

USER MANUAL

T63, T63E

JIDO GPS FREIGHT TRACKER

24/7 TECHNICAL SUPPORT AT 1.877.877.2269 OR VISIT BLACKBOX.COM



TABLE OF CONTENTS

CONTENTS	
1. SPECIFICATIONS	4
2. OVERVIEW.....	5
2.1 INTRODUCTION.....	5
2.2 FEATURES.....	5
2.3 WHAT'S INCLUDED	5
2.4 HARDWARE DESCRIPTION	6
2.5 TYPICAL APPLICATION.....	7
3. MODE OF OPERATION	8
3.1 MODES.....	8
3.2 MODE CHANGE PROCESS FLOW	8
3.3 MODE DESCRIPTION	8
4. ALERTS GENERATING FROM DEVICE.....	9
5. INSTALLATION	10
5.1 CONNECT THE DEVICE WITH THE CONTAINER	10
5.2 STEPS TO ACTIVATE THE DEVICE TO USE	11
6. JIDO – WEB APPLICATION	12
6.1 LOGIN.....	12
6.2 DASHBOARD.....	12
6.3 SETTINGS	13
6.3.1 Company Creation.....	13
6.3.2 Container	14
6.3.3 Device.....	15
6.3.4 Device Assignment	15
6.3.5 Alerts.....	16
6.4 USER MANAGEMENT	16
6.4.1 Role.....	16
6.4.2 Users	17
6.5 VENDOR MANAGEMENT	17
6.6 ROUTE MANAGEMENT	18
6.7 TRIP MANAGEMENT	19
6.8 REAL TIME TRACKING	19
6.9 HISTORY PLAYBACK.....	20
6.10 GEO-FENCE CREATION (UNLOADING POINTS)	21
6.11 REPORTS	22
7. JIDO – MOBILE APP	24
8. STEPS TO ACTIVATE THE DEVICE TO USE.....	25
A.1 DISCLAIMER.....	26
A.2 TRADEMARKS USED IN THIS MANUAL	26



CHAPTER 1: SPECIFICATIONS

1. SPECIFICATIONS

SPECIFICATIONS (T63)	
COMMUNICATION	
GSM/GPRS DEFAULT	Quad band (850, 900, 1800, 1900)
OPTIONAL MODEMS	UMTS900/2100, UMTS850/1900
NUMBER OF SIMS	Dual
ANTENNA TYPE	Built-IN
DATA CHANNELS	SMS, TCP, UDP, PPP, FTP, HTTP, SSL, MQTT
BLUETOOTH®	V3.0 BLE Type 3.0, support SPP and HFP-AG profiles
LOCATION/GNSS	
SYSTEM	GPS/QZSS L1 C/A, GLONASS
SBAS	SBAS L1 C/A: WAAS, EGNOS, MSAS, GAGAN
CHANNEL/CHIP	33 Tracking Channels/99 Acquisition Channels, High-sensitivity Receiver
SENSITIVITY	Tracking & Nav: -167 dBm; Cold starts (aided): -149 dBm; Reacquisition: -161 dBm
HORIZONTAL ACCURACY	<2.5 m CEP
VELOCITY ACCURACY	0.2 m/s
ACQUISITION TIME	Cold start: 35 s; Aided Start: 2 s; Reacquisition: 1.5 s
SUPPORT AGPS	Yes
ANTENNA TYPE	Built-IN
BATTERY	
TYPE	Li ion rechargeable
CAPACITY	15000 mAh/55.5 Wh
SENSORS	
ON-BOARD	Accelerometer
INPUT POWER	
DUAL POWER	5 VDC from charger 24 VDC input from battery
LOCKING/UNLOCKING MECHANISM	
MANUAL LOCK	Manual key to lock/unlock
ENVIRONMENTAL	
OPERATING TEMPERATURE	+14 to +140° F (-10 to +60° C)
STORAGE TEMPERATURE	-4 to +158° F (-20 to +70° C)
OPERATING HUMIDITY	5 to 95%, noncondensing
MECHANICAL	
DIMENSIONS	8.26" H x 5.12" W x 1.77" D (21 x 13 x 4.5 cm)
WEIGHT	Less than 1.76 lb. (800 g)
APPROVALS	
PROTECTION RATING	IP 65
CERTIFICATIONS	CE, RoHS, IP65, Drop Test 6ft, Vibration Test 1.5 g 3-Axis

CHAPTER 1: SPECIFICATIONS

SPECIFICATIONS (T63E)	
COMMUNICATION	
GSM/GPRS DEFAULT	Quad band (850, 900, 1800, 1900)
OPTIONAL MODEMS	UMTS900/2100, UMTS850/1900
NUMBER OF SIMS	Dual
ANTENNA TYPE	Built-in
DATA CHANNELS	SMS, TCP, UDP, PPP, FTP, HTTP, SSL, MQTT
BLUETOOTH®	V3.0 BLE Type 3.0, support SPP and HFP-AG profiles
LOCATION/GNSS	
SYSTEM	GPS/QZSS L1 C/A, GLONASS
SBAS	SBAS L1 C/A: WAAS, EGNOS, MSAS, GAGAN
CHANNEL/CHIP	33 Tracking Channels/99 Acquisition Channels, High-sensitivity Receiver
SENSITIVITY	Tracking & Nav: -167 dBm; Cold starts (aided): -149 dBm; Reacquisition: -161 dBm
HORIZONTAL ACCURACY	<2.5 m CEP
VELOCITY ACCURACY	0.2 m/s
ACQUISITION TIME	Cold start: 35 s; Aided Start : 2 s; Reacquisition: 1.5 s
SUPPORT AGPS	Yes
ANTENNA TYPE	Built-in
BATTERY	
TYPE	Li ion rechargeable
CAPACITY	15000 mAh/55.5 Wh
SENSORS	
ON-BOARD	Accelerometer
INPUT POWER	
CHARGING	5 VDC from charger
LOCKING/UNLOCKING MECHANISM	
E-LOCK	Unlocking of the device can be done remotely using command through SMS or Bluetooth
ENVIRONMENTAL	
OPERATING TEMPERATURE	+14 to +140° F (-10 to +60° C)
STORAGE TEMPERATURE	-4 to +158° F (-20 to +70° C)
OPERATING HUMIDITY	5 to 95%, noncondensing
MECHANICAL	
DIMENSIONS	8.26" H x 5.12" W x 1.77" D (21 x 13 x 4.5 cm)
WEIGHT	Less than 1.76 lb. (800 g)
APPROVALS	
PROTECTION RATING	IP 65
CERTIFICATIONS	CE, RoHS, IP65, Drop Test 6ft, Vibration Test 1.5g 3-Axis



CHAPTER 2: OVERVIEW

2. OVERVIEW

2.1 INTRODUCTION

The JIDO GPS Freight Tracker with Manual Lock (T63) or Electronic (E-) Lock (T63E) is used for transportation, logistics, shipment, and freight tracking.

It enhances end-to-end visibility of your assets and provides tampering alerts. This rugged device is weatherproof. Protected against man and nature, JIDO is IP65 rated and features a hardened plastic, tamper-proof design.

