

Voxware Overview and Integration

Purpose of this document

This document will illustrate the setup and functionality of Voxware with Ceres. Voxware is a WMS supplement to Ceres to provide Voice device support for common warehouse tasks. Currently Voxware integrates with Ceres to support Agency Order Picking – hence a common reference to Voxware is "Voice Pick." In later releases, Voxware and Ceres may be setup to support other common warehouse tasks.

Ceres Object release 5.00.00 is required for the functionality described in this document.

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Voxware Integration

The setup of the Voxware integration can be accessed from Departments \rightarrow Financial Management \rightarrow Inventory \rightarrow Administration \rightarrow Setup \rightarrow Voxware Setup.

🚮 Setup - Microsoft Dynamics N	AV
G 🕞 🗸 🛛 Finance Com	ipany 🕨 Departments 🕨 Financial Management 🕨 Inventory 🕨 Setup 🕨
•	
Departments Financial Management	Setup
General Ledger Cash Management	Administration Inventory Setup
Cost Accounting	Item Charges
Cash Flow Receivables	Item Categories Rounding Methods
Payables	Phys. Invt. Counting Periods Cycle Count Notification Setup
Fixed Assets	Grocery Rescue Order Import Setup
Inventory	Voxware Setup
Periodic Activities	E Item Values

The Voxware setup card is displayed where the various parameters are set to control Ceres integration with Voxware.

Note: Ceres is designed currently to link with Voxware release 5. There is substantial Voxware software setup and training required as well. Contact Voxware for assistance on these related tasks.

🚮 Edit - Voxware Setup			
HOME			Ceres 5.0 Testing ?
View Edit OneNote Note: Manage Show Attac		→ Go to Clear Filter Page	
Voxware Setup			
General			^
Enable VOX Communications: NST Outbound VOX Directory: Outbound VOX Directory: Inbound VOX Directory: Processed Inbound VOX Dir.: VOX Pick Hdr Outbound Code: VOX Pick Line Outbound Code: VOX Pick Line Inbound Code: Pallet Cubic Feet:	C:\temp\outbou C:\temp\ob\ C:\temp\in\ C:\temp\process HEAD LINE HEAD LINE 0.00	Pick Check Digit Color Code: Send To Voxware Default: Append FBC Sorting Sequence: Shorts / Cuts Handling Method: Auto Post Negative Adj.: Journal Template Name: Journal Batch Name: Send Full Pallets to VOX: Rounding: Rounding Precision: Rounding Type:	Red
Chinaina			
Shipping Special Shipping Instructions: %1 Agency No. %2 Agency Name		%3 Shipment Method Co %4 Order Handling Group %5 Order Routing Group	o Code
			ОК Т

Note: Voxware comes with a message configuration utility called VoxConnect. The Voxware system communicates with external systems by exchanging "messages". The VoxConnect user interface provides the tools to manage message communication between the Voxware system and Dynamics NAV for a portion of the integration. Please refer to the VoxConnect manual for details on configuration of the VOX side of the integration. It is important that the same setup is done on both sides to ensure successful transmissions between the two systems.

Enable VOX Communications: Check this box to enable the NAS (Navision Application Server) to process VOX files via the "Outbound VOX Directory" and "Inbound VOX Directory".

Note: Depending upon your Network and Active Directory configuration, additional setup may be required to enable file sharing for Ceres. File sharing is necessary to provide for the translation of outbound files to the Outbound VOX Directory. Refer to the link below for additional information.

http://blogs.msdn.com/b/nav/archive/2011/12/22/managing-network-files-in-rtc.aspx

NST Outbound VOX Directory: This specifies the location of the folder where Ceres generated messages intended for Voxware will be placed temporarily. The NST (Navision Service Tier) is the machine that executes the Ceres business logic on behalf of the RTC Client. The directory specified here needs to exist on the NST in order to temporarily hold the messages (files) before they are relocated to the Outbound VOX Directory for eventual processing into the Voxware system.

