

Shipping Add-On to WWMS for Adagio Functional Specification

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Revision 3

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This revision supersedes all previous revisions.

1.0 DEFINITIONS

Stock Keeping Unit (SKU) – any item from Adagio IC that is introduced to WMS

Pick Order – Adagio Sales order imported into WMS for fulfillment and shipment

CASE (CA) – Lowest possible unit of measure of any SKU inside WMS

Shipping Container Level 1 (SCL1) – any physical shipping tare object that can have only SKU objects inside. Each SCL1 must have SSCC18 barcode.



0 is the package type - a box or carton.

0718908 is the manufacturer code.

The following part is the serial number for this container (562723189).

At the end of this number is the check digit (6).

BOX – Physical shipping object that is used to package multiple different or same SKU objects. **BOX** and **SCL1** are identical by definition.

Shipping Container Level 2 (SCL2) – any physical or logical shipping tare object that can have both SKU and SCL1 objects inside. Each SCL2 must have SSCC18 barcode.

Samples of such container are pallets and pick order itself.

ShipTo Location – “code” that is defined as Adagio Contact Code in AR

Code	Description	Description 2	City	Prov/State	Contact Name
480135	STORE #0135		KAMLOOPS	BC	
480907	STORE #0907		BURNABY	BC	
480912	STORE #0912		BURNABY	BC	
480937	STORE #0937		VANCOUVER	BC	
480946	STORE #0946		MISSION	BC	
480953	STORE #0953		NELSON	BC	
480972	STORE #0972		QUESNEL	BC	
480979	STORE #0979		SQUAMISH	BC	
480990	STORE #0990		NORTH VANC...	BC	
480996	SAVE-ON-FOODS #0996		BURNABY	BC	
480999	STORE #0999		NORTH VANC...	BC	
482218	STORE #2218		SURREY	BC	
482221	PRICESMART #2221		BURNABY	BC	
482235	STORE #2235		WHITE ROCK	BC	
482263	STORE #2263		SURREY	B.C.	
482274	STORE #2274		RICHMOND	BC	
482298	STORE #2298		COQUITLAM	BC	
487614	STORE #7614		VANCOUVER	BC	
487615	STORE #7615		VANCOUVER	BC	
487623	STORE #7623		VANCOUVER	BC	
487638	URBAN FARE #7638		KELOWNA	BC	
489114	EV LOGISTICS GLOUCESTER		LANGLEY	BC	

Shipment – a set of pick orders that intend to be shipped to same ShipTo location by TL or LTL

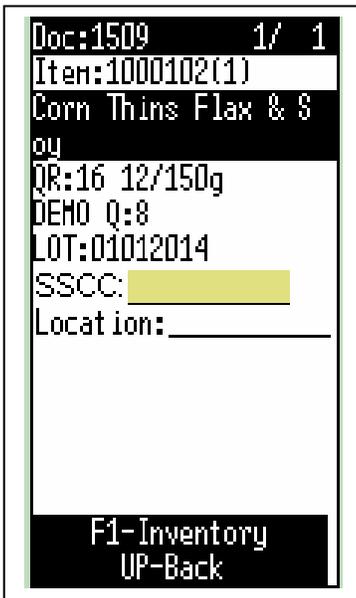
2.0 OBJECTIVE

The primary objectives of “Shipping Add-On” are as follows:

1. Record the content the shipping container(s) during warehouse picking process via handheld scanner (HH)
2. Ability to move content of one shipping container (SC) into another SC or new SC via HH within the pick order boundaries , this means that SC content cannot have SKUs from multiple pick order(s)
3. Ability to preprint SSCC18 bar-coded labels of type SCL1 and SCL2 to be used during and post picking process
4. Ability to print shipping label(s) for each SC after picking process is complete
5. Ability to print content of SC on supporting shipping documents
6. Ability to consolidate multiple pick orders into Shipment
7. Ability to print generic “Pack List” document by Pick Order
8. Ability to print generic “Bill of Lading” document based on predefined templates by Shipment or Pick Order
9. Ability to print generic “Shipping Manifest” document by Shipment

3.0 IMPLEMENTATION

1. Record the content the shipping container(s) during warehouse picking process via handheld scanner (HH)



New HH module will become available: SC Picking

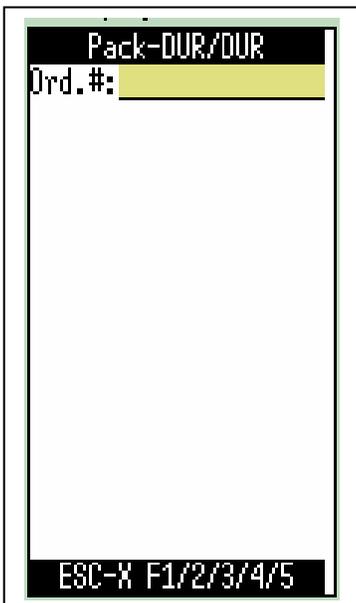
One additional prompt (SSCC) will be added compare to Standard Pick module , to capture SSCC18 barcode from the pre-printed label from 2.0.3

Software will validate this scan for the data length (20 digits) and barcode symbology (Code 128)

If for what ever reason the user will decide not to assign SC to the picked SKU , the user must press <Ent> key in this prompt.

