Nox DoD

User Guide

Version 3.0.x

Contents

Overview

Shipment Manager -- Nox Administrator Roles
The shipment manager is responsible for creating and monitoring shipments to be processed by packagers on the floor. Items can not be packed or fulfilled until the shipment manager creates a shipment and sets its status to 'In Progress'.

Step 1:
The shipment manager should log into Nox by going to the Nox login page and entering his or her User ID and Password.

Step 2:
Once the shipment manager has logged on, he or she should navigate to the DoD section by clicking on the DoD button in the navigation bar.

The DoD tab contains all of the functions needed by the shipment manager.

- **Orders screen** displays a list of all currently downloaded contracts and delivery orders along with their requested quantity and total shipped quantity.
- **Shipments screen** displays a list of shipments. Each shipment item will allow the shipment manager to view the progress of a shipment in real time -- including the current packed quantity and goal quantity.
- **NSNs screen** contains a list of all downloaded NSNs. Much of the information needed to process an NSN is downloaded automatically; however, the following information must be added to each NSN before packing or shipping:
  - Items Per Case -- Required to automate the packing process.
  - Cases Per Pallet -- Required to automate the palletizing process.
  - Weight -- Required to generate compliant Exterior Container Case labels.
  - Container Weight -- Required to calculate appropriate weight for Exterior Container Case labels.
- **DODAACs screen** is in place to allow future compliance with the creation of Military Shipping Labels -- This screen is not used.
- **CAGEs screen** allows administrators to set up logins for each CAGE code he or she will be shipping against. Each CAGE code requires a Vim Download User ID and Password, and a Vim Upload User ID and Password. This will allow Nox to download all the contract data for that CAGE code from VIM-ASAP and properly send advanced shipping notices to VIM-ASAP.

Floor Manager / Packaging -- Nox User Roles
The floor manager and packagers are responsible for printing item-level hang tags, applying them to each product, packing those items in boxes and stacking those boxes on pallets.

Step 1: Printing Item Tags
Each item being shipped must have an item level RFID tag attached before packing.

Item tags can be printed from the Nox interface by navigating to the Nox login screen in a web browser and logging in with a User ID and Password.

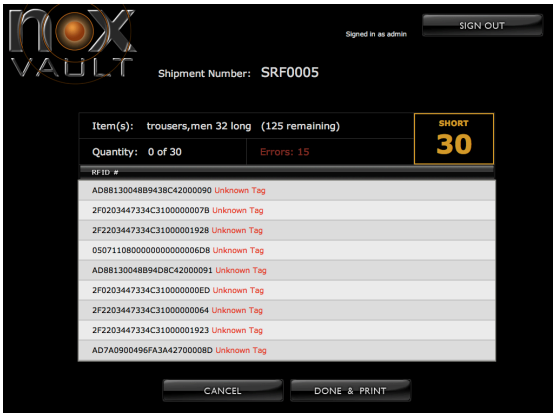
Once logged in, the user can click the DoD button in the navigation bar and browse to the NSNs screen by clicking on the NSNs link in the submenu.

The NSNs screen displays a list of all available NSNs. The user can print tags for an NSN by clicking **CTRL + F** and typing the NSN, clicking the NSN link and clicking on the 'Print Tags for This NSN' button.

Step 2: Packing Items
At each packing station there is a touch screen kiosk running the Packing View. Users must log into the packing stations by touching the keypad to enter his or her PIN.

The packing station will display a list of all the Shipments and Line Items that can be packed and fulfilled. Placing a tagged item in the packing station will display only the shipments which contain that item.

Packagers can pack cases in the packing station, or they can place pre-packed cases in the station. RFID readers will count and verify the contents of every package and print a container label for the completed case.



Step 3: Palletizing
After each cases is packed, it can be placed on a pallet. When a pallet is complete it can be pushed into the palletizing station.

The user must touch the keypad on the palletizing kiosk to enter his or her PIN.

The kiosk will display the number of cases currently packed on the pallet along with any errors. Once the pallet has been packed, the user can print a pallet RFID label and set the pallet aside for quality assurance and fulfillment.

Helpful Notes

Nox Login URL:

Nox Server IP Address:

Pack Station URL:

Pallet Station URL:

Item Level RFID Printer IP Address:

Case RFID Printer IP Address:

Pallet RFID Printer IP Address:

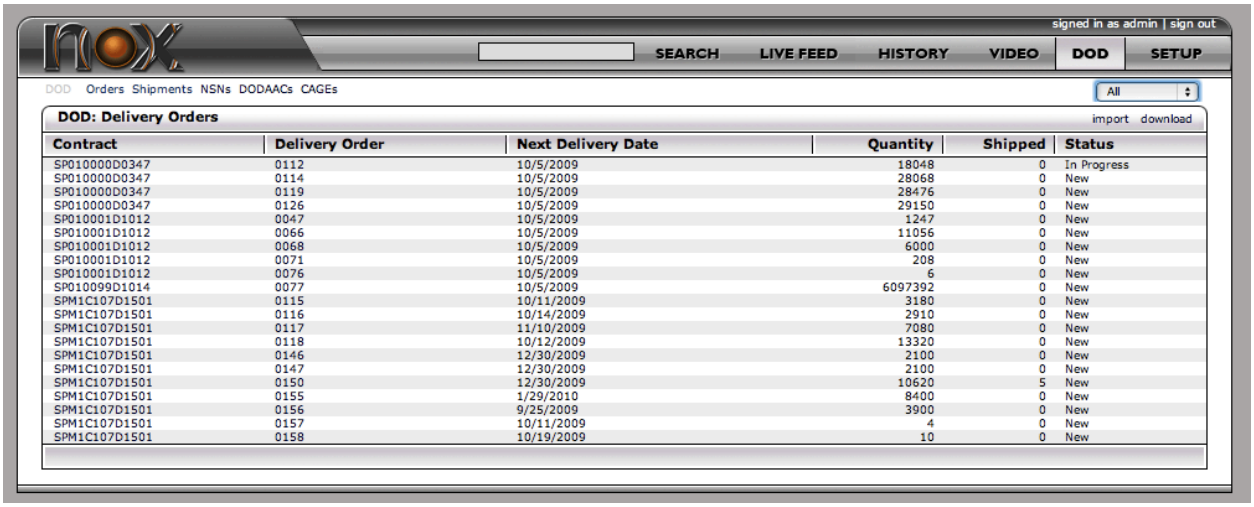
SimplyRFiD Technical Support:
(703) 343-1689

Creating a Shipment

To begin any shipment, the shipment administrator must create a shipment against a contract. This can be done by going to the Orders screen on the DoD tab of the Nox interface.

