

FeneTech, Inc.

FeneVision® Tracking User Manual



FeneVision[®] Tracking User Manual

v. 18.1

June 2023

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Overview

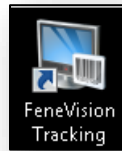
The FeneVision Tracking application consists of networked, bar-coded or touch-screen tracking, which can be located in key production areas throughout the manufacturing facility. These production areas, or stations, collect intermediate production status information, and visually display key production information to users. This collection of production statuses allows the generation of real time production data to both plant management and customers. Furthermore, FeneVision Tracking allows for reprocessing in case of rejects or defects in manufactured product.

Using Tracking

The FeneVision Tracking application allows the user to track parts through the manufacturing process. The parts can be scanned at a single tracking station or through multiple tracking stations.

Starting

To open the Tracking application, use the mouse to position the pointer on the Tracking icon and double click.



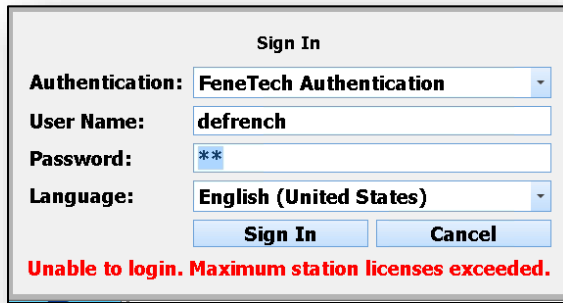
If the station accessed has 'Login Required' enabled, the user will be prompted with a login screen.

A screenshot of the 'Sign In' dialog box. It has a title bar 'Sign In'. Below the title bar, there are three labels: 'Authentication:' with a dropdown menu showing 'FeneVision Authentication', 'User Name:' with a text input field, and 'Password:' with a password input field. At the bottom, there are two buttons: 'Sign In' and 'Cancel'.

For users who have multiple languages configured for their applications, an additional drop-down will appear on the login screen to allow the user to select their desired language.

A screenshot of the 'Sign In' dialog box, similar to the previous one but with an additional 'Language:' label and a dropdown menu showing 'English (United States)'. The 'Sign In' and 'Cancel' buttons are at the bottom.

For users that have tracking and trucking stations by license, if the maximum number of licenses has been reached, the user will see the following error message:



The user will not be able to open Tracking until another Tracking or Trucking station is closed, freeing up a license.

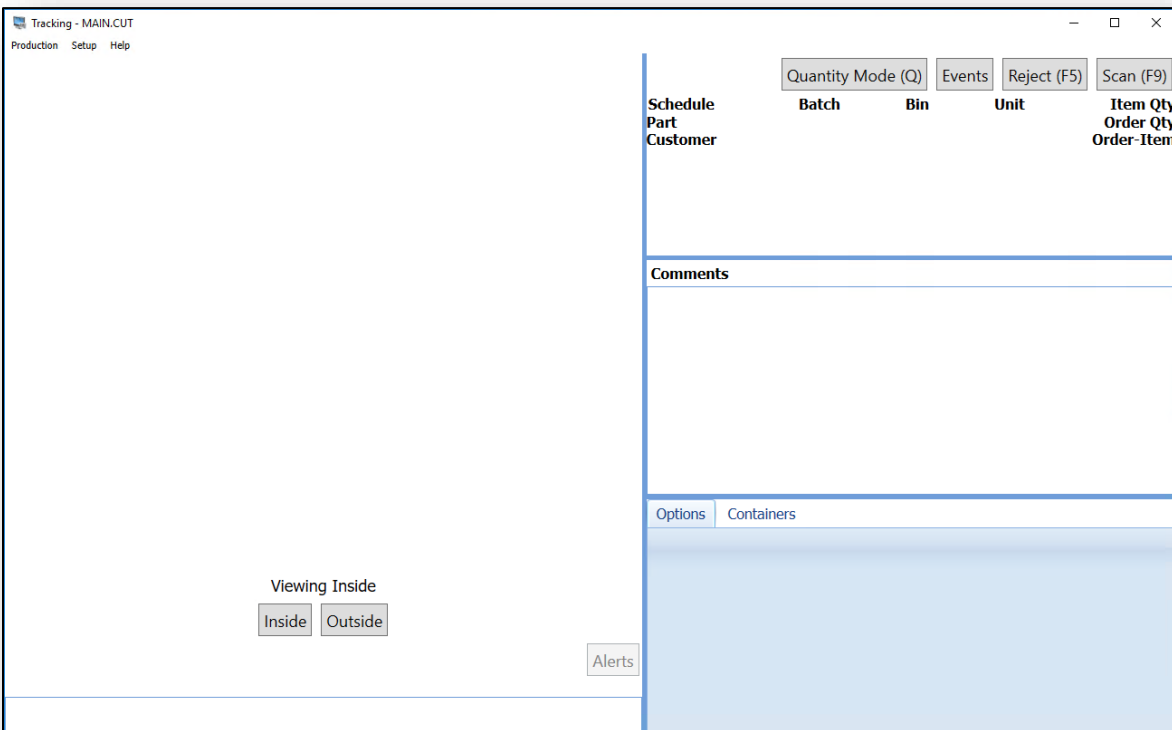
Scanning

Scanning in FeneVision can be achieved in one of five modes. Navigate to the 'Setup' >> 'Settings' menu to configure the desired mode.

Part Updating

'Part Updating' mode can be used to scan parts separate from their 'Ordered Part'.

To use 'Part Updating' mode, open 'Setup >> 'Settings'. Under 'Tracking Mode', select 'Part Updating'.



To scan in 'Part Updating' mode, complete either of the following:

1. Scan an item barcode using the barcode scanner to select a unit; or
2. In the event a barcode is not available, manually scan by selecting 'SCAN (F9)'. The following screen will appear.

- a. Enter the 'Schedule' number and the 'Unit' number of the item to be scanned. The 'Unit' number can be found on the unit production label or in FeneVision BI.
- b. If 'Allow Ordered Part Scan' is enabled, a 'Master Key' and 'Parent Key' will not need to be entered when scanning the ordered part; however, if 'Allow Ordered Part Scan' is not enabled, the user must enter a 'Master Key' and a 'Parent Key' found on the production label.

Note: The 'Schedule / Unit / Master Key / Parent Key' values are also referred to as the 'SUMP'. This information is typically found on a production label next to the barcode.

The user has the option of scanning multiple units of the same line item with a single scan. Return to 'Setup' >> 'Options' >> 'General Tab' to indicate the 'Prompt for Quantity' option, and choose 'Enable', 'Disable', or 'Toggle'.

If a 'Part Updating' mode station is tied to a capacity work cell that falls at the end of the capacity plan of a set of parts, those parts will receive a status of 'Complete' when scanned at this station. All of the previous work cells that consist of the capacity plan for the scanned unit will be updated to a 'Complete' status. Also, all of the parts that make up the BOM of the unit that received the 'Complete' status will receive the same status.

Ex. An insulated unit is planned at CUT >> TEMP >> IG. If the unit is scanned at the IG station, regardless of where it was scanned previously, all of the work cells in the plan (CUT, TEMP, IG) will receive a 'Complete' status, and the entirety of the BOM for the unit (glass, spacer, gas, etc.) will also receive a 'Complete' status.

At anytime throughout the process a unit can be scanned at a station outside of the capacity plan without losing the data from the stations already scanned. This gives users the ability to scan at an extra station, such as a quality control station, without limiting the capacity requirements or losing information for previously scanned stations. When scanned at the next station on the capacity plan, the tracking history will show the additional station scan.

Manufactured Tab

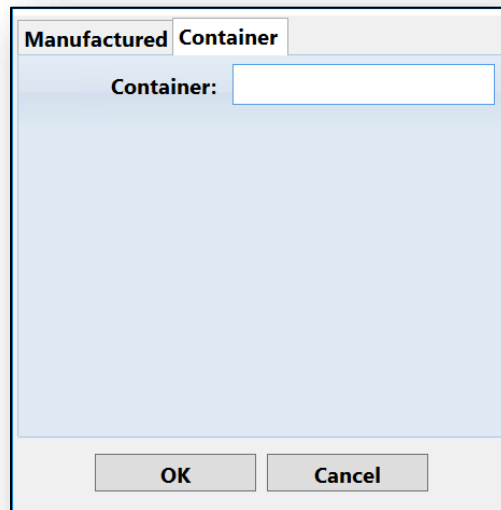
The fields on the 'Manufactured' tab of the 'Manufactured / Container' screen in 'Part Updating' mode include the 'SUMP'. These are assigned at schedule release:

- **Schedule** – Production schedule number.
- **Unit** – Production unit number—this is found on the Unit Production label or in FeneVision BI under 'Orders' >> 'Production Status'.

- **Master Key and Parent Key** – Unit sub-component numbers. These can be found on the unit production label. These values are used to identify individual components in each unit’s bill of material.
- **Batch Bin** – The user also has the option of selecting the ‘Batch Bin’ checkbox. Using the same data from BI, enter the appropriate values for the ‘Batch’ and ‘Bin’ number. Enter the ‘Master Key / Parent Key’ numbers if the user wants the option of accepting a sub-part of an ordered part instead of rejecting the entire assembly.

Container Tab

The ‘Container’ tab allows the user to enter a container ID or container key in order to open the ‘Containers’ screen. When a container is entered here, and ‘Prompt for Container’ is set at {None}, it is effectively scanning the container and units on the container with a status.



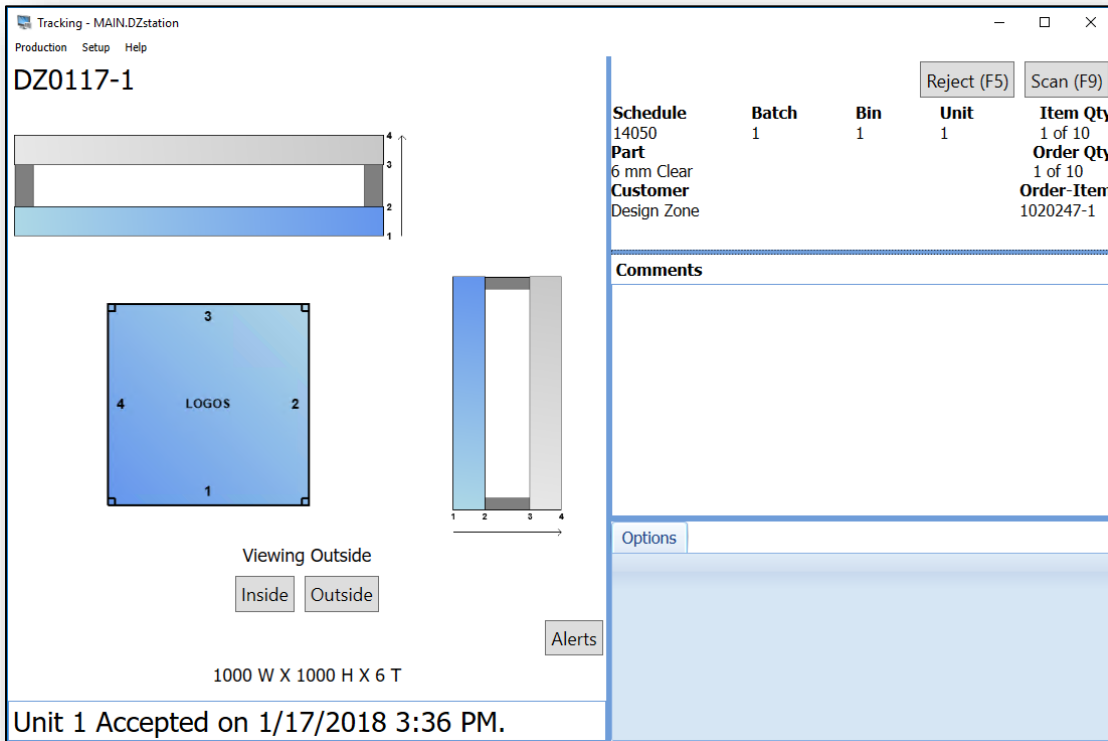
When ‘Prompt for Container’ is specified (after selecting OK), the ‘Containers’ screen appears. Users can open or empty a container from this screen.

Scanning

If the ‘Accept on First Scan’ is disabled, a single scan will select a unit. After selecting a unit or part, the ‘Run’ screen updates showing a picture of the unit or part scanned, as well as detailed order information. The selected unit or part can be accepted, competed, or rejected, or the user can manually select another unit.

To scan, complete the following:

1. To accept or complete the currently selected unit, scan its label or scan again using the SUMP. Once produced, it is marked as accepted or completed.
2. To reject the currently selected unit, select ‘REJECT (F6)’ before scanning the unit. Select ‘SCAN (F9)’, scan the SUMP again, and complete the rejection screen to finish rejecting the unit.
3. A successful scan is confirmed when the user hears the correct tone.



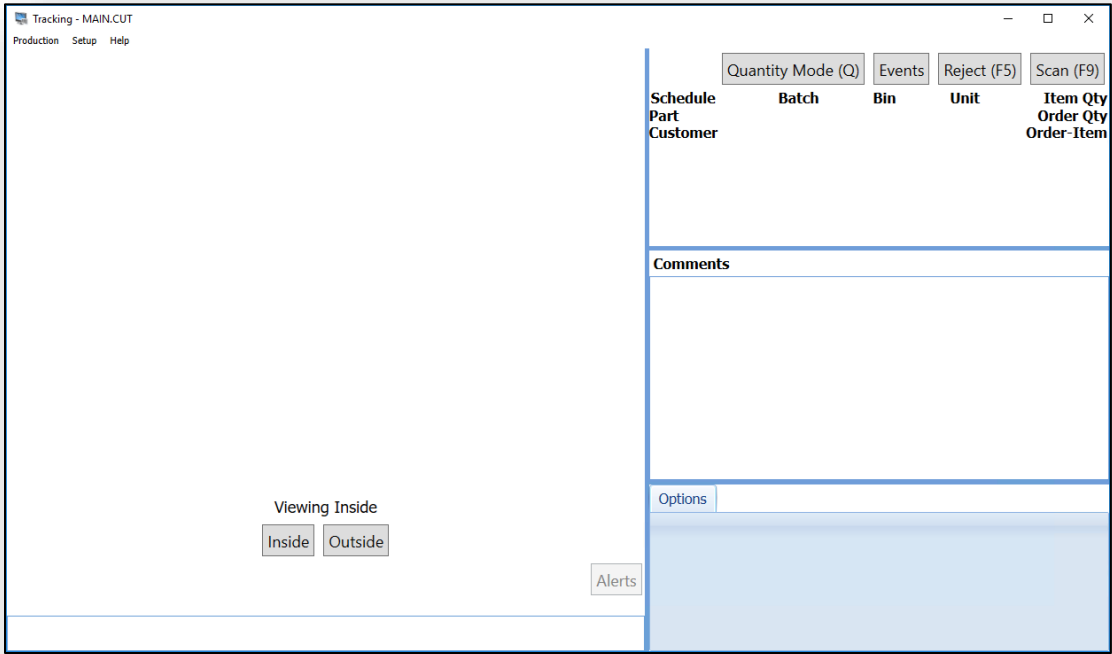
Note: If scanning an individual lite in an IG or Lami unit, FeneVision can be configured so that the selected layer is highlighted on the cross-section images. This can be seen in the image above. The outer lite was scanned, so the inner lites are not highlighted. This is configured in Core using the 'CAD Layer' attribute. See the FeneVision Core manual for more information.

Ordered Part Updating

'Ordered Part Updating' updates ordered parts or units with 'Accept', 'Complete', or 'Reject' status.

Note: Parts can only be rejected at their manufacturing location. Return to 'Setup' >> 'Settings' >> 'General Tab' to indicate manufacturing location

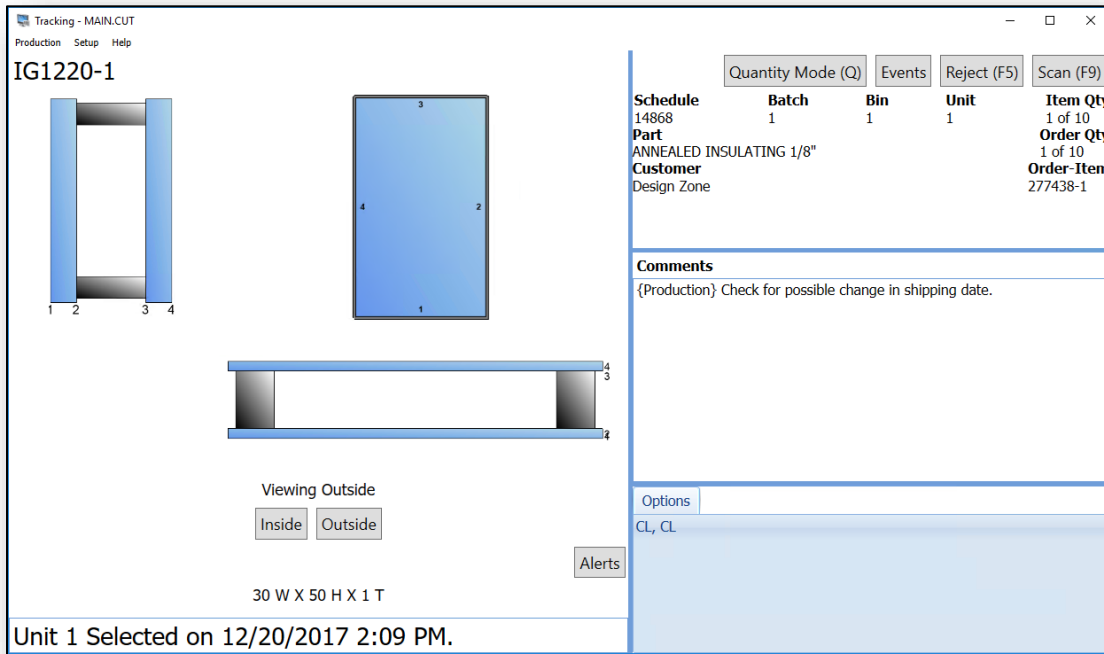
To use 'Ordered Part Updating' mode, open 'Setup >> 'Settings'. Under 'Tracking Mode', select 'Ordered Part Updating'.



To scan in 'Ordered Part Updating' mode, complete either of the following:

1. Scan an item barcode using the barcode scanner to select a unit; or
2. To manually scan in the event a barcode is not available, select 'SCAN (F9)'.
 - a. Enter the 'Schedule' number and the 'Unit' number of the item to be scanned. The 'Unit' number can be found in FeneVision BI or on production paperwork and labels.

- b. Additionally, just as in 'Part Updating' mode, the user also has the option of selecting the 'Batch Bin' checkbox. Using the same data from BI, enter the appropriate values for the batch and bin number.
- c. In the 'Container' tab, enter a container ID or container key in order to open the 'Containers' screen. When a container is entered here, and 'Prompt for Container' is set at {None}, it is effectively scanning the container and units on the container with a status.



3. After selecting a unit or part, the 'Run' screen updates showing a picture of the unit or part scanned, as well as detailed unit information.

If an 'Ordered Part Updating' mode station is tied to a capacity work cell that falls at the end of the capacity plan of a set of parts, those parts will receive a status of 'Complete' when scanned at this station. This is true whether the 'Mark Complete' setting is enabled or disabled. All of the previous work cells that consist of the capacity plan for the scanned unit will be updated to a 'Complete' status. Also, all of the parts that make up the BOM of the unit that received the 'Complete' status will receive the same status.

Ex. An insulated unit is planned at CUT >> TEMP >> IG. If the unit is scanned at the IG station, regardless of where it was scanned previously, all of the work cells in the plan (CUT, TEMP, IG) will receive a 'Complete' status and entirety of the BOM of the unit (glass, spacer, gas, etc.) will also receive a 'Complete' status.

At any time throughout the process a unit can be scanned at a station outside of the capacity plan without losing the data from the stations already scanned. This gives users the ability to scan at an extra station, such as a quality control station, without limiting the capacity requirements or losing information for previously scanned stations. When scanned at the next station on the capacity plan, the tracking history will show the additional station scan.

Work Route Updating

Tracking in 'Work Route Updating' mode can be done in both 'Work Route' and 'Rack' modes.

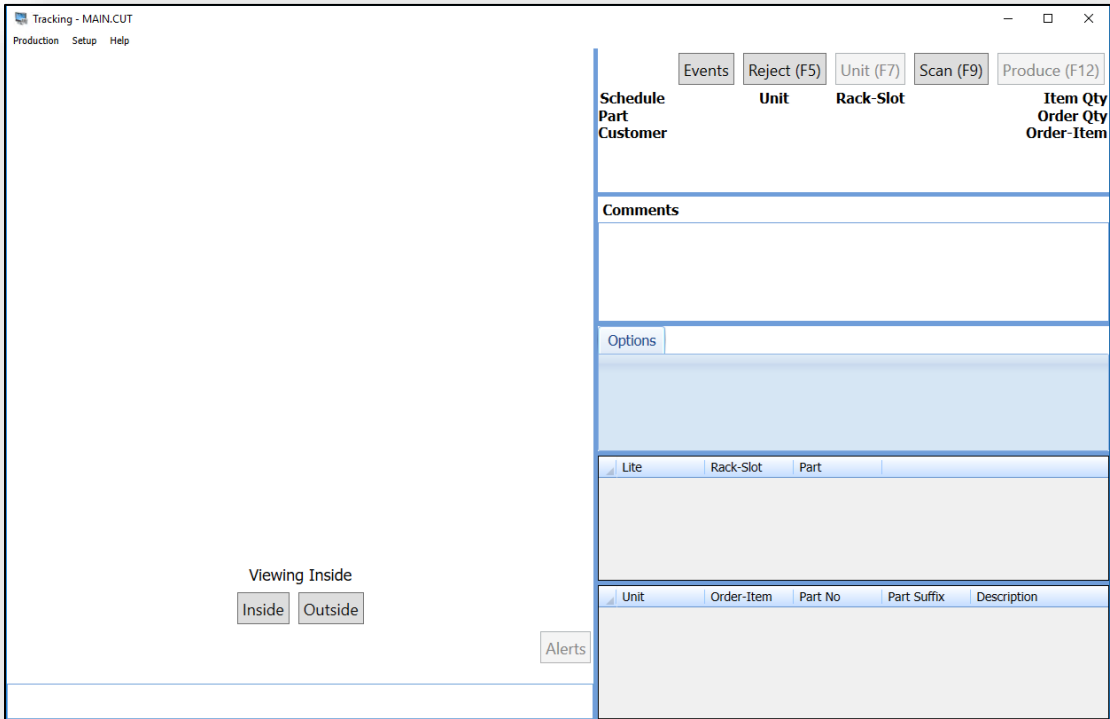
Work Route Mode

'Work Route' mode can be used to scan units of the same work route.

To use 'Work Route Updating' mode, open 'Setup >> Settings'. Under 'Tracking Mode', select 'Work Route Updating', and under 'Selection Mode', select 'Work Route'.

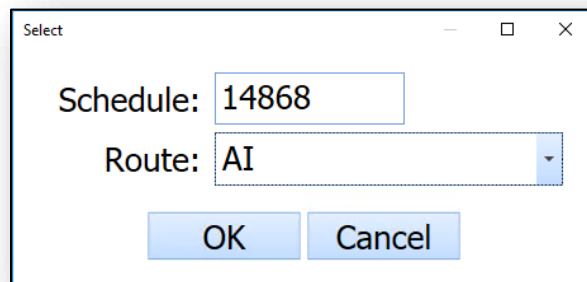
The screen in 'Work Route Mode' contains three additional action buttons. There are associated selection buttons located at the top right corner of the screen.

- **Scan (F9)** – Displays the contents of the schedule specified by the work route.
- **Produce (F12)** – Used to produce each unit individually from the queue.
- **Unit (F7)** – Allows the user to choose a unit from the queue out of the regular sequence.

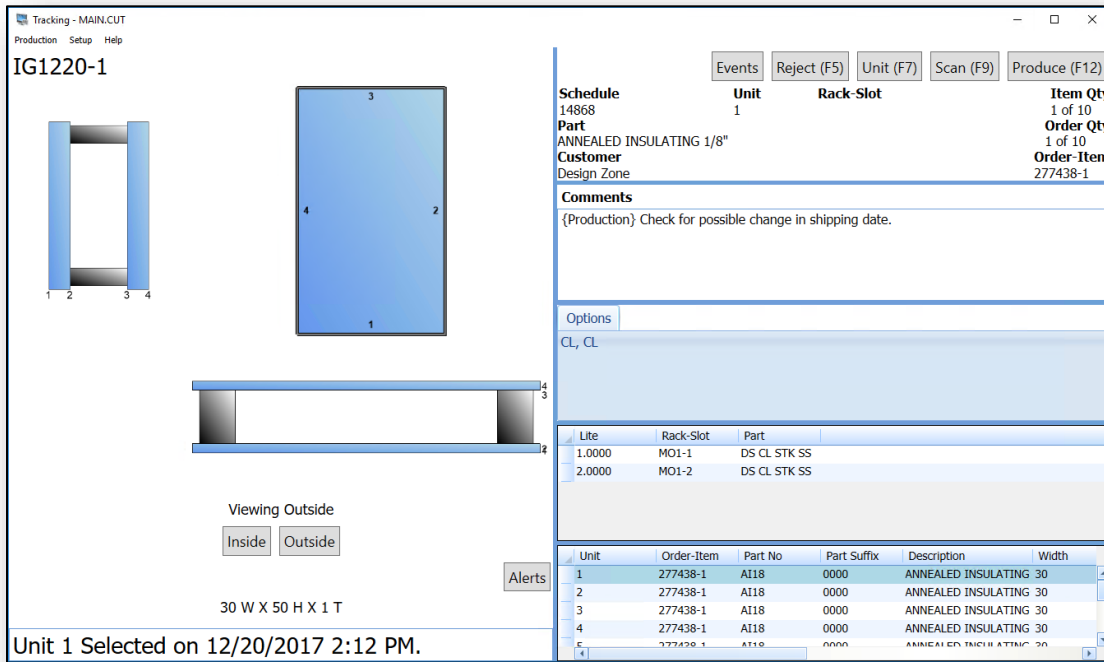


To scan in this mode, complete the following:

1. Select 'SCAN(F9)'. Just as in the previous two modes, the 'Schedule' information is available on the 'Unit Production' label.



2. Enter the schedule number and indicate, in the drop-down menu, the work route.



3. Tracking in this mode allows the user to see exactly where each part is racked in the work route 'EG' (read only).

The following columns are available in rack grid:

- **Lite** – Describes the individual lite's position within the overall unit.
- **Rack-Slot** – Slot of the rack where the selected part is to be placed.
- **Part** – Alphanumeric description of the part.

4. Use the 'Produce (F12)' button to accept the units in the item queue.

The following columns are available in the item queue:

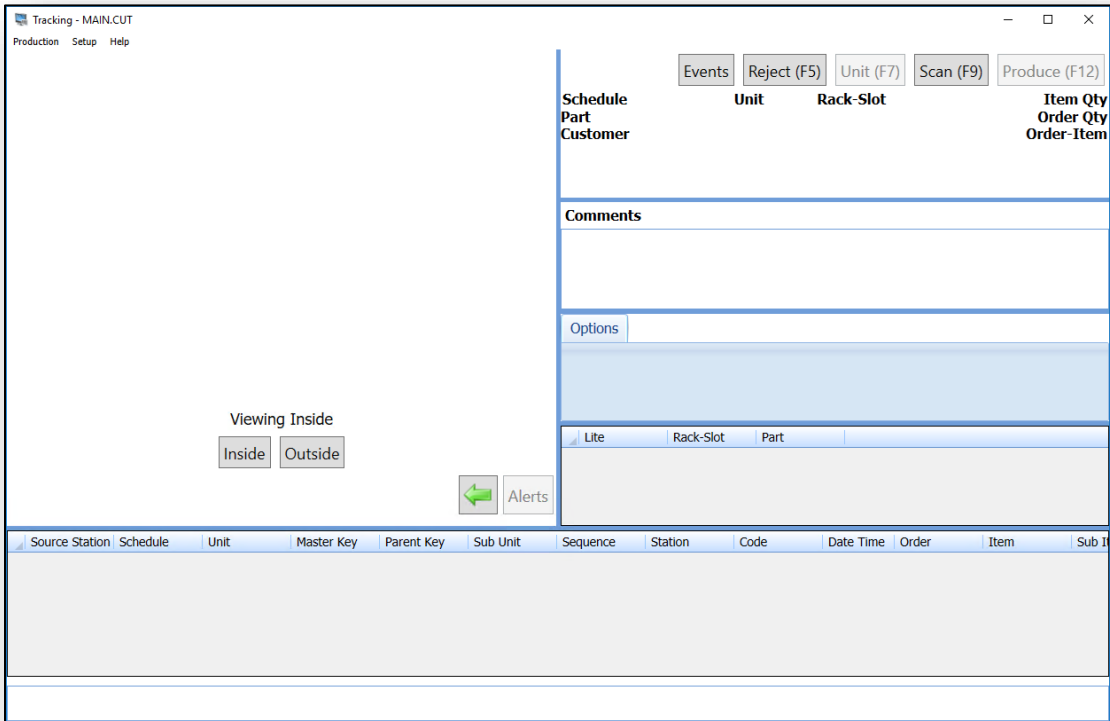
- **Unit** – Production unit number—this is found on the Unit Production label or in FeneVision BI under 'Order Status' >> 'Production Status'.
- **Order-Item** – Order number and line item number of selected part.
- **Part No** – Alphanumeric designation for the selected part.
- **Part Suffix** – Predefined part suffix, as defined in 'Part Setup'.
- **Description** – Description of the part.
- **Width** – Total width of the item.
- **Height** – Total height of the item.
- **Thickness** – Total thickness of the items.
- **CID** – Container ID
- **PACID** – Preassigned Container ID
- **StackID** – Specifies the stack location of the item on its current rack.
- **Slot** – Specifies the slot location of the item on its current rack.
- **SubSlot** – Specifies the sub slot location of the item on its current rack.

Rack Mode

'Rack' mode can be used to select units to place into the item queue based off of the production racking information.

To use 'Work Route By Rack' mode, open 'Setup >> 'Settings'. Under 'Tracking Mode', select 'Work Route Updating', and under 'Selection Mode', select 'Rack'.

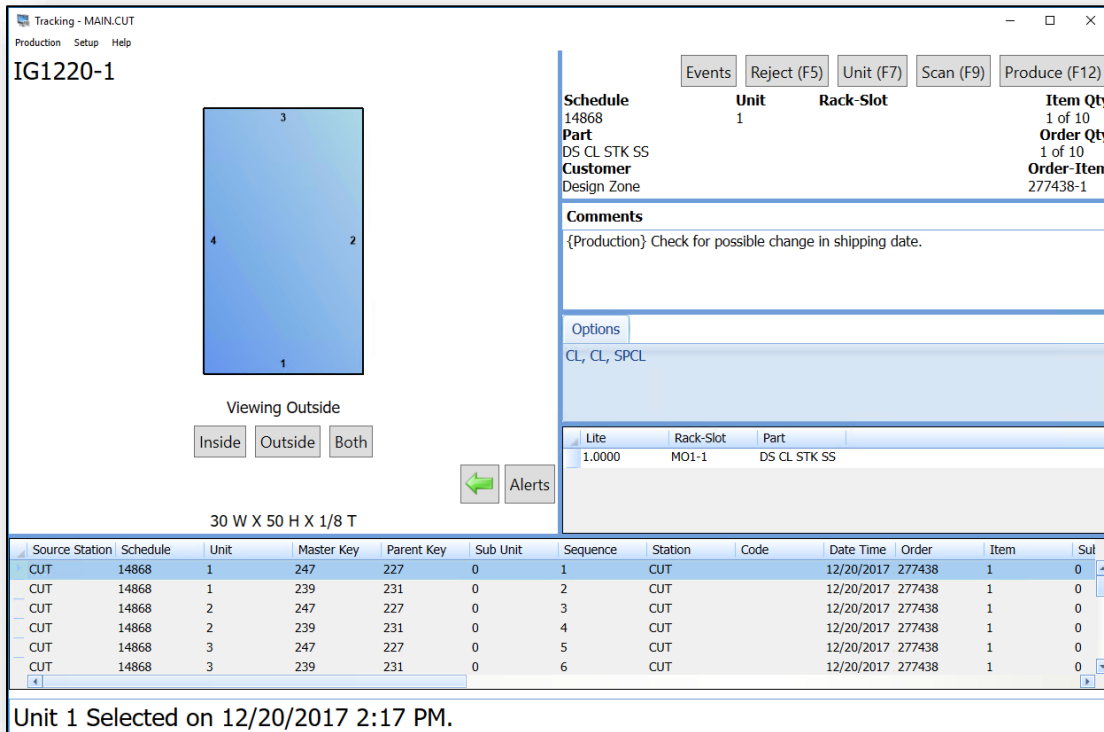
Just as in the previous modes, in 'Work Route By Rack' mode, the schedule information is available on the Unit Production label.



Note: The Tracking Station ID must be assigned to a valid Work Cell to use 'Work Route by Rack' mode.

To scan in this mode, complete the following:

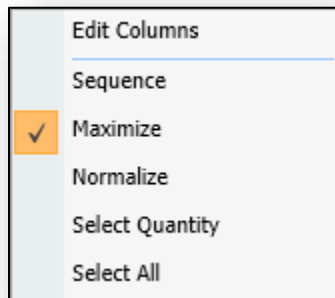
1. Select 'SCAN (F9)'.
2. Enter the schedule number. The user can use the drop-down to filter by rack or by unit.
3. Check the racks or units to be scanned, and select 'OK'. The following screen will appear.



4. Once the user highlights and selects this unit number, the screen will reflect that unit's information. Select 'PRODUCE (F12)' to produce that unit. 'UNIT (F7)' can be used to select units out of order to produce; otherwise 'PRODUCE (F12)' will produce units individually in the order they appear in the queue.

Note: Users can access the 'Previous Units' screen by selecting the 'Back' icon on the 'Run' screen.

Users can right click the 'Rack Queue' at the bottom of the screen to display the following options:



- **Edit Columns** – Use the 'Column Manager' feature to edit available columns.
 - **Lite** – Describes the individual lite's position within the overall unit.
 - **Rack-Slot** – Slot of the rack where the selected part is to be placed.
 - **Part** – Alphanumeric description of the part.
 - **Source Station** – When using inline tracking this displays the station ID where the item was processed before the current station. When not using inline tracking, this displays the current station ID.
 - **Schedule** – Production schedule number.

