



Warehouse Control Software

User Manual

Version 2.0

Date August 07, 2025



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Version History

Ser No	Version No	Writer	Date	Approver
1	1.1	Sumedh Karandikar	06/26/2025	Robert J. Ward
2	2.0	Sumedh Karandikar	08/07/2025	Robert J. Ward

Purpose

The purpose of this document is to provide instructions for use for Warehouse Control Software

Prerequisites

- Valid login to REVOLUTION ST. WXS Warehouse Control software. If you do not have one, please contact the system administrator
- Modern browser, the application works on Firefox, chrome etc.
- Familiarity with the application

Common Icons

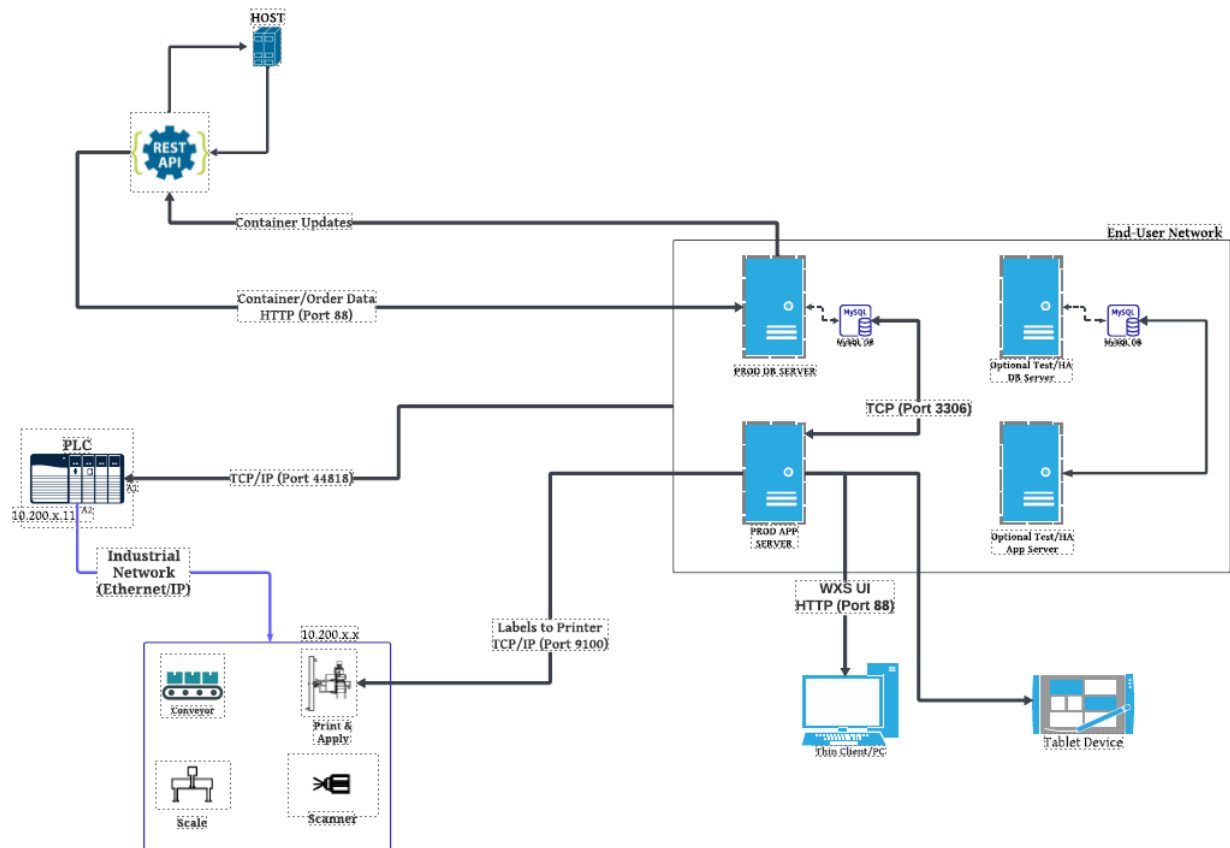
- The sign  indicates menu option to expand
- The sign  indicates that the menu option is expanded. All the submenu items are displayed.
- Click on  to get more information about the screen.
- Click on  to see notifications generated by the system.

VPN Information

The required support to connection to the PLCs is a Virtual Private Network (VPN) connection through the customers' network. The VPN can either be facilitated through the customers company VPN or VPN provided by eWon Device. Through this connection Pendant Automation can access the control system to troubleshoot the problems and make system modifications.

Network Diagram

This is the typical network diagram to use the WXS system. The network includes the Database Server, App Server, host, PLC and Printer.



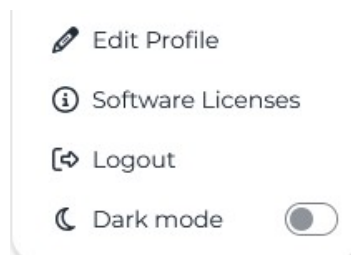
Log in

Revolution St. WXS is a web-based application.

URL: <https://demo.revolutionstreetwxs.io/dashboard>

To log in into the application needs a username and password. If you do not have one, please contact the administrator of the application for it. Such users will have to be created.

On the right-hand side under user icon click the user photo following menu items will be displayed.



- Edit the profile including first name, last name. email id, phone number, passwords etc.
 - o Also 2 factor authentication for user can also enabled here.

Username

First name

Last name

Email

Phone Number

Use this number for SMS 2FA

Password

Confirm Password

Two-Factor Authentication

ENABLE TWO-FACTOR AUTHENTICATION →

- The software licenses option informs you about the software license and the terms of licensing.
- You can log out from application. This is a recommended option, please use it to delete the information about user session.
- Move the application to Dark mode which used to improve visual comfort, usability and efficiency of digital screen.

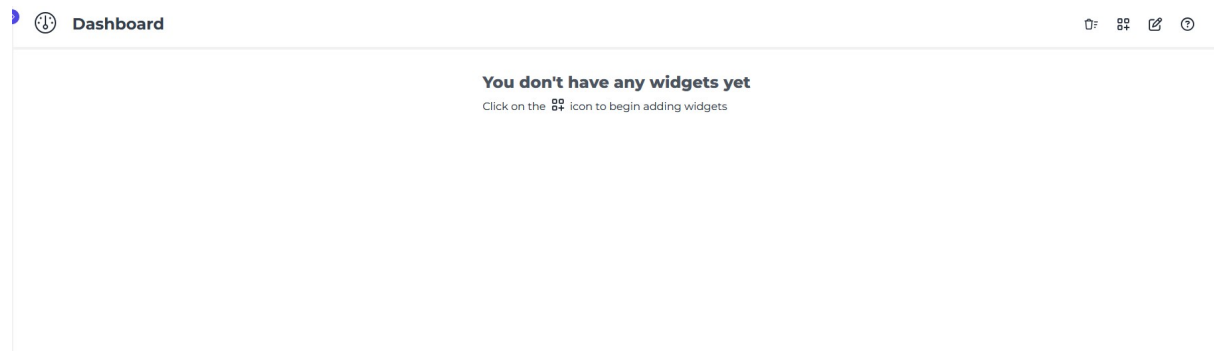
Now let us go through all the items on the main menu.

Main Menu

Dashboard

On successful log in the dashboard page will be displayed as screen shot here.

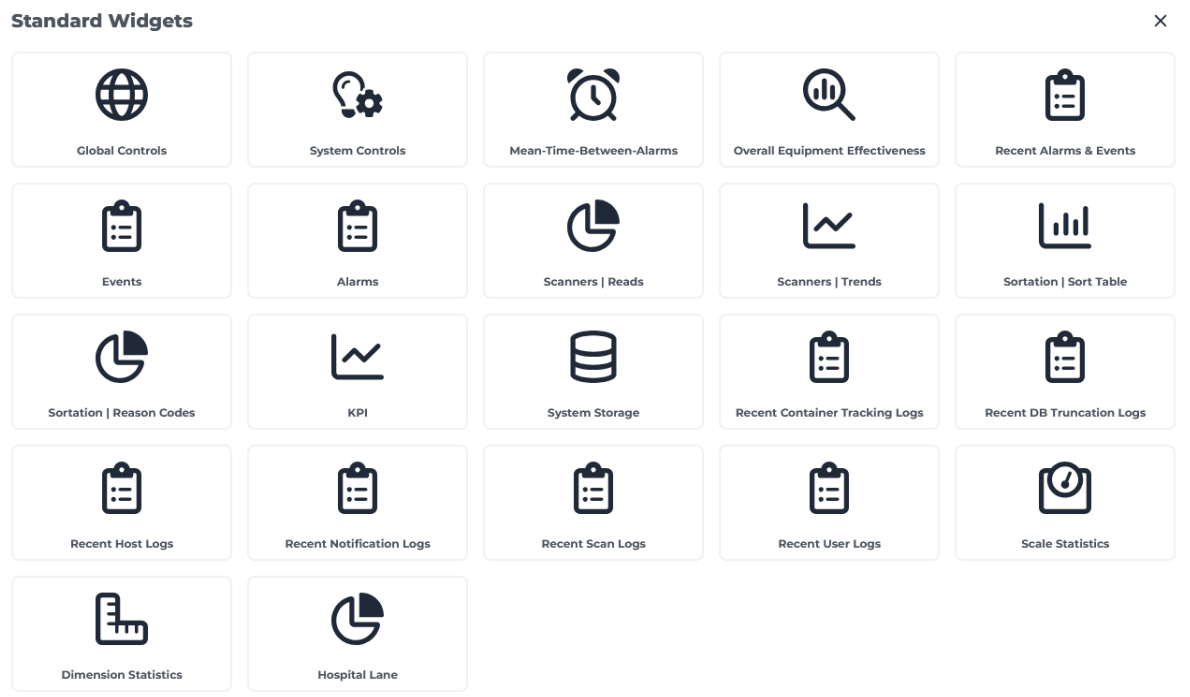
To navigate to dashboard, click on **Revolution St.** Warehouse control, **simplified.** icon.



Widgets

Since no widgets are selected, the page does not show it. As indicated click on  button to add widgets.

This shows standard widgets.



Select the one that you need to display the information that is most critical for you.



e.g. to add KPI widget hover over KPI it will show as . Then select it.

Having added KPI the dashboard shows as follows.

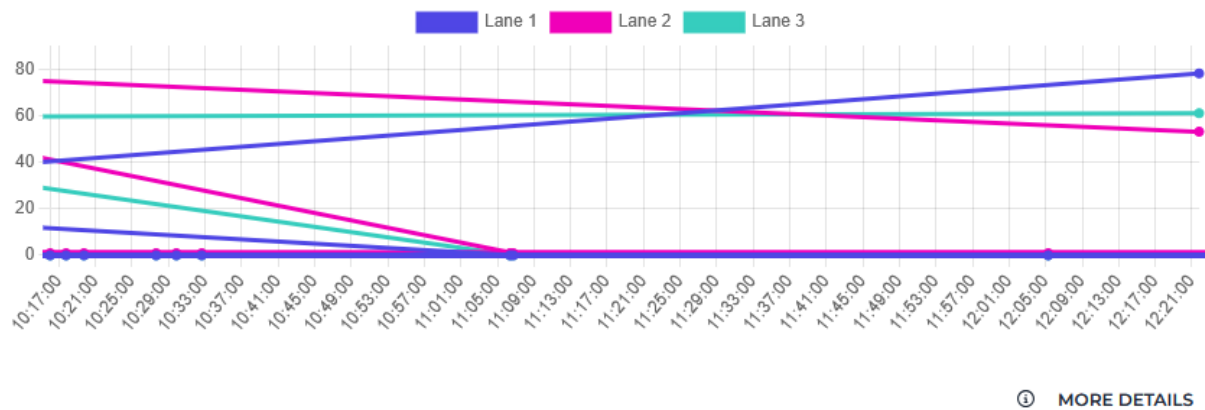


Dashboard

KPI

Today

KPI - Merge_Rate_1_to_3



① MORE DETAILS

If widget is to be deleted, then click on  button to delete the widget using  button displayed on top right corner.

Alternatively customized widgets can be created based on data returned by the internal system of PLC etc.

This is meant for advanced users and also internal knowledge of application is expected.

Custom Widgets

MANAGE CUSTOM WIDGETS →

Click on  to a custom widget.

Then click on  to create a new widget. Click on new Widget will display following form to enter all required fields.

New Widget ?

Name

Total Jams

FROM

Main

PLC

Color

Icon

Resettable

Read Tag

bitAlwaysTrue

Read Tag Type

BOOL

Reset Tag

Reset Tag Type

BOOL

CANCEL

SAVE

Once you have all required fields selected click on Save to save the widget. Then hover on the widget to add it to dashboard page. Now the new widget will start appearing as follows.

Demo for custom widget

P316

RESET

Container Data

Clicking on Container Data menu following screen will be displayed.

Search...

Today

07/07/2025

12:00 am

to

07/07/2025

11:59 pm

RESET

LPN	Status	Carrier	Tracking	Weight A...	Weight A...	Length A...	Length A...	Width As...	Width Ac...	Height As...	Height A...
841568114-3	SSG269893	UPS	1Z668M63210006132	32.33	1.46	18.99	85.79	5.88	15.94	84.42	62.65
792375187-0	XM5573553	UPS	1Z316H173355358956	13.45	14.35	66.91	9.79	60.98	96.18	23.9	32.05
127587229-8	RSA676761	UPS	1Z556J54607206230	22.89	28.59	65.02	6.68	98.13	86.97	40.69	82.18
278888387-0	QMC988188	UPS	1Z122F394839690021	34.06	30.3	88.65	24.69	38.07	11.09	56.73	99.57
512338369-7	XBU928008	UPS	1Z565P9888455480E	12.61	33.05	64.96	46.41	28.64	30.4	17.2	36.63
308849100-8	ZNW425529	UPS	1Z635V837563134824	8.06	5.77	82.13	30.67	16.58	4.01	4.76	10.21
302650794-6	ZOD923310	UPS	1Z306T658215573263	14.91	13.62	5.95	24.2	55.88	62.15	50.95	42.37
490155836-6	XXL1952444	UPS	1Z846K04660264214	25.75	2.46	1.13	37.14	89.9	59.2	44.68	52.25
120100056-6	PTX769666	UPS	1Z383N10000000000000	33.95	32.73	1.70	65.66	9.79	17.67	67.66	1.89

This page shows all the container details and the lane where it should be parked and the lane where the container the parked. Other information of container is carrier, tracking no, weight, Length assigned and actual, width assigned and actual, Height assigned and actual, assigned reason, Lane Assigned and Lane actual. This allows us to compare design assignments to actual assignments.

Filtration criteria for Container Data

Search...

Today

09/07/2025

12:00 am

to

09/07/2025

11:59 pm

RESET

As shown in the screenshot above, data displayed can be searched and filtered based on

- Search: Search values from any of the columns including, LPN, Status, Carrier or tracking. So, once you start typing the value the data will be searched and displayed accordingly.
- Date Range: Either you can provide using convenient values such as Today, Yesterday, This week, Last week, Last month, This Quarter, Last Quarter, This year, Last year or custom. Based on the option selected the date will be set accordingly. E.g. if the option is selected as last year, then dates will be selected as 01/01/2024 to 12/31/2025.

Records display and configure columns

Page 1 of 33

RESULTS PER PAGE: AUTO (23)

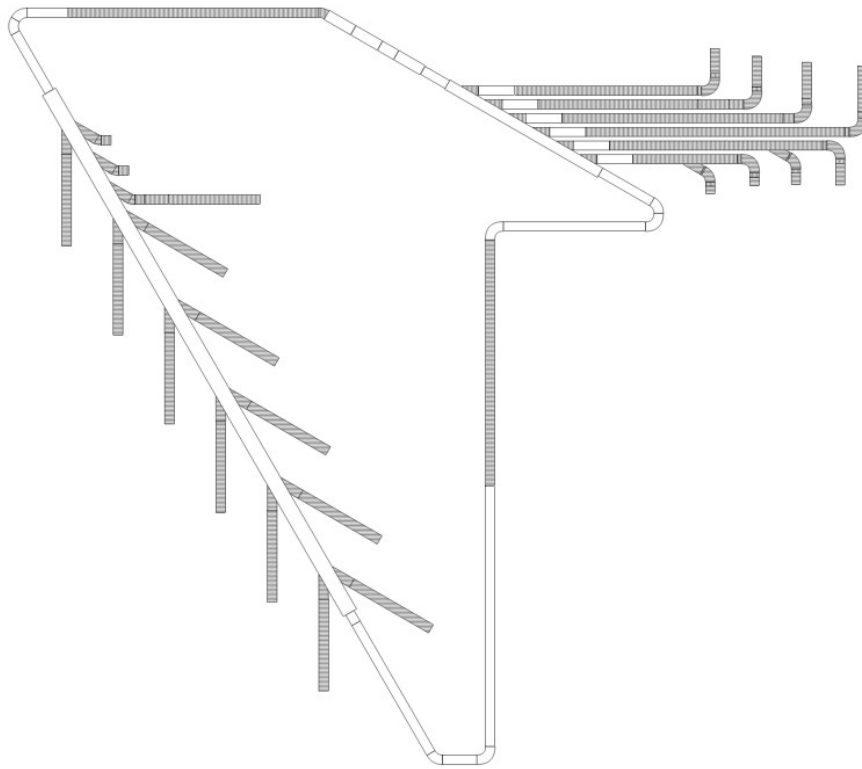
HIDE/SHOW COLUMNS

Using this option select the page no displayed, also no of rows displayed on each page e.g. 10, 15, 25, 50, 100, 250 etc. Also, the columns displayed can be configured.