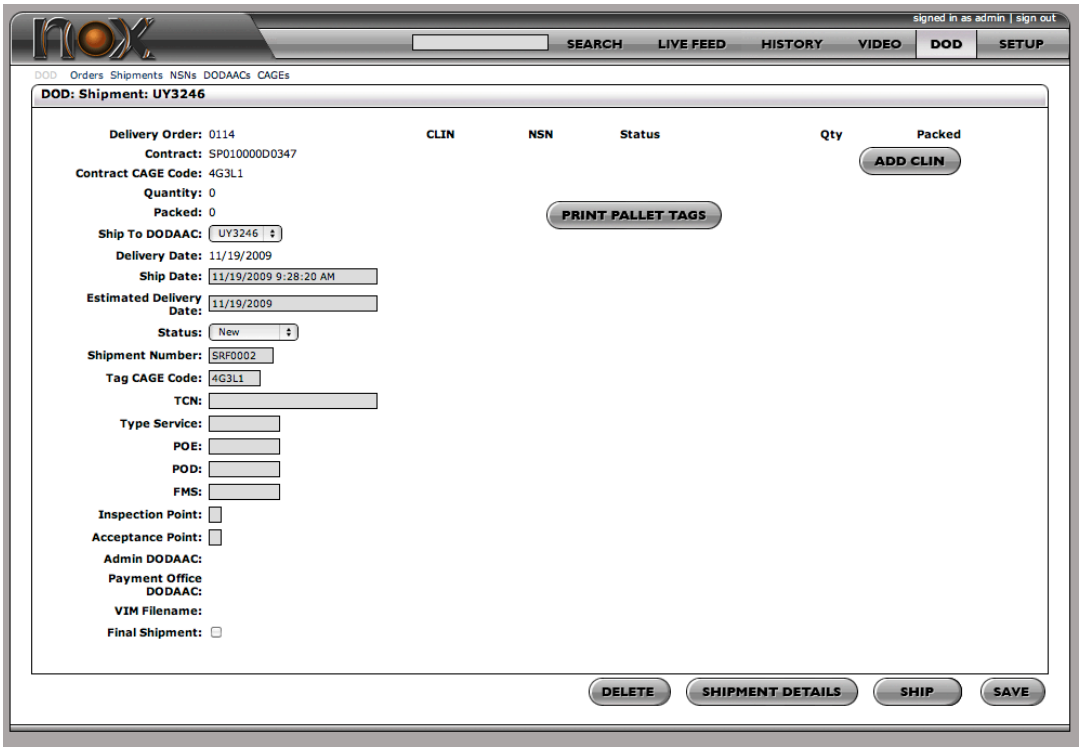
All current orders are downloaded automatically via VIM-ASAP every day. SimplyRFiD downloads the currently active contract numbers and delivery orders, along with the NSN's and quantities remaining for each from VIM-ASAP. This allows users to plan and build their shipments without hand entering any data. All data is real time actual data from the DoD.

Step 1:
Select the appropriate contract and delivery order and click the Add Shipment button on the next screen.



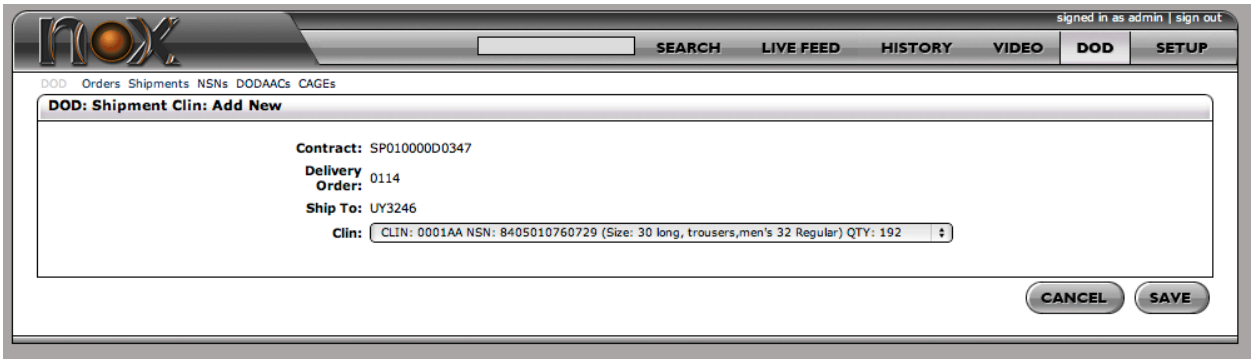
Contract	Delivery Order	Next Delivery Date	Quantity	Shipped	Status
SP010000D0347	0112	10/5/2009	18048	0	In Progress
SP010000D0347	0114	10/5/2009	28068	0	New
SP010000D0347	0119	10/5/2009	28476	0	New
SP010000D0347	0126	10/5/2009	29150	0	New
SP010001D1012	0047	10/5/2009	1247	0	New
SP010001D1012	0066	10/5/2009	11056	0	New
SP010001D1012	0068	10/5/2009	6000	0	New
SP010001D1012	0071	10/5/2009	208	0	New
SP010001D1012	0076	10/5/2009	6	0	New
SP010099D1014	0077	10/5/2009	6097392	0	New
SPM1C107D1501	0115	10/11/2009	3180	0	New
SPM1C107D1501	0116	10/14/2009	2910	0	New
SPM1C107D1501	0117	11/10/2009	7080	0	New
SPM1C107D1501	0118	10/12/2009	13320	0	New
SPM1C107D1501	0146	12/30/2009	2100	0	New
SPM1C107D1501	0147	12/30/2009	2100	0	New
SPM1C107D1501	0150	12/30/2009	10620	5	New
SPM1C107D1501	0155	1/29/2010	8400	0	New
SPM1C107D1501	0156	9/25/2009	3900	0	New
SPM1C107D1501	0157	10/11/2009	4	0	New
SPM1C107D1501	0158	10/19/2009	10	0	New

Step 2:
On the shipment screen, select the Ship To DoDAAC and change the Status to In Progress (Only shipments with a status of **In Progress** will display at the packing stations for the shippers to pack against) before saving the shipment.



Step 3:
Adding a CLIN to a Shipment

Once the shipment has been saved, the user can add CLINs to be shipped by clicking the **Add CLIN** button. Only CLINs that are shipping to the DoDAAC selected on the Shipment screen will be available.

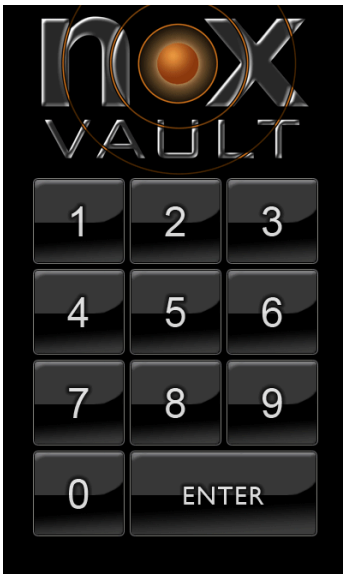


Step 4:
After selecting a CLIN, the user will be prompted to specify a quantity and status. Only CLINs with a status of 'In Progress' will be made available at the packaging kiosk to be shipped. Clicking the **Save** button will take the user back to the shipment screen where he or she will be able to add more CLINs or go back to the orders screen.

