9.2. Consolidated packing flows

This section discusses the following consolidated packing flows:

- 9.2.1. Consolidated packing flow (creating SSCC number)
- 9.2.2. Consolidated packing flow (keeping SSCC number)

9.2.1. Consolidated packing flow (creating SSCC number)

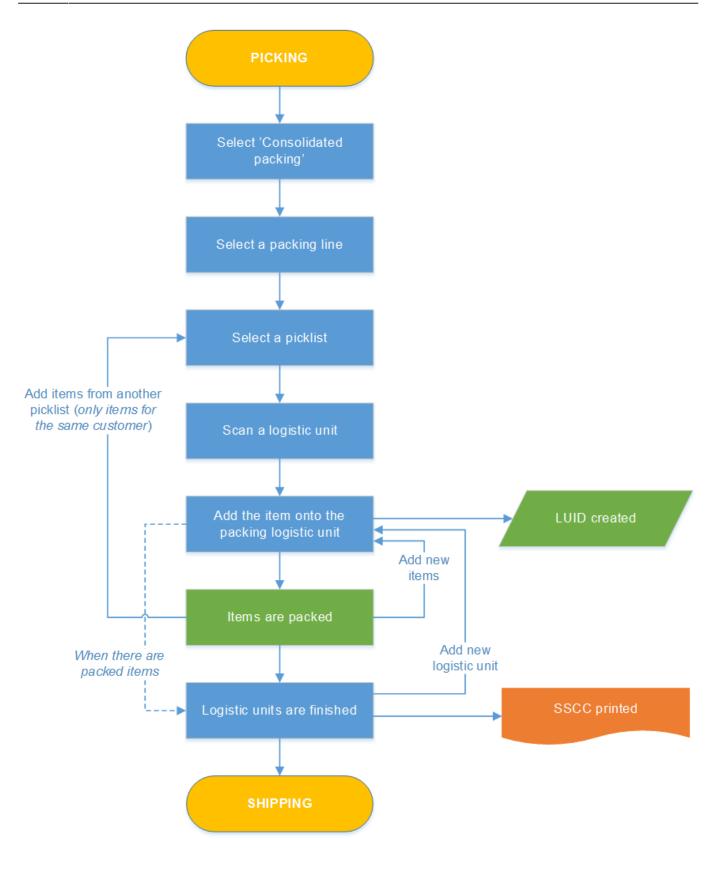
This flow takes place when logistic units were used instead of movable locations during the picking. The flow uses the logistic unit(s) as an input and an SSCC number is created.

Configuration

Before starting the picking flow, set the following configurations:

- Check the 'Always status picked' box at the 'Produmex pick list types' window. For more information see: 3.2.3.2. Produmex pick list types (PMX_PLTY)
- Link the packing line to the zone where the picking takes place at the 'Link pack line to zone' window. For more information see: 3.2.3.9. Link pack line to zone (PMX_LPLZ)

Workflow



- Select a packing line
- Select a picklist#select_a_picklist
- Scan an SSCC
- Pack and add items
- Add SSCC

• Finish SSCC

1. Select a packing line

Select a packing line where the items that have to be packed are located.

2. Select a picklist

After selecting a packing location, the system will display the list of the pick lists which have been picked to the zone linked to the packing location.

×

×

Select a pick list from the list and proceed by tapping the right arrow.

3. Scan an SSCC

Scan the SSCC barcode on the logistic unit. (Logistic units cannot be selected from the list.)

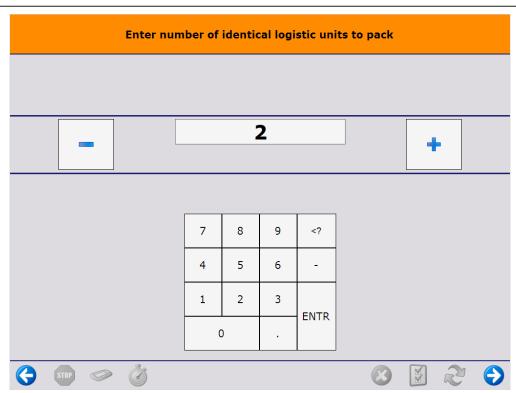
4. Select a task

If the *Allow to create master SSCC* option is enabled on the Pick list controller, it is possible to create a master SSCC during the packing. On the Select a task screen tap the 'Create master SSCC' button to pack onto a master SSCC. Tap the Create normal SSCC button to pick onto a normal SSCC.