Export As

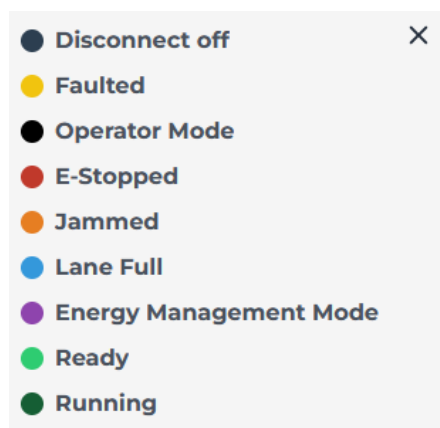
Using this option for the displayed data can be exported in Excel or CSV format.

System Overview



As the name suggest this allows to give an overall view of system. It allows the user to track all conveyors with custom colour code.

Following are default colour code for various states.



This will allow the user to get a glance of system in one go.

Performance

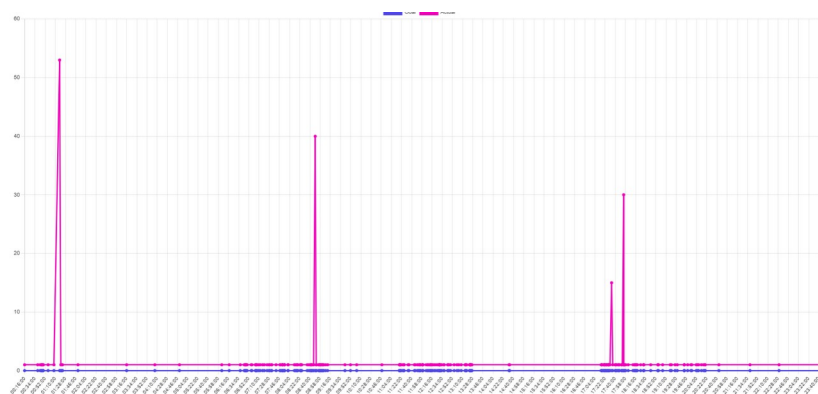
This section has several ways to analyse the system performance and get statistics of the various operation of a Warehouse. By this the overall efficiency of warehouse and throughput can be measured. All the parameters are over specified range of dates hence these can be studied over a range of weeks, months, quarters and years. This will help to define performance of warehouse over a period.

This also provides drill downs so that on a specific instance if the values are not acceptable more details of an event can be searched easily.

Performance - KPI

This page will show the measure of performance in terms of KPIs and will provide a comparison of actual performance vs expected performance.

Here the KPI presented is for Sorter Rate. The graph provides a comparison of how the system has performed over a period and compares the goal vs actual sorter rate. Here the graph shows how the system performance was over the last day.



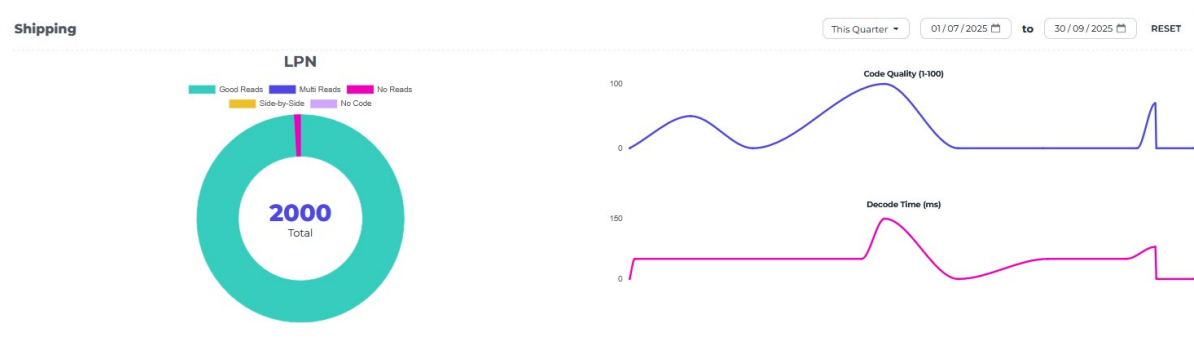
We can also check the values for Throughput, by Merging the values between 1 and 3, Merging rates 4 to 6.

Date Range: KPIs can be displayed at various date ranges. Date range can be provided using convenient values such as Today, Yesterday, This week, Last week, Last month, This Quarter, Last Quarter, This year, Last year or custom. Based on the option selected the date will be set accordingly. E.g. if the option is selected as last year, then dates will be selected as 01/01/2024 to 12/31/2025.

Performance - Scan Statistics

This option displays all the scanning statics at the following locations. Shipping, Pick Zone, Test Sorter, Werfen Scale and Werfen Panda Verify.

To see the shipping data for this quarter, after selecting the parameter as This Quarter following graph gets displayed.

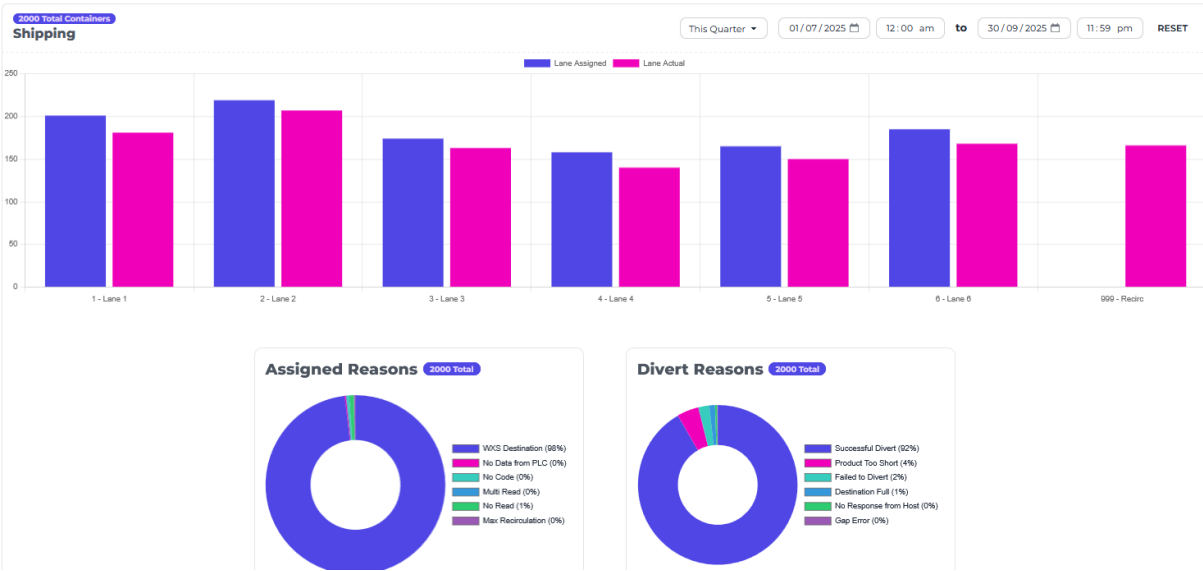


Similarly, data can be viewed for other options as required.

Performance - Sortation Statistics.

Here performance statistics of various sortitions are displayed. This includes following locations, Panda Verify Test, Shipping, Test Sorter, Warfen Sorter.

To view the statistics of shipping for the current quarter, select the This Quarter to select current quarter start and end dates. Then the following graph gets displayed.

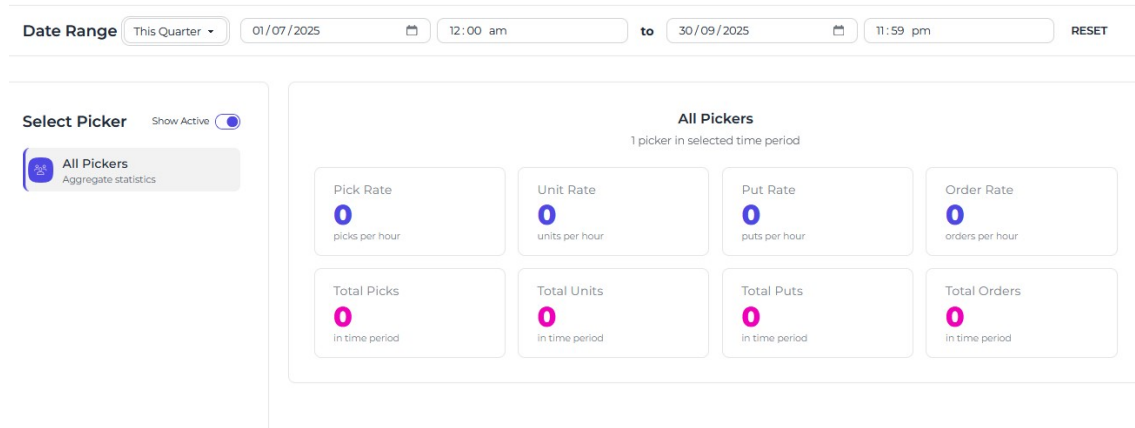


Sorting quantity data is displayed for each lane.

Based on the pie chart one can analyze how the items reach their destinations once those are picked up and whether they are diverted to the correct path. As seen, most deliveries are reaching to destination and hence get diverted to the correct path.

Performance – Pick Statistics

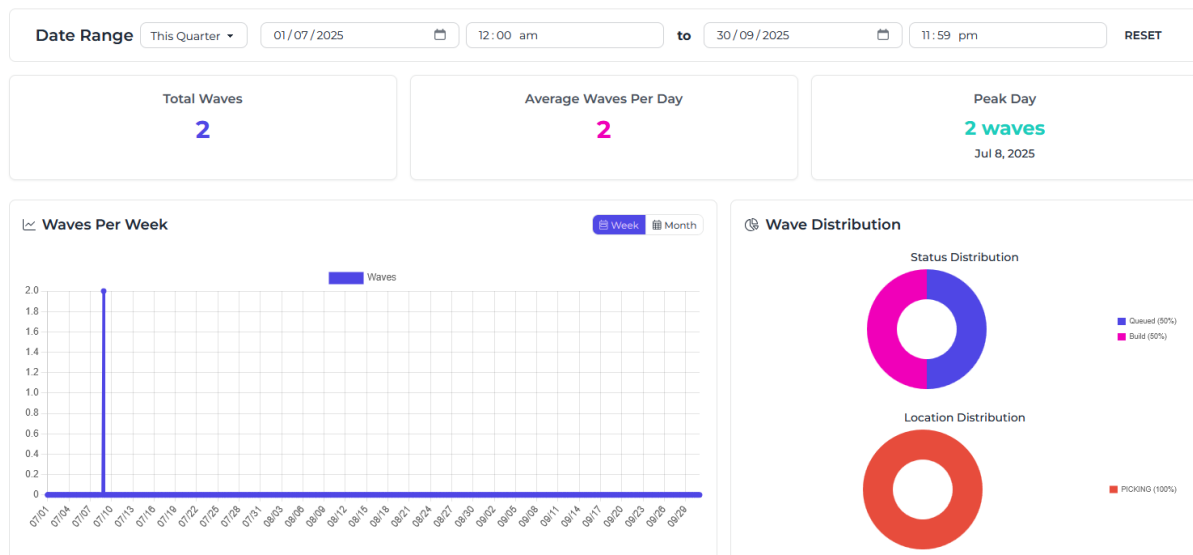
This dashboard shows picking statistics for all pickers. Alternatively select a specific picker to check statistics. For each picker, Pick Rate, Unit Rate, Put Rate and Order Rate are displayed along with total values for picks, units, puts and orders.



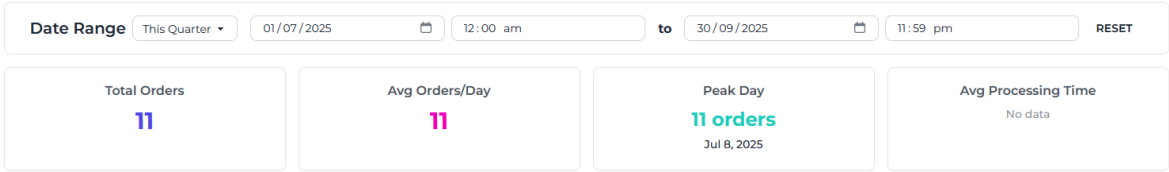
This is the data getting printed for a quarter.

Performance - Wave Statistics

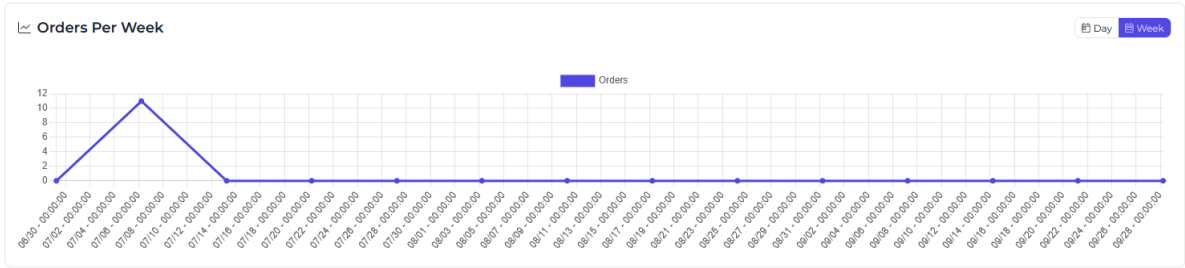
The application uses waves for put and pick activities. Hence in these statistics, for a date range, it shows wave level statistics. This includes no of waves, Waves per day, no of waves on a peak day. This also shows the status distribution and location distribution as a bar chart. Application also shows the number of waves on the graph for a monthly or weekly as a selected parameter.



Performance - Order Statistics

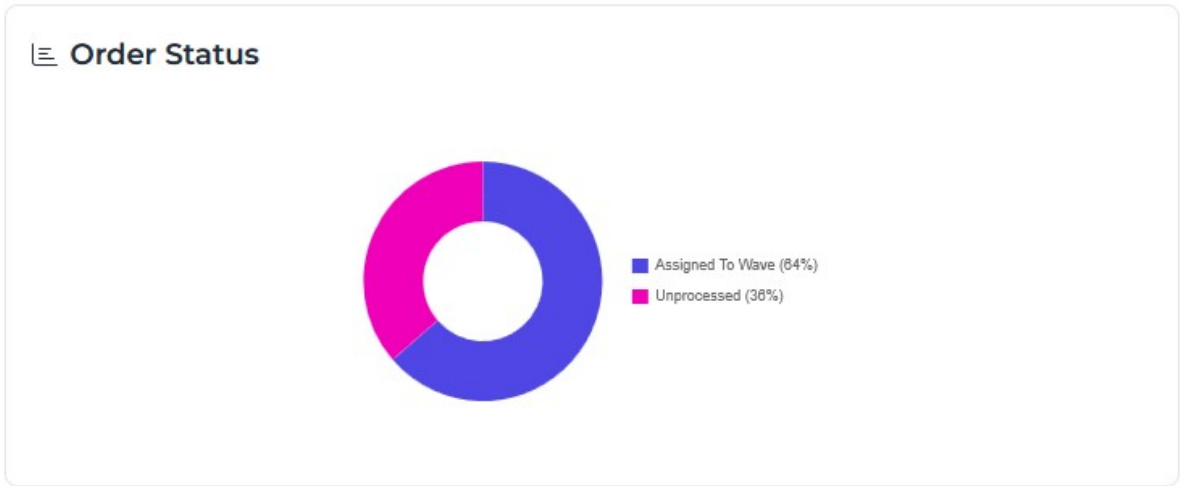


These statistics show total orders received per day, Average Orders Per day, Peak orders on a day, Average processing time per order.

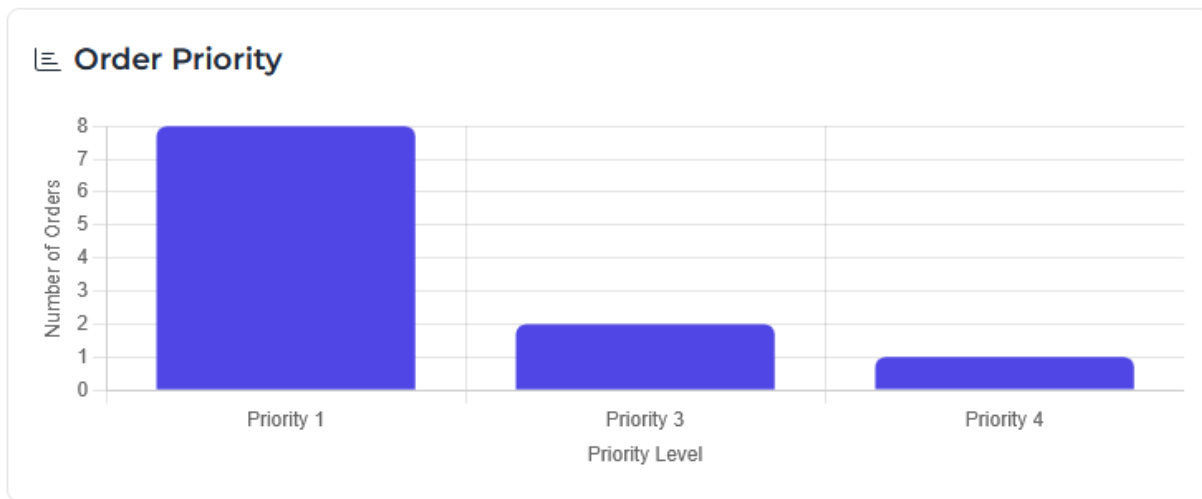


On a line chart it will display no of orders received each day. These can be viewed daily or weekly aggregation.