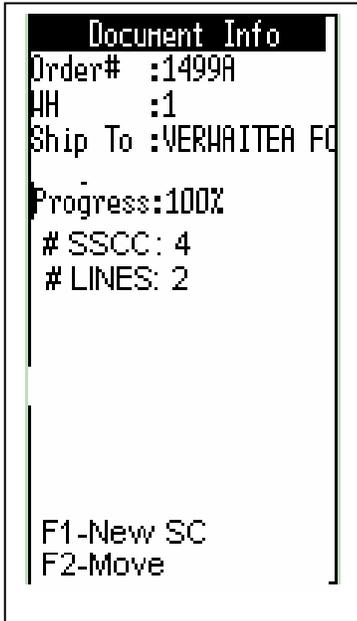
Picked SKU will reside in the pick order logical container. There will be the possibility to reassign such a SKU to another or new SC at a later time using procedure 3.0.2

2. Move content of one shipping container (SC) into another SC or new SC



New HH module will become available: SC Management

User enters pick order #



The statistic info will be displayed:

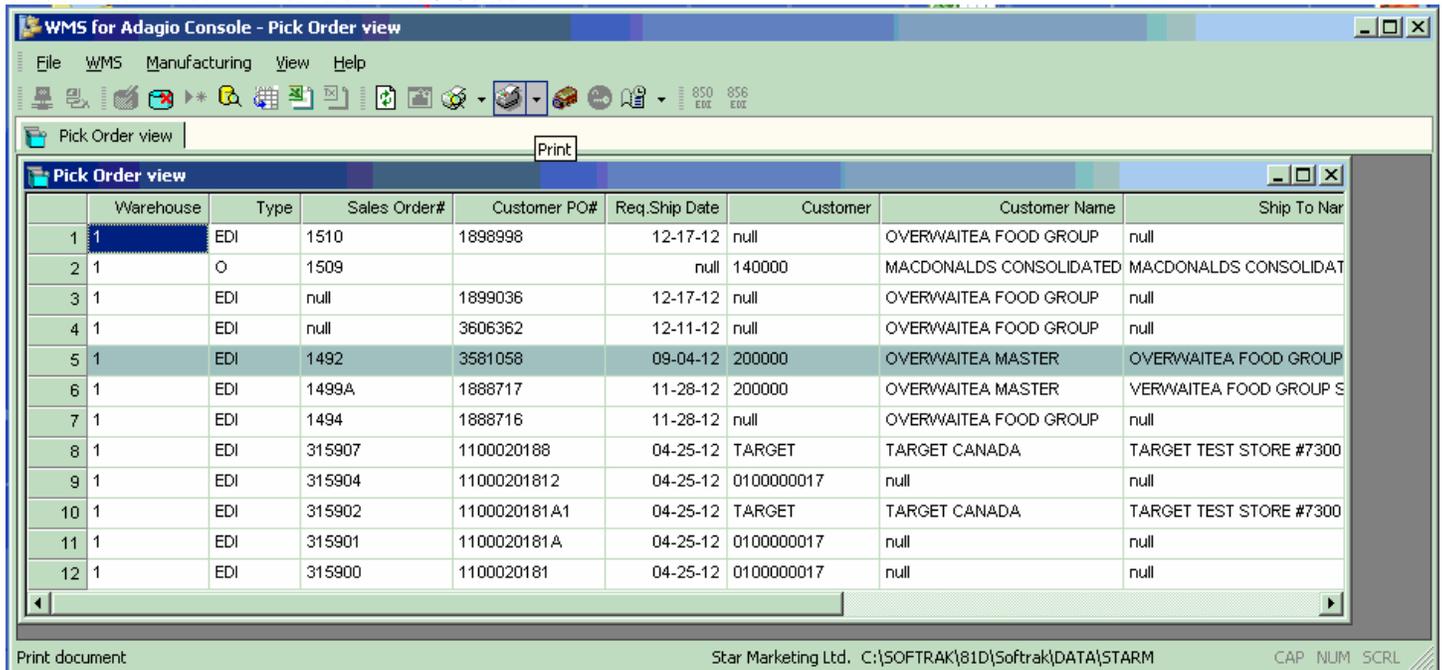
- Progress: display the order picking status
- # SSCC: display number of SC already assign
- # LINES: display number of lines not assigned to SC

User can further execute 2 functions:

- <F1> - create new SC and assign lines that are currently unassigned
- <F2> - move content of currently existing SC to another existing SC or to the new SC
- <F3> - destroy SC and un-assign lines that are currently assigned

3. Ability to preprint SSCC18 bar-coded labels of type SCL1 and SCL2 to be used during and post picking process

This feature will be available from WMS Console



Two label templates will be created. One for SCL1 (0-package type) intend to be used with BOX , another for SCL2 (1-package type) intend to be used with PALLET