- **Unit** – Production unit number—this is found on the Unit Production label or in FeneVision BI under ‘Order Status’ >> ‘Production Status’.
 - **Master Key / Parent Key** – Unit sub-component numbers. These can be found on the unit production label. These values are used to identify individual components in each unit’s bill of material.
 - **Sub Unit** – Displays the reject revision number when using SUMPR functionality.
 - **Sequence** – Order in which the units in the rack were scheduled to be produced.
 - **Station** – Tracking station where the item was scanned, or the current station if the item has not yet been scanned.
 - **Code** – Transaction code associated with the scan of the item.
 - **Date Time** – Date/time item was scanned or placed into the queue at the current tracking station.
 - **Order** – Alphanumeric value assigned during Order Entry to identify the order.
 - **Item** – Line item number associated with the order.
 - **Sub Item** – Sub-number associated with line item, if the item is a subassembly part.
 - **Part Number** – Alphanumeric designation for the selected part
 - **Part Suffix** – Predefined part suffix, as defined in ‘Part Setup’.
 - **Width** – Total width of the item.
 - **Height** – Total height of the item.
 - **Thickness** – Total thickness of the item.
 - **Customer** – Customer name
 - **Target Ship Date** – Date the order is to be shipped to the customer. By default, the ‘Target Ship Date’ is the same as the ‘Required Date’. However, if shipping days are configured in ‘Shipping Routes’ setup, then the ‘Target Ship Date’ is calculated as number of shipping days before the ‘Required Date’.
 - **Plan Date** – Date order is planned to go to production.
 - **Prod Work Cells** – Displays the description of the work cells from ‘Work Route Setup’ where the item was planned.
 - **Capacity Work Cells** – Displays the Capacity Planning work cells where the item is planned.
 - **Work Route ID** – Alphanumeric ID associated with the work route.
 - **Work Route** – Route assigned to the schedule-unit.
 - **Status** – ‘Complete’, ‘Accepted’, or ‘Rejected’.
- **Sequence** – Opens the ‘Rack Sequence’ screen.

Sequence

[Waiting]

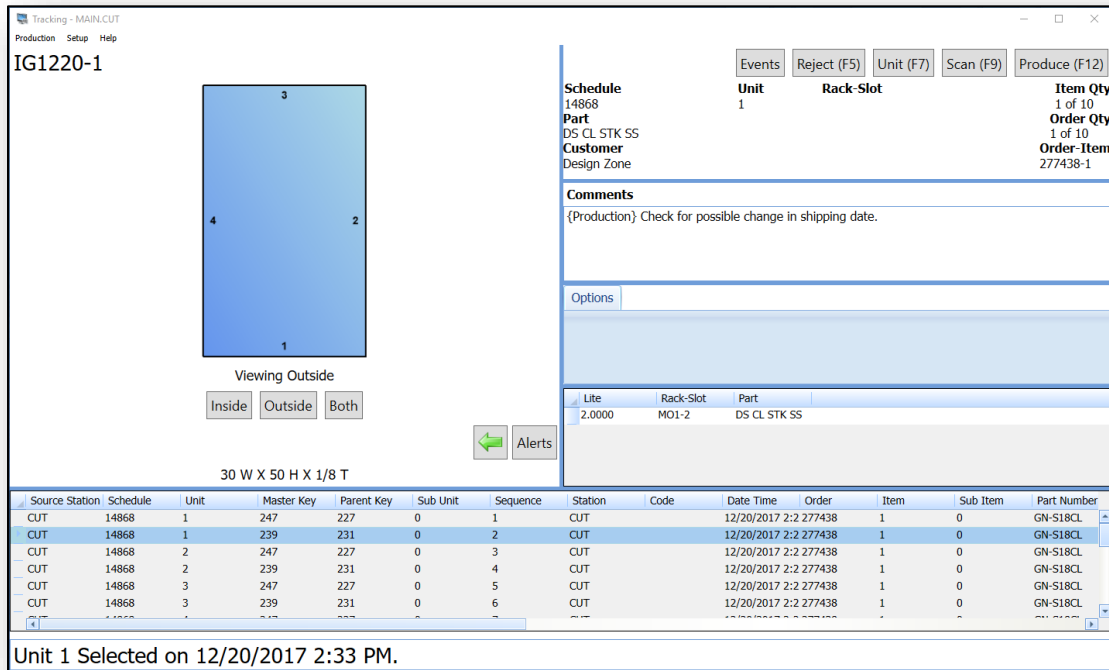
Unit	Station	Status	Date Time	Order-Item	Part Number	Part Suffix	Size	Customer	Target Ship Date	Plan Date	Capacity Work Cells	Work Route	Container ID	Container/Racks	Harb/Racks
1	CUT	Waiting	12/20/2017 2:28...	277438-1	GN-S18CL	0000	30 W X 50 H X 1/8 T	Design Zone	12/29/2017	12/28/2017	CUT, CUT-HEAVY	AI			MO1
2	CUT	Waiting	12/20/2017 2:28...	277438-1	GN-S18CL	0000	30 W X 50 H X 1/8 T	Design Zone	12/29/2017	12/28/2017	CUT, CUT-HEAVY	AI			MO1
3	CUT	Waiting	12/20/2017 2:28...	277438-1	GN-S18CL	0000	30 W X 50 H X 1/8 T	Design Zone	12/29/2017	12/28/2017	CUT, CUT-HEAVY	AI			MO2
4	CUT	Waiting	12/20/2017 2:28...	277438-1	GN-S18CL	0000	30 W X 50 H X 1/8 T	Design Zone	12/29/2017	12/28/2017	CUT, CUT-HEAVY	AI			MO2
5	CUT	Waiting	12/20/2017 2:28...	277438-1	GN-S18CL	0000	30 W X 50 H X 1/8 T	Design Zone	12/29/2017	12/28/2017	CUT, CUT-HEAVY	AI			MO3
6	CUT	Waiting	12/20/2017 2:28...	277438-1	GN-S18CL	0000	30 W X 50 H X 1/8 T	Design Zone	12/29/2017	12/28/2017	CUT, CUT-HEAVY	AI			MO3
7	CUT	Waiting	12/20/2017 2:28...	277438-1	GN-S18CL	0000	30 W X 50 H X 1/8 T	Design Zone	12/29/2017	12/28/2017	CUT, CUT-HEAVY	AI			MO4
8	CUT	Waiting	12/20/2017 2:28...	277438-1	GN-S18CL	0000	30 W X 50 H X 1/8 T	Design Zone	12/29/2017	12/28/2017	CUT, CUT-HEAVY	AI			MO4
9	CUT	Waiting	12/20/2017 2:28...	277438-1	GN-S18CL	0000	30 W X 50 H X 1/8 T	Design Zone	12/29/2017	12/28/2017	CUT, CUT-HEAVY	AI			MO5
10	CUT	Waiting	12/20/2017 2:28...	277438-1	GN-S18CL	0000	30 W X 50 H X 1/8 T	Design Zone	12/29/2017	12/28/2017	CUT, CUT-HEAVY	AI			MO5

OK Cancel

The 'Sequence' dialog allows users to customize the order in which the units in the rack will be produced. There are two choices from the drop-down in the upper left side of the menu: Waiting and Accepted. When 'Waiting' is selected, changes to the sequence will affect the order the units are displayed at the source station. When Accepted is selected, changes to the sequence will affect the order the units are displayed at the destination station. Using the arrows on the right side of the dialog, the user can change the order of the units. Additionally, all column headers can be used to sort the grid which can be used as a quick way to sequence the units. Selecting 'OK' will apply the sequence to the rack in the in the main Tracking dialog.

When the sequence is changed for units that were accepted at the source station, the units that are out of sequence will show up highlighted in yellow at the destination station.

Users can right-click on the header to edit the columns. The columns available are the same as shown in the 'Rack Queue'.

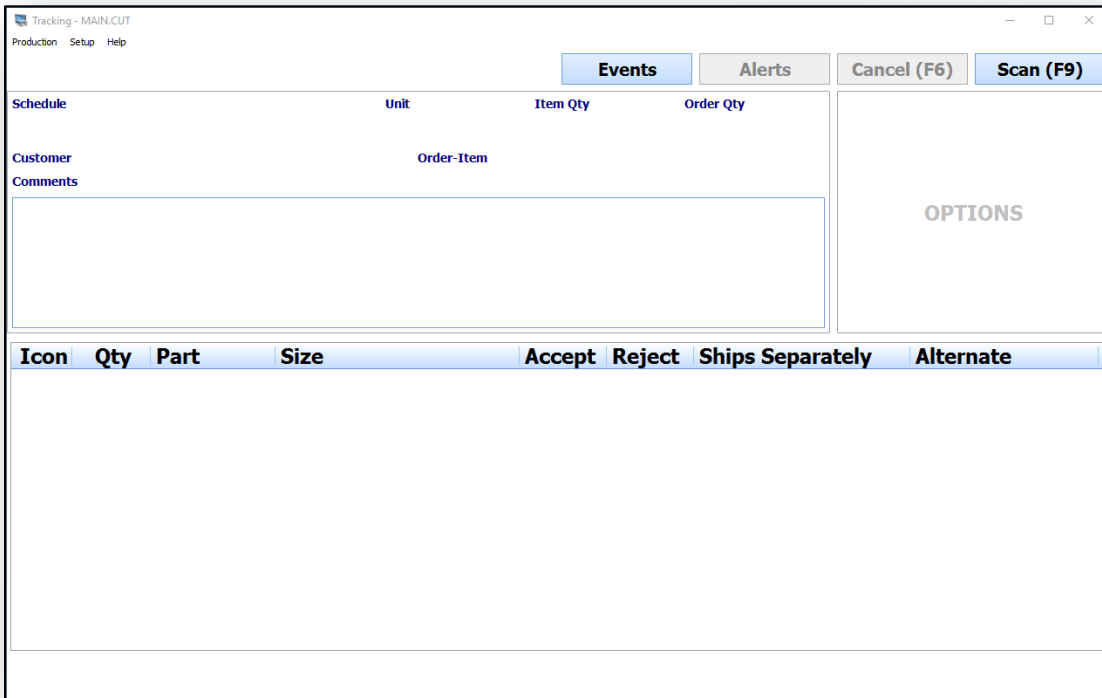


- **Maximize** – Positions the ‘Rack Queue’ pane across the bottom of the entire screen.
- **Normalize** – Positions the ‘Rack Queue’ pane in the bottom right corner.
- **Select Quantity** – Allows the user to specify the number units that will be produced at once in the ‘Rack Queue’.
- **Select All** – Allows the user to select all units to be produced at once in the ‘Rack Queue’.

Assembly Updating

Tracking in ‘Assembly Updating’ mode allows the user to scan the components within a single subassembly of a unit’s bill of material; verifying that all components are scanned, and the incorrect components are not scanned.

To use ‘Assembly Tracking’ mode, open ‘Setup >> ‘Settings’. Under ‘Tracking Mode’, select ‘Assembly Tracking’.



To scan in 'Assembly Updating' mode, complete the following:

1. Select 'SCAN (F9)'.

2. Enter the 'Schedule' number, 'Unit' number, 'Master Key', and 'Parent Key' for the subassembly the user intends to scan.
3. Select 'OK'. A successful scan will result in the following screen:

Tracking - MAINtracking
Production Setup Help

Events Alerts Cancel (F6) Scan (F9)

Schedule
4735 - KD0312-2

Unit **1** Item Qty **1 of 1** Order Qty **1 of 1**

Customer **FeneTech[Campus]** Order-Item **8709-1**

Comments

WH, CLCL, ARG

OPTIONS

Qty	Part	Size				
1	8660DH - DOUBLE HUNG	36 W X 60 H X 3 1/4	Accept	Reject		
1	8660DH-F - DOUBLE HUNG FRAME	36 W X 60 H	Accept	Reject	Ships Separately	Alternate
1	8660DH-KS - DOUBLE HUNG KEEPER SASH	32 5/16 W X 28 3/4	Accept	Reject	Ships Separately	
1	8660DH-LS - DOUBLE HUNG LOCK SASH	33 5/16 W X 28 3/4	Accept	Reject	Ships Separately	Alternate

Unit 1 Selected on 3/12/2019 1:47:17 PM.

- If a user scans a part that is not part of the current assembly, the following prompt will appear accompanied by the associated tone:



Users can right click on the header to edit the columns. The following columns are available:

- Icon** – Displays a green checkmark when an item is accepted and a red 'No' symbol when an item is rejected.
- Qty** – Scanned quantity of the selected item.

- **Quantity Editor** – Allows the user to edit the quantity on a part with an alternate part. This screen is accessed by clicking the quantity button. Only enabled when the part is or has alternate parts and the ‘Enable Quantity Edit for Subassembly’ setting is enabled.

- **Part** – Alphanumeric identifier of the part.
- **Size** – Width, Height, and Thickness
- **Accept** – Button to accept the item.
- **Reject** – Button to reject the item. Will bring up the ‘Reject’ screen.
- **Ships Separately** – Button to change subcomponent parts to be ‘Ships Separately’. The user will be prompted to accept the change.

Note: If ‘Ship Separate on Same Truck’ is set to prompt via the settings screen, a prompt will popup to ask if the item is to be shipped loose on the same truck or to be left off of the truck. If the user selected yes or no to the prompt, all subsequent ship separately units must use the same setting.

Note: The “Ship Separately” button is automatically disabled if the line item quantity is greater than one (1).

- **Alternate** – Alternate part that can be used in place of the current item.
 - If there is one alternate part configured, the system will verify the alternate part configured.
 - If there is more than one alternate part configured, a dialog that lists the available alternate parts will open. Select one and click OK. The system will verify the alternate part selected.
- **Part Number** – Alphanumeric designation for the selected part
- **Part Suffix** – Predefined part suffix, as defined in ‘Part Setup’.
- **Width** – Total width of the item.
- **Height** – Total height of the item.
- **Thickness** – Total thickness of the item.
- **Vendor Part** – Alphanumeric part designation given by the vendor
- **Vendor Description** – Vendor provided description of the part
- **Status** – ‘Completed’, ‘Accepted’, or ‘Rejected’
- **Station** – Tracking station at which the item was scanned
- **Date Time** – Date/time order-item was scanned at the tracking station.

Users will be notified of orders with attachments in the upper left portion of the screen via a paperclip icon.

Ships Separately

Subcomponent parts can be changed to ‘Ships Separately’ by clicking the ‘Ships Separately’ button next to the part. This is done when the part is unavailable to be packaged and must be shipped separately to the customer at a later date. After clicking the button an additional item will show in Trucking to ship for this unit.

Qty	Part	Size			
1	T12 - TEMPERED GLASS 1/2"	30 W X 30 H X 1/	Accept	Reject	
1	OUTGLASS12T - 1/2" OUTBOARD GLA	30 W X 30 H X 1/	Accept	Reject	Ships Separately

Container Tracking

Tracking in ‘Container Tracking’ mode allows users to remove and add items into containers. Both manufactured and non-manufactured items can be scanned in this mode.

To use ‘Container Tracking’ mode, open ‘Setup >> ‘Settings’. Under ‘Tracking Mode’, select ‘Container Tracking’.

Container ID	Container Def	Type	Qty	Customer	Address	Order	Production	Target Ship Date	Req Date	Container Weight	Total Weight				
cs1	Shipping	Harp Rack	3	{Multiple}	{Multiple}	{Multiple}	Shipping	4/6/2022	4/12/2022	0.00	114.93	Close	Empty	Print	Move Items
cs2	Shipping	Harp Rack	2	Atlantic In	2819 E. Ba	10482	Shipping	4/14/2022	4/14/2022	0.00	71.10	Close	Empty	Print	Move Items

Slot	Part	Schedule	Unit	Work Route	Size	Order-Item	Qty	Weight	Target Ship Date	Address	Customer	
1	8100SH - SINGLE HUNG	5197	1		30 W X 30 H X : 10476-1		28.98	4/12/2022	1765 Hec Atom Ann			Empty
2	8000PW - PICTURE WINDOW	5193	1		50 W X 50 H X : 10443-4		32.56	4/6/2022		KD Window		Empty
3	8660DH - DOUBLE HUNG	5191	1		36 W X 60 H X : 10401-1		53.39	4/14/2022	2819 E. B Atlantic In:			Empty

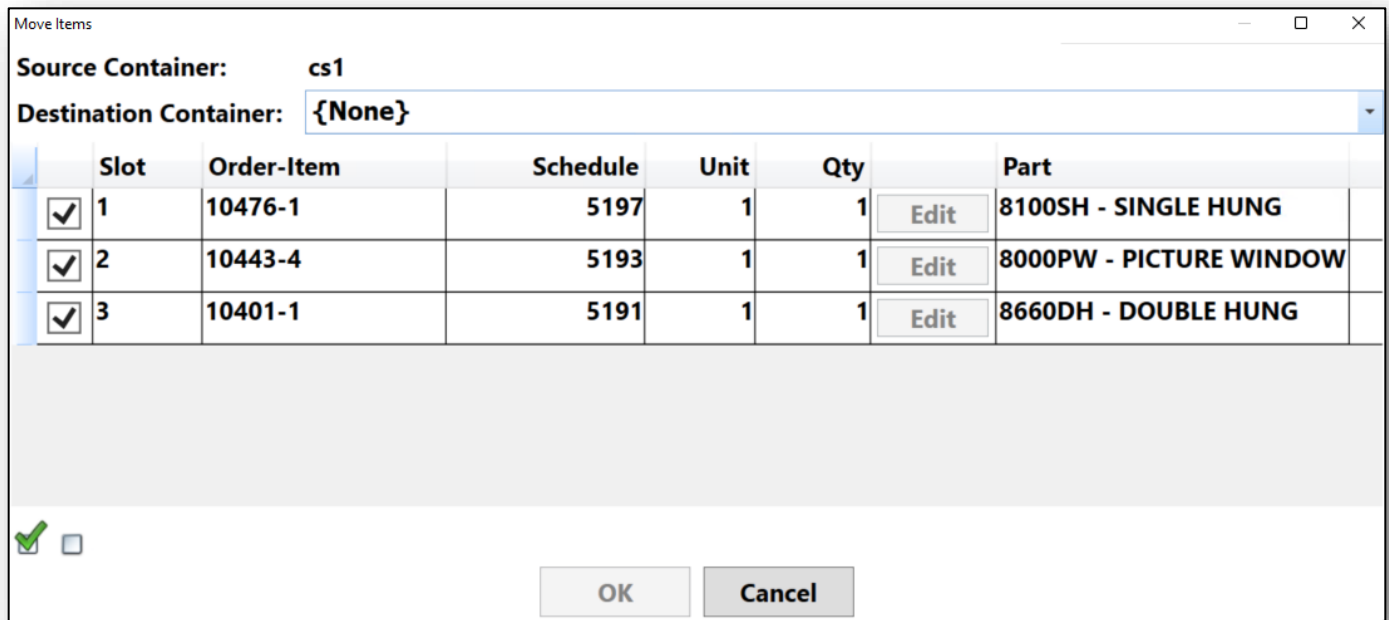
The top grid displays the list of containers open at the station. The bottom grid displays the list of units in the selected container.

The following columns and buttons exist in top grid of the 'Container Tracking' dialog:

- **Container ID** – ID depicting the specific container being used.
- **Container Def** – Definition of the container being used, as configured in 'Containers' setup in Core.
- **Type** – Specifies whether the container being used is a 'Harp' rack or 'Stacked' rack.
- **Qty** – Total quantity of units on the container.
- **Customer** – Customer name.
- **Address** – Shipping address, as setup in 'Customers' setup in Core.
- **Order**– Shows {Multiple} if units from multiple orders exist on the container. A tooltip shows the listing of order numbers.
- **Production/Shipping** – Container type
- **Target Ship Date** – Date the order is to be shipped to the customer. By default, the 'Target Ship Date' is the same as the 'Required Date'. However, if shipping days are configured in 'Shipping Routes' setup, then the 'Target Ship Date' is calculated as number of shipping days before the 'Required Date'.
- **Req Date** – Date the order is required to arrive to the customer.
- **Container Weight** – By default, the container definition's weight. This can be manipulated, if necessary, by clicking on the cell itself, which is a button.
- **Unit Weight / Total Weight** – Turns red if the maximum weight for the container definition is exceeded. A tooltip will show the maximum weight.
- **Close** – Closes the container (places a 'C' in the 'Code' field of the 'Containers' table).
- **Empty** – Empty the container of all its units
- **Print** – Print is based on the settings from ('Setup' >> 'Reports').

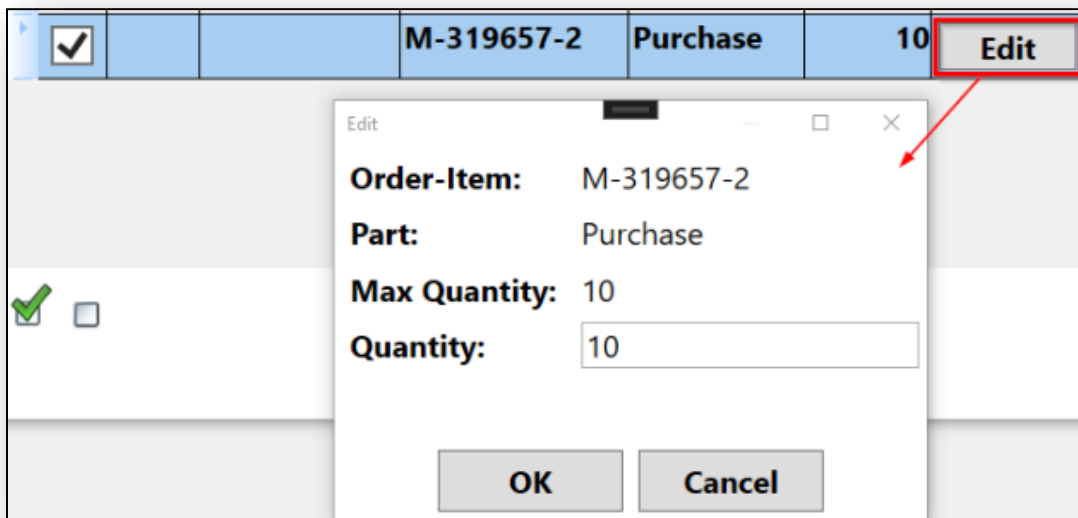
*Note: Special barcodes can be scanned in this mode. The user can scan a '*OC' to open a new container, '*CC' barcode to close the container, '*CCPP' to close and print, and '*PP' to print.*

- **Move Items** – Opens the 'Move Items' menu and allows users to transfer items from the current container to a different container



In the 'Move Items' screen the current container is displayed in a read-only manner as the Source Container. A Destination Container can be selected from the drop-down, or can be selected by scanning the container barcode.

In the grid a selection checkbox exists for each item to allow the user to specify what items are to be moved to the destination container. The Edit button becomes enabled for non-mfg items with a Qty greater than 1. This opens an Edit dialog that allows the user to specify how many of the items are to be transferred





When moving items, if the destination container is a harp rack that does not have enough available slots for the incoming items, the transfer will be prevented.

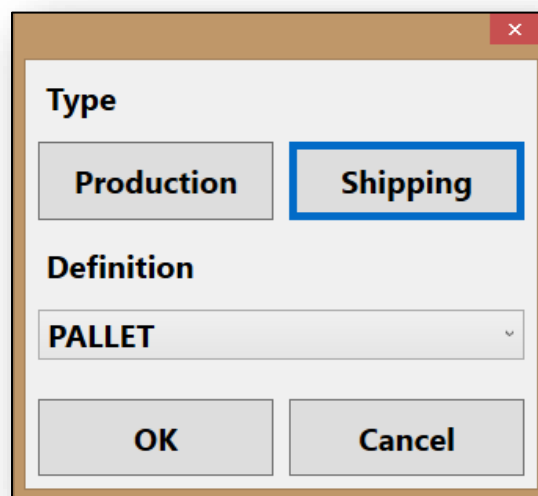
The following columns and buttons exist in bottom grid of the 'Container Tracking' dialog:

- **Slot** – Will be hidden automatically when a container with no slots is selected. Will come back into view when a container with slots is selected.

- **Part** – Part or subpart scanned onto the container selected
- **Schedule** – Production schedule number.
- **Unit** – Production unit number—this is found on the Unit Production label or in FeneVision BI under ‘Order Status’ >> ‘Production Status’.
- **Work Route** – Route assigned to the schedule-unit
- **Size** – Width, height, and thickness for the item.
- **Order-Item** – Order number and line item number for the part
- **Qty** – Number of units scanned into the container for a non-manufactured part. (Manufactured parts will not have a quantity listed in this column).
- **Weight** – Weight of the item
- **Target Ship Date** – Date the order should ship by.
- **Address** – Shipping address, as setup in ‘Customers’ setup in Core.
- **Customer** – Customer name
- **Remove** – Removes the unit from the container
- **Empty** – Removes all units from the container
- **Capacity Alerts** – This column will display a green checkmark if alerts have been approved, and an Approve button will appear if there are alerts that need to be approved. Selecting the Approve button will open the alert and allow the user to approve the alert. This column is only visible if plan alerts are enabled at the station.
- **Master Key and Parent Key** – Unit sub-component numbers. These can be found on the unit production label. These values are used to identify individual components in each unit’s bill of material.

The following buttons exist in the splitter between the top and bottom sections of the ‘Container Tracking’ dialog:

-  /  – Snaps the height of the top section to just one container (approximately), or expands the top back to the default. These heights can also be manipulated manually using the mouse to move the split.
- **BI (F1)** – The ‘Order Production Status’ page will be opened in FeneVision BI if a unit is selected in the bottom grid and the user hits F1.
- **Events** – Opens the ‘Events’ dialog. If an event exists with no end time, the button turns red (like regular tracking).
- **Add (F3)** – Select F3 or select ‘Add’. This dialog will prompt you to choose ‘Production’ or ‘Shipping’, if the prompt type is ‘Production / Shipping’. Otherwise, it will show container definitions for whichever type is used at the station. This dialog only shows definitions that have ‘Allow New’ checked for the container definition (in ‘Containers’ setup). This will create an "on-the-fly" container.



- **List (F4)** – Press F4 or select ‘List’. This dialog shows a listing of all the containers in the system, with several different filters. The status filter has options for {All}, {Open}, and {Closed}. {Closed} refers to any non-open status (including ‘Shipped’ or ‘Loaded’). Containers can be printed or opened from here.

Container ID	Container Def	Qty	Customer	Address	Target Ship Da	Req Date	Type	Production/Shi	Station	Status	Date	
4407	PALLET	0					Harp Rack	Shipping	Contracki	Open	6/15/2015 11:2	Print
4406	PALLET	0					Harp Rack	Shipping	Contracki	Open	6/15/2015 11:2	Print
4394	PALLET	0					Harp Rack	Shipping	Contracki	Open	6/15/2015 11:0	Print
4395	PALLET	5	1112 NEW C		10/24/2014	10/24/2014	Harp Rack	Shipping	ConTracki	Open	6/8/2015 9:17:0	Print
4396	PALLET	1	007 Window 1717 Parker		5/19/2015	5/19/2015	Harp Rack	Shipping	ConTracki	Open	6/8/2015 9:08:1	Print
4391	PALLET	1	007 Window 1717 Parker		6/3/2015	6/3/2015	Harp Rack	Shipping	ConTracki	Open	6/5/2015 10:50	Print
110	PALLET	0					Harp Rack	Shipping	Contracki	Closed	6/15/2015 2:13	Open Print
4393	PALLET	0					Harp Rack	Shipping	Contracki	Closed	6/15/2015 2:12	Open Print
4397	PALLET	0					Harp Rack	Shipping	Contracki	Closed	6/15/2015 10:0	Open Print
4398	PALLET	47	1112 NEW C		5/27/2015	5/27/2015	Harp Rack	Shipping	Contracki	Closed	6/15/2015 10:0	Open Print
4399	PALLET	0					Harp Rack	Shipping	Contracki	Closed	6/15/2015 10:0	Open Print
4392	PALLET	0	1112 NEW C				Harp Rack	Shipping	Contracki	Closed	6/15/2015 10:0	Open Print
P01	PALLET	47	007 Window 1617 Parker		5/19/2015	5/19/2015	Harp Rack	Shipping	Contracki	Closed	6/10/2015 1:27	Open Print
P04	PALLET	0					Harp Rack	Shipping	ConTracki	Closed	6/9/2015 1:22:1	Open Print
P02	PALLET	0					Harp Rack	Shipping	ConTracki	Closed	6/9/2015 1:19:1	Open Print
P03	PALLET	0					Harp Rack	Shipping	ConTracki	Closed	6/9/2015 1:19:1	Open Print
3389	SHIPPING	0					Harp Rack	Production	ConTracki	Closed	6/9/2015 8:36:1	Open Print
3384	PALLET	0					Harp Rack	Shipping	ConTracki	Closed	6/4/2015 3:38:0	Open Print
3382	PALLET	0	007 Window				Harp Rack	Shipping	ConTracki	Closed	6/3/2015 2:03:0	Open Print
3383	PALLET	0	007 Window				Harp Rack	Shipping	ConTracki	Closed	6/3/2015 2:03:0	Open Print
2320	PALLET	0	007 Window				Harp Rack	Shipping	ConTracki	Closed	6/3/2015 2:03:0	Open Print

- **Reject (F5)** – Select F5 or select ‘Reject’ to toggle reject mode.
- **Manual (F9)** – Select F9 or select ‘Manual’ to reveal the manual scan screen. The Manufactured / Non-Manufactured tabs are used to scan units / order-items onto the current container. The ‘Container’ tab is used to open or select a container based on a container ID or container key.

Manufactured
Non-Manufactured
Container

Schedule:

Unit:

Master Key:

Parent Key:

Use Batch Bin

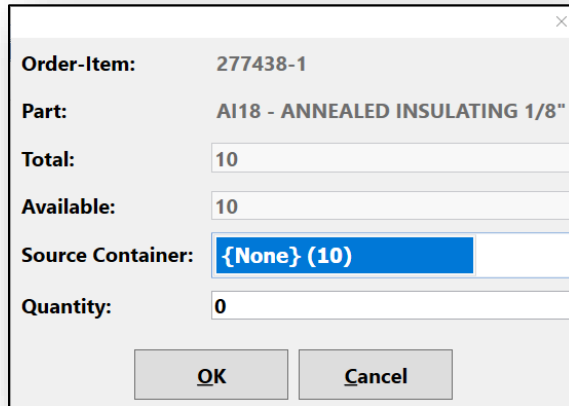
OK
Cancel

- **Quantity Mode (Q)** – Either select ‘Q’ or select ‘Quantity Mode’ to toggle quantity mode. Toggling only works if the station’s settings allow it. There exist unique features in ‘Quantity’ mode in ‘Container Tracking’. Tracking will use the ‘Quantity Prompt’ default that requires a ‘Source Container’ selection. This is used to indicate which group of units is being manipulated. The first time a barcode is scanned in quantity mode, it will show {None} as the only selection for the ‘Source Container’.

For example, 2 out of 10 units are put onto container XYZ.
The next time a barcode is scanned, the ‘Source Container’ will show two options:

- {None} (8)
- XYZ (2)

When the 'Quantity' dialog appears, the user can scan another barcode. This action is the same as if the user selected the 'Enter' key to commit the dialog and process the units. After the system is finished processing that quantity (which could take several seconds depending on the quantity), FeneVision will process the scanned barcode (whether it is a SUMP, container, or other barcode). Validations for target ship date, customer, or address discrepancy will occur as soon as a barcode is scanned. Validation for whether the current container has enough slots will only occur after the quantity is entered and the user selects OK.



The screenshot shows a dialog box with the following fields and values:

- Order-Item: 277438-1
- Part: AI18 - ANNEALED INSULATING 1/8"
- Total: 10
- Available: 10
- Source Container: {None} (10) (highlighted in blue)
- Quantity: 0

At the bottom, there are two buttons: 'OK' and 'Cancel'.

If a 'Container Tracking' mode station is tied to a capacity work cell that falls at the end of the capacity plan for a set of parts, those parts will receive a status of 'Complete' when scanned at this station. This is true whether the 'Mark Complete' setting is enabled or disabled. All of the previous work cells that consist of the capacity plan for the scanned unit will be updated to a 'Complete' status. Also, all of the parts that make up the BOM of the unit that receive the 'Complete' status will receive the same status.

Ex. An insulated unit is planned at CUT >> TEMP >> IG. If the unit is scanned at the IG station, regardless of where it was scanned previously, all of the work cells in the plan (CUT, TEMP, IG) will receive a 'Complete' status and entirety of the BOM of the unit (glass, spacer, gas, etc.) will also receive a 'Complete' status.

Reject Only

Tracking in 'Reject Only' mode allows the user to scan both manufactured and non-manufactured items to be rejected.

To use 'Reject Only' mode, open 'Setup >> 'Settings'. Under 'Tracking Mode', select 'Reject Only'.

To reject, complete the following:

1. Select 'SCAN (F9)'. Enter the 'Schedule' number, the 'Unit' number, the 'Master Key', and 'Parent Key' numbers (found on the 'Unit Production' label).

Manufactured **Non-Manufactured**

Schedule: 12299

Unit: 104

Master Key: 0

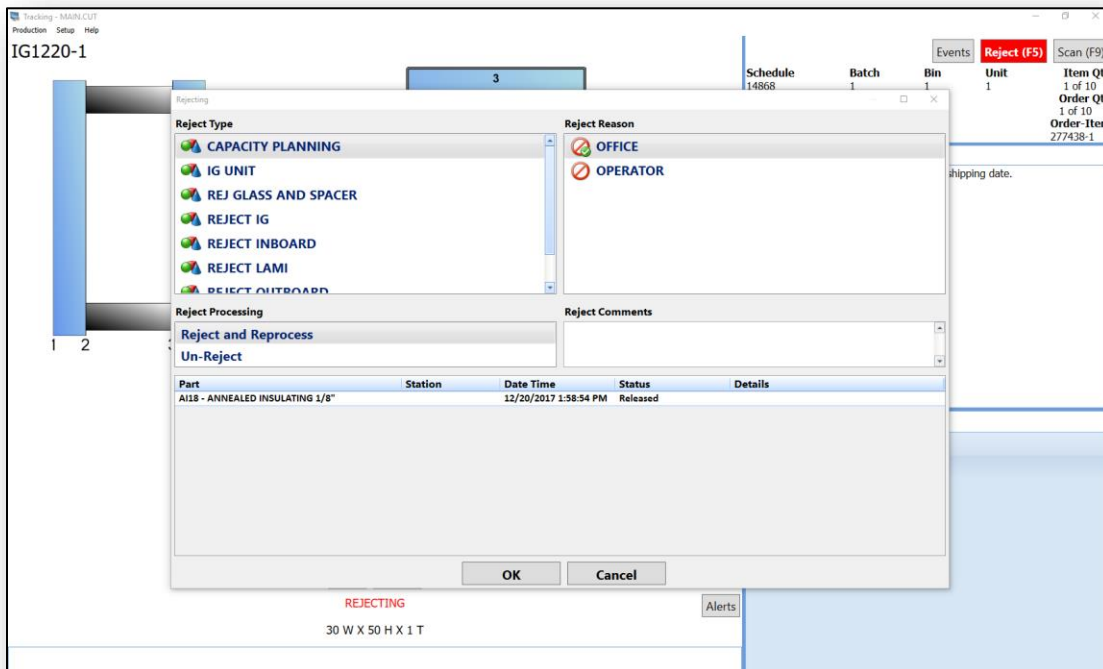
Parent Key: 0

Use Batch Bin

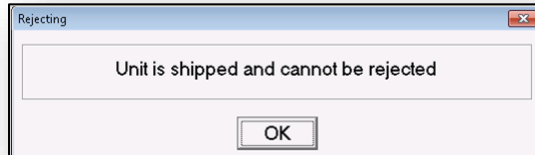
OK Cancel

2. Select 'OK'. The text within the 'Reject Only' screen will appear in red, indicating that the unit on this particular scan has been rejected. Additionally, 'Reject Reasons', configured previously in FeneVision Core under 'Setup' >> 'Rejects', will appear.
3. The user selects the 'Reject Type' and 'Reject Reason', then indicates if the user should 'Reject and Reprocess', 'Reject Only', or 'Un-Reject'. There is also a text field for user comments regarding the reject.