Then following charts get displayed.



Order Status: A pie chart of no of orders per each order status.



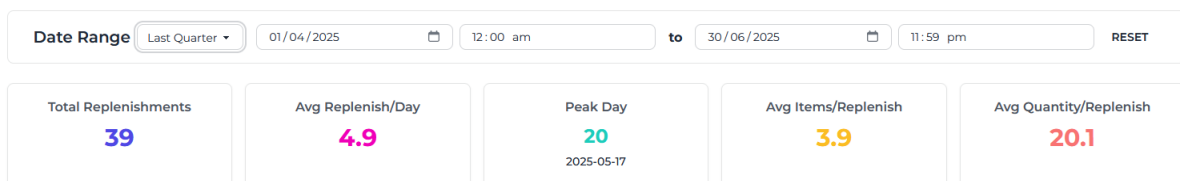
Order Priority: For the selected period, this bar chart shows number of orders received per each priority.

The next chart shows processing time for each order.

<<No data for chart hence screen shot not added. >>

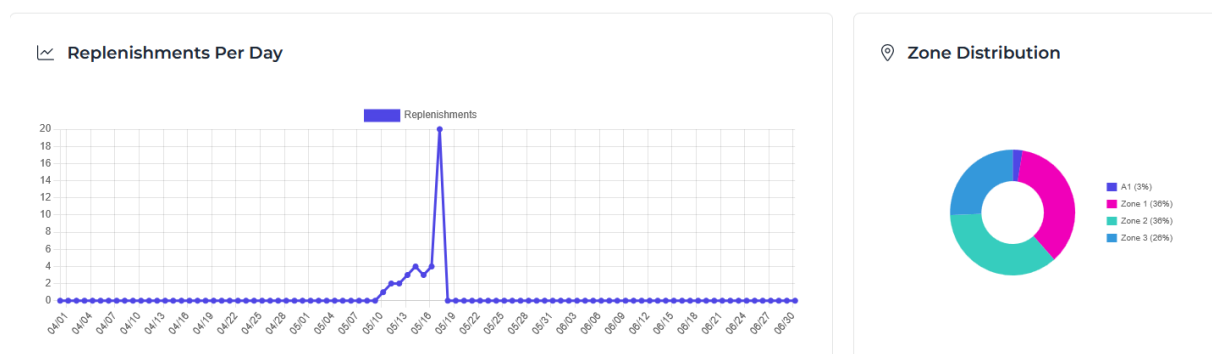
Performance - Replenish Statistics

For the selected date range, this graph shows statistics of replenishment.

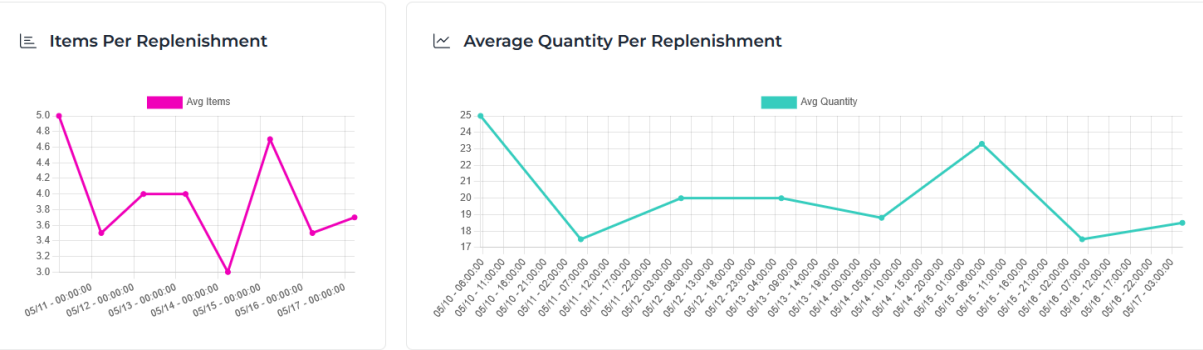


As shown on the graph here, it shows Total replenishments, average no replenishments per day, Maximum replenishments per day, average number of items replenished in a day and average quantity of items per day.

For the date range selected, it shows no of replenishments per day. And the zone wise replenishments.



Then there are 2 graphs displayed, items per replenishment and Average quantity per replenishment.



Alarms and Events

This page gives details of all the alarms and events generated by application based on specified criteria.



Today

15/07/2025

12:00 am

to

15/07/2025

11:59 pm

RESET



Class	Location	Description	Duration	Updated At	Actions
Error	Application	Test Sorter Sorter - No lane returned (No Hospital Lane)	00:00:00	2024-06-20 17:55:09.438	
Error	Application	Teset Sorter Sorter - No Lane returned (All Lanes Disabled)	00:00:00	2024-09-04 19:07:07.855	
Error	Application	Example Sorter - No Lane returned (All Lanes Disabled)	00:00:00	2024-09-03 18:18:10.763	
Error	Application	TestSorter Sorter - No Lane returned (All Lanes Disabled)	00:00:00	2024-09-04 19:03:36.743	
Error	Application	Test Sorter Sorter - No lane returned (No Hospital Lane)	00:00:00	2024-06-20 07:32:30.16	
Comm Failure	WXS	Web Service Loss of Comms	00:15:00	2024-10-13 03:00:14.298	
Error	Application	Test aSorter Sorter - No Lane returned (All Lanes Disabled)	00:00:00	2024-09-04 18:44:16.91	
Error	Application	TestSorter Sorter - No Lane returned (All Lanes Disabled)	00:00:00	2024-09-04 18:44:06.265	
Comm Failure	WXS	Web Service Comms Resumed	00:00:07	2024-03-28 20:34:44.276	
Error	Application	Example Sorter - No Lane returned (All Lanes Disabled)	00:00:00	2024-09-03 18:17:09.756	

Based boundary conditions, application level or REVOLUTION ST. WXS level errors, warnings and common failures are displayed here. Clicking on any condition more details about can also be found.

Error	Application	Example Sorter - No Lane returned (All Lanes Disabled)	00:00:00	2024-09-03 18:17:09.756	
Details					
Class					
Error					
Location					
Application					
Description					
Example Sorter - No Lane returned (All Lanes Disabled)					
Duration					
00:00:00					
Processed					

So, clicking on error will display more details about it.

Today

15/07/2025

12:00 am

to

15/07/2025

11:59 pm

RESET

Using the search window based on typed details all the alarms and events will be searched.

One can see the alarms and events based on various date ranges including today, yesterday, this week, last week, this month, last month, this quarter, last quarter, This calendar year, last calendar year or for a required date range.

Alarms

This menu item shows alarms.



Today

15/07/2025

12:00 am

to

15/07/2025

11:59 pm

RESET



Class	Location	Description	Duration	Updated At	Actions
Error	Application	Test Sorter Sorter - No lane returned (No Hospital Lane)	00:00:00	2024-06-20 17:55:09.438	
Error	Application	Teset Sorter Sorter - No Lane returned (All Lanes Disabled)	00:00:00	2024-09-04 19:07:07.855	
Error	Application	Example Sorter - No Lane returned (All Lanes Disabled)	00:00:00	2024-09-03 18:18:10.763	
Error	Application	TestSorter Sorter - No Lane returned (All Lanes Disabled)	00:00:00	2024-09-04 19:03:36.743	
Error	Application	Test Sorter Sorter - No lane returned (No Hospital Lane)	00:00:00	2024-06-20 07:32:30.16	
Comm Failure	WXS	Web Service Loss of Comms	00:15:00	2024-10-13 03:00:14.298	
Error	Application	Test aSorter Sorter - No Lane returned (All Lanes Disabled)	00:00:00	2024-09-04 18:44:16.91	
Error	Application	TestSorter Sorter - No Lane returned (All Lanes Disabled)	00:00:00	2024-09-04 18:44:06.265	
Comm Failure	WXS	Web Service Comms Resumed	00:00:07	2024-03-28 20:34:44.276	
Error	Application	Example Sorter - No Lane returned (All Lanes Disabled)	00:00:00	2024-09-03 18:17:09.756	

Based boundary conditions, application level or REVOLUTION ST. WXS level errors, warnings and common failures are displayed here. Clicking on any condition more details about can also be found.

Error	Application	Example Sorter - No Lane returned (All Lanes Disabled)	00:00:00	2024-09-03 18:17:09.756	
Details					
Class					
Error					
Location					
Application					
Description					
Example Sorter - No Lane returned (All Lanes Disabled)					
Duration					
00:00:00					
Processed					

So, clicking on errors will display more details about it.

Search...

Today

15/07/2025

12:00 am

to

15/07/2025

11:59 pm

RESET

Using the search window based on typed details all the alarms and events will be searched.

One can see the alarms and events based on various date ranges including today, yesterday, this week, last week, this month, last month, this quarter, last quarter, This calendar year, last calendar year or for a required date range.

Events

This menu item shows all events generated in the system.

Class	Location	Description	Duration	Updated At	Actions
Notification	Warehouse	Not enough available Cubbies for Wave w20250707-005	00:00:00	2025-07-07 21:07:07.579	

As shown here, the event occurred when cubbies were not available.

Click on the event to see more details of the event.

As you can see here the event details are getting displayed.

Notification	Warehouse	Not enough available Cubbies for Wave w20250707-005	00:00:00	2025-07-07 21:07:07.579	
Details					
Class					
Notification					
Location					
Warehouse					
Description					
Not enough available Cubbies for Wave w20250707-005					
Duration					
00:00:00					
Processed					
false					
Timestamp					
2025-07-15 12:48:44.0					
Updated At					
2025-07-07 21:07:07.579					
Internal Row Id					
0					

Alarm Hit List

This list shows the alarms (not events). So, it is same as earlier menu where it showed Alarms and events. This shows only alarms and their occurrence in the specified period.

This Quarter ▾	01/07/2025 📅	to	30/09/2025 📅	RESET
Comm Failure > WXS: Web Service Loss of Comms				00:15:00 1
Comm Failure > WXS: Web Service Comms Resumed				00:15:00 1

The above diagram shows that there are 2 alarms, and they both have occurred once in the selected date range which is this quarter.

This page will list all alarms and their occurrences in the given period.

Events Hit List

This list shows the events (not alarms). So, it is same as earlier menu where it showed Alarms and events. This shows only events and their occurrence in the specified period.

This Quarter ▾	01/07/2025 📅	to	30/09/2025 📅	RESET
Notification > Warehouse: Not enough available Cubbies for Wave w20250707-005				00:00:00 1

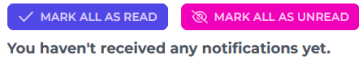
The above diagram shows that there is 1 event, and it occurred once in the selected date range which is this quarter.

This page will list all events and their occurrences in the given period.

Notifications

My Notifications

This page shows all the notifications that are received for the current user.



The message here confirms that there are no notifications generated for this user.

To view notifications to all users, navigate to the Notification Log.

Reports

This menu allows user to create own report based on templates.

One Time Report

These are ready made templates and cover all part of application such as Alarm, Hit list, Event Hit List, Scale Statistics, Dimension Statistics, Pick Statistics, Order Statistics, Replenish Statistics, waves, Pick /put logs, Order Tracking logs, wave logs, sortation logs and Unsuccessful Diverts.

Data from all these templates can be selected predefined Date range.

User can define whether the report is to be downloaded or should be sent over email. Here one more email existing users can be selected to send email.

report	July 1st, 2025 - October 1st, 2025	One-Time	VIEW REPORT	
Wave Log	January 1st, 2025 - January 1st, 2026	One-Time	VIEW REPORT	

The definition of the report thus defined gets saved and can be downloaded any time. Please note that this will not execute the report again, it will simply download the generated report.

One Time Report

These are ready made templates and cover all part of application such as Alarm, Hit list, Event Hit List, Scale Statistics, Dimension Statistics, Pick Statistics, Order Statistics, Replenish Statistics, waves, Pick /put logs, Order Tracking logs, wave logs, sortation logs and Unsuccessful Diverts.

Data from all these templates can be selected predefined Date range.

User can define whether the report is to be downloaded or should be sent over email. Here one more email existing users can be selected to send email.

Also define the frequency when the report will be sent e.g. weekly, monthly, quarterly or yearly. Hence no date range is not required to be selected for this report.

The generated reports can also be sent to email id by adding it.

Logs

Container Tracking Logs

This report shows all the containers being loaded for a given date range

DB Truncation Logs

This report shows all the database logs for a given date range

Host Logs

These are server logs that get generated because of some error in operation or any process-to-process communication.

Source	Type	Message	Timestamp
WMS to WXS	Create Many	ID: c75139a8-21d1-4e16-8b78-e9fe98549e3c Error [{"lpn":"test6","width_actual":1}] Invalid "prisma.containers.create()" invocation: { data: { lpn: 'test6', width_actual: 1, + lan	2025-07-22 23:58:23.0
WMS to WXS	Create Many	ID: d0c8a317-95bb-4ed7-a48e-33157fe15361 Success [{"lpn":"test16","lane_assigned":1,"lane_actual":1}] undefined	2025-07-22 23:41:36.0
WMS to WXS	Create Many	ID: 99a4851a-9026-4f9c-a419-c90c6287e510 Error [{"lpn":"test7","width":1}] Invalid "prisma.containers.create()" invocation: { data: { lpn: 'test7', width: 1, ~~~~~ + lane_assig	2025-07-22 23:12:19.0
WMS to WXS	Upset Many	Partial Total processed: 2 Reset count: 0 Success count: 1	2025-07-22 23:10:34.0
WMS to WXS	Upset Many	Success Total processed: 1 Reset count: 1	2025-07-22 22:53:56.0
WMS to WXS	Create Many	ID: 534d388e-7db7-4480-8fc7-a0e278bed03f Error [{"lpn":"test6","lane_assigned":"test"}] Invalid "prisma.containers.create()" invocation: { data: { lpn: 'test6', lane_assigne	2025-07-22 22:44:58.0
WMS to WXS	Upset Many	Success Total processed: 1 Reset count: 1	2025-07-22 22:42:05.0
WMS to WXS	Upset Many	Success Total processed: 2 Reset count: 0 Success count: 2 Request: [{"id":"O390905","type":"Split","priority":1,"items":[{"sku":"PROD-003","qty":12},{"sku":"PROD-006","qty	2025-07-22 22:38:56.0

As can be seen from the screenshot, various events such as partial process completion, Success or any error generated.

Clicking on the event displays more details about the logged item

WMS to WXS	Create Many	ID: 4d61544a-0777-491c-b8d2-d243aaaf9247 Error [{"lpn":"test8","assigned_width":"XYZ"}] Invalid "prisma.containers.create()" invocation: { data: { lpn: 'test8', assigned_w	2025-07-22 21:10:23.0
WMS to WXS	Create	[{"lpn":"test1","lane_assigned":1,"lane_actual":1}] Invalid "prisma.containers.create()" invocation: Unique constraint failed on the constraint: "PRIMARY"	2025-07-22 20:34:15.0
WMS to WXS	Upset Many	Success Total processed: 1 Reset count: 0 Success count: 1 Request: [{"id":"O390802","type":"Split","priority":1,"items":[{"sku":"PROD-003","qty":12},{"sku":"PROD-006","qty	2025-07-22 20:09:50.0
WMS to WXS	Upset Many	Success Total processed: 5 Reset count: 0 Success count: 5 Request: [{"id":"O738752","type":"Full","priority":2,"items":[{"sku":"PROD-013","qty":31},{"sku":"PROD-001","qty":4	2025-07-22 20:07:27.0

Details

Source

WMS to WXS

Type

Create Many

Message

ID: 4d61544a-0777-491c-b8d2-d243aaaf9247 | Error | [{"lpn":"test8","assigned_width":"XYZ"}] | Invalid "prisma.containers.create()" invocation: { data: { lpn: 'test8', assigned_width: 'XYZ', ~~~~~ + lane_assigned: Int, + lane_actual: Int, ? status?: String | null, ? carrier?: String | null, ? service?: String | null, ? tracking?: String | null, ? weight_assigned?: Decimal | null, ? weight_actual?: Decimal | null, ? length_assigned?: Decimal | null, ? length_actual?: Decimal | null, ? width_assigned?: Decimal | null, ? width_actual?: Decimal | null, ? height_assigned?: Decimal | null, ? height_actual?: Decimal | null, ? assigned_reason?: String | null, ? ship_confirm?: String | null, ? divert_reason?: String | null, ? recirc_counter?: Int, ? created_at?: DateTime | null, ? updated_at?: DateTime | null } } | Unknown arg "assigned_width" in data.assigned_width for type containersCreateinput. Did you mean "assigned_reason"? Argument lane_assigned for data.lane_assigned is missing. Argument lane_actual for data.lane_actual is missing. Note: Lines with + are required, lines with ? are optional.

Timestamp

2025-07-22 21:10:23.0

Internal Row Id

9

Application also allows to configure the columns to be displayed. User can download the report in excel or csv format.

Notification Logs

These are notifications generated by system. These can be displayed over required date range.

Order Tracking Logs

Order a date range, this displays all the orders that are processed.