Packing a Shipment

Once a shipment has been created it is ready to be packed. Packing can be completed with a stationary packing station, or a handheld NoxVault reader.

The shipper must first login to the pack kiosk using the on-screen keypad.

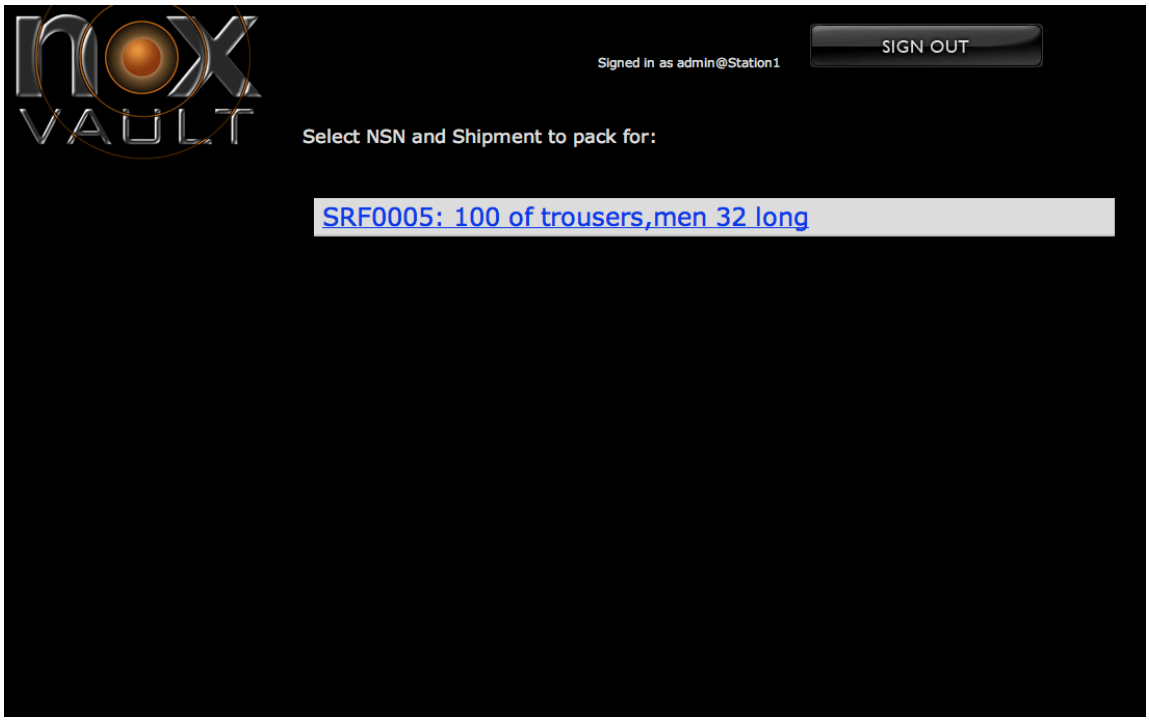


Packing a Case

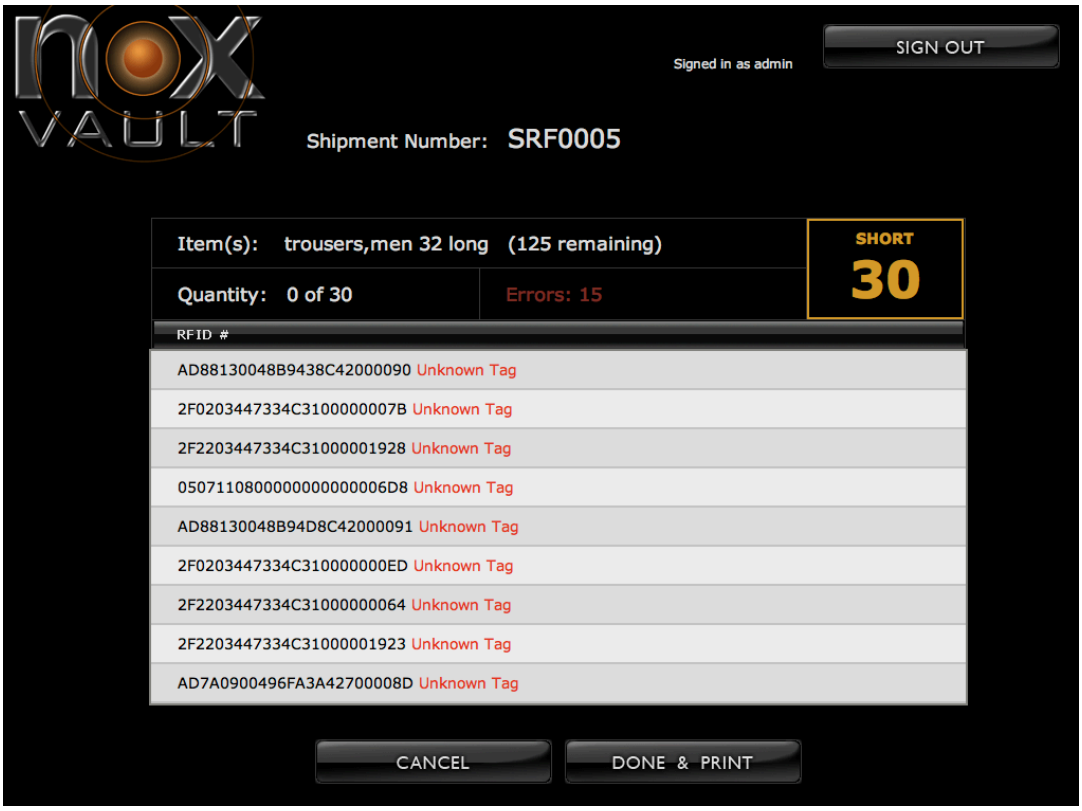
Step 1:
The user will be prompted to select a shipment to pack against by tapping on the item in the list. This list displays all available shipments and CLINs until an item-level RFID tag is present. Once an item-level RFID tag is present in the pack station, the kiosk will display only shipments that contain that NSN.

Shipments and CLINs are displayed based on the current 'In Progress' shipments and CLINs specified by the shipping administrator.

Step 2:
After selecting a Shipment CLIN, the user will be taken to the pack screen. The current remaining quantity for the entire shipment CLIN is displayed on the pack screen to give shippers a up-to-date running tally of the number of items that remain to be packed.



The shipper will then place items into a shipping container in the pack station until the Quantity reads ‘Case Complete’.



