recorded"

The order is selected by double touching the order. This downloads the order lines to the mobile device.

**Note:** When an order is selected on the mobile device it is locked. Other users will see the order as locked and will receive a warning if they try to access it.

Note: A locked order can be released by activating the "Release [order#]" function from the menu.

**Note:** It is possible for multiple people to work on the same order. As long as they don't work on the same lines. If they do the person posting last will overwrite registrations made by other users. This should only be done by experienced users.

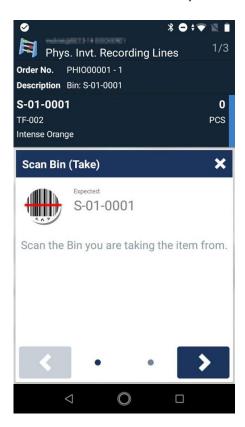




The screen above shows the recording lines for the Physical Inventory Order "PHIO00001" Recording No.: 1. Each line typically corresponds to an item in a bin, and is registered through the following work process:

1. Scan the item you want to count (or select the line manually)

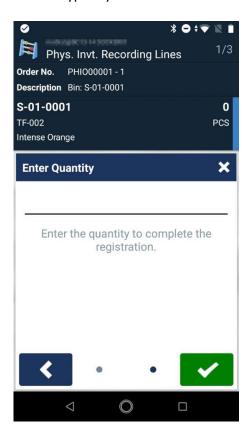
This selects the line and asks you to validate the bin you are counting.





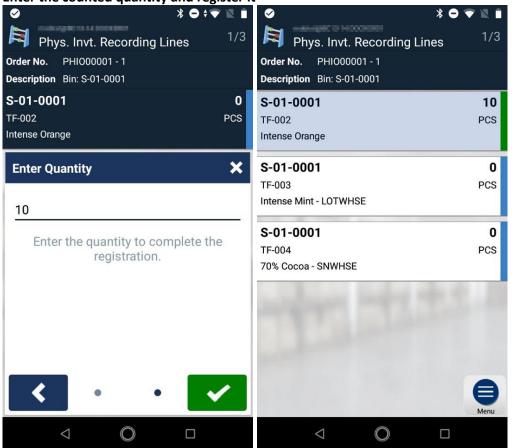
## 2. Scan the bin code

If the expected bin is scanned you are allowed to enter the counted quantity. A bin code can also be entered manually by clicking the barcode image. You are typically not allowed to see the expected quantity.



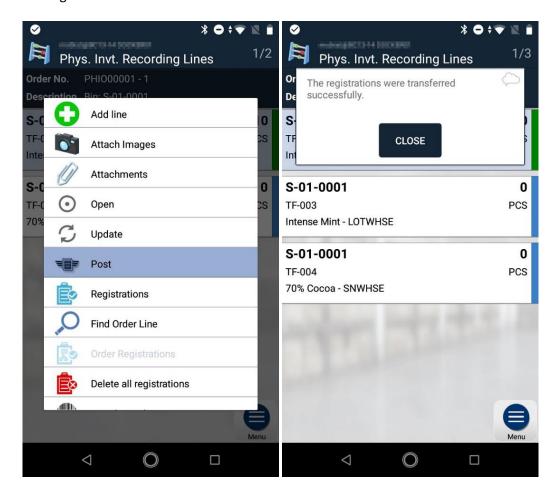


3. Enter the counted quantity and register it



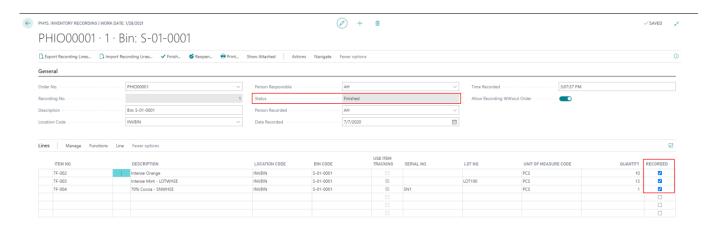


4. **Repeat for all lines, then post the order**Posting is done from the menu



After posting the order the order list is displayed again if there are no outstanding lines left to count.

The Phys. Inventory Recording is now marked as Finished and lines as recorded.

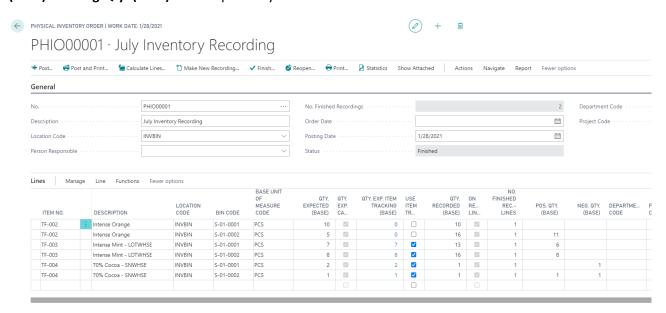


If the warehouse manager for some reason wants a line to be recounted the **Recorded** flag can be removed and the line will reappear on the mobile device the next time the order is selected.



## 9.5 Finishing the Physical Inventory Order in Business Central

When you have finished a physical inventory recording, the **Qty. Recorder (Base)** field on the related physical inventory order is updated with the counted (recorded) values, and the **On Recording** check box is selected. If a counted value is different from the expected, then that difference is shown in the **Pos Qty.** (Base) and **Neg Qty.** (Base) field respectively.



To see expected quantities and any recorded differences for items with item tracking, choose the **Lines** action, and then choose the **Item Tracking Lines** action to select various views for serial and lot numbers involved in the physical inventory count.

You can also choose the **Phys. Inventory Order Diff.** action to view any differences between the expected quantity and the counted quantity.

#### To find duplicate physical inventory order lines

- 1. Choose the licon, enter **Physical Inventory Orders**, and then choose the related link.
- 2. Open the physical inventory order that you want to view duplicate lines for.
- 3. Choose the **Show Duplicate Lines** action.

Any duplicate physical inventory order lines are displayed so that you can delete them and keep only one line with a unique set of values in the **Item No.**, **Variant Code**, **Location Code**, and **Bin Code** fields.

#### To post a physical inventory order

After completing a physical inventory order and changing its status to **Finished**, you can post it. You can only set the status of a physical inventory order to **Finished** if the following are true:

- All related physical inventory recordings have a status of **Finished**.
- Each physical inventory order line has been counted by at least one inventory recording line.
- The **In Recording Lines** and the **Qty. Exp. Calculated** check boxes have been selected for all of the physical inventory order lines.
- 1. Choose the icon, enter **Physical Inventory Orders**, and then choose the related link.
- 2. Select the physical inventory order that you want to complete, and then choose the Edit action.



On the Physical Inventory Order page, you view the quantity recorded in the Qty. Recorded (Base) field.

3. Choose the Finish action.

The value in the **Status** field is changed to **Finished**, and you can now only change the order by first choosing the **Reopen** action.

