# LOADS AND SHIPMENTS AND WAVES, OH MY!

This blog series will cover scenarios which represent several common practices used in today's warehouses. These scenarios will illustrate how key D3650 Warehouse Management concepts and configuration considerations are used to enable the desired process design to meet the most simple and complex requirements.

> Written by: Tim Downie Western Computer AX Consultant

Part 2 of 3 – Multiple Orders: One shipment to many sales orders



## Loads and Shipments and Waves, Oh My!

## Part 2 of 3 – Multiple Orders: One shipment to many sales orders

#### **Manual Process**

To make this happen, the following configuration parameter settings must be defined:

- 1. Warehouse management>Setup>Warehouse management parameters>Loads
  - a. Automatically create Load at SO entry: No
  - b. Consolidate loads during wave processing: No

Dynamics 365 V Operations	Warehouse management > Setup > Warehouse management parameters	USMF
Save OPTIONS P		
Warehouse manageme	ent parameters	
General	Set up the load requirements	
Loads	Relativity (setting state) setting state)         Automatically center at transfer under .         Center lange strategies	/areho
Location directive failures	Ceate big of load history for No	.rder.pr

- 2. Warehouse management>Setup>Waves>Wave templates
  - a. Automate wave creation: Yes (this is optional for this scenario as a shipment with no wave can still be consolidated)
  - b. Process wave at release to warehouse: No
  - c. Automate wave release: No



### Scenario Summary

As with the single order picking process from Part 1 of this series, the automated functionality certainly creates a far from efficient process than the manual process. By manually consolidating shipments, the ties of a shipment to loads and waves was demonstrated. Without understanding how these relationships work, it is difficult to use an automated process effectively. While the shipment consolidation can easily be implemented with a single parameter change, it is important to understand the impact of that change. In this case, the impact of the change is all systemdriven criteria (consolidation rules) to determine what can be consolidated.



Dynamics 365 🗸 C	Operations	Warehouse manageme	nt > Setup > Waves	s 〉 Wave ten	mplates		
🖉 Edit 🛛 🕂 New 📋 Dele	ete Move up	Move down Edit query	Validate template O	options 🔎			
Click the edit button to make	changes.						
Filter Wave template type Shipping 24 Shipping Default 24 Shipping Default 1		Wave template name 24 Shipping Default General WAVE TEMPLATE INFORMAT Automate wave creation Yes	te Wave template description 24 Shipping Default TTON Proce No No	n Iss waye at release	Wave template sequence 1 e to warehouse cally at thresh	Site 2 Automate wave release No Automate replenishment work No WAVE THRESHOLDS	Warehouse 24 release
						Wave weight threshold 0.00	

- 3. Warehouse management>Setup>Warehouse>Warehouses
  - a. Consolidate shipment at release to warehouse: No

Dynamics 365 V Operations	Warehouse management > Setup > Warehouse > Warehouses
	se options P
Click the edit button to make changes.	
	Warehouses Warehouse Name
24  Site 2 - Warehouse Management	24         Site 2 - Warehouse Management           2         Default         28         27
	Master planning Inventory and warehouse management
	Location names Addresses
	Hierarchy
	Retail
	Warehouse
	Ute weekhouse management process Rearray investory at load posting CYCL COUNTING CONSIDERT Yes No No Management process Rearray when cellers are released by Yes No

- 4. Accounts receivables>Setup>Accounts receivables parameters>General>Sales default values>Reservation
  - a. NOTE: This is not a required setting. However, for loads and shipments to be created, reservations must exist for the sales order lines. By setting the Reservation parameter to Automatic, the reservation is made at SO line creation if the quantity is available.