Using the JIDO device, the user can get a complete picture of freight shipments from anywhere with internet access. JIDO provides end-to-end visualization of shipments, and provides improved logistical tracking and improved security of valuable assets.

2.2 FEATURES

- ♦ IP65 rated waterproof and dustproof. Constructed of hardened plastic. Tamperproof design.
- ♦ Fast and easy installation. Simply attach JIDO and secure it on the magnetic mount.
- ♦ End-to-end visualization. Visualize cargo shipment on a map with alerts for any deviations from its schedule.
- ♦ Multiple sensors integration. Fast movement tilt lifting, door opening, lock opening and tampering, and temperature and humidity
- ♦ Sufficient data backup. Store more than 3 months of location data when the shipment was out of network
- ♦ Cargo safety: Alerts for any tampering, opening of lock, deviations from route, and unscheduled stops
- ♦ Seamless connectivity. Dual SIM connects to any geography. Connect via Bluetooth to latch on to the router of the ship during deep sea transport.
- ♦ Create routes. Trips, geo-fences, stops, and zones provide intelligent reports.
- ♦ Smooth tracking of device. Easy map-based system lets you track the device from the Web and a mobile app.

2.3 WHAT'S INCLUDED

Your package should include the following items. If anything is missing or damaged, contact Black Box Technical Support at 877-877-2269 or techsupport@blackbox.com.

- ♦ (1) JIDO GPS Freight Tracker with Manual Lock (T63) or Electronic (E-) Lock (T63E)
- ♦ (1) 1-A charger
- ♦ (1) data cable
- ♦ (1) set of keys (for manual lock version, T63 only)
- ♦ (1) battery

CHAPTER 2: OVERVIEW

2.4 HARDWARE DESCRIPTION

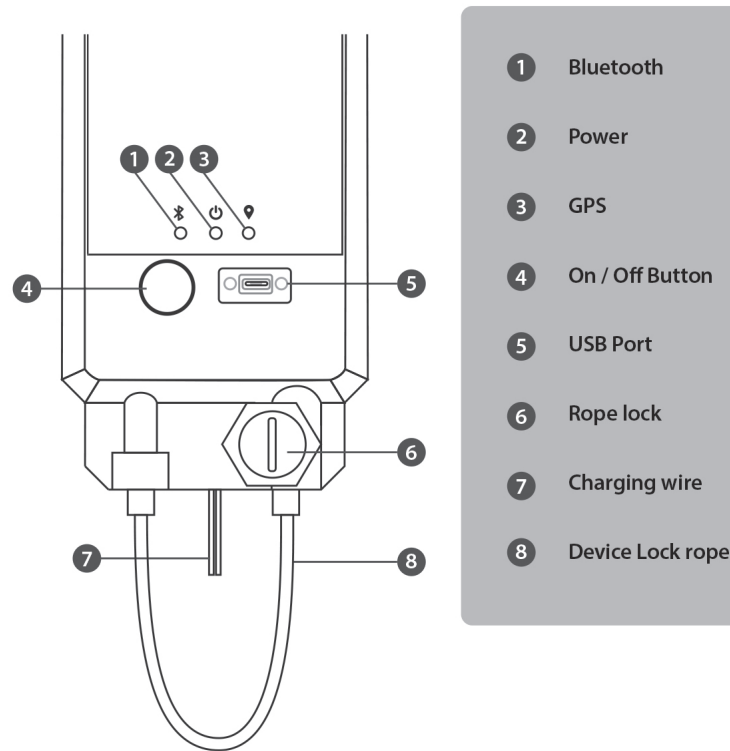


FIGURE 2-1. JIDO COMPONENTS

2.5 TYPICAL APPLICATION

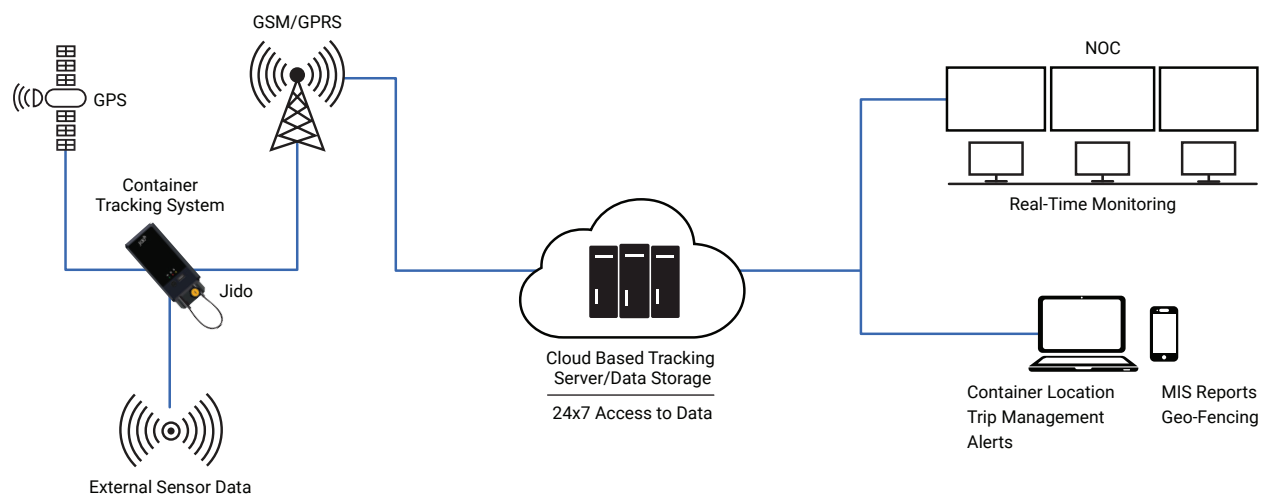


FIGURE 2-2. TYPICAL APPLICATION

CHAPTER 3: MODE OF OPERATION

3. MODE OF OPERATION

3.1 MODES

TABLE 3-1. MODES

MODE	MAIN BATTERY	MAIN POWER	SPEED
Truck	Connected	ON	> 0
Train	Disconnected	OFF	> 0
Yard	Disconnected	OFF	0

3.2 MODE CHANGE PROCESS FLOW

Truck Mode <-----> Yard Mode <-----> Train Mode

3.3 MODE DESCRIPTION

TABLE 3-2. EVENTS AND ALERT DATA

EVENT	NUMBER OF ALERT DATA SENT TO SERVER
Yard Mode to Train Mode	1. Location Data with Train Mode and Main Power off Status with speed > 0
Train Mode to Yard Mode	1. Location Data with Yard Mode and Main Power off Status with speed = 0
Truck Mode to Yard Mode	1. Main Battery Disconnected Alert
	2. Location Data with Yard Mode with Main Power off Status and Speed = 0
Yard Mode to Truck Mode	1. Main Battery Connected Alert
	2. Location Data with Truck Mode and Main Power on Status