The pack screen will display any errors that need to be corrected. On a perfectly packed case the screen will read ‘Case Complete’ and the RFID list will be completely empty. If there are any RFID tags in the list, Nox will display an error that needs to be corrected. The errors could be:

Unknown Tag - This is a tag that has not been recorded by Nox. A blank tag or tag from a different system may be contained in the case. The case must be opened and the offending tag removed.

Incorrect NSN - This refers to a tag that has been programmed with a different NSN that does not belong to the shipment CLIN currently being packed. Nox does not allow for a multi-packed case so the offending tag must be removed before continuing.

Step 3:
Once the case has been packed, the user may click the Done & Print button to print the Case RFID label. The case label contains all the data of an exterior shipping container label.

If a case does not contain the correct number of items Nox will prompt the user to print a label for a **short** case. Nox will not allow users to print a case label with too many items present.

Breaking a Case
If a case has been incorrectly packaged, or needs to be repackaged for any reason, the shipper may place the case RFID tag, or an item from inside that case in front of the RFID reader at the pack station to tap the ‘Break Case’ link.

Note: Once a case has been broken, the Case RFID tag must be destroyed. Item level RFID tags may be reused.

Using NoxVault to Pack a Case

Users may also use the NoxVault handheld to pack a case. NoxVault will allow users to scan entire cases or entire pallets in less than 2 seconds.

Using the packing screen, scan the contents of a case until the same requirements as the packing station are met and click the Done Scanning button. The user will be prompted to exclude any RFID tags that were unintentionally packed before printing a Case RFID label.

NoxVault connects to the Nox backend via a Wi-Fi connection to collect tag data and shipment details. Every NSN, or item tag, stored in Nox can be recalled with the NoxVault handheld. As the user scans the items in a case, NoxVault can verify each tag against the Nox server back end to ensure that every packed NSN is correct and that there are not multiple NSNs packed into a single case.

The Case packing screen will display the number of scanned items, and the number of needed items. NoxVault will prompt the user if the number of scanned items does not match the number of needed items and will allow the user to print a short case. If the number of scanned items is more than the number of needed items, NoxVault will not allow the user to print a case label.

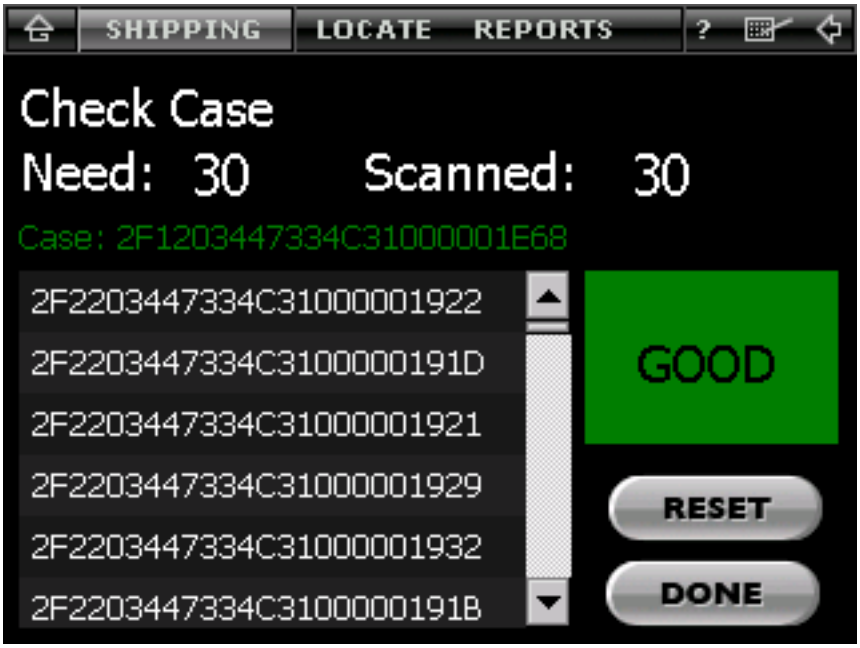
NoxVault will display errors for any of the following cases:

Unknown Tag - This is a tag that has not been recorded by Nox. A blank tag or tag from a different system may be contained in the case. The case must be opened and the offending tag removed.

Incorrect NSN - This refers to a tag that has been programmed with a different NSN that does not belong to the shipment CLIN currently being packed. Nox does not allow for a multi-packed case so the offending tag must be removed before continuing.

Users must inspect the case for additional tags, or missing items and either remove offending tags or add additional items before rescanning and clicking the print button to print a case label.

When a case label is printed, NoxVault sends the item data of the case to the Nox back end. Nox stores all the information about the case and shipment and sends a command to the printer to print a case level RFID label along with the exterior container data.



Packing a Pallet

Once a case has been packed, it is placed on a pallet in the palletizing station. Shippers will log into the pallet kiosk and select their shipment just as they did when packing a case.

The pallet station will read all case tags placed on the pallet and ignore all item tags. If Nox finds any tags that are part of a different shipment on the pallet the user will be able to see those tags in the errors list. Any RFID labels that are not recognized by Nox, blank or non-programmed RFID tags, will display as errors on the screen. All offending tags must be removed from the pallet before continuing.

Once the pallet is completely stacked, the shipper will verify that the correct number of cases exists on the pallet, and that there are no unknown or incorrect tags in the zone. Clicking the Done & Print button will produce a pallet RFID tag.

Breaking a Pallet

Pallets that have been incorrectly palletized can be broken down and rebuilt. To break a pallet the shipper will have to put the pallet RFID tag or any case tag on the pallet in view of the pallet RFID reader station and click the ‘Break Pallet’ link.

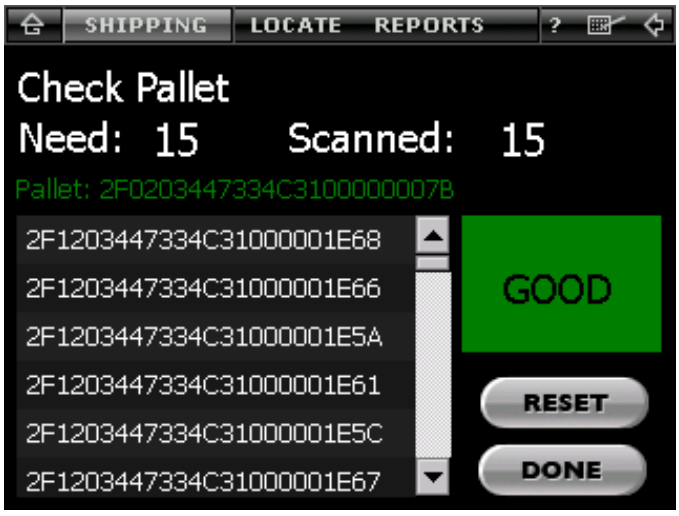
Note: The Pallet RFID tag must be destroyed after breaking a pallet.

