Last Updated: 3/24/2021

INTRO

The production display software will display production information and remaining work counts from EXE using a rotating carousel of cards

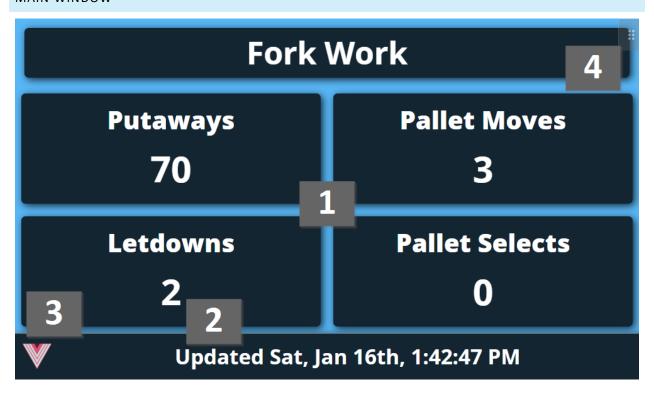
Each card focuses on displaying a summary of information relating to a specific type of work in EXE.

The software was designed to show a simplified view of data pulled from EXE and should not require any user interaction after configuration is complete. Data is fetched automatically from EXE every 20 minutes.

If displayed on a 55' or larger display the text should be legible from a distance of around 30 feet.

The PCs that will run the production display software will come preconfigured to run the program automatically after startup

MAIN WINDOW



The main window has 4 parts

- 1. The currently displayed card. This will automatically change every few seconds.
- 2. The refresh date/time. This timestamp will show the date and time of the last refresh.
- 3. The busy spinner. When visible a refresh is occurring in the background.
- 4. The icon drawer. The drawer will slide out when the mouse cursor is moved over the drawer.

SUPPORT

The production display software is not a supported by computer support. This software is provided as-is as a temporary solution until IT can roll out a supported solution.

If any issues are encountered with the program, please contact <u>jonathan.nelson@spartannash.com</u>. These will be worked on as time allows.

If additional features are desired, please contact noel.clemons@spartannash.com. These requests will be forwarded to IT and possibly included in the supported solution.

If any errors occur relating to the PC hardware or network connection a ticket should be called in to computer support as normal.

COMMON ERRORS / SOLUTIONS

There are a few different errors that may display while the software is running. Possible solutions are listed below.

ERROR MESSAGE "EXE LINK IS BROKEN"

This generic error message will display any time:

- the software is unable to connect to EXE
- the data transfer takes longer than 30 seconds or the entire refresh process takes longer than 9 minutes
- EXE returns back data that cannot be processed.

After the program starts the first refresh must succeed or this error message will display. After that the data refresh can fail up to three times before this message will be displayed.

This error message is normal during times when EXE is not reachable for other reasons (such as during the Saturday maintenance window).

Possible solutions:

- Perform a manual refresh.
 - 1. Move the mouse cursor to the top right of the window, over the icon drawer. The icon drawer will slide out.
 - 2. Click on the refresh icon
 - 3. Wait for the manual refresh to complete or to fail.
- Check that the PC network connection to the PC is plugged in and internet access is available.
 - To test internet connectivity
 - 1. double click anywhere within the production display window (or use the ESC key) to return the software to a window
 - 2. Move the mouse cursor to the bottom of the screen to expose the task bar
 - 3. open any web browser and attempt to load a website
 - o If the PC is unable to access the internet open a problem ticket with computer support.

o If the PC can access the internet, but the production display software continues to display this error contact <u>jonathan.nelson@spartannash.com</u>.

ERROR MESSAGE "INVALID SETTINGS"

This error message is displayed when the software is unable to determine how to connect to EXE. This is normal if the software is freshly installed but should not display after initial configuration. This is an indicator that the configuration file may have become corrupted.

Solutions:

The EXE connection information will need to be re-entered. Contact jonathan.nelson@spartannash.com

DISPLAYING INVALID CASE COUNT / WORK COUNT

If a card is showing a case count, work count, or production information that does not match the current count in EXE this might be an indication that the last scheduled refresh did not complete. The software will attempt to load fresh data from EXE every 20 minutes.