×

×

When the 'Use pallet packing type from customer master data' option is enabled on the on the Packing controller and the Pallet packing type is 'Multiple Pallet', 'Pallet –multiple carton' or 'Ask user', add the number of identical logistic units as well.



In the case of working with master SSCC's, first add the number of the identical master SSCC's, then add the number of identical sub SSCC's on a single master SSCC.

5. Adjust quantity and select items

On the next screen the system displays the list of the items picked into the movable location. You can use the input field to filter the list.

×

Displayed information:

At the top left corner the system shows the name of the customer and the shipping address.

At the top right corner the system displays the picklist number(s) and the pick and pack remarks.

Additional information displayed on the screen: barcode, item code, item description, batch number, best before date and total quantity.

The total quantity marks the open quantity on the moveable location.

- When packing on multiple SSCCs, the total quantity marks the total quantity on the moveable location / the number of identical SSCCs.
- When packing on multiple identical master and sub SSCC, the total quantity marks the total quantity on the moveable location / (the number of identical master SSCCs * number of identical sub SSCCs)

Grouped items

By default, the system groups the items that have the same identical item number, batch1 number

and best before date. You can ungroup and then regroup the items by clicking the button. If the grouped lines have items managed by serial numbers, the system asks you to scan the serial numbers by picklist lines as a next step in the flow.

5/23

:: Produmex Windows Terminal ::				— C) X			
Consolidation packing								
Elise Sellas Westbury Hill Bristol 56-58 UNITED KINGDOI	М	SSCC: Remarks	:	[No SS	CC36			
Product	Batch Number Best Before Date	Total	Quanti Pac	ity to :k				
123456789 - RF-W230 DIS_003, Photo frame	265017 10/10/2020	1 PCS	- :	1 +				
123456789 - RF-W230 DIS_003, Photo frame	265017 10/10/2020	1 PCS	- :	1 +				
Add SSCC	Add Items Unit		Select All	Skip all it	ems			
E STOP	Ö				€			

Adjust quantity

By default, the system displays the total quantity in the Quantity to pack section. The maximum quantity that can be packed is the total quantity on the line.

Adjust the quantity by tapping + or - in the Quantity to pack section. The quantity can also be entered by using a keyboard. Click on the quantity field and enter the quantity on the keyboard. Press Enter to close the keyboard.

Last update: 2019/03/25 implementation:wms:consolidated_packing https://wiki.produmex.name/doku.php?id=implementation:wms:consolidated_packing&rev=1553510200 10:36

:: Produmex Windows Terminal ::								- [ı ×
		Con	solidati	ion pacl	king				
Elise Sellas Westbury Hill Bristol 56-58 UNITED KINGDOM	И				SCC: marks:		<u>[</u>]	lo SS	ccj
Product			Number efore Da	ite To	otal	Ç	uantity to Pack		
123456789 - RF-W230 DIS_003, Photo frame		7	8	9	</td <td></td> <td>1</td> <td>+</td> <td></td>		1	+	
123456789 - RF-W230 DIS_003, Photo frame		4	5	6	-		1	+	
		1	2	3	ENTR	•			
			0						
Add SSCC	Add Iter	ns	Finish U	Logistic nit	s	elect Al	l Sk	tip all it	ems
E STOP	ð							2	€

Select items

Select the items to be packed by clicking on the line or use the Select all button to select all the items on the list.

×

6. Add items

If at least one item is selected, the Add items button becomes active. Tap the button and the selected items are moved onto the logistic unit.

The items that have already been packed are not displayed on the list. Packed items cannot be removed from the logistic unit.

When at least one item is packed onto the logistic unit, the system creates a LUID for it. After the LUID is generated, it is displayed on the screen.

When changing shipping type for Logistic unit has been enabled on the Packing Controller, a 'Shipping Type' drop-down menu is activated on this window. Select between different types of manual and auto shipping. The shipping type also appears on the LUID table in the 'Shipping Type' column.

Note: At this point, only the sub-variants of manual or auto shipping types can be selected (based on the specifics of the Sales Order header). If the shipping types differ on the lines, the request will be blocked.