Source	Type	Message	Timestamp
WXS	Assignment	Order ID = O308063	2025-07-08 22:26:25.426
WXS	Assignment	Order ID = O351716	2025-07-08 22:26:24.871
WXS	Assignment	Order ID = O204957	2025-07-08 22:26:03.283
WXS	Assignment	Order ID = O158048	2025-07-08 22:26:02.699
WXS	Assignment	Order ID = O519486	2025-07-08 22:24:10.742
WXS	Assignment	Order ID = O142449	2025-07-08 22:24:10.162
API	Upset Many Orders	Success Request ID	2025-07-08 22:20:56.620
WXS	Assignment	Order ID = O308063	2025-07-08 22:13:38.224
WXS	Assignment	Order ID = O204957	2025-07-08 22:13:37.759

Similarly for selected order

WXS	Assignment	Order ID = O308063	2025-07-08 22:02:11.859
Details			
Source WXS			
Type Assignment			
Message Order ID = O308063 Assigned To Wave w20250708-001			
Timestamp 2025-07-08 22:02:11.859			
Internal Row Id 14			

This shows more details about the order.

Pick/Put Logs

For a given date range, this shows all the picking and packing logs.

Replenishment Logs

For a given date range, this shows all the replenish logs.

Source	Type	Message	Timestamp
WAMAS	REPLEN	ID:SD-TEST01 From	2025-05-02 18:29:15.986

Details

Source

WAMAS

Message

ID:SD-TEST01 | From:A1 | To:18888888101-001-001 | Item:item123 | Qty:4 | State:FINISHED | Time:2025-01-24 12:02:21 | Operator:touch | Batch:Unknown | Priority:0 | Zone:ZONEA

Timestamp

2025-05-02 18:29:15.986

Type

REPLEN

Internal Row Id

0

As shown in the image above, replenish date and details are displayed here.

Scan Logs

The scans are done at various points. These are as follows:

Shipping, PrickZone, Test Sorter, Werfen Scale. User will need to select one of the options.

Please choose a scanner to continue

SHIPPING

PICKZONE

TEST SORTER

WERFEN_SCALE

WERFEN_PANDA_VERIFY

Here on selecting shipping following scanning at shipping are displayed.

This displayed the report as follows

location	LPN	cod...	dec...	created_at
Shipping	BJQ2221	0	0	2025-07-23 23:56:06.0
Shipping	BGA3704	0	0	2025-07-23 23:53:45.0
Shipping	BFB6987	0	0	2025-07-23 23:49:04.0
Shipping	BYC4653	0	0	2025-07-23 23:45:10.0
Shipping	BXD1176	0	0	2025-07-23 23:32:18.0
Shipping	BYV4483	0	0	2025-07-23 23:31:45.0

Clicking on one of the items of shipping shows it's details.

Details
Location Shipping Barcode1 BYV4471 Barcode2 null Barcode3 null Barcode4 null Barcode5 null Code Quality (1-100) 0 Decode Time (Ms) 0 Timestamp 2025-07-23 23:30:32.0 Updated At

User Logs

As the name suggests this is a log of all users who have logged into the system in the given date range.

User	Description	Operation	Page	Changed Properties	Timestamp	Actions
Super User	Logged in	UPDATE	https://demo.revolutionstreetwxs.io/login?next=/dashboard	avatar_updated_at, last_login_at	2025-07-22 16:14:35.161	
Super User	Logged in	UPDATE	https://demo.revolutionstreetwxs.io/login?next=/dashboard	avatar_updated_at, last_login_at	2025-07-22 15:39:03.807	
Super User	Logged in	UPDATE	https://demo.revolutionstreetwxs.io/login?next=/dashboard	avatar_updated_at, last_login_at	2025-07-03 20:13:05.142	

Clicking on one of the user records, shows following details.

Details
User Voodoo 328e78dc-6618-4c84-a645-a3e96a05de86 Description Logged in Operation UPDATE Page

Wave Logs

This shows the status of all waves in the given date range.

Source		Type		Message		Timestamp
WXS		Edited		Wave ID = w20250708-002 Wave Order O308063 Swapped With Order O351716		2025-07-08 22:26:25.802
WXS		Edited		Wave ID = w20250708-002 Wave Order O204957 Swapped With Order O158048		2025-07-08 22:26:03.771
WXS		Edited		Wave ID = w20250708-001 Wave Order O519486 Swapped With Order O142449		2025-07-08 22:24:11.154
WXS		Created		Wave ID = w20250708-002 Wave Orders = [{"O204957": 3, 1}, {"O308063": 4, 1}] Status = Build		2025-07-08 22:13:38.642
WXS		Edited		Wave ID = w20250708-001 Wave Order O308063 Swapped With Order O522226		2025-07-08 22:09:08.62

The screen shot shows various waves and their created status. Clicking on any of the rows, shows the details of that wave.

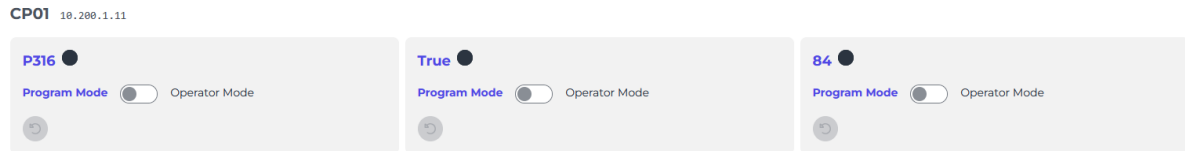
WXS	Activated	Wave ID = w20250707-004 Wave Sent to VLM	2025-07-07 20:23:19.445
Details Source WXS Type Activated Message Wave ID = w20250707-002 Wave Sent to VLM Timestamp 2025-07-07 20:19:24.204 Updated At 2025-07-07 20:19:24.204 Internal Row Id 14			

The screen shot shows the details of a wave in active state.

Maintenance

Manual Control

This shows the status of all the motors in all PLCs .



For sample the above screenshot shows 3 motors for PLC CP01.

As can be seen here, for each motor, this shows status of the motor, type of motor (FVNR, FVR or VFD). Then it shows whether it is programming mode or operating mode and the reset switch.

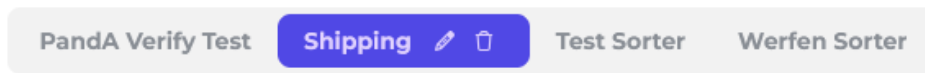
Since a PLC includes several motors, you can search for a specific motor using the window above.

Network and I/O

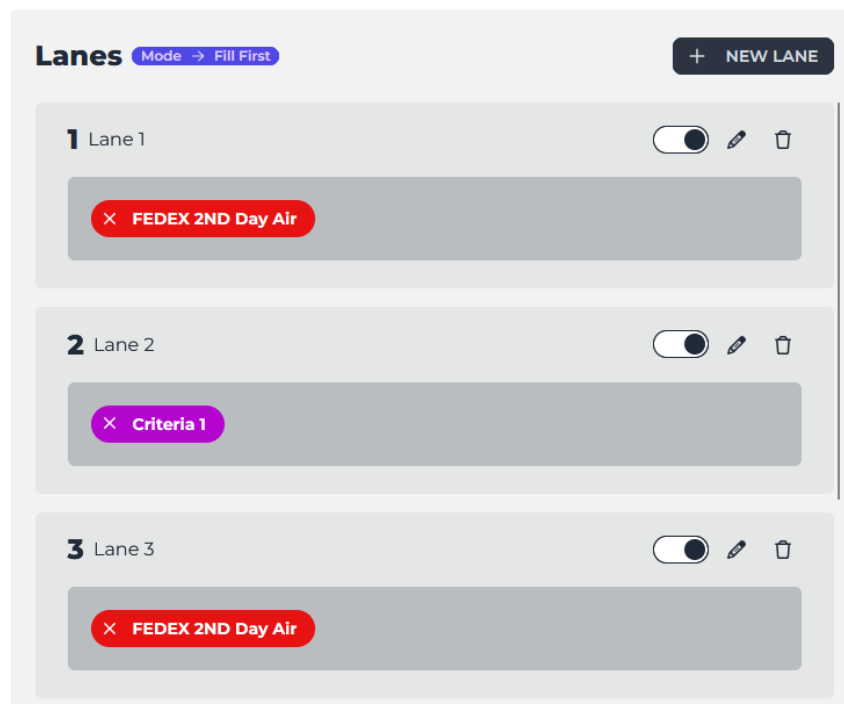
<<Need an example to add more details >>

Sortation

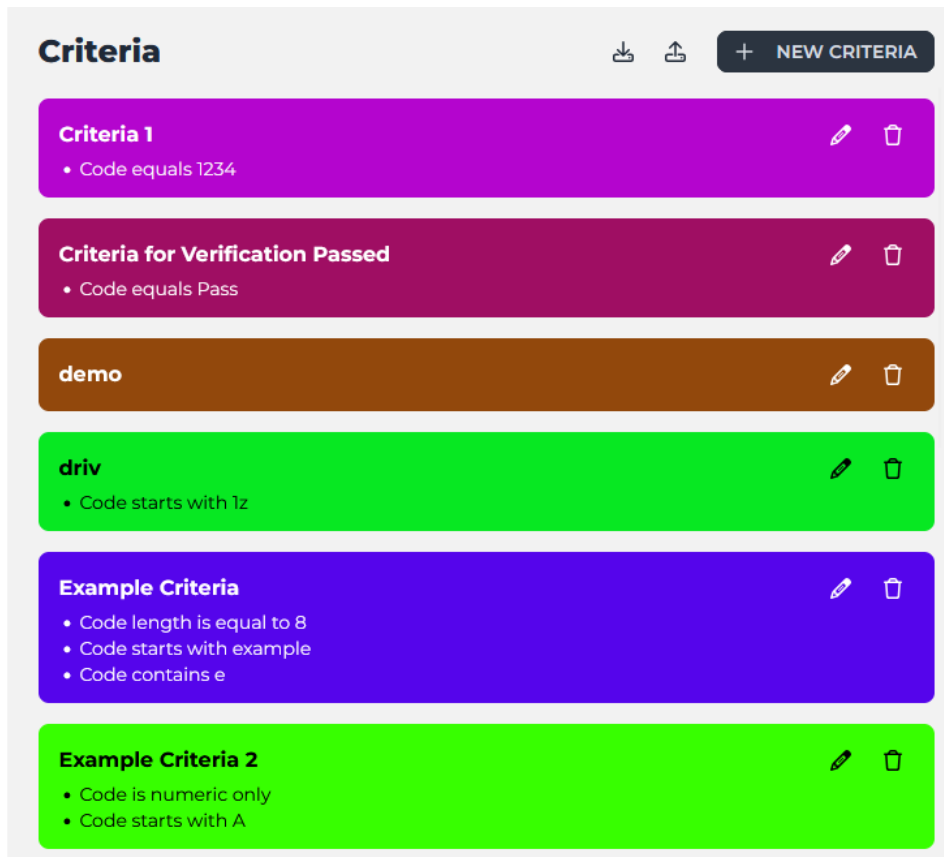
This page allows to set up sortation routes for packages.



On the top it shows all the sorters. Here the selected sorter is Shipping.



This shows all the lanes defined for sorter Shipping.



The right-hand side pane shows various criteria defined on the system. One can be added if required too. As required criteria can be dragged to the lane to add as a criteria.



As you can see here, I have added the example criteria to lane 3.

New Lane

On this page if required new lanes can be added using **+ NEW LANE** button.

New Lane

Lane Number: 7

Hospital/Jackpot Lane: ☐

Location / Lane Name: Lane for FMCG

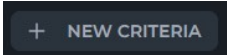
PLC: CP01 - 10.200.1.11

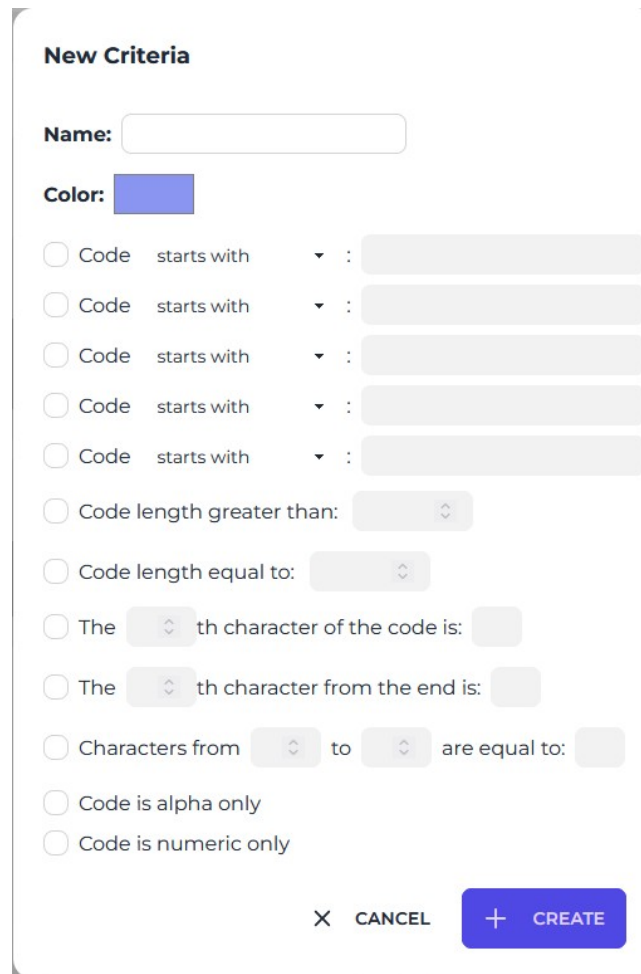
PLC Lane Availability:

- bitAlwaysTrue
- strRunning
- strReady
- strOB600
- ASuperLongTagNameThatHasALotOfCharactersToCauseOver
- strConveyorEventName
- strTL1120

Specify the lane number, Lane name more like description, PLC from which it is going to get connected with, PLC lane no.

New Criteria

To create a new criterion, click on  button.



The 'New Criteria' dialog box contains the following elements:

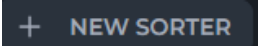
- Name:** A text input field.
- Color:** A color selection box, currently showing blue.
- Criteria List:** A series of radio buttons followed by selection options:
 - Five 'Code starts with' criteria, each with a dropdown menu and a text input field.
 - 'Code length greater than:' with a numeric input field and up/down arrows.
 - 'Code length equal to:' with a numeric input field and up/down arrows.
 - 'The [] th character of the code is:' with a numeric input field and up/down arrows.
 - 'The [] th character from the end is:' with a numeric input field and up/down arrows.
 - 'Characters from [] to [] are equal to:' with two numeric input fields and up/down arrows, followed by a text input field.
 - 'Code is alpha only'.
 - 'Code is numeric only'.
- Buttons:** 'X CANCEL' and '+ CREATE' at the bottom right.

Based on the code, various criteria for selection can be provided. This includes the code starting with, character any specific position, length of the code, The code can be alphabetic or number.

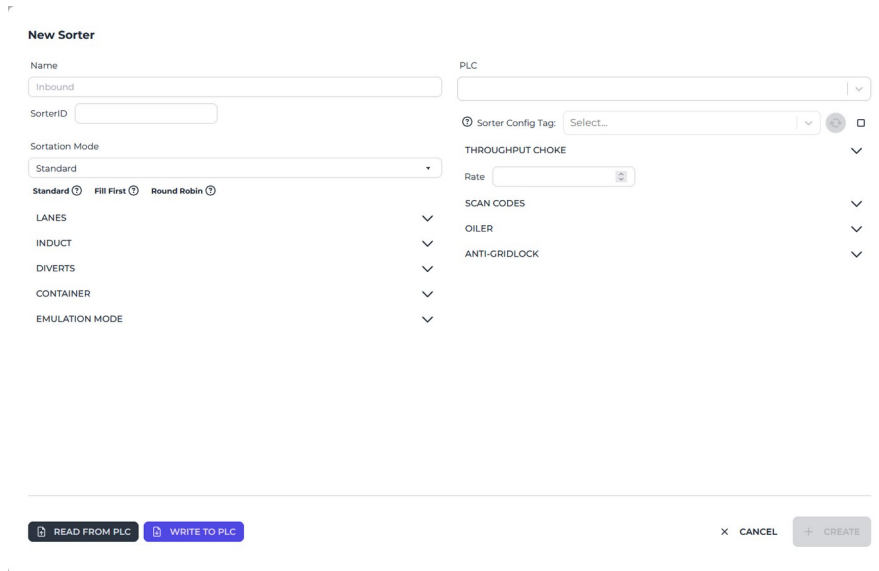
Once such criteria are created those can be added to lanes as described earlier.

New Sorter

Sorter will be connected to PLC and each sorter has its own set of lanes and a sortation mode.

To create a sorter, click on new sorter .

Then the following screen shows up.

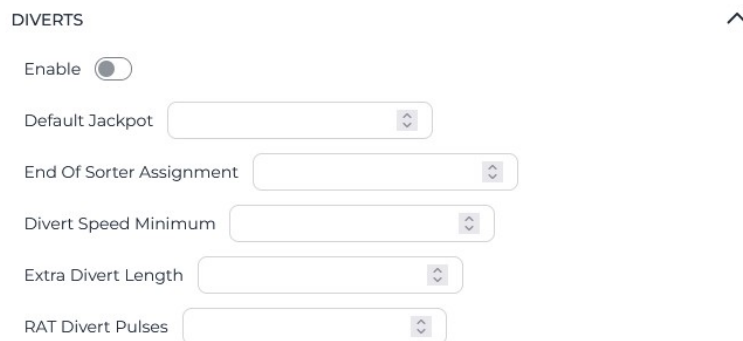


The 'New Sorter' configuration screen is divided into two main columns. The left column contains fields for 'Name' (with 'Inbound' entered), 'SorterID', 'Sortation Mode' (with 'Standard' selected from a dropdown), and a list of expandable sections: LANES, INDUCT, DIVERTS, CONTAINER, and EMULATION MODE. The right column contains a 'PLC' dropdown, a 'Sorter Config Tag' dropdown (with 'Select...' entered), a 'THROUGHPUT CHOKE' dropdown, a 'Rate' input field, and three expandable sections: SCAN CODES, OILER, and ANTI-GRIDLOCK. At the bottom, there are buttons for 'READ FROM PLC', 'WRITE TO PLC', 'CANCEL', and 'CREATE'.