Packing a Pallet with NoxVault (Future Release)
Pallets can also be created using the NoxVault handheld. Just like when packing a case, the user will verify that every case has been packed and that there are no incorrect tags in view before clicking the Done Scanning button and excluding any extra tags that were picked up by mistake.

NoxVault will automatically pull case information and shipment information from the Nox server over a Wi-Fi connection.

To scan a pallet with NoxVault, the user will pull the trigger to begin scanning for cases. The shipment will automatically be selected for them based on the first case NoxVault reads. NoxVault will then add every case it reads to the pallet. Once the correct number of cases have been read, the user will be prompted to print a label from the handheld.

The handheld connects back to the Nox backend over the Wi-Fi connection and sends Nox the currently scanned information. Nox then sends a signal out to a printer to print a pallet RFID label.



Validating a Shipment

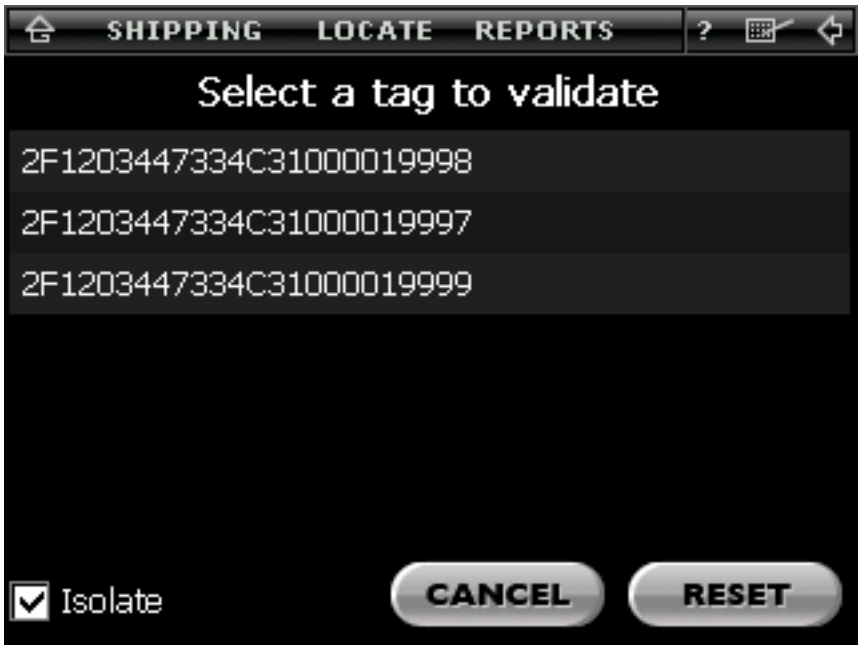
Once a case or pallet has been packed, it can be validated with NoxVault. NoxVault can be used for QA to double check that a case or pallet has been packed properly.

Begin by logging into NoxVault using the keypad.

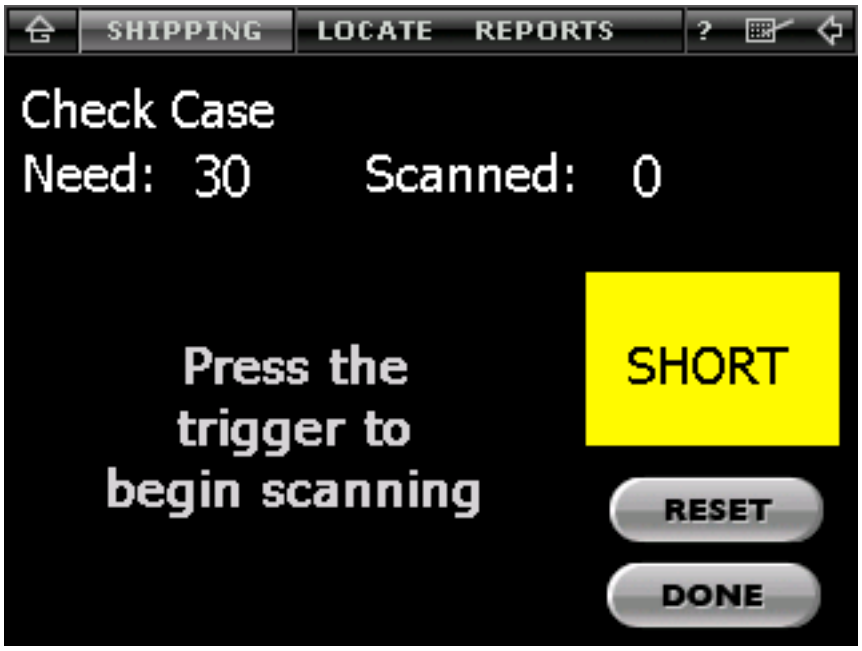
This will take you to the home screen where the user can validate the contents of a container, or check a container for valid tags.

Tapping on the Validate button will prompt the user to validate a Case or Pallet.

Validating a Case or Pallet Against Nox (Future Release)
Select Case to validate a case then pull the trigger to begin scanning. NoxVault will display a list of all case tags in view.



Tap on the case tag you wish to validate. NoxVault will connect to the Nox system to collect information about the selected case.



Pull the trigger to scan the contents of the selected case. Nox will check to ensure that each RFID tag is reading properly and valid for the selected case. If all tags are present and valid, tap the Done button to go back to the case and pallet validation screen.

When in Isolate mode, NoxVault ignores all tags that are not part of the currently selected case or pallet allowing the user to validate a case or pallet in a tag-rich environment.

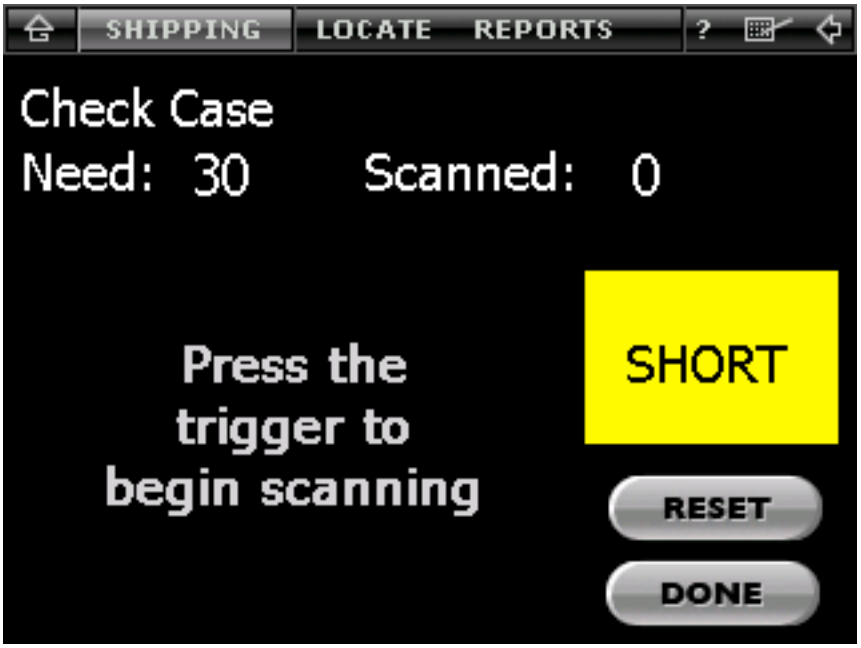
While scanning a case, the QA user may want to check that case without moving it away from all other cases. This can be done by clicking the Isolate checkbox. While in Isolate mode, NoxVault will only search for tags that are contained within the selected case. All other tags will be ignored.