4. To post the order, choose the **Post** action, and then choose the **OK** button.

The involved item ledger entries are updated along with any related item tracking entries.

#### To view posted physical inventory orders

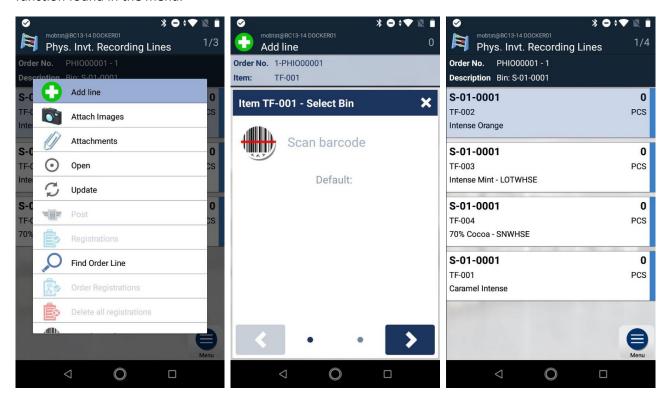
After posting, the physical inventory order will be deleted and you can view and evaluate the document as a posted physical inventory order including its physical inventory recordings and any comments made.

- 1. Choose the licon, enter Posted Phys. Invt. Orders, and then choose the related link.
- 2. On the **Posted Phys. Invt. Orders** page, select the posted inventory order that you want to view, and then choose the **View** action.
- 3. To view a list of related physical inventory recordings, choose the **Recordings** action.



## 9.6 Adding a new item using the mobile device

Should the warehouse user encounter an unexpected item, the user can add the item, using the "Add Line" function found in the menu.



Scan the Item -> Scan the Bin -> Choose the UoM and finish the registration. The Line will now have been added to the Recording and you can register the counted quantity on the line.



# 10. Planned inventory counting

Planned inventory counting is performed using the standard inventory journals in Business Central.

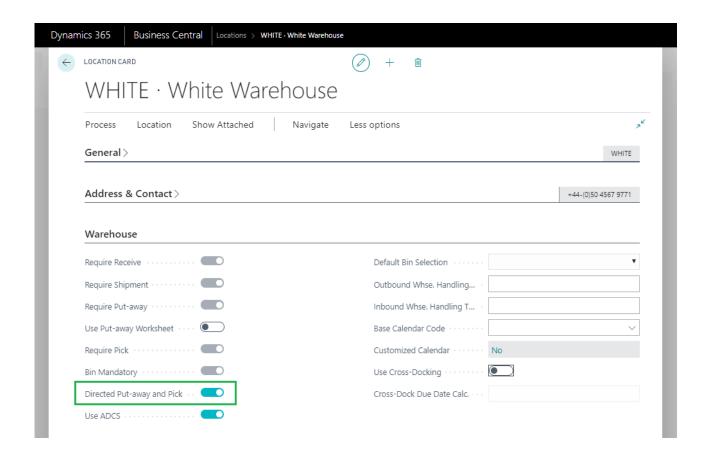
#### Note:

"Count" uses one of two different Journals depending on whether you are using Bin or not.

If the location you are counting is configured to use "Directed Put-away and Pick" then

- you use the "Whse. Phys. Invt. Journals".
- If not you use the "Phys. Inventory Journals".

The work process on the mobile device is the same for both journals.





## 10.1 Creating journal Batches

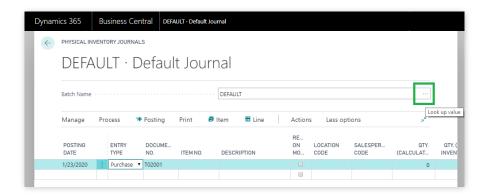
Before the mobile devices can be used to register the counted values, you need to create some journal batches and populate them with relevant lines. This is done by opening the "Item Journal Batches" window and creating the needed batches:

It is recommended that you create at least as many batches as you have mobile devices / people available for the inventory counting. This will allow you to perform the counting in parallel.

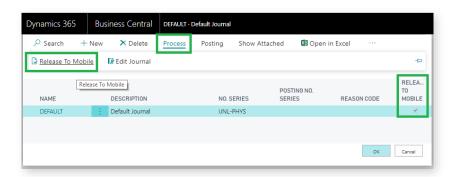
## 10.2 Releasing Physical Inventory Batch

The "Released to Mobile" setting determines if the batch is available on the mobile devices.

This flag should be set when the batch has been populated with relevant lines.



Lookup the Batch Name.



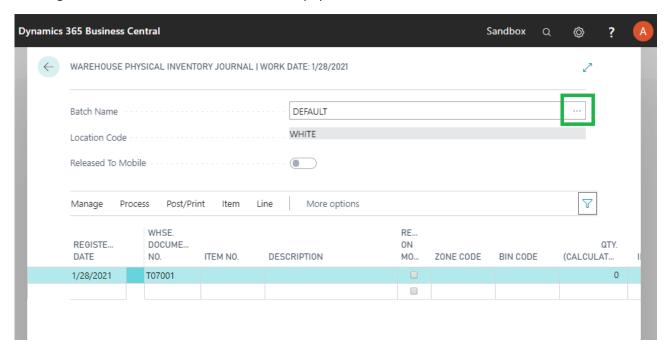
Use the "Release To Mobile" action.



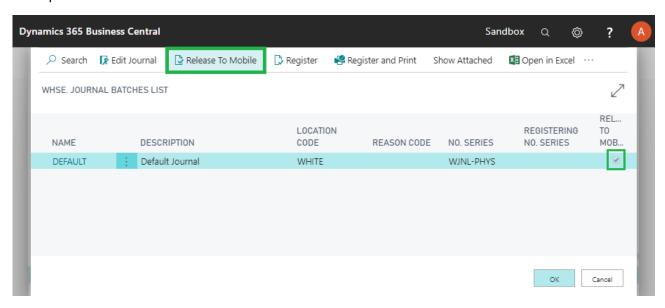
## 10.3 Releasing a Warehouse Physical Inventory Batch

The "Released to Mobile" setting determines if the batch is available on the mobile devices.

This flag should be set when the batch has been populated with relevant lines.



Lookup the Batch Name.

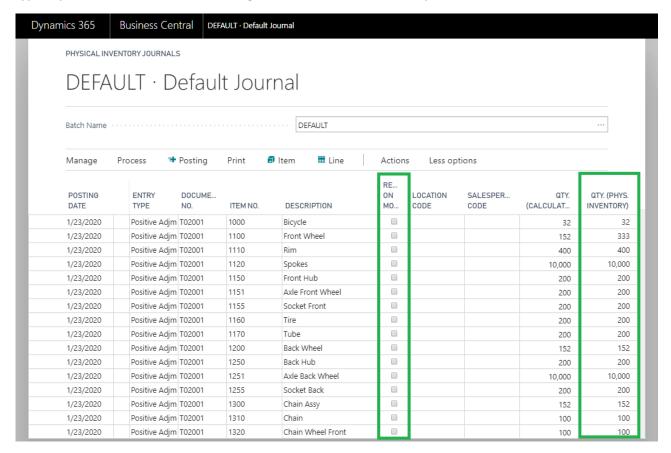


Use the "Release To Mobile" action.