Outbound VOX Directory: This specifies the location of the folder where all Ceres generated messages intended for Voxware will be placed. This directory is generally a network share where messages (files) are written to await processing into the Voxware system.

Inbound VOX Directory: This specifies the location of the folder where Ceres will look for transactions sent from the Voxware system. As files are found in this folder, Ceres will process the file and move it to the "Processed Inbound Vox Dir" folder.

Processed Inbound VOX Dir: This specifies the location of the folder where Ceres will place processed inbound transactions from the Voxware system

Inbound VOX File Nos.: This specifies the numbering series to use when renaming the inbound VOX files in the "Processed Inbound Vox Dir". The number series specified should not have an ending number for the series as this process is handled by the system VOX NAS with no user intervention.

VOX Pick Hdr Outbound Code: This field is used to specify the first field value in the outbound files sent to Voxware to indicate that the record is an order header record.

VOX Pick Line Outbound Code: This field is used to specify the first field value in the outbound files sent to Voxware to indicate that the record is an order line record.

VOX Pick Hdr Inbound Code: This field is used to specify the first field value in the inbound message files received from Voxware to indicate that the record is an order header record.

VOX Pick Line Inbound Code: This field is used to specify the first field value in the inbound message files received from Voxware to indicate that the record is an order line record.

Pallet Cubic Feet: Average pallet size used to calculate number of pallets being exported to Voxware.

Pick Check Digit Color Code: This field indicates which color coded check digit is currently being used. If multiple color-coded check digits are used on the slots, this parameter is normally changed periodically. Single check digits do not change day to day. Choosing multiple check digits allows management to change which location check digit will be used each day, so as to prevent pickers from memorizing the check digits. For example, a warehouse may define three sets of check digits by color code and let the pickers know which color to look for that day. The three available options are:

Yellow – Yellow check digits on Bins will be utilized.
Red – Red check digits on Bins will be utilized.
Green – Green check digits on Bins will be utilized.

Scan Frequency (Seconds): This field specifies in seconds how often the NAS will look for and process files from the Inbound VOX Directory

Send to Voxware Default: This field sets the default for Agency Orders when orders are created or the Allocation Journal. When the Send to Voxware Default field is checked the Send to Voxware field on an Agency Order will default as checked (Yes) when Orders are created manually or through allocation journals.

Append FBC Sorting Sequence: Ceres provide the ability to append Sorting Sequence No. as specified for the FBC Storage Requirement. When checking this option Ceres will perform a check to ensure that a Sorting Sequence No. other than zero has been specified for all FBC Storage Requirements. Conversely, when un-checking this option a check will be performed to ensure that there are no FBC Storage Requirements with a Sorting Sequence No. other than zero. A similar check is performed prior to pick creation to ensure setup integrity with regard to the setting of this option and the Sorting Sequence numbers as specified on the FBC Storage Requirements.

Shorts / Cuts Handling Method: This field indicates to Ceres how to handle "Shorts" and "Cuts" sent from the Voxware system. The options are as follows:

{Blank} - do nothing

Negative Journal Entry - Write and post a negative item journal entry for the short/cut product

Cycle Count Notification - Send a Cycle Count email

Both - Negative Journal Entry and Cycle Count Notification

Auto Post Negative Adj.: If checked, the journal created by the shorts /cuts handling will automatically be posted. Leave this field unchecked to disable this function. The journal will still be created, but will require review and manual posting.

Journal Template Name: This field indicates to Ceres which journal template the negative adjustments will be entered in.

Journal Batch Name: This field indicates to Ceres which journal batch the negative adjustments will be entered in.

Send Full Pallets to VOX: The setting of this field controls whether pallets that have been suggested on a pick document as a "full pallet" will be written to the Voxware Export file. This option is useful for some sites to send full pallet drops to Voxware. Sites that have full pallets picked by Voxware users should check this box. If your site has full pallets picked by other warehouse workers, this box should be left unchecked and full pallet drops will not be sent to Voxware for picking.