CHAPTER 4: ALERTS GENERATING FROM DEVICE

4. ALERTS GENERATING FROM DEVICE

TABLE 4-1. ALERTS GENERATING FROM DEVICE

EVENT	ALERT DATA SENT TO SERVER
Yard Mode to Train Mode	Location Data with Train Mode & Main Power off Status with speed > 0
Train Mode to Yard Mode	Location Data with Yard Mode & Main Power off Status with speed = 0
Truck Mode to Yard Mode	Main Battery Disconnected Alert
	Location Data with Yard Mode with Main Power off Status and Speed = 0
Yard Mode to Truck Mode	Main Battery Connected Alert
	Location Data with Truck Mode and Main Power on Status

CHAPTER 5: INSTALLATION

5. INSTALLATION

5.1 CONNECT THE DEVICE WITH THE CONTAINER

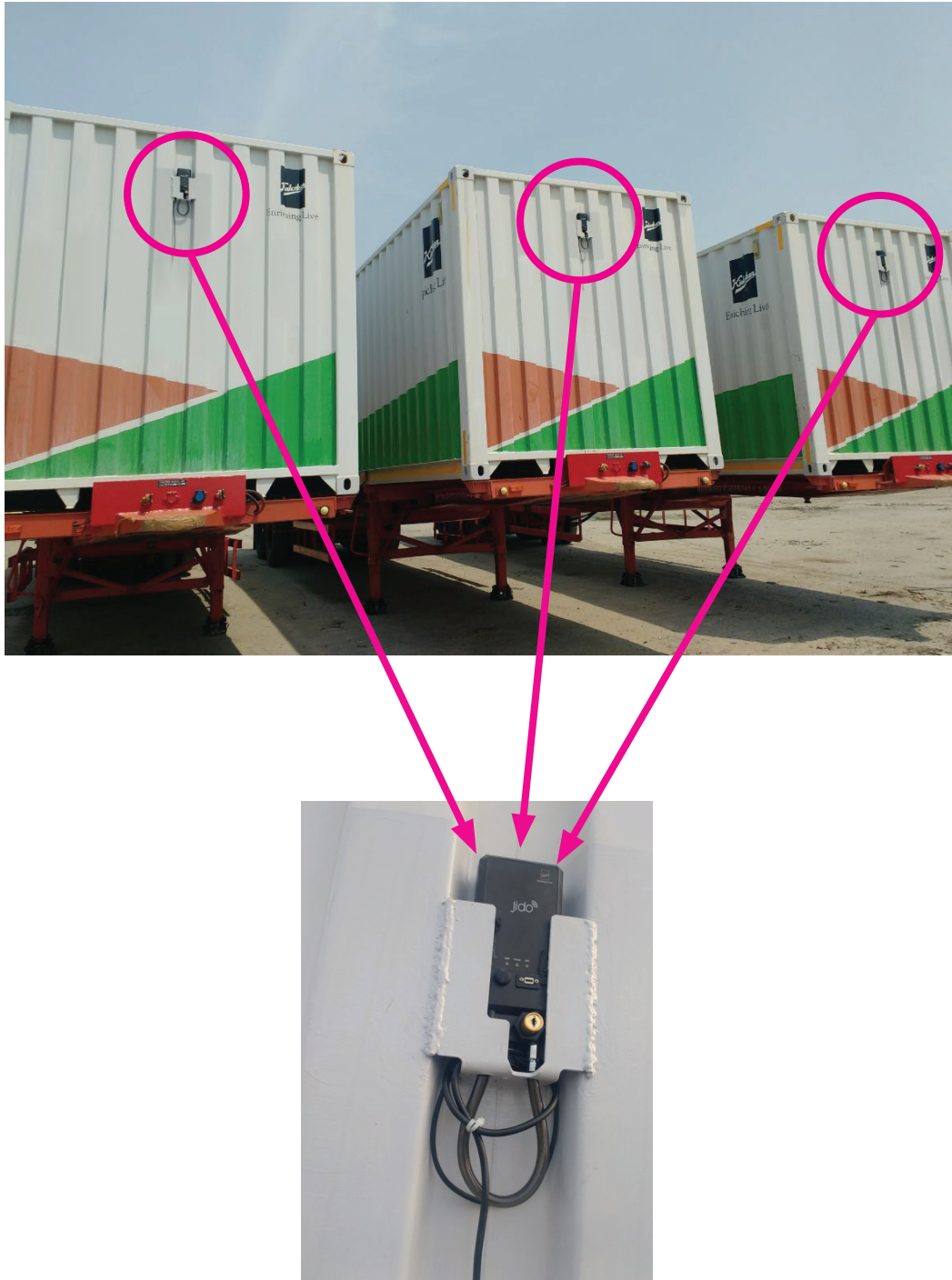


FIGURE 5-1. CONNECT DEVICE WITH CONTAINER

CHAPTER 5: INSTALLATION

5.2 STEPS TO ACTIVATE THE DEVICE TO USE

1. Switch ON the device by pressing the Power button (The Power LED will light red.)
2. Wait for a few seconds until the GSM LED is blinking green. The maximum time until the GSM LED begins blinking is 3 minutes.
3. Wait for a few minutes until the GPS LED is blinking green. The maximum time until the GPS LED begins blinking is 5 minutes if it is already used in that location or up to 15 minutes for first-time use. Keep the device in open sky to get the GPS signal.

After you complete the steps above, the device is ready for use.

CHAPTER 6: JIDO – WEB APPLICATION

6. JIDO – WEB APPLICATION

Jido Web application's user interface and step-by-step instructions are next.

6.1 LOGIN

Log in to the system with the user name and password.

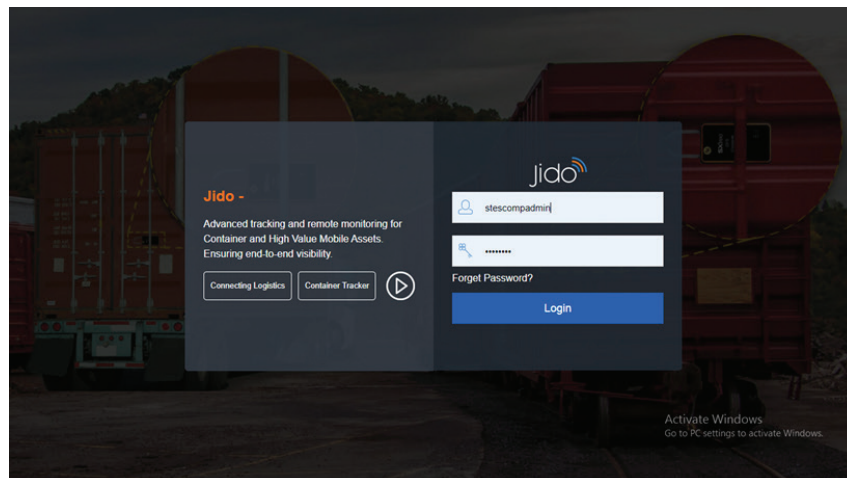


FIGURE 6-1. LOGIN SCREEN

6.2 DASHBOARD

After login, view the container status at a glance, including how many devices are active and inactive.