Here you will need to specify Name, Select PLC, Sorter Id, Sorter config tag, Sortation mode such as Standard, Fill First, Round Robin.

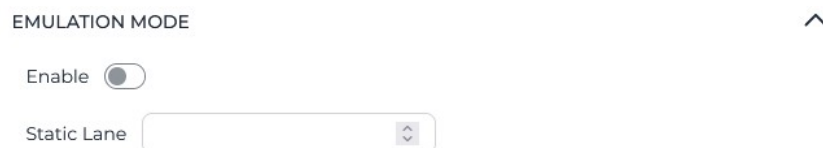
Then the following configuration will be done, this will include, Lanes, Induct.

For Divert there are the following options.



The 'DIVERTS' configuration screen features a toggle switch for 'Enable' (currently off). Below it are six input fields with up/down arrows: 'Default Jackpot', 'End Of Sorter Assignment', 'Divert Speed Minimum', 'Extra Divert Length', and 'RAT Divert Pulses'. A collapse icon is visible in the top right corner.

For Emulation there are following options.



The 'EMULATION MODE' configuration screen features a toggle switch for 'Enable' (currently off) and a single input field with up/down arrows for 'Static Lane'. A collapse icon is visible in the top right corner.

For the container there are the following options.

CONTAINER ^

Length Enable ☒

Length Min.

Length Max.

Length Max. Limit

Weight Enable ☒

Weight Min.

Weight Max.

For the Scan Codes there are the following options.

SCAN CODES ^

No Read Character

Multi Read Character

No Code Character

Side by Side Character

No Read String

Multi Read String

No Code String

Side by Side String

For Oiler here are the following options.

OILER ^

Enable ☒

Mode ☒

MANUAL OIL

Cycle Time

For ANTI-GridLock specify following configurations

ANTI-GRIDLOCK

Enable ☒

Warning Setpoint

Prevention Setpoint

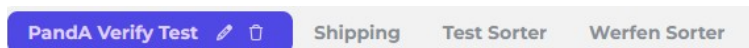
Mode Setpoint

Warning Induct Reduction

Prevention Induct Reduction

Recirc Traversing Time (m)

Once a new sorter is created, it will be displayed here.



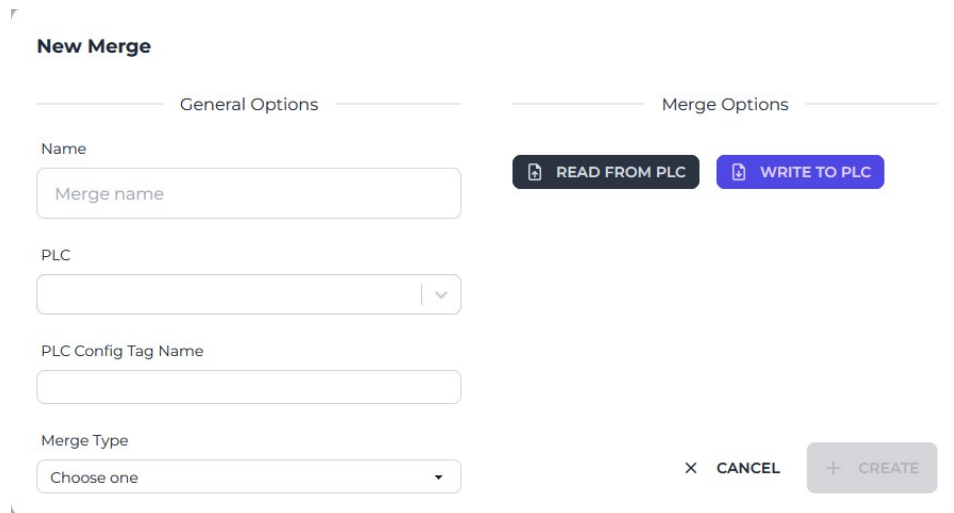
Select one of the sorters to show associated Lanes and criteria.

Merge

Merge is used to merge two or more lanes.

Click on the button  to create a merge.

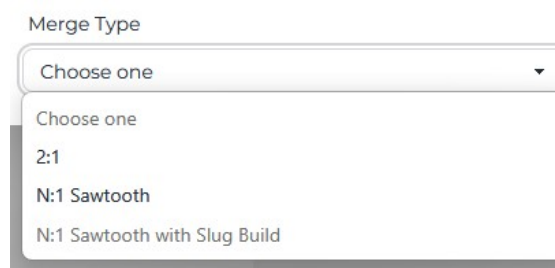
Specify following parameters to create a new merge.



The 'New Merge' dialog box is divided into two tabs: 'General Options' and 'Merge Options'. Under 'General Options', there are four fields: 'Name' (text input with placeholder 'Merge name'), 'PLC' (dropdown menu), 'PLC Config Tag Name' (text input), and 'Merge Type' (dropdown menu with 'Choose one' selected). Under 'Merge Options', there are two buttons: 'READ FROM PLC' (dark blue) and 'WRITE TO PLC' (purple). At the bottom right, there are three buttons: 'X CANCEL' (grey), 'X CANCEL' (dark grey), and '+ CREATE' (grey).

Provide the name of Merge, PLC, Plc tag name to read, type of merge, 2:1 or N:1 Sawtooth.

If the merge option is selected as N:1 Sawtooth then following fields need to be selected.



The 'Merge Type' dropdown menu is open, showing the following options: 'Choose one', '2:1', 'N:1 Sawtooth', and 'N:1 Sawtooth with Slug Build'.

Once these required configurations are defined, click on the creation button to create the merge.

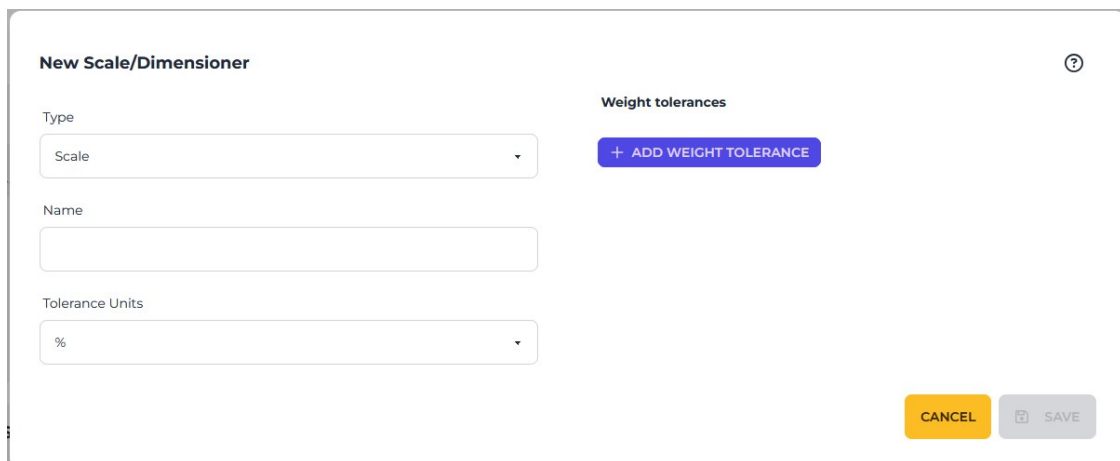
Weight and Dimension

On this page you can set the tolerances for scales and dimensioners. These are later assigned to actual weighing units and dimension units to define their respective tolerances.

To add a new scale or dimensioner click on [+ ADD NEW SCALE / DIMENSIONER](#)

Adding a Scale

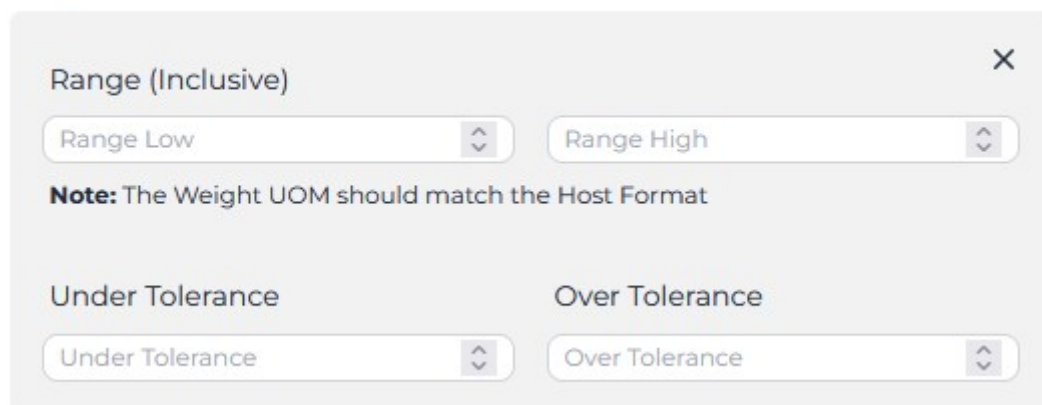
To add a scale, please provide values for name and tolerance units. The tolerance unit can be %, oz, lbs or kg.

A form titled "New Scale/Dimensioner" with a help icon in the top right. It contains three input fields: "Type" with a dropdown menu showing "Scale", "Name" with a text box, and "Tolerance Units" with a dropdown menu showing "%". To the right of these fields is a section titled "Weight tolerances" with a button "+ ADD WEIGHT TOLERANCE". At the bottom right are two buttons: "CANCEL" (yellow) and "SAVE" (grey with a save icon).

More details in terms of weight tolerance can be provided.

If it is to be provided, then click on [+ ADD WEIGHT TOLERANCE](#)

Weight tolerances

A modal window titled "Weight tolerances" with a close button (X) in the top right. It contains two input fields: "Range Low" and "Range High", both with up/down arrows. Below them is a note: "Note: The Weight UOM should match the Host Format". At the bottom, there are two sections: "Under Tolerance" and "Over Tolerance", each with an input field and up/down arrows.

Here you can provide the range of scale including the low and high value defined in range.

Or for tolerance, once needs to specify the under and over tolerance.

More than one such levels of tolerances can be specified.

Adding a Dimension

To add a new scale or dimensioner click on [+ ADD NEW SCALE / DIMENSIONER](#)

Then select the type as Dimensioner.

Provide the name and tolerance unit. The tolerance unit can be %, oz, lbs or kg.

More details in terms of weight tolerance can be provided. Click on [+ ADD WEIGHT TOLERANCE](#) to add one.

New Scale/Dimensioner ⓘ

Type
Dimensioner

Name

Tolerance Units
%

DIM tolerances X

Range (Inclusive)
Range Low Range High

Note: The Dimension UOM should match the Host Format

Under Tolerance Over Tolerance

+ ADD DIM TOLERANCE

CANCEL SAVE

Here you can provide the range of scale including the low and high value defined in range.

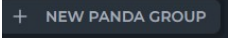
Or for tolerance, once needs to specify the under and over tolerance.

More than one such level of tolerances can be specified.

Print & Apply

On this page, printers used to print bar codes can be configured. Here groups of printers are created that will be used to print from PLC data.

New PANDA GROUP

Let us first see how a printer group is created. Click on  to create a new group.

Provide the name and mode as Duty/Standby or Round robin.

Create New Panda Group

Name

Mode

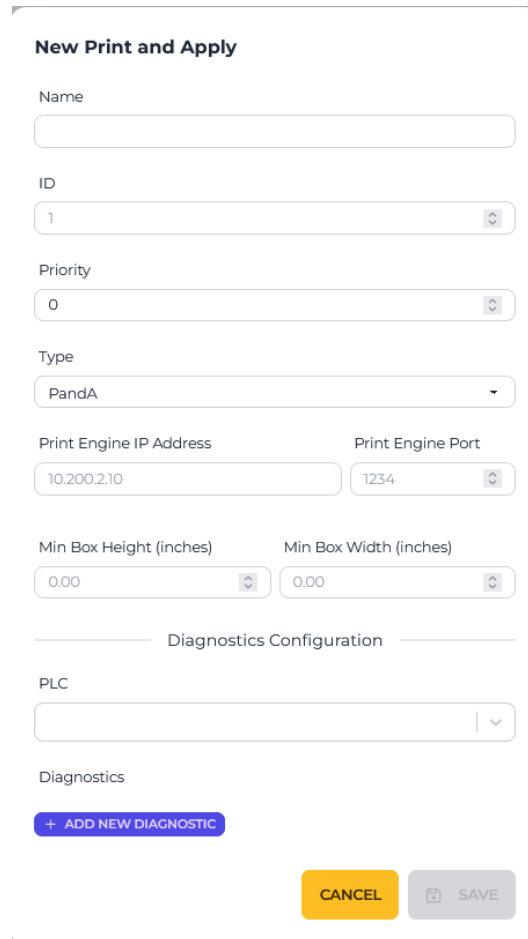
Duty / Standby

CANCEL

 SAVE

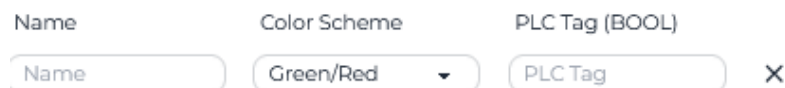
Create New PANDA

The new PANDA is new printer set up. For a new printer set up following fields need to be provided. Name, ID, Priority, Type such as PANDA or Manual/Desktop, Printer address, Print Engine Port, Min Box Height, Min Box Width, PLC and Diagnostics.



The screenshot shows a web-based configuration form titled "New Print and Apply". It contains several input fields and dropdown menus. The fields are: Name (text input), ID (numeric input with a dropdown arrow), Priority (numeric input with a dropdown arrow), Type (dropdown menu showing "PandA"), Print Engine IP Address (text input showing "10.200.2.10"), Print Engine Port (numeric input with a dropdown arrow showing "1234"), Min Box Height (inches) (numeric input with a dropdown arrow showing "0.00"), Min Box Width (inches) (numeric input with a dropdown arrow showing "0.00"), PLC (dropdown menu), and Diagnostics (a button labeled "+ ADD NEW DIAGNOSTIC"). At the bottom right, there are two buttons: "CANCEL" (yellow) and "SAVE" (grey).

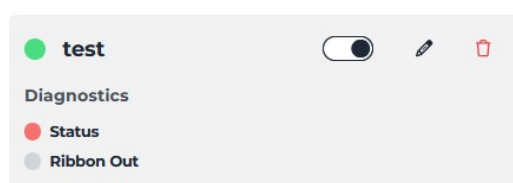
To add new diagnostics, click on **+ ADD NEW DIAGNOSTIC**. Adding this following fields are added.



The screenshot shows a row of three configuration fields for a diagnostic. The first field is "Name" with a text input containing "Name". The second field is "Color Scheme" with a dropdown menu showing "Green/Red". The third field is "PLC Tag (BOOL)" with a text input containing "PLC Tag". To the right of these fields is a close button represented by an "X" icon.

By the above configuration, based on the BitStatus tag of PLC, status will be defined. It will be Green when Printer is working otherwise it will be red.

Thus, once configured the printer will be displayed as follows.



The screenshot shows a printer status card. At the top, there is a green circle icon followed by the text "test". To the right of this is a toggle switch and two small icons (a pencil and a trash can). Below this, the word "Diagnostics" is displayed. Under "Diagnostics", there are two items: "Status" with a red circle icon and "Ribbon Out" with a grey circle icon.

Admin

User Admin

In this section Users and Roles are created.

Users

To create new user following fields will be provided.

This section allows to maintain users of various roles. To view users of specific roll select the corresponding Role from drop down.

E.g. for Admin role there is one user and user details are displayed here.



+

 REGISTER NEW USER

Administrator

Show Archived Users

Click on  to get more information about the selected user.

Click on  to delete the selected user.

Register New User

Username*

Email*

Require email verification

Want to use the same email address for multiple accounts? [Learn More](#)

First name

Last name

Phone Number

Use this number for SMS 2FA

Role*

Note: For security reasons only roles that are lower privileged than your role are visible here.

Abcabca

Create a [new role](#)

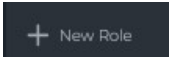
Temporary password*

REGISTER

To register a new user, provide username, Email id, first name, Last Name, Phone number, allow for two phased authentications. Then select role for user such as Administrator or Operator. Then define a temporary password that will be changed by user on logging in.

Role Management

Use this option to create a new role. For a role, number of privileges can be defined.

To create a new role, click on . Specify the name for a role.

Then select all the privileges that are to be defined for a role. One can select few of the following privileges.



For each privilege, there are 2 options as Read and Write. Hence for each privilege such as Dashboard or Container Data specify whether read and / or write access should be available or not. Once such privilege is defined, it can be specified for a user.

System Admin

Auto- Link

This allows us to set up automatic links based on a specified criterion. This will automatically convert text found in data-tables matching the criteria into hyperlinks. This is typically used to link container tracking numbers to their respective tracking websites.

E.g. Linking UPS URL to USPs tracking numbers.

Let us assume that UPS has tracking numbers with USP 2025 for all tracking numbers in 2025. Then corresponding link can be created so that when the number in specified format is found it will be linked to UPS URL.