## 10.4 Populating a journal batch

The journal batch is populated with lines using the "Functions" -> "Calculate Inventory" function. You typically set a location and bin filter to generate lines for a subset of your location.



The journal batches are typically created by a warehouse manager. This person will not perform the counting, but is responsible for organizing the inventory count and for posting the journals after they have been updated with data from the mobile devices.

The "Registered on mobile" flag tells the warehouse manager which lines that have been updated from a mobile device.

#### Note:

The "Registered on mobile" flag is also used to filter the lines shown on the mobile device.

Only lines that have not been registered before are shown. The flag is set when the line is posted from a mobile device.

#### Note:

Posting from a mobile device does not actually post the journal. It only updates the

"Qty. (Phys. Inventory)" field. It is the responsibility of the warehouse manager to post the journal.



## 10.5 Making registrations using the mobile devices

The planned inventory counting jobs are available from the "Count" menu.





The available journal batches are shown as count orders in the order list.



The list only shows journal batches that meets the following criteria:

- The batch is "Released to Mobile"
- The batch contains lines that are not "Registered on mobile"

The order is selected by double touching the order. This downloads the order lines to the mobile device.

**Note:** When an order is selected on the mobile device it is locked. Other users will see the order as locked and will receive a warning if they try to access it.

Note: A locked order can be released by activating the "Release [order#]" function from the menu.

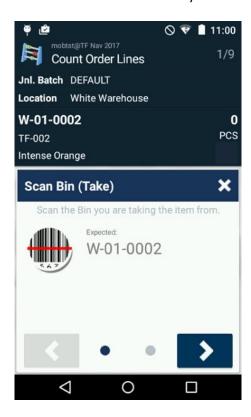
**Note:** It is possible for multiple people to work on the same order. As long as they don't work on the same lines. If they do the person posting last will overwrite registrations made by other users. This should only be done by experienced users.





The screen above shows the count order lines for the "DEFAULT" journal batch. Each line typically corresponds to an item in a bin and is registered through the following work process:

5. **Scan the item you want to count (or select the line manually)**This selects the line and asks you to validate the bin you are counting.

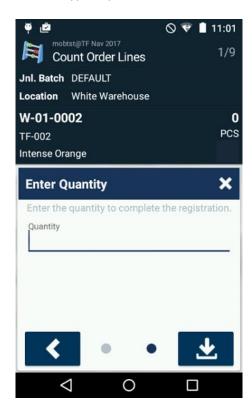


## 6. Scan the bin code

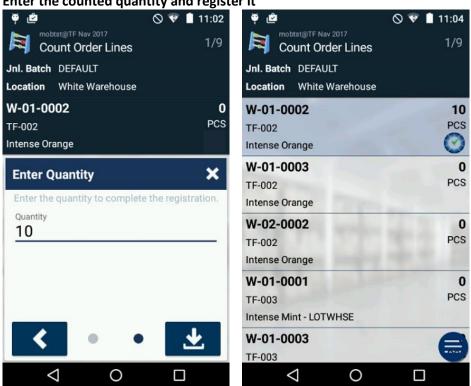
If the expected bin is scanned you are allowed to enter the counted quantity. A bin code can also be entered manually by clicking the barcode image.



You are typically not allowed to see the expected quantity.

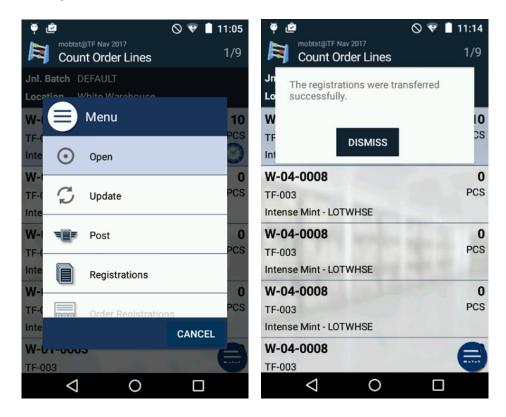


7. Enter the counted quantity and register it





8. Repeat for all lines, then post the order Posting is done from the menu

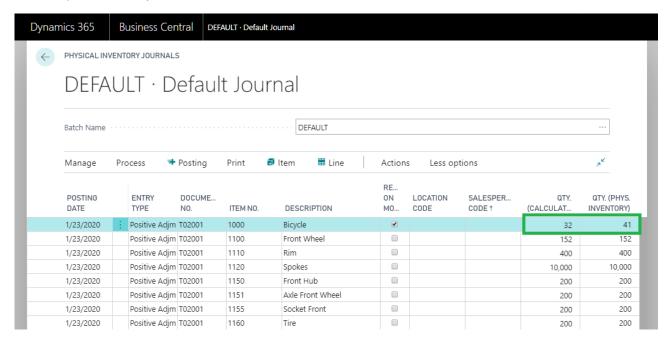


After posting the order the count order list is displayed again.



## 10.6 Finishing the Count in Business Central

When the count order is posted on the mobile device the registrations are transferred to the journal batch. An example of a filled journal batch is seen below.



This journal batch contains registrations for two lines.

Note: This journal batch will still be visible on the mobile devices because it still contains lines that have not been registered. If the order is selected again it will only contain the lines that have not been registered (two lines).

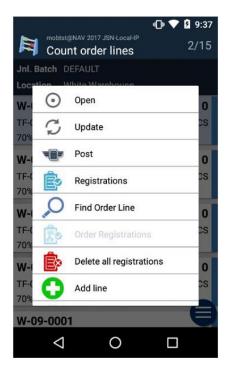
If the warehouse manager for some reason wants a line to be recounted the "Registered on mobile" flag can be removed and the line will reappear on the mobile device the next time the order is selected.

The warehouse manager finishes the counting process by posting the journal and removing the "Released to Mobile" flag on the journal batch.



## 10.7 Adding a new item using the mobile device

Should the warehouse user encounter an unexpected item, the user can add the item, using the "Add Line" function in the round blue menu.



## Note:

Serial/Lot Tracked items can be counted.

However, it is <u>not</u> possible to Add new lines from the mobile device with tracking.

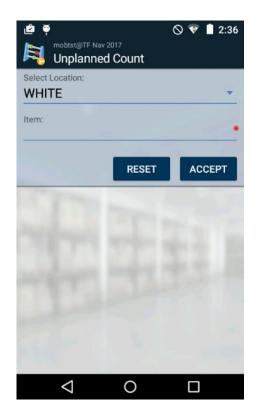
Unexpected tracked items, must be added through the Journal by the warehouse manager.