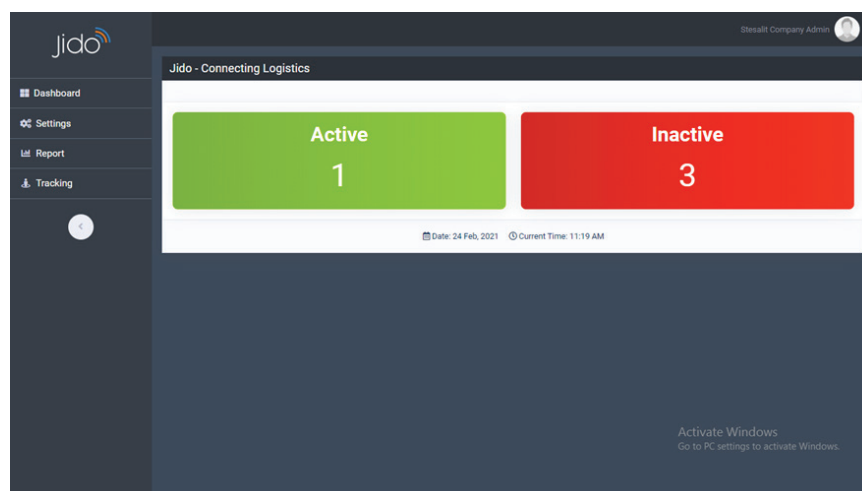


FIGURE 6-2. DASHBOARD

CHAPTER 6: JIDO — WEB APPLICATION

6.3 SETTINGS

After logging in as a Company user, the following menus appear.

1. Container
2. Device
3. Material
4. Route Management
5. Transporter
6. Trip Management

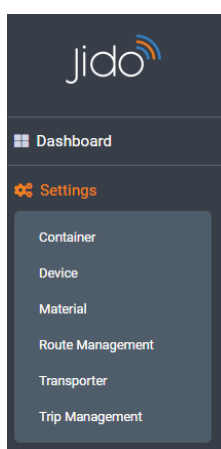


FIGURE 6-3. COMPANY USER MENUS

6.3.1 COMPANY CREATION

After logging in as a Distributor, you can add Company in this module.

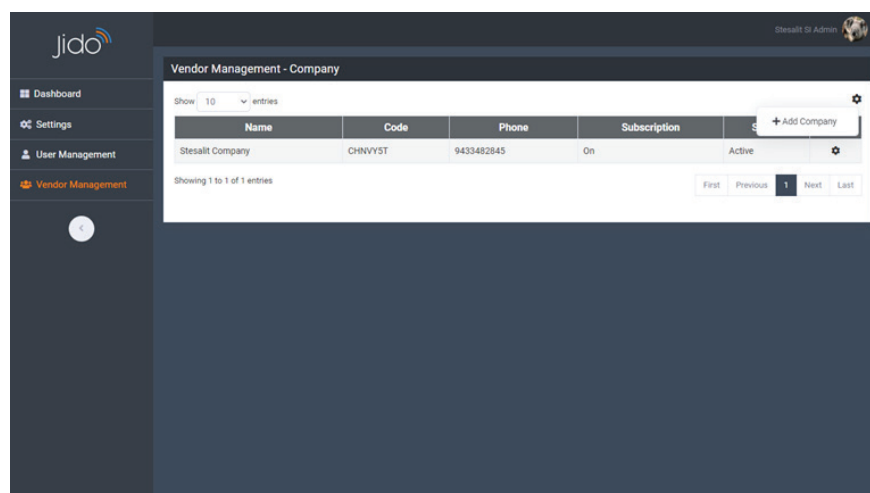


FIGURE 6-4. ADD COMPANY SCREEN

CHAPTER 6: JIDO — WEB APPLICATION

6.3.2 CONTAINER

All the containers' details can be added from here. All users can edit the container details if required. The Device Assignment with container parts also can be handled from here.

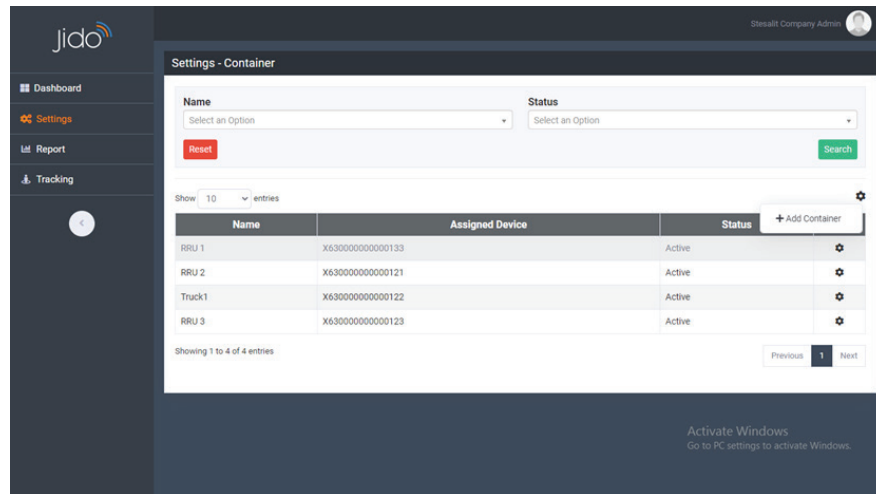


FIGURE 6-5. ADD CONTAINER SCREEN

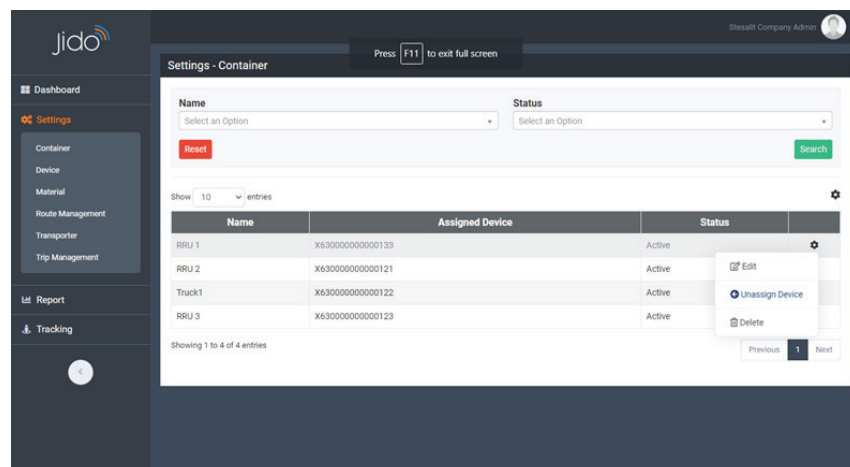


FIGURE 6-6. EDIT CONTAINER SCREEN

CHAPTER 6: JIDO — WEB APPLICATION

6.3.3 DEVICE

After logging in as a system admin user (Company), the user can add Jido devices.

