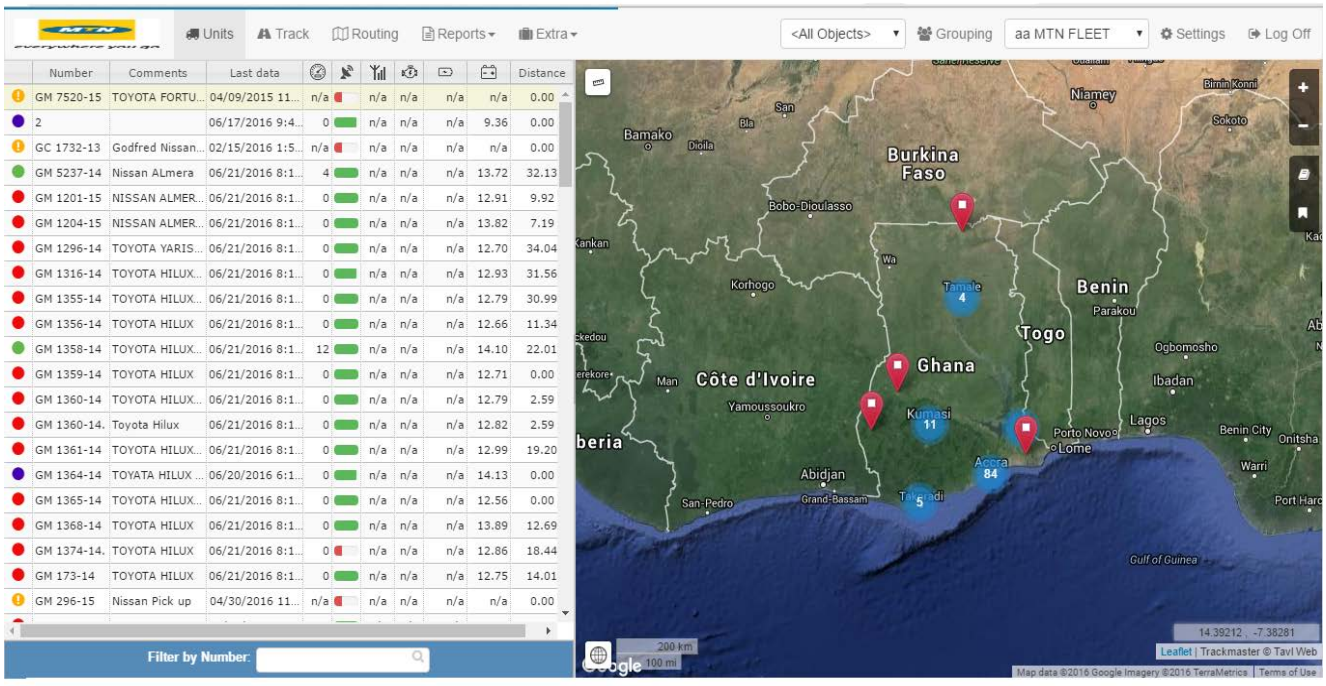
Trackmaster™ Automatic Vehicle Locator

TAVL



Client User Guide

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CONTENTS

1. QUICK START..... 3

2.1 LOGGING IN 4

2.2 LOCATING OBJECT AND LOADI NG ITS TRACK 4

2.3 LOGGING OUT 4

2. USER INTERFACE.....5

3.1 USER INTERFACE STRUCTURE USER INTERFACE CONSISTS OF FIVE BASIC ELEMENTS 7

3.2 TOOLBAR ITEMS 5

3.3 MAP CONTROLLERS 5

3.4 OBJECT LIS T..... 6

3 OPERATIONS

4.1 TRACK DATA MANAGEMENT 7

4.2 GEOFENCING 8-9

4.3 WARNING PANEL 10

4.4 MESSAGING 10

4.5 ROUTING..... .....1 1

4.6 BIGGER MAP..... .....1 2-13

4.7 GOTOREPORTS..... 14

4.8 FILTERING BY NUMBER..... 14

4.9 SETTINGS..... 15

5.0 REPORTS..... 16-20

DATE DAILY SOURCE REPORTS..... 20

WARNING RULES REPORTS..... 21

DISTANCE REPORT..... 21

ROUTE R EPORTS..... 22

TRIP S TOPS..... 23

GEOFENCING R EPORTS..... 24

1. Quick Start

Trackmaster AVL is a simple technology that enables you to track your vehicles in Ghana from anywhere in the world using internet access through a computer or a smart phone.

Trackmaster AVL enables companies to monitor all the movements of their fleet at the lowest cost possible.

a. Logging In

To access TAVL enter the following link in your web browsers address bar:

http://trackmaster.com.gh

When web page loads enter username, password and client code in appropriate fields. (see Figure 1.)