Note: Un-rejecting is intended for the scenario where something is accidentally rejected. If something is rejected and reprocessed outside of the system then 'Reject' should be chosen and it should be scanned like normal in tracking when done.



4. If a scan is performed upon a unit that has already been shipped, the user will be prompted with the following message:



- If a unit that has been placed on a container (one assigned in Tracking) and has been rejected, the 'Rejecting' feature will remove the item from the container.

Inline Tracking

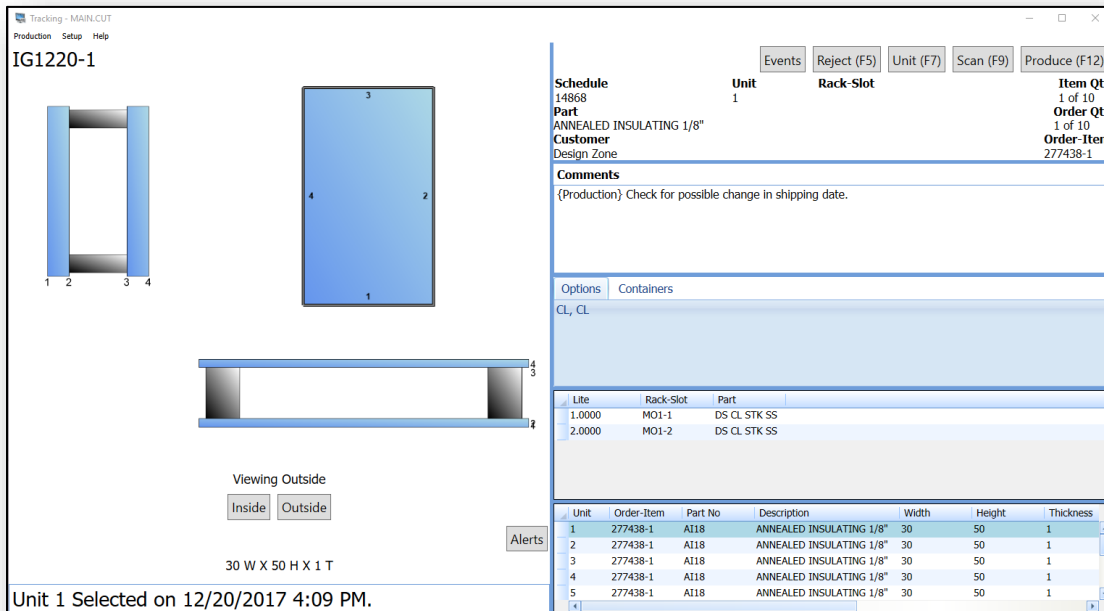
Tracking stations can be set up to work as a production line, one after another, with one feeding the next.

To use 'Inline Tracking', complete the following:

- Scan an item at the first 'Tracking' station that has a 'Destination Station' defined. The first station in line will not have a 'Source' station defined.
- The item will then be displayed at the next 'Tracking' station that has the 'Source Tracking' station defined. This station will only display units that have passed through its source station, and only those units can be handled at the station.
- The final station in line will have no 'Destination' station.

Note: If the selected item is removed from the station queue, FeneVision Tracking will update the screen with the next item in the queue.

The image below displays a destination station with units that have been scanned at a source station and are now available to produce:



Valid configurations of inline tracking include:

- Part Updating to Part Updating
- Ordered Part Updating to Ordered Part Updating
- Work Route by Rack to Work Route by Rack

- **Work Route Updating to Part Updating**

Produce a Unit

Follow these steps to produce a unit:

1. When a unit is produced at a 'Source' station, it then becomes available at the 'Destination' station. In 'Work Route by Rack' mode, units will display as 'Waiting' at a 'Destination' station until the 'Source' station produces that unit, at which time it will become available.
2. Select 'PRODUCE (F12)' from the 'Destination' station or press the space bar.
3. Once produced, the unit is marked 'Accepted' or 'Completed'. The item will no longer appear in the list, and FeneVision Tracking will automatically select the next unit.

Reject a Unit

Follow these steps to reject a unit:

1. At the 'Source' station, scan the unit's label. As described in Step 1 above, the unit only needs to be scanned once at the 'Source' station.
2. Select 'REJECT (F5)' to place Tracking in Reject mode, and then scan the unit. Complete the rejection screen.
3. Once rejected, Tracking will automatically select the next unit, as described in Step 3 above.

The unit exists in the queue but is rejected at a source station ('Work Route by Rack' mode to 'Work Route by Rack' mode).

When a unit is rejected, the unit will no longer be in the queue for the destination station. Rejects are always removed from the queue.

Units will be automatically loaded to the queue at the refresh interval specified in setup. To re-query for new units, close and re-enter the screen.

Note: The columns and information that are displayed in the queue can be customized through a stored procedure. Contact FeneTech for more information.

Multi-Location Scanning

In some instances, a product may require a transfer ship from one location to another to complete production. FeneVision gives users the ability to start production at one location, and have the order continue production at another location.

Multi-location scanning is especially useful for subassembly parts. The user is able produce subassemblies at one location, scan them through tracking, and receive them at a second location to complete production. Tracking will communicate with FeneVision Core to create the appropriate shipping requirements from one location to another. When completing an order's schedule at the first location, the order can be shipped to the second location via FeneVision Core's Route Builder or FeneVision Trucking. The user is then able to scan the order at the next location using either the SUMP from the first location or the Container ID the order is scanned into. This can be done with as many locations as needed to complete the order.

To complete a transfer shipment, complete the following steps:

1. Schedule the order through FeneVision Core for the first required location.
2. Scan the units accepted/complete at all tracking stations for the released schedule.
3. When all stations at the location are complete, create a route through FeneVision Core's Route Builder, and ship the route through Route Builder or FeneVision Trucking from the first location to the next.
4. Open a Tracking station at the receiving location, and either:
 - a. Scan the SUMP of the first location schedule for each unit, or
 - b. Scan the container that contains all of the units from the first location schedule (this must be done with containers not set to prompt at the Tracking station).

Once a unit/container has been scanned at a second location, the tracking station will mark the unit(s) as 'Transfer Received'. This status can be seen in Tracking right after the scan, through FeneVision Core's scheduler screen, or through FeneVision BI's Capacity Status report.

Unit 1 *Transfer Received on 4/19/2018 9:23 AM.

The user also has the ability to receive a finished good part at a location that it is not expected by scanning the part at the unexpected location. For example, if location A has shipped a finished good to the customer, but the customer is unable to receive at this time, and location B is closer, the user is able to receive the finished good at location B. This will cause the shipping requirement from location A to be closed, and a new requirement to be created from location B to the customer. This unplanned shipment can then be found in Route Builder when creating a {None} Shipping Route.

Incomplete Items

The 'Incomplete Items' screen allows the user to see which items are planned for the current station's work cells, in addition to the status of the items in the work cells. To access the 'Incomplete Items' dialog, select 'I' on the keyboard. The following screen will appear:

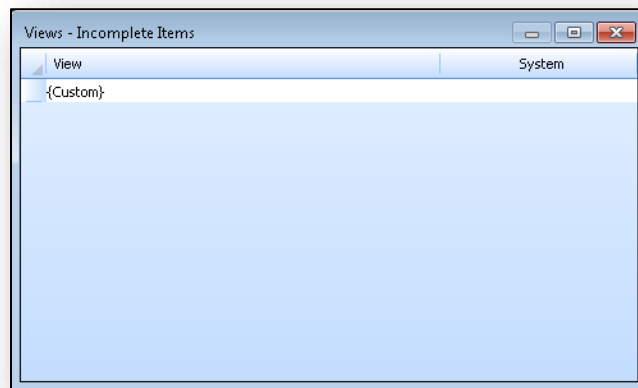
Qty Previous	Work Cell	SqM	Target Ship Date	Customer	Order-Item	Part	Plan	Complete	Remaining	Qty Remaining	Part Plan	Station	Status	Schedules	Plan Date
0	CUT	1.25	2/25/2016	Glass Co.	1019383-1	GL060	2.6	0.0	2.6	4	CUT-->IG		Released	5071, 5072	2/15/2016
0	CUT	1.25	2/25/2016	Glass Co.	1019383-1	GL060	2.3	0.0	2.3	4	CUT-->IG		Released	5071, 5072	2/15/2016
0	CUT	1.25	2/25/2016	Glass Co.	1019383-1	GL060	2.3	0.0	2.3	4	CUT-->IG		Released	5071, 5072	2/15/2016
0	CUT	1.00	2/15/2016	Glass Co.	1019363-1	GL060	0.7	0.0	0.7	1	CUT-->IG		Released	5064	2/15/2016
0	CUT	1.00	2/15/2016	Glass Co.	1019363-1	GL060	0.7	0.0	0.7	1	CUT-->IG		Released	5064	2/15/2016
0	CUT	1.25	2/25/2016	Glass Co.	1019383-1	GL060	3.5	0.0	3.5	4	CUT-->IG		Released	5071, 5072	2/15/2016
0	CUT	1.25	2/25/2016	Glass Co.	1019383-1	GL060	3.5	0.0	3.5	4	CUT-->IG		Released	5071, 5072	2/15/2016
0	IG	1.00	2/15/2016	Glass Co.	1019363-1	IG	1.0	0.0	1.0	1	IG		Released	5064	2/15/2016
0	IG	1.00	2/19/2016	Glass Co.	1019374-1	IG	3.0	0.0	3.0	3	IG		Released	5069, 5070	2/15/2016
0	IG	1.05	2/16/2016	Glass Co.	1019364-1	IG	1.0	0.0	1.0	1	IG		Released	5065	2/15/2016
0	IG	1.00	2/15/2016	Glass Co.	1019363-1	IG	1.0	0.0	1.0	1	IG		Released	5064	2/15/2016
0		13.55					24.2	0	24.2	32					

No data will appear in the grid when the user initially opens the dialog. First, the user must configure the 'View' using the

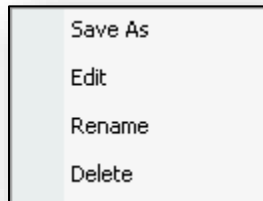


. To configure the 'View' filters, complete the following:

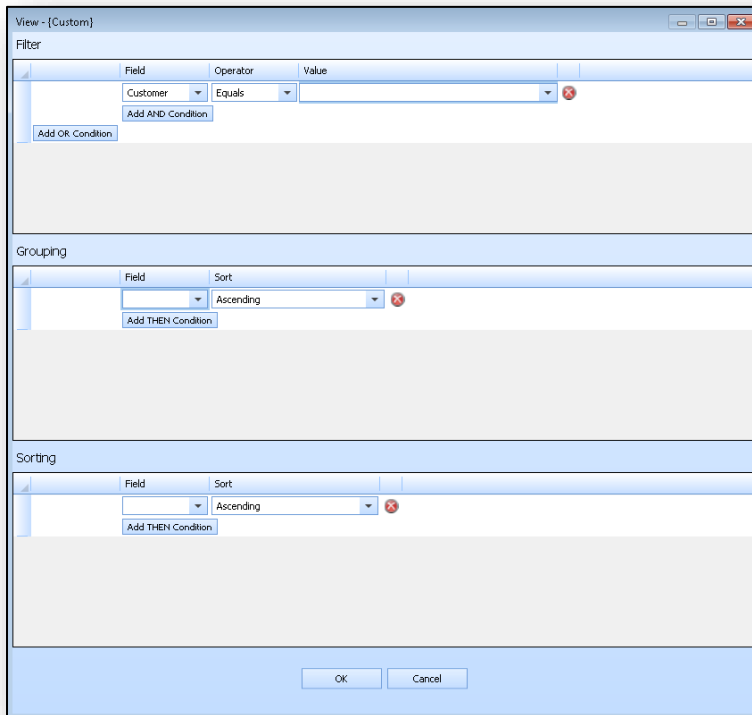
1. Select . The following dialog will appear:



2. In the 'View - Incomplete Items' screen, right on {Custom}. The following dialog will appear:



3. Select 'Edit'. The following dialog will appear:



4. Use the 'Filter' functionality to select what information displays.
5. Use the 'Grouping' functionality to select how the information is grouped (optional).
6. Use the 'Sorting' functionality to select how the information is sorted (optional).
7. Select 'OK' to finish out of the view screen. In the 'View – Incomplete Items' screen, the custom filter will have the filtering / grouping / sorting properties that were just selected.
8. Right click again on {Custom}.
9. Select 'Save As'. Enter a description for 'View'.
 - a. This will create a new view with the properties selected.
 - b. This view can be changed at any time by right clicking and selecting 'Rename' to change the description or 'Edit' to alter the filtering / grouping / sorting properties.
10. Indicate whether the newly created view is a 'System' view (the {Custom} option cannot be assigned as a 'System' view).
 - a. The 'System' checkbox determines if the filter will appear for all users or for just the user entering the filter.
 - b. If it is an employee-specific filter, the 'System' checkbox is not checked and the 'Employee (X)' prefix is added signifying the filter is an employee-specific filter.
 - c. This prefix will also appear in the drop-down but is not saved to the database.
11. To create another view, repeat these steps.



The user can now indicate how the information in the 'Incomplete Items' dialog will be presented by selecting views in the 'View' drop-down.

The following filters and icons can be found in the ribbon of the 'Incomplete Items' dialog:

- **Plan Date** – Drop-down to indicate whether to view items by 'Plan Date' or 'Target Ship Date'.
- **Start Date / End Date** – Dropdowns / date pickers to indicate a date range to view incomplete items.
- **View** – Drop-down menus combined with a filter to indicate how to view items in the 'Incomplete Items' dialog.
- **Column** – Filter to indicate by which column and its accompanying value (indicated in the field to the right of the drop-down) the incomplete items are to be limited.

For example, if a user only wants to see the incomplete items for a specific customer, the user would choose 'Customer' in the drop-down. Then, the user would enter the customer's name in the field next to the drop-down.

When using the column filter, all subtotal rows will be hidden since their values may be misleading when the original data is filtered.

-  – Refresh the items in the 'Incomplete Items' grid (providing real time information during production).
-  – Refresh interval. Data will automatically be refreshed every five seconds (by default). Users can change this value using this icon.

To view item details in the 'Incomplete Items' dialog, complete the following:

1. Choose to view incomplete items by 'Plan Date' or by 'Target Ship Date'.
2. Indicate a date range
3. Choose a 'View'.
4. To see incomplete items by column, use the 'Column' drop-down, choose a column, then indicate the value of the chosen column in the field next to the drop-down.

The following fields exist in the 'Incomplete Items' dialog:

- **Work Cell** – Name of the work cell through which the item is passing.
- **Plan Date** – The date production needs to start based on the shipping date and lead times.
- **Shift** – Production shift when the item was originally planned to be processed.
- **Target Ship Date** – Calculation of target ship date to customer. The default date is the same as the 'Required Date'. However, if shipping days are configured in 'Shipping Routes' setup, then the 'Target Ship Date' is calculated as number of days before the 'Required Date'.
- **Customer** – Customer name
- **Order-Item** – Identifier of the order and the item number.
- **Part** – Alphanumeric identifier of the part.
- **Plan** – Number of items that have been planned for that work cell.
- **Complete** – Number of items that have been completed at that work cell.
- **Remaining** – Number of items to complete at that work cell.
- **Qty Remaining** – Number of items remaining at that work cell.
- **Part Plan** – List of work cells through which the part is planned.
- **Station** – Tracking station through with the item was scanned.
- **Status** – Items' status
 - **Available** – Item(s) are available for production.
 - **Released** – Item(s) have been released to production.
 - **Accepted** – Item(s) have been accepted at the tracking station.
 - **Complete** – Item(s) are complete.
 - **Manually Loaded** – Item(s) have been manually loaded onto the truck.
 - **Shipped** – Item(s) have been shipped.

- **Schedules** – Schedule(s) on to which the items have been released.
- **Qty Previous** – Represents the minimum completed at previous work cells. In the situation where two child parts go through work cells prior to an ordered item level work cell, the 'Qty Previous' will calculate based on the number of total units with both work cells completed as seen in the example below.

For example, if a user is at Work Cell C (that is fed by Work Cells B and A) and Work Cell B has completed 5/10 items and Work Cell A has completed 1/10, this column will display '1' as the 'Qty Previous' for Work Cell C.

This value can be calculated to show the total number of units completed across both work cells. This would result in the above example showing a 'Qty Previous' of '6/20'. This calculation can be changed based on a capacity setting. Please contact FeneTech for more information regarding the changing of this calculation.

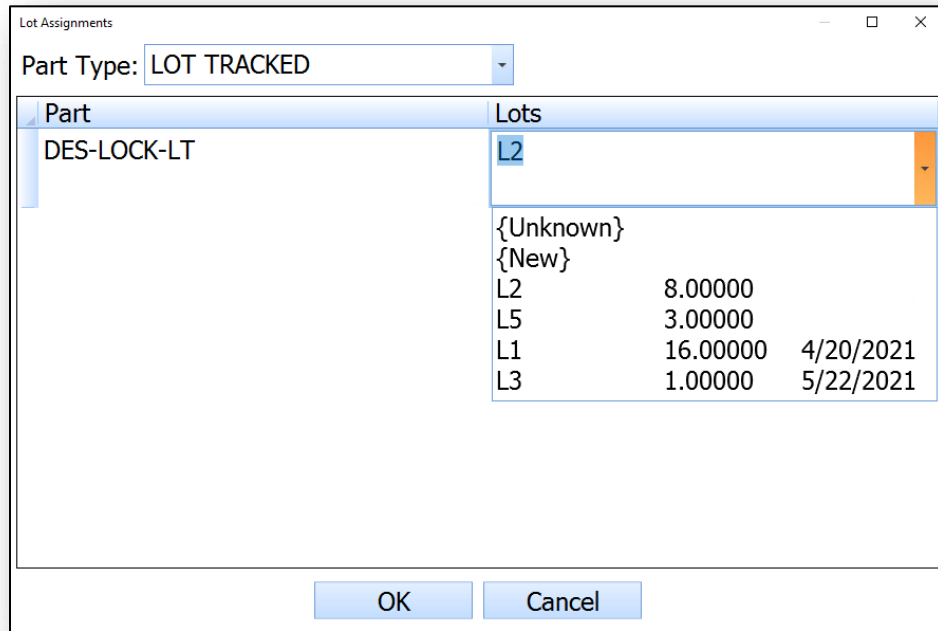
The following fields can be added to the 'Incomplete Items' dialog via the 'Column Management' feature:

- **Classification** – The classification assigned to the ordered item, if a classification has been indicated in 'Order Entry'.
- **Group** – Product group the part is associated with.
- **Height** – Total height of the ordered item(s).
- **Options** – Any options that were added to the ordered item(s)
- **Order Number** – Identifier of the order.
- **Ordered Part** – Alphanumeric identifier of the part that was ordered.
- **SqFt (SqM)** – Total square feet (square meters) of the ordered item(s).
- **Thickness** – Total thickness of the ordered items(s).
- **Unit** – Unit number of the item.
- **UOM** – Unit of measure by which the item(s) are counted.
- **Width** – Total width of the ordered item(s).

The bottom of the grid displays a grand total of the sum of all records currently visible in the grid (excluding the subtotal rows).

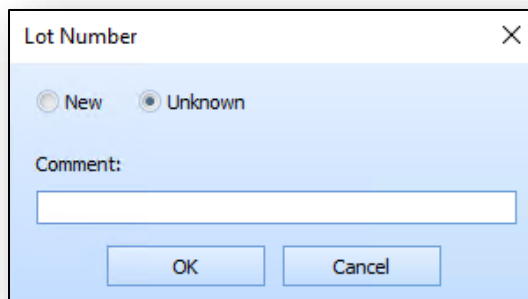
Lot Tracking

To use the 'Lot Tracking' feature in Tracking, the user must have checked 'Enable Lot Tracking' in the 'Lot Part Types' screen ('Settings' >> 'Lot Part Types'). The 'Lot Assignments' screen will appear when a lot tracked part is being processed through the Tracking station. By choosing a lot for the part(s), inventory will be relieved from the lot specified for the part. The screen can also be opened by using the 'L' key to change the lot assignment for a part.



The following information appears in the 'Lot Assignments' screen:

- **Part Type** – Drop-down filter containing the part types assigned to the station. This filter only displays if the screen was opened using the 'L' key.
- **Part** – Part information for lot tracked parts.
- **Lots** – List of active lot numbers and supporting information. This list is filtered by the Location set for the station ID.
 - **Lot Number** – Lot number assigned to the part that is active. If the user logged in to Tracking has permission, this column also contains two additional options:
 - **{Unknown}** – Selecting this record will open a screen that allows the user to choose that the lot number being relieved is unknown and provides the user with a comment field if applicable.



- **{New}** – Selecting this record will open a screen that allows the user to enter a new lot number and expiration date.

- **Qty** – Quantity on hand of the lot number.
- **Expiration Date** – Expiration date of the lot number.

To Assign a Lot, complete the following:

1. Open the 'Lot Assignments' screen.
 - a. Using the 'L' key on the keyboard can be used to enter the 'Lot Assignments' screen as well. Doing it this way opens the screen with a 'Part Type' drop-down to filter the list of parts based on the part types assigned to the Tracking station.
 - b. Scan the SUMP for a lot tracked part or a SUMP for a part that contains lot tracked subparts. The parts that display in the 'Lot Assignments' screen will only be lot tracked parts in the BOM of the currently scanned item.

Note: The screen will not appear if all of the lot tracked parts affected by the scan have been processed through this station before. The last lot number used is saved for each successive status update at the station.

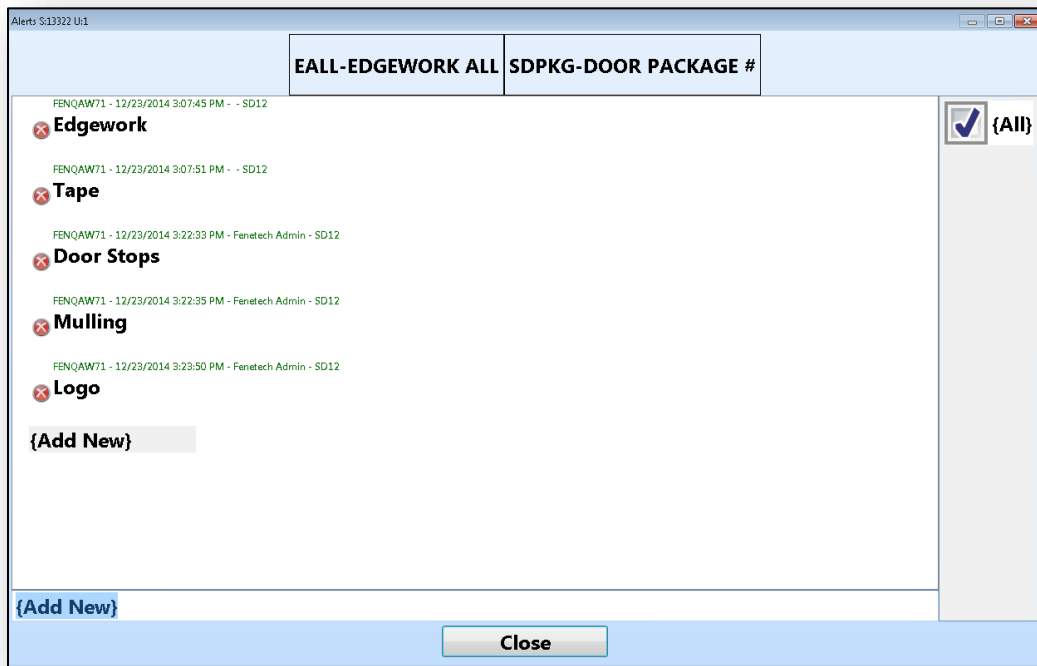
2. Assign the part a lot number by:
 - a. Using the drop-down to assign a lot number to a part; or
 - b. Manually entering a lot number in the empty field.
3. Select 'OK' to save the lot assignments

Note: Unless 'Available' lot part types have been assigned in the 'Lot Part Types' screen, the 'Lot Assignments' screen will not populate.

Alerts

The 'Alerts' screen will open when any part or option alerts are found in the scanned unit. Up to four alerts are displayed on the screen at a time. If the unit has more than four alerts, then arrows will appear that allow the user to view the remaining alerts.

Note: The 'Alerts' screen refers to 'Option' and 'Part' alerts.



There may be multiple alert pages displayed if an alert is applied to multiple units. The '{Add New}' feature allows the user to include notes intended for sharing from one workstation to the next. Once all alerts have been displayed, the 'Close' button will appear.

Select 'Close' to close the screen.

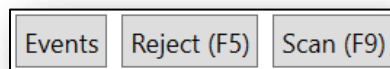
Note: To see the 'Alerts' screen again, select 'Alerts' at the bottom of the main 'Run' screen.

Events and Conversations

'Events' refers to procedures, such as material changes or machine maintenance, that may cause an interruption of production. The 'Conversations' feature allows users to record conversations associated with a work cell.

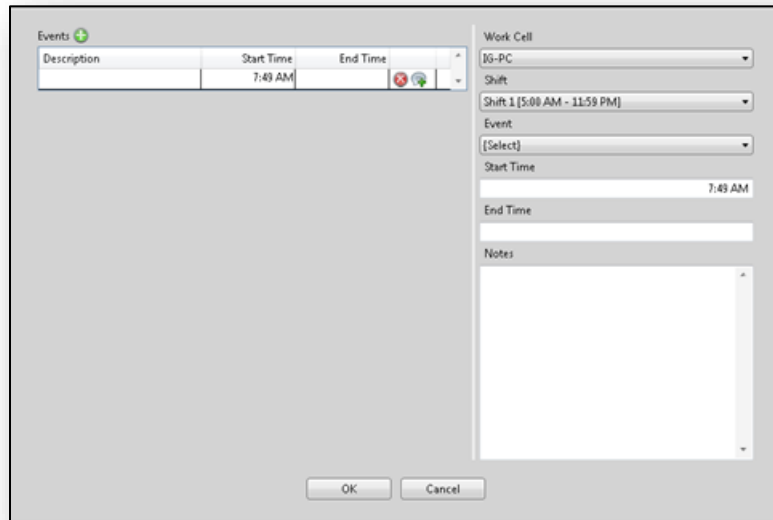
Events

The 'EVENTS' button will appear as long as the following is completed.



1. 'Capacity Planning' is enabled in FeneVision Core.
2. The user has navigated to Core >> 'Setup' >> 'Capacity Planning' >> 'Work Cell' and assigned a station ID to the work cell.
3. The user has linked the events that are likely to happen in the work cell to the tracking 'Station ID'.

The events are *created* in Tracking but are also visible in the 'Capacity Planning Scheduler' screen in Core. To create events in Tracking, open the events screen, and select 'Add'.



For events that will *not affect* capacity / production, the end time can be left blank. If these types of 'Events' are indicated, the user will see the 'Events' button turn red.

Note: The 'Events' button will not be visible if there are no shifts planned for the day in FeneVision Core.

Blocking Events

Blocking Events are events that are meant to block the Tracking station from producing while the event is occurring. It is meant to be started before the event and closed after the event has finished. The user will be prompted with the following message if the event does not have a specified end time:

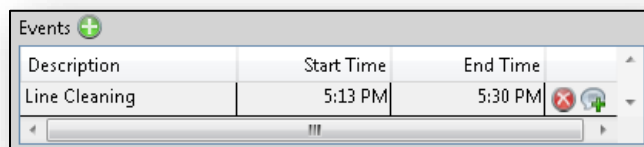


Conversations

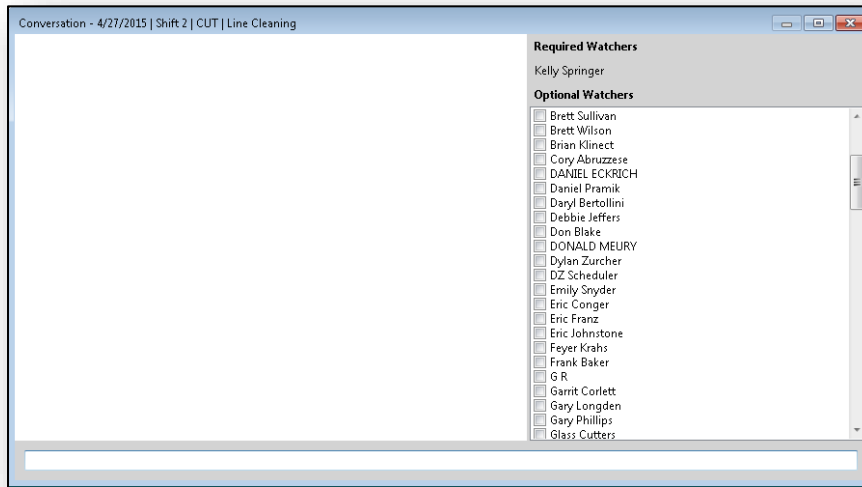
Conversations are recorded both in 'Order Entry' and in the 'Events' sections of FeneVision Core. In Tracking, the 'Conversations' feature allows the user to enter text associated with a particular work cell or event. Conversations are documented, dated, and time stamped.


The user can add conversations associated with a Tracking station by entering the 'Events' feature and selecting 'Add'.








From this screen, select the  from the drop-down on the upper left.




The following screen will appear:



The person who begins the conversation will enter text in the field at the bottom of the screen. The text will appear in the large field on the left. This person can then add watchers from the list on the right by selecting the box next to the appropriate name from the list of employees. Once a conversation has been started, the icon will display as  beside the 'Event' description.

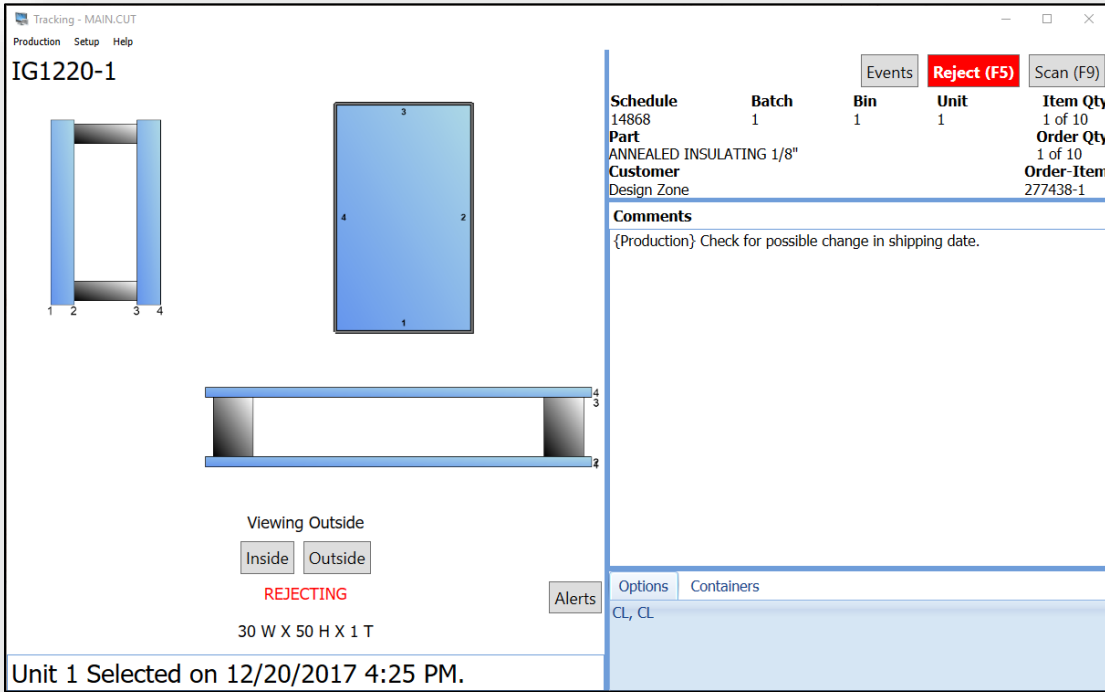
Events 				
Description	Start Time	End Time		
Material Changeover	3:28 PM	3:29 PM		
Changing Glue Gun	3:29 PM	3:31 PM		
Line Cleaning	3:35 PM	3:36 PM		

Selecting  will allow the user to view the conversation.

Note: A user can only open/create a conversation on an event if they are logged into FeneVision Tracking. If login is not required when using Tracking, the user will not be able to access the conversations screen.

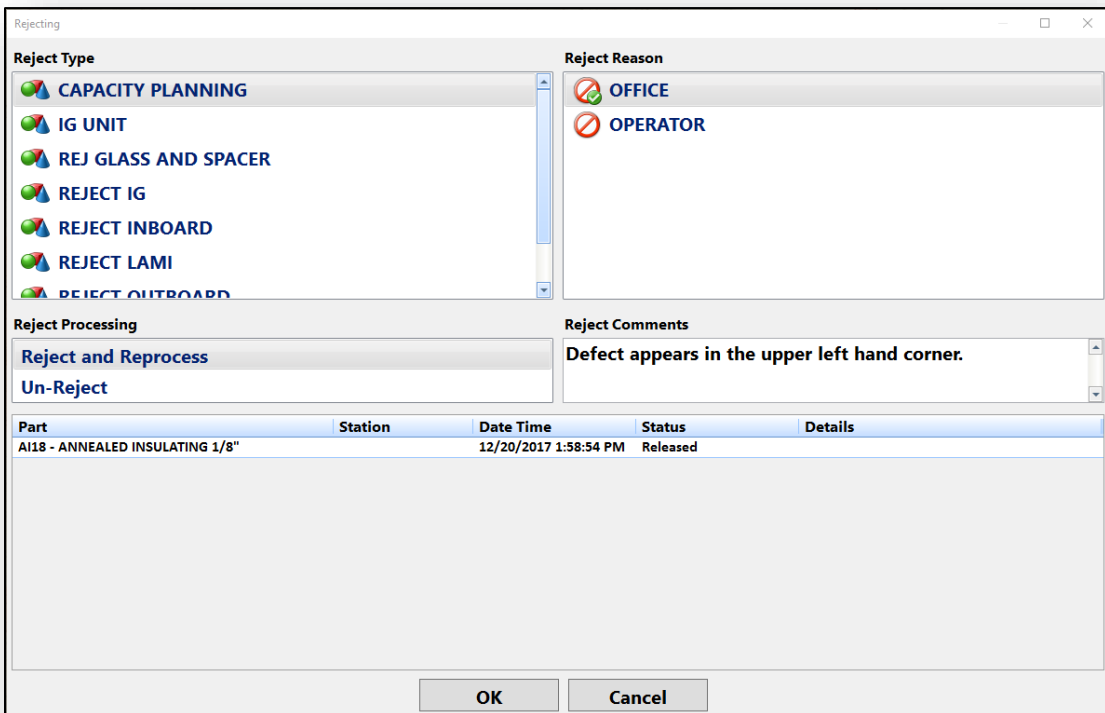
Rejecting

To reject a unit, select 'REJECT (F5)' before scanning the unit or part. Selecting 'REJECT (F5)' places the station in reject mode, as indicated by the text **REJECTING**, and the reject button turning red, as shown in the image below.