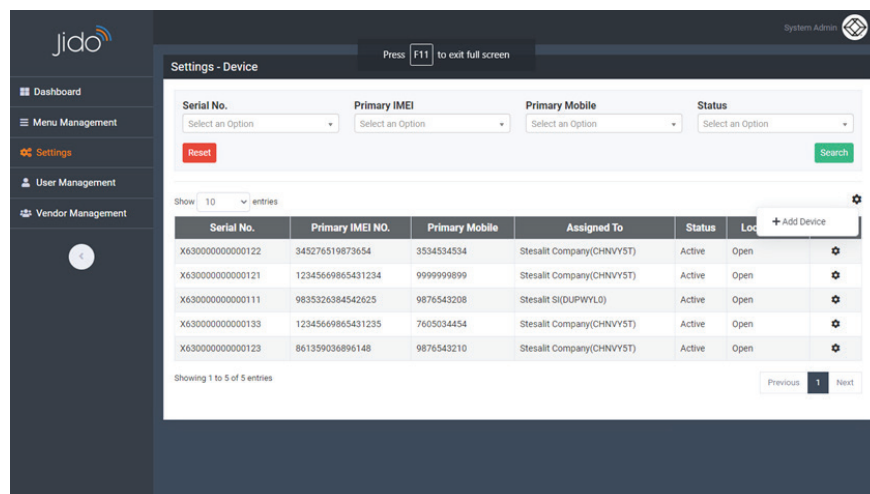


FIGURE 6-7. ADD JIDO DEVICE SCREEN

6.3.4 DEVICE ASSIGNMENT

After logging in as a system admin user (Company User) you can assign Jido devices to a Distributor.

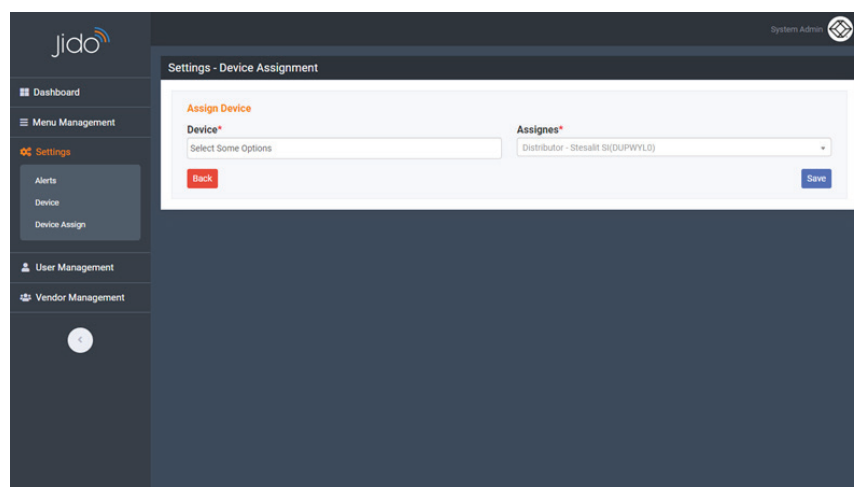


FIGURE 6-8. ASSIGN JIDO DEVICES TO A DISTRIBUTOR

CHAPTER 6: JIDO — WEB APPLICATION

6.3.5 ALERTS

Different kinds of Alert descriptions can be modified from this module.

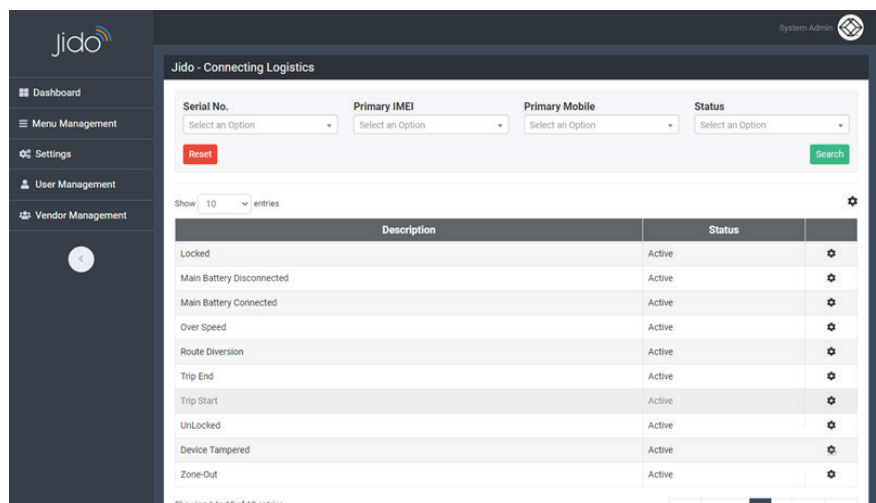


FIGURE 6-9. ALERT DESCRIPTIONS

6.4 USER MANAGEMENT

6.4.1 ROLE

Different Types of Roles can be added under this module.

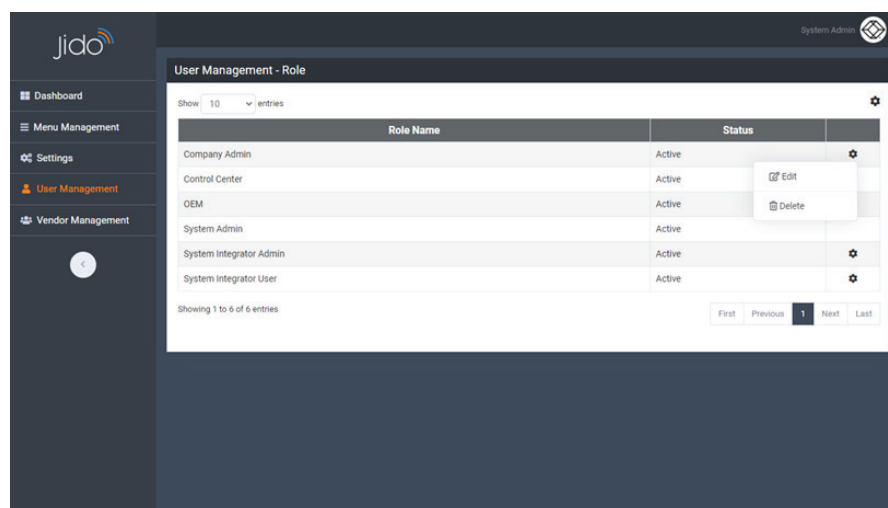


FIGURE 6-10. ADD ROLES

CHAPTER 6: JIDO — WEB APPLICATION

6.4.2 USERS

Add different types of users under the Users module. Assign roles to Users from here.