This process can be repeated for each case and pallet on the shipment.

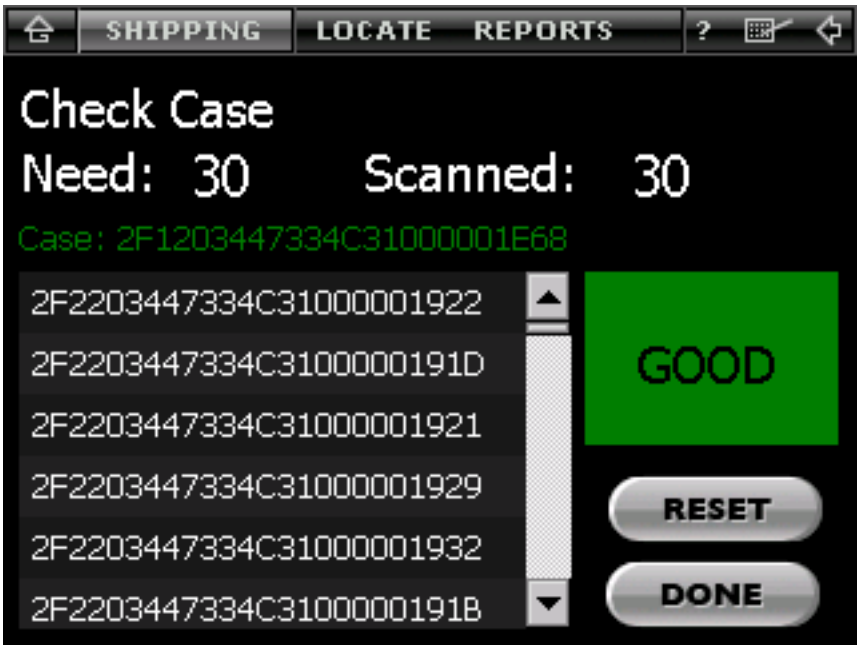
Checking Cases and Pallets Without a Nox Backend
If NoxVault is not connect to the Nox back end software, cases and pallets can still be checked for correctness. On the Home screen, tap the Check button.

Again, the user will be prompted to select either Case or Pallet.

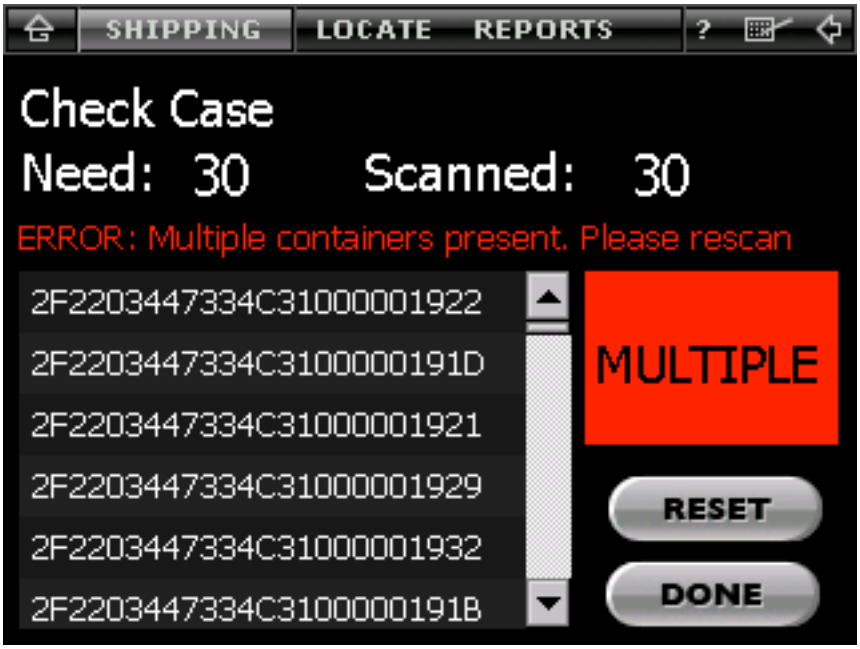
To scan the contents of a case, tap the CASE button and pull the trigger to begin scanning.



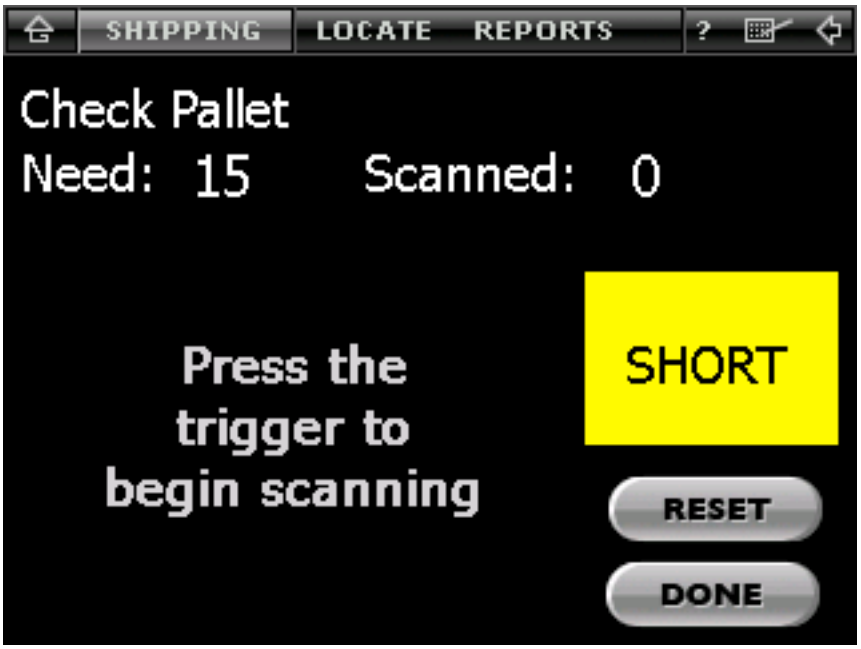
NoxVault will automatically find the case tag and each item tag contained in that case.