Note: In order to use the 'Rejecting' functionality in Tracking, the user must have performed the proper setup of 'Rejects' in FeneVision Core. To set up 'Rejects' in Core, go to 'Setup' >> 'Rejects'.

After scanning a unit or part, the user will be prompted to select a 'Reject Part Type', 'Reject Reason', and 'Reject Processing' action. The user may also enter 'Reject Comments', if desired. Once the scan occurs, the following screen will appear:

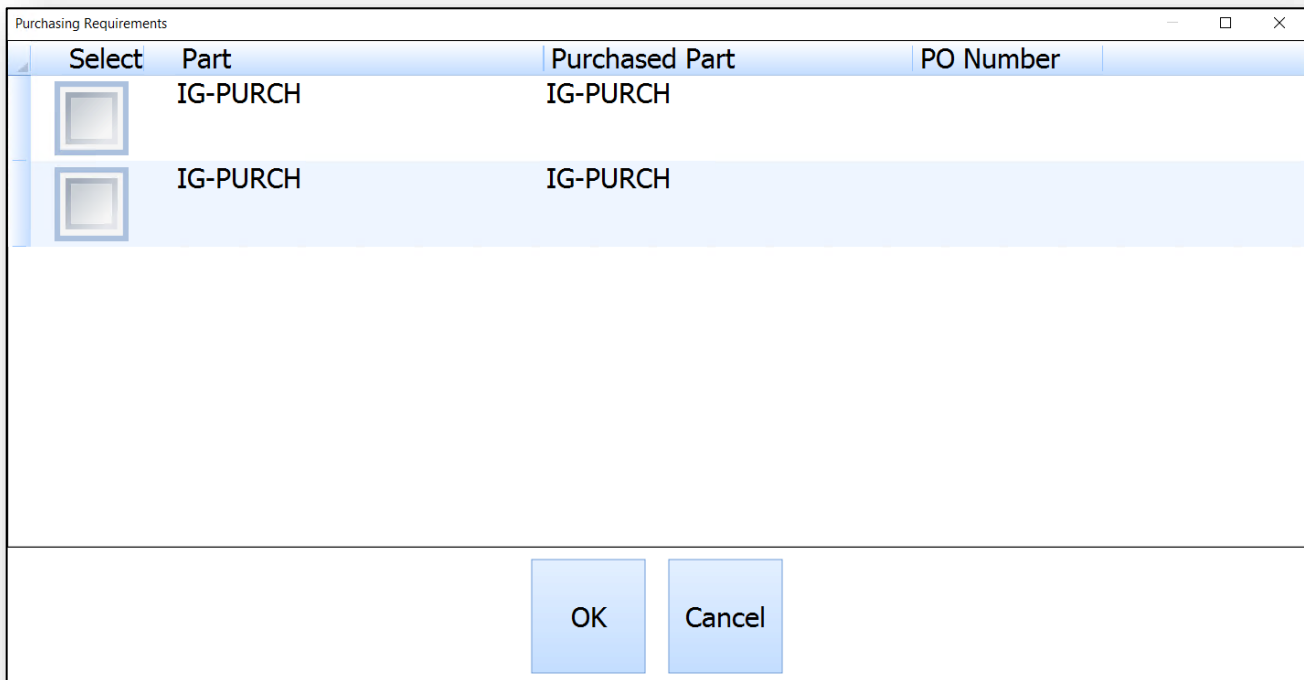


In the 'Reject Type' portion, indicate which type of reject to use. After selecting the applicable reason in the 'Reject Reason' screen, the user indicates the action to be performed on the unit in the 'Reject Processing' portion. The 'Reject Comments' portion allows the user to include more specific comments regarding the unit's status. These comments will appear in the following reports, located in FeneVision BI under the 'Details' column:

- **Order Production Status**
- **Schedule Batch Details**
- **Unit Details (upper portion only)**

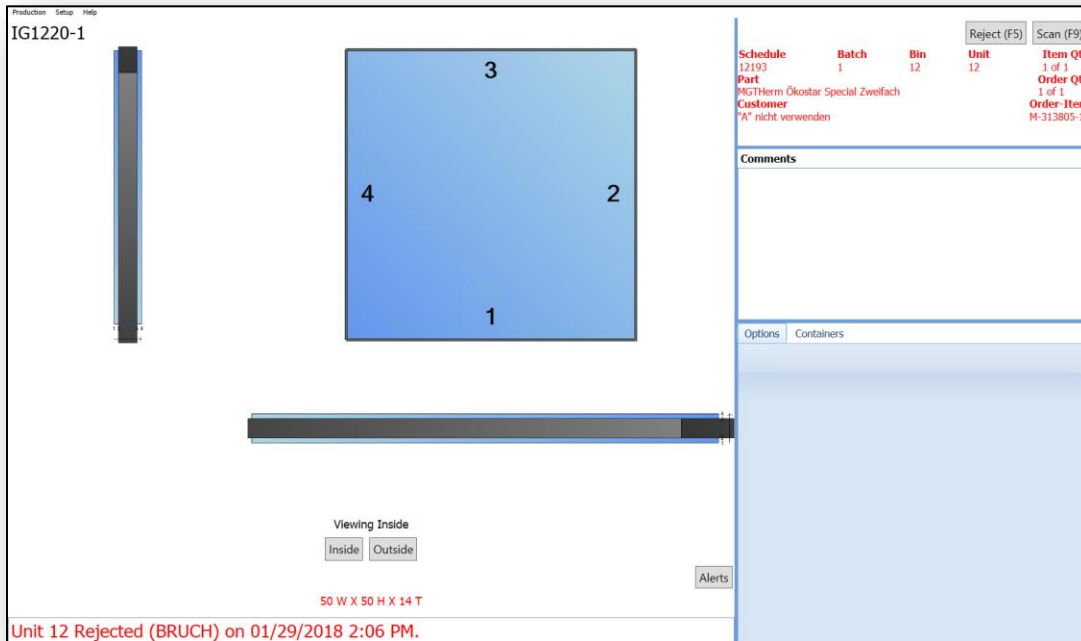
Reference the Core user manual for more information regarding 'Reject Part Type' and 'Reject Reason' setup. 'Reject Reasons' can be marked as 'Default' or 'Hidden' for a particular station within Core.

If the part being rejected or if a subpart of the rejected part is purchased and will receive a reject code, the 'Purchasing Requirements' screen will appear after selecting OK from the 'Rejecting' screen.



Checking the Select checkbox will create a new purchasing requirement for the part in Order Entry. The new purchasing requirement will appear when viewing the requirements for the order. The new record will be separate from the original purchasing requirement and will be red to indicate the requirement came from a reject. Selecting the OK button without checking anything in this menu will not generate any new purchasing requirements.

Screen text appears red when a unit or part is rejected. Rejected units can be un-rejected and accepted, as long as the part wasn't reprocessed. If the part was sent back for reprocessing, it must first be reprocessed before it can be accepted or rejected again.



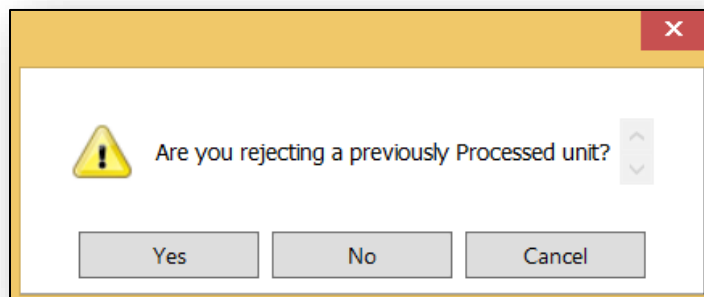
Similarly, if a unit that has been placed on a container (one assigned in Tracking) and has been rejected, the 'Rejecting' feature will remove the part from the container.

Note: If rejecting one branch of a complete part, parts in other branches of the bill of materials will change from Completed to Accepted. If parts at a lower level are complete, they will remain complete as they are lower than the part of the BOM that is actually being rejected unless they receive a reject status as well. However, the parts above the rejected part will move to an Accepted status.

Quantity Rejecting

Quantity rejecting allows the user to reject multiple units with a single scan. To use this functionality the user must have quantity mode enabled before selecting the reject button. A few notes about quantity rejecting are:

- The default quantity to reject is always 1
- Units to reject are always taken from the highest unit ID backwards. After the user selects a quantity and selects OK, the following message appears:



If the user replies 'No', then the units that have no prior status code are rejected beginning with the highest unit ID and progressing backwards. The logic for selecting a range of units is sensitive to masterkey / parentkey. This means that the user must scan or type the exact SUMP of the part being processed, and the user must select a reject part type that maps to the part being processed.

If the user replies 'Yes', then the system looks at parts that already have an accepted / completed / etc. status, and rejects beginning with the highest unit ID and progressing backwards.

Multi-Location Rejecting

In some instances, a product may be broken during a transfer ship from one location to another. FeneVision gives users the ability to reject at the receiving location in Tracking. Rejecting at a second location is handled much the same way as standard rejecting is, with the following changes:

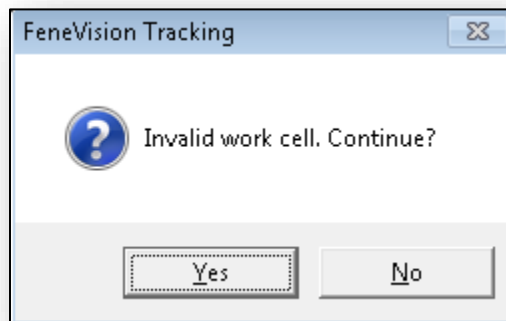
- When rejecting a unit from a different location, "Reject Only" will not be available as a reprocessing type, as the intent is to get it remade at the manufacturing location.
- Rejecting evaluates where all of the BOM parts were made, and any parts getting rejected that were made in another location will need to be remade at the original location.
- When the reject is committed, rejecting will check if the unit transfer shipped. If so, the system will perform a return step first. This way the item will show up in Route Builder as a shipping requirement again.
- When the user selects the "Un-Reject" reprocessing type, a disclaimer prompt will show after the unit has finished un-rejecting: "No previous shipping or container information is retained when un-rejecting units from other manufacturing locations." The reason for this is that it is not possible to reverse the unshipping and uncontainerization steps if the unit was previously containerized or transfer shipped. The prompt will show regardless of whether the unit was actually containerized or shipped.

Items rejected at a different manufacturing location than they were originally produced will not go directly into the Remakes screens of Core and Opti. Instead, they will be automatically placed into a rescheduling transaction so that they show up again in Scheduler. There is no action required by the user in the Remakes screen. The FeneVision agent takes all rejects that have a location ID equal to the schedule's location, and places them into a rescheduling transaction.

Plan Alerts

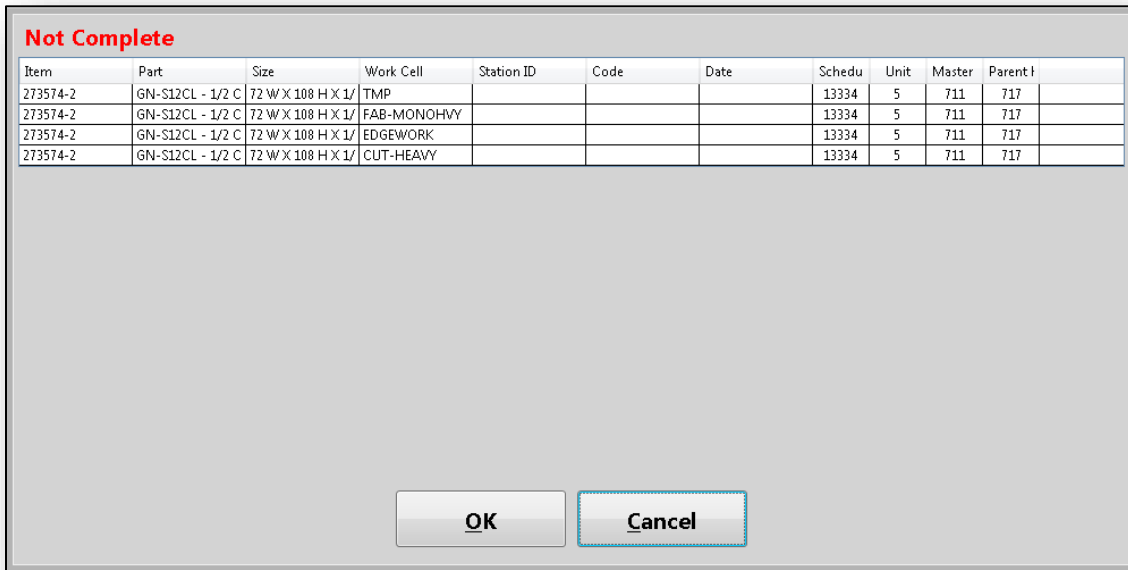
The 'Plan Alerts' feature informs the user if a unit that has capacity plans is scanned out of plan sequence order (*'Capacity Planning' in FeneVision Core is required*).

If a unit has been scanned at a station tied to a work cell that is not part of the capacity plans, the user will see the following message:



If the user does not want to proceed with the action taken, select 'No'. The user will be returned to the 'Run' screen. If the user wants to continue with the action regardless of the plan alert, select 'Yes'. By selecting 'Yes' the user is acknowledging that the unit has been scanned at an invalid work cell, but production can resume as normal. The unit status will still be updated with a scan from the station.

If a unit has been scanned out of sequence order, as sequenced by capacity plans, the user will see the following message:

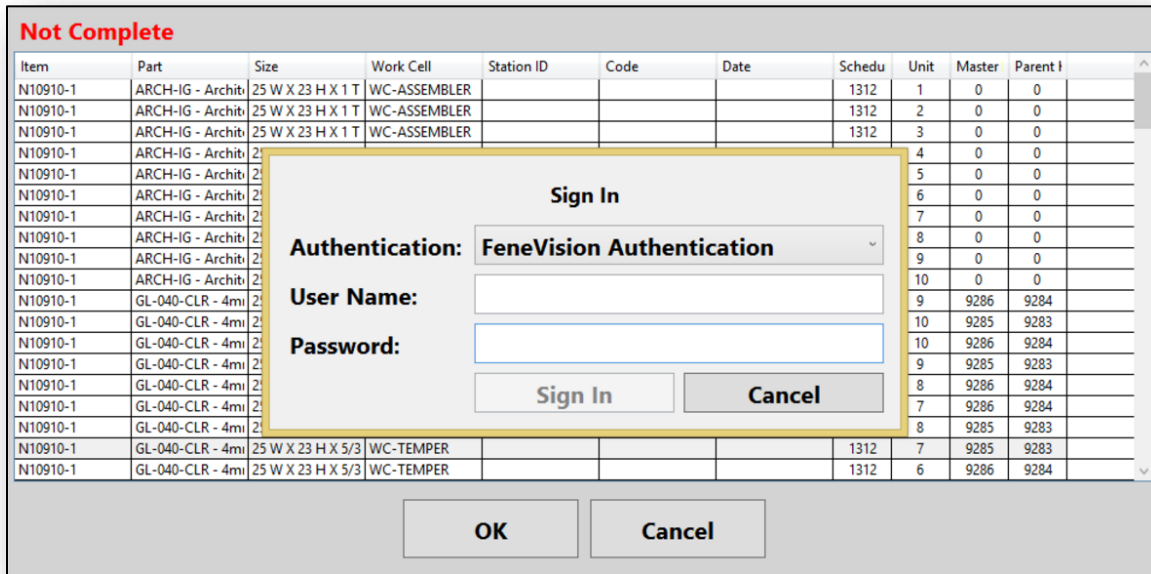


The 'Alerts' screen displays the items that were not scanned at the previous work cells. The following fields exist in the 'Plan Alerts' grid:

- **Item** – Order-Item identifier.
- **Part** – Part name.
- **Size** – Size of the part, including width, height, and thickness.
- **Work Cell** – 'Work Cell' where the unit was supposed to have been scanned at before arriving at the current station.
- **Station ID** – Station ID where part was rejected. Will display as empty if part has not been rejected.
- **Code** – Reject code from Core. Will display as empty if part has not been rejected.
- **Date** – Date the part was rejected. Will display as empty if part has not been rejected.
- **Schedule** – Schedule ID.
- **Unit** – Unit number.
- **Master Key / Parent Key** – Unit sub-component numbers. These can be found on the unit production label. The use of the Master / Parent Keys is required if the user is scanning in 'Part Updating Mode'. When in 'Part Updating Mode' if these keys are not included, a message stating 'Invalid Barcode' will appear unless the 'Allow Ordered Part Scan' is checked.

If the user does not want to proceed with the action taken, select 'Cancel'. The user will be returned to the 'Run' screen.

If the user wants to continue with the action regardless of the plan alert, select 'OK'. When a user selects 'OK', a login window will prompt. If the user attempting to proceed through the message has insufficient permissions to do so, they will not be able to continue, and a user with higher privileges must login to continue. These permissions can be assigned within the Core application.



By selecting 'OK', the user is acknowledging that the unit is ready to be scanned at the current work cell despite the plan alert. This action will also cause that capacity to be completed at the previous work cells that appeared in the Plan Alert message.

After selecting 'OK', if 'Hide approved plan alerts' is selected in the capacity settings through FeneVision Core, the unit will not bring up the alert when scanned at Tracking stations later down the production line. However, if the 'Hide approved plan alerts' is not checked, the user will receive a plan alert at each of the stations scanned thereafter. Whether the 'Hide approved plan alerts' is or is not checked, any new plan alerts for the station will still appear and require acknowledgment. Once a unit is accepted through the alert, that information is logged and reported in FeneVision BI.

Note: If 'Accept on First Scan' is disabled, the first scan will request a login. The second scan will display the 'Alerts' screen, but the permissions from the first scan will persist.

Prompt for Quantity

When a Tracking mode has enabled 'Prompt for Quantity', a single scan can be used to accept, complete, or reject multiple parts. When Tracking sounds are enabled, a single notification sound will occur to indicate all units are accepted, completed, or rejected, instead of a single notification for each unit being scanned in the group. Additionally, if 'Prompt for Quantity' is enabled, the mulling option is also disabled; if it is set at 'Toggle', then mulling can still be enabled.

To enable quantity mode, select a setting in the drop-down box next to 'Prompt for Quantity' in the 'Setup' >> 'Settings' menu in Tracking.

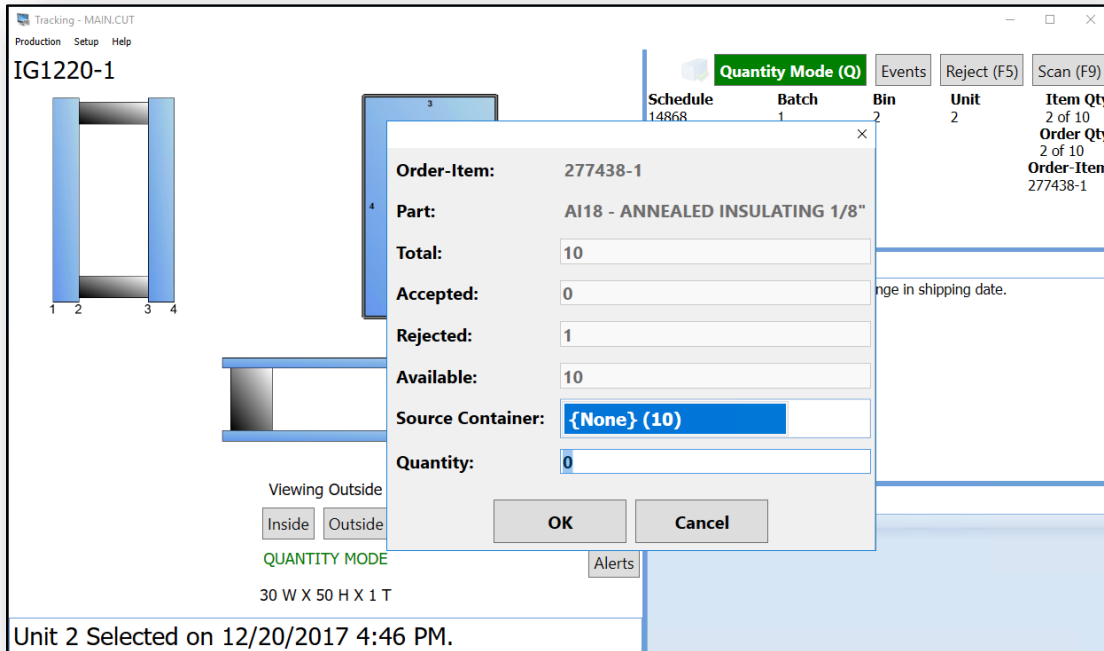
- **Enable** – Enables the functionality
- **Disable** – Disables the functionality
- **Toggle** – Allows user to turn 'Prompt for Quantity' functionality on and off by selecting 'Q' on the user's keyboard or selecting the 'Quantity Mode (Q)' button.
- **Quantity Prompt Excludes Rejects From Available Quantity** – When 'Prompt for Quantity' is set to Enable or Toggle, this option can be checked. When checked, all currently rejected units will be unavailable to be scanned as accepted when performing a quantity scan.

If 'Prompt for Quantity' is enabled, the button 'QUANTITY MODE' will appear in green at the top of the screen.

Scanned Accepted

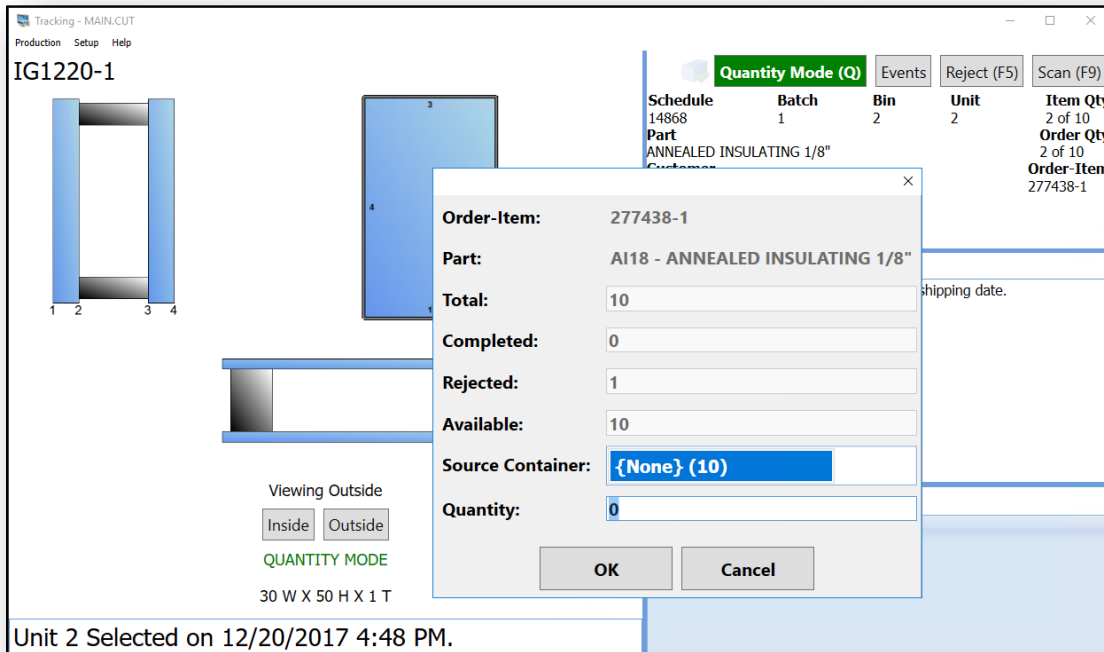
When the user scans the first unit with 'Accept on First Scan' not checked, the 'Quantity' window does not display, and the scanned unit is simply selected. It is not until the unit is scanned again that the 'Quantity' window displays to accept multiple

units. However, when 'Accept on First Scan' is enabled the 'Quantity' window will display when the unit is scanned for the first time.



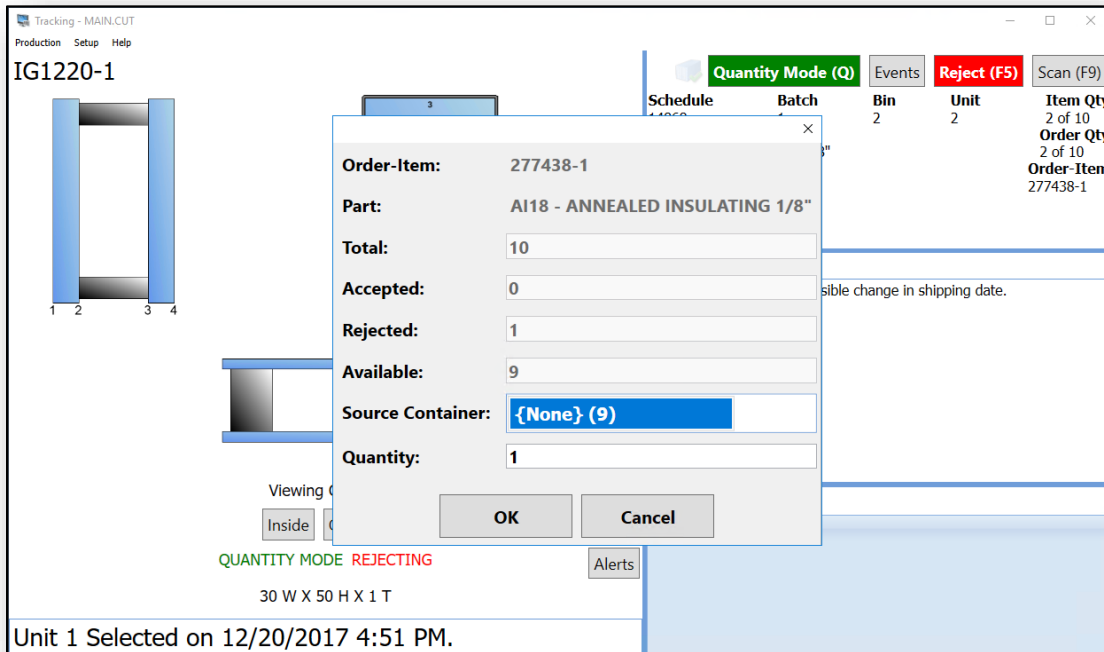
- **Order-Item** - Identifier of the order and the item number.
- **Part** – Alphanumeric identifier of the part.
- **Total** – Total amount of units for the scanned order-item (*read only*).
- **Accepted** – Total amount of units previously scanned 'Accepted' at this station (*read only*).
- **Rejected** – Total amount of rejected units for the scanned order-item (or part) on the current schedule (*read only*).
- **Available** – Number of units that have not yet been 'Accepted'.
- **Source Container** – Container that houses the units that are available to be scanned.
- **Quantity** – Number of units to receive the accepted scan. This number defaults to either '0', '1', or the number of units in the 'Source Container' field. This default can be specified by the 'Quantity Prompt Default' field in the 'Settings' screen.

Scanned Completed



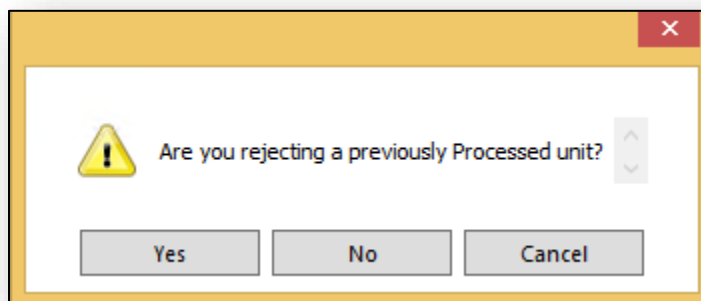
- **Order-Item** – Order number and order line item number.
- **Part** – Alphanumeric identifier of the part.
- **Total** – The total amount of units for the scanned order-item that were released to this schedule (*read only*).
- **Completed** – Total amount of units previously scanned completed at any station (*read only*).
- **Rejected** – Total amount of rejected units for the scanned order-item (or part) on the current schedule (*read only*).
- **Available** – Number of units that have not yet been 'Accepted'.
- **Source Container** – Container that houses the units that are available to be scanned.
- **Quantity** – Number of units to receive the accepted scan. This number defaults to either '0', '1', or the number of units in the 'Source Container' field. This default can be specified by the 'Quantity Prompt Default' field in the 'Settings' screen.

Scanned Rejected



- **Order-Item** – Order number and order line item number.
- **Part** – Alphanumeric identifier of the part.
- **Total** – The total amount of units for the scanned order-item that were released to this schedule (*read only*).
- **Accepted** – Total amount of units previously scanned accepted at this station (*read only*).
- **Rejected** – Total amount of rejected units for the scanned order-item (or part) on the current schedule (*read only*).
- **Available** – Number of units that have not yet been 'Accepted'.
- **Source Container** – Container that houses the units that are available to be scanned.
- **Quantity** – Number of units to receive the rejected scan. This number always defaults to '1' when rejecting.

Note: Units to reject are always taken from the largest unit ID backwards. After selecting the quantity to reject, and selecting the 'OK' button, the prompt below will appear:

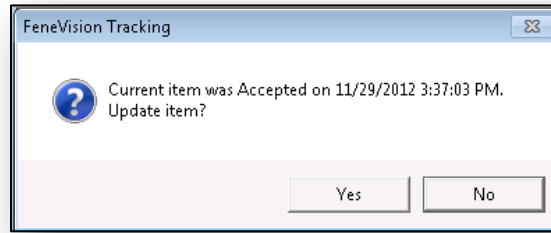


If the user replies 'No', then it retrieves the parts that have no prior status code. If 'Yes' is selected, then the highest numbered unit with a status code will be rejected first.

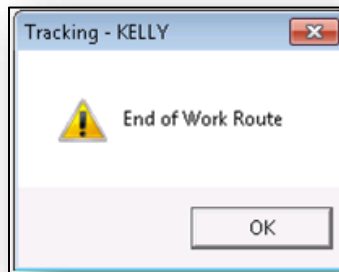
Duplicate Scans

If a unit has already been scanned 'Accepted' and is either inadvertently or intentionally scanned a second time at a tracking station, a message box will display, and the user will be asked whether an update of the status of the unit is necessary. This is

useful for situations where the user wants visual feedback on a previously completed unit's information without updating the status of the unit, such as when checking or changing a unit's location container.



In 'Work Route Updating' mode, once a work route has been completely scanned and produced, the user will see this message:



Mulling

'Ordered Part Updating' mode supports unit mulling. Mulling allows many units to be assembled together and tracked as one unit (e.g., windows that are produced individually but assembled together). One label is printed for the entire assembly. To mull a unit, follow these steps:

1. Check to make sure that 'Enable Mulling' is checked in the 'Settings' screen.
2. Press the spacebar, select the 'Start Mull' button, or scan a *TMM barcode. The word 'MULLING' will appear in green at the bottom of the screen, and the 'Start Mull' button will turn green and change to 'End Mull'. If a unit has an alert, it will be displayed as the unit is scanned into the mull.
3. All of the units in the assembly can be scanned, one scan for each unit. Each unit's information will appear on the screen as it is scanned, getting the units ready for the mulling process.

Note: After the first item is scanned when mulling, the Current Mull section in Tracking shows a list of the parts expected to be included in the current mull. The parts already scanned into the current mull will have a green checkmark. If the AutoCompleteSubMaterial parameter is enabled parts that will be autocompleted will be italicized. This means that these parts will be added to the mull once the non italicized items are added to the mull.

Current Mull

Schedule	Unit	Part	Order-Item	Bin	Batch	
5093	1	DH-PW-DH	10090-1	1	1	✓
5093	2	8000PW	10090-1.2	2	1	
5093	3	8660DH	10090-1.3	3	1	
5093	4	8660DH	10090-1.1	4	1	
<i>5093</i>	<i>5</i>	<i>MULL-VM</i>	<i>10090-1.4</i>	<i>4</i>	<i>1</i>	
<i>5093</i>	<i>6</i>	<i>MULL-VM</i>	<i>10090-1.5</i>	<i>4</i>	<i>1</i>	

- Pressing the space bar again will complete the mulling process. The word "MULLING" will disappear, and a single label will print out with the information of the mulled unit.

DZ0108-1

Start Mull () Alerts

80 W X 80 H

Unit 4, 1, 2, 3, 5, 6 Accepted on 1/8/2018 4:00 PM.

Schedule	Batch	Bin	Unit	Item Qty
24452	1	1	4	1 of 1

Part Triple-DH Muller Unit
Order Qty 1 of 1
Customer Design Zone
Order-Item 744361-1

Comments

Options Current Mull

Updating Rules

The following ordered part updating rules apply to mulled units:

- If an ordered part is scanned, the ordered part information and image will be displayed on the screen.

2. If the mull or unit has previously been scanned at this station, and the code indicates it is currently un-staged or unloaded, then the user will be prompted to update the current unit/mull. If they choose yes, the units will be 'Accepted' / 'Completed' in the database, a wrapper label will be printed, and 'Accept' labels will be printed for the unit.
3. Under a best-case scenario (where a unit is scanned at the station and no prompts are displayed) the database will be updated with an 'Accept' / 'Complete' code for the unit (if a mull is scanned, then all units in the mull get the 'Accept' / 'Complete' code). A wrapper label will be printed for the unit / mull, and an 'Accept' label will be printed for the unit.

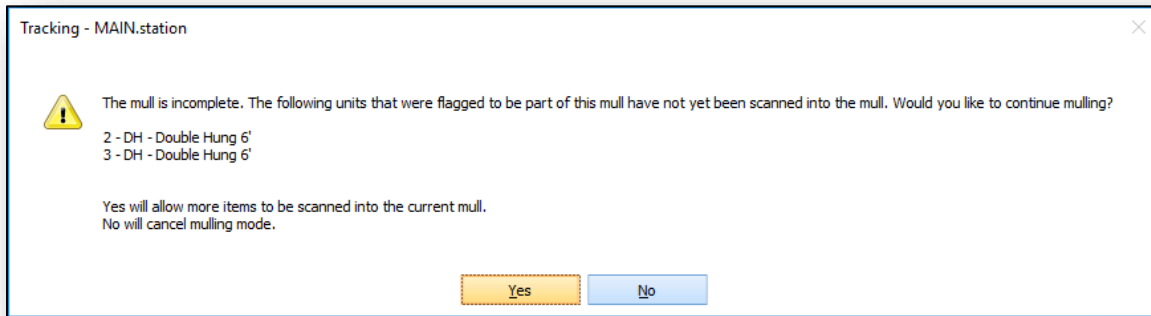
Mulling Rules

The following rules apply to the 'Mulling' feature in Tracking:

1. Mulling is only permitted in the Ordered Part Updating mode.
2. When the user is in mulling mode, scanned units are accepted on the first scan, even if the user does not have 'Accept on First Scan' checked.
3. Units from different production schedules cannot be mulled together.
4. Rejected parts can be scanned into mulls, as long as they have not been sent for reprocessing.
5. Items shipped separately cannot be scanned into a mull.
6. When a unit is scanned, its part information will be displayed. If the scanned unit is within a factory mull (that has already been mulled together), then the mull image will be displayed. Otherwise, the scanned unit's image will be displayed.
7. If the scanned mull or unit has a code that indicates it is currently staged, loaded, shipped, or delivered, the user will be prompted that the item cannot be mulled. The example below shows that the item cannot be mulled because it has already been shipped.