Dynamics 365 🗸	Operations	Accounts receivable > Setup	> Accounts receivable parameters
Save OPTIONS	Q		
Accounts rec	ceivable pa	rameters	
General		Set up requirements for sale	s order approval and customer info
Updates		Customer One-time customer account	Minimum reimbursement
Project		Sales default values	10.00
Summary update		Order type Sales order	Sales order pool 01
Shipments		Period of validity 0	Reservation Value

The steps below demonstrate manual shipment consolidation:

- 1. Create multiple sales orders for the same customer and same delivery date and release to warehouse.
- 2. Go to Warehouse Management>Shipments>All Shipments and sort by customer.



ynamics 36	5 🗸 Operat	ions	Warehouse mar	agement > Shipmer	nts 🗲 All ship	ments									USMF	e مر	<b>P</b> (0)	0	1
	/ 🖹 Delete Sł	HIPMENT	IS TRANSPORTATI	ON OPTIONS A													đ		
RSONALIZE	PAGE OPTION	s	EDIT SHA	RE															
ways open for editi ersonalize this form dd to workspace $\lor$	ng Security diagr Advanced Filt Record info	er/Sort	Read mode Get Revert	a link 🗸															
All shipm	ients																		
Display close	d shipments														_				
SHIPMENTS														/					
✓ Shipment	D Î SH	ip V	Wave ID	Load ID	Direction	Shipment lines	Containers	Volume	Weight	Site	Warehouse	Account number ~	Customer name		Drop-c	off date		Pickup	date
USMF-00	0001 W	/aved	USMF-000000001	USMF-000001	Outbound	1	0	160.00	30.00	2	24	î Sort A to Z			1/13/	2016		1/13/2	016
USMF-00	0002 W	/aved	USMF-000000002	USMF-000002	Outbound	1	0	160.00	30.00	2	24	↓ Sort Z to A			1/15/	2016		1/14/2	016
USMF-00	0003 In	pro	USMF-000000009	USMF-000005	Outbound	2	3	785.00	205.00	6	63	· · · · · · · · · · · · · · · · · · ·			4/15/	2016		4/15/2	016
USMF-00	0005 W	/aved	USMF-000000013	USMF-000007	Outbound	1	0	16.00	3.00	2	24	Account number	begins with $\vee$	Diego	3/15/	2017		3/14/2	017
USMF-00	0006 W	/aved	USMF-000000013	USMF-000008	Outbound	1	0	9.00	4.00	2	24			Diego	3/15/	2017		3/14/2	.017
USMF-00	0007 W	/aved	USMF-000000013	USMF-000009	Outbound	1	0	0.00	5.10	2	24	Apply	Clear		3/15/	2017		3/14/2	017
USMF-00	0008 W	/aved	USMF-000000015	USMF-000010	Outbound	2	0	25.00	7.00	2	24	US-004	Cave Wholesales		3/17/	2017		3/14/2	017
USMF-00	0009 W	/aved	USMF-000000015	USMF-000010	Outbound	1	0	0.00	5.10	2	24	US-002	Contoso Retail Los	Angeles	3/15/	2017		3/14/7	017
USMF-00	0010 W	/aved	USMF-000000016	USMF-000013	Outbound	1	0	32.00	6.00	2	24	US-001	Contoso Retail Sar	n Diego	3/17/	2017		3/16/2	.017
USMF-00	0011 W	aved	USMF-000000017	USMF-000014	Outbound	1	0	48.00	9.00	2	24	US-001	Contoso Retail Sar	n Diego	3/17/	2017		3/16/2	.017
USMF-00	0012 0	pen			Outbound	1	0	90.00	40.00	2	24	US-001	Contoso Retail Sar	n Diego	3/22/	2017		3/21/2	.017
USMF-00	0013 0	pen	USMF-000000018		Outbound	1	0	144.00	27.00	2	24	US-001	Contoso Retail Sar	n Diego	3/22/	2017		3/21/2	.017