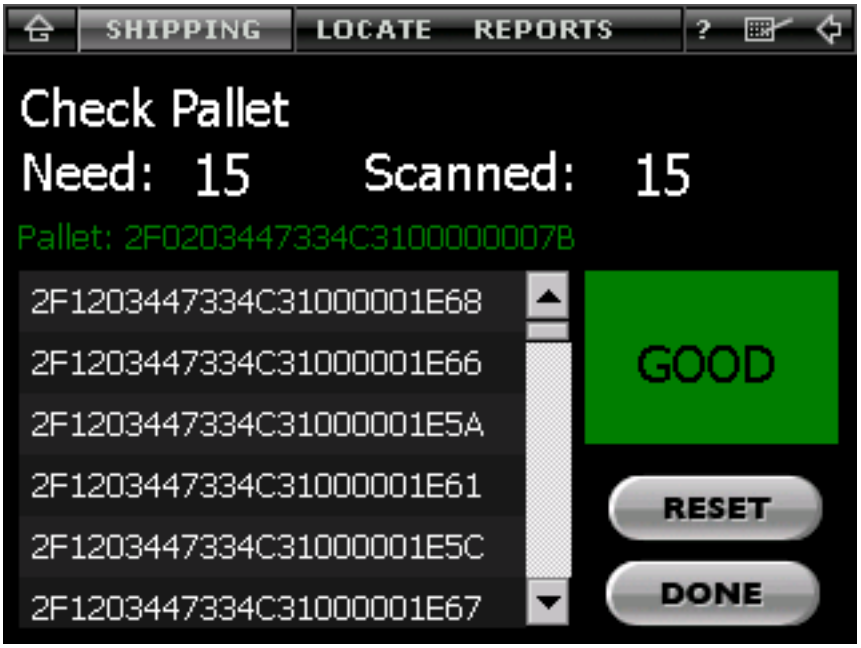
Once the case has been scanned, NoxVault will display the number of scanned item tags, the number of remaining item tags and the case tag ID. If too many item tags are scanned, or too many case tags are scanned the user will need to remove any extra RFID tags from the area and tap the Reset button to scan again.



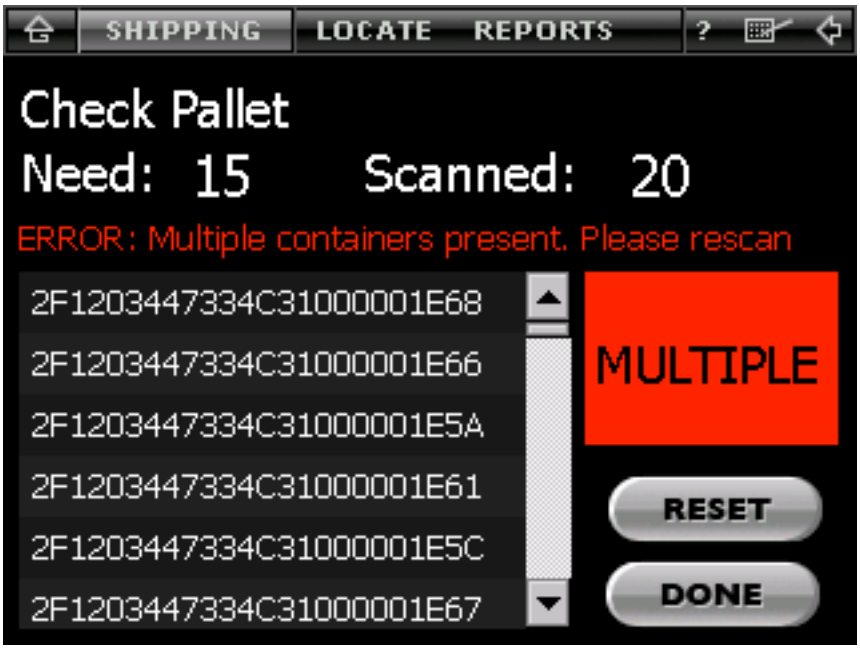
This process can be completed for each case to check the contents of every container before being placed on a pallet. Once the pallet has been packed the user may click on the Pallet button on the first Check screen.



The pallet check screen is identical to the case check screen. The user will pull the trigger to scan for case RFID tags while the scanner ignores all item tags.



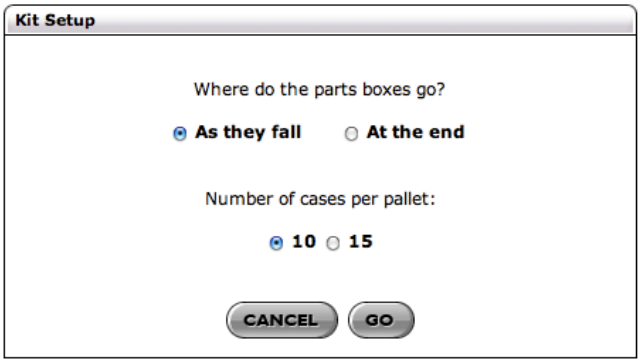
Once the case tags have been scanned, the pallet check screen will display a list of valid case RFID tags and the scanned pallet tag. If too many case tags or pallet tags are present, the user will be prompted to remove them and must reset the scan to scan again.


SHIPPING
LOCATE
REPORTS
?
Check Pallet
Need: 15
Scanned: 20
ERROR: Multiple containers present. Please rescan
2F1203447334C31000001E68
2F1203447334C31000001E66
2F1203447334C31000001E5A
2F1203447334C31000001E61
2F1203447334C31000001E5C
2F1203447334C31000001E67
MULTIPLE
RESET
DONE

Kitting Case and Pallet Labels

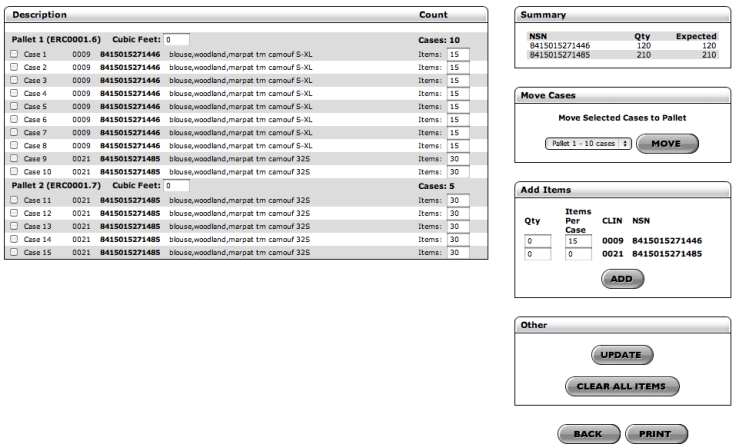
Nox includes the ability to print case and pallet tags for a shipment that does not require RFID. This feature will automatically generate a pallet label, followed by a set of case labels for each CLIN in your shipment. To print kitted RFID labels, navigate to your shipment and click the “Print Non-Item Kit for this Shipment” button.