:: Produmex Windows Terminal ::					-	□ ×
	Scan a Mov	able Locatio	on to Add	Items		
Elise Sellas Westbury Hill Bristol 56-58 UNITED KINGDO	DM		SSCC: Remarks		00000000)3254
Shipping Type:	Auto Ship	~				
Product		Number Before Date	Total	Quant Pa		
1234556789 - RF-W230 DIS_003, Photo frame	26501 10/10		5 PCS	-	5 🕂	
Enter Cart Manually	Add Items	Finish Logi Unit	stic	Select All	Skip all i	tems
STOP 🔗	Ì					Ð

7. Add SSCC

New items for the same customer can be added to the list of possible items to pack. For adding items from another moveable location, scan the barcode or tap the Add SSCC button and enter the code.

8. Finish SSCC

If there is at least one item packed into the logistic unit, the 'Finish logistic unit' button will be active.

If changing shipping type for logistic unit has been enabled, the shipping type for each added item can be changed here, too, before finishing the logistic unit. Note that only variants of auto or manual shipping type can be selected based on the Sales Order header of the added item.

After tapping the Finish logistic unit button, the system prints the SSCC label. (Packing:

Last update: 2019/03/25 implementation:wms:consolidated_packing https://wiki.produmex.name/doku.php?id=implementation:wms:consolidated_packing&rev=1553510200 10:36

finished logistic unit event (500) print event) After finishing a logistic unit, the system displays the shipping dock where to logistic unit has to be moved.

×

When creating a master SSCC during the picking, after the Finish logistic unit button has been tapped, the system asks whether to finish the master SSCC or the sub SSCC.

Tap the Master SSCC is full button to finish the master SSCC. After finishing the master logistic unit, the system prints the labels for the master and the sub logistic units and displays the dock where the master logistic unit has to be moved. On the next screen declare whether you would like to start a master or a sub SSCC.

×

Tap the Sub SSCC is full button to finish the sub SSCC. The picking will be continued onto a new sub SSCC, but onto the same master SSCC.

If every item is packed and *Automatic shipping* is enabled for the shipping type of the base document, the *Master SSCC is not finished screen* is opened. Tap the Yes button to finish the master SSCC as well.

Master SSCC is not finished								
Finish master SSCC?								
Finish master SSCC?								
				_				
Yes	No							
	8	×.	R	Ð				

On the next screen the select a logistic unit to pack on or tap the Start new logistic unit button to create a new logistic unit.

9. Finish SSCC / Capture weight

If the *Ask weight*? or *Ask weight Sub SSCC*? option is set to true on the Produmex pick list types user table for the picklist, and there is a scale defined under the shipping dock/packing line, the weight of the logistic unit can be measured on the connected scale after the logistic unit is finished.

×

				·		Weig							
We	ight - Setup		-	- - ×	Un	its of Mea	asure - Set	tup					
#	Code	Unit Name	Weight (mg)	7	#	UoM Code	UoM Name	Length	Width	Height	Volume	Volume	UoM V
1	g	Gram	1.000	A	1	Manual	Manual					ci	•
2	kg	Kilogram	1,000,000		2	KG	kg					ci	* 1
з	Lb	Pound	453,592.4		3	Lb	Pound					ci	▼ 1
4	mg	Milligram	1		4	mg	Miligram					ci	▼ 1
5	Oz	Ounce	28,300		5	Oz	Ounce					ci	T 1
6					6							ci	•
				_									
				_									
				_									
				_									
				_									
				_									
				_								_	

Master SSCC: Enter the weight of the master logistic unit	Master SSCC: Enter the weight of the mas	ter logi	istic ur	nit	
4.06 (1)		are <mark>(3</mark>)	(1)	
ZERO <mark>(2)</mark> TARE <mark>(3)</mark>		7	8	9	</td
Current scale: SD01(4)		4	5	6	-
Switch scale (5)		1	2	3	ENTR
SSCC:(6) 0000000000002653 Theoretical weight:(7) 4.00 KG	(4) Scale code: Scale01 Switch scale (5)	C)		ENTR
Sub SSCC weight:(8) 4.02 KG	SSCC: (6) 0000000000002691 Theoretical weight: (7) 2.00 KG Sub SSCC weight: (8) 1.91 KG				
😌 💷 🏖 😢 😔	()		8	9 á	2 🕤

1. The measured weight. The UoM is the UoM defined for the scale. The number of decimals displayed depends on the scale accuracy.

This field is automatically filled with the weight measured on the connected scale. It is possible to manually overwrite the measured weight.