8. If the user is trying to scan a new unit into a mull, the following conditions will be checked for legacy mulls (a mull created for units that do not use alternate wizards):
 - a. The unit cannot already exist in another mull.
 - b. All units that are being mulled must be in the same schedule.
 - c. A single unit cannot be scanned into a mull multiple times.
 - d. All units that are being mulled must be from the same order.
 - e. A unit with no sub line items cannot be mulled together with a unit that has sub line items.
9. If the user is trying to scan a new unit into a mull, the following conditions will be checked for 'Opening Designer' mulls. The same restrictions as above apply, plus the following:
 - a. The unit must be flagged to be part of a factory mull (loose sub line items = 0).
 - b. The unit cannot be flagged to be field mulled (loose sub line items = 1).
 - c. All items that are being mulled must be from the same line item.
 - d. The same sub line item cannot be mulled into a mull multiple times.
10. When an item is scanned into a mull, the accept report will print immediately (before the mull gets committed). This occurs to avoid confusion as to which accept label goes with which window.
11. If an alternate wizard mull is flagged to be factory mulled, all manufactured sub line items must be mulled into the mull. If the user tries to commit an incomplete mull, the following prompt will appear.



12. If the user tries to commit a mull that only has one unit scanned into it so far, a message will appear indicating that only a single unit has been scanned into the unit, but a mull must consist of at least two units (this applies to legacy mulling).
13. When a mull is successfully committed (by pressing the spacebar, or selecting 'End Mull'), the screen will display the ordered unit and the mull image (if it is a designer wizard or legacy mull, no image will be displayed), all units will be updated in the database with 'Accept' / 'Complete', and a wrapper label will print for the mull.

Leaving 'Mulling' Mode

To leave 'Mulling' mode, press the spacebar, or select 'End Mull', and the word 'MULLING' will be removed. The units will have been mulled, and the labels will have already been printed.

Label Printing

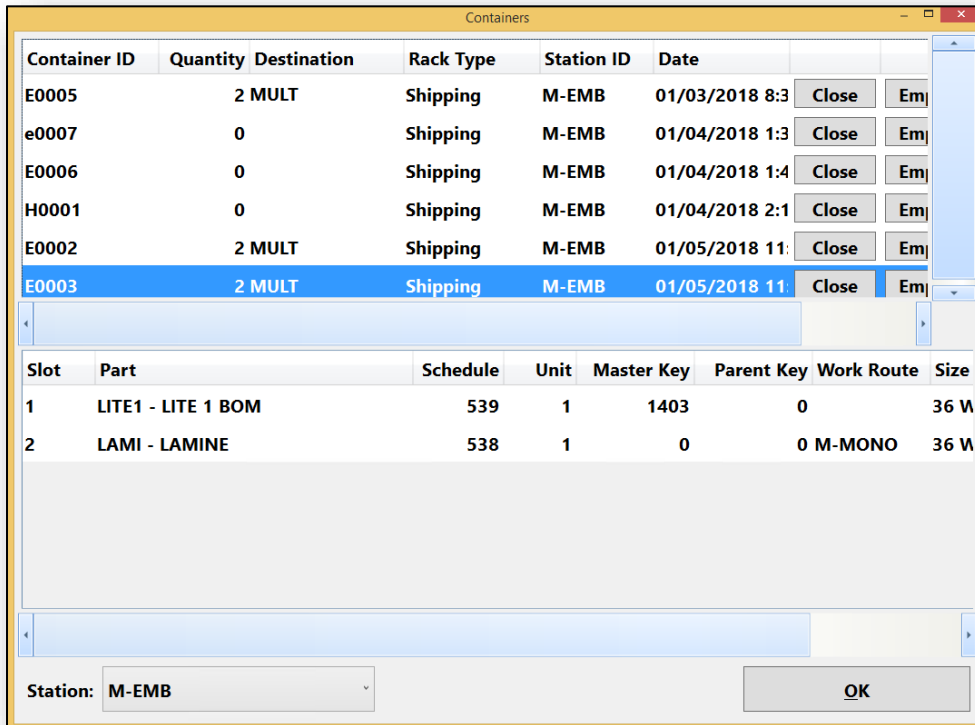
Finished product label printing is supported when in 'Ordered Part Updating' mode and a printer is specified in 'Setup' >> 'Reports'. Labels are automatically printed when the unit is accepted. When using Energy Star / NFRC or NAMI label printing, these labels will also print at this time.

Containers

Containers of various designs can be designated for production only, for shipping only, or can serve as both production and shipping. These configurations are typically arranged in FeneVision Core in the 'Container Setup' menu.

Container Rules

Selecting 'C' on the user's keyboard will open the 'Container' screen that displays the containers – both production containers and shipping containers – that are currently open at the station.



The image above displays the list of containers currently open at the station. Oldest containers are shown first.

The following columns show in the Containers screen:

Top Grid:

- **Container ID** – The alpha-numeric ID associated with the selected container
- **Quantity** – The number of units scanned into the container
- **Destination** – Where the container is required next.
 - For a production container, this will indicate the next workcell in the capacity plan. If there are no additional workcells, the current workcell will be listed as the destination.
 - For shipping containers, this will indicate what customer(s) or transfer location are associated with the units in the container.
- **Rack Type** – Indicates whether the container is a production or shipping container
- **Station ID** – The station the container is currently located
- **Date** – The date/time of the first unit's scan into the container
- **Commands**
 - **Close** – Allows the user to close the container, making it not appear in the containers tab at the current Tracking station
 - **Empty** – Removes all units from the selected container. This does not change the status of the units in the container.
 - **Print** – Prints the container report for the selected container.

Bottom Grid:

- **Slot**
- **Part**
- **Schedule**

- **Unit**
- **Master Key**
- **Parent Key**
- **Work Route**
- **Size**

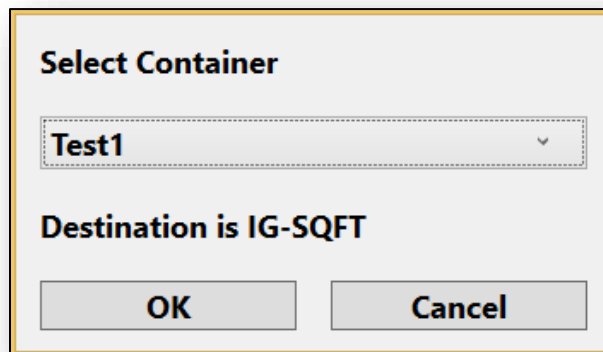
The following rules apply to the 'Container' feature in FeneVision Tracking:

1. In 'Part Updating' mode, if a part is scanned onto a shipping container, its entire ordered part gets placed on that container.
2. If 'Prompt for Container' is set to 'Shipping Rack' or 'Production / Shipping Rack', Tracking allows the user to select a shipping rack when a unit is scanned. This selection defaults to the container that was previously scanned for the units in that schedule.

3. Once the user selects 'OK', the unit will be added to the selected shipping container.
4. If the 'Prompt Timeout' setting is set with a value, then the dialog automatically closes after time expires. When this occurs, the container selected in the drop-down will be automatically used. If no container was selected from the drop-down, the unit will not be placed into a container.
5. While the dialog is showing, the user can scan a container barcode. Once the barcode is scanned, the dialog automatically selects the scanned container and closes. The unit is added to the scanned container.
6. In some cases, the user may decide to not place the unit on a container and instead update it as "loose", or remove the unit from a container. In this case, the user would select the blank entry at the top of the list:

7. When the user selects 'OK', the unit is removed from any container that it is currently assigned to and is updated without being placed on a container. This selection is remembered for the unit's customer (for shipping containers), so the selection will default to a blank entry the next time a unit for that customer is scanned. The 'Prompt Timeout' setting applies for blank entries just as it does for named entries.
8. When using production containers, the default container is selected as the production container based on the hierarchy below:

- a. If the current 'Order-Item-Master Key-Parent Key' already exists on an open container at the station, that container will be selected by default.
- b. If the current unit's next work cell is already set as the destination of an open container at the station, that container will be selected by default.
- c. If neither of these criteria are true, blank will be selected as the default.

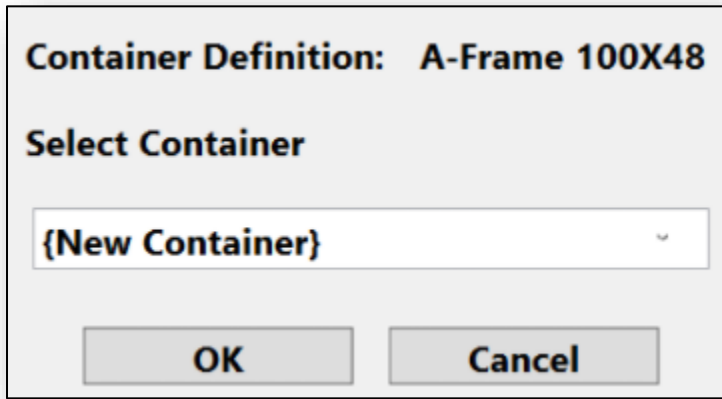


9. When the default container is selected, it will place the reason for the default in a label on the selection screen (displays as either "Destination is WORKCELLX" or "Same Order-Item");
10. If a container has a fixed number of slots defined, the user will receive a message when the container has no more available slots.
11. If a container has already been staged or loaded by another application, a message informs the user that the container cannot be used.
12. If a container is currently assigned to another customer, but it has not been staged or loaded, then a prompt appears to tell the user the container is already assigned to another customer. It shows the date and time and asks, "Do you want to assign the current container to customer ABC instead?" Selecting 'No' cancels the update. Selecting 'Yes' empties the container and re-assigns it to the current customer. If the container is still open in the user's list, a message will state that the container is assigned to another customer and cannot be used.

Note: In Core, if the 'Shipping Container With Multiple Customers' policy has its Action set to 'Info', units from multiple customers can be placed onto the same shipping container.

13. If the user still wants to use the container, the container must first be closed. The user will be prompted to empty the container. If the user tries to remove a unit from a container and the unit has already been staged or loaded, the message "Container A01 Loaded by Tracking at 9/1/2010 11:55:04 AM. Unit cannot be removed" appears, and the update is cancelled.
14. If a part is in a production container, and a part above this part in the BOM is scanned into a different production container, the General Setup Parameter TrackingRemoveSubComponentsOnProductionContainers will determine if the lower level part should be removed from the container it was in. Ex. Loose lites are in a production container then they are laminated and the LAMI lite is scanned into a different production container.
15. If a part is in a container and either the part or a subpart of the part in the container is rejected, the item will be removed from the container.

When an item has been preassigned to a container through Opti-Pack in Core, the container prompt may appear differently. If the container definition used in Opti-Pack has no physical containers assigned to the definition, the container prompt will appear in the format displayed below:



The container definition used in Opti-Pack will be displayed at the top of the prompt and the user will be given the option to create an on-the-fly container by selecting the 'New Container' option from the drop-down.

Part Updating and Ordered Part Updating Modes

In 'Part Updating Mode' and 'Ordered Part Updating Mode', the user can enter the container ID or container key.

Enter Container ID or Container Key

In order for a container to receive a status when scanned (just as a normal unit would), scan a container with 'Prompt for Container' set as {None}.

In 'Part Updating Mode' and 'Ordered Part Updating Mode', the user can enter the container ID or container key.

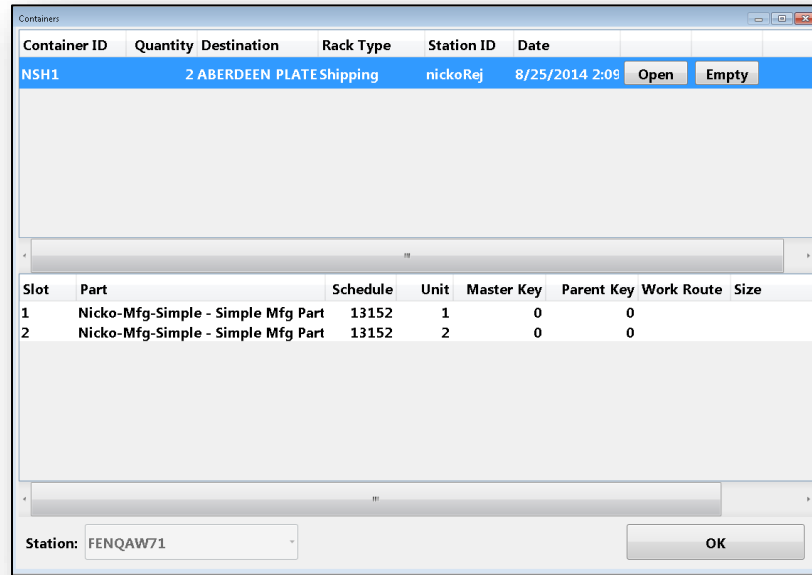
To enter the container ID or container key in 'Part Updating Mode' or 'Ordered Part Updating Mode' without entering the SUMP, complete the following steps.

1. Select 'SCAN (F9)'.
2. Select the 'Container' tab.
3. Enter the container ID or container key and select 'OK'.



4. All units scanned into the container will be marked as 'Accepted' or 'Complete'.

If the same steps are followed with the 'Prompt for Container' set to 'Production Rack', 'Shipping Rack, or 'Production/Shipping Rack', the 'Containers' screen will appear instead of the units being accepted.



The 'Containers' screen shows the status of the scanned container. It displays the container's contents, and allows the user to open, empty, or close the container; as well as, remove its contents individually, if the container is open at that station.

Accept / Complete All Units in a Container

In 'Part Updating Mode' and 'Ordered Part Updating Mode', the user can monitor and track how an entire container is moving through production by scanning that container at each station.

If the station ID is associated with a capacity work cell, capacity planning will be updated for the units in the container once the container is scanned ('Prompt for Container' must be set to {None}). This functionality works for both shipping and production containers.

Note: Units with a status of 'backordered', 'shipped', 'delivered', 'loaded', or 'manually loaded' will not be scanned.

Station Filter

The station filter at the bottom of the 'Containers' screen allows the user to see containers currently open at other stations. A 'Station' column appears when viewing the 'Containers' menu.

Closing Containers

In the 'Containers' screen, the user can select 'Close' for any container. This marks the container as 'Complete' and removes the container from the list. If plant locations are set to prompt then closing the container will allow the user to assign a plant location to the container.

Empty Containers

The user can empty a container in the 'Containers' screen in FeneVision Tracking, making that container available for other units. Select 'Empty' to empty a container.

Print Container Information

Users can print container reports from the 'Containers' screen in Tracking. Select 'Print'. Container reports must be printed before closing a container since closing the container removes it from the list.

Plant Locations

After being scanned, items can be placed in plant locations located in the production facility. Both individual units and containers can be scanned into plant locations.

Plant Location Rules

When plant locations are set to prompt in the 'Setup' menu, the prompt to select a plant location occurs after the following actions:

- Immediately after accepting a unit when containers are not set to prompt.
- After accepting a unit and declining to select a container when containers are set to prompt.
- After closing a container.

BI

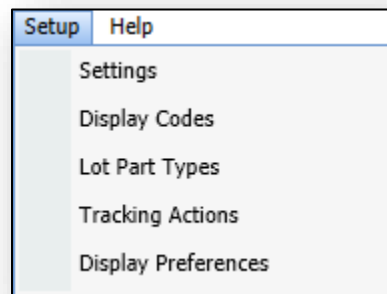
FeneVision Business Intelligence (BI) can be opened by selecting 'F1' on the user's keyboard. By default, the 'Order Status' will display if a unit is selected, and the 'Order Search' will display if a unit is not selected. However, another report can be specified instead by adding the URL to the report field in the Production Status section of the Reports menu in Tracking Setup.

Exiting

Exit FeneVision Tracking by selecting the 'X' in the in the upper right corner of the main screen, or by selecting 'Program' >> 'Exit' from the menu bar.

Setup

The 'Setup' menu allows the user to configure settings regarding how Tracking will track production for each unique Station ID.



System Requirements

The Tracking application has specific hardware and software requirements. Please reference the FeneVision Hardware & Software Requirements document.

Installation

The FeneVision Tracking application is installed by executing an installation file and following the associated installation wizard. Although the software and hardware installation is not difficult, it should be done by someone with Microsoft® Windows and computer setup experience.

Program

To install the Tracking application, follow these steps.

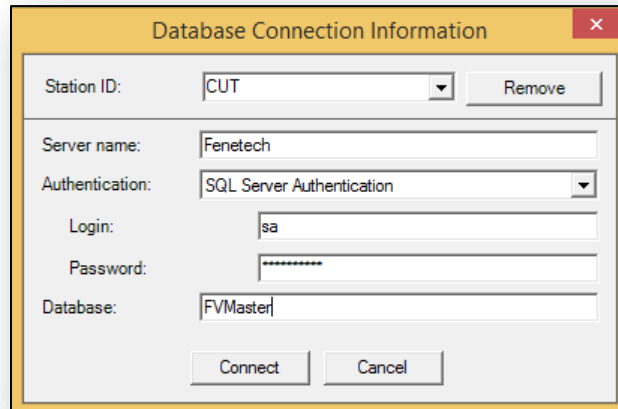
1. Locate the Tracking installation program.
2. Double click the installation file to begin installation.
3. An installation wizard will launch that will install the Tracking application.
4. A dialog box will appear that contains the license terms. These must be accepted in order to proceed with the installation.
5. Choose the typical install.
6. An application icon is automatically placed on the user's desktop. This icon can be used to start the application.

Initial Setup

Database connection information ('Setup...' screen) opens the first time the software is run. All information in the dialog must be supplied in order to communicate with the FeneVision server. Consult your system or network administrator for the required information. This screen can be reached at any time by holding the 'Shift' key while the software is starting

Database Connection Information

Users connect with the database by indicating from which station the connection is made, the server name, and the appropriate authentication. Windows Authentication uses the security features integrated into the Microsoft® Windows OS to grant users access to the SQL database used by FeneVision.



The 'Setup ...' dialog contains the following fields:

- **Station ID** – Computer or station name used to identify the application instance.
- **Server name** – Identifier of the server.
- **Authentication** – Choose either SQL Server Authentication or Windows Authentication.
- **Login** – SQL Server user. This field should be blank when using Windows Authentication.
- **Password** – SQL Server user's password. Should be blank when using Windows Authentication.
- **Database** – SQL server database name (typically, 'FVMaster').

Note: This screen can be reached at any time by holding the 'Shift' key while the software is starting.

Tones

Tracking uses distinct tones to indicate when specific actions occur in the application. FeneTech recommends that each tracking station have speakers connected to the user's PC so that users can hear the audible sounds to verify these actions.

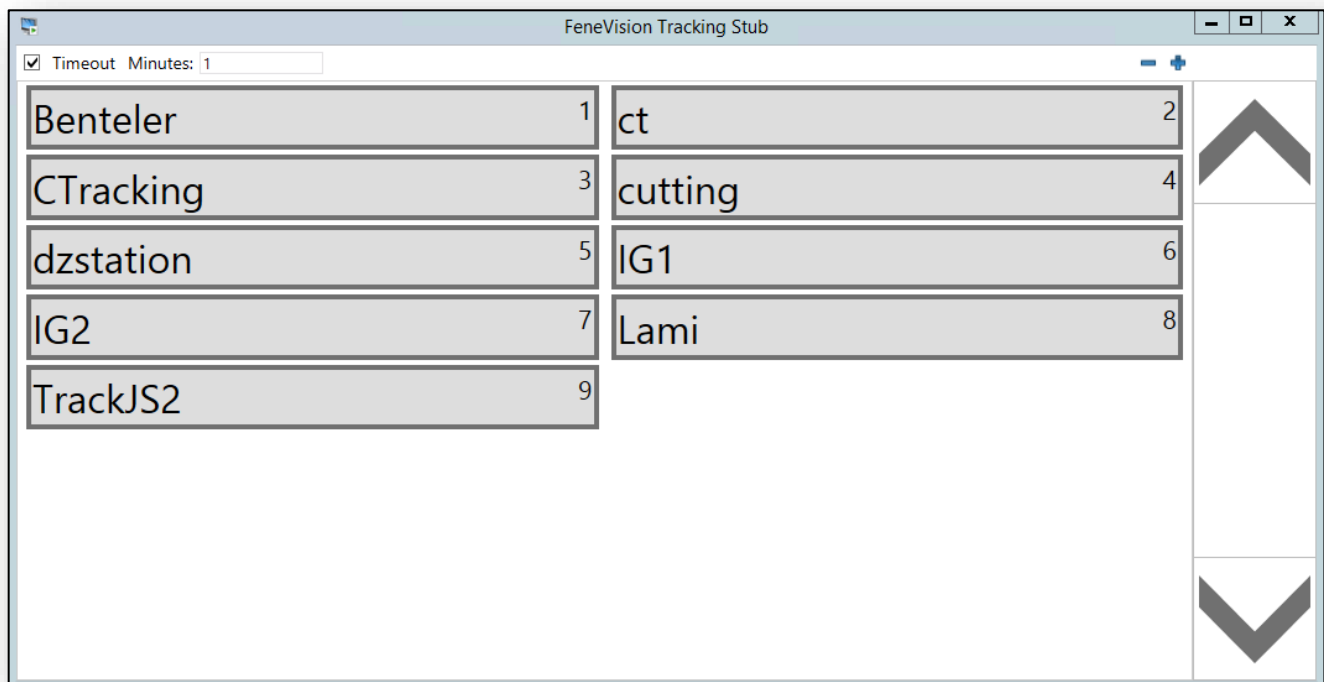
The following tones will sound with each of these actions:

- **Successful Scan** – Unique tone indicating a successful scan.
- **Unsuccessful Scan** – Unique tone indicating unsuccessful scan.
- **Unsuccessful Scan with Prompt** – If a user enters a unit number representing a subcomponent that is not part of the current assembly ('Assembly Updating' mode), a three-toned sound accompanied by the following prompt:



Stub

The standard way to use FeneVision Tracking is to use one tracking station per PC. Multiple tracking stations can be set up on a single PC using a feature called 'Tracking Stub Mode'. Opening the FeneVision Tracking Stub application will display the following dialog.



This application allows the user to open Tracking from a list of multiple preconfigured station settings on a single PC. This functionality also has a timeout feature configurable in minutes that will close Tracking stations opened by this application after the allotted time. If the user times out, they will need to reenter their credentials when logging in to another station, but if the user closes out of the current station and opens a new station without timing out, they will be able to open the new station without having to reenter their credentials. Selecting the + or – buttons will change the way the available stations are displayed by separating them into more or less columns.

The stations available in the Tracking Stub match the list of stations that appear in the 'Station ID' drop-down in the 'Database Connection Information' dialog when opening the regular Tracking application. To add a station to the stub do the following:

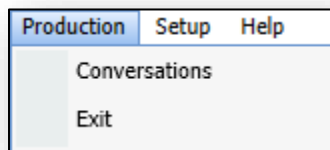
1. Open the regular tracking application while holding 'Shift' on the keyboard.
2. In the 'Database Connection Information' dialog type the new stationID and the proper connection information then hit 'Connect'.
3. If needed, configure the station's settings.
4. Close Tracking. When opening the stub this station will now be available.

To remove a station from the stub do the following:

1. Open the regular tracking application while holding 'Shift' on the keyboard.
2. In the 'Database Connection Information' dialog select the station you no longer want and hit 'Remove'.
3. When opening the stub this station will no longer appear.

Production

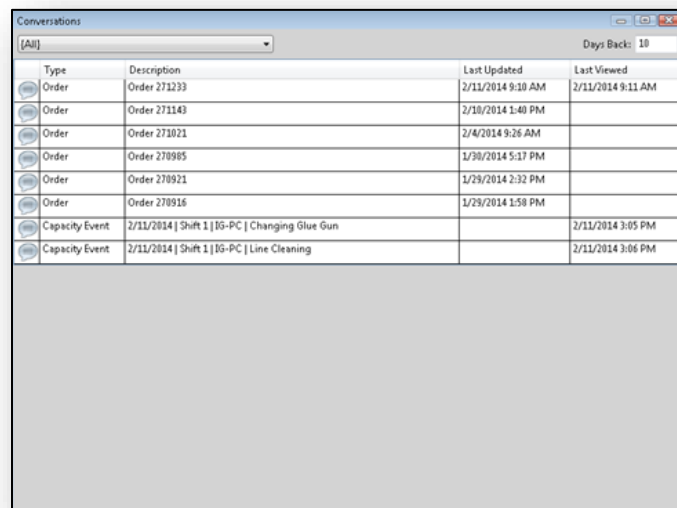
The 'Production' menu features the 'Run' and 'Conversation' functions. The user can also exit from this menu.



Conversations

Conversations are recorded both in 'Order Entry' and in the 'Events' sections of FeneVision Core. In Tracking, the 'Conversations' feature allows the user to enter text associated with a particular work cell. Conversations are documented, dated, and time stamped.

The image below represents *all* the conversations within FeneVision associated with the user of the application. Conversations can also be filtered by those that are unread and those where the user has been designated as a watcher.

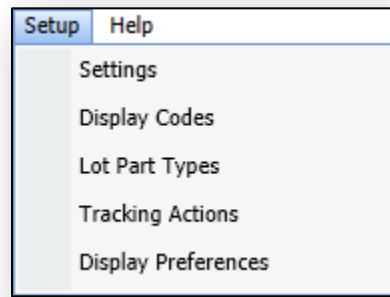


The image shows a window titled 'Conversations' with a dropdown menu set to '[All]' and a 'Days Back: 10' indicator. The window contains a table with the following data:

Type	Description	Last Updated	Last Viewed
Order	Order 271233	2/11/2014 9:10 AM	2/11/2014 9:11 AM
Order	Order 271143	2/10/2014 1:40 PM	
Order	Order 271021	2/4/2014 9:26 AM	
Order	Order 270985	1/30/2014 5:17 PM	
Order	Order 270921	1/29/2014 2:32 PM	
Order	Order 270916	1/29/2014 1:58 PM	
Capacity Event	2/11/2014 Shift 1 16-PC Changing Glue Gun		2/11/2014 3:05 PM
Capacity Event	2/11/2014 Shift 1 16-PC Line Cleaning		2/11/2014 3:06 PM

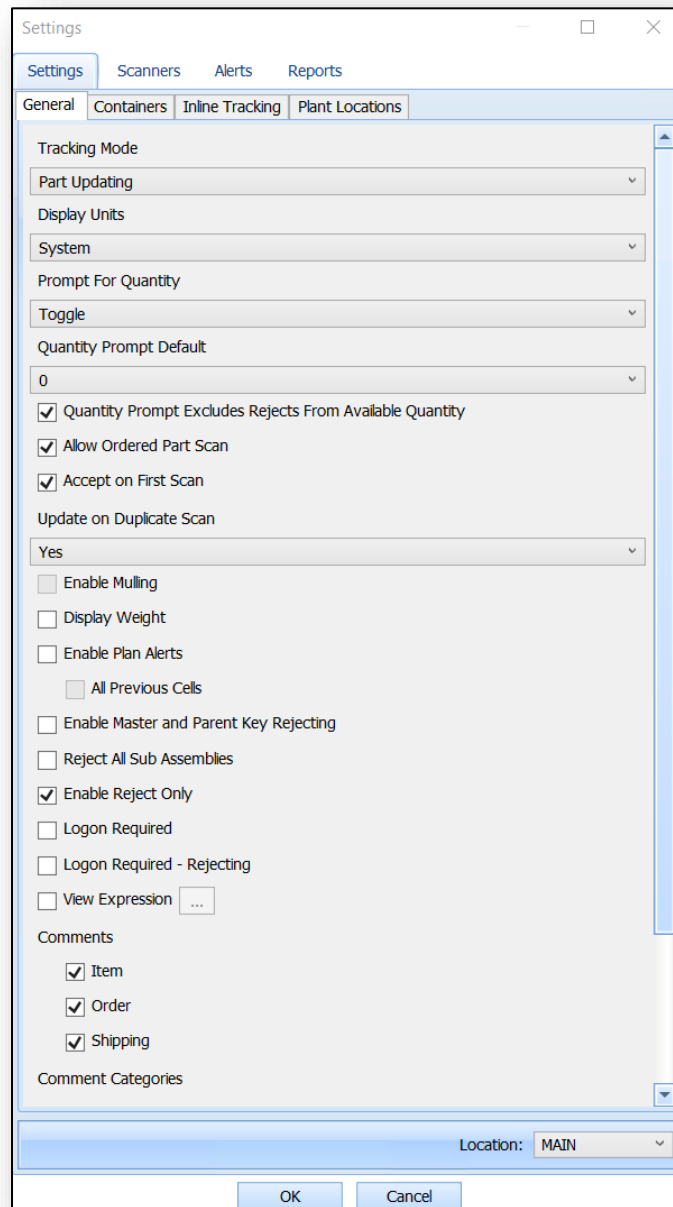
Setup

The 'Setup' menu features essential functions to configure the Tracking station to operate as expected by the user.



Settings

The 'Settings' screen is used to configure basic operating characteristics of the application. The 'Settings' screen can be found by selecting menu item 'Setup' >> 'Settings'.



Settings Tab

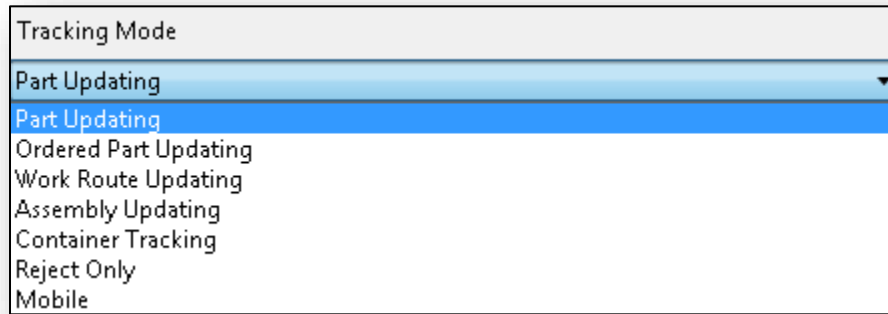
Three tabs exist in the 'Settings' screen: 'General', 'Containers', and 'Inline Tracking'.

General Tab

Tracking Mode

'Tracking Mode' allows the user to specify how the application updates the production status of units on a given production schedule.

- **Tracking Mode** – Allows the user to toggle between each type of tracking mode.



- **Display Units** – Allows the user to set the dimension display at the tracking station.
 - System – At the tracking station, dimensions display in the default measuring system set for the FeneVision system.
 - Imperial – Dimensions display in ‘Imperial’ only.
 - Metric – Dimensions display in ‘Metric’ only.
- **Prompt for Quantity** – Use a single scan to accept parts for multiple units of the same order-item. The user is prompted to enter the quantity they would like to accept or complete. The system then applies the same scan code to multiple parts at the same time.
 - Disable – Disables functionality.
 - Toggle – Switch between enabling and disabling prompt for quantity by selecting the ‘Q’ key on the user’s keyboard, or by selecting the ‘Quantity Mode (Q)’ icon.
 - Enable – Enables functionality.

Note: If the user enables the ‘Prompt for Quantity’ option, the user will see ‘QUANTITY MODE’ in green at the bottom center of the ‘Run’ screen.

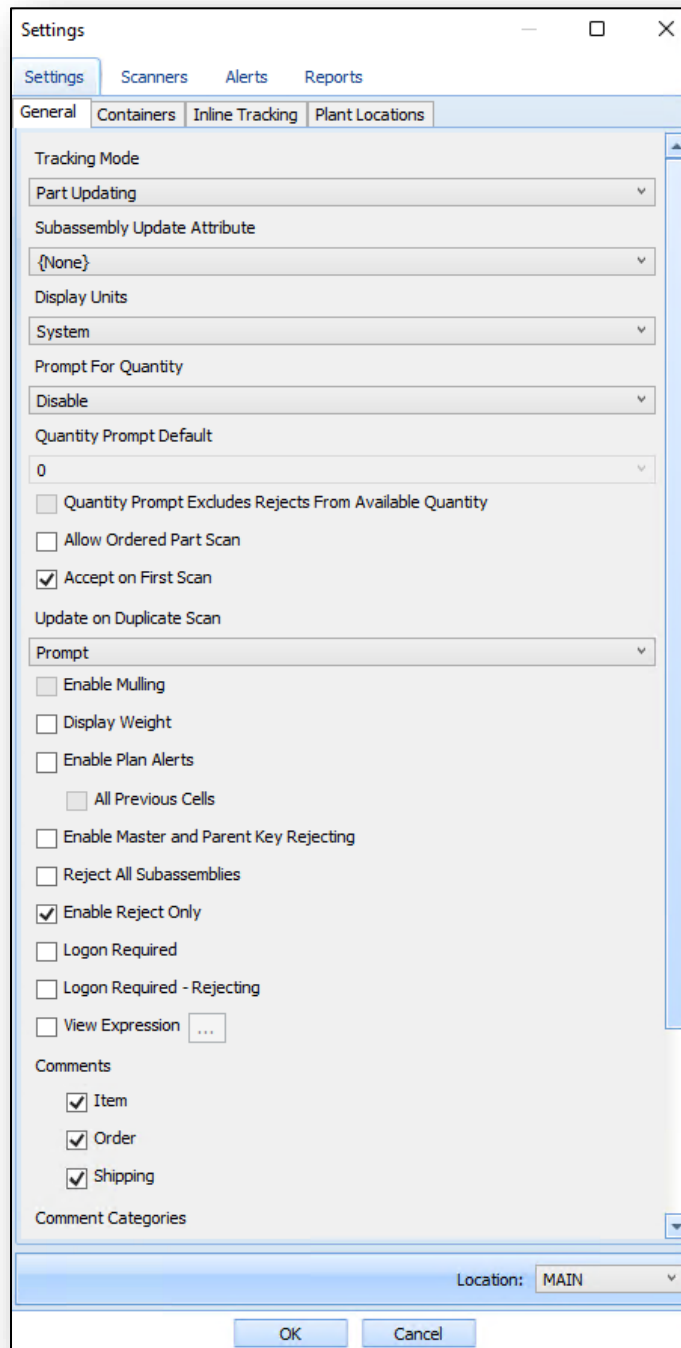
Note: When using quantity mode, Tracking will automatically scan accepted the next unit on the schedule that has not been accepted. Therefore, if the schedule has 25 of the same item, and the first 5 units are already scanned accepted/complete, when the user scans in quantity mode, the next unit to be accepted will automatically be unit 6.