3. Identify the shipments to consolidate and select ONE of the shipments and click Consolidate shipments.

C Edit + New Delete SHIPMENTS	TRANSPORTATION OPTIC	ons <i>P</i>										
SHIPMENTS Confirm shipment Transfer shipment to existin Consolidate shipments Transfer shipment to new lo	ACTIONS ng load Change work location oad	GENERATE WORK Bill of lading Work of Packing slip Skip no Send ASN	details on-mandatory work	RELATED INFORMATION Quality orders	PRINT Load list report Pick list Packing list	NAFTA certificate of origin Certificate of origin Commercial invoice						
Click the edit button to make changes.	Click the edit button to make changes.											
All shipments												
Shipment ID Ship	Wave ID Load II	Direction	Shipment lines	Containers Bill of ladir	ig ID	Volume	Weight	Site	Warehouse	Account numb 1		
USMF-000006 Waved	USMF-000000013 USMF	-000007 Outbound	1	0		9.00	4.00	2	24	US-001		
USMF-000010 Waved	USMF-000000016 USMF	-000013 Outbound	1	0		32.00	6.00	2	24	US-001		
USMF-000011 Waved	USMF-000000017 USMF	-000014 Outbound	1	0		48.00	9.00	2	24	US-001		
USMF-000012 Open	USMF	-000018 Outbound	3	0		1,134.00	467.00	2	24	US-001		
✓ USMF-000015 Open	USMF-000000020	Outbound	2	0		32.00	6.00	2	24	US-002		
USMF-000017 Open	USMF-00000022	Outbound	1	0		16.00	3.00	2	24	US-002		
USMF-000018 Open	USMF-00000023	Outbound	1	0		108.00	48.00	2	24	US-002		
USMF-000009 Waved	USMF-000000015 USMF	-000010 Outbound	1	0		0.00	5.10	2	24	US-002		
USMF-000001 Waved	USMF-000000001 USMF	-000001 Outbound	1	0		160.00	30.00	2	24	US-003		
USMF-000007 Waved	USMF-000000013 USMF	-000009 Outbound	1	0		0.00	5.10	2	24	US-003		
USMF-000008 Waved	USMF-000000015 USMF	-000010 Outbound	2	0		25.00	7.00	2	24	US-004		
USMF-000002 Waved	USMF-00000002 USMF	-000002 Outbound	1	0		160.00	30.00	2	24	US-027		

4. The Shipment Consolidation form will display the shipment eligible to be consolidated with the shipment selected in step 3. Select the shipment to consolidate and click OK to accept the consolidation.

$\checkmark$ OK $\times$ Cancel OPTIONS $>$					
USMF-000015 Shipment consolidation					
Shipment ID 1 Load ID	Order number	Site	Warehouse 🍸	Shipment status 🏹	Account number 🏹
USMF-000017	000799	2	24	Open	US-002
USMF-000018	008000	2	24	Open	US-002

- 5. Repeat steps three and four to consolidate additional shipments.
- 6. Now, in the All Shipments form, the shipments selected in the Shipment Consolidation form are no longer displayed. Those sales orders are now part of the shipment selected in step 3. Additionally, the sales order lines are now part of the shipment wave of the consolidated shipment.



<ul> <li>Shipment ID</li> </ul>	Ship 🍸 War	ve ID	Load ID	Direction	Shipment lines	Containers	Bill of lading ID
USMF-000005	Waved US	MF-000000013	USMF-000007	Outbound	1	0	
USMF-000006	Waved US	MF-000000013	USMF-000008	Outbound	1	0	
USMF-000010	Waved US	MF-000000016	USMF-000013	Outbound	1	0	
USMF-000011	Waved US	MF-000000017	USMF-000014	Outbound	1	0	
USMF-000012	Open		USMF-000018	Outbound	3	0	
USMF-000009	Waved US	MF-000000015	USMF-000010	Outbound	1	0	
USMF-000015	Open US	MF-000000020		Outbound	4	0	
USMF-000001	Waved US	MF-000000001	USMF-000001	Outbound	1	0	
USMF-000007	Waved US	MF-000000013	USMF-000009	Outbound	1	0	
USMF-000008	Waved US	MF-000000015	USMF-000010	Outbound	2	0	
USMF-000002	Waved US	MF-000020002	USMF-000002	Outbound	1	0	
USMF-000003	In pro US	MF-00000009	USMF-000005	Outbound	2	3	
DAD DETAILS				Note that the s no longer in the displayed in the	hipment selected e shipment list but e load details of th	int he Shipmen the orders in the consolidated	t Consolidation form a nose shipments are n shipment.
000797	USMF-000015	5 A0001		1.00	pcs		
000798	USMF-000015	5 A0001		1.00	Pcs		
000799	USMF-000015	5 A0001		1.00	Pcs		
00800	USMF-000015	5 A0002		12.00	Pcs		