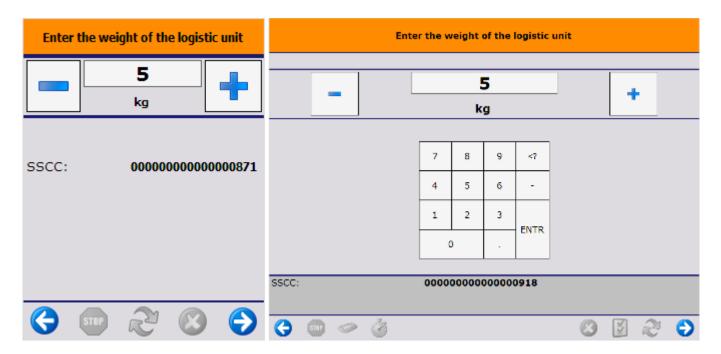
If the weight is manually added or the connection to the scale is lost, the value starts flickering in red.

2. If the scale has a defined zero command, the Zero button is displayed.

- 3. If the scale has a defined tare command, the Tare button is displayed.
- 4. The code of the connected scale.
- 5. If there are more than one scales defined under the dock/packing line, an additional Switch scale button is displayed on the screen. Tap this button to change the scale. On the next screen select the scale from the list. Every scale defined under the dock/packing line is listed. After switching the scale, the screen will use the chosen scale. After proceeding with the flow, and a new weight needs to be captured, the standard logic to choose a scale is used. This means that switching scale only switches the scale for the current weighing.
- 6. SSCC number of the logistic unit.
- 7. *Theoretical weight*: The *theoretical weight* is the sum of the weight of the items on the logistic unit. The item weight can be defined on the Sales tab of the Item Master Data.
- 8. In the case of master SSCC's, an additional *Sub SSCC's weight* value is shown. The value is calculated as the sum of the measured weight of the Sub SSCC's.

10. Finish SSCC / Enter dimensions

If the *Ask weight?*/ *Ask weight Sub SSCC*? option is enabled for the pick list type, and there is no scale defined under the shipping dock/packing line, the user has to enter the weight of the (sub) logistic unit after it is finished. The data will be stored on the PMX_LUID table. The unit of measure is the Default Weight UoM set on the Display tab of General Settings.



Based on the pick list type settings, the user might have to enter the dimension(s) of the (sub) logistic unit after it is finished.

When there are package dimensions defined on the Package Dimensions table, the user can select a predefined dimension instead of entering the length, the width and the height manually. The 'Select a package' screen opens. On this screen every package dimension that is not cancelled is listed. Select a dimension from the list or tap the Enter dimensions manually button.

Ð

Select a package		Select a package
		long box - 12x4x4 (longbox)
long box - 12x4x4		standard box - 16x12x6 (standbox)
(longbox)		tall box - 4x4x12 (tallbox)
standard box -		
16x12x6 (standb		
tall box - 4x4x12 (tallbox)		
Enter dimensions		
manually		Enter dimensions manually
🔇 🐨 2 🗵	\mathbf{r}	C (a)

When the Enter dimensions manually button is tapped or there are no package dimensions defined, the user has to enter the dimensions manually.

- If the *Ask length? Ask length Sub SSCC*? option is enabled for the pick list type, the user has to enter the length of the (sub) logistic unit after the it is finished.
- If the Ask width?/ Ask width Sub SSCC? option is enabled for the pick list type, the user has to enter the width of the (sub) logistic unit after the it is finished.
- If the *Ask height?/ Ask height Sub SSCC*? option is enabled for the pick list type, the user has to enter the height of the (sub) logistic unit after the it is finished.

The data will be stored on the PMX_LUID table. The unit of measure is the Default Length UoM set on the Display tab of General Settings.

Enter the length o	of the logistic unit		Ente	r the v	vidth a	of the l	ogistic u	nit			
	.2 m	_ 4 _ cm]	•	•	
SSCC: 00	0000000000000871			7	8	9	<1				
				1	2)	3	ENTR				
STOP	रे 😢 🌖	sscc:	Č1	0000	00000	00000	0918	8	S	ĝ.	6

11. Skip items

It is possible that there are goods that cannot be packed. Continue the packing until only products that cannot be packed are listed on the screen.

Tap the Skip all items button to skip every remaining item.

On the next screen confirm that you would like to skip the remaining items.



The system proceeds to the *Select a reason* screen.

Select a reason from the list. Every reason that can be used for picking is listed.

×

On the next screen define where the skipped items should be moved.