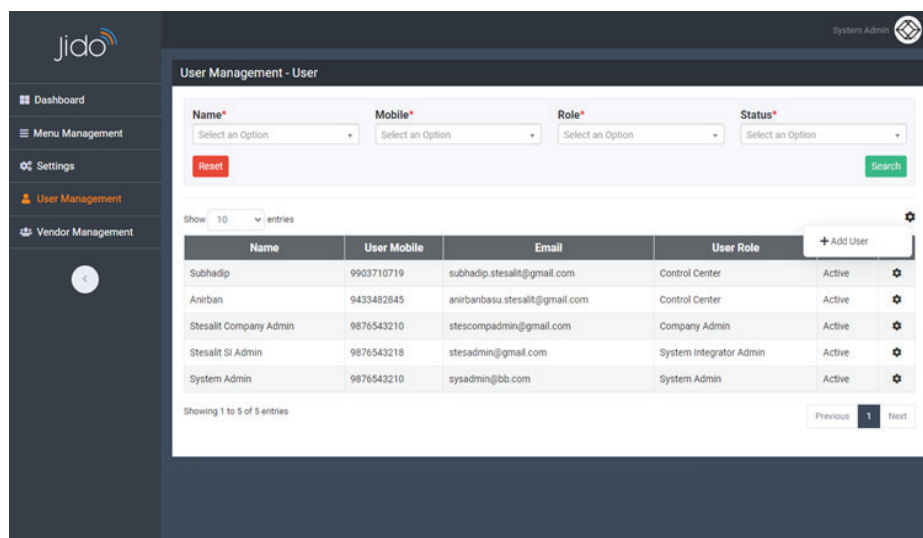


FIGURE 6-11. ADD USERS

6.5 VENDOR MANAGEMENT

After logging in as a System Admin (Company User), an OEM can add all the Distributors' details using this module.

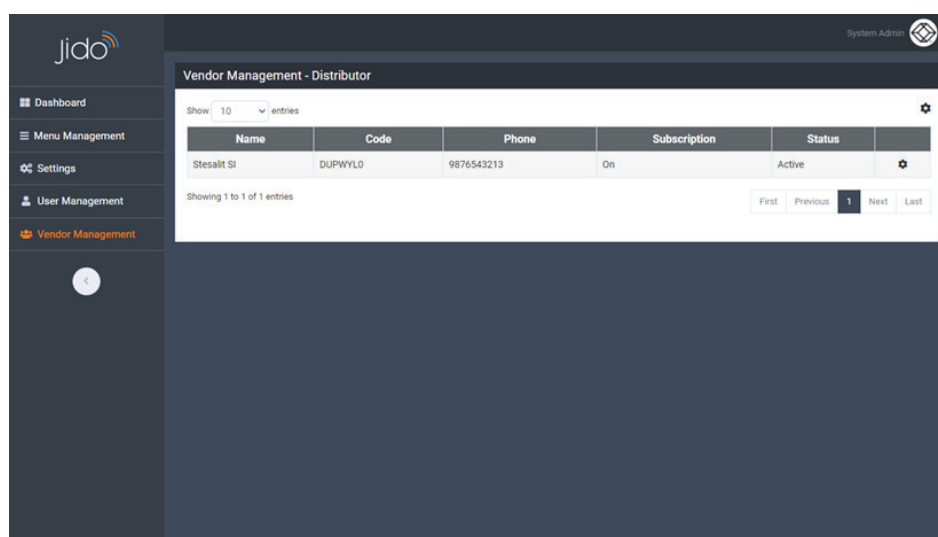


FIGURE 6-12. ADD DISTRIBUTERS' DETAILS

CHAPTER 6: JIDO – WEB APPLICATION

6.6 ROUTE MANAGEMENT

Create routes based on Starting point and Destination Point and minimum distance between points.

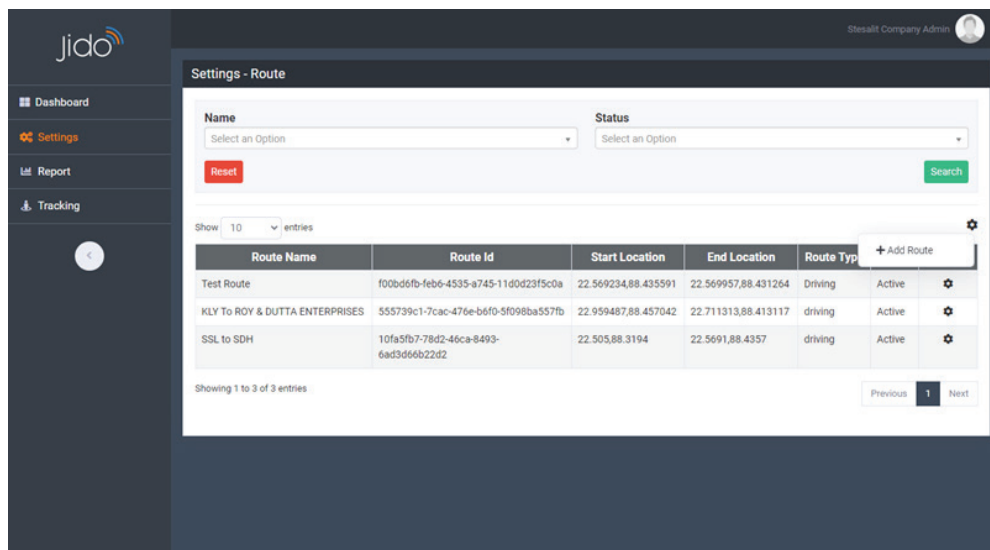


FIGURE 6-13. ADD ROUTES

View the created Route on a Map.

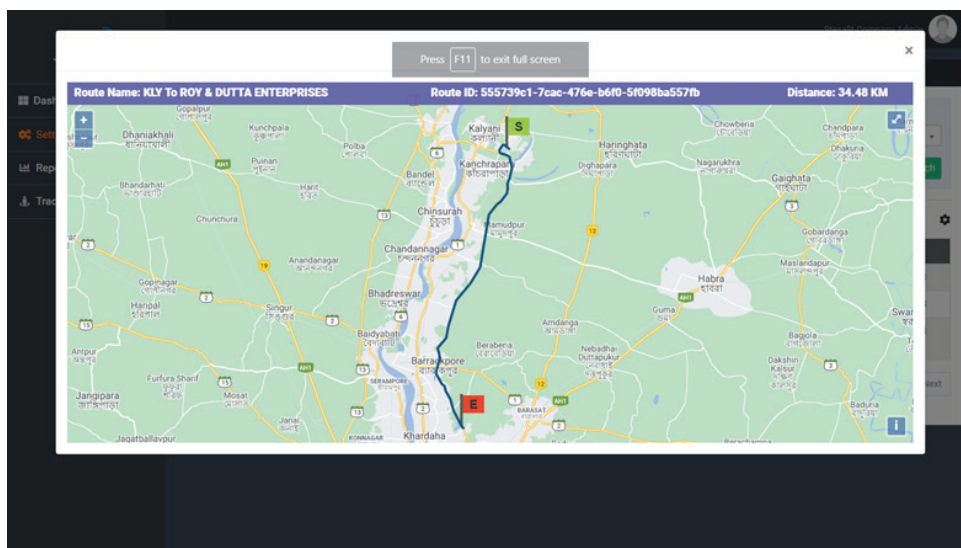


FIGURE 6-14. ROUTE, MAP VIEW

CHAPTER 6: JIDO – WEB APPLICATION

6.7 TRIP MANAGEMENT

Create a Trip following the route. Add Driver details, and Trip Start and End time.