Rounding: Place a checkmark here to indicate that rounding for the total pallet count calculation should be applied utilizing the Rounding Precision and Rounding Type specifications.

Rounding Precision: Here you can specify the rounding precision to be applied during the total pallet count calculation; for example, specify 0.01 to have Ceres round to two decimal places.

Rounding Type: Here you can specify the rounding type to be applied during the total pallet count calculation; choose for the following options: Nearest, Up, or Down.

Special Shipping Instructions: Here you can specify a message which includes place holders for information that will be determined at run-time.

Five placeholder substitutions are available:

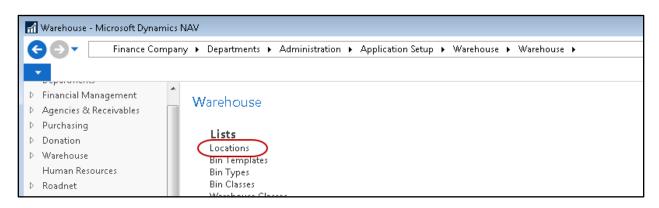
- %1 Use this placeholder in a message of your design to have Ceres substitute the Agency No. associated with the Agency Order when creating or updating the Warehouse Request.
- %2 Use this placeholder in a message of your design to have Ceres substitute the Agency Name associated with the Agency Order when creating or updating the Warehouse Request.
- 3. **%3** Use this placeholder in a message of your design to have Ceres substitute the Agency Order "Shipment Method Code" when creating or updating the Warehouse Request.
- 4. %4 Use this placeholder in a message of your design to have Ceres substitute the Agency Order "Order Handling Group Code" when creating or updating the Warehouse Request.
- 5. **%5** Use this placeholder in a message of your design to have Ceres substitute the Agency Order "Order Routing Group Code" when creating or updating the Warehouse Request.

For example, the message of: "Agency No.=%1 and Agency Name=%2" will be translated to Warehouse Request and Inventory Pick document as: "Agency No.= A-0004 and Agency Name= Emergency Food Network"

Note: A Warehouse Request is created or updated with each Release of an Agency Order. The Special Shipping Instructions on the Warehouse Request will flow to the Inventory Pick document created for the request and to the Voxware outbound header file. **Note:** The Special Shipping Instructions field on Voxware Setup is limited to 250 characters. The Special Shipping Instructions as translated (with expansion via substitutions) to the Warehouse Request, Inventory Pick document, and the Voxware outbound header file are also limited to 250 characters.

Bin Check Digits

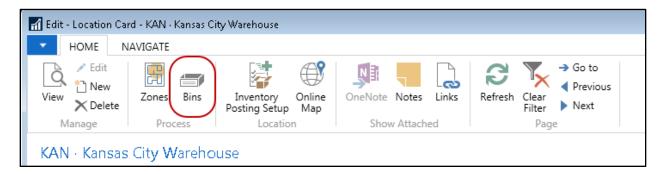
1. The setup of the bins now includes the fields for the different colored check digits. The bins can be accessed from Departments \rightarrow Administration \rightarrow Application Setup \rightarrow Warehouse \rightarrow Locations.



2. A list of available locations will be displayed. Click on the location you wish to work with.

Cocations - Microsoft Dynamics NA	W					
🗲 🕞 🔻 🛅 Finance Company	/► Dep	artments	► Administr	ation 🕨 Applicatio	n Setup 🔸	Wareh
HOME ACTIONS NAV	IGATE	REPOR	т			
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Transfer New Edit View Order	Delete		Create ouse location	Inventory - Inbound Transfer	Transfer Order	Iten Negativ
New Manage		1	Process		Report	2
Departments Financial Management Agencies & Receivables Purchasing Donation 	Loca	tions	• Name			
▷ Warehouse 🗏	СС		Concord Ware	house		
Human Resources	GR		Grocery Rescu	e		
▷ Roadnet ▷ Appian	HO	J	Houston Whs			
 Adv. Leased Storage 	INT	RANSIT	In-Transit			
 Administration 	KAN	l	Kansas City W	arehouse		
▷ IT Administration	LS-E	DRY	Leased Storag	e Dry		
 Application Setup 	MA	N	MAIN WHSE	-		
▷ General	MO	BILE	Offsite Trailer:	and Trucks		
Anveo Client Suite Users	OFF	SITE	Off Site Storag	je		