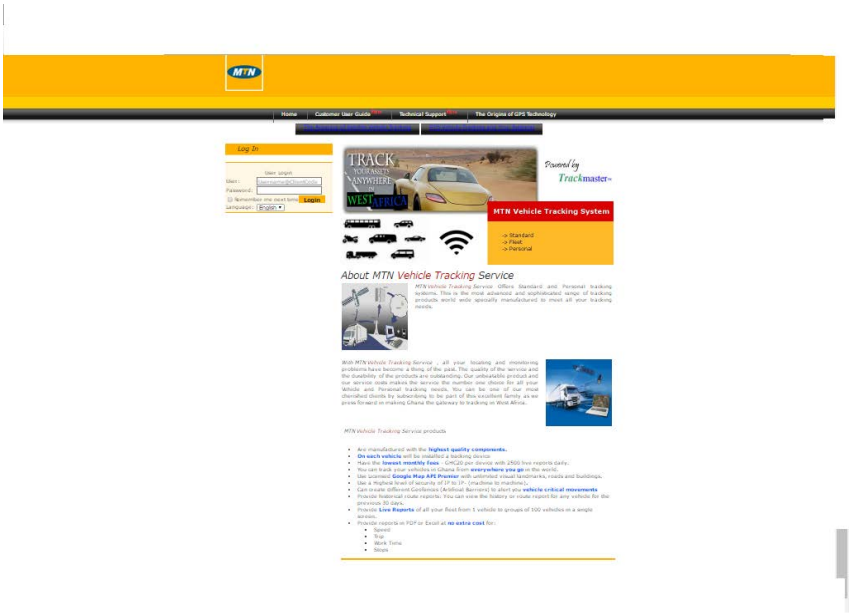


Figure 1

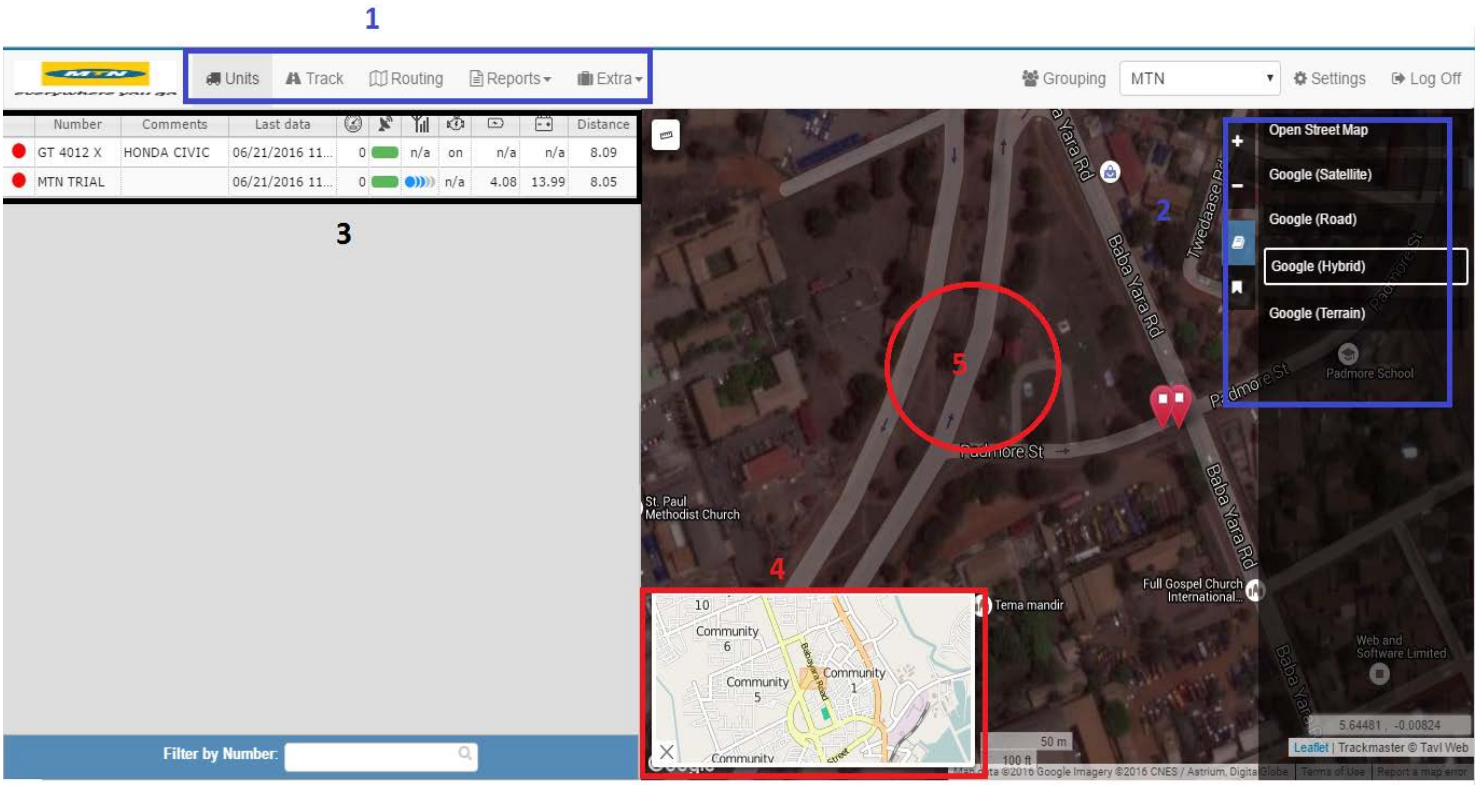
b. Logging Out

When you have finished tracking your vehicles, be sure to logout from TAVL.

c. User Interface

The user interface consists of five basic elements:

1) Toolbar;
2) Map Controller
3) Object List
4) Mini Map
5) Map



- Toolbar

	Description
Units	Opens Object list window
Track	Opens Track window properties
Zone data	Opens Geofence panel
Warning data	Opens warning panel
SMS window	Opens messaging panel
Garmins	Opens Garmin solution controllers

Figure 4

- Map control element

To zoom in or zoom out click +/- buttons in map controlling menu.

Object list

In Object list window you can see all your objects. Vehicle number,last time when data was sent,speed,GPS and GSM signal strength,ignition status,total distance for the day and battery voltage information are all shown in the object list. You can sort object by any of these values ,to do so click on the feature name or object,by which you want to sort your object.

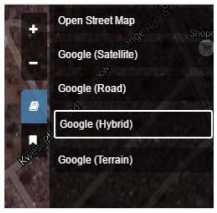
	Number	Last data					
		n/a	n/a		n/a	n/a	n/a
		2 minutes ago	90		n/a	n/a	n/a
		2 minutes ago	89		n/a	n/a	n/a
		an hour ago	87		n/a	n/a	n/a
		3 days ago	78		n/a	n/a	n/a
		6 days ago	66		n/a	n/a	n/a
		11 minutes ago	7		n/a	n/a	n/a
		4 minutes ago	0		n/a	n/a	n/a
		5 minutes ago	0		n/a	n/a	n/a
		5 minutes ago	0		n/a	n/a	n/a
		a minute ago	0		n/a	off	n/a
		25 minutes ago	0		n/a	n/a	n/a
		35 minutes ago	0		n/a	n/a	n/a

- Map and Map Switch

Currently TAVL Web supports the following online maps:

- Open Street Maps for free
- Google Maps with annual fees

To select map layer click “Map layer” button and select your map from maps available.