Create an Auto-Link



Details

Name

UPS

Code Sample

UPS 2025BC123dsd2

Description

UPS Link

URL

<https://tools.usps.com/go/TrackConfirmAction?tRef=fullpage&tLc=3&text28777=i>

[Click here to see some URL examples.](#)

Rules

Note: *All* of the checked criteria below must be met to turn a code into a link. If *any* of the checked criteria below is not met the code will be ignored by this Auto Link.

Regular Expression: (?=.*^UPS 2025)(^\w{10,}\$)

☒ Code starts with : UPS 2025

☐ Code starts with :

☐ Code starts with :

☐ Code starts with :

☐ Code starts with :

☒ Code length greater than: 10

☐ Code length equal to:

☐ The th character of the code is:

☐ The th character from the end is:

☐ Characters from to are equal to:

☐ Code is alpha only

☐ Code is numeric only

X CANCEL

+ CREATE

As shown in the demo here, this link UPS URL and code, it starts with USP 2025 and has more than 10 characters.

Once the link is created successfully then it will show as below.

UPS



Code Sample: UPS 2025BC123dsd2

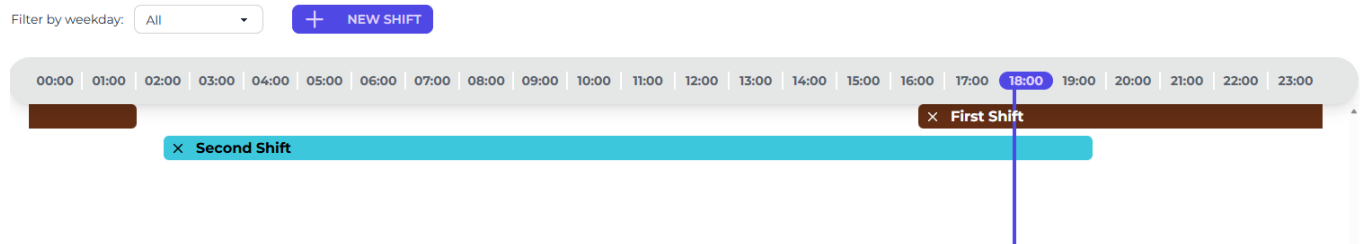
URL: <https://tools.usps.com/go/TrackConfirmAction?tRef=fullpage&tLc=3&text287...>

Description: UPS Link

Regex: (?=.*^UPS 2025)(^\w{10,}\$)

Shifts

This page allows to define Shifts timings.



As shown in the screen here, on a time scale it shows the shift timings.

Click on “X” to delete a shift.



(dark patch) indicates a break in the shift.

Select either a view for whole day or for all days using the “all” option.

To create a shift, click on **+ NEW SHIFT** button.

New Shift ⓘ

Name
Third shift

Start Time 07:00 ⌚ End Time 19:00 ⌚

Enabled ☒ Color

Breaks

Break start time 13:00 ⌚ Break end time 13:20 ⌚ ⊖

+ ADD BREAK

Active weekdays

Mon Tue Wed Thur Fri Sat Sun

CANCEL SAVE

Important fields in defining shift include, Name, Start time of shift, end time of shift. Shift is enabled or not, its color, Breaks in shift. Then select the shift activation days of the week from Monday to Sunday.

System Configuration

This section provides a summary of all the fields that can be defined as a part of system configuration.

System Parameters

There are following parameters defined in system parameters.

- Password configuration as enhanced configuration or standard.
- Defining weekdays: Options include, Monday to Sunday or Sunday to Saturday.
- Throughput potential: How many containers should be processed per minute.
- Enable Graph line interpolation or not.

Notification Settings

There are following notification settings that can be specified.

- Notification API such as Twilio, Microsoft Graph API or Custom SMTP Server.
- Date when all notifications will be expired.
- Client ID: Key specified for each client.
- Client Secret Key
- TenantId: Key specified for each client as a tenant key
- User Email: This is the admin email id.

DB Truncation

These are activities planned for managing database. This includes.

- Database dump location
- App tables. Specify the number of days after which data for following options will be deleted. E.g. 180 days
 - o Sortation Statistics
 - o User logs.
- PLC Tables. Specify the number of days after which data for following options will be deleted. E.g. 30 days
 - o Events
 - o Graphdata
 - o Scan_log
- Deploy tables. Specify the number of days after which data for following options will be deleted. E.g. 30 days
 - o Contrainer_traceablity logs
 - o Containers
 - o Hospital_lane
 - o Host_logs
 - o Inventory
 - o Inventory_logs
 - o Notification_logs
 - o Order Confirm Processor
 - o Order Pick Status

- o Oder Tracking logs
- o Pick Demand Ack
- o Pick put logs
- o Pick retry
- o Put Ack processor
- o Replen_logs
- o Truncation Logs
- o Wave logs
- o weights

PLCS

These are basic configurations for PLC. This includes, PLC name, ip address and description.

Also network configuration such as subnet mask, default mask.

Alarms and Events.

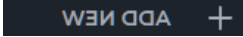
This specifies the alarm class and event classes that are used to color code and font the display of various alarms and events in the system.

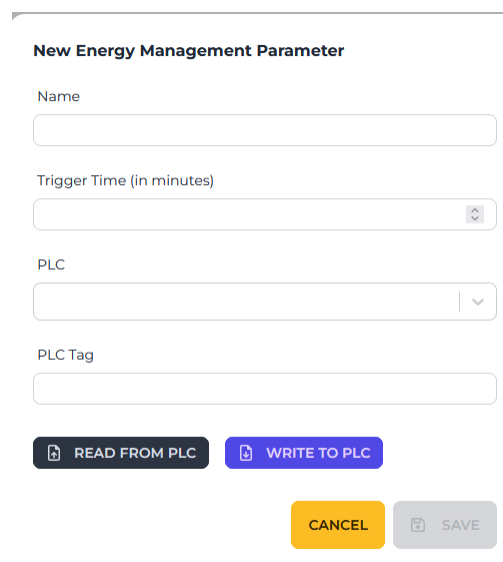
Host Interface configuration

This is the configuration for application server configuration to be used for the system

Energy Management

Here energy management parameters can be provided.

To add a new energy management parameter click on . Then it displays following fields



This includes name, Trigger time in minutes, PLC name and PLC Tag to write.

Scanner Configuration

This is the configuration for all scanners in the system. Here we configure the barcodes used in the application for various purposes. Such configuration is provided for following scanners used in the application.

- Shipping
- Pickzone
- Test Sorter
- Werfen Scale
- Werfen Panda Verify

For each barcode following configuration needs to be specified. This includes Name, barcode type. Then define exceptions for No Read, Multi Read, Side by Side and No Code.

Create New Scanner

Name

Barcodes

Barcode #1

My Custom Alias

Barcode #2

My Custom Alias

Barcode #3

My Custom Alias

Barcode #4

My Custom Alias

Barcode #5

My Custom Alias

Read Exceptions

No Read

No Read

Multi-Read

Multi Read

Side-by-Side

Side by Side

No Code

No Code

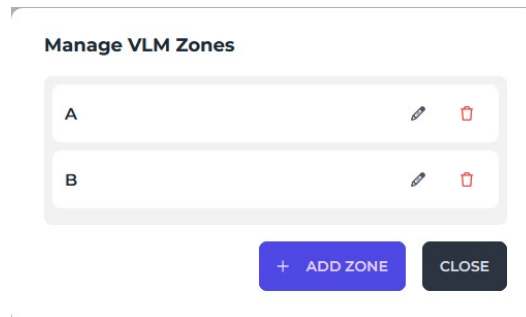
CANCEL

SAVE

VLM Configuration

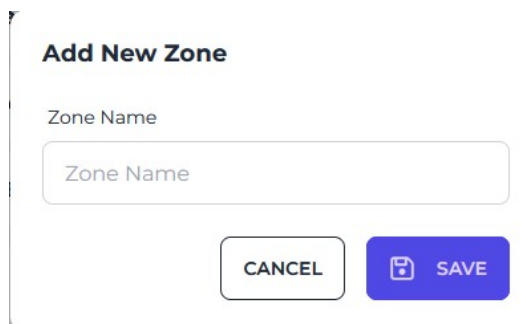
VLM (Vertical Lift Module) is defined and is attached to specific zone for operation.

First create Zone. To create a new zone, click on **MANAGE ZONES**. This displays following page.



The 'Manage VLM Zones' interface shows a list of existing zones, 'A' and 'B', each with edit and delete icons. At the bottom, there is a blue '+ ADD ZONE' button and a dark grey 'CLOSE' button.

Clicking ADD Zone, new zone is created. Need to specify a zone name. The configuration is as follows

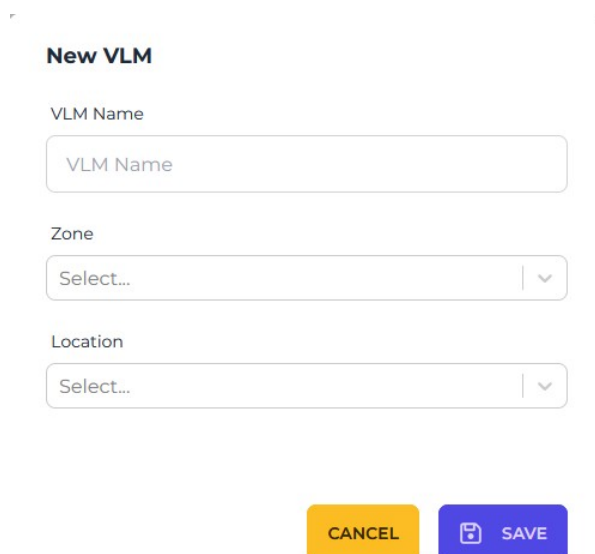


The 'Add New Zone' form contains a 'Zone Name' label and a text input field with the placeholder 'Zone Name'. Below the input field are two buttons: a white 'CANCEL' button and a blue 'SAVE' button with a save icon.

Once this is done, the next task is to create a VLM and attach to zone. For this click on



This will display following options to define a VLM. Here specify VLM name, Zone created earlier and location.



The 'New VLM' form includes three input fields: 'VLM Name' (text input), 'Zone' (dropdown menu with 'Select...' placeholder), and 'Location' (dropdown menu with 'Select...' placeholder). At the bottom, there is a yellow 'CANCEL' button and a blue 'SAVE' button with a save icon.

Wave Configuration

Following configurations apply to all waves used for various warehouse operations. These are

Trigger Type ⓘ

Time Interval

Time Interval (minutes)

5

Priority Swap ⓘ

Disabled ☐ Enabled ☒

Max Priority Swap ⓘ

2

Max Orders in Wave ⓘ

5

Shift-based Wave Configuration ⓘ

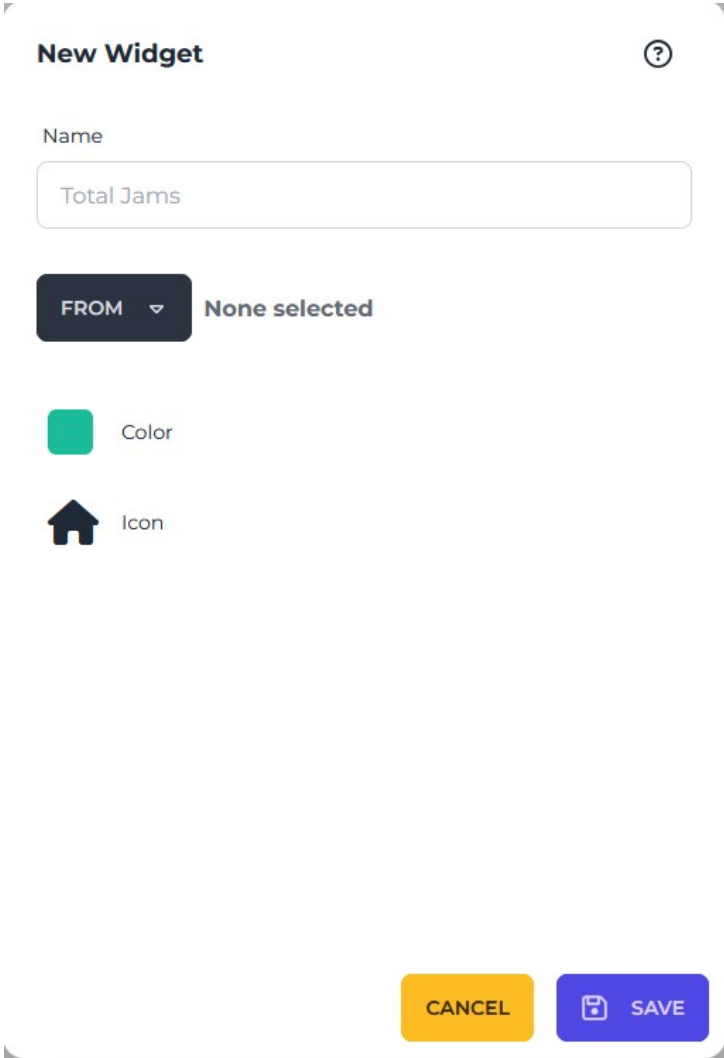
Disabled ☐ Enabled ☒

SAVE CONFIGURATION

- Trigger interval which is no of minutes when the wave is started.
- Priority for wave. This allows to move the higher priority orders ahead
- Maximum number of orders in a Wave.
- Shifts based wave configuration.

Widgets

Widgets are used to configure customer specific fields that are read through PLC. To add a new widget, click on . This displays following field.



The 'New Widget' form is a modal window with a title bar containing the text 'New Widget' and a help icon. It contains several input fields: a 'Name' field with the text 'Total Jams', a 'FROM' dropdown menu currently showing 'None selected', a 'Color' field with a teal square icon, and an 'Icon' field with a house icon. At the bottom right, there are two buttons: a yellow 'CANCEL' button and a blue 'SAVE' button with a save icon.

- Name: Name of Widget
- From: the PLC name from which data will be selected.
- Colour: Select the colour for the widget.
- Icon: Icon for the widget.
- Whether the widget is resettable or not
- Read Tag: the tag of PLC from which the data will be read and its type such as Boolean, INT or Object string etc.
- Reset Tag: based on which the widget the tag will be resetted.

Glossary and Terms section

- VLM Vertical Lift Model

Troubleshooting section

<<Need information here >>

Support page

Contact us

Email

Email Contact: support@pendantautomation.com

Address

Monday – Friday

8:00 am to 4:00 PM EST

(410) - 939 – 1150 {ext. 2 or 3}

After hours Support

24/7 Emergency Support

(844) 473 – 6787





Warehouse Execution Software

User Manual

Version 2.0

Date August 07, 2025



Purpose

The purpose of this document is to provide instructions for use for Warehouse Execution Software

Prerequisites

- Valid login to REVOLUTION ST. WXS Warehouse Execution software. If you do not have one, please contact the system administrator
- Modern browser, the application works on Firefox, chrome etc.
- Familiarity with the application

Common Icons

- The sign  indicates menu option to expand
- The sign  indicates that the menu option is expanded. All the submenu items are displayed.
- Click on  to get more information about the screen.
- Click on  to see notifications generated by the system.

-

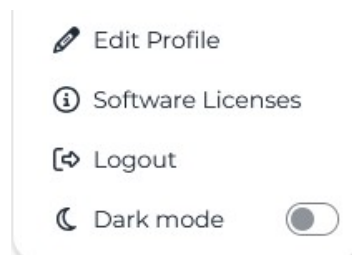
Log in

Revolution St. WXS is a web-based application.

URL: <https://demo.revolutionstreetwxs.io/dashboard>

To log in into the application needs a username and password. If you do not have one, please contact the administrator of the application for it. Such users will have to be created.

On the right-hand side under user icon click the user photo following menu items will be displayed.



- Edit the profile including first name, last name. email id, phone number, passwords etc.
 - o Also 2 factor authentication for user can also enabled here.

Username

First name

Last name

Email

Phone Number

Use this number for SMS 2FA ☐

Password

Confirm Password

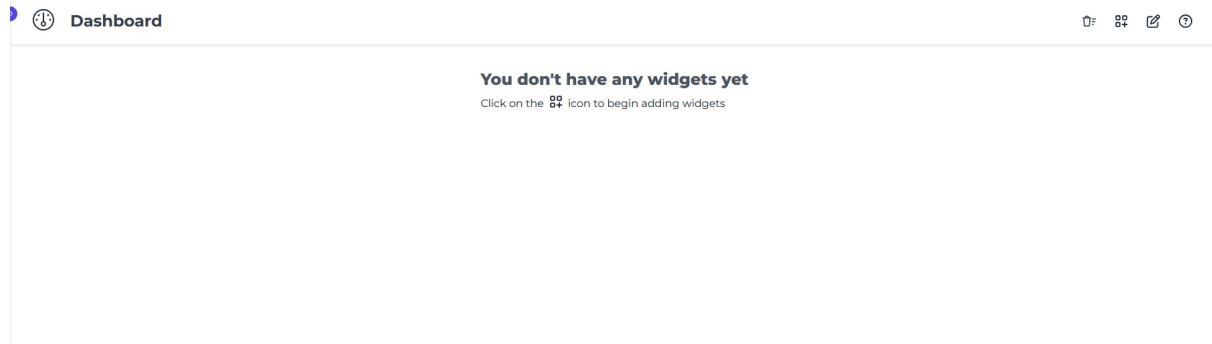
Two-Factor Authentication

- The software licenses option informs you about the software license and the terms of licensing.
- You can log out from application. This is a recommended option, please use it to delete the information about user session.
- Move the application to Dark mode which used to improve visual comfort, usability and efficiency of digital screen.