3. Click Home \rightarrow Bins



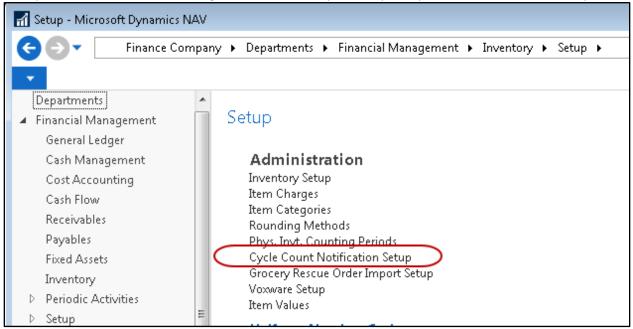
4. A list of the bins for this location is displayed. Find the three columns "Red Check Digit", "Yellow Check Digit" and "Green Check Digit". In each of these fields enter the correct code for each for the specified bin slot.

ins -								Type to filte
Locat 🛓 Code	Zone Code	Code	Bin Type Code	Bin Ranking	Row No. Bin Cod		Green Check Digit	Yellow Check Digit
KAN	DRY	01-103-A	STORAGE	0	1 DRY	863	453	271
KAN	DRY	01-103-B	STORAGE	0	1 DRY	787	037	418
KAN	DRY	01-103-C	STORAGE	0	1 DRY	027	518	086
KAN	DRY	01-103-D	STORAGE	0	1 DRY	564	358	548
KAN	DRY	01-105-A	STORAGE	0	1 DRY	226	507	957
KAN	DRY	01-105-B	STORAGE	0	1 DRY	268	235	949
KAN	DRY	01-105-C	STORAGE	0	1 DRY	838	498	863
KAN	DRY	01-105-D	STORAGE	0	1 DRY	371	864	125
KAN	DRY	01-107-A	STORAGE	0	1 DRY	477	998	540
KAN	DRY	01-107-B	STORAGE	0	1 DRY	468	310	026
KAN	DRY	01-107-C	STORAGE	0	1 DRY	968	110	524
KAN	DRY	01-107-D	STORAGE	0	1 DRY	028	807	327
KAN	DRY	01-109-A	STORAGE	0	1 DRY	073	325	128
KAN	DRY	01-109-B	STORAGE	0	1 DRY	427	869	954
KAN	DRY	01-109-C	STORAGE	0	1 DRY	240	671	426

5. Find the three columns "Red Check Digit", "Yellow Check Digit" and "Green Check Digit". In each of these fields enter the correct code for each for the specified bin slot.

Cycle Count Notifications

 When using Voxware you have the option to notify users of inventory issues due to shorts and cuts on recording of picks. See Location Overview for more information on this option. The setup of the user's emails to notify is done through the Cycle Count Setup screen. To access this setup screen go to Departments → Financial Management → Inventory → Setup → Cycle Count Notification Setup.



2. The cycle count screen wille be displayed. Enter the required information as shown below. You may enter up to 3 email addresses for notifications

🚮 Edit - Cycle Cou	unt Notific:	ation Setu	ıp						- • ×
 HOME 								Cere	es 5.0 Testing 🕐
View Edit	OneNote	Notes	Links	C Refresh	Clear Filter	→ Go to			
Manage	Sho	w Attach	ed		Page				
Cycle Count General	t Notifi	cation	Setup						^
Enabled:		V				Notify	Email Address 3:	samw@esopro.com	
Notify Email Ac	dress 1:	johns@e	sopro.co	m		Email S	Subject:	Cycle Count Require	d
Notify Email Ac	ldress 2:	jimp@es	opro.con	n		Email E	Body:	Please count the foll	owing:
							2		ОК

Enabled: Check this field to enable email notification of cycle count warnings to users. If this field is turned off, emails will not be generated regardless of the setting in "Voxware Setup.