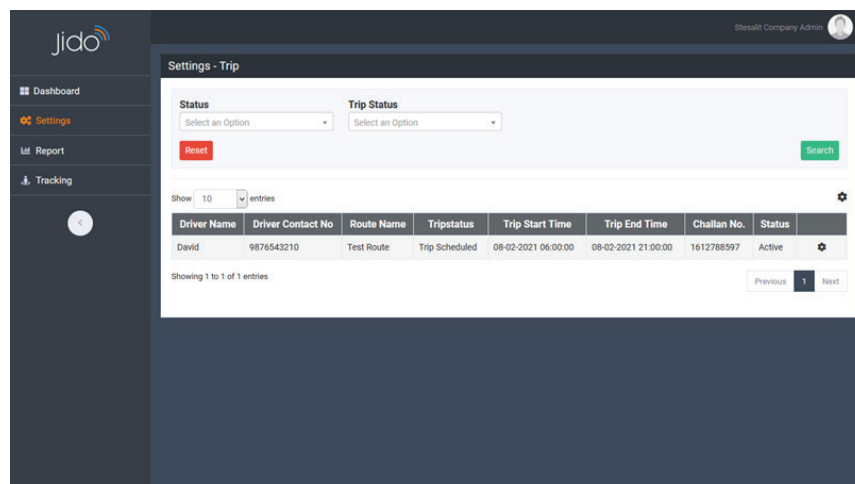


FIGURE 6-15. CREATE TRIP

6.8 REAL TIME TRACKING

View four screens to monitor the live movement of four containers at a time simultaneously or in a single Window (map view) by maximizing the window.

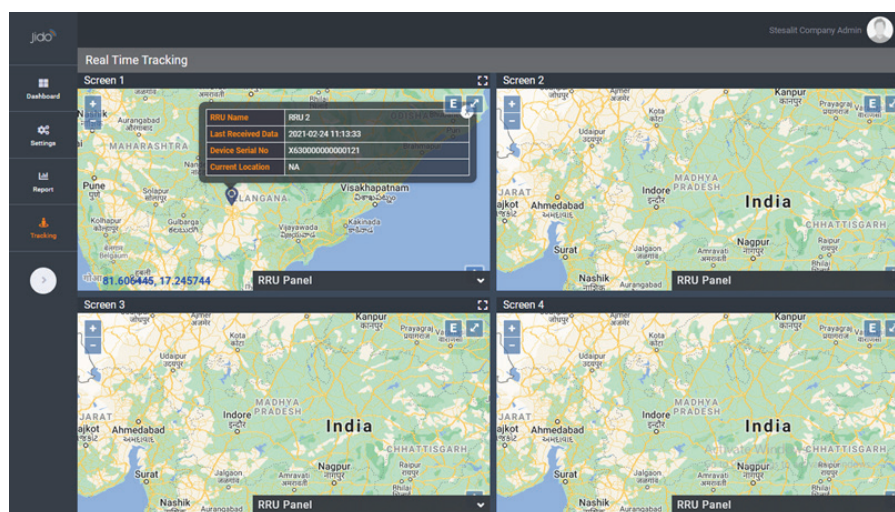


FIGURE 6-16. REAL-TIME TRACKING

CHAPTER 6: JIDO – WEB APPLICATION

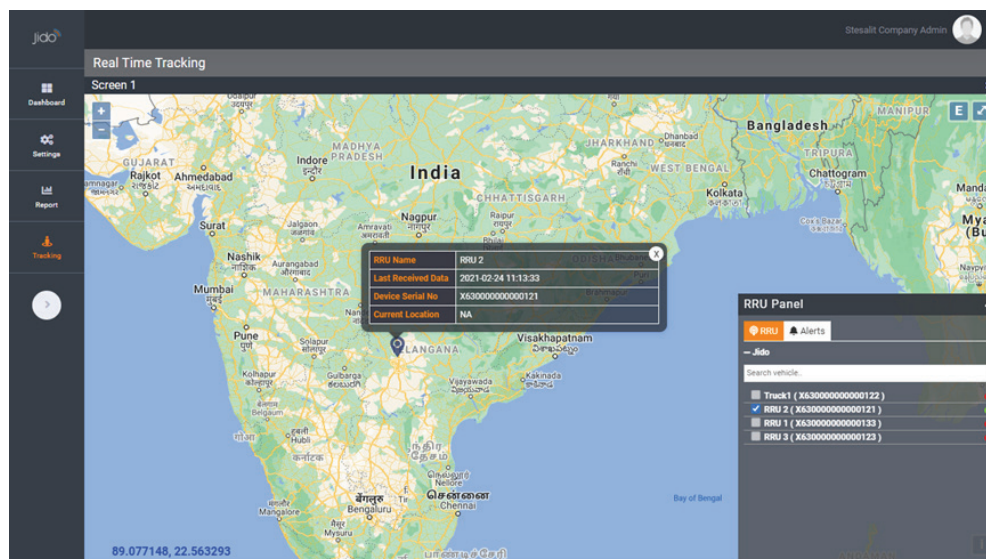


FIGURE 6-17. REAL-TIME TRACKING

6.9 HISTORY PLAYBACK

Monitor the container's movement and stoppages by playing the history data by selecting the "to date", "from date" and "to time", "from time".

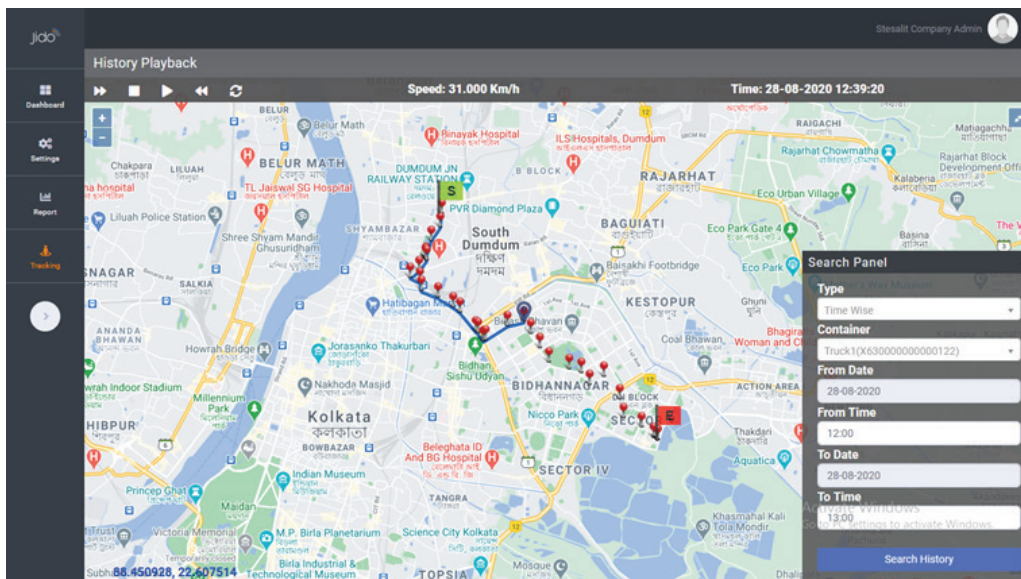


FIGURE 6-18. HISTORY SCREEN

CHAPTER 6: JIDO – WEB APPLICATION

6.10 GEO-FENCE CREATION (UNLOADING POINTS)

Based on provided coordinates, you can create Geo-Fences. Those Geo-Fences are nothing but the unloading points of the containers. View those created Geo-Fences on the Map.