Dashboard

On successful log in the dashboard page will be displayed as screen shot here.

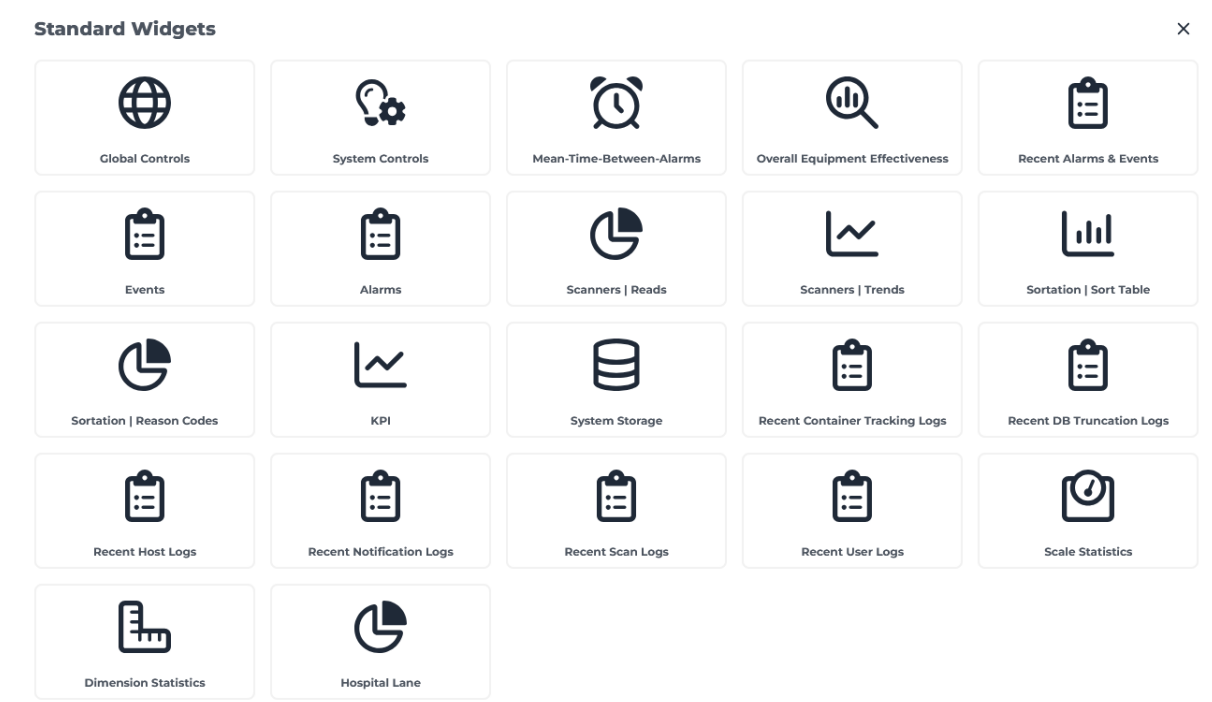
To navigate to dashboard, click on **Revolution St.** Warehouse control, **simplified.** icon.



Widgets

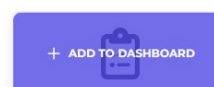
Since no widgets are selected, the page does not show it. As indicated click on **+** button to add widgets.

This shows standard widgets.



Select the one that you need to display the information that is most critical for you.

e.g. to add KPI widget hover over KPI it will show as



. Then select it.

Having added KPI the dashboard shows as follows.

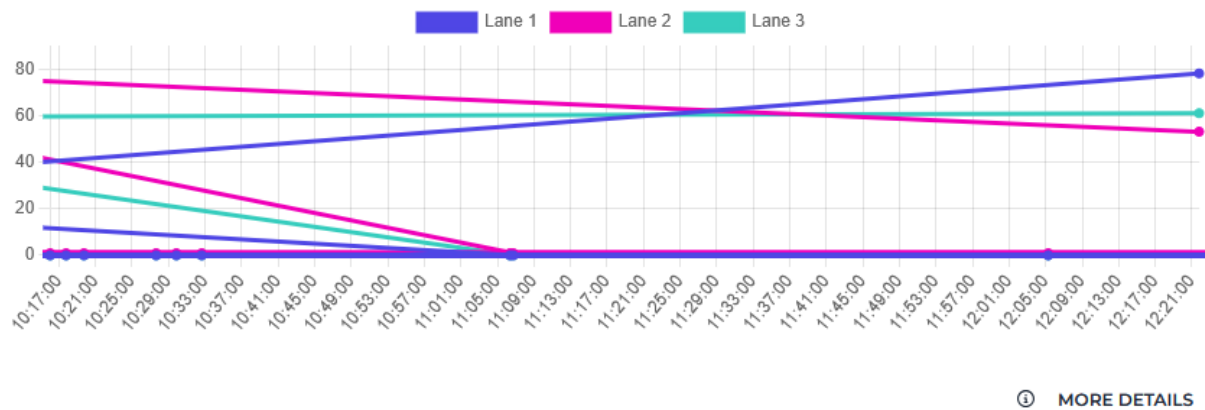


Dashboard

KPI

Today

KPI - Merge_Rate_1_to_3



① MORE DETAILS

If widget is to be deleted, then click on  button to delete the widget using  button displayed on top right corner.

Alternatively customized widgets can be created based on data returned by the internal system of PLC etc.

This is meant for advanced users and also internal knowledge of application is expected.

Custom Widgets

MANAGE CUSTOM WIDGETS →

Click on  to a custom widget.

Then click on  to create a new widget. Click on new Widget will display following form to enter all required fields.

New Widget

?

Name

Total Jams

FROM

Main

PLC

Color

Icon

Resettable

Read Tag

bitAlwaysTrue

Read Tag Type

BOOL

Reset Tag

Reset Tag Type

BOOL

CANCEL

SAVE

Once you have all required fields selected click on Save to save the widget. Then hover on the widget to add it to dashboard page. Now the new widget will start appearing as follows.

Demo for custom widget

P316

↺

RESET

Main Menu

Click on the main menu  to show navigational links

	Pick/Put/Pull	▼
	Inventory Management	▼
	Order Management	▼
	Admin	▼

When the main menu is collapsed, clicking on following icons, corresponding screens will be displayed.



Pick / Put / Pull

There are the following options in this section.

1. Pick / Put Wall
2. Pick Sessions

Pick / Put Wall

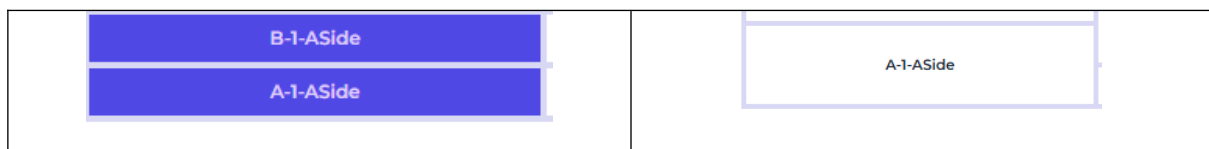
E-1-Put	E-2-Put	E-3-Put	E-4-Put	E-5-Put	E-6-Put	E-7-Put	E-8-Put	E-9-Put	E-10-Put
D-1-Put	D-2-Put	D-3-Put	D-4-Put	D-5-Put	D-6-Put	D-7-Put	D-8-Put	D-9-Put	D-10-Put
C-1-Put	C-2-Put	C-3-Put	C-4-Put	C-5-Put	C-6-Put	C-7-Put	C-8-Put	C-9-Put	C-10-Put
A-1-Put	B-2-Put A-2-Put	A-3-Put	B-4-Put A-4-Put	A-5-Put	B-6-Put A-6-Put	B-7-Put A-7-Put	B-8-Put A-8-Put	B-9-Put A-9-Put	B-10-Put A-10-Put

In this page user will have following options

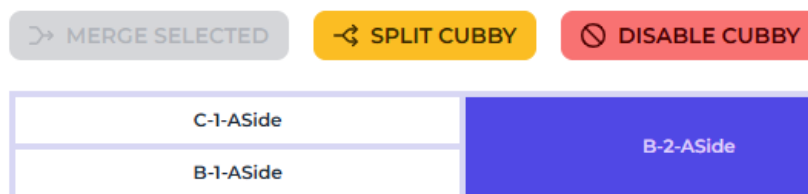
User can either select the existing wall using edit button next to wall name. The other option will delete the current wall.

The user can see the sides of wall using options

To merge 2 or more cubbies, select 2 or more cubbies as shown here. Use Ctrl + Click to select multiple cubbies, then click "Merge Selected".



Select a merged cubby and click "Split Cubby" to unmerge it as shown in the diagram below.



User can create a new wall using button.

The following pop up will be displayed once the New Wall option is selected.

New Pick/Put Wall

Name

Location

Select location ▼

Height (rows)

10

Width (columns)

30

Sides

2

Side A label

Put

Side B label

Pull

CANCEL

 SAVE

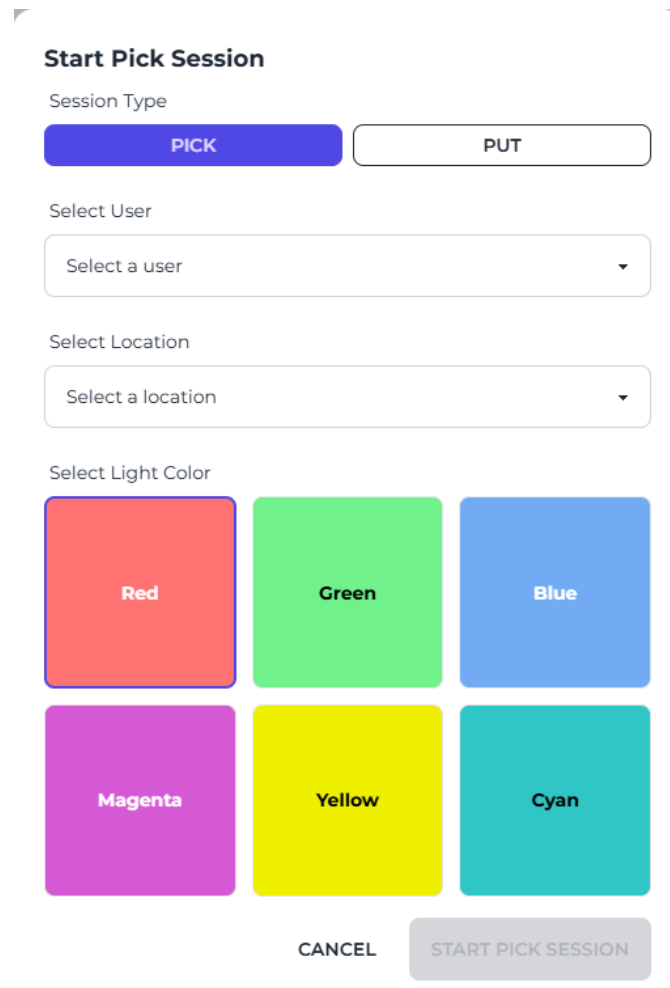
The following attributes can be selected for a wall.

- Name: Name of wall
- Location of Wall
- Height of wall. E.g. 4
- Width of wall E.g. 5
- No of sides of the wall E.g. 2
- Labels for both sides of the wall.

Pick Sessions

Please use the icon  to create a new pick session.

Clicking on it will display the following section



The dialog box titled "Start Pick Session" contains the following elements:

- Session Type:** Two buttons, "PICK" (highlighted in blue) and "PUT" (white with a black border).
- Select User:** A dropdown menu with the placeholder text "Select a user".
- Select Location:** A dropdown menu with the placeholder text "Select a location".
- Select Light Color:** A grid of six colored squares, each with a label: Red, Green, Blue, Magenta, Yellow, and Cyan.
- Buttons:** "CANCEL" and "START PICK SESSION" (disabled, greyed out) at the bottom right.

On this the user will specify the following.

Select user: Select the user who is going to create pick session.

Select location: Select the location of picking session

Select Light Color: Select one of the displayed colors and then hit the start pick session button to start pick sessions.

Once the picking session is started the following screen will be displayed.

Active Sessions

**Voodoo Robotics**
Voodoo

Status
Active

Started
less than a minute ago

Light Color
Cyan

Picking From
PICKING

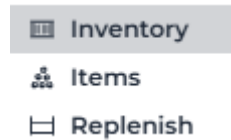
☐ **END**

Then click on ☐ **END** to end the picking session.

Inventory Management

The inventory Management module has the following options.

Inventory, items, Replenish



Inventory

Here you can see all the inventory items on this page.

The following fields will be displayed.

SKU	Product ABC	Example description	Example family	Example group			1515	1535	1555	3005
CH42E	Example family	Example office	Office family	Office group	Example office	Example office	1515	1535	1555	3005
CVB3B	Example family	Example office	Office family	Office group	Example office	Example office	1515	1535	1555	3005

The fields include

SKU, Quantity, Status, Location, Zone, Batch, Best Before, Production Date, Loading Unit.

Option is also available to sort by any of items or filter based on an expression for a specific value or expression.

Inventory items can also be searched based on entered value for SKU.

To search for records of specific date range, quick date selection is as follows.

Today, Yesterday, This week, Last Week, This Month, Last Month, This Quarter, Last Quarter, This year, Last year.

If none of date range fits your criteria, then select custom date range to search for specific inventory data.

Once records are retrieved, the following options are available.

Records Per Page: On a single page select the number of records to be displayed. E.g. 10, 15, 25, 50 etc.

Show / hide columns: If any of the following columns can be marked as hidden. This includes SKU, Quantity, Status, Location, Zone, Batch Best Before, Production Date, Loading unit.

There are options to clear existing filters and export data in CSV or xlsx format.

Items

This menu option allows users to manage items and their details.

The following fields are displayed for items.

SKU, Name, Description, UPC, Family, Group, Alias 1 and Alias 2, Height, Width, Length, Weight, Packing Density, Par Level, Minimum Order Quantity, Mover, Image URL and updated date.

To create items, use the upload CSV option so that any new items can be imported.

The page also allows settings to define how many items can be displayed on a page e.g. 25, Adjust to show fewer columns, Export the data in Csv or Excel formats.

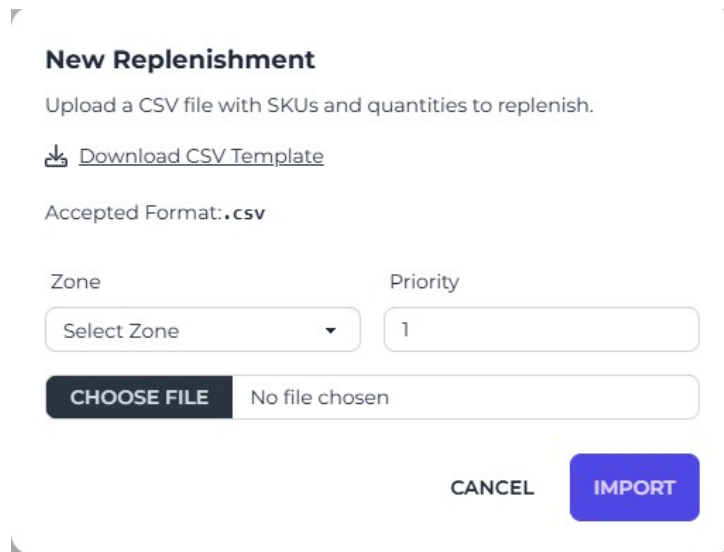
Replenish

This menu option allows users to replenish the item.

Items can be replenished using a new replenishment request. For that click on

 **NEW REPLENISHMENT**

This will display the following screen



The image shows a 'New Replenishment' form. At the top, it says 'New Replenishment' and 'Upload a CSV file with SKUs and quantities to replenish.' Below this is a link to 'Download CSV Template'. The 'Accepted Format' is listed as '.csv'. There are two input fields: 'Zone' with a dropdown menu showing 'Select Zone' and 'Priority' with a text input showing '1'. Below these is a file upload section with a 'CHOOSE FILE' button and a text box showing 'No file chosen'. At the bottom right are 'CANCEL' and 'IMPORT' buttons.

The CSV template should be downloaded first then filled with required SKUs and quantities.

Then select the zone and priority where the item should be added.

Clicking on IMPORT button will import the data into the system. A confirmation message will be displayed that the items are imported successfully.

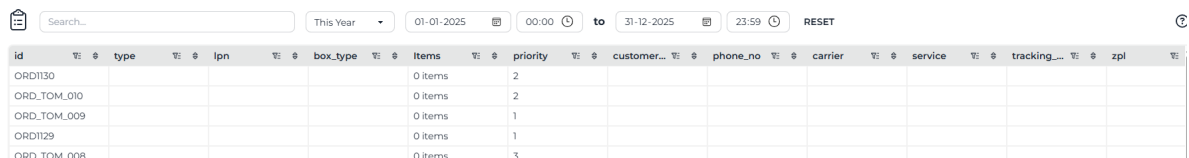
Order Management

Order Management has following options

Orders, Wave and Wave history.

Orders

This option will list all orders.