Check the 'last updated' time at the bottom of the display. If this time is more than 20 minutes ago the most recent update most likely failed.

Possible Solutions:

- Wait for the next refresh. This will happen automatically within 20 minutes.
- Perform a manual refresh.
 - 1. Mouse over the icon drawer at the top right of the window, the drawer will slide out.
 - 2. Click on the refresh icon
 - 3. Wait for the manual refresh to complete or to fail.

If the software has refreshed recently and the data does not match in EXE check that the card is configured correctly. Some cards allow data to be filtered by warehouse. If that option is enabled a warehouse number (or numbers) must be selected. If no warehouse number is selected most cards will default to showing a count of '0'.

- 1. Move the mouse cursor over the button tray at the top right of the window, the icon drawer will slide out.
- 2. Click on the settings icon to open the settings window.
- 3. Click on the Cards tab at the top of the window.
- 4. In the horizontal list of selected cards click on the icon for the card that is showing the incorrect count. The card settings will appear below.
- 5. Check the card settings. If the card is set to show data for a specific warehouse verify that the warehouse number was entered correctly

SETTINGS

There are several different settings available. These are grouped into three tabs: 'Display', 'Background', and 'Cards'. Top open the application settings move the mouse cursor to the top right of the display. The icon drawer will slide out. Click on the gear icon to open the settings window.

DISPLAY TAB

START IN FULL SCREEN MODE

If this option is enabled the application will automatically expand to fill the screen at startup. Fullscreen mode can be toggled by pressing the 'esc' key or by double clicking anywhere within the main window.

This setting will be enabled before the PC ships and should be left enabled at each site.

KEEP SCREEN AWAKE

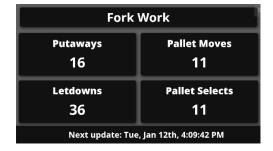
If this option is enabled the screensaver will be disabled and the PC will not enter sleep mode while the program is running full screen.

This setting will be enabled before the PC ships and should be left enabled at each site.

THEME

Selects the theme for the display. Two themes are available. A light theme and a dark theme. The dark theme is enabled by default.

Fork Work	
Putaways 16	Pallet Moves
Letdowns 36	Pallet Selects
Next update: Tue, Jan 12th, 4:09:42 PM	



BUSY SPINNER

This option controls the look of the busy spinner that is displayed while data is being refreshed.



SHOW THE LAST/NEXT UPDATE TIME

This setting changes the timestamp shown on the main screen from showing the last successful update timestamp to the next scheduled refresh timestamp. The text will only be updated on the next refresh.

DATE ROLLOVER

Certain EXE screens (such as ALAPL or ARDAA) will prompt for a date or a date range when fetching data.

By default the software will always use the current date on any screens that prompt for a date value and will use the current date and a range of 00:00 - 23:59 on any screens that prompt for a date/time range.

This option allows the transition to the next day to be postponed by up to 12 hours.

This can be used to continue showing selection case counts for the previous day if selectors do not complete all work before midnight.

If, for example, if the date rollover is set to 6AM then from midnight until 5:59 AM:

- The ARDAA report will show data for all associates that clocked in the previous day prior to midnight
- ALAPL and NFAPL will show case counts for orders that were waved the previous day prior to midnight
- IRREA and IRRSA will show a pallet/case count for POs that were scheduled or received from 6 AM the previous day until 5:59 AM the current day.

In general this setting should be left at midnight if the DC performs all work in a single shift, or if all work is complete before midnight.

If the DC has multiple shifts this should be set to the earliest time the first shift associates will begin working.

BACKGROUND TAB

By default, the software will use a solid color as the background. Additional options are available.

IMAGE

This option will show a custom image as the background.

Two options are available:

- Click on the 'select folder' button to display a slideshow of images from the selected folder. The displayed image will change every 8-10 minutes.
- Click on 'select file' to choose a specific image as the background. Options are available to stretch the image to fill the background or to resize to fill the largest dimension.

Any JPEG, or PNG image can be used. If a folder was selected the folder will be re-scanned for new images every 10 minutes. Network folders can be used, though the background may go black for multiple seconds as the image is loaded.

DAY/NIGHT CYCLE

This option will adjust the background color periodically through the day to replicate a day/night cycle. By default, a day/night cycle for Columbus GA is used. To use a cycle corresponding to the local sunrise/sunset times a local zip code can be entered.