- **Quantity Prompt Default** – When scanning in ‘Quantity Mode’, this value will be the default value in the ‘Quantity’ field. This drop-down allows the user to set the default value as ‘0’, ‘1’, or ‘Remaining Qty’. When ‘Remaining Qty’ is selected, the value will be taken from the Remaining Qty field when the unit is scanned.
- **Quantity Prompt Excludes Rejects From Available Quantity** – When ‘Prompt for Quantity’ is set to Enable or Toggle, this option can be checked. When checked, all currently rejected units will be unavailable to be scanned as accepted when performing a quantity scan.

Note: Each mode has its specific list of options that follow the drop-downs in the ‘General’ tab. Additionally, variations exist among the drop-downs depending upon which ‘Tracking Mode’ is selected.

Part Updating

Using ‘Part Updating’ mode, parts and sub-assemblies can be scanned individually. ‘Part Updating’ also gives the user the option of allowing *ordered* parts to be scanned. Only the specific part scanned will be given an update status.



Note: The 'Part Updating' mode only works with parts manufactured in the tracking station's manufacturing location.

The following fields exist in the 'Part Updating' section of 'Tracking Mode'.

- **Subassembly Update Attribute** – If an attribute is specified for this setting then only the scanned item and subassemblies with the attribute assigned will be updated when a scan occurs.

Note: Any attribute that has a number value of -1 or 0, or a string value of '0', 'F', or 'False' case insensitive will be considered a False value. Any other attribute values will be considered True values.

- **Allow Ordered Part Scan** – When scanning in ‘Part Updating’ mode, checking this will allow the user to scan both the sub-assemblies and the ordered part. If an ordered part is scanned without enabling ‘Allow Ordered Part Scan’, a message stating ‘Invalid Barcode’ will appear.
- **Accept on First Scan** – If this option is enabled, a single scan of the label will update the status of the part scanned to accepted, or complete. Otherwise, two scans are required to update the status of the part; a single scan to select the unit or part, and a second scan of the same unit or part to accept, or complete.
- **Update on Duplicate Scan** – This setting determines what will happen when a unit is scanned at a Tracking station where it had already been scanned accepted.
 - **No** – When ‘No’ is selected, the unit will not be scanned accepted again.
 - **Yes** – When ‘Yes’ is selected, the unit will be scanned accepted again.
 - **Prompt** – When ‘Prompt’ is selected, a prompt will occur allowing the user to cancel or accept the scan.
- **Enable Mulling** – Enables all mulling functions.
- **Display Weight** – Weight of the scanned part will be shown next to the width, height, and thickness dimensions (shown under the display object).
- **Enable Plan Alerts** – Informs the user if a unit is scanned out of plan sequence order, or if a unit is scanned at a station that is not a work cell on that unit’s plan sequence (*‘Capacity Planning’ required*).

Note: ‘Plan Alerts’ differ from ‘Part / Option Alerts’.

- **All Previous Cells** – When checked, the plan alerts will look back to verify that the part has been scanned at all previous work cells in the plan sequence. When unchecked, the plan alerts will only look back at the most recent work cell to verify the part has been scanned there.
- **Enable Master and Parent Key Rejecting** – Rejects only the part in the bill of material that is scanned regardless of part type configuration. Part type configuration is used to define reject subassemblies when this setting is not enabled.
- **Reject All Sub-Assemblies** – When a part is rejected, all sub-assemblies of the part are rejected. When disabled, only sub-assemblies of the same type as the rejected part will be rejected. This setting is commonly used in conjunction with ‘Enable Master and Parent Key Rejecting’.
- **Enable Reject Only** – When rejecting, makes the ‘Reject Only’ option available to be selected from the ‘Reject Reprocessing’ selections.
- **Logon required** – Requires the user to log in when starting Tracking.
- **Logon required - Rejecting** – Requires the user to log in when rejecting units.
- **View Expression** – Scripts can be written to alter the objects images in the Tracking screen. The following actions can be performed using this script:
 - Specify the ‘DisplayBase’ – Tells the machine what edge of the shape should be shown as the bottom
 - Specify the ‘DisplayView’ – The inside/outside view. This can also be set to Default to use whatever the default view would be. (Useful for vertical line scanners)
 - Sort - Shows lites in descending sequence in work route mode when this setting is set to 1.
 - Example:

```
Sub Evaluate()

    'EXAMPLES
    'DisplayInfo.DisplayView = InsideView
    ' If OptionExists("SH041") Then
    '     DisplayInfo.DisplayBase = 3
    '         DisplayInfo.Sort1 = Descending
    ' End If
    'NOTE: This routine does not contain "retval".

    'ENTER YOUR CODE HERE!

    'DO NOT MODIFY CODE BELOW THIS LINE!
```

End Sub

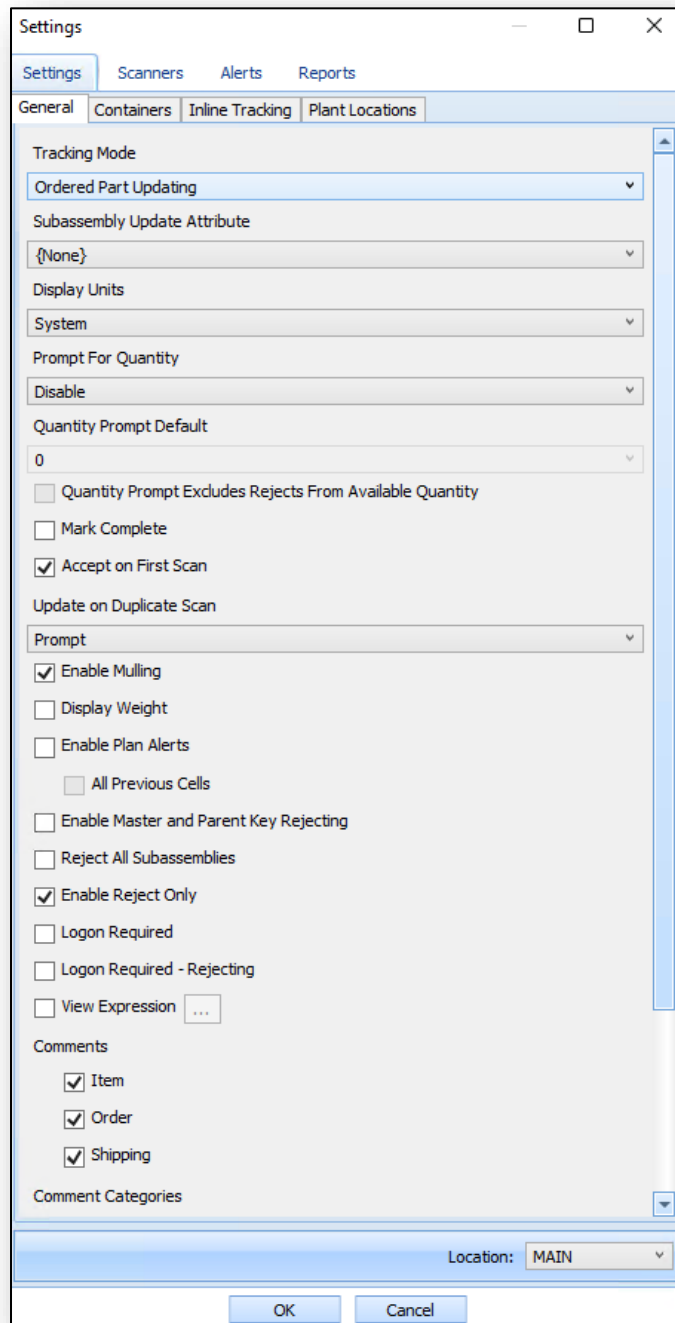
- **Comments** – Comments entered in ‘Order Entry’ can be configured to appear in Tracking.
 - **Item** – Item comments entered in ‘Order Entry’ will appear in Tracking when this option is checked.
 - **Order** – Order comments entered in ‘Order Entry’ will appear in Tracking when this option is checked.
 - **Shipping** – Shipping comments entered in ‘Order Entry’ will appear in Tracking when this option is checked.
- **Comment Categories** – Comments in ‘Order Entry’ can be assigned to System Text categories. Selecting the categories in the Tracking Settings menu displays all of the comments from ‘Order Entry’ that are assigned to the selected category.
- **Arguments**
 - **Tracking Logs** – /L:5 – Adds all scans within the tracking station to a tracking log
 - **Forced Updates** – /u – Will default prompt to Yes to make sure updates are enforced when scanning a unit more than once.
 - **Automatically Empty Container** – /e – Will default the empty container prompt to Yes when scanning into a shipping container that still contains another customer’s items
 - **Automatically Return Container** – /r – Will default the return container prompt to Yes when scanning into a shipping container that still shows as shipped
 - **Quiet Mode** – /q – Will automatically use defaults for each prompt and not show any pop-ups.

Note: When using quiet mode, users can scan the container ID before scanning SUMP's to indicate that the units will be put into the container.

- **Preamble Character** – Configurable prefix for handheld scanners. Defaulted to the standard STX (ASCII 2).
- **Post-amble Character** – Configurable suffix for handheld scanners. Defaulted to the standard STX (ASCII 2).

Ordered Part Updating

Updates all parts in the bill of material of a unit with ‘Accept’, ‘Complete’, or ‘Reject’ status, regardless of which label is scanned.



The following options exist when operating in 'Ordered Part Updating':

- **Subassembly Update Attribute** – If an attribute is specified for this setting then only the scanned item and subassemblies with the attribute assigned will be updated when a scan occurs.

Note: Any attribute that has a number value of -1 or 0, or a string value of '0', 'F', or 'False' case insensitive will be considered a False value. Any other attribute values will be considered True values.

- **Mark Complete** – The scanned part or unit is updated with a complete status.

- **Accept on First Scan** – If this option is enabled, a single scan of the label will update the status of the part scanned to accepted, or complete. Otherwise, two scans are required to update the status of the part; a single scan to select the unit or part, and a second scan of the same unit or part to accept, or complete.
- **Update on Duplicate Scan** – This setting determines what will happen when a unit is scanned at a Tracking station where it had already been scanned accepted.
 - **No** – When ‘No’ is selected, the unit will not be scanned accepted again.
 - **Yes** – When ‘Yes’ is selected, the unit will be scanned accepted again.
 - **Prompt** – When ‘Prompt’ is selected, a prompt will occur allowing the user to cancel or accept the scan.
- **Enable Mulling** – Enables all mulling functions.
- **Display Weight** – Weight of the scanned part will be shown next to the width, height, and thickness dimensions (shown under the display object).
- **Enable Plan Alerts** – Informs the user if a unit is scanned out of plan sequence order, or if a unit is scanned at a station that is not a work cell on that unit’s plan sequence (‘Capacity Planning’ required).

Note: ‘Plan Alerts’ differ from ‘Part / Option Alerts’.

- **All Previous Cells** – When checked, the plan alerts will look back to verify that the part has been scanned at all previous work cells in the plan sequence. When unchecked, the plan alerts will only look back at the most recent work cell to verify the part has been scanned there.
- **Enable Master and Parent Key Rejecting** – Rejects only the part in the bill of material that is scanned regardless of part type configuration. Part type configuration is used to define reject subassemblies when this setting is not enabled.
- **Reject All Sub-Assemblies** – When a part is rejected, all sub-assemblies of the part are rejected. When disabled, only sub-assemblies of the same type as the rejected part will be rejected. This setting is commonly used in conjunction with ‘Enable Master and Parent Key Rejecting’.
- **Enable Reject Only** – When rejecting, makes the ‘Reject Only’ option available to be selected from the ‘Reject Reprocessing’ selections.
- **Logon required** – Requires the user to log in when starting Tracking.
- **Logon required - Rejecting** – Requires the user to log in when rejecting units.
- **View Expression** – Scripts can be written to alter the objects images in the Tracking screen. The following actions can be performed using this script:
 - Specify the ‘DisplayBase’ – Tells the machine what edge of the shape should be shown as the bottom
 - Specify the ‘DisplayView’ – The inside/outside view. This can also be set to Default to use whatever the default view would be. (Useful for vertical line scanners)
 - Sort - Shows lites in descending sequence in work route mode when this setting is set to 1.
- **Comments** – Comments entered in ‘Order Entry’ can be configured to appear in Tracking.
 - **Item** – Item comments entered in ‘Order Entry’ will appear in Tracking when this option is checked.
 - **Order** – Order comments entered in ‘Order Entry’ will appear in Tracking when this option is checked.
 - **Shipping** – Shipping comments entered in ‘Order Entry’ will appear in Tracking when this option is checked.
- **Comment Categories** – Comments in ‘Order Entry’ can be assigned to System Text categories. Selecting the categories in the Tracking Settings menu displays all of the comments from ‘Order Entry’ that are assigned to the selected category.
- **Arguments**
 - **Tracking Logs** – /L:5 – Adds all scans within the tracking station to a tracking log
 - **Forced Updates** – /u – Will default prompt to Yes to make sure updates are enforced when scanning a unit more than once.
 - **Automatically Empty Container** – /e – Will default the empty container prompt to Yes when scanning into a shipping container that still contains another customer’s items
 - **Automatically Return Container** – /r – Will default the return container prompt to Yes when scanning into a shipping container that still shows as shipped

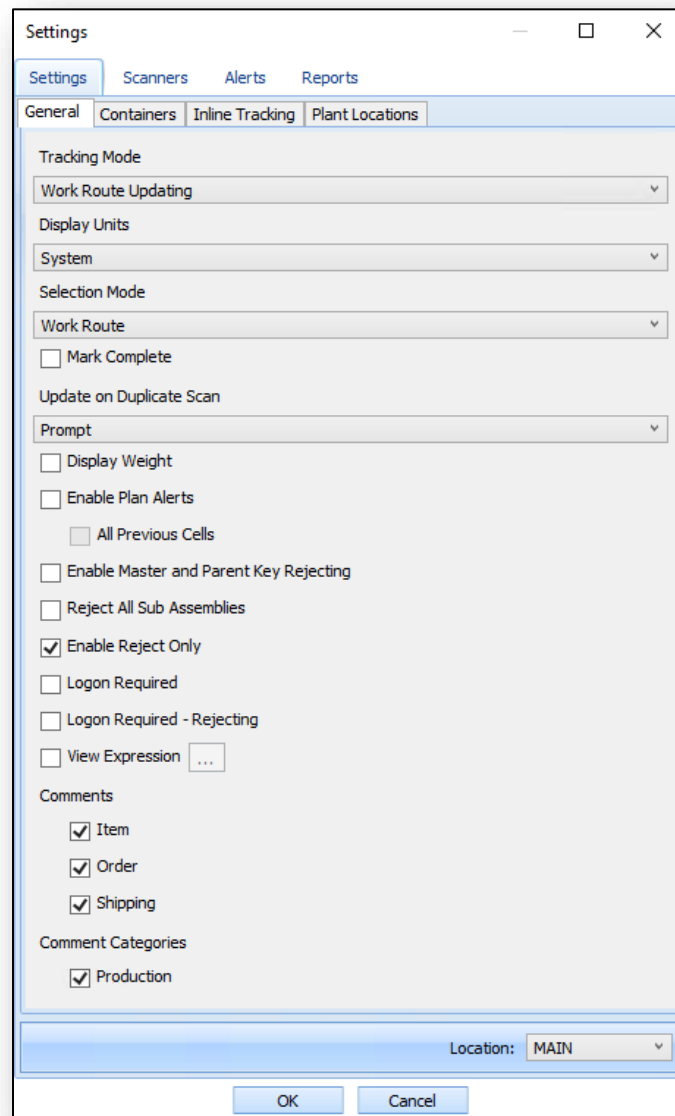
- **Quiet Mode** – /q – Will automatically use defaults for each prompt and not show any pop-ups.

Note: When using quiet mode, users can scan the container ID before scanning SUMP's to indicate that the units will be put into the container.

- **Preamble Character** – Configurable prefix for handheld scanners. Defaulted to the standard STX (ASCII 2).
- **Post-amble Character** – Configurable suffix for handheld scanners. Defaulted to the standard STX (ASCII 2).

Work Route Updating

'Work Route Updating' mode allows users to scan a list of units from a work route into a queue, and then produce individual units from that queue. Users can choose either 'Work Route' or 'Rack' modes then cycle through the units in that work route and accept or reject them.



In addition to the 'Tracking Mode' and 'Display Units' dropdowns, in 'Work Route Updating' mode, the user can toggle between 'Work Route' or 'Rack' mode using the 'Selection Mode' drop-down:

- **Selection Mode** – 'Work Route Updating' can be run in two different modes.
 - **Work Route Mode** – Track and scan units by work route.

- **Rack Mode** – Track and scan units by rack.

Note: Rack mode is often used for laminate production lines.

The remaining options are available to the user operating in 'Work Route Updating' mode:

- **Mark Complete** – The scanned part or unit is updated with a complete status.
- **Update on Duplicate Scan** – This setting determines what will happen when a unit is scanned at a Tracking station where it had already been scanned accepted.
 - **No** – When 'No' is selected, the unit will not be scanned accepted again.
 - **Yes** – When 'Yes' is selected, the unit will be scanned accepted again.
 - **Prompt** – When 'Prompt' is selected, a prompt will occur allowing the user to cancel or accept the scan.
- **Display Weight** – Weight of the scanned part will be shown next to the width, height, and thickness dimensions (shown under the display object).
- **Enable Plan Alerts** – Informs the user if a unit is scanned out of plan sequence order, or if a unit is scanned at a station that is not a work cell on that unit's plan sequence ('Capacity Planning' required).

Note: 'Plan Alerts' differ from 'Part / Option Alerts'.

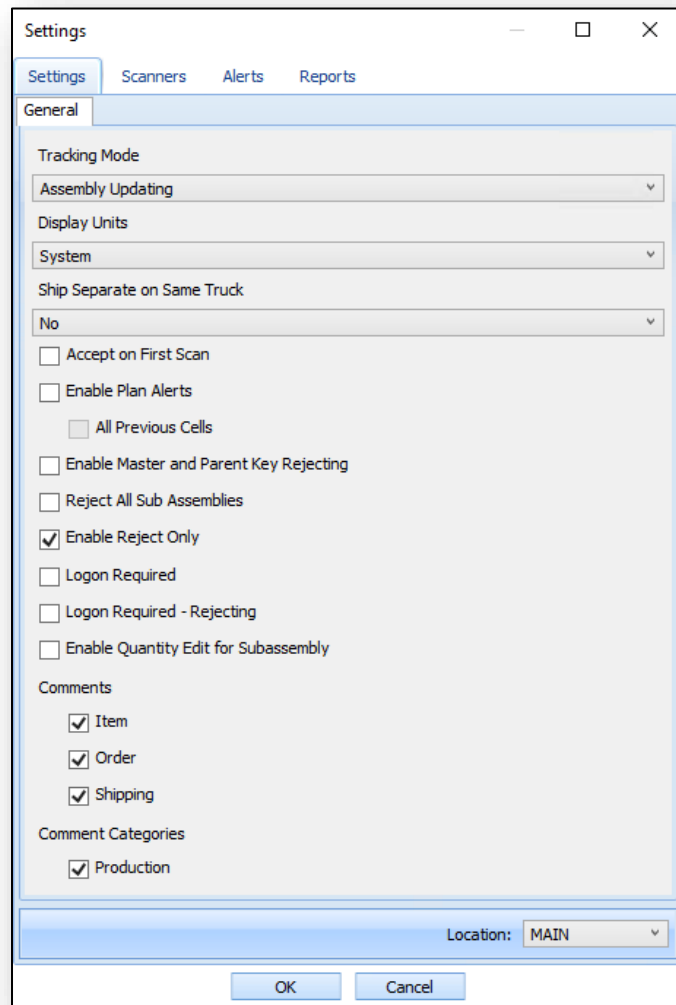
- **All Previous Cells** – When checked, the plan alerts will look back to verify that the part has been scanned at all previous work cells in the plan sequence. When unchecked, the plan alerts will only look back at the most recent work cell to verify the part has been scanned there.
- **Enable Master and Parent Key Rejecting** – Rejects only the part in the bill of material that is scanned regardless of part type configuration. Part type configuration is used to define reject subassemblies when this setting is not enabled.
- **Reject All Sub-Assemblies** – When a part is rejected, all sub-assemblies of the part are rejected. When disabled, only sub-assemblies of the same type as the rejected part will be rejected. This setting is commonly used in conjunction with 'Enable Master and Parent Key Rejecting'.
- **Enable Reject Only** – When rejecting, makes the 'Reject Only' option available to be selected from the 'Reject Reprocessing' selections.
- **Logon required** – Requires the user to log in when starting Tracking.
- **Logon required - Rejecting** – Requires the user to log in when rejecting units.
- **View Expression** – Scripts can be written to alter the objects images in the Tracking screen. The following actions can be performed using this script:
 - Specify the 'DisplayBase' – Tells the machine what edge of the shape should be shown as the bottom
 - Specify the 'DisplayView' – The inside/outside view. This can also be set to Default to use whatever the default view would be. (Useful for vertical line scanners)
 - Sort - Shows lites in descending sequence in work route mode when this setting is set to 1.
- **Comments** – Comments entered in 'Order Entry' can be configured to appear in Tracking.
 - **Item** – Item comments entered in 'Order Entry' will appear in Tracking when this option is checked.
 - **Order** – Order comments entered in 'Order Entry' will appear in Tracking when this option is checked.
 - **Shipping** – Shipping comments entered in 'Order Entry' will appear in Tracking when this option is checked.
- **Comment Categories** – Comments in 'Order Entry' can be assigned to System Text categories. Selecting the categories in the Tracking Settings menu displays all of the comments from 'Order Entry' that are assigned to the selected category.
- **Preamble Character** – Configurable prefix for handheld scanners. Defaulted to the standard STX (ASCII 2).
- **Postamble Character** – Configurable suffix for handheld scanners. Defaulted to the standard STX (ASCII 2).

Assembly Updating

'Assembly Updating' mode allows the user to scan a 'Parent' subassembly that consists of multiple 'Child' parts. The user will then be required to scan all the correct 'Child' parts before the 'Parent' can be considered complete. 'Assembly Updating'

mode is often used when packing multiple components from one unit into a box. This mode ensures that the correct parts were packaged and that no parts were forgotten.

For example, with 'Assembly Updating', the user can scan a label for sub-assembly A, which displays all the components of A (including B, C, D, and E). The user can then scan labels representing B, C, D, and E to complete A. The user will be warned if component Z is scanned in error since component Z does not belong in the assembly. Additionally, the user will be warned if component E is not scanned since component E *does* belong in the subassembly and is missing because it was not scanned.



The user has the following options when operating in 'Assembly Updating' mode:

- **Ship Separate on Same Truck** – Gives users the ability to differentiate between products that will ship loose and products that won't ship at all due to a stock out.

Note: When selecting using Yes or selecting Yes in the prompt, the main line item must already be on a route/truck.

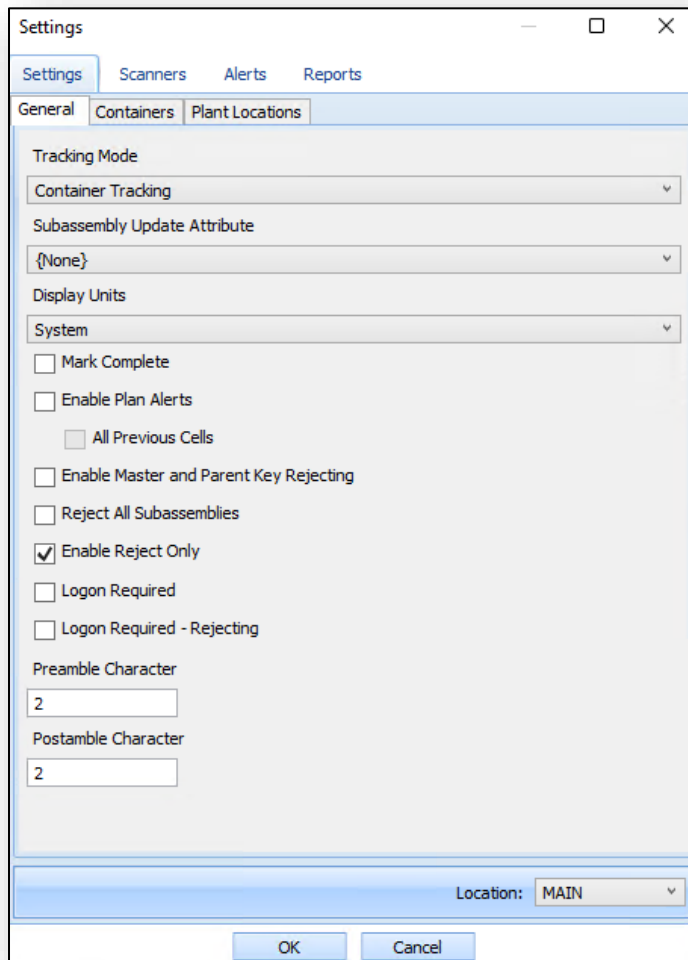
- **Accept on First Scan** – If this option is enabled, a single scan of the label will update the status of the part scanned to accepted, or complete. Otherwise, two scans are required to update the status of the part; a single scan to select the unit or part, and a second scan of the same unit or part to accept, or complete.
- **Enable Plan Alerts** – Informs the user if a unit is scanned out of plan sequence order, or if a unit is scanned at a station that is not a work cell on that unit's plan sequence ('Capacity Planning' required).

Note: 'Plan Alerts' differ from 'Part / Option Alerts'.

- **All Previous Cells** – When checked, the plan alerts will look back to verify that the part has been scanned at all previous work cells in the plan sequence. When unchecked, the plan alerts will only look back at the most recent work cell to verify the part has been scanned there.
- **Enable Master and Parent Key Rejecting** – Rejects only the part in the bill of material that is scanned regardless of part type configuration. Part type configuration is used to define reject subassemblies when this setting is not enabled.
- **Reject All Sub-Assemblies** – When a part is rejected, all sub-assemblies of the part are rejected. When disabled, only sub-assemblies of the same type as the rejected part will be rejected. This setting is commonly used in conjunction with 'Enable Master and Parent Key Rejecting'.
- **Enable Reject Only** – When rejecting, makes the 'Reject Only' option available to be selected from the 'Reject Reprocessing' selections.
- **Logon required** – Requires the user to log in when starting Tracking.
- **Logon required - Rejecting** – Requires the user to log in when rejecting units.
- **Enabled Quantity Edit for Subassembly** – Allows for users to manually update the quantity for a part that has an alternate part.
- **Comments** – Comments entered in 'Order Entry' can be configured to appear in Tracking.
 - **Item** – Item comments entered in 'Order Entry' will appear in Tracking when this option is checked.
 - **Order** – Order comments entered in 'Order Entry' will appear in Tracking when this option is checked.
 - **Shipping** – Shipping comments entered in 'Order Entry' will appear in Tracking when this option is checked.
- **Comment Categories** – Comments in 'Order Entry' can be assigned to System Text categories. Selecting the categories in the Tracking Settings menu displays all of the comments from 'Order Entry' that are assigned to the selected category.
- **Preamble Character** – Configurable prefix for handheld scanners. Defaulted to the standard STX (ASCII 2).
- **Postamble Character** – Configurable suffix for handheld scanners. Defaulted to the standard STX (ASCII 2).

Container Tracking

The 'Container Tracking' mode allows users to manage containers and the units within containers, and also control how those containers move throughout production. 'Container Tracking' can be used to move units into and out of containers, as well as the containers themselves.



Once the user has chosen 'Tracking Mode' and 'Display Units', the remaining options are available when operating in 'Container Tracking' mode:

- **Subassembly Update Attribute** – If an attribute is specified for this setting then only the scanned item and subassemblies with the attribute assigned will be updated when a scan occurs.

Note: Any attribute that has a number value of -1 or 0, or a string value of '0', 'F', or 'False' case insensitive will be considered a False value. Any other attribute values will be considered True values.

- **Mark Complete** – The scanned part or unit is updated with a complete status.
- **Enable Plan Alerts** – Informs the user if a unit is scanned out of plan sequence order, or if a unit is scanned at a station that is not a work cell on that unit's plan sequence ('Capacity Planning' required).

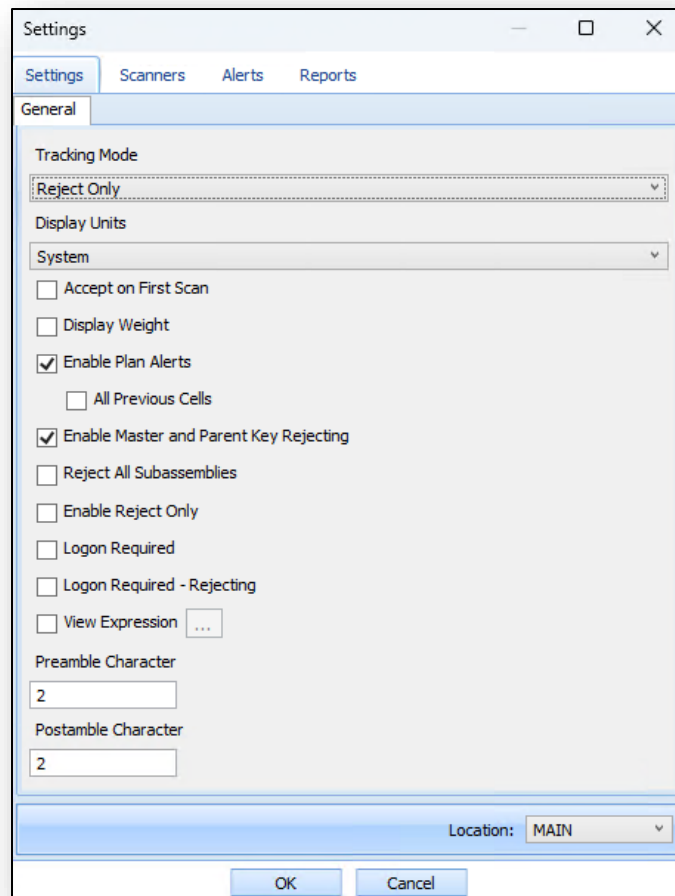
Note: 'Plan Alerts' differ from 'Part / Option Alerts'.

- **All Previous Cells** – When checked, the plan alerts will look back to verify that the part has been scanned at all previous work cells in the plan sequence. When unchecked, the plan alerts will only look back at the most recent work cell to verify the part has been scanned there.
- **Enable Master and Parent Key Rejecting** – Rejects only the part in the bill of material that is scanned regardless of part type configuration. Part type configuration is used to define reject subassemblies when this setting is not enabled.

- **Reject All Sub-Assemblies** – When a part is rejected, all sub-assemblies of the part are rejected. When disabled, only sub-assemblies of the same type as the rejected part will be rejected. This setting is commonly used in conjunction with ‘Enable Master and Parent Key Rejecting’.
- **Enable Reject Only** – When rejecting, makes the ‘Reject Only’ option available to be selected from the ‘Reject Reprocessing’ selections.
- **Logon required** – Requires the user to log in when starting Tracking.
- **Logon required - Rejecting** – Requires the user to log in when rejecting units.
- **Preamble Character** – Configurable prefix for handheld scanners. Defaulted to the standard STX (ASCII 2).
- **Postamble Character** – Configurable suffix for handheld scanners. Defaulted to the standard STX (ASCII 2).

Reject Only

The ‘Reject Only’ mode locks the station in ‘Reject’ mode.



Note: Shipped or mulled units cannot be rejected.

After the user has chosen the options in the ‘Tracking Mode’ and ‘Display Units’ drop-downs, choose the remaining options when operating in ‘Reject Only’ mode:

- **Accept on First Scan** – If this option is enabled, a single scan of the label will update the status of the part scanned to accepted, or complete. Otherwise, two scans are required to update the status of the part; a single scan to select the unit or part, and a second scan of the same unit or part to accept, or complete.
- **Display Weight** – Weight of the scanned part will be shown next to the width, height, and thickness dimensions (shown under the display object).

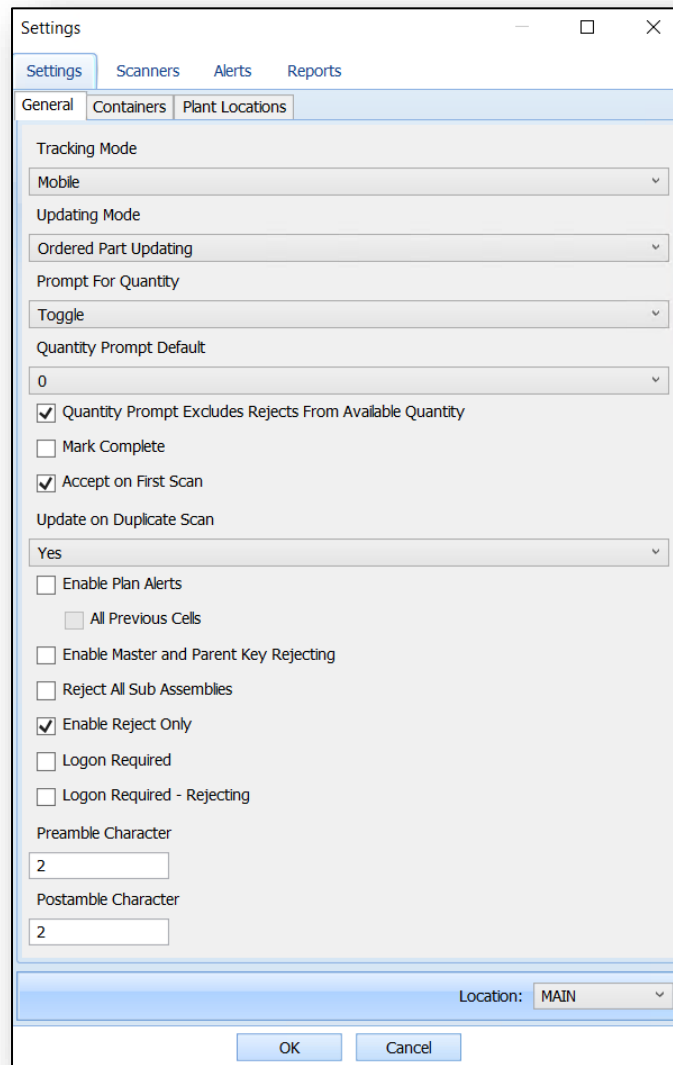
- **Enable Plan Alerts** – Informs the user if a unit is scanned out of plan sequence order, or if a unit is scanned at a station that is not a work cell on that unit's plan sequence ('Capacity Planning' required).

Note: 'Plan Alerts' differ from 'Part / Option Alerts'.