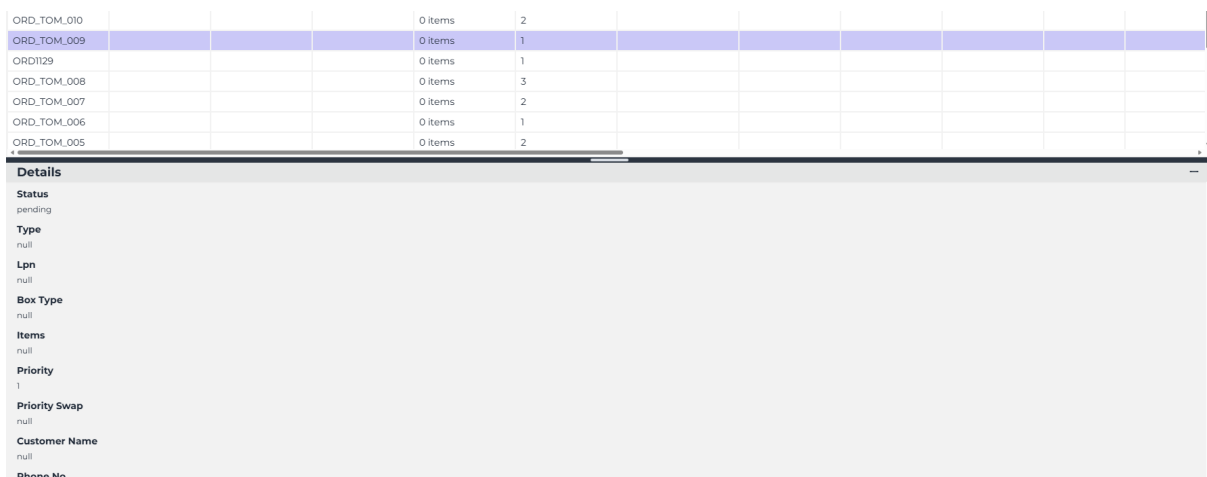
The screenshot shows the Order Management interface. At the top, there is a search bar and a filter section with 'This Year' selected, a date range from '01-01-2025' to '31-12-2025', and a time range from '00:00' to '23:59'. A 'RESET' button is also present. Below the filters is a table with the following columns: id, type, lpn, box_type, Items, priority, customer..., phone_no, carrier, service, tracking..., and zpl. The table contains several rows of data, including ORD1130, ORD_TOM_010, ORD_TOM_009, ORD1129, and ORD_TOM_008.

id	type	lpn	box_type	Items	priority	customer...	phone_no	carrier	service	tracking...	zpl
ORD1130				0 items	2						
ORD_TOM_010				0 items	2						
ORD_TOM_009				0 items	1						
ORD1129				0 items	1						
ORD_TOM_008				0 items	3						

For each order following fields will be displayed.

Order id, type, lpn, box _type, Items, Priority, Customer name, Phone no, Carrier, Service, Tracking no, ZPL, address details 1, address details 2, stage, zip, order date, shipping date,

To see the order details briefly please click on the order id. It will show the order details in the following manner.



The screenshot shows the Order Details view. At the top, there is a table with the following columns: id, type, lpn, box_type, Items, priority, customer..., phone_no, carrier, service, tracking..., and zpl. The table contains several rows of data, including ORD_TOM_010, ORD_TOM_009, ORD1129, ORD_TOM_008, ORD_TOM_007, ORD_TOM_006, and ORD_TOM_005. Below the table is a detailed view of the selected order (ORD_TOM_009). The details are organized into sections: Status (pending), Type (null), Lpn (null), Box Type (null), Items (null), Priority (1), Priority Swap (null), Customer Name (null), and Phone No (null).

id	type	lpn	box_type	Items	priority	customer...	phone_no	carrier	service	tracking...	zpl
ORD_TOM_010				0 items	2						
ORD_TOM_009				0 items	1						
ORD1129				0 items	1						
ORD_TOM_008				0 items	3						
ORD_TOM_007				0 items	2						
ORD_TOM_006				0 items	1						
ORD_TOM_005				0 items	2						

Details
Status
pending
Type
null
Lpn
null
Box Type
null
Items
null
Priority
1
Priority Swap
null
Customer Name
null
Phone No



The screenshot shows the Order Management interface. At the top, there is a search bar and a filter section with 'This Year' selected, a date range from '01-01-2025' to '31-12-2025', and a time range from '00:00' to '23:59'. A 'RESET' button is also present. Below the filters is a table with the following columns: id, type, lpn, box_type, Items, priority, customer..., phone_no, carrier, service, tracking..., and zpl. The table contains several rows of data, including ORD1130, ORD_TOM_010, ORD_TOM_009, ORD1129, and ORD_TOM_008.

id	type	lpn	box_type	Items	priority	customer...	phone_no	carrier	service	tracking...	zpl
ORD1130				0 items	2						
ORD_TOM_010				0 items	2						
ORD_TOM_009				0 items	1						
ORD1129				0 items	1						
ORD_TOM_008				0 items	3						

Using the menus above the columns of order details can be changed.

The user can also export the orders in CSV or XLSX format using **EXPORT AS...** button.

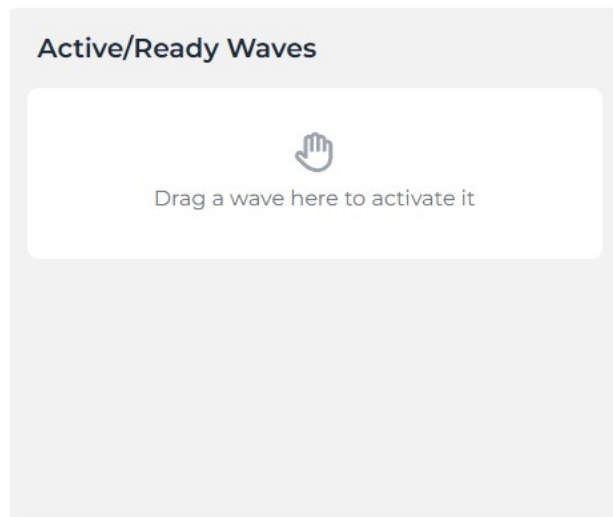
Wave

On this page you can configure and manage waves for order picking and shipping.

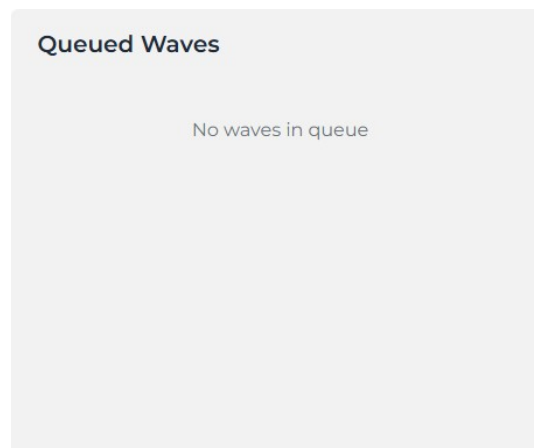
Let us go through various sections of the wave page.

Active / Ready Waves.

This section lists all the waves that are active or ready. These are the waves that are being processed by pickers.

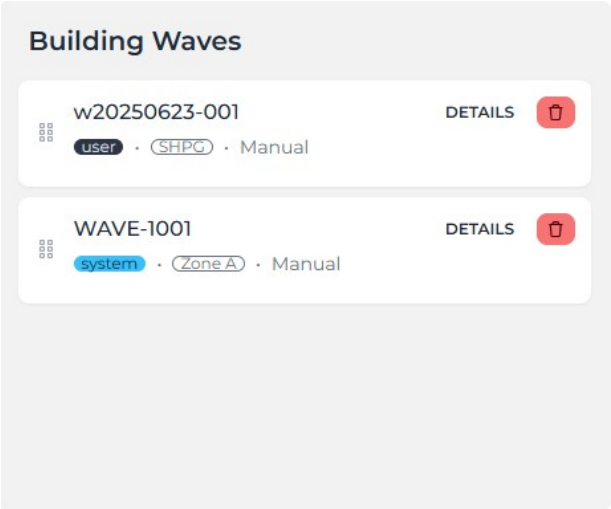


Queued waves



These are the waves that are scheduled to be picked. They will be processed in the order shown here

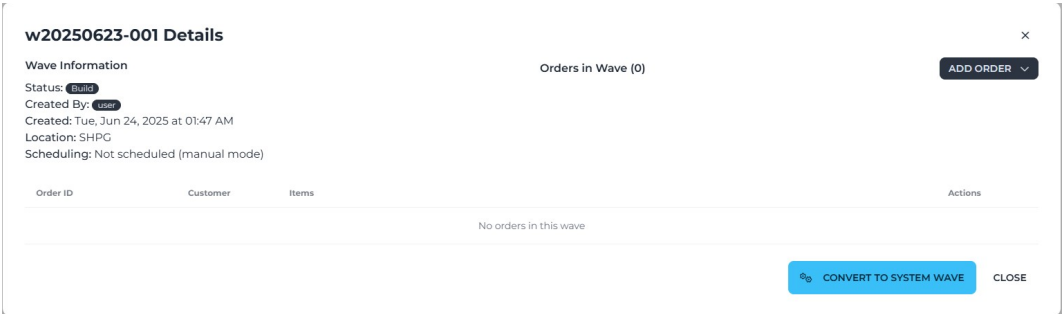
Building Waves



These are the new waves being built. Add orders here to organize them into waves sending them to the queue.

For each wave the following features are available

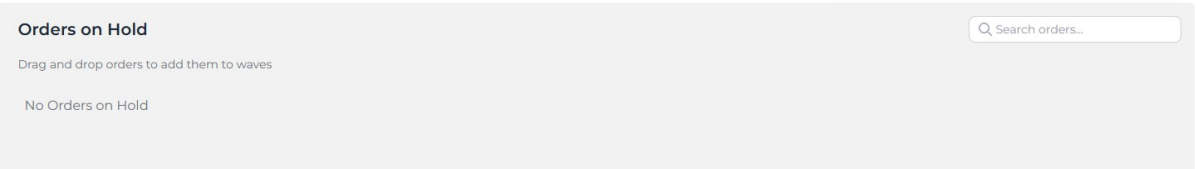
Click on the DETAILS button to see details of the wave. Use the Add Order drop down to add the Order on hold to queue.



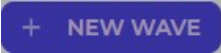
Use the drag button to move the wave from Building waves to Queued and then to Active to process the wave.

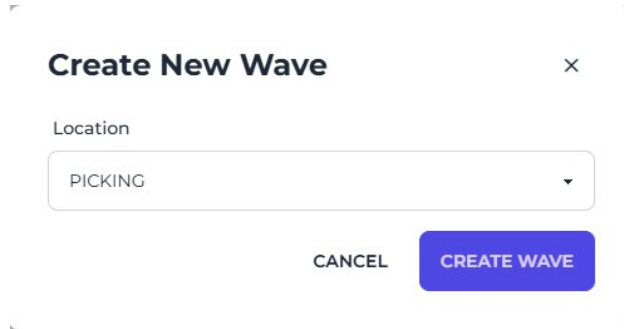
Orders on Hold

This section displays order on hold. Such order can be dragged and added to wave.



New Wave

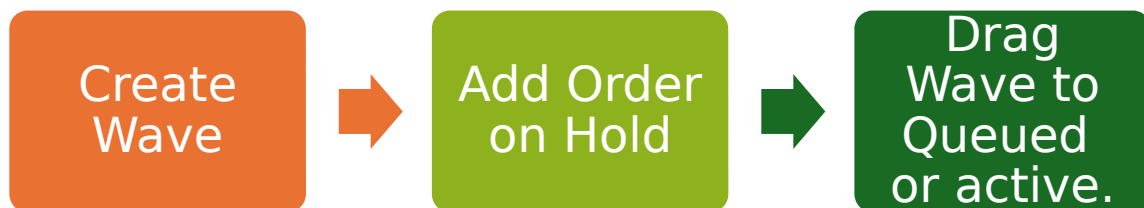
Use the  button to create a new wave. Specify the picking location. Please note that the wave name is automatically generated by the application.



The dialog box titled "Create New Wave" has a close button (X) in the top right corner. Below the title is a label "Location" followed by a dropdown menu currently showing "PICKING". At the bottom of the dialog are two buttons: "CANCEL" and "CREATE WAVE".

The wave name is date followed by a sequence number to uniquely identify each wave.

Hence for creating a wave the following process should be followed.



Wave History

This is a history page to view completed waves and their details.

Wave ID: WAVE101 Last Updated: Fri, May 16, 2025 Location: Zone A Orders: 0	VIEW DETAILS	Wave ID: WAVE103 Last Updated: Fri, May 16, 2025 Location: Zone A Orders: 0	VIEW DETAILS
Wave ID: WAVE105 Last Updated: Fri, May 16, 2025 Location: Zone B Orders: 0	VIEW DETAILS	Wave ID: WAVE106 Last Updated: Thu, May 15, 2025 Location: Zone A Orders: 0	VIEW DETAILS

The page shows the history of all complete waves in ascending order. To see any specific wave details, then search using wave ID. You can also click on the any specific wave and click on

VIEW DETAILS

button. This will display the wave details below.

WAVE101 Details×

Wave Information
Status: Completed
Created By: System
Created: Fri, May 16, 2025 at 08:13 AM
Location: Zone A
Scheduling: Not scheduled (manual mode)

Orders in Wave (0)

Order ID	Customer	Items	Actions
No orders in this wave			

CLOSE

Once all details are reviewed, click on the close button.

If required, the number of waves displayed on a page can also be set to a different number e.g. 25 or 50.

System Configuration

These are system level configurations that are managed by Admin or super user users.

Pick/ Put Configuration

VooDoo Connection

API Key

Enter API Key

Server URL

e.g., https://vlm-light-<host>.com/api/

TEST CONNECTION

Note: Save changes before testing connection.

Here Application specific API keys and URLs are configured for application used for Pick and Put activities.

Process Configs

This section defines colors and fonts for specific actions

Process Config

Light Colors

Pick Light

Put Light

Pull Complete - Full

Pull Complete - Split

Pull Audit - Full

Pull Audit - Split

Pull Replenish

User Choice

Solid

User selectable

User Choice

Solid

User selectable

Red

Solid

Green

Solid

Yellow

Solid

Yellow

Solid

Magenta

Solid

Idle Text

Welcome

Row B (max 26 characters)

Row C (max 26 characters)

Row D (max 26 characters)

Welcome

F - 1 - A

Batt: 3.03V

Pick/Put Text

Custom

Sai Ram Ungarala

REMOVE

Custom

items.sku

REMOVE

Show Barcode

Custom

SKU

5

Sai Ram Ungarala

items.sku

F-1-A

SKU

Batt: 3.03V

Pull Text

order.id

Show Barcode

Custom

Order ID

F - 1 - A

Order ID

Batt: 3.03V

SAVE

Colors are defined for Pick and Put options, Idle Text, Pick / Put Text and Pull Text.

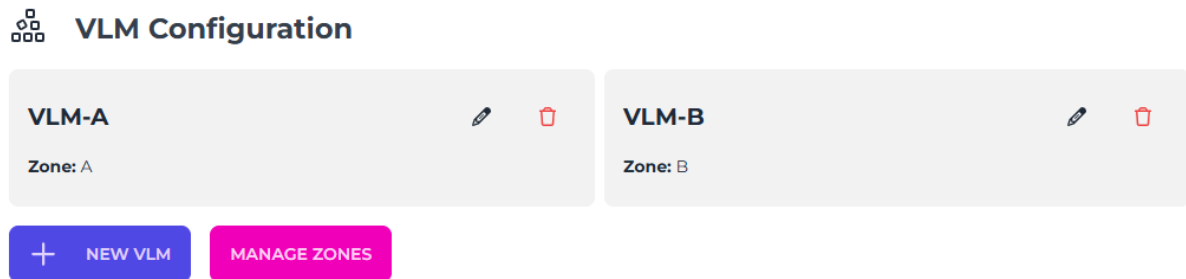
Configure to display text or barcode for Pick Put text and Pull text.

Barcode can either be generated based on some custom fields such as Company name or any of the order fields such as id, status.

Click on save to selections.

VLM (Vertical Lift Modules) Configuration

This section allows to create VLMs and manage Zones. These are the storage areas using vertical space.



As shown in the screenshot various VLMs get displayed here.

To create a VLM click in  button. The following screen is shown.

The 'New VLM' form is displayed. It has a title 'New VLM'. Below the title, there are two input fields: 'VLM Name' with a placeholder 'VLM Name', and 'Zone' with a dropdown menu showing 'Select...'. At the bottom of the form, there are two buttons: a yellow 'CANCEL' button and a blue 'SAVE' button with a save icon.

Select the unique name for VLM and select a zone for it.

This module also helps to create Zones.

Click on  to manage zones.

Manage VLM Zones

A

B

+ ADD ZONE

CLOSE

Click on

+ ADD ZONE

 to add new zone.

Add New Zone

Zone Name

Zone Name

CANCEL

SAVE

To create a zone, specify name for zone.

This we can create VLMS and Zones in it for storage of items.

Wave Configuration

For Wave Configuration the following parameters can be configured.

~ **Wave Config**

Trigger Type

Manual

Priority Swap ⓘ

Disabled ☐ Enabled ☒

Max Priority Swap ⓘ

4

Max Orders in Wave ⓘ

25

SAVE CONFIGURATION

Locations

Picking Locations ⓘ

Enter new location

+ ADD

PICKING	Enabled ☒	
SHPG	Disabled ☐	

Trigger Type: This specifies when the wave be executed e.g., manually, Time Interval, Order Quantity, Order quantity / time, At Completion.

Define priority for scheduling this any number between 1 to 5.

Max orders in Wave. These are the maximum orders that can be included in an order.

Picking Location for wave. Add one or more packing locations.

Once required parameters are defined click on

SAVE CONFIGURATION

 button.