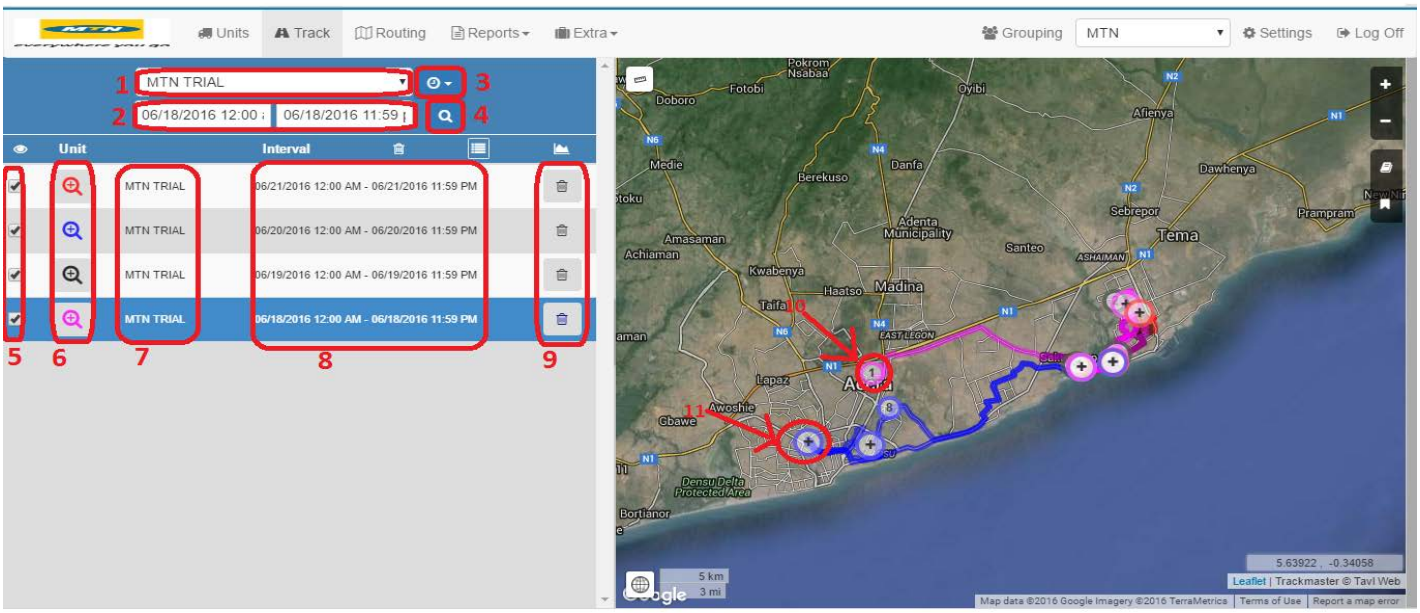
4 Operations

4.1 Track data management

It is possible to see various objects tracks with different dates on the map at one time. To do so choose your object whose track you want to see, select date or time interval and press show, object track info will appear in the track list and track will be drawn on the map. To add another objects track to the list and to the map, repeat previous steps.

In track list you can choose which tracks to show or hide, focus selected track on map, see object numbers, see date of shown track and remove selected track from the list.

1. Object selection
2. Exact date selection
3. Default time interval selection
4. Show track button
5. Select to show/hide track
6. Focus track on map
7. Object number list
8. Time interval of track shown
9. Remove track from list and map
10. Trip stop place and number
11. Zoom several stops in a close area



- The time format is 24 hours, eg. 8PM = 20.00
- By default, the starting and ending date and time are set to the current day: from 12.00AM to 23.59PM
- The ending date can be in the future and the loaded track will show records until the current time.
- It is recommended to track for 48h or less.
- MTN Vehicle tracking service keeps tracking data for 90 days.

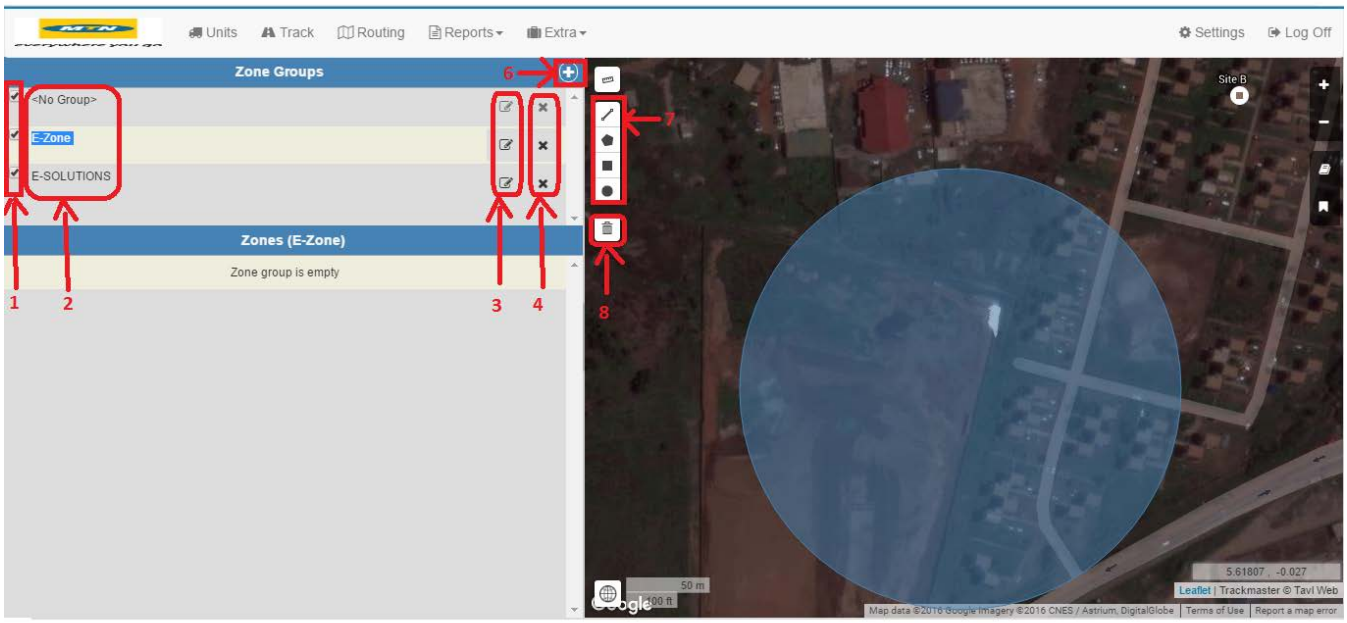
a. Geofencing

Geofencing feature lets user create a virtual zone (GeoZone) on map and get a warning when predefined object leaves and/or enters that zone.