Label size for both templates will be 4”W x 2”H

4. Ability to print shipping label(s) for each SC after picking process is complete

This feature will be available from WMS Console. The difference from 3.0.3 is the ability to properly print **BOX n of m** , where **n** is current BOX and **m** is the total BOX count in the pick order. This label can have “Ship From” , “Ship To” sections

Label size for SC shipping label will be 4”W x 2”H

5. Ability to print content of SC on supporting shipping documents

Once picked SKUs are assigned to SCs, this relation (content of SC) can be printed on **“Pack List”, “Bill of Lading” or “Shipping Manifest”** documents

Customer to provide exact sample of the desired document (TBD)

6. Ability to consolidate multiple pick orders into Shipment

Another layer of data structures will be added to carry the information about the **“Shipment”**

The **“Shipment builder wizard”** will be designed to help user to consolidate multiple pick orders into the Shipment. Common parameters are Customer Code and Address Line 3 from Adagio **“Contact”** setup. User will select initial order to start **”Shipment Builder Wizard”**. Based on the selected order, only orders that are for the same customer will be shown in the next step of the wizard. User is responsible to properly select the orders intended to be shipped to same cross-dock warehouse. Address Line 3 will make this decision simple for the user.



The most important difference between current **“Ship”** pick order function and new function of closing **“Shipment”** is that WMS must post information to Adagio OE from all pick orders that constitute a **“Shipment”**. This process must not be interrupted and current function of **“Ship”** pick order will not be available for individual orders that constitute a shipment. This means that Adagio will not be able to invoice a single order in the **“Shipment”** until the entire **“Shipment”** is closed and all pick orders from the **“Shipment”** are posted to OE

7. Customer to provide an existing **“Pack List”** sample

8. The following data field or preset values need to be populated in order to generate **“Bill of Lading”** shipping document:

Field Name	Type	Preset Data	Comments
Waybill #	N	Auto	
Document Date	D	Today	
Delivery Due Date	D	User Enter	
Shipper (Consignor)	AN	Auto	Customer Company Name
Shipper Address	AN	Auto	SM Street
Shipper City	AN	Auto	SM City
Shipper Prov and postal	AN	Auto	BC , postal
Consignee	AN	Auto	Imported from Adagio with Pick Order that is the first in “Shipment” set of pick orders
Consignee Address	AN	Auto	
Consignee City	AN	Auto	
Consignee postal	AN	Auto	
Pick order number(s)	AN	Auto	All Pick Order number in the “Shipment”
Number of pieces / boxes	N	Auto	Count of SCL1 plus count of CA
Number of pallets	N	Auto	Count of SCL2 plus 1 if count of CA is > then 0 or user input during “Shipment” creation
Weight	N	Auto	Adagio unit weight multiply by qty shipped
Description of goods	AN	Auto	“Food stuff” or select from template
Consignee PO number(s)	AN	Auto	Imported from Adagio “Reference” field
Payment Terms	AN	Auto	Imported from Adagio “Terms” filed

9. The following table will represent “Shipping Manifest”

Column Name	Type	Preset Data	Comments
Store #	N	Auto	4 last chars of Shipto Code
Description	AN	Auto	Shipto Code “Description” (imported from Adagio)
Number of pieces / boxes	N	Auto	Count of SCL1 plus count of CA
Weight	N	Auto	Derived from Adagio
Number of pallets	N	Auto	Count of SCL2 or “Mixed”
Pack List #	AN	Auto	Pick Order number
Value	N	Auto	Unit Price multiple by qty shipped summed by Pick Order

4.0 POST IMPLEMENTATION ADDITIONS

Two new features are requested for the “Shipment builder wizard” (see 3.6)

- a) ability to add new pick order to existing shipment at any time
- b) ability to remove pick order from existing shipment at any time

1. Implementation of a)

User can create a shipment with at least one “finished” pick order. “Finished” means that pick order should not be altered (with pick or unpick transactions) after.

Once other pick order(s) that are meant to be part of this original shipment progress in picking, the shipping manager can add them to this shipment one by one or as a group. It is advised that user adds only “finished” pick orders.

PLEASE NOTE: if the pick order is already added to the shipment and warehouse pickers are altering it’s status by doing any pick or un-pick transactions inside this pick order , “Shipment” **will not** recalculate number of boxes, pallets and weight that are to be printed on BOL and Manifest

To workaround this constraint the shipping manager may remove altered pick order using feature b) and re add same pick order again to the shipment using feature a)

IMPORTANT: remember that if user **has exported pick order results back to Adagio using “Ship Order” function**, such a pick order will disappear from ‘Pick order view” screen , hence is not available for any “shipment” operation

Adding pick order will re-calculate **number of boxes, pallets and weight** of entire shipment with possibility to edit those values like in existing implementation

2. Implementation of b)

User can remove any pick order from shipment unless it is the only one pick order left in this shipment. If the shipment contains only one pick order, existing “Delete shipment” function has to be used.

Removing pick order will re-calculate **number of boxes and weight** of entire shipment. Pallet count will not be affected since it cannot be clearly calculated.