On the Kit Setup page you will be prompted to select where the partial boxes go. You may select “As they fall” to allow partial boxes to fill out pallets in their regular order, or you may select “At the end” which will group all partial boxes onto a pallet at the end of the shipment. You will also be prompted to select the number of cases per pallet. The current options are either 10 cases per pallet or 15 cases per pallet.



Clicking the Go button will allow Nox to build a suggested pallet for you. This suggestion will pack all of your cases onto pallets ordered by CLIN.

The shipment kit screen will display your pallets in a list along with each case that has been associated with the pallet. Click the “Print” button to finalize your shipment and print your RFID tags. The printer will produce one pallet label followed by all of the case labels associated to that pallet. Please keep these labels in order and apply them to your pallets in the same order they were printed.



Moving Cases
It is possible to move cases from one pallet to another by clicking on the checkbox to the left of a case, selecting the target pallet on the right side of the screen and clicking the “Move” button. Selecting “New Pallet” in the drop down list will add an additional pallet to your shipment before moving the selected cases to it.

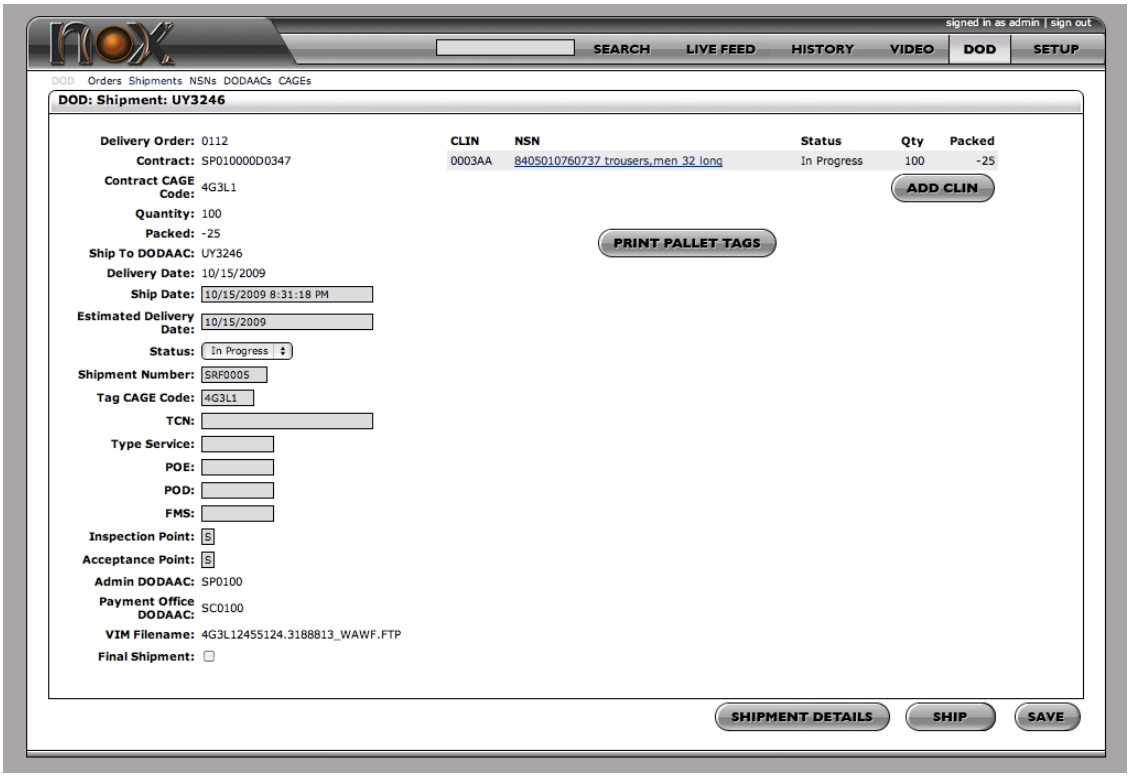
Adding Cases
To add cases to a kit, type the item quantity next to a CLIN on the right side of the page and click the “Add” button. This button will divide the number of items by the number of items per case and add that many cases to the last pallet on your shipment.

Changing Quantities and Removing Cases
The item quantity per case is displayed in a text box to the right side of each case in the shipment kit screen. To change the number of items in a case, type the new quantity into the text box and click the “Update” button. You may also set the quantity to 0 to completely remove the case from the shipment.

Starting Over
If you wish to completely clear out the suggested kit and manually re-add cases, you may click the “Clear All Items” button on the right side of the screen. This will permanently remove all the cases from your kit. You must then go to the “Add Items” section on the right side of the screen to manually add your cases back to the shipment.

Transmitting a Shipment to VIM-ASAP

Once the verification has been completed, the shipment is ready to be transmitted to VIM-ASAP.



To transmit shipment data to VIM-ASAP the shipment administrator must select the shipment from the Shipments list on the DoD tab of the Nox interface.

Clicking the Ship button will automatically build a Combo document with all appropriate shipment details and package contents.

Nox already knows exactly which items are in each case, exactly which cases are on each pallet along with exact quantities. This data is converted to a flat file format accepted by VIM-ASAP and then transmitted to VIM-ASAP via FTP.

VIM-ASAP polls for FTP transmissions every 15 minutes. The completed combo document should show up on VIM-ASAP's servers once it has been imported by VIM-ASAP.

Troubleshooting

Shipment Issues

Q: I've created a shipment but none of my CLINs are showing up at the pack station, how do I pack against my shipment?

A: Be sure to set the shipment's status to In Progress, and to set each CLIN's status to In Progress.

Q: I've transmitted my shipment data to VIM-ASAP but I'm receiving an error from VIM, or my shipment is not showing up as complete. What should I do?

A: It takes up to 15 minutes for VIM-ASAP to receive a file. If you have waited more than 15 minutes, call the VIM-ASAP help desk for technical support. You may need the VIM Filename listed on the shipments screen.

Packaging Issues

Q: I've packed a case with 30 items but the pack station says I only have 29.

A: If there are 30 tagged items in a case but you are not reading all 30 you should remove the case from the pack station then add items in to that case a few at a time, monitoring for RFID tags until you add an item that does not display on the pack screen. This item may have a weak or bad RFID tag. That tag should be destroyed and replaced.

Q: A power outage or malfunction has caused my printer to stop printing item tags half way through a batch, what should I do?

A: Item level RFID tags do not need to be printed sequentially. If your print job fails you may simply start a new batch of RFID tags from the NSN screen. To clear out an existing print job, shut down the printer and wait for five minutes for the print job to clear before restarting.