Now that the shipments have been consolidated, the wave will need to be processed and released to provide a pick list. Click on the wave ID from the shipment line to access the wave or you can go to Warehosue Management> Outbound Waves>Shipping Waves>Pending Waves and select the relevant wave to process. NOTE: In Part 1 of this series, manual creation of a wave is demonstrated. This step could be applied here if desired. To avoid redundancy that procedure is not included in here. Please refer to Part 1.

7. Once in the wave, click Process then Release.

AVE			RELATED I	NFORMATION	PRINT
aintain shipments ocess lease	Progress Cleanup wave data Processing history	Wave Allocation Processing Log Batch jobs	Work Loads	Shipments Containerization history	Pick list
Click the edit but	ton to make changes.				
waves	0000020 .	LISME-000015			
031011 -00	.0000020	031011 -000013			
Wave					
Wave					
WAVE		STATUS		STORAGE DIMENSIO	ons
WAVE Wave ID		STATUS Wave status		STORAGE DIMENSIC	DNS
Wave ID	020	STATUS Wave status Created		STORAGE DIMENSIO Site 2	DNS
Wave ID USMF-000000 Description	020	STATUS Wave status Created Process		STORAGE DIMENSIO Site 2 Warehouse	DNS
Wave ID USMF-000000 Description USMF-000015	020	STATUS Wave status Created Process No		Site 2 Warehouse 24	DNS
wave Wave ID USMF-000000 Description USMF-000015	020	STATUS Wave status Created Process No		STORAGE DIMENSIO Site 2 Warehouse 24 ATTRIBUTES	DNS
Wave Wave ID USMF-000000 Description USMF-000015 TEMPLATE Wave template na	020	STATUS Wave status Created Process No		STORAGE DIMENSIO Site 2 Warehouse 24 ATTRIBUTES Attribute 1	DNS

8. The wave has now created work as defined by the Work Template. The work is in the form of a Pick list. You will notice, by clicking on Work in the "Related information" area that all lines from all sales orders in the shipment are on the pick list.



	C Edit WAVE Mainta Process Release	t + New Delete WA in shipments Progress s Cleanup wave data e Processing history	VE WORK OPTIONS Wave Allocation Processing Log Batch jobs	C RELATED INFORMATION Work Shipments Loads Containerization h	PRINT Pick list istory		
CEdit WORK SHIPMEN	T RELATED INFORMATION	N OPTIONS P					
USMF-00000020 : USMF-00001 Work	5						
OVERVIEW GENERAL							
✓ Work priority Lock	ked by Work I	D↑♥ Work status	Site	Warehouse	Work pool ID	Target license plate IC	) Work order type
50	USMF	F-000021 Open	2	24			Sales orders
4							
LINES GENERAL							
Transactions User ac	tions Custom data Ca	ancel work line Display dimen	sions				
✓ Work status	Work type	Location	Item number	Product name	Work quantity Order	r number	Remaining gua Unit
Open	Pick	FL-001	A0001	HDMI 6' Cables	1.00 0007	97	1.00 pcs
Open	Pick	FL-001	A0001	HDMI 6' Cables	1.00 0007	'98	1.00 pcs
Open	Pick	FL-001	A0001	HDMI 6' Cables	1.00 0007	'99	1.00 pcs
Open	Pick	FL-006	A0002	HDMI 12' Cables	12.00 0008	100	12.00 pcs
Open	Put	BAYDOOR			15.00		15.00