# 11. Unplanned Count

As an alternative to the planned inventory counting the Mobile WMS app also supports unplanned counting. This allows the warehouse worker to count a single item / bin without having to plan it in Business Central first. This feature is started by selecting "Unplanned Count" from the main menu.





The "Location" list contains the locations assigned to the user (warehouse employee setup). The first location in the list is the default location for the user.

The work process for unplanned counting is:

- 1. Select the location you are in
- 2. Scan or enter the item number / barcode you want to count Alternatively you can search for the item using the online search feature.



3. Scan or enter the bin code the item is placed in



4. Scan or enter the bin code the item is placed in



## 5. Post the registration

The quantity in Business Central has now been updated.

#### Note:

- The update depends on the specific configuration of the Location and the Mobile WMS setup.
- Unplanned Count is only available while the mobile device is online.

#### Tracked Items:

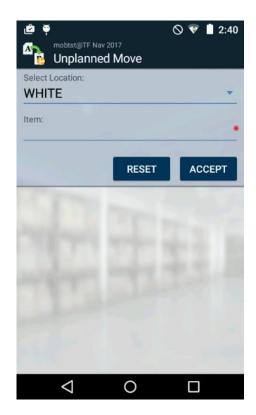
- Serial tracked items are not supported with Unplanned Count.
- Lot tracked items are only supported when the "Item Tracking Code" has "Warehouse Tracking" enabled.
- Tracked Items are not supported since these should be identified during Receipt.
   Also, Counting tracked items will make it impossible to decide whether to collect Expiration Date, since this is not needed for known items but needed for unknown.



## 12. Unplanned Move

As an alternative to the planned movements the Mobile WMS app also supports unplanned moving. This allows the warehouse worker to move a single item without having to plan it in Business Central first. This feature is started by selecting "Unplanned Move" from the main menu.





The "Location" list contains the locations assigned to the user (warehouse employee setup). The first location in the list is the default location for the user.

The work process for unplanned counting is:

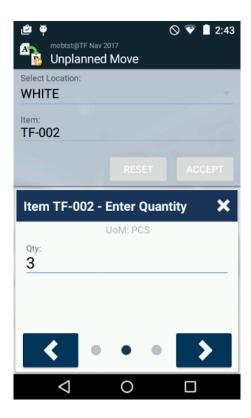
- 1. Select the location you are in
- **2. Scan or enter the item number / barcode you want to move** Alternatively you can search for the item using the online search feature.



3. Scan or enter the bin code to move the item from

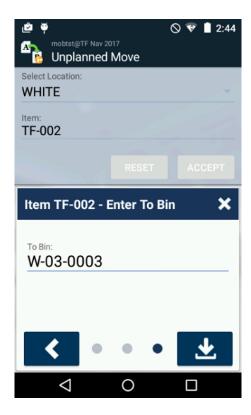


4. Enter the quantity to move





## 5. Scan or enter the bin code where the item is placed



## 6. Post the registration

The movement has now been registered in Business Central.

#### Note:

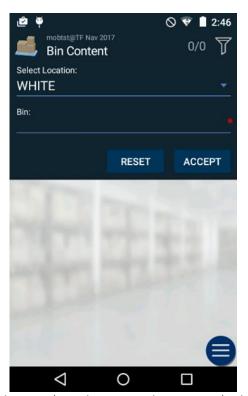
- Unplanned Move can only be performed while the mobile device is online.
- The steps needed to complete the unplanned move can easily be modified by your partner. An example of this is, if the item to move is Lot or serial number tracked then the user must also register the Lot or serial number that is moved. This is standard functionality.
- The update of Business Central depends on the configuration of the location and the Mobile WMS setup.
  - No setup is required when used on a location that does not use "Directed Put-away and Pick"



## 13. Bin Content

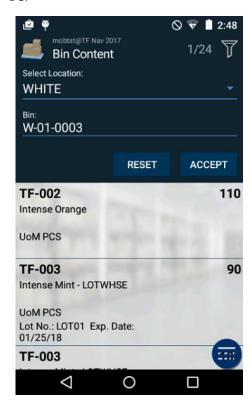
The Mobile WMS app allows the user to lookup the contents of a bin using the mobile device. The feature is activated by selecting the "Bin Content" menu item on the main menu.





The "Location" list contains the locations assigned to the user (warehouse employee setup). The first location in the list is the default location for the user.

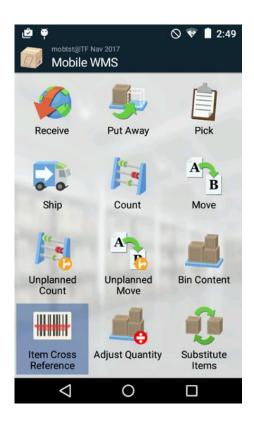
The user then scans or enters the bin code and then the mobile device gets the bin contents from Dynamics BC:

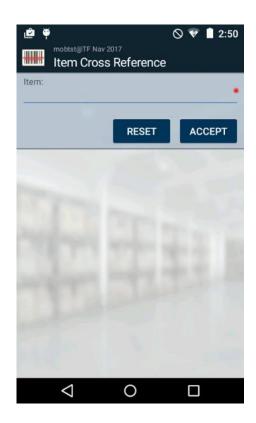




## 14. Item Cross Reference

The Mobile WMS app allows the user to associate a barcode with an item using the mobile device. This can be helpful if the items in Business Central have not been setup with information about the barcodes. The feature is activated by selecting the "Item Cross Reference" menu item on the main menu.



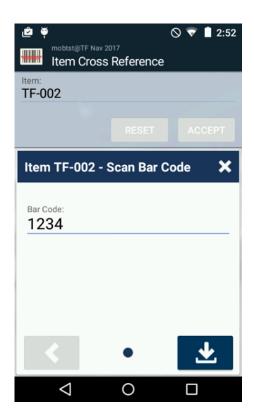


The work process is:

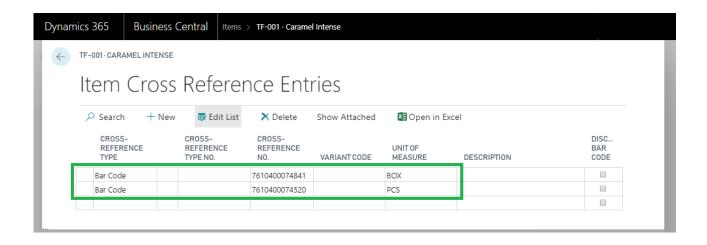
- 1. Enter the item number

  Alternatively search for the item number using the online search function
- 2. Scan / enter the barcode to associate with this item





Post the registration to associate the barcode with the item. The barcode is now registered as a cross reference on the item.