Notify Email Address 1: Enter a valid email address of the 1st user you wish to receive notification of required cycle counts.

Notify Email Address 2: Use this field if additional email addresses are required for cycle count notifications.

Notify Email Address 3: Use this field if additional email addresses are required for cycle count notifications.

Email Subject: Use this field to enter a short email subject line to indicate to the email recipient the reason for the email address.

Email Body: Use this field to enter an email body message for the recipient. The actual item # will be appended to the end of the email body message.

Supplemental Voxware Setup (Optional)

- 3. Ceres provides three optional configuration settings related to Voxware. The Exclude from Voxware setting is available on the Location, Zone, and FBC Storage Requirement records.
- 4. If you do not wish for Ceres to create a Voxware export file for pick documents related to a given Location, place a checkmark in the Exclude form Voxware field.

Warehouse			^
Warehouse Require Receive: Require Shipment: Require Put-away: Use Put-away Worksheet: Require Pick: Inv. Short Handling Method: Bin Mandatory: Directed Put-away and Pick: Use ADCS: Enable Agency Pallet Tracking: Default Bin Selection: Outbound Whse, Handling Time: Base Calendar Code: Customized Calendar: Use Cross-Docking: Cross-Dock Due Date Calc.:	None ✓ Last-Used Bin ✓ No	Ceres Directed Picking Option: WAP Template: Existing WAP Deletion Method: Palletized Items Only (WAP): Create Pick by: Pick Creation Sort Order: Pick Creation Sort Order: Pick Line Sort Order: Require Inv. Pick on Transfers: Movement Xfer. Template Name: Movement Xfer. Batch Name: ADCS Phys. Inv. Jml. Template: ADCS Phys. Inv. Jml. Template: Shorts Cuts Template Name: Shorts Cuts Batch Name: Sug. Full Pallet from Put Away:	A Base HOU Keep all Existing WAP Lines FBC Storage Requirement FBC
olon beek bac bac bac.	(Sug. Full Pallet to Pick: Drop Full Pallet to Pick: Exclude from Voxware:	

5. If you do not wish for Ceres to create a Voxware export file for pick documents related to a given zone or storage requirement, place a checkmark in the Exclude from Voxware field.

HOME	NAVIGATE														
New Vie New Vie		velete Show Show as as List Chart View		nks Refre		Find									
ones -													Type to filt	er (F3)	
Locat 🔺 Code	Code	Description	Bin Class Code	В Т	Zone Ranking	Max. Pallets	Exclude from Whse. Doc.	Lo Re	Invt. Pick Nos.	Invt. Pick Printing	New Pag	Staging Area	Exclude from Voxware	Not Avai	
<u>KAN</u>	COOLER	Cooler Zone	CLR		0	1		Yes	I-PICKR	Both (Pick a	V	STGR-1			
KAN	DRY	Dry Zone	DRY		0	2 1		Yes	I-PICKD	Both (Pick a	1	STGD-1			
KAN	FREEZER		FRZ		0	1		Yes	I-PICKZF	D-H- (D:-L-	1	STGF-1	v		
	FREEZER	Freezer Zone	FRZ		U	1		165	I-PICNZF	Both (Pick a	V	3101-1	×		
	FREEZER	Freezer Zone Freezer Zone 2	FRZ FRZ		0	1		Yes	I-PICKZF	Both (Pick a Both (Pick a	V	STGF2-1	V		
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KAN KAN KAN	FREEZER2 GR	Freezer Zone 2 Grocery Rescue Zone	FRZ ALL		0	1		Yes Yes	I-PICK2F	Both (Pick a Both (Pick a	V	STGF2-1			
KAN KAN KAN	FREEZER2 GR KIT END	Freezer Zone 2 Grocery Rescue Zone Completed Kits	FRZ ALL ALL		0 0 0	1 1 1		Yes Yes Yes	IPIUNEF	Both (Pick a Both (Pick a Both (Pick a		STGF2-1			
kan Kan Kan Kan Kan Kan	FREEZER2 GR KIT END KITTING	Freezer Zone 2 Grocery Rescue Zone Completed Kits Kitting Zone	FRZ ALL ALL ALL	PI	0 0 0	1 1 1 1		Yes Yes Yes Yes	IPIUNEF	Both (Pick a Both (Pick a Both (Pick a Both (Pick a		STGF2-1			