Options are available to display stars at night and to display a few different scenes on top of the background color.



VIDEO BACKGROUND

This option displays an animated video as the background. The software does not ship with videos included. To download and use a video click on the thumbnail in the list. Once the video has finished downloading it will be displayed as the background.

Additional options are available to control the playback speed, color shift, blur, and a few other settings.

CARDS TAB

Cards display content relating to different topics. There are a few different cards available. Multiple instances of each card can be added and configured separately. This can, for example, allow displaying selection data for each warehouse independently, or to display a different production grid for selectors and lift drivers.

All cards have at least two configurations available:

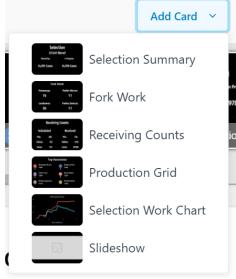
- Enabled sets whether to show this card or skip it during the cycle.
- Show between X and Y. Sets the hours of the day (in 24 hour format) this card should be visible. By default, cards will be visible between 0:00 and 24:00 (the entire day). If a card should only be visible at night (and cross over the midnight boundary) the from field can be set to an hour at night, and the to field can be set to an hour in the morning (for example: from 22:00 to 6:00).

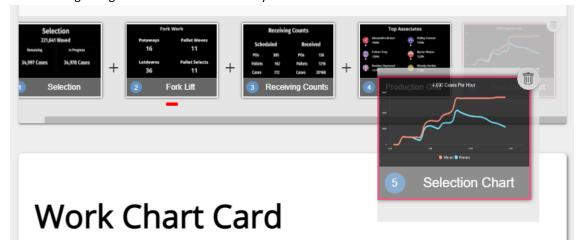
To add a card click on the 'Add Card' button and select the type of card to add. The new card will be added to the end of the rotation.

To delete a card click on it's thumbnail and then click on the trash can icon in the top right. You will be prompted to confirm the deletion.

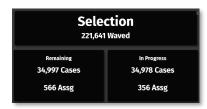
Cards can be re-arranged by clicking and dragging the card thumbnail to a new position. Available positions are marked with a pulsing '+' symbol. Move the thumbnail over one of these positions and release to move the card into that position. To cancel the move drop the card anywhere outside of those positions.

If the card list is too long the card thumbnail can be moved to the left or right edge of the list to automatically scroll in that direction





SELECTION



This card displays the total number of cases waved and the total number of cases remaining. This data is pulled directly from the ALAPL or NFAPL screens in EXE.

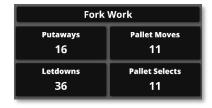
The title shown at the top of the card can be changed.

By default, the case count from ALAPL will be used. Click on the 'Display data from' dropdown control and choose NFAPL to use the billed counts from that screen.

By default, this card will show the total number of cases waved and the number of cases remaining. You can optionally include the number of assignments remaining as well as the number of cases or assignments that are in progress.

By default, the case count for all warehouses will be shown. To restrict the case count to specific warehouses change the 'Display data for' option to 'Selected warehouses only', then select the warehouse number(s) desired.

FORK WORK



This card displays the number of fork work units left to complete. This data is pulled from the RMRWA screen in EXE.

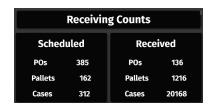
This work is broken into four categories:

- Replenishments
- Putaways
- Pallet Moves
- Pallet Selects

By default, all four types will be displayed. The title shown at the top of the card can be changed.

By default, the work unit count for all warehouses will be shown. To restrict the work count to specific warehouses, change the 'Display data for' option to 'Selected warehouses only', then select the warehouse number(s) desired.

RECEIVING COUNTS



This card displays the number of POs, pallets, and cases that are scheduled to be received as well as the count of POs, pallets, and cases that have been received.

The date and time range is controlled by the date rollover setting. By default it will include POs scheduled to be received on the current day from 00:00 to

23:59 and POs that have been completed from 00:00 to the current time.

By default, the card will always include counts under the 'Truck' column from the IRRSA report total. Counts from BackHaul, Truck Export, BH Export, Rail, and Other columns can be included by checking those options.