In Geofencing menu you can manage, create and delete geozones:

1.Show/hide zones or groups on map
2.Zones, groups name list
3.Focus selected zone on map
4.Delete zone or group
5. Edit group
6.Add new group
7.Add new zone with selected geometry
8.Delete zones by selecting them on the map

- Circular
- Rectangular
- Polygon (used mainly in the case of geo-corridors, ie route.)



- Circular
- Rectangular
- Polygon (used mainly in the case of geo-corridors, ie route.)

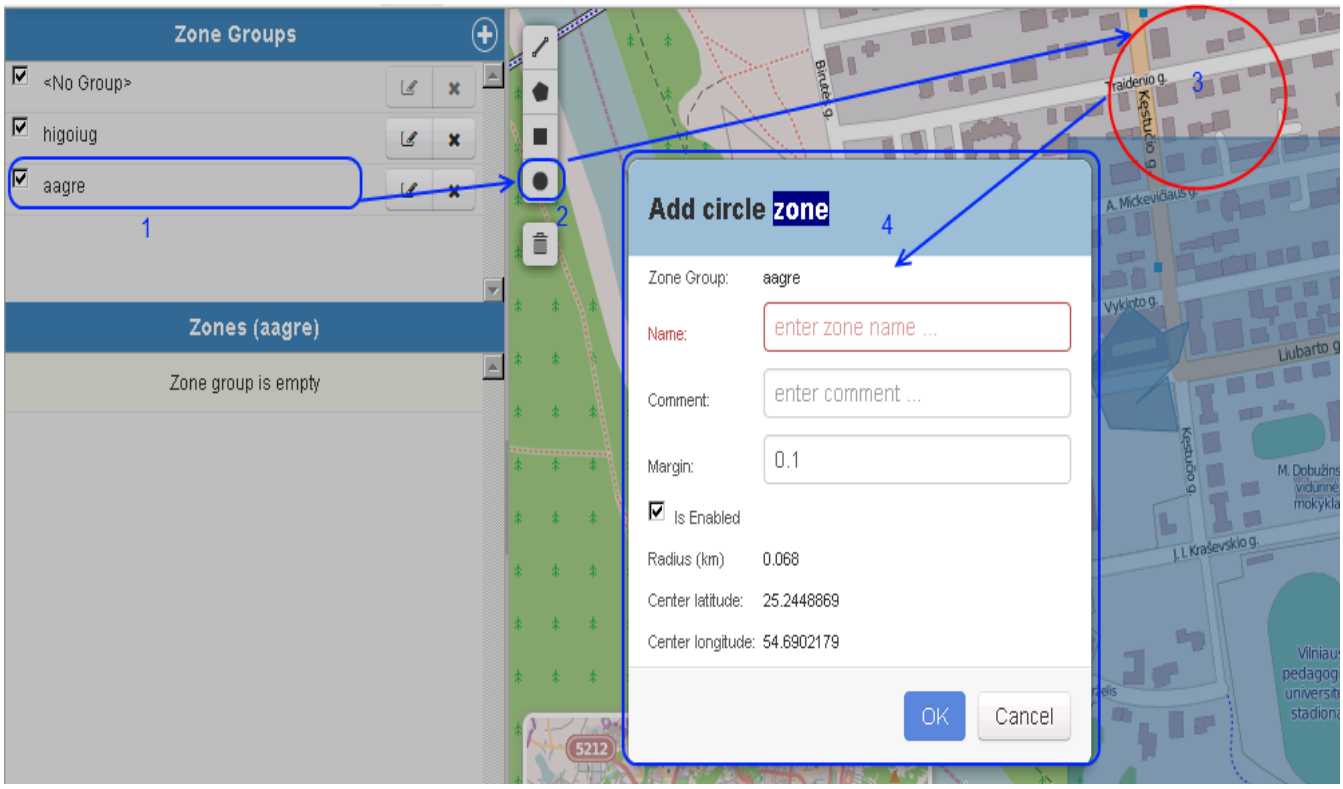


Figure 12. Creation of Geozone

To create geofences, users need to access the geofence creation platform by clicking on the toolbar: Extra > Zones and go through the following steps:

To create a new group, click “create new group” button, enter Group name, comment and click OK button.

To create a new geozone, firstly select the group name or <no group> which you want your geozone to be attached to. Then choose what geometrical type your geozone should be and click “Create a new zone”, draw a zone on the map, enter your preferred parameters and click OK. (see Figure 1)

4.3 Warning panel

This feature allows user to see previously emitted warnings. When using this view user has to select time period, there is two possible ways to do that. You can select direct date and time interval in date fields or just select default time interval by clicking clock button and click „Select". Warning messages for selected time will appear in the message box. You can select to show the exact location of event on the map, or to get more details of that warning (see Figure 12).