- To move the items onto an SSCC, scan the SSCC. If the scanned SSCC is not in stock, identify the destination location as described below.
- To create a new SSCC, tap the New SSCC button then identify the destination location as described below. If configured, the 700 WHS: created LU print event is triggered and the logistic label is printed.
- Scan the destination location or select it from a list.
 - Tap the Select location button to list every active location from the warehouse.
 - Tap the Select empty location button to list every empty active location from the warehouse.

Please note: If no SSCC is created or selected, the items will be moved without a linked logistic unit.

Scan destination location or SSCC									
	Destination location:								
	Select location								
	Select empty location								
	New SSCC								
STOP			× ×	R	•				

After the destination location is defined, the system removes the locking from the skipped products and updates the pick list.

- If the total quantity on the pick list line is skipped, the system adds the selected reason to the pick list line and closes it.
- If the pick list line is partially skipped, the 'Open' and 'Picked' quantity of the pick list line is updated with the packed quantity. A closed line will be added with the quantity and the details of the skipped product and the selected reason.

After the lockings are removed, the skipped products are moved onto the selected logistic unit or destination location. Then the system returns to the *Select moveable location* screen where the user can continue the packing.

12. Restarting the flow

The flow can be continued after it has been stopped. Restart the flow and select the packing location. If there are a moveable location, scan the moveable location as well. Then the system will offer the option to choose from the existing logistic units or to start a new one.

Sel	ect a logistic unit to pack on	Select a logistic unit to pack o	n			
<pre> #</pre>	Customer 1 - 1 Street, Atlanta K	Y 456789	, USA		→ D2.1 Customer 2 - 22 Street, New York NY 885544, USA 00000000000001366 → PA1.1	6
				V	Customer 2 - 22 Street, New York NY 885544, USA 00000000000001427	Ø
) Start new logistic unit				Start new logistic unit	
()		8	2	€	🤝 🐨 🧞 🛞 -	€

After selecting the logistic unit, scan the SSCC barcode on the logistic unit.

Identify the SSCC to pack on	Identify the SSCC to pack on
> BarCode <	> BarCode <
^{ℊ,} → D2.1	<mark>99 → D2.1</mark> 000000000000001366
000000000001618	
 S (1) S (2) S (2)	

13. Continue the packing onto an already packed logistic unit

When there are already packed logistic unit(s) for the selected customer or shipping address, the system will offer the option to choose from the existing logistic unit(s) or to start a new one. After selecting a logistic unit, scan the SSCC barcode on it.

9.2.2. Consolidated packing flow (keeping SSCC number)

Overview

This flow can be used to double check the content of the carton boxes/logistic units prepared during the Prepare carts and Multi-picking flows. The flow keeps the SSCC number added to the carton boxes

during the Prepare carts flow and it will only fully confirm or reject the content.

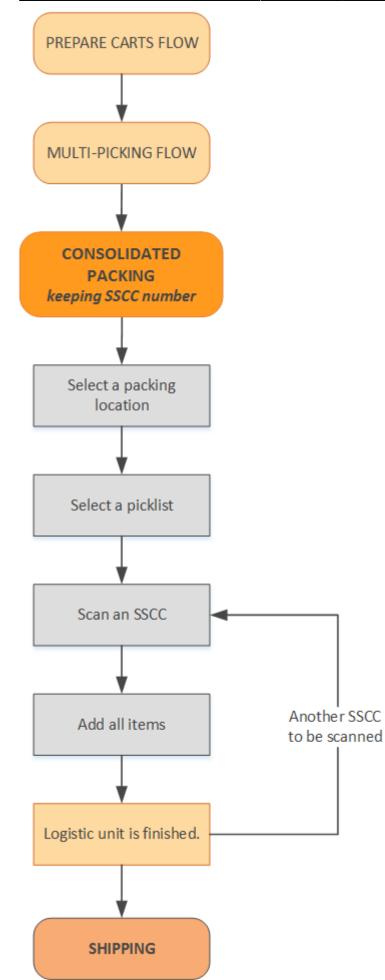
Configuration

Before starting the picking flow, set the following configurations:

- Check the 'Always status picked' box at the 'Produmex pick list types' window. For more information see: 3.2.3.2. Produmex pick list types (PMX_PLTY)
- Link the packing line to the zone where the picking takes place at the 'Link pack line to zone' window. For more information see: 3.2.3.9. Link pack line to zone (PMX_LPLZ).