FIGURE 6-19. ADD UNLOADING POINT, SCREEN 1

FIGURE 6-20. ADD UNLOADING POINT, SCREEN 2

CHAPTER 6: JIDO — WEB APPLICATION

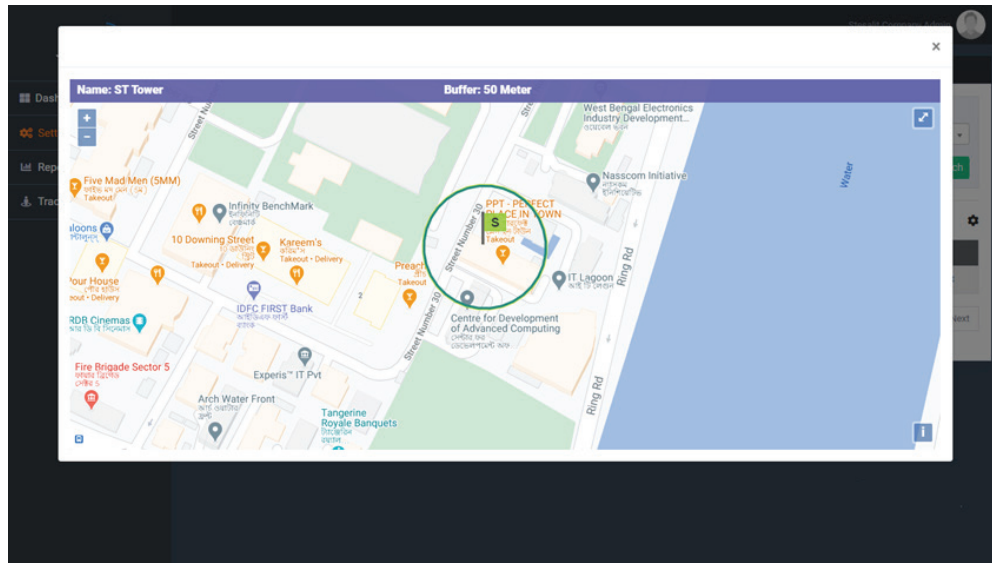


FIGURE 6-21. UNLOADING POINT, MAP VIEW

6.11 REPORTS

Multiple MIS reports are available in this portal such as:

1. Close Case/Trip Report
2. Open Case/Trip Report
3. Detail Trip Report

You can download reports in Excel and PDF format.

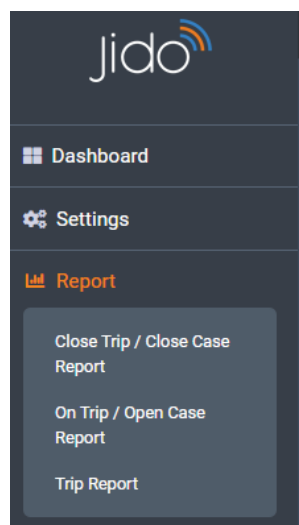


FIGURE 6-22. REPORT OPTION

A Detailed Trip Report is shown next.

Trip Report

Date* 08-02-2021 Trip Status Trip Scheduled

Reset Download Excel Download PDF Search

Show 10 entries

Driver Name	Driver Contact No	Route Name	Distance (Km)	Tripstatus	Trip Start Time	Trip End Time	Challan No.	Status
David	9876543210	Test Route	1	Trip Scheduled	08-02-2021 06:00:00	08-02-2021 21:00:00	1612788597	Active

Showing 1 to 1 of 1 entries

Previous 1 Next

FIGURE 6-23. DETAILED TRIP REPORT

CHAPTER 7: JIDO – MOBILE APP

7. JIDO – MOBILE APP

The Mobile app is nothing but the replica of the web application to monitor the real-time status of the containers including their live tracking, alerts details, and history data monitor for immediate action and control.

Below are the Login and Dashboard pages of the mobile application. The Android version of the web application is available in the Google Play Store.

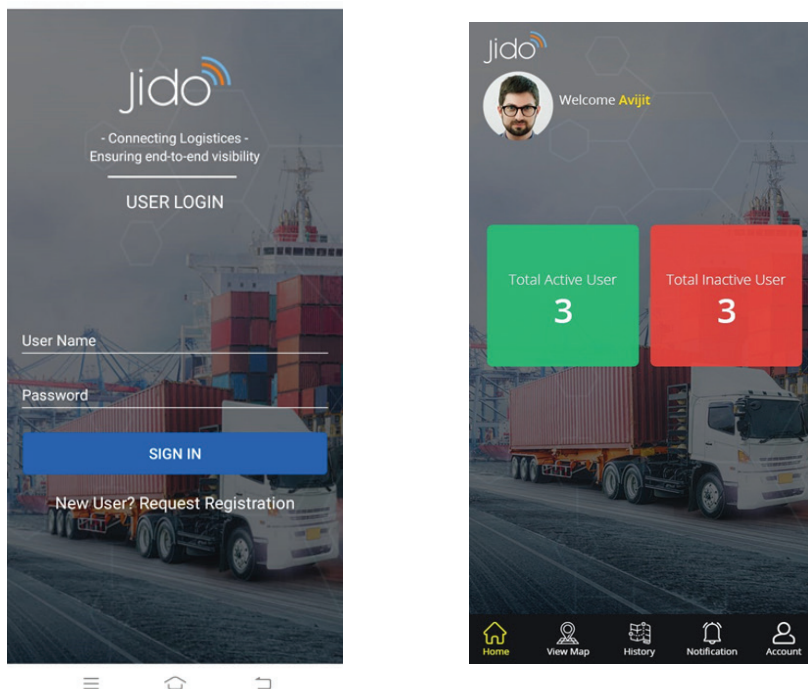


FIGURE 7-1. LOGIN AND DASHBOARD PAGES OF MOBILE APP

CHAPTER 8: STEPS TO ACTIVATE THE DEVICE TO USE

8. STEPS TO ACTIVATE THE DEVICE TO USE

1. Switch ON the Device by pressing Power Button (Power LED will glow red).
2. Wait for a few seconds until the GSM LED starts blinking (green). The maximum time is 3 minutes.
3. Wait for a few minutes until the GPS LED starts blinking (green). The maximum time is 5 minutes in an already-used location or 15 minutes for first-time use. The device must be kept in open sky to get the GPS Signal.
4. Once all the above conditions are fulfilled, the device is ready for use.
5. The device can't be switched off using the Power button. It can only be switched off using SMS from the registered mobile number to the Primary SIM, i.e. SIM One.

Message to Device	Return Message from Device	
Example	Success	Failure
*17,off#	POWER OFF Successful	POWER OFF Failed
*Device ID, Command ID, status#		

APPENDIX: DISCLAIMER/TRADEMARKS

A.1 DISCLAIMER

Black Box Corporation shall not be liable for damages of any kind, including, but not limited to, punitive, consequential or cost of cover damages, resulting from any errors in the product information or specifications set forth in this document and Black Box Corporation may revise this document at any time without notice.

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