- 9. Now the wave/order is ready to be picked. Click Print>Print Picklist to print the picklist. The picklist will then be picked using the Dynamics 365 for Operations Warehousing App on a mobile device. Once the picking work is complete the shipment must be confirmed.
- 10. The shipment confirmation can be done in either the shipment itself or the load/load planning workbench.
  - a. Confirm a shipment from the shipment:



b. Confirm a shipment from the Load:



Edit + New	Delete LOADS	SHIP AND RECEI	VE TRANSPORTATION	OPTIONS 🔎			
NFIRM	RECEIVE	GENERATE	ERSE				
bound shipment	Product receipt	Bill of lading Rev	erse shipment confirmation				
utbound shipment	Packing structure	Packing slip Can	cel packing slips				
		Send ASN Can	cel product receipt.				
Click the edit butt	on to make changes.						
JSMF-00	0022 : Outb	ound					
INFORMATION		Load template ID		Work status		Load arrival c	date and time
Load ID				0.00% of work con	pleted	3/22/2017	7 07:00:00 AM
USMF-000022		Foundation		Order sumber			
Investig		Equipment		Order number		LIA	
No	ī						
NO		Load status				Required sail	date and time
		Waved		DATES			
				Scheduled load shippir	ig date and time		
				3/21/2017 07:00:0	0 AM		
Load lines							
🗊 Delete 🛛 Re	duce picked quantity	Display dimension	s Sales line serials				
✓ Invalid	Order number	Shipment ID	item number	r Code 1		Code 2	Code 3
	000797	USMF-000	015 A0001				
	000798	USMF-000	015 A0001				
	000799	USMF-000	015 A0001				
	000800	LISME-000	015 40002				

c. Confirm a shipment from the Load Planning Workbench:

Dynamics 365 V Operations	5 Warehouse manag	ement > Loads > Lo	ad planning workbench								
Save SUPPLY AND DEMAND FILTE											
ADD	RELATED INFORMATION	CONSOLIDATE									
To new load Entire order to new load To existing load Entire order to existing load	Rate route workbench Original document	Load building workbench									
Load planning workb	ench										
Supply and demand filter											
SHIPMENTS SALES LINES TRANS	CONFIRM	OFR LINES									
t number Order number	Inbound shipment	Delivery reci	street Street	Ci	ty						
	Outbound shipment 🔸			We didn't find any	thing						
	RECEIVE			to show here	uning						
	Product receipt										
	Packing structure										
	Create cross docking pack	ing structure									
¢.	REVERSE CONFIRMATIO	N									
LOADS	Reverse shipment confirm	ation									
🗊 Delete 🛛 Release 🏏 Actions 🗎	Ship and receive 🗸	Rating and routing $\checkmark$	Generate 🗸 Related inform	ation V Transportation	~						
Load filter	Load filter										
✓ Load ID ↓ Invalid	Silection	Site	Warehouse	Load lines	Shipments						
✓ USMF-000022	Outbound	2	24	4	1						
USMF-000018	Outbound	2	24	3	1						

11. The shipment has now been confirmed. Packing Slip, Bill-of-Lading and/or other required documention can now be printed to be shipped with the order. The process is complete.



#### Automatic Process

Now let's take that same scenario but change settings in the Warehouse parameters, wave template, and the step-by-step process.