1. Time interval selection
2. Message list
4. Warning event location on map
5. Warning confirmation

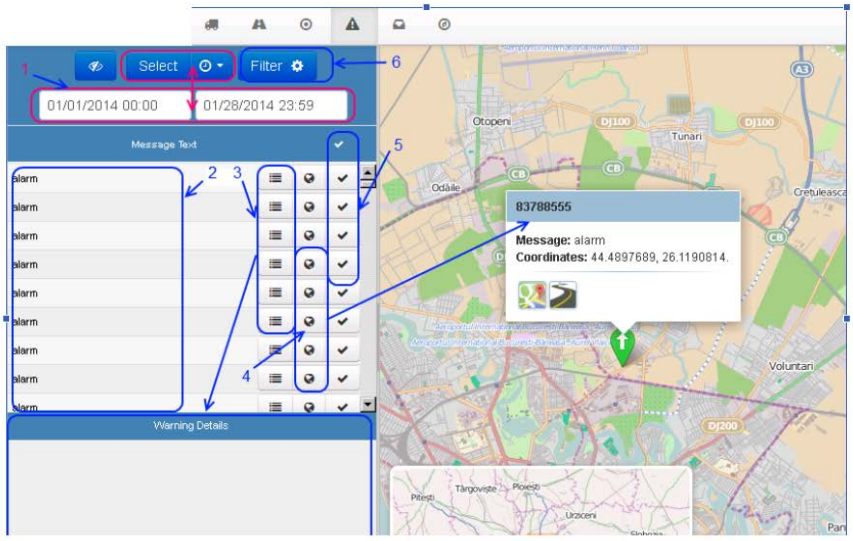


Figure 13. Warning panel

4.4 Messaging

You can use SMS tool to simply and quickly read and send SMS messages to and from drivers. To see the message list firstly check inbox/outbox buttons which messages you would like to see, select time interval of you messages should be displayed and click show button near the date field. You can also choose which information of your messages should be displayed, and search your messages (see Figure 13).

4.6 Routing

With this feature you can simply and fast plan your own route by setting points or switching streets which you need to achieve. From menu bar choose routing like shown in “Figure 20”.