Note: The Exclude from Voxware option applies only to pick documents at the header level; not to individual pick document lines. Thus the option at the Location level applies to an entire pick document (based on the Pick Document header's Location Code) and for all Zones in the Location. Likewise, the option at the Zone and FBC Storage Requirement level only applies when the related Location has been configured to create pick by Zone or FBC Storage Requirement.

Depending upon whether you create picks by Zone or FBC Storage Requirement Ceres will reference the appropriate Exclude from Voxware option to determine whether the pick document should be export to Voxware.

Sending Data to Voxware for Picking

When Voxware is being used and Ceres has been configured appropriately as discussed in this document, Ceres will create and export a text file based representation of the inventory pick documents (one text file per pick document). The text file is created and exported to the configured directory upon the successful completion the Create Inventory Pick process. Once exported, the file is available for Voxware import and processing. After the picking instruction has been handled in Voxware, Voxware will create and export another text file based representation of the picking instruction. An instance of the Navision Application Server (NAS) will monitor the directory for Voxware generated exports and process them into Ceres to update the pick documents with information such as Assigned User ID, Start and End dates and times, Qty. to Handle, etc. The pick documents may then be reviewed and posted from within Ceres.

Throughout the Ceres / Voxware interactions, Ceres is responsible for providing directed picking instructions. Thus, only pick document lines containing fully qualified inventory suggestions (Location, Zone, Bin, Pallet, and Lot level) will be exported to Voxware.

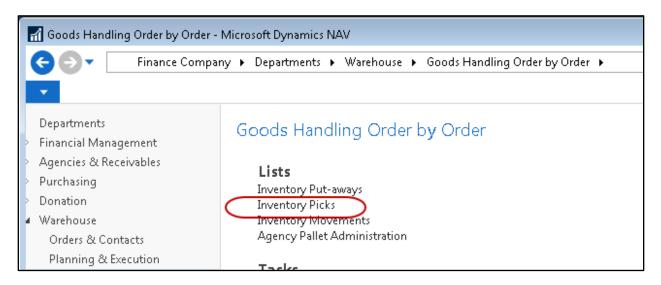
Should a pick document be generated with line(s) void of a fully qualified inventory suggestion, inventory will need to be made available (movement to a pick bin or inclusion on the WAP), the pick document or line(s) (depending upon your Location setup configuration of the "Create Picks by" setting) deleted, and the Create Invt. Put-away / Pick process rerun for related Agency Orders in order to generate an export file for Voxware processing.

Viewing Voxware Errors for Pick

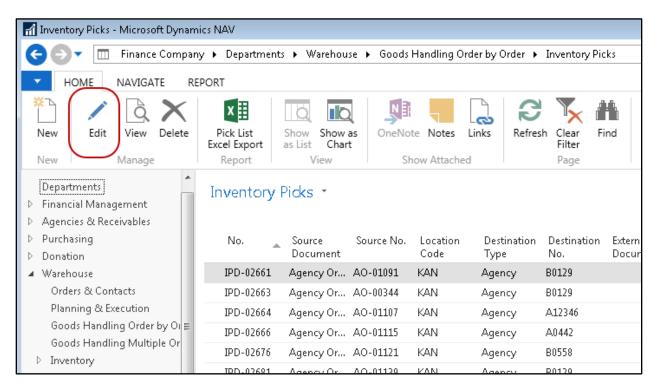
As Ceres processes inbound transaction from Voxware, any errors are trapped and recorded on the pick document they relate to. The following errors are trapped and recorded. Any errors will prevent the pick from being posted.