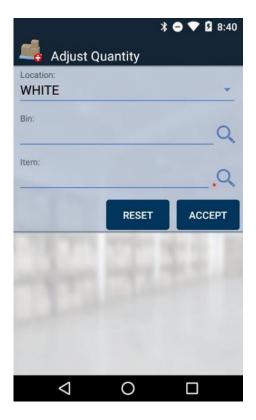




## 15. Adjust Quantity

The Mobile WMS app allows the user to remove items from the inventory. The purpose of the feature is to allow the user to remove expired or otherwise damaged items from the inventory and update Business Central immediately. Compared to the unplanned count feature the adjust quantity feature does not require the user to count the items. The user simply registers the quantity that is removed. The feature is activated by selecting the "Adjust Qty" menu item on the main menu.





The work process is:

#### 1. Select the location

#### 2. Scan / enter the bin

Alternatively search for the bin using the online search functionality. Leave empty if the location does not use bins.

## 3. Scan / enter the item number or barcode

Alternatively search for the item using the online search functionality

## 4. Enter the quantity to remove

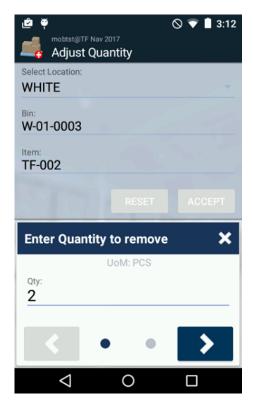
If the item being removed is Lot or serial tracked the user must enter this information for the removed items.

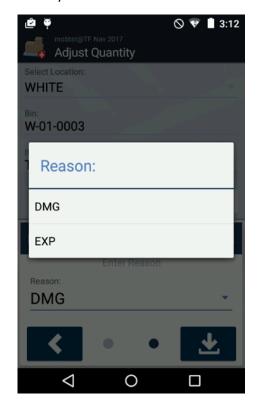
#### 5. Enter the reason code



## 6. Post the registration

The items have now been removed from the inventory.



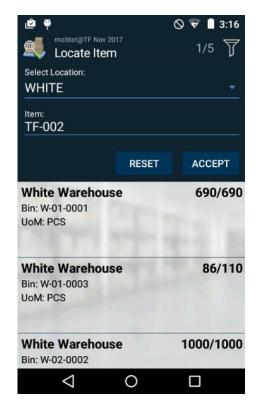




## 16. Locate Item

The Mobile WMS app allows the user to lookup all bins where an item is stored. The feature is activated by selecting the "Locate Item" menu item on the main menu.





The work process is:

- 1. Scan / enter the item number or barcode
  Alternatively search for the item using the online search functionality
- 2. Perform the search

Business Central returns all the bins that match the entered criteria

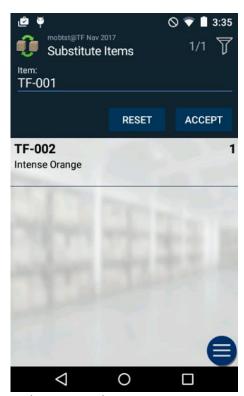
The returned quantity is <available qty> / <physical qty>



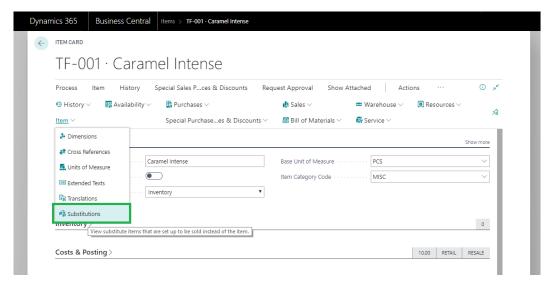
## 17. Substitute items

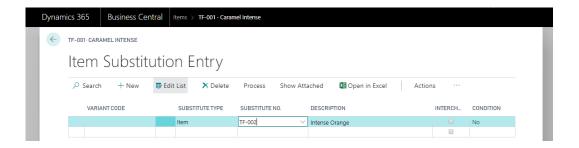
The Mobile WMS app allows the user to lookup substitute items for a particular item. The feature is activated by selecting the "Substitute Items" menu item on the main menu.





In Business Central the item substitutions are setup from the item card.



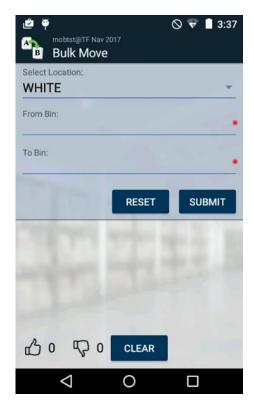




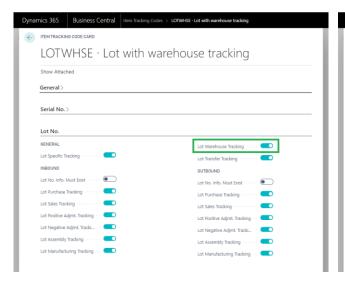
## 18. Bulk Move

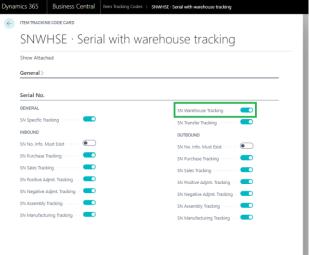
The Mobile WMS app allows the user to move all content from one bin to another. The function is activated by selecting the "Bulk Move" menu item on the main menu.





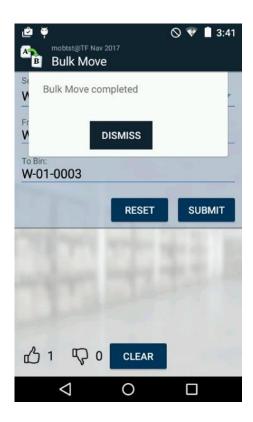
If you are using item tracking on any items in the bin, be sure that the tracking model has enabled "Warehouse Tracking", otherwise you will not be able to use "Bulk Move".



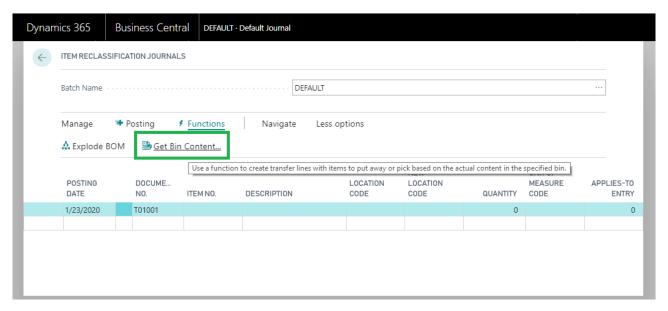




If everything is ok the result will be like this:



In Business Central the "Bulk Move" function uses either "Item Reclass. Journals" and the function "Get Bin Content" to create the move



or "Whse. Reclass. Journals" if the location is setup to use "Directed Put-away and pick".

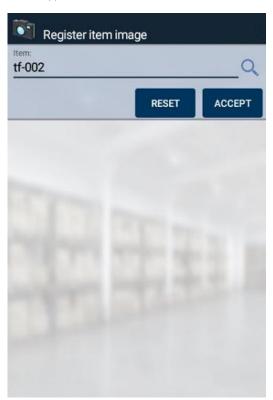


# 19. Register Item Image

To Register an Image to an Item or Order Line. Select "Register Item Image" from the Menu.