Workflow

Last update: 2019/03/25 implementation:wms:consolidated_packing https://wiki.produmex.name/doku.php?id=implementation:wms:consolidated_packing&rev=1553510200 10:36 _____



Last update: 2019/03/25 implementation:wms:consolidated_packing https://wiki.produmex.name/doku.php?id=implementation:wms:consolidated_packing&rev=1553510200 10:36

- Prepare carts
- Multi-picking
- Select a packing location
- Select a picklist
- Scan an SSCC
- Add items
- Logistic unit is finished.
- Shipping flow

1. Select a packing location

Select a packing line where the logistic units to be checked are located.



2. Select a picklist

After selecting a packing location, the system will display the list of the picklists which have been picked to the zone linked to the packing location.

Select a picklist from the list and proceed by pressing the right arrow.

:: Produmex Windows Terminal ::	- 0	×
Select a pick list		
Lilla Keys - Brownlow Hill, Liverpool, UNITED KINGDOM	33	
John Miller - Bridgewater Street, Manchester, UNITED KINGDOM	34	
🤆 STOP 🧼 👸 😢 🕅		€

3. Scan an SSCC

Scan the SSCC barcode of the logistic unit. Even if multiple SSCC's are available to be scanned, only one SSCC can be scanned at a time.

Please note that logistic units cannot be selected from the list.

:: Produmex Windows Terminal ::	- D X							
Scan an SSCC								
PB_2 12345678900000418	Warehouse 1(WH_1)							
🔆 👓 🧼 🖉	😣 🕅 🗞 😔							

4. Add items

On the next screen you can see that the flow keeps the SSCC number and displays it on the upper right corner of the screen. Click Add items.

Please note that **in this scenario all items need to be packed at the same time.** It is not possible to partially pack because the goods are stored in the same SSCC. All the goods that are on the SSCC will be displayed and automatically selected. It is not possible to adjust the quantity or deselect a line.

When changing shipping type for Logistic unit has been enabled on the Packing Controller, a 'Shipping Type' drop-down menu is activated on this window. Select between different types of manual and auto shipping. The shipping type also appears on the LUID table in the 'Shipping Type' column.

Note: At this point, only the sub-variants of manual or auto shipping types can be selected (based on the specifics of the Sales Order header). If the shipping types differ on the lines, the request will be blocked.

:: Produmex Windows Terminal ::					- 🗆	×				
Scan a Movable Location to Add Items										
Elise Sellas Westbury Hill Bristol 56-58 UNITED KINGDOM		SSCC: Remarks:	00000	00000	00000	69 3254				
Shipping Type:	Auto Ship	~								
Product	Batch Number Best Before Da	lotal		ntity to ack						
1234556789 - RF-W230 DIS_003, Photo frame	265017 10/10/2020	5 PCS	-	5	÷					
Enter Cart Manually		Logistic	Select All	Sk	ip all ite	ems				
	Ì		\otimes		2	€				

5. Logistic unit is finished

After tapping the Add items button, the system automatically performs the Finish logistic unit functionality. The packed SSCC is ready for shipping and moved to the destination location defined in the picklist.

6. Skip all items

In this process it is not possible to partially pack, therefore the goods in the box are either complete and can be packed, or there is something wrong (for example items missing, there are more items than necessary in the box, etc.), in which case all items need to be skipped.

Tap the Skip all items button and on the next screen confirm that you wish to skip all the items.



The system proceeds to the Select a reason screen.

Select a reason from the list. Every reason that can be used for picking is listed.

×

On the next screen define where the skipped items should be moved.

- To move the items onto an SSCC, scan the SSCC. If the scanned SSCC is not in stock, identify the destination location as described below.
- To create a new SSCC, press the New SSCC button then identify the destination location as described below. If configured, the 700 WHS: created LU print event is triggered and the logistic label is printed.
- Scan the destination location or select it from a list.
 - Press the Select location button to list every active location from the warehouse.
 - Press the Select empty location button to list every empty active location from the warehouse.

Please note: If no SSCC is created or selected, the items will be moved without a linked logistic unit.

Scan destination location or SSCC						
	Destination location:					
	Select location					
	Select empty location]				
]				
STOP CO CO	New SSCC					

After the destination location is defined, the system removes the locking from the skipped products and updates the picklist. The system adds the selected reason to the pick list line and closes it.

After the locking is removed, the skipped products are moved onto the selected logistic unit or destination location. Then the system returns to the Select a picklist screen where the user can continue the packing.