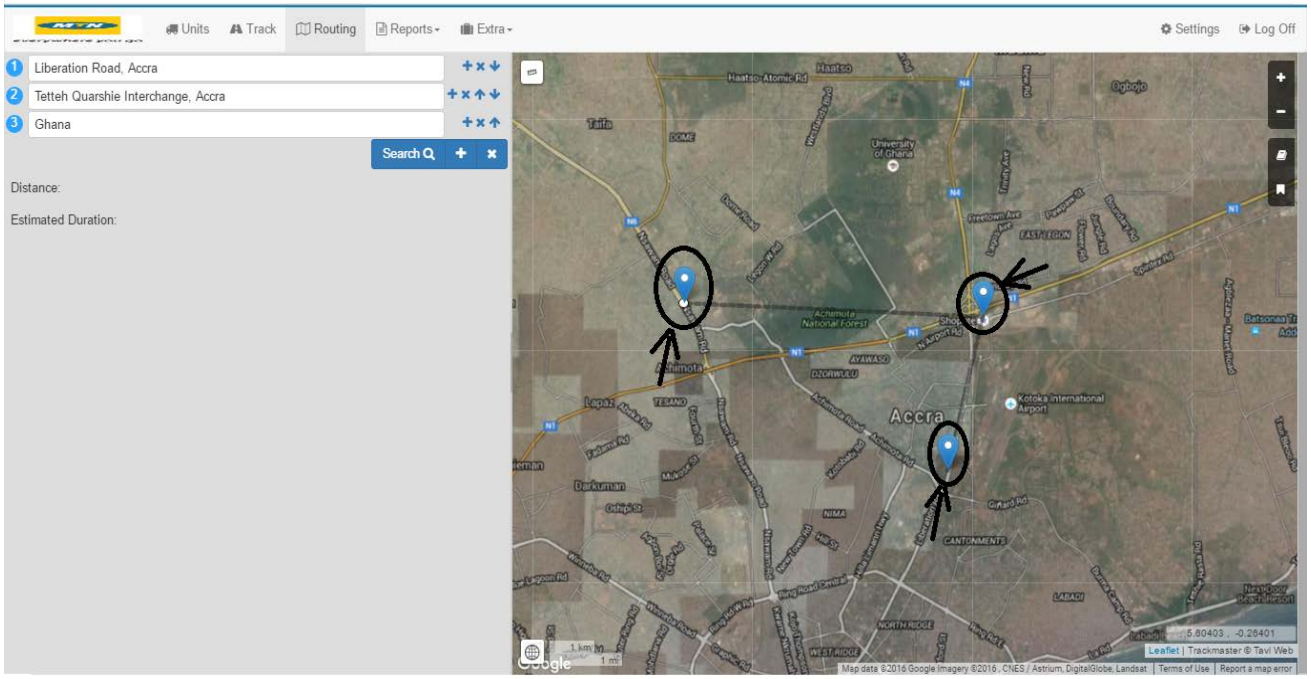
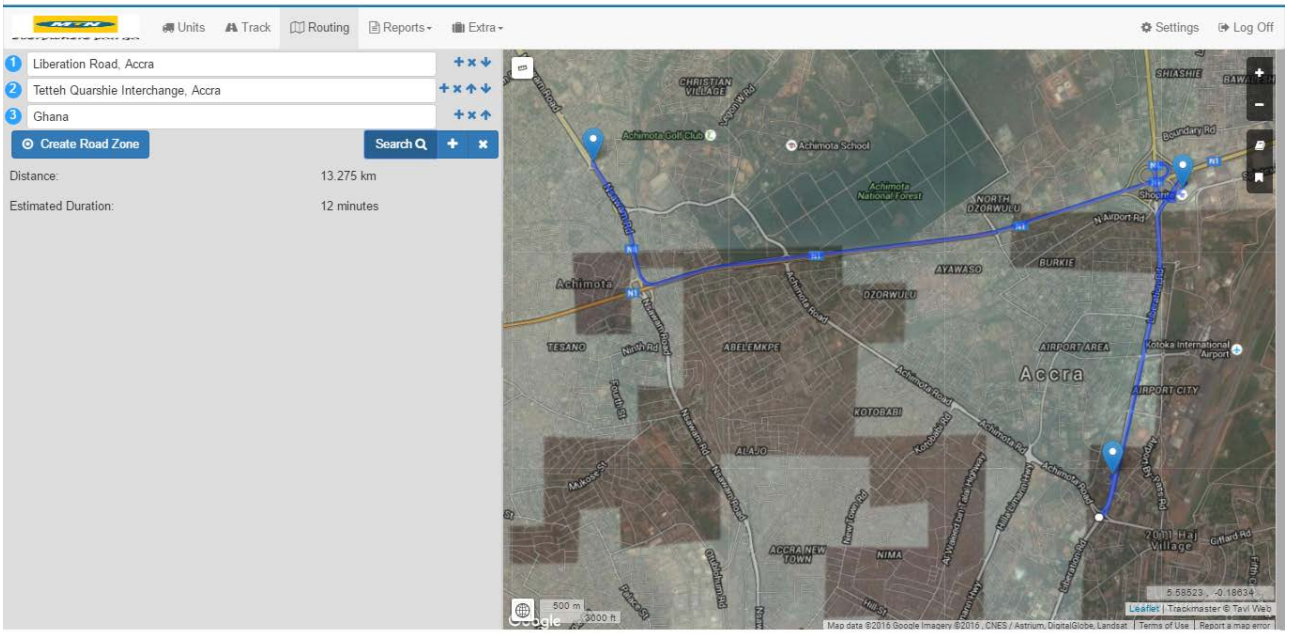


Figure 21. route pointers

In Figure 21 you can see disordered set pointers, but routing feature will fix it and find the fastest way from point to point. See in “Figure 22”

In the left side corner you can see all points details, street or city (if route is very big) names.



4.7 Bigger map

Sometimes you need to see a lot of objects at the same time in the map window, but a big part of it is occupied from both sides with the additional information. Bigger map feature lets you to hide both toolbars. Simply press yellow marker on left toolbar side like shown on “Figure 23”, and the same on right side