Scan, type or Search for an Item No.

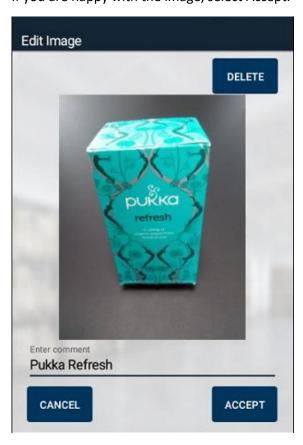




Select the blue + symbol and take the photo.

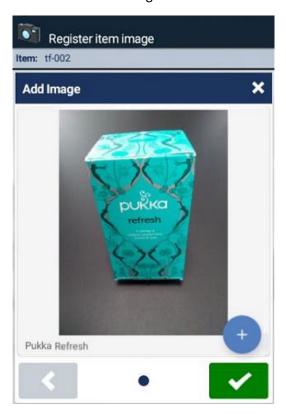


If you are happy with the image, select Accept.

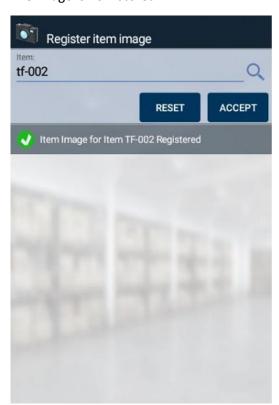




You can add more images or select the "Check mark" to save the image(s).



The image is now stored.





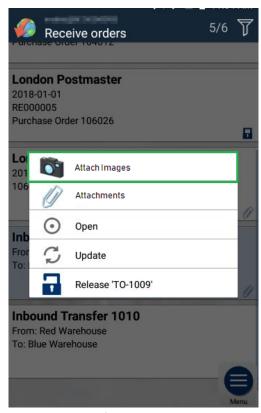
The registered image will now be shown when this item is handled.



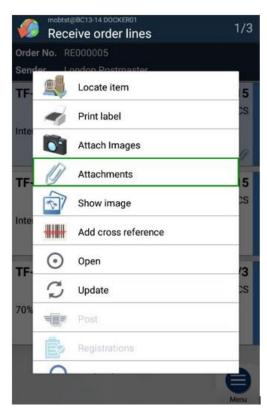


# 20. Attach Images

To Attach an Image to an Order or Order Line. Select "Attach Images" from the Menu.



You can do this from Orders.



And you can do this from Order Lines.



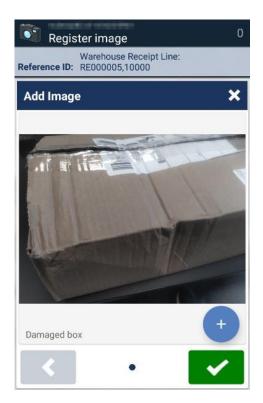


Select the blue + symbol and take the photo.

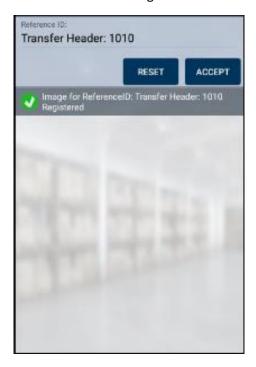


Enter a comment describing the image.





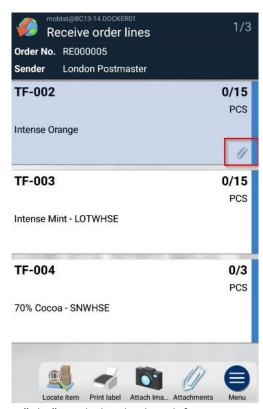
You can add more images or select the "Check mark" to save the image(s).



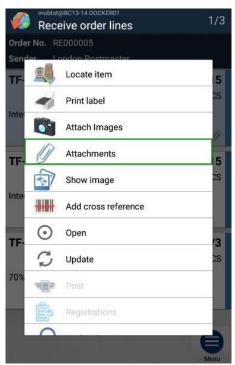


## 20.1.1 View attached Images

You can now see that the images have been attached. And it is possible to fetch the attached images again by selecting the action "Attachments".

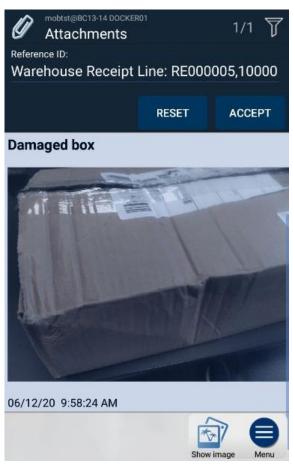


A "Clip" symbol is displayed if images are attached.



Select "Attachments".



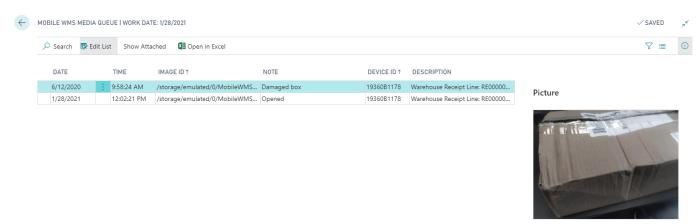


A list of attached images is then displayed.

## 20.1.2 View attached images from BC

Images are stored in the Mobile WMS Media Queue.

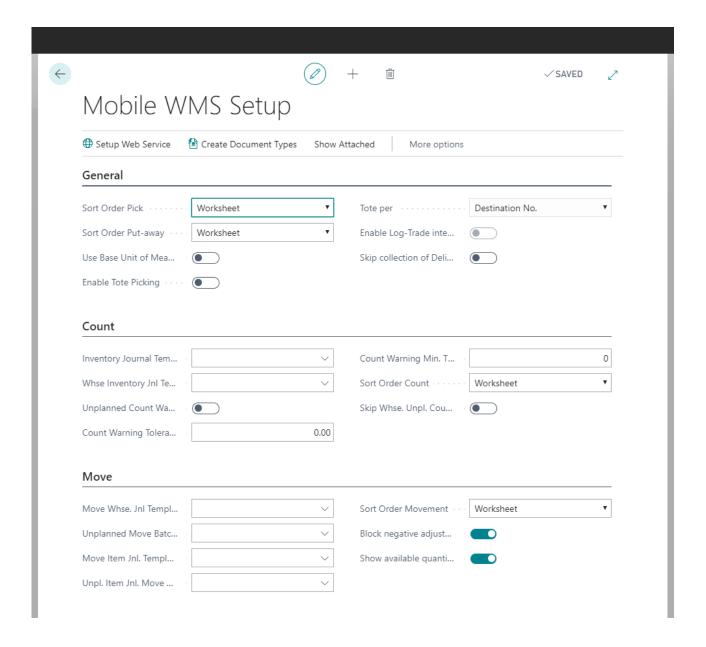
- Go to the Mobile WMS Media Queue page.
- Select an entry.