- **All Previous Cells** – When checked, the plan alerts will look back to verify that the part has been scanned at all previous work cells in the plan sequence. When unchecked, the plan alerts will only look back at the most recent work cell to verify the part has been scanned there.
- **Reject All Sub-Assemblies** – When a part is rejected, all sub-assemblies of the part are rejected. When disabled, only sub-assemblies of the same type as the rejected part will be rejected. This setting is commonly used in conjunction with 'Enable Master and Parent Key Rejecting'.
- **Enable Reject Only** – When rejecting, makes the 'Reject Only' option available to be selected from the 'Reject Reprocessing' selections.
- **Logon required** – Requires the user to log in when starting Tracking.
- **Logon required - Rejecting** – Requires the user to log in when rejecting units.
- **View Expression** – Scripts can be written to alter the objects images in the Tracking screen. The following actions can be performed using this script:
 - **Specify the 'DisplayBase'** – Tells the machine what edge of the shape should be shown as the bottom
 - **Specify the 'DisplayView'** – The inside/outside view. This can also be set to Default to use whatever the default view would be. (Useful for vertical line scanners)
 - **Sort** - Shows lites in descending sequence in work route mode when this setting is set to 1.
- **Preamble Character** – Configurable prefix for handheld scanners. Defaulted to the standard STX (ASCII 2).
- **Postamble Character** – Configurable suffix for handheld scanners. Defaulted to the standard STX (ASCII 2).
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Mobile

The 'Mobile Tracking' mode is designed for handheld barcode scanners with a built-in touch screen. It allows users to perform actions such as accepting units, rejecting units, containerizing units, returning containers, and viewing the status of units without having to be tied to a physical computer on the shop floor.



The following settings are available in 'Mobile' Tracking Mode:

- **Updating Mode** – Select the updating mode in which mobile tracking will be scanning units; either 'Part Updating' or 'Ordered Part Updating'.
- **Prompt for Quantity** – Use a single scan to accept parts for multiple units of the same order-item. The user is prompted to enter the quantity they would like to accept or complete. The system then applies the same scan code to multiple parts at the same time.
 - **Disable** – Disables functionality.
 - **Toggle** – Switch between enabling and disabling prompt for quantity by selecting the 'Q' key on the user's keyboard, or by selecting the 'Quantity Mode (Q)' icon.
 - **Enable** – Enables functionality.

Note: If the user enables the 'Prompt for Quantity' option, the user will see 'QUANTITY MODE' in green at the bottom center of the 'Run' screen.

- **Quantity Prompt Default** – When scanning in 'Quantity Mode', this value will be the default value in the 'Quantity' field. This drop-down allows the user to set the default value as '0', '1', or 'Remaining Qty'. When 'Remaining Qty' is selected, the value will be taken from the Remaining Qty field when the unit is scanned.

- **Quantity Prompt Excludes Rejects From Available Quantity** – When ‘Prompt for Quantity’ is set to Enable or Toggle, this option can be checked. When checked, all currently rejected units will be unavailable to be scanned as accepted when performing a quantity scan.
- **Allow Ordered Part Scan** – (Part Updating Mode only) When scanning in ‘Part Updating’ mode, checking this will allow the user to scan both the sub-assemblies and the ordered part. If an ordered part is scanned without enabling ‘Allow Ordered Part Scan’, a message stating ‘Invalid Barcode’ will appear.
- **Mark Complete** – The scanned part or unit is updated with a complete status (‘Ordered Part Updating’ mode only).
- **Accept on First Scan** – If this option is enabled, a single scan of the label will update the status of the part scanned to accepted, or complete. Otherwise, two scans are required to update the status of the part; a single scan to select the unit or part, and a second scan of the same unit or part to accept, or complete.
- **Update on Duplicate Scan** – This setting determines what will happen when a unit is scanned at a Tracking station where it had already been scanned accepted.
 - **No** – When ‘No’ is selected, the unit will not be scanned accepted again.
 - **Yes** – When ‘Yes’ is selected, the unit will be scanned accepted again.
 - **Prompt** – When ‘Prompt’ is selected, a prompt will occur allowing the user to cancel or accept the scan.
- **Enable Plan Alerts** – Informs the user if a unit is scanned out of plan sequence order, or if a unit is scanned at a station that is not a work cell on that unit’s plan sequence (‘Capacity Planning’ required).

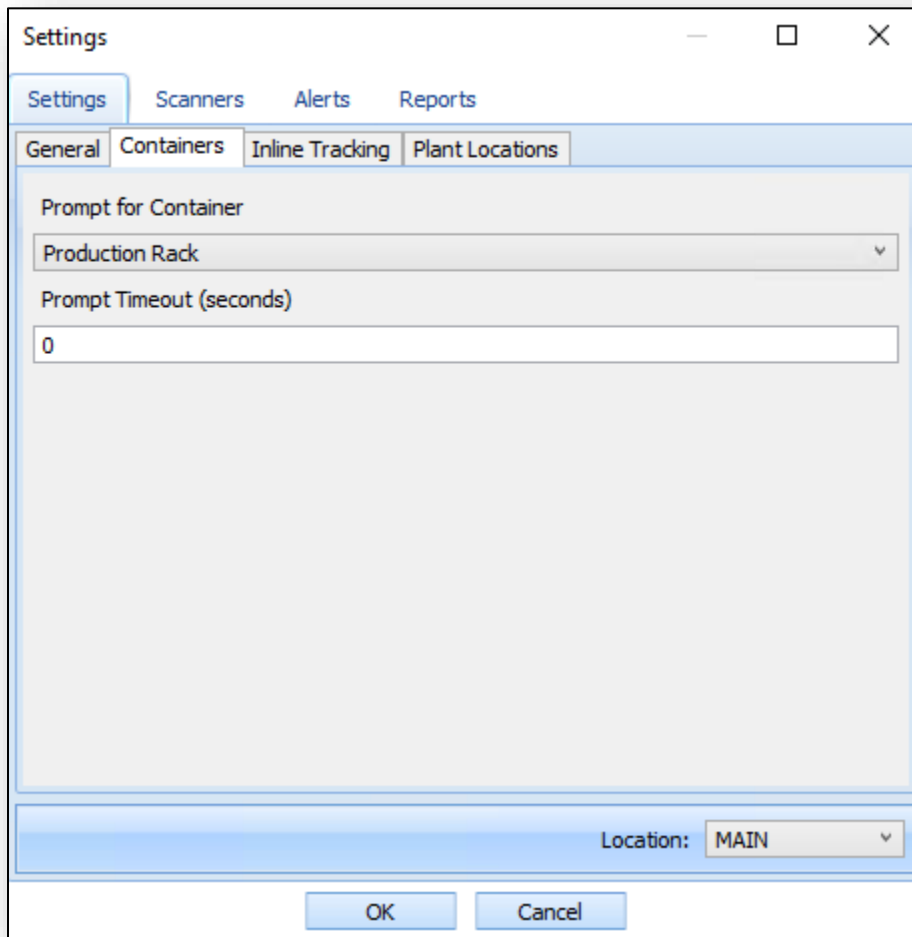
Note: ‘Plan Alerts’ differ from ‘Part / Option Alerts’.

- **All Previous Cells** – When checked, the plan alerts will look back to verify that the part has been scanned at all previous work cells in the plan sequence. When unchecked, the plan alerts will only look back at the most recent work cell to verify the part has been scanned there.
- **Enable Master and Parent Key Rejecting** – Rejects only the part in the bill of material that is scanned regardless of part type configuration. Part type configuration is used to define reject subassemblies when this setting is not enabled.
- **Reject All Sub-Assemblies** – When a part is rejected, all sub-assemblies of the part are rejected. When disabled, only sub-assemblies of the same type as the rejected part will be rejected. This setting is commonly used in conjunction with ‘Enable Master and Parent Key Rejecting’.
- **Enable Reject Only** – When rejecting, makes the ‘Reject Only’ option available to be selected from the ‘Reject Reprocessing’ selections.
- **Logon required** – Requires the user to log in when starting FeneVision Tracking.
- **Logon required - Rejecting** – Requires the user to log in when rejecting units.
- **Preamble Character** – Configurable prefix for handheld scanners. Defaulted to the standard STX (ASCII 2).
- **Postamble Character** – Configurable suffix for handheld scanners. Defaulted to the standard STX (ASCII 2).

Containers Tab

The ‘Containers’ tab allows users to specify container types.

The following fields exist in the ‘Containers’ tab when all but the following tracking modes are selected: ‘Assembly Updating’ and ‘Reject Only’.

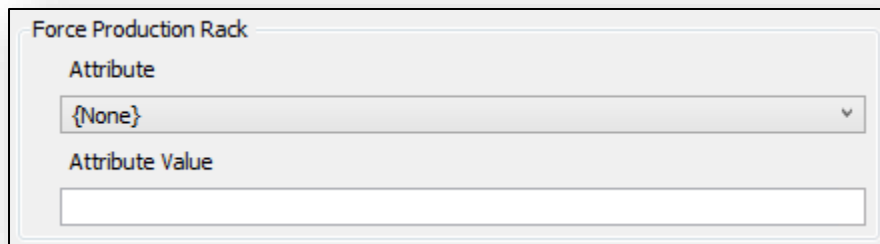


- **Prompt for Container** – After scanning an item, the user is prompted with a list of containers used to identify where the accepted item will be placed. Containers of various designs can be designated for production only, for shipping only, or can serve as both production and shipping. These configurations are typically arranged in FeneVision Core in the ‘Container Setup’ menu. When scanning units assigned to a pre-assigned container, an additional option will be available in the drop-down {Blank}. Leaving the drop-down blank will leave the unit associated with the pre-assigned container and will not assign the unit a Container ID. This occurs when the pre-assigned container definition in use has no Container IDs created for it in Container Setup.

Note: When scanning a unit with a pre-assigned container, the user will be prompted for the container. If the next unit scanned is also on the same pre-assigned container the container prompt will have the previous container as the default selection. This will continue until either the container (rack) runs out of slots or the unit scanned has been assigned a different container than the previous unit. At that time, the user will be prompted again for the container. This scenario occurs with both ‘Part Updating Mode’ and ‘Ordered Part Updating Mode’ only when shipping racks are assigned.

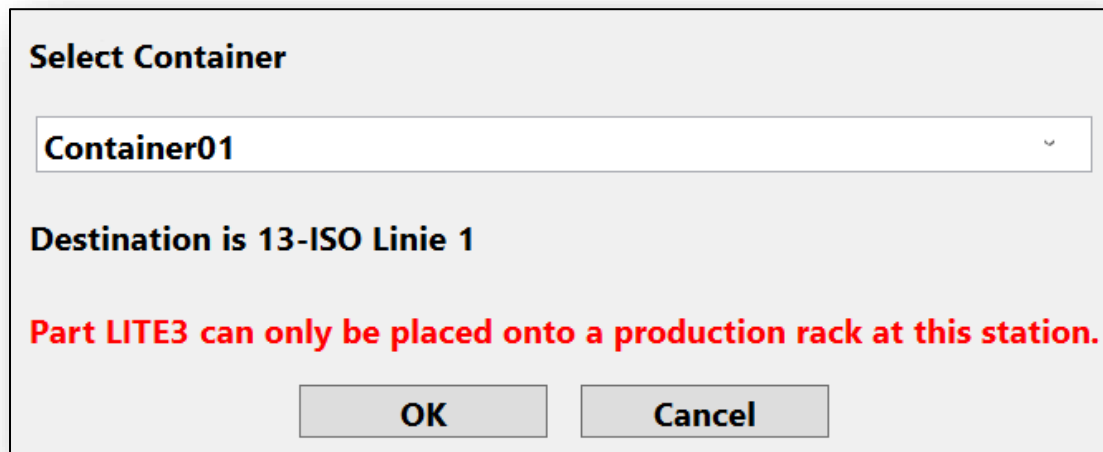
- **{None}** – do not prompt for a container.
- **Production Rack** – With this option selected, the list of containers in the prompt will only display ‘Production’ racks.
- **Shipping Rack** – With this option selected, the list of containers in the prompt will only display ‘Shipping’ racks.
- **Production / Shipping Rack** – With this option selected, the list of containers in the prompt will display both ‘Production’ and ‘Shipping’ racks.

When Production / Shipping is selected additional fields appear in Part Updating, Work Route Updating, and Container Tracking modes.




The dialog box is titled "Force Production Rack". It contains two main sections. The first section is labeled "Attribute" and features a dropdown menu with the text "{None}" and a small downward arrow on the right. The second section is labeled "Attribute Value" and features a single-line text input field.

This section allows users to specify an attribute and an attribute value that will force items to be scanned onto production containers. When an item is scanned that has the specified attribute assigned that is returning the specified attribute value the prompt below occurs:



The dialog box is titled "Select Container". It has a dropdown menu showing "Container01". Below the dropdown, the text "Destination is 13-ISO Linie 1" is displayed. A red error message reads: "Part LITE3 can only be placed onto a production rack at this station." At the bottom, there are two buttons: "OK" and "Cancel".

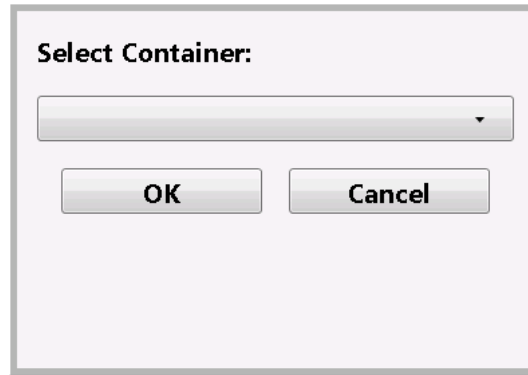
If a shipping container is selected the prompt will refresh with a message explaining that a production rack must be selected.



The dialog box is titled "Select Container". It has a dropdown menu showing "Container01". Below the dropdown, the text "Destination is 13-ISO Linie 1" is displayed. A red error message reads: "Shipping Container 'Container01' Invalid. Part LITE3 can only be placed onto a production rack at this station."

Note: See 'Containers' setup in the FeneVision Core user manual for information on creating new containers.

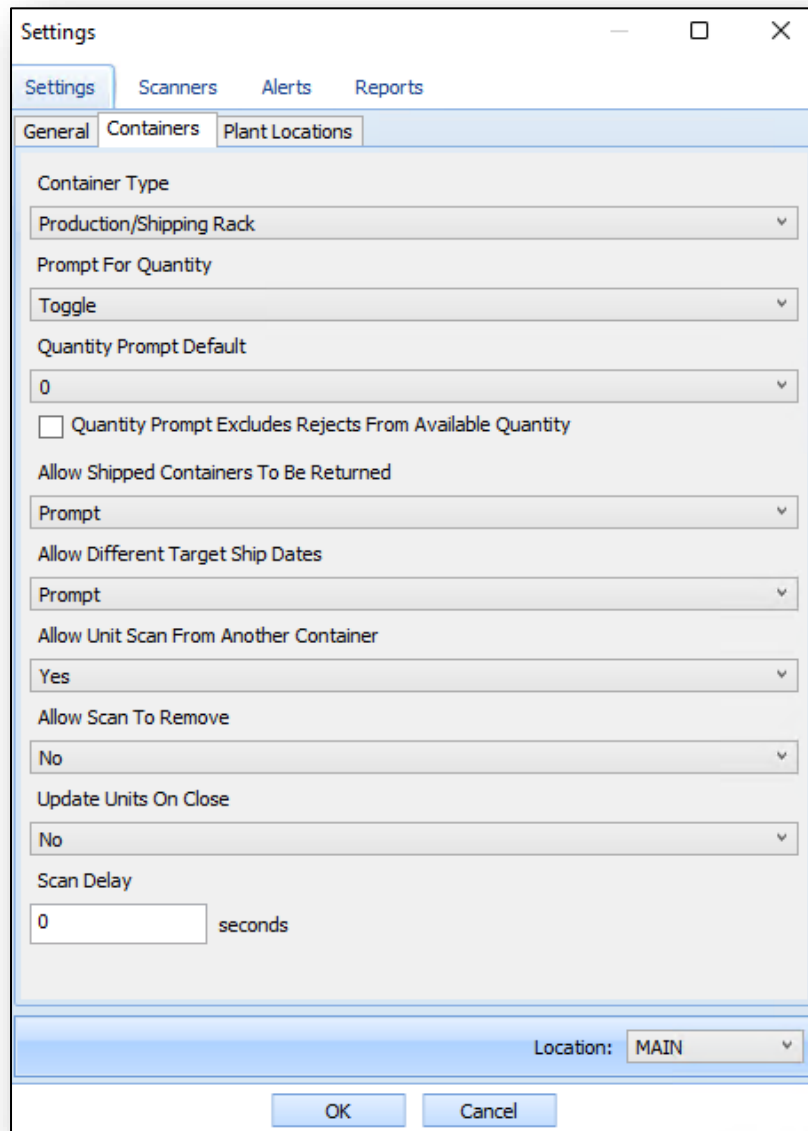
The image below represents a container prompt that appears after scanning a part.



Note: After a container is selected for an order item, every other item scanned from that order will default to that container. This helps speed the process of container selection; as well as, help group order items together.

- **Prompt Timeout (seconds)** – How long the container prompt will stay open before it is closed (when this occurs the default container, or new container chosen from the drop-down, will be selected). This allows for automatic selection of the fixed container after the specified interval.

The following fields exist in the 'Containers' tab when the user selects 'Container Tracking' as the Tracking mode.



- **Container Type** – After scanning an item, the user is prompted with a list of containers used to identify where the accepted item will be placed. Containers of various designs can be designated for production only, for shipping only, or can serve as both production and shipping. These configurations are typically arranged in Core in the ‘Container Setup’ menu.

Note: When scanning a unit with a pre-assigned container, the user will be prompted for the container. If the next unit scanned is also on the same pre-assigned container the container prompt will have the previous container as the default selection. This will continue until either the container (rack) runs out of slots or the unit scanned has been assigned a different container than the previous unit. At that time, the user will be prompted again for the container. This scenario occurs with both ‘Part Updating Mode’ and ‘Ordered Part Updating Mode’ only when shipping racks are assigned.

- **Production Rack** – With this option selected, the list of containers in the prompt will only display ‘Production’ racks.
- **Shipping Rack** – With this option selected, the list of containers in the prompt will only display ‘Shipping’ racks.

- **Production / Shipping Rack** – With this option selected, the list of containers in the prompt will display both ‘Production’ and ‘Shipping’ racks.

Note: See ‘Containers’ setup in the FeneVision Core user manual for information on creating new containers.

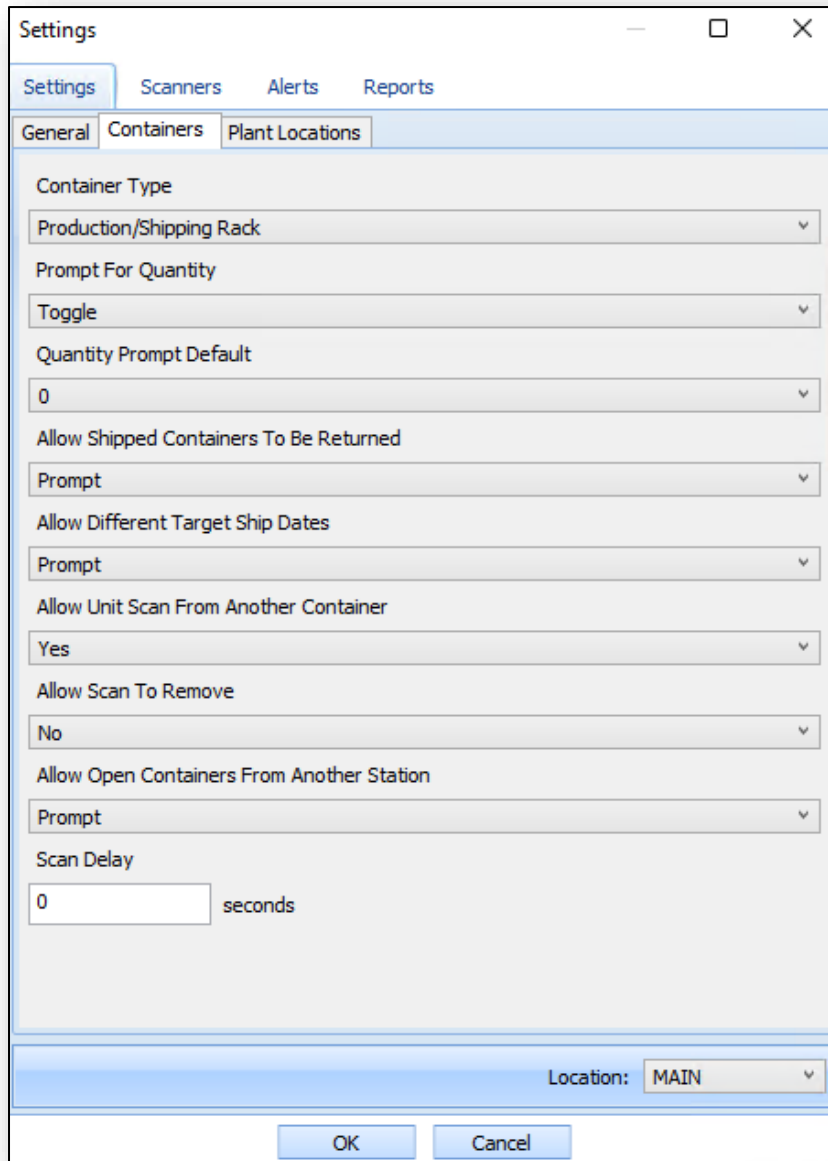
- **Prompt for Quantity** – Use a single scan to accept parts for multiple containers. The user is prompted to enter the quantity they would like to accept or complete. The system then applies the same scan code to multiple parts at the same time.
 - **Disable** – Disables functionality.
 - **Toggle** – Switch between enabling and disabling prompt for quantity by selecting the ‘Q’ key on the user’s keyboard, or by selecting the ‘Quantity Mode (Q)’ icon.
 - **Enable** – Enables functionality.

Note: If the user enables the ‘Prompt for Quantity’ option, the user will see ‘Quantity Mode’ in green at the bottom center of the ‘Run’ screen.

- **Quantity Prompt Default** – When scanning in ‘Quantity Mode’, this value will be the default value in the ‘Quantity’ field. This drop-down allows the user to set the default value as ‘0’, ‘1’, or ‘Remaining Qty’. When ‘Remaining Qty’ is selected, the value will be taken from the Remaining Qty field when the container is scanned.
- **Quantity Prompt Excludes Rejects From Available Quantity** – When ‘Prompt for Quantity’ is set to Enable or Toggle, this option can be checked. When checked, all currently rejected units will be unavailable to be scanned as accepted when performing a quantity scan.
- **Prompt For Container Location** – If checked, when a container is scanned, the user will be prompted to specify the containers production location. (‘Container Tracking’ mode only)
- **Allow Shipped Containers To Be Returned** – Drop-down to indicate whether the user can scan a container that is shipped and not yet returned.
 - **No**
 - **Yes**
 - **Prompt** – Issues a prompt asking whether the user wants to scan a shipped container not yet returned.
- **Allow Different Target Ship Dates** – Drop-down to indicate whether the user can scan units with different ‘Target Ship Dates’ into a single container.
 - **No**
 - **Yes**
 - **Prompt** – Issues a prompt asking if the user wants to scan units with different TSDs into a single container.
- **Allow Unit Scan From Another Container** – Drop-down asking whether the user can scan a unit onto a container that is already assigned to a different container.
 - **No**
 - **Yes**
 - **Prompt** – Issues a prompt asking if the user wants to scan a unit into a container that has already been scanned into a different container.
- **Allow Scan To Remove** – Determines if the user can scan a unit already on the current container to remove it.
 - **No**
 - **Yes**
 - **Prompt** – Issues a prompt asking if the user wants to scan a unit already on the current container to remove it.
- **Update Units On Close** – Determines if items assigned to a container are accepted when the container is closed at the station.
 - **No**
 - **Yes**
 - **Prompt** – Issues a prompt asking if the user wants to accept the units assigned to the container when closing the container.

- **Scan Delay** – Double scans will be ignored for this number of specified seconds. This prevents accidental addition and removal of the same unit.

The following fields exist in the ‘Containers’ tab when the user selects ‘Mobile’ as the Tracking mode.



- **Container Type** – After scanning an item, the user is prompted with a list of containers used to identify where the accepted item will be placed. Containers of various designs can be designated for production only, for shipping only, or can serve as both production and shipping. These configurations are typically arranged in Core in the ‘Container Setup’ menu.

Note: When scanning a unit with a pre-assigned container, the user will be prompted for the container. If the next unit scanned is also on the same pre-assigned container the container prompt will have the previous container as the default selection. This will continue until either the container (rack) runs out of slots or the unit scanned has been assigned a different container than the previous unit. At that time, the user will be prompted again for the container.

This scenario occurs with both 'Part Updating Mode' and 'Ordered Part Updating Mode' only when shipping racks are assigned.

- **Production Rack** – With this option selected, the list of containers in the prompt will only display 'Production' racks.
- **Shipping Rack** – With this option selected, the list of containers in the prompt will only display 'Shipping' racks.
- **Production / Shipping Rack** – With this option selected, the list of containers in the prompt will display both 'Production' and 'Shipping' racks.

Note: See 'Containers' setup in the FeneVision Core user manual for information on creating new containers.

- **Prompt for Quantity** – Use a single scan to accept parts for multiple containers. The user is prompted to enter the quantity they would like to accept or complete. The system then applies the same scan code to multiple parts at the same time.
 - **Disable** – Disables functionality.
 - **Toggle** – Switch between enabling and disabling prompt for quantity by selecting the 'Q' key on the user's keyboard, or by selecting the 'Quantity Mode (Q)' icon.
 - **Enable** – Enables functionality.

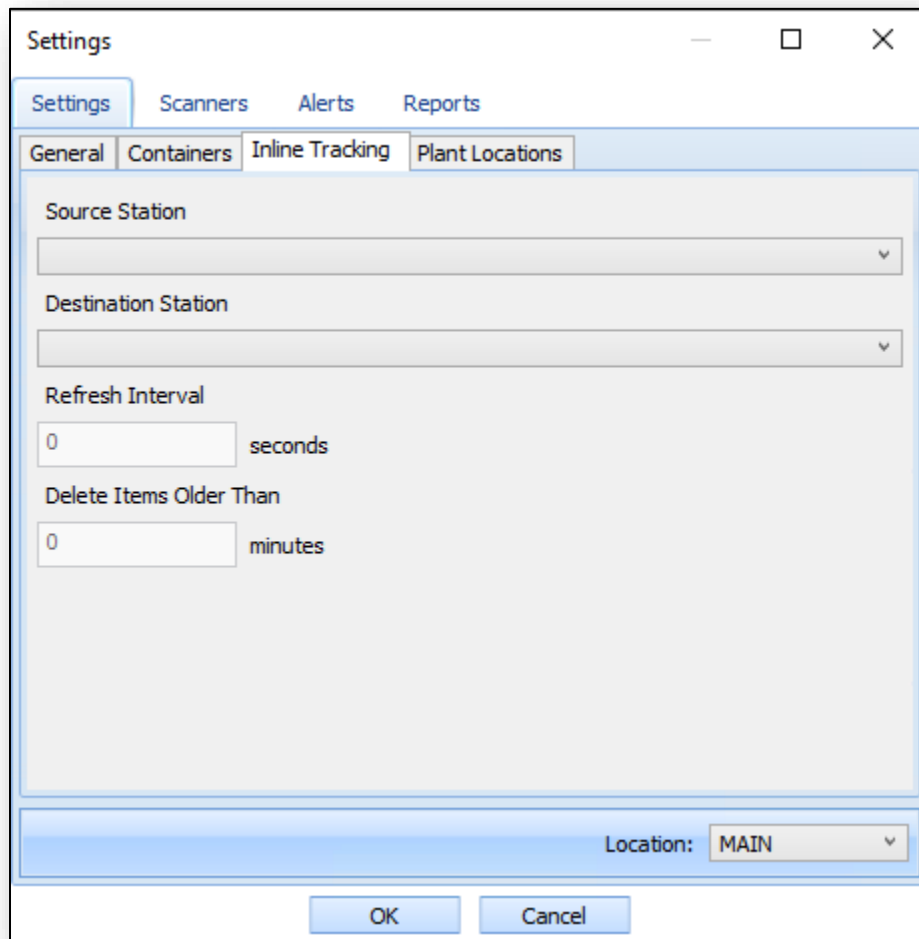
Note: If the user enables the 'Prompt for Quantity' option, the user will see 'Quantity Mode' in green at the bottom center of the 'Run' screen.

- **Quantity Prompt Default** – When scanning in 'Quantity Mode', this value will be the default value in the 'Quantity' field. This drop-down allows the user to set the default value as '0', '1', or 'Remaining Qty'. When 'Remaining Qty' is selected, the value will be taken from the Remaining Qty field when the container is scanned.
- **Prompt For Container Location** – If checked, when a container is scanned, the user will be prompted to specify the containers production location. ('Container Tracking' mode only)
- **Allow Shipped Containers To Be Returned** – Drop-down to indicate whether the user can scan a container that is shipped and not yet returned.
 - **No**
 - **Yes**
 - **Prompt** – Issues a prompt asking whether the user wants to scan a shipped container not yet returned.
- **Allow Different Target Ship Dates** – Drop-down to indicate whether the user can scan units with different 'Target Ship Dates' into a single container.
 - **No**
 - **Yes**
 - **Prompt** – Issues a prompt asking if the user wants to scan units with different TSDs into a single container.
- **Allow Unit Scan From Another Container** – Drop-down asking whether the user can scan a unit onto a container that is already assigned to a different container.
 - **No**
 - **Yes**
 - **Prompt** – Issues a prompt asking if the user wants to scan a unit into a container that has already been scanned into a different container.
- **Allow Scan To Remove** – Determines if the user can scan a unit already on the current container to remove it.
 - **No**
 - **Yes**
 - **Prompt** – Issues a prompt asking if the user wants to scan a unit already on the current container to remove it.
- **Allow Open Containers From Another Station** – Determines if the user can open a container that is currently in use at another station.
 - **No**

- **Yes**
- **Prompt** – Issues a prompt asking if the user wants to open the container at the new station or leave it open at its current station.
- **Scan Delay** – Double scans will be ignored for this number of specified seconds. This prevents accidental addition and removal of the same unit.

Inline Tracking

Tracking stations can be set up to work as a production line, one after another, with one feeding the next.



A Tracking station can specify a source station, a destination station, or both.

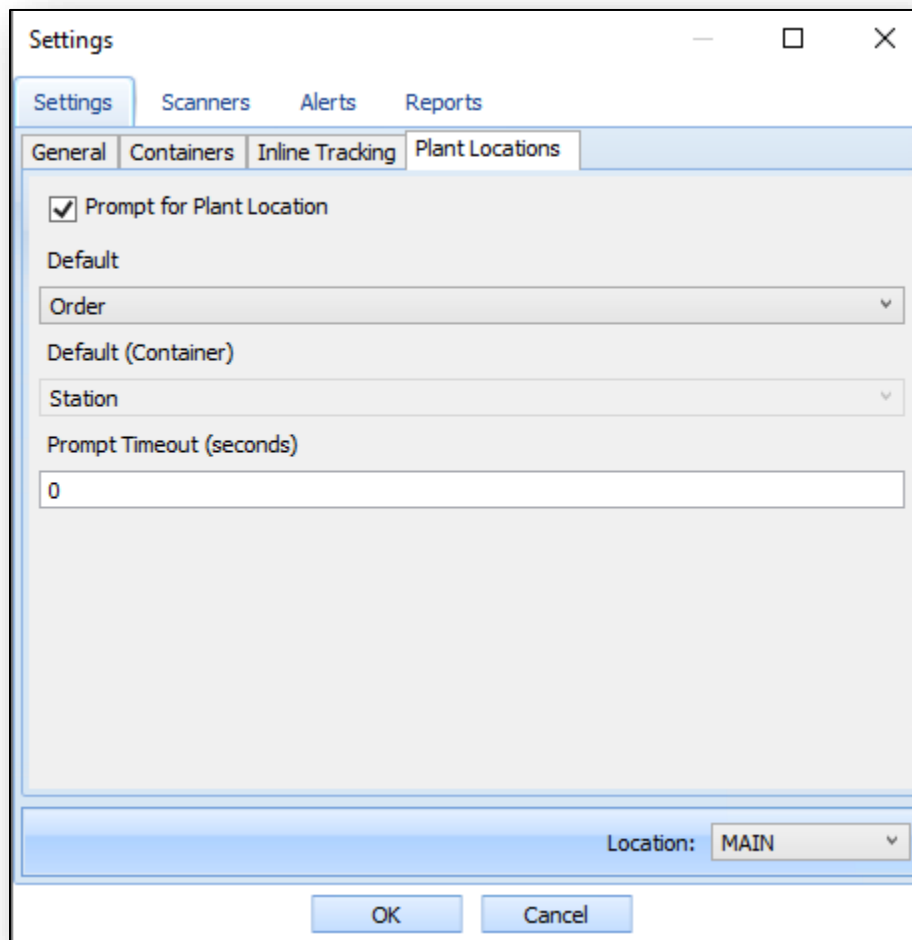
- **Source Station** – Specifies from which station the user will receive previous information about a part. Units scanned at a station with a specified 'Source Station' must have been previously scanned at the 'Source Station' for the unit to appear in the production queue. The following modes allow for a 'Source Station' to be set up:
 - **Part Updating**
 - **Ordered Part Updating**
 - **Work Route Updating in 'Rack' Mode**

Note: Inline tracking stations will only show units passed through its source station, and only those units can be handled at the station.

- **Destination Station** – Tracking station will pass along any part information that is scanned through on to the ‘Destination Station’. A ‘Destination Station’ can only be set up for the following modes:
 - **Part Updating**
 - **Ordered Part Updating**
 - **Work Route Updating in ‘Work Route’ Mode**
- **Refresh Interval** – Number of seconds the system will wait before querying the station queue for additional units. If nothing is specified or zero is specified, the tracking screen will not automatically re-query for new units. Users can re-query by re-entering the screen (‘Source Station’ required).
- **Delete Items Older Than** – Delete any units from the station queue older than the given number of minutes. If nothing is specified or zero is specified, no deletions will occur. The deletion of units starts automatically.

Plant Locations

The ‘Plant Locations’ tab allows the user to specify if the station should assign units to a plant location when the unit leaves the station.