To make this happen, the following configuration parameter settings must be made:

- 1. Warehouse management>Setup>Waves>Wave templates
  - a. Automate wave creation: Yes (this is optional for this scenario as a shipment with no wave can still be consolidated)
  - b. Process wave at release to warehouse: Yes
  - c. Automate wave release: Yes

Dynamics 365 🗸 🤇	Operations	Warehouse management > Setup >	Waves > Wave templates			
☐ Save + New 前 De	elete Move up	Move down Edit query Validate templ	late OPTIONS 🔎			
P Filter		Wave template	escription Wave template sequence	Site	Warehouse	Template status
Wave template type Shipping	$\sim$	24 Shipping Default 24 Shipping D	Default 1	2	24	Valid
24 Shipping Default 24 Shipping Default 1		General wave tempLate information Automate wave creation Yes Assign to open waves No	Process wave at release to warehouse Yes Process wave automatically at thresh No	Automate wave release Yes Automate replenishment work No	WAVE THRE Wave weigh release	tt threshold 0.00

- 2. Warehouse Management>Setup>Warehouse>Warehouses
  - a. Consolidate shipment at release to warehouse: Yes

Dynamics 365 V Operations	Warehouse management > Setup >	Warehouse > Warehouses			USMF ,P
🖾 Save 🕂 New 🗟 Delete WAREHC	USE OPTIONS 🔎				
Filter  24 Star 2 - Warehouse Management	Warehouses Varehouse 24 Site 2 2 Varehouse M	anagement Type Default	Quarantine warehouse	Transit warehouse	REFERENCE Vendor account
	Master planning Inventory and warehouse manag Location names Addresses Hierarchy Patrail	gement			Y
	Varehouse Use warehouse management process Yes Print BOL before confirming shipment No	Reserve Inventory at load posting No Parallel Reserve when orders are released by No Parallel	CYCLE COUNTING Allow pallet moves during cycle coun Yes	CONSOLIDATION Consolidate shipment at release to w Ves	INVENTORY STATUS CHANGE Remove reservations and markings None
	RESERVATIONS Reserve only warehouse in productio No	NEGATIVE INVENTORY Rinancial negative inventory No Physical negative inventory	Use unique check digits No EEDUCE PICKED QUANTITY Concernent land land	Default inventory status ID Available Default container type	LABOR STANDARDS Allow labor standards No

 Process Change: Shipments will not be released to the warehouse from the sales order by the order taker. Shipments will be released by warehouse personnel using the "Release to Warehouse" functionality in Warehouse Management>Reelase to Warehouse>Release to Warehouse (NOTE: this same process also applies to the "Automatic release of Sales Orders" fucntionality. For demonstration purposes, we will use the "Release to Warehouse" function)



The steps below demonstrate automated shipment consolidation:

- 1. Create multiple sales orders for the same customer with the same delivery date and warehouse. DO NOT "Release to Warehouse"
- Go to Warehosue Management>Release to Warehouse>Release to Warehouse. Select the sales order to release. For this demonstration, sales orders other than the orders to be consolidated will be selected for release to illustrate how D3650 uses consolidation criteria to avoid consolidating mismatching orders.
  - a. Select the orders to release
  - b. Click "Add"
  - c. Click "Release to Warehouse"

Dynar	nics 365 🗸	Operations	Varehouse mana	gement > Release to	warehouse > Rele	ease to ware	house		
🔚 Save	OPTIONS 🔎								
Rele	ease to wa	arehouse NSFER ORDERS							
Ad	dd Add all A	dd order Display dim	ensions						
~	Sales order 1	Sales origin	Custom	er Nar	ne		Item number	Product name	Line status
~	000751	PHONE	US-02	7 Bire	ch Company		A0001	HDMI 6' Cables	Open order
	000783	PHONE	US-00	1 Co	ntoso Retail San Dieg	ю	M0030	Professional speaker cable	Open order
	000783		US-00	1 Cor	ntoso Retail San Dieg	ю	M0030	Professional speaker cable	Open order
~	000801	PHONE	US-00	B For	rest Wholesales		A0002	HDMI 12' Cables	Open order
- ×	020002	PHONE	US-00	3 For	rest Wholesales		A0001	HDMI 6' Cables	Open order
~	000803	PHONE	US-00	3 For	rest Wholesales		A0002	HDMI 12' Cables	Open order
	001000	PHONE	US-00	4 Cav	ve Wholesales		A0001	HDMI 6' Cables	Open order
RELE	ASE TO WAREHOU	ISE		- 3					
Re	move Remove	all Release to wareho	use						
~	Requested Qty	Module	Order number	Lot ID	Released quantity	Credit limit t	lype		
	10.00	Sales order	000751	011751	10.00	Balance+A	u ~		
	23.00	Sales order	000801	012595	23.00	Balance+A	AII		
	34.00	Sales order	000802	012596	34.00	Balance+A	AII		
	43.00	Sales order	000803	012597	43.00	Balance+A	AII.		