- Invalid Doc No
- Invalid Picked by
- Invalid Start times and dates
- Invalid End times and dates
- Invalid Line no
- Invalid Item no
- Invalid Quantity
- Invalid Bin code
- Invalid Lot no
- Invalid Pallet no

1. To view the errors on a pick document access the pick documents from Departments \rightarrow Warehouse \rightarrow Goods Handling Order by Order \rightarrow Lists \rightarrow Inventory Picks.



2. Select the appropriate pick from the list and then click Home \rightarrow Edit to edit the inventory pick document.



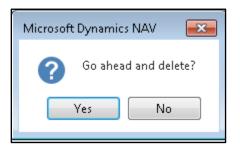
3. The inventory pick document will be displayed. If there are any VOX errors you should see a number (in blue) in the field "No. of VOX Errors". In this example there are 2.

🚮 Edit - Inventory Pick - Invt. Pick -	IPD-02676			
 HOME ACTIONS N 	AVIGATE REPORT			Ceres 5.0 Testing 🕜
View Delete Manage	t and Get Source int Get Source Print Process	Shipping Tag Shipping (11 x 8.5) Tag (6 x 4)	©TheNote Show Attached Show Attached Show Attached Show Attached Show Attached Show Attached	h Previous ilter Next Page
Invt. Pick · IPD-02676 General				^
	IPD-02676	Posting Date:	5,25,2025	•
Location Code:	KAN 👻	Shipment Date:	5/29/2019	
Source Document:	Agency Order 🔹 👻	External Document No.:		
Source No.:	AO-01121 -	External Document No.2:		
Agency No.:	B0558	Assigned User ID:		•
Agency Name:	Hope House, Inc.	Picked By:		•
Shopper:	AGSHOPPER-000000018	Shipment Method Code:	DELIVER	
Shopper Name:	HH Shopper	Appointment Time:		
Shopper Email:	hhshopper@gmail.com	Pallet Count:		0
Order Handling Group Code:	HARV WEB	Start Date:		-
Order Routing Group Code:		Start Time:		
No. of VOX Errors:	2			-
	SIGD-1	End Date:		
	STGD-1	End Time:		

4. If there are errors, click on the blue number of errors (this is a hyperlink) and this will open another window displaying all the VOX errors associated with this pick that must be corrected prior to the pick being posted.

🖬 View - VOX Error Log Entries								, • •	×
HOME							Ceres	5.0 Testing	0
Delete Show Show as as List Chart Wanage View Show Attache	Links Refree		Find						
VOX Error Log Entries 🔹					Type to	filter (F3)	Document No.	- →	^
Show results:									
🗙 Where Document No. 🔻 is IPD-02	676								
+ Add Filter									
Entry 🔔 Error Description No.	Туре 🔺	Document No.	Picked By	Start Pick Date	Start Pick Time	Pick Line No.	Item No.	Qty. To Handle	Bi
5 Activity Document [PCK-00107] n	. Pick Head	IPD-02676	ESP	8/2/2012	4:42:57 PM	0		0.00	
6 Activity Document [PCK-00107] n	. Pick Line	IPD-02676				10000	65007	1.00	32-

- 5. You must resolve the errors and delete the VOX error messages before posting of the pick is allowed. To delete a VOX error, click Home \rightarrow Delete.
- 6. Ceres will ask you to confirm to deletion of the error message.



- 7. Select "Yes" to delete the entry.
- 8. If you attempt to post the pick without resolving and/or deleting all the VOX errors, the process will be halted with the following error.

Microsoft	Dynamics NAV
8	Pick cannot be posted until VOX Errors have been resolved and deleted.
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Related Topics

- 1. Inventory Picks
- 2. Agency Order Overview
- 3. Bin Overview
- 4. Item Overview
- 5. Location Overview
- 6. Order Handling Groups, Order Routing Groups
- 7. Warehouse Activity Plan WAP
- 8. Warehouse Activity Plan and Default Bin Picking.
- 9. Zone Overview