By default, the card will display both the scheduled and received counts. Checkboxes are available to disable each section.

By default the card will display the PO count, the pallet count, and the case count. Checkboxes are available to disable the different counts.

By default, the work unit count for all warehouses will be shown. To restrict the work count to specific warehouses, change the 'Display data for' option to 'Selected warehouses only', then select the warehouse number(s) desired.

PRODUCTION GRID



This card displays a grid of associates ordered by their production percentage. Production information is pulled from the ARDAA report in EXE. By default, this screen will show the top 10 associates with the highest production numbers based off overall production. This can be expanded to up to 30 associates.

Production information is not available on Monday and Tuesday mornings between 8AM – 10:30 AM EST. This is to prevent the ARDAA report from interfering with the payroll data extract.

Note: EXE treats loading assignments as direct touch assignments. Since labor standards are not set for loading assignments these may display as a production of 0%. If any associate has worded both loading assignments and either fork lift or selection assignments their overall production may show as lower than normal. Switching the display from 'overall' to either 'selection' or 'fork lift' production will ignore the loading assignments.

The title shown at the top of the card can be changed.

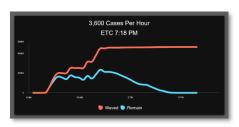
There are multiple options available:

- Production data for
 - Overall production the associate's production numbers for all direct touch assignments in all warehouses.
 - All selection the associate's production numbers for all selection assignments in all warehouses.
 - o All fork work the associate's production numbers for all fork lift assignments in all warehouses.
 - Single warehouse the associate's overall production numbers for all direct touch assignments in a single warehouse (a warehouse number must be entered)
- Hide associates below sets the lowest allowed production number before an associate can be shown. If
 no associates meet this minimum the message 'No associates above minimum production cutoff' will be
 displayed.
- Skip associates with production above sets the highest allowed production number allowed before an associate will be skipped. This can be used to prevent associates that complete assignments via a timeclock (such as Inventory Control or supervisors) from showing up on the grid.
- Show the top X associates sets the maximum number of associates to display in the grid. If the grid is larger than the screen the list will be scrolled downwards when the card is displayed. If this number is set too large the list may have to scroll too fast to be easily read.
- Show associates with the swaps the grid between displaying associates with the highest production numbers and the lowest production numbers.
- Portrait source this option allows portraits to be displayed beside each associate name
 - No Portrait the default. Displays a generic portrait image.
 - Random Geometric displays a randomly generated geometric shape as the associate's portrait.
 A few different color schemes are available.
 - File displays an image file as the associate's portrait.
 - Portrait folder path the directory that holds all the associate photos. Network shares paths are allowed.
 - File template this option tells the software how to match an associate record to a file name in the portrait folder path. See the help message for more information. Typically

this option would be set to "{{id}}.jpg" to match file names based off the associate's ID number, or "{{last}}, {{first}}.jpg" to match file names based off the associate's first and last name.

- Crown top associate—toggles showing a crown above the portrait at the top of the list.
- Medals above X percent shows a medal below the portrait for associates with a production above this number.

WORK CHART



This card displays a visual chart of the total number of selection cases waved compared to the total number of cases left to be selected. This data is pulled from the ALAPL screen in EXE.

Historical case counts are not available, so prior data points are only included if the production display program was running during that time period and a refresh was successful.

By default, the card will use case counts from ALAPL. This can be changed to use NFAPL.

By default, this screen will only allow itself to display four hours after it sees the first case wave. This can be changed.

By default, the case counts for all warehouses will be shown. To restrict the case count to specific warehouses, change the 'Display data for' option to 'Selected warehouses only', then select the warehouse number(s) desired.

SLIDESHOW

This card displays a random image from the chosen folder each time the card is displayed. This can be used to show photos of good/bad loads, associate recognition images, reminders, or any other photo desired.

The photos folder path may be a network share.

The list of pictures available will only be refreshed every 5 minutes. A new photo will be displayed every time the card is cycled into view. The next photo displayed is random, but the card will attempt to avoid showing the same photo twice.

Photos can be automatically resized to:

- Contain the photo will be scaled so that the entire photo is visible
- Cover the photo will be scaled so that the entire display is covered. Some portions of the photo may be cut off.