# 21. Mobile WMS Setup

Before the mobile devices can be used the "Mobile WMS Setup" screen must be reviewed. Here the general behaviour is configured.





## **General**

#### Sort Order Pick

This setting controls the sort order of pick orders. There are 3 options:

- Worksheet
- o Item
- o Bin

If worksheet is selected the order lines are sorted in the sequence defined when the order was created. A typical usage of this is to sort the lines according to Bin ranking.

## Sort Order Put-away

Same as for Pick.

#### • Use Base Unit of Measure

If this check mark is set all quantities on the mobile device must be entered in the base unit of measure.

If it is not set the quantities are entered in the unit of measure used on the order lines in Business Central.

#### • Enable Tote Picking

This functionality enables you to perform Picking / Shipping operations more efficiently by consolidating several orders onto Pick orders and Shipments.

Saving on Shipping, Picking for several orders on one-go and tracking containers, are all benefits.

## • Tote per.

This setting determines how the orders are consolidated:

## - Destination No.

Tote per customer

#### - Source No.

Tote per order

#### - Whse. Document No.

Tote per shipment

## • Skip Collect Delivery Note

Default a step to collect Delivery Note No. is displayed during posting of Receive Order. Enable this setting to hide this collection step.



## Move, Unplanned Move & Bulk Move

#### Note:

<u>No setup</u> is required perform Unplanned Move feature, on a location that does <u>not</u> use "Directed Put-away and Pick"

## Warehouse Journal:

• Move Whse. Jnl. Template

Used for:

- o Unplanned Move, when Location uses "Directed Put-away and Pick"
- o Bulk Move
- Unplanned Move Batch Name

This is used for the journal batch when posting:

- o Unplanned Move, when Location uses "Directed Put-away and Pick"
- o Bulk Move

The standard value to use is MOB\_UPM.

## **Item Journal:**

• Move Item Jnl. Template

This is used by the Bulk Move feature

• Unpl. Item Jnl. Move Batch

This is used by the Bulk Move feature



## Miscellaneous:

## • Sort Order Movement

This setting controls the sort order of Move orders. There are 3 options:

- o Worksheet
- o Item
- o Bin

## • Block negative adjustment if Reservation exists

Check for Order reservations and don't allow move if any exist (Standard Business Central behaviour).

## • Show available quantity on Unplanned Move

Makes the first "Step" an information step that shows the Quantity available moving.

This also effectively moves the "From Bin" -field from Steps to the Header.





## **Count & Planned Count**

## Inventory Journal Template

Select the journal template that is used for physical inventory journals. The standard value is PHYS. INV.

## • Whse Inventory Jnl Template

Select the journal template that is used for warehouse physical inventory journals. The standard value is PHYSINVT

## • Handheld Enable Count Warning

This flag controls if the user should be warned when the unplanned count feature is used. If the warning is enabled the user will get a warning if the physical quantity exceeds the tolerance levels defined below.

#### • Handheld Count Warning Tolerance Percent

If the physical quantity exceeds this tolerance level the user will get a warning on the mobile device.

## Handheld Count Warning Min. Qty.

The minimum tolerance prevents warning messages on items with a large difference in percentages, but only a small numerical difference. The difference must exceed this value before the warning is generated.

#### Sort Order Count

Controls the way the count order is presented.

#### Skip Whse. Unpl. Count Item Journal Post

If – and only if - the location uses "**Directed Put-away and Pick**", this flag makes it possible post the warehouse entries generated by the unplanned count and adjust quantity, without posting item journal. Periodically "Calculate Whse. Adjustment" from an Item Journal must be executed and posted.



# 22. Printing Labels

There are currently two ways of printing (labels) through Mobile WMS.

- 1. The included integration with our Print Cloud Service (version 5.16 or newer)
- 2. Extend Mobile WMS to create custom functions to create and print labels.

## 22.1 Prerequisites

Zebra Label printer connected via Bluetooth or Wi-Fi to mobile devices running Mobile WMS.

## 22.2 Printing technology

The mobile devices running Mobile app, can issue RAW printing.

This means you can print to both locally connected:

- Bluetooth printers
- Network printers



## 23. Printing Labels with Cloud Print Service

Printing labels is an essential task in any warehouse using barcode scanners.

Our integration to Cloud Print Service seamlessly combines data from Mobile WMS with an online label designer and SaaS print-service.

## 23.1 Key features

- Label layout is handled by Cloud Print Service. A complex task not suited for ERP.
- Design your custom labels using WYSIWYG (What You See Is What You Get)-designer.
- Plug-n-play installation.
- Label printing using the ZPL and ZPL CPCL standards.
- Customization of data through Mobile WMS extension API.

## 23.2 Prerequisites

- Zebra Label printer connected via Bluetooth or Wi-Fi to mobile devices running Mobile WMS.
- An active subscription with Cloud Print Service.

## 23.3 Cloud Print Service Terminology

## "Template" or "Label Template"

Cloud Print Service layout/design of a Label.

Templates have a Name and an URL mapping.

## "Request"

XML Request to Cloud Print Service containing the data to print a label.

## "Dataset"

Intermediate level where data is stored in generic format in memory in Business Central.

- The Cloud Print Service Request is being created using this dataset.
- o Requests are free from reading database directly.
- Customizable so you can add/change values to the dataset
- The dataset can include:
  - Context (Order, OrderLine, Lookup-result etc.).
  - Collected steps.
  - Customization.



## 23.4 High-level process

- 1. User selects an action to print.
  - a. The action can be placed anywhere in the Mobile app using mobile configuration.
- 2. User is shown with a list of available label-templates (designs) and selects one.
- 3. The context (Order, OrderLine, Lookup-result etc.) is converted to a "Dataset".
  - a. Additional values are collected using "Steps" and added to the Dataset.
  - b. New steps can be added and existing ones changed through customization.
- 4. An online request is sent to Cloud Print Service.
  - a. Dataset is converted to Request using the "template handler"
  - b. Any values and labels can be omitted/changed through customization.
- 5. Cloud Print Service maps the values from the dataset to the label template (design)
  - a. The mapping can be customized using the Cloud Print Service designer (optional)
  - b. Cloud Print Service responds with label data corresponding with the selected label and data.
- 6. Mobile WMS Android app will issue the printing directly to the printer.



## 23.5 Standard Templates

The system comes with standard labels that can be customized to suit your exact needs.

## 23.6 Templates Handlers

Each standard label has a "template handler", this can be used if you create your own version of a template, but want to re-use the data processing and Step-collection of a standard template.

This makes it very easy to create additional custom labels with Cloud Print Service.

## 23.7 Customization

- All values and labels can be omitted/changed via customization.
- Additional values are collected by using "Steps" new steps can be added or you can change existing.