- 3. Upon releasing to warehouse, shipments and waves will be created, processed and released in accordance to the warehouse parameters and wave template parameters.
- 4. In the All Shipments form the shipments created in step three are displayed in the list. (BONUS CONTENT: Note this scenario created a shipment for an additional order that was not combined with the shipment to Forest Wholesales. However, because the order is for an item that is included in the other shipment, both shipments are included in the same wave. Therefore, the item can be picked as part of the same trip for the picker.)



Dyna	amics 365 🗸	Operation	S War	ehouse manageme	ent > Shipment	s 🗲 All ship	oments							
🖉 Edit	+ New 🛍 🕻	Delete SHIPM	ENTS TRAM	SPORTATION (	OPTIONS 🔎									
SHIPME Confirm Consoli	INTS a shipment Tra date shipments Tra	ransfer shipment to ransfer shipment to	existing load new load	ACTIONS Change work locat	GENERATE Bill of ladin Packing slip Send ASN	WORK Work de Skip non	tails I-mandatory work	RELATED INFORMATION Quality orders	PRINT Load list report Pick list Packing list	NAFTA certificate of or Certificate of origin Commercial invoice	igin			
Clic	k the edit button to m	nake changes.												
All D (	Shipment Display closed ship IPMENTS	S Newly or	eated shipmer	Note the Shpp Wave has bee	ing Stauts is "Wa n processed and	ved" meaning released.	the			Note the waves for s are the same	shipment 23 i	nd 24		
$\checkmark$	Shipment ID 1	Ship	𝕎 Wave ID		oad ID	Direction	Shipment lines	Containers Bill anad	ling ID	Volume	Weight	Site	Warehouse	Account number
	USMF-000003	In pro	USMF-00	1 eooooo	JSMF-000005	Outbound	2	з		785.00	205.00	6	63	US-027
	USMF-000005	Wave	d USMF-00	0000013 U	JSMF-000007	Outbound	1	0		16.00	3.00	2	24	US-001
	USMF-000006	Wave	d USMF-0	0000013 U	JSMF-000008	Outbound		0		9.00	4.00	2	24	US-001
	USMF-000007	Wave	d USMF-DO	0000013 0	JSMF-000009	Outbound	1	0		0.00	5.10	2	24	US-003
	USMF-000008	Wave	d USM-00	0000015 0	JSMF-000010	Outbound	2	0		25.00	7.00	2	24	US-004
	USMF-000009	Wave	d USMF-00	0000015 U	JSMF-000010	Outboand	1	0		0.00	5.10	2	24	US-002
	USMF-000010	Wave	d USMF-00	0000016 l	JSMF-000013	Outbound	1	0		32.00	6.00	2	24	US-001
	USMF-000011	Wave	d USMF-00	0000017 l	JSMF-000014	Outbound	1	0		48.00	9.00	2	24	US-001
	USMF-000012	Open	1	l	JSM000018	Outbound	3	0		1,134.00	467.00	2	24	US-001
	USMF-000015	Wave	d USMF-00	10000020	JSMF-000022	Outbound	4	0		156.00	57.00	2	24	US-002
	USMF-000023	V Wave	d USMF-00	0000026	JSMF-000023	Outbound	1	0		160.00	30.00	2	24	US-027
	USMF-000024	Wave	d USMF-00	0000026	JSMF-000024	Outbound	3	0		1,138.00	366.00	2	24	US-003

5. In the wave, you will notice there are two lines. One line notes the order number while the other line's order number is blank. That is merely because the field cannot store multiple order numbers. Click on Work in the wave to review orders in the wave/shipment if desired.