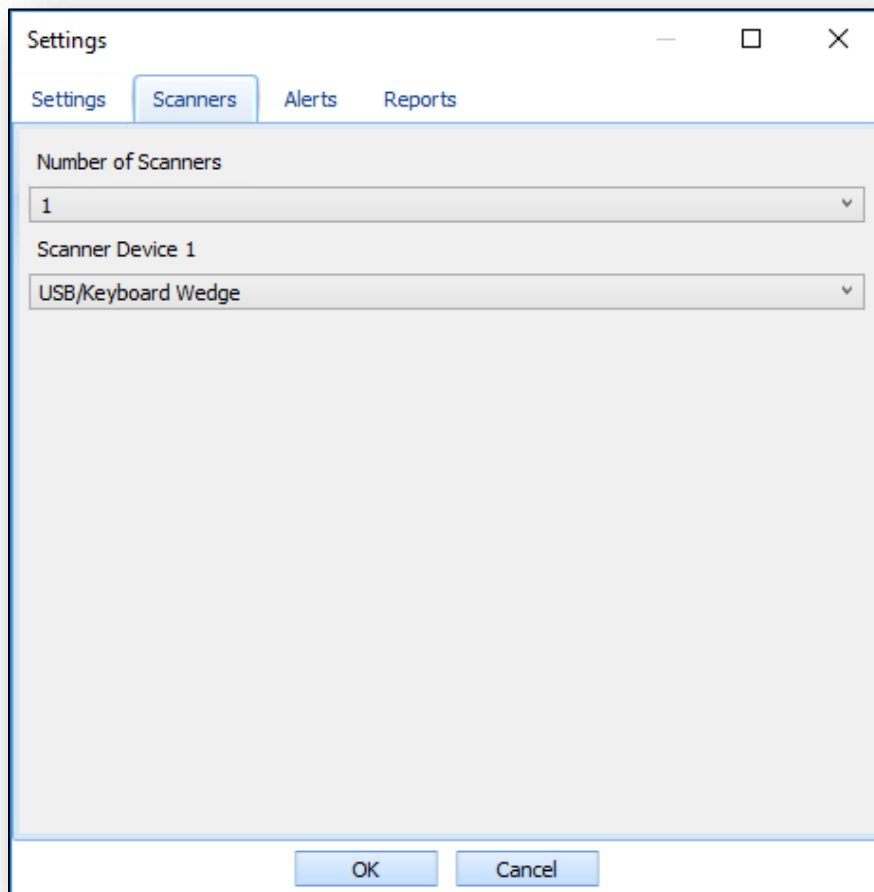


- **Prompt for Plant Location** – After scanning an item or closing a container, the user is prompted with a list of plant locations used to identify where the accepted item will be placed.
- **Default** – This allows the user to specify which plant location is selected by default for a unit.

- **Order** – If another unit from the current order was previously scanned at this station, the plant location prompt will default to assigning the current unit to the same plant location. This can help keep orders together.
- **Station** – The plant location selected by default will be the last plant location that was selected at this station.
- **Default (Container)** – This allows the user to specify which plant location is selected by default when a container is closed at this station. This is hardcoded to 'Station' and cannot be changed as containers could contain units from multiple orders.
- **Prompt Timeout (seconds)** - How long the plant location prompt will stay open before it is closed (when this occurs the default plant location, or new plant location chosen from the drop-down, will be selected). This allows for automatic selection of the fixed plant location after the specified interval.

Scanners Tab

The 'Scanner Setup' screen can be found by selecting menu item 'Setup' >> 'Settings' >> 'Scanners'. This screen is used to identify to which communication port the barcode scanner is connected.



Tracking can be used with a single USB / Keyboard Wedge barcode scanner or a single RS-232 barcode scanner. The USB / Keyboard Wedge must be configured with a preamble character of ASCII (2) AND a post-amble character of ASCII (2). The RS-232 scanner must be configured to append CRLF/ASCII (13) ASCII (10) characters to the end of the barcode. Tracking can use a TCP/IP Listener. When a listener is selected as the second scanner another scanner can also be configured and used at the Tracking station. When TCP/IP Listener is selected as a scanner device the following additional fields are added to the screen:

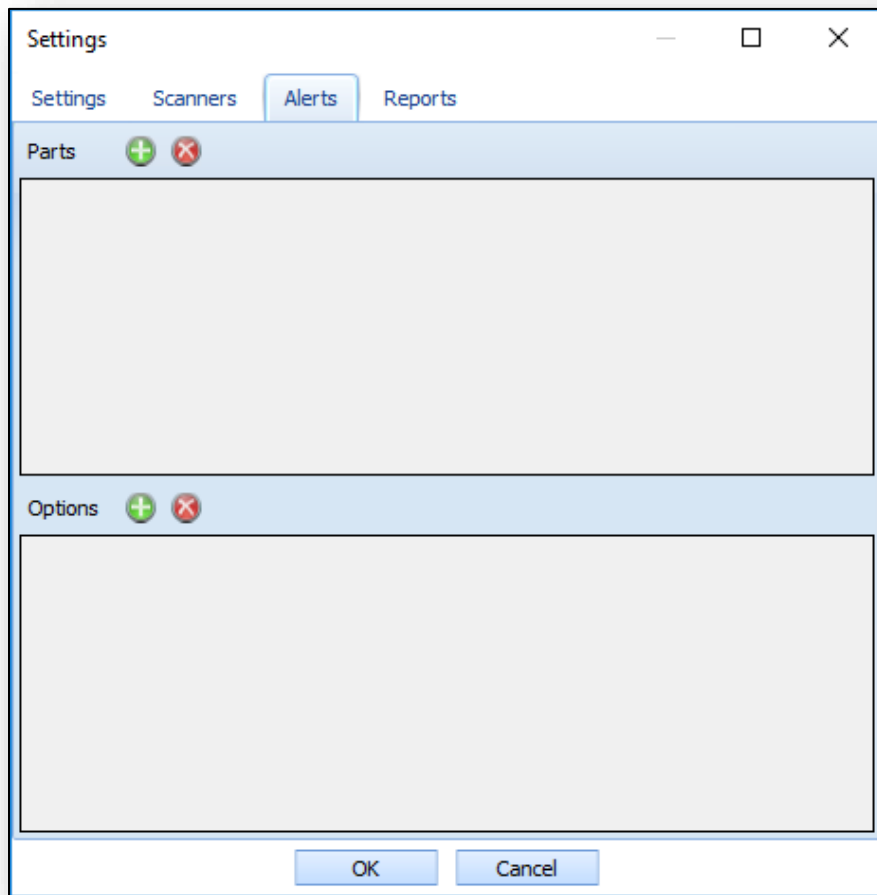
- **IP Address** – The IP address of the Tracking computer that the machine (client) will need to send messages to. If not set, this will default to the IP of the computer that Tracking is being run from. In most cases this field is left blank.
- **Port** – Allows the user to specify the port being used to communicate from the TCP/IP Listener and the computer being used to run Tracking.

- **Preamble** – The Preamble to ignore at the beginning of the message. This is case sensitive and anything before the preamble will be ignored as well.
- **Postamble** – The Postamble to ignore at the end of the message. This is case sensitive.

Alerts Tab

The ability to set up user alerts based on options or parts can be found through the 'Alert Setup' menu ('Setup' >> 'Settings' >> 'Alerts'). An alert prompt appears when a specified option or part is being used in a scanned part.

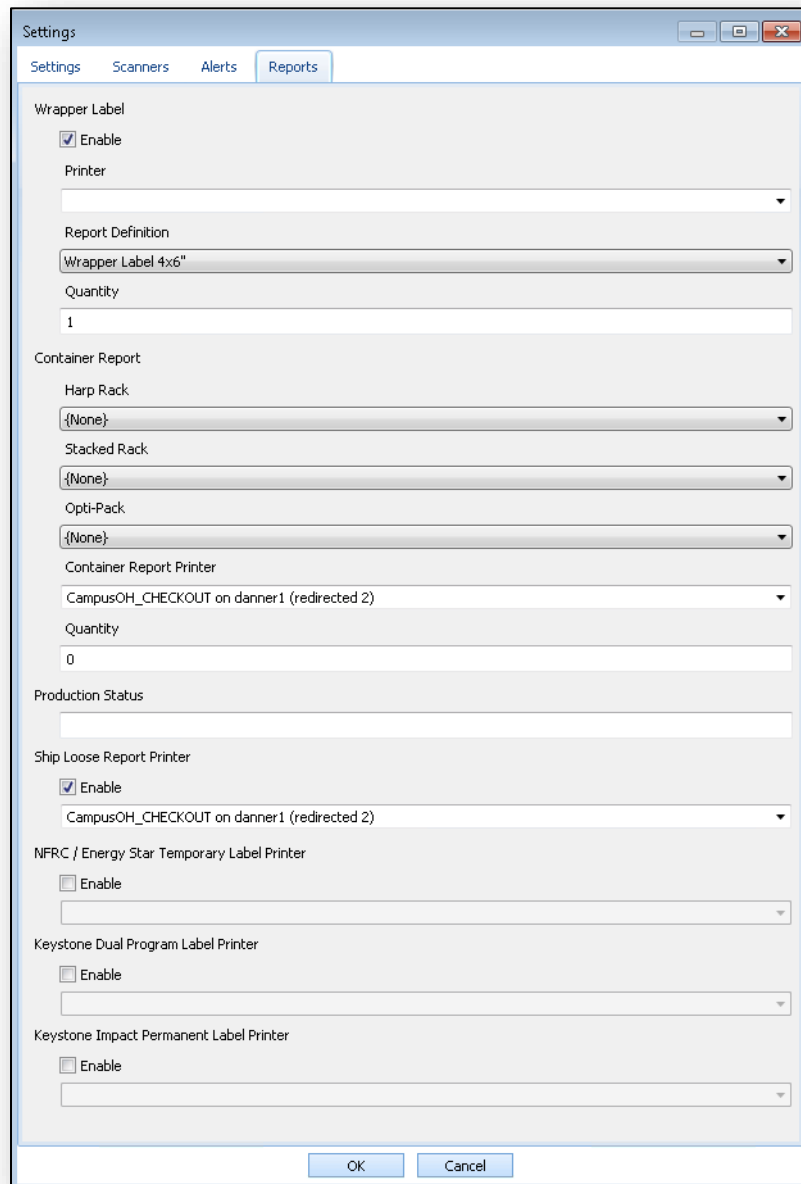
Part alerts can be added by selecting the green plus button by the Parts list. After selecting the green plus button, users select parts that should trigger an alert when scanned at the current Tracking station. The user can select the red delete button to remove any parts currently configured for alerts at the current Tracking station.



Option alerts can be added by selecting the green plus button by the Options list. After selecting the green plus button, users select options that should trigger an alert when scanned at the current Tracking station. The user can select the red delete button to remove any options currently configured for alerts at the current Tracking station.

Reports Tab

Label printing is built into the Tracking Application. To access the 'Label Printer Setup' screen, go to 'Setup' >> 'Settings' >> 'Reports'.



The following fields exist in the 'Report Setup' screen:

- **Wrapper Label** – There is an 'Enable' checkbox that when checked allows wrapper labels to be printed.
 - **Printer** – Designate from which printer the wrapping label will be printed.
 - **Report Definition** – Drop-down to define which type of report to include on the label.
 - **Quantity** – Indicate the number of copies.

Note: A label template file exists that can be edited to allow the user to customize the information printed on the 'Wrapper Label'. For more information, please contact FeneTech.

- **Container Report** – Report definition that will be used in order to display the contents of a scanned container. Different definitions can be specified per Container Type. By default, there are two reports— 'Shipping Container' and 'Shipping Container (Opti-Pack)'; however, additional reports can be configured through FeneVision Core. The available Container Types are below:
 - **Harp Rack**
 - **Stacked Rack**

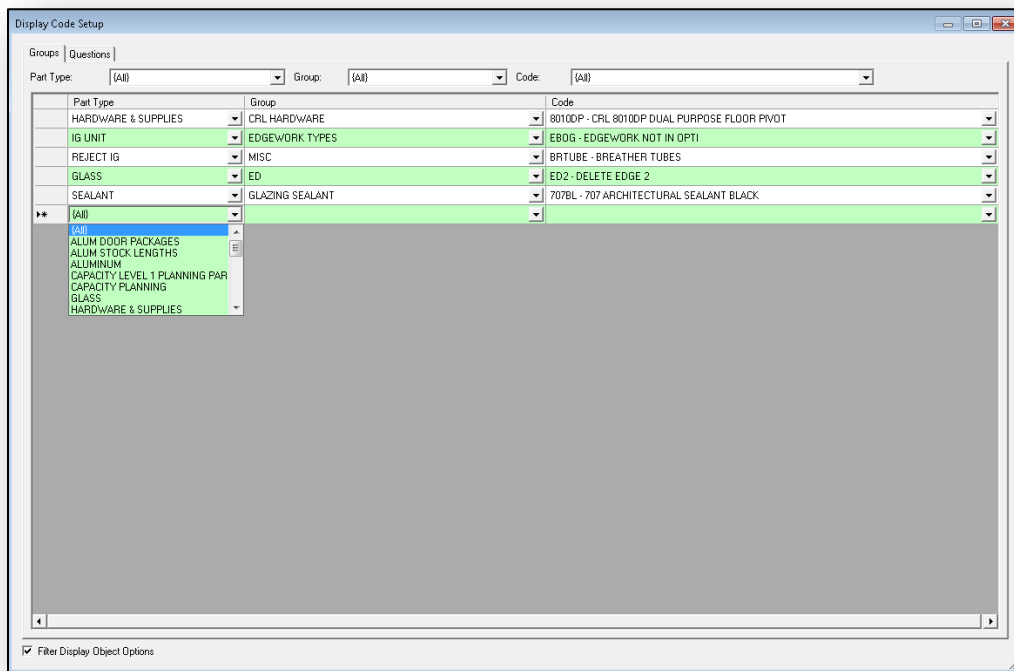
- **Opti-Pack (glass customers only)**
- **Container Report Printer** – Allows the user to specify which printer the container report will print to. Leaving this field blank will result in the user being prompted to select a printer when trying to print the container report.
- **Quantity** – Indicate the number of copies.
- **Production Status** – Field in which to type in a URL that will link to a station-specific production report. The report can be accessed while in Tracking by selecting 'F1'. Leaving this field blank will result in the 'F1' key taking users to the default production status report in BI.
- **Ship Loose Report Printer** - This report is automatically printed (if enabled) whenever a subassembly is shipped loose on the same truck as its main part, and is not printed if the subassembly is backordered. (*Assembly mode only*).
- **NFRC / Energy Star Temporary Label Printer** – Allows window, door, and skylight manufacturing users to print labels according to NFRC/Energy Star® standards. These attributes are set up in FeneVision Core. Check to enable.
- **Keystone Dual Program Label Printer** – Allows users print labels based upon attributes set up in Core. Check to enable.
- **Keystone Impact Permanent Label Printer** – Allows users to print labels based upon attributes set up in Core. Check to enable.
- **NAMI Label Printer** – Allows window, door, and skylight manufacturing users to print labels according to NAMI® standards. These attributes are set up in FeneVision Core. Check to enable.

Display Codes

The 'Display Code Setup' screen is used to identify which product options to display on the screen and print on the wrapper label, if the 'Wrapper Label' option is enabled. The option codes display a comma-delimited list at the bottom right of the Tracking screen. This list can be selected to display a detailed view of the options.

Groups Tab

The 'Groups' tab allows the user to select a code to display by option 'Group', option 'Code', and 'Part Type'. If the code specified by the user is identified within the scanned part, the display code will be shown on the tracking screen.



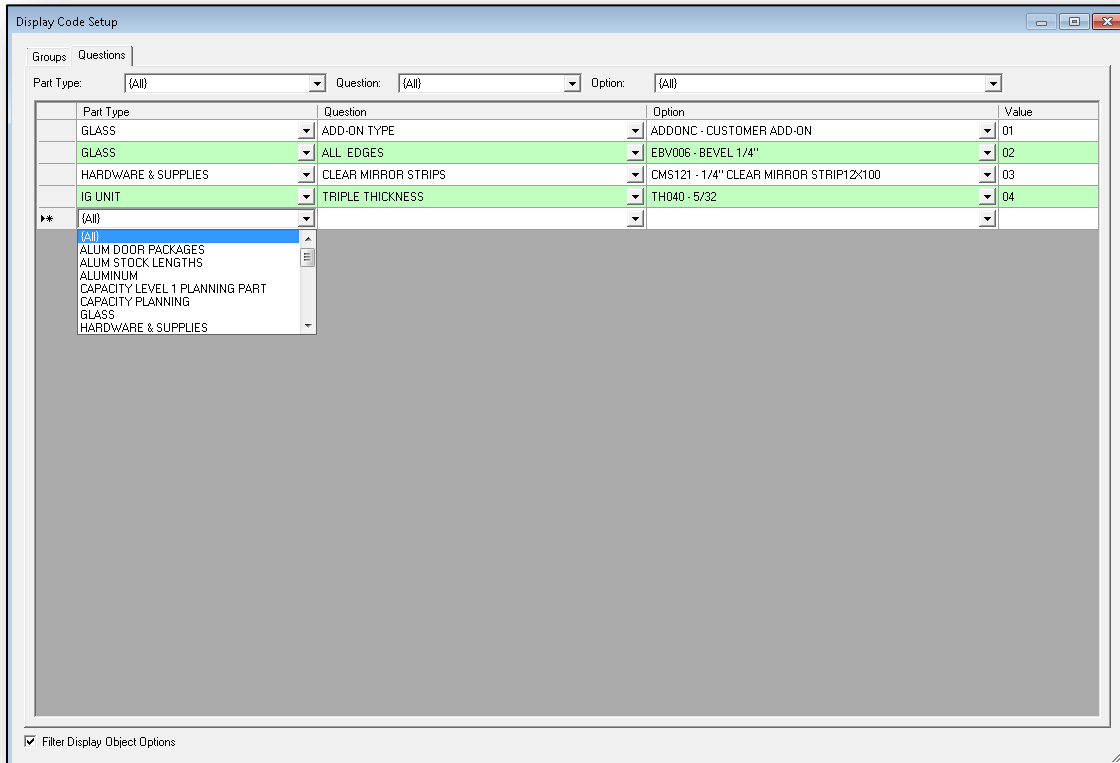
The following fields exist in the 'Groups' tab in the 'Display Code Setup':

- **Filters**
 - **Part Type** – Drop-down to filter the list of display codes configured by part type.

- **Group** – Drop-down to filter the list of display codes configured by group.
- **Code** – Drop-down to filter the list of display codes configured by code.
- **Columns**
 - **Part Type** – Drop-down to choose a part type.
 - **Group** – Drop-down to choose an option group.
 - **Code** – Drop-down to choose a display code for the part type and option group.

Questions Tab

The 'Questions' section allows the user to select a code to display by option 'Question', 'Option' code, and option 'Value' assigned to the option. If the option and value specified by the user is identified within the scanned part, the display code will be present on the screen as explained above, and will also appear on the wrapper label.



The following fields exist in the 'Questions' tab of the 'Display Code Setup' screen:

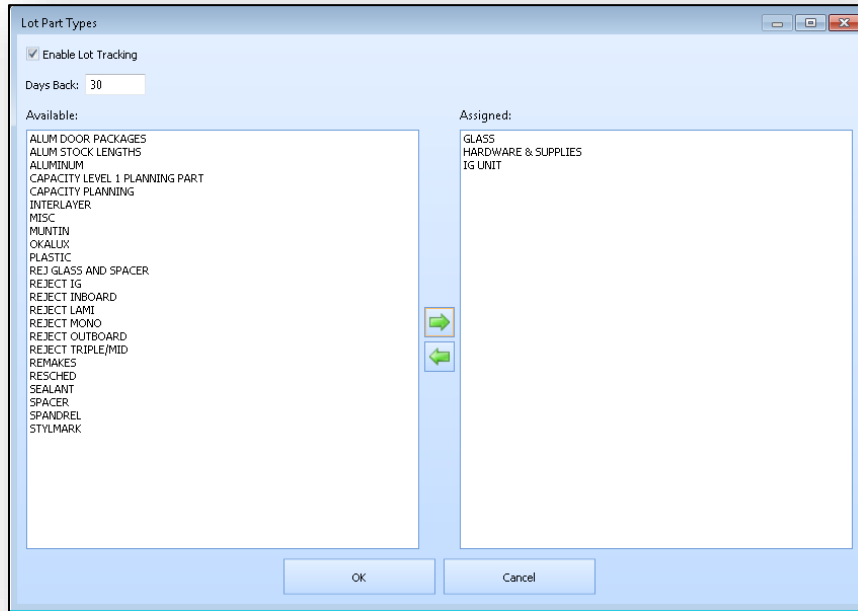
- **Filters**
 - **Part Type** – Drop-down to filter the list of display codes configured by part type.
 - **Question** – Drop-down to filter the list of display codes configured by question.
 - **Option** – Drop-down to filter the list of display codes configured by option.
- **Columns**
 - **Part Type** – Drop-down to choose a part type.
 - **Question** – Drop-down to choose a question pertaining to the part type.
 - **Option** – Drop-down to choose an option pertaining to the part type that answers the question.
 - **Value** – Field to enter a value for the question/option.

By selecting Filter Display Object Options at the bottom left corner of the screen, only the selected options will be used to render in the image in the Tracking screen.

Lot Part Types

FeneVision Tracking has the ability to assign lot numbers to specific part types at the same time that a unit is updated.

To open the 'Lot Part Types' screen, select 'Lot Part Types' in the 'Setup' menu. 'Lot Tracking' allows the user the ability to track lots associated with each particular unit. If a user wishes to track the parts associated with an IG unit, for example, the ability exists to assign lot numbers to all parts of the BOM (e.g., spacers from Lot A, sealant from Lot B).



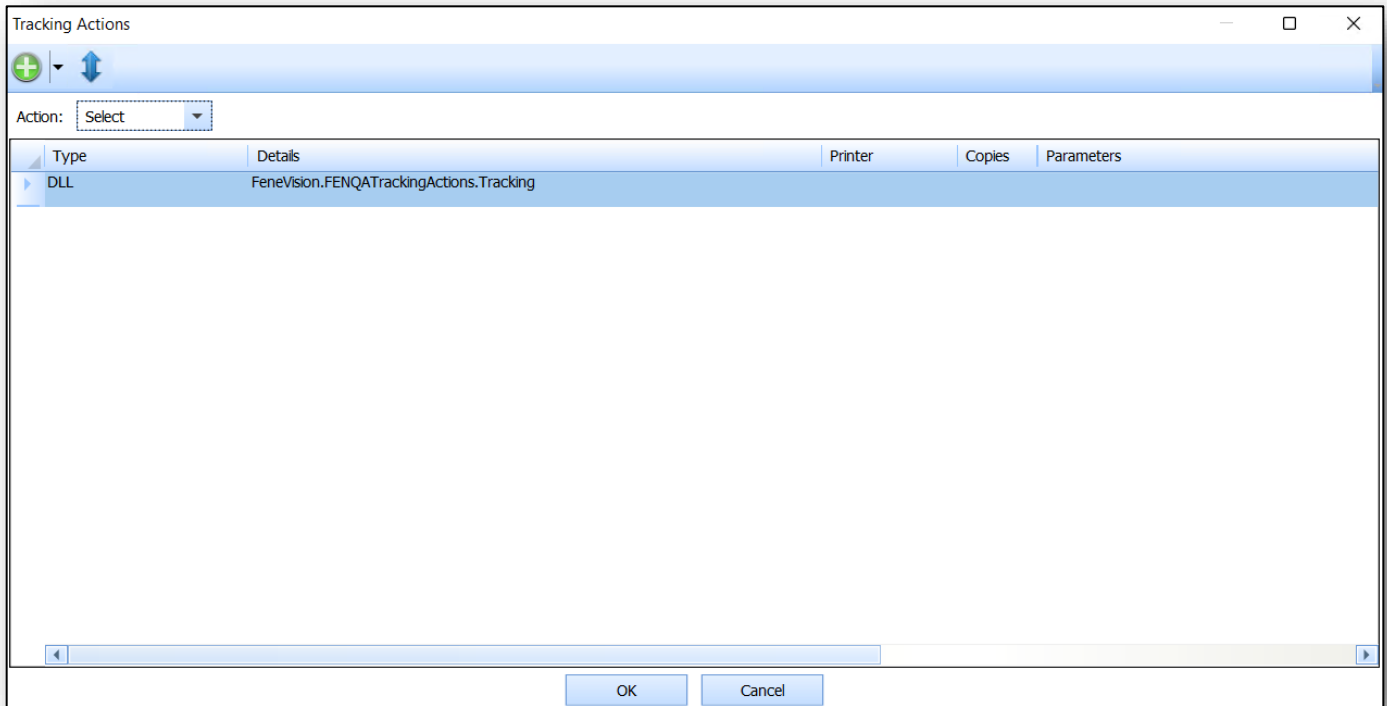
To enable lot tracking, check the 'Enable Lot Tracking' box at the top left of the screen. The list of 'Available' part types is shown on the left side of the screen.

To change which part types are on the list of 'Assigned' part types, complete the following:

1. To add to the 'Assigned' list, highlight the 'Available' part type and select the right arrow.
2. To remove an 'Assigned' part type, highlight the part and select the left arrow.

Tracking Actions

'Actions' allow users to configure custom actions to occur during the tracking process. These are configured by selecting 'Setup' >> 'Tracking Actions'.



The green 'Add' button in the toolbar allows the user to add different actions for the type selected in the 'Action' drop-down. The actions can also be resequenced by selecting the 'Sequence' icon in the toolbar.

The 'Action' drop-down allows users to select among 'Select', 'Accept', or 'Reject'. This designation determines at what point in the tracking process the action will occur.

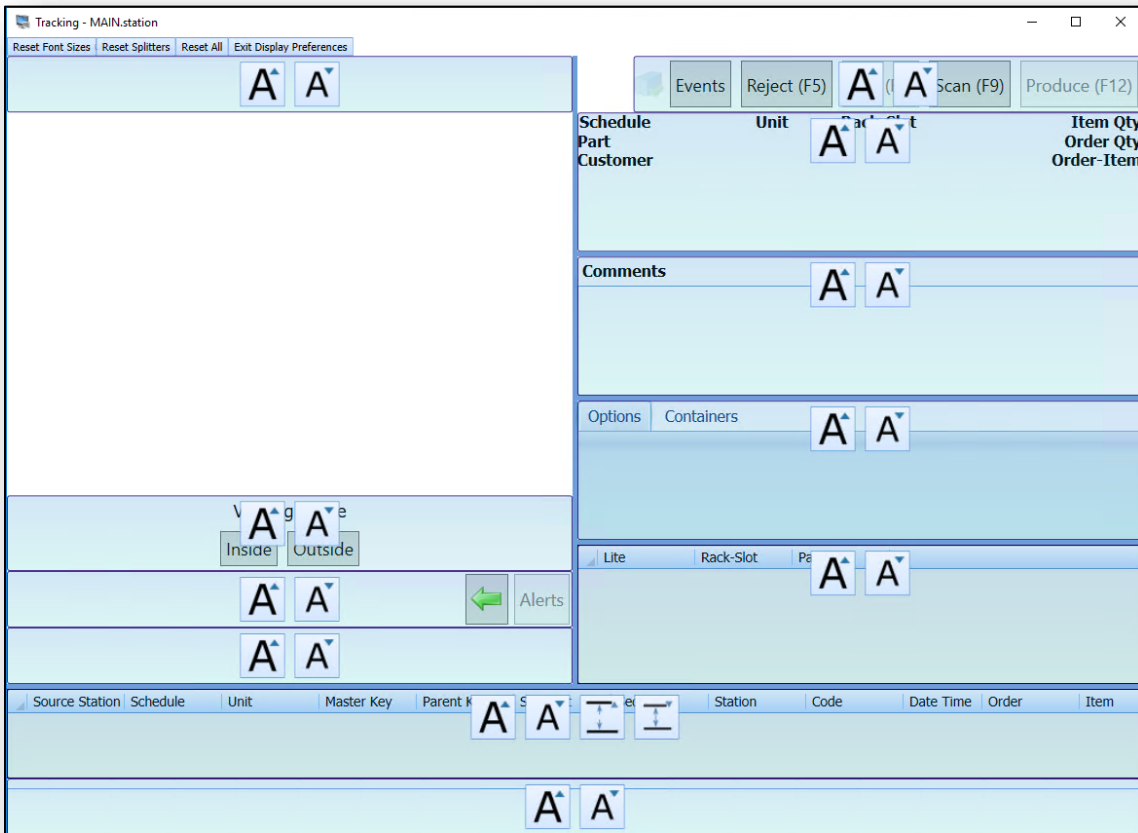
- **Select** – Once the user selects a unit the action will occur.
 - **Accept** – Once the unit is accepted the action will occur.
 - **Reject** – Once the unit is rejected the action will occur.
- **Type** – The available types of custom actions. Depending upon the action type, the user will enter different settings in the action field.
 - **Report** – Drop-down that allows users to select from available 'System Reports'.
 - **DLL** – Text box allowing users to enter the name of the DLL to execute.
 - **File Copy** – Selecting 'File Copy' allows FeneVision Tracking to copy a single file to a working directory.
 - **Generic Text Interface** – Allows the user to use an existing Generic Text Interface to generate files after an action occurs.
 - **Printer** – Drop-down with a list of available printers. This is disabled if the action type is not set to 'Report'.
 - **Copies** – The number of copies of a report that should be printed. This is disabled if the action type is not set as 'Report'.
 - **Parameters** – In the 'Add Tracking Action' menu click the green add button by the 'Parameters' label to add new parameters to be used for the action. Contact FeneTech for additional parameter details.

Note: Select Machine Interfaces, like Forel CNC, Forel IG, and the CMS CAD interface, support file generation through a station action. Contact FeneTech for additional information regarding this functionality. This functionality is not supported by all interfaces.

Display Preferences

'Display Preferences' allows the user to manipulate the font size, section size, and row height of the individual sections within any of the Tracking modes.

To begin changing the display preferences, select 'Display Preferences' from the setup drop-down menu.



While the display preferences are visible, the users can alter the screen in the following ways:

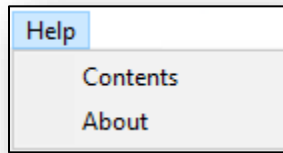
- **Font Size** – Using the buttons indicated by the 'A', the user can increase or decrease the font size of each section on the screen.
- **Section Size** – By hovering over the section splitter until a double-sided arrow appears, the user can alter the size of a section by dragging the section splitter.
- **Row Height** – Using the buttons indicated by the two horizontal lines, the user can increase the height of the rows in the rack queue. Available in Work Route mode.

The following options are also available while the display preferences are visible:

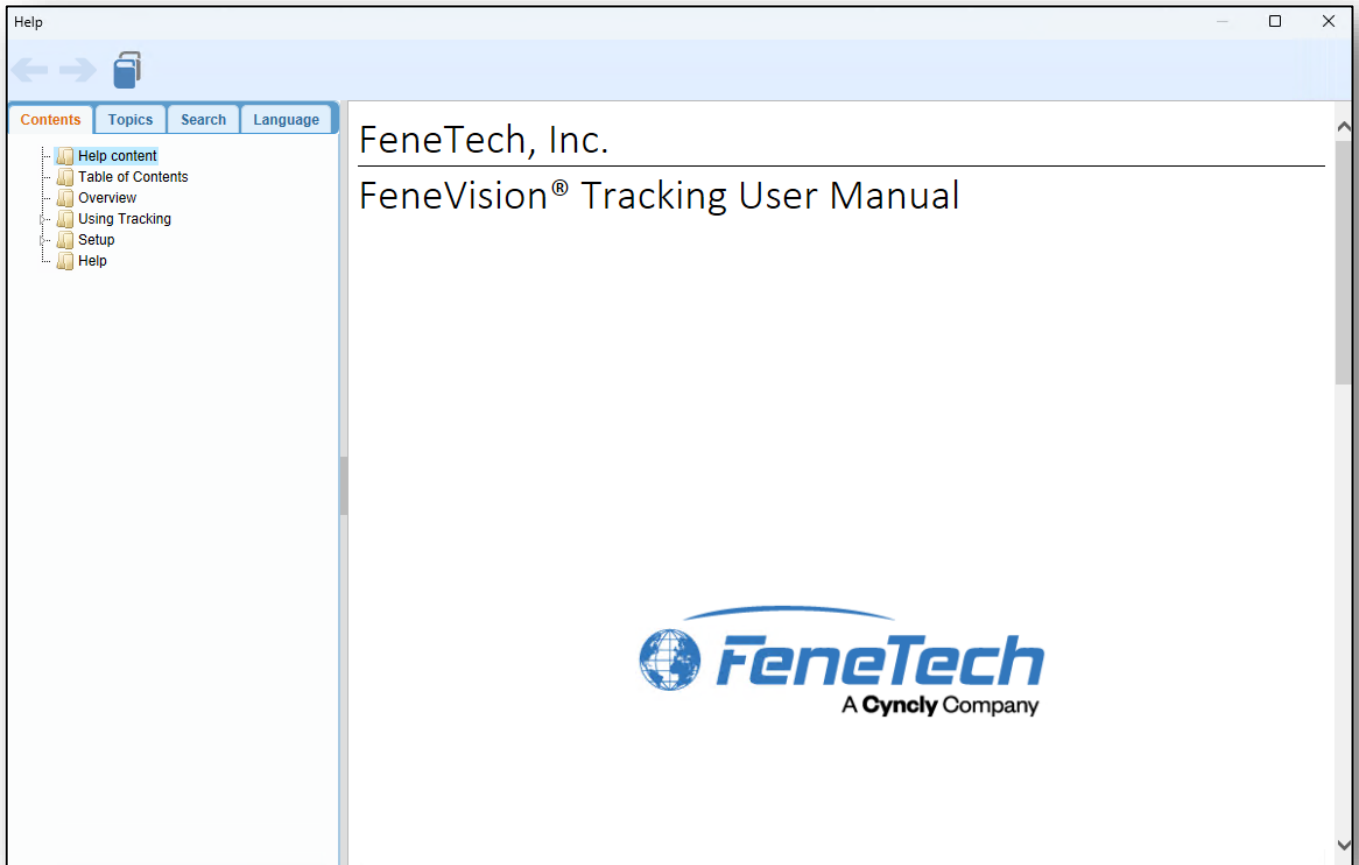
- **Reset Font Sizes** – Resets the font sizes for all sections to the default font size.
- **Reset Splitters** – Resets all section splitters to the original location.
- **Reset All** – Resets all font sizes and section splitters to the original location.
- **Exit Display Preferences** – Exits display preferences and saves all font sizes, splitter locations and row heights.

Help

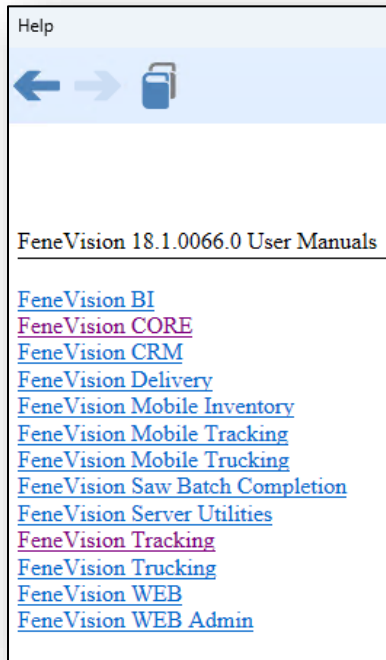
There are two options within the help menu: 'Contents' and 'About'.



Select the 'Contents' option to view an electronic copy of the user manual. The user can search through the contents page, review an index of key terms, or type a search for a key word or quickly find a section of the manual.



Users also have the ability to view the user manuals in different languages using the translate button at the top of the manual screen. Using the green arrows allows the user to 'Go Back' to a previous page or 'Go Forward' a page. The icon that resembles books can be used to access all other available Core user manuals.



Select the 'About' option to view the current version of FeneVision in use.