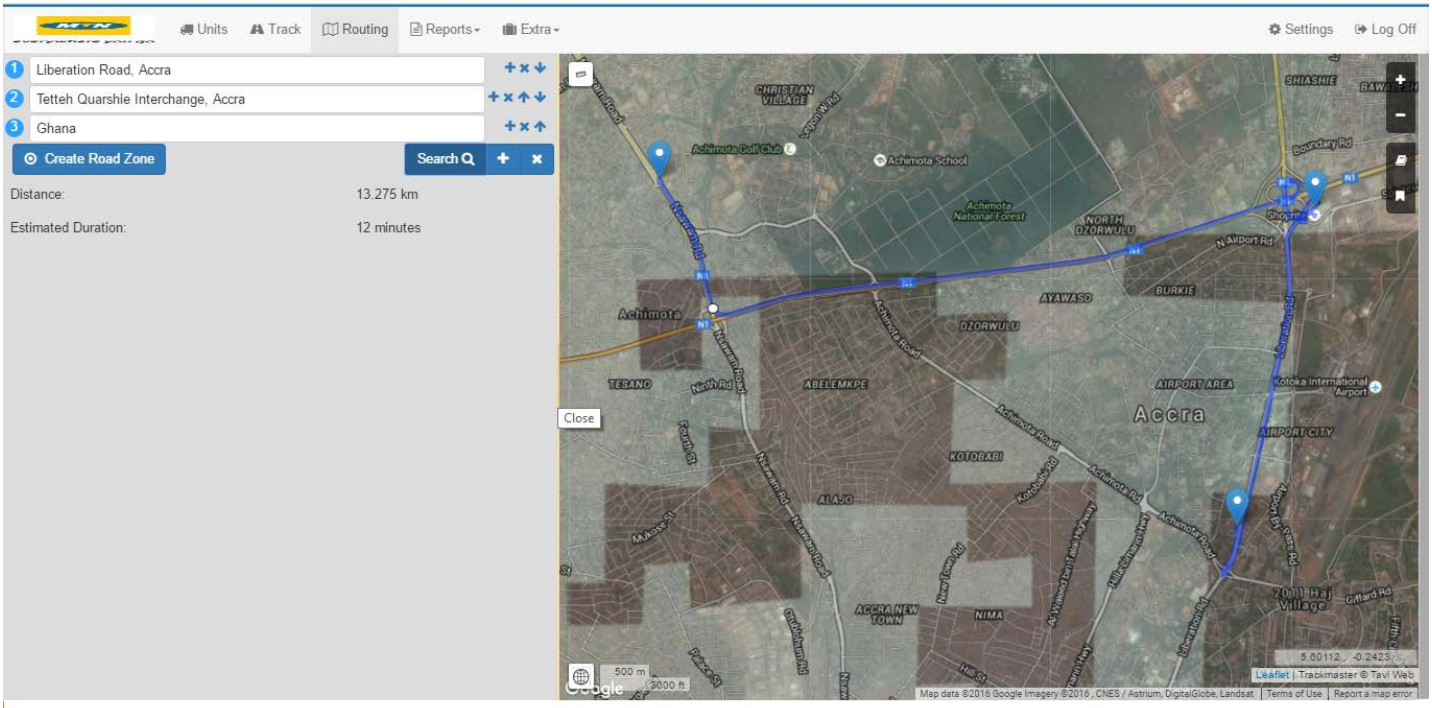


Figure 23. Yellow marker location

When you press that small yellow line will see this, more comfortable view “Figure 24”.

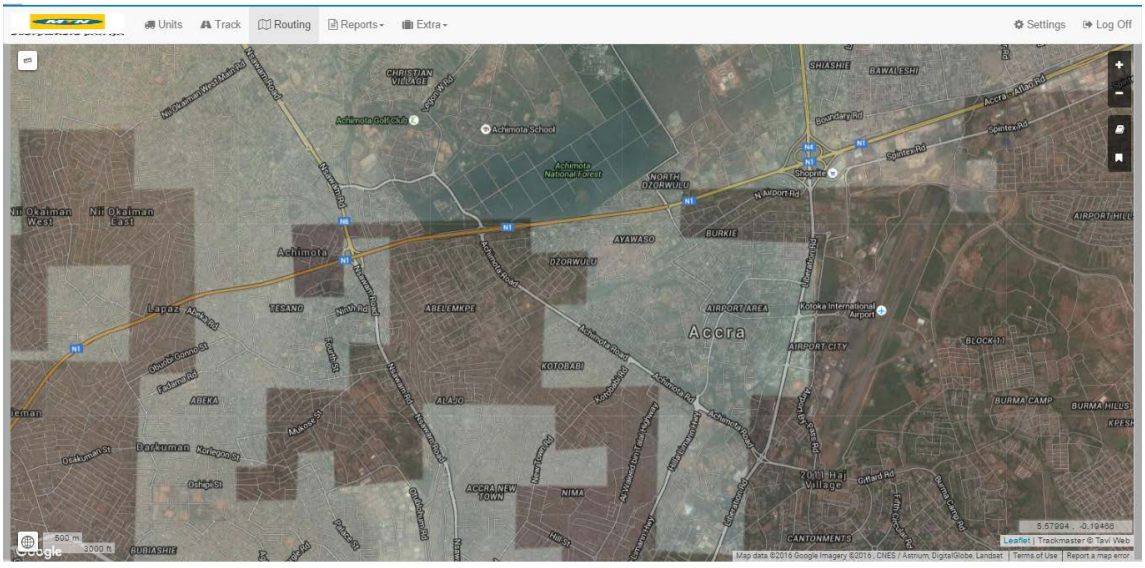


Figure 24. Bigger map

GoToReports

Reports feature lets you easy make report about driven distance, geofencing, route and etc. In “Figure 25” you see report list, simply press which you need and report will be shown to you. For more information about getting a report, look at page 28.