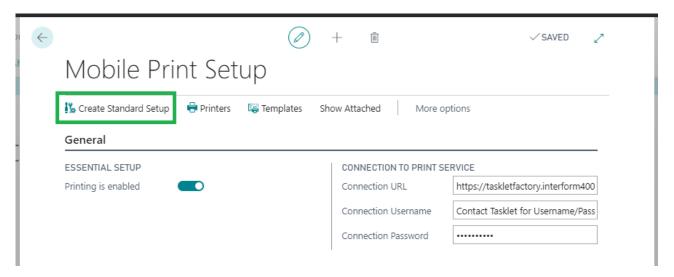


## 23.8 Setting up Cloud Print Service in Business Central

## Go to Mobile Print Setup

This page contains the general setup.

Use the "Perform Standard Setup" action to generate the base setup.



This action will create

- Default Label-Templates
- Connection URL

## 23.9 Fill in the Connection Username and Password

Your Username and Password will connect you to your own space at the Cloud Print Service, with the exact templates (designs) that has been made available to you.

Please contact Tasklet Factory sales to purchase and gain access to Cloud Print Service.

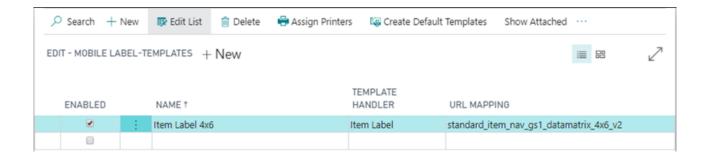


## 23.10 Label Templates

This page contains the Cloud Print Service templates (layouts) that you have access to.

Use this page to:

- Assign printers to templates
- Optionally select a Template Handler for your own custom template.



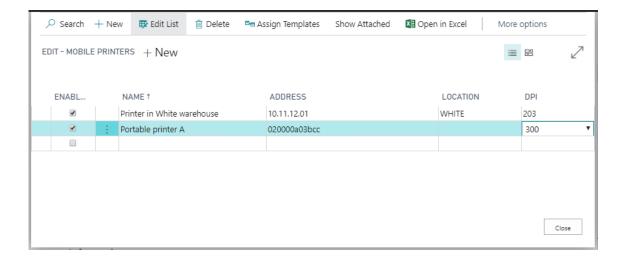
## 23.11 Mobile Printers

This page contains the physical printers that you have access to.

- Bluetooth connected devices are identified via MAC-address
- Network connected devices are identified via IP-address

## Insert your printer

- You must insert your printer(s) and the select the correct DPI-setting for each printer.
- The DPI can be found in the technical documentation for your printer model. If an incorrect DPI is specified here, labels will scale incorrectly





## 23.12 Assign Templates to Printers

You can assign:

- Printer to Templates
- Templates to Printers

## Assigning templates to a printer

A "label template" represents a label designed for a specific size of label i.e. 4-inch x 6-inch.

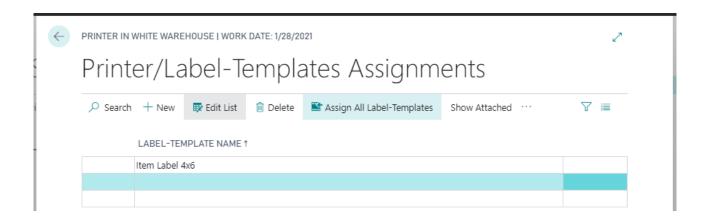
Label templates should only be assigned to printers that supports the label size the template has been designed for.

Assuming your label printer supports all the Mobile WMS standard templates created for Cloud Print Service you may:

- 1. Go to the **Mobile Printer**-page.
- 2. Select Assign Templates-action.
- 3. Select Assign All Label-Templates action.

You have now assigned all possible Templates to your printer.

You can also add/remove templates individually using this list.

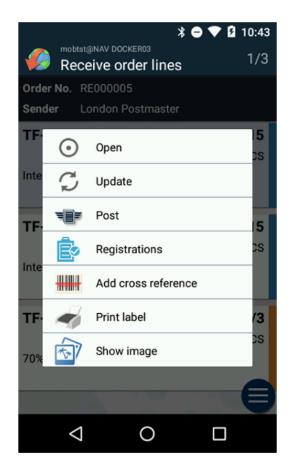


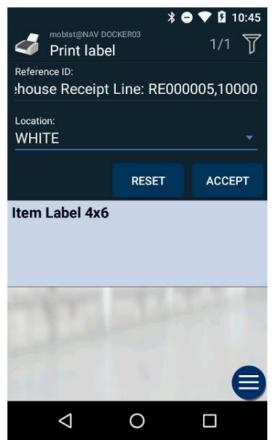


# 24. Using the 'Print Label' action

To print Labels using Cloud Print Service you must:

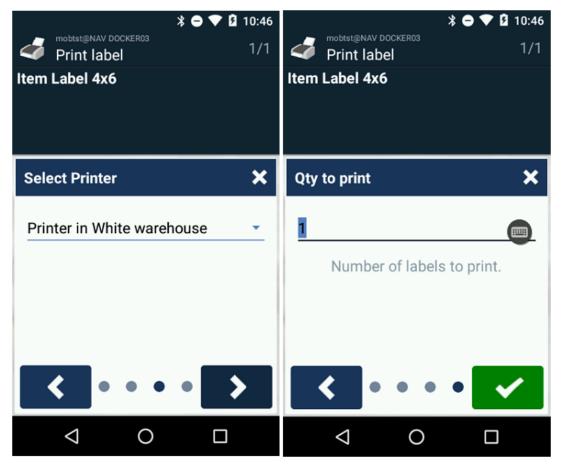
- Select an action to print labels at the Mobile Device.
- As default, an action to print labels exist on the main menu and "Receive Order Lines".
- Additional print actions can be placed anywhere in the Mobile app using mobile configuration.





A list of available templates (designs) for the Location is displayed. You must select one.





## **Collecting additional steps**

Additional information may be needed to print the label. Based on context (i.e. Receive Order Line)

- The **Template Handler** (if used) is responsible for which steps and under which conditions they are collected.
- Steps can be added or changed through customization.

As a minimum the following should be collected:

- Printer
- Number of labels

## How the print is then issued

- 1. An online request is sent to Cloud Print Service.
- 2. Cloud Print Service responds with label data corresponding with the selected label and data.
- 3. Mobile WMS Android app will issue the printing directly to the printer



## 25. Restore Default Setup Data

## Should you need to restore the data created during installation.

You may use the action "Create Document Types" to do this.

Find in it on the "Mobile WMS Setup"-page. More > Action > "Create Document Types".

#### This function will:

- Create all "Mobile Menu Options".
- Create a "Mobile Group" named "WMS" and add all Menu Options to it.
- Create all "Mobile Document Types".
- Create "Mobile Messages" in English.
- Set the "Warehouse Setup" posting error setting to "Stop and show the first posting error".

## 26. System Requirements

Mobile WMS runs on both Premium and Essential editions and SaaS or On-Prem platforms.

See installation guide for minimum required Platform version.