WAVE         RELATED INFORMATION         PRINT           Maintain shipments         Progress         Wave Allocation Processing Log         Work         Shipments         Pick list           Process         Cleanup wave data         Batch jobs         Loads         Conscientization history         Pick list           Release         Processing history         Versessing history         Pick list         Pick list	
Click the edit button to make changes.	
WAVES USMF-000000026 : Multiple Shipments	
Wave	
WAVE         STATUS         STORAGE DIMENSIONS         Attribute 2	
Wave ID Wave status Site	
Description Process Watehouse	
Multiple Shipments No 24	
Attribute 4	
TEMPLATE ATTRIBUTES	
Wave template name Attribute 1	
24 Shipping Default	
Wave lines	
Shipment	
Shipment ID Load ID Work order type Order number	
USMF-000023 USMF-000023 Sales orders 000751	
✓         USMF-000024         USMF-000024         Sales orders	



Dyr	namics 365	✓ Operation:	S Warehouse ma	anagement 🔀 Shipme	nts 🖒 All shipments				
🖉 Eo	lit WORK	SHIPMENT RELATE	D INFORMATION OP	tions 🔎					
0	lick the edit butt	on to make changes.							
usi M	/ork	UULTIPLE SHIPMENTS							
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c	OVERVIEW	ENERAL							
	✓ Work p	riority Locked by	Work ID ↑ 🔽	Work status	s Site	Warehouse	Work pool ID	Target license	plate ID Work order type
		50	USMF-00002	2 Open	2	24			Sales orders
L	INES GENER	:AL							
	Transactions	User actions Cu	stom data Cancel w	ork line Display dime	ensions			1	
	✓ Work status	Work ty	/pe	Location	Item number	Product name	Work quantity	Order number	Remaining qua Unit
	Open	Pick		FL-001	A0001	HDMI 6' Cables	10.00	000751	10.00 pcs
	Open	Pick		FL-001	A0002	HDMI 6' Cables	34.00	000802	23.00 pcs
	Open	Pick		FL-006	A0002	HDMI 12' Cables	43.00	000803	43.00 pcs
	Open	Put		BAYDOOR			110.00		110.00

6. At this point the pick list is ready to be be printed. There are multple ways to print the picklist. The pick list can be printed from within the shipment or wave. To stay with the automation theme, pick list printing can be run in a batch either on-demand or at scheduled times in Warehouse Management>Inquiries and Reports>Pick List Reports.



Destination		
Destination		^
≓ Change		
Screen		
Records to include		^
√ Filter		
WORK LINES	Load ID	
Work status		
Open, In process	Shipment ID	
Run in the background		^
Recurrence Alerts		
Batch processing	Task description	
No	Shipping pick list	
	Batch group	
	$\sim$	
	Private	
	No	
	Critical Job	
	No	
	Monitoring category	
	$\checkmark$	
Start date: 3/16/2017 (08:55:11 pm)	(GMT) Coordinated Universal Time	

- 7. Now the wave/order is ready to be picked. Click Print>Print Picklist to print the picklist. The picklist will then be picked using the Dynamics 365 for Operation Warehousing App on a mobile device. Once the picking work is complete the shipment must be confirmed.
- 8. To confirm the shipment, refer to options step 11 in the Manual process above.

#### Scenario Summary

As with the single order picking process from Part 1 of this series, the automated functionality certainly creates a far from efficent process than the manual process. By manually consolidating shipments, the ties of a shipment to loads and waves was demonstrated. Without understanding how these relationships work, it is difficult to use an automated process effectively. While the shipment consolidation can easily be implemented with a single parameter change, it important to understand the impact of that change. In this case the impact of the change is all system driven criteria (consolidation rules) to determine what can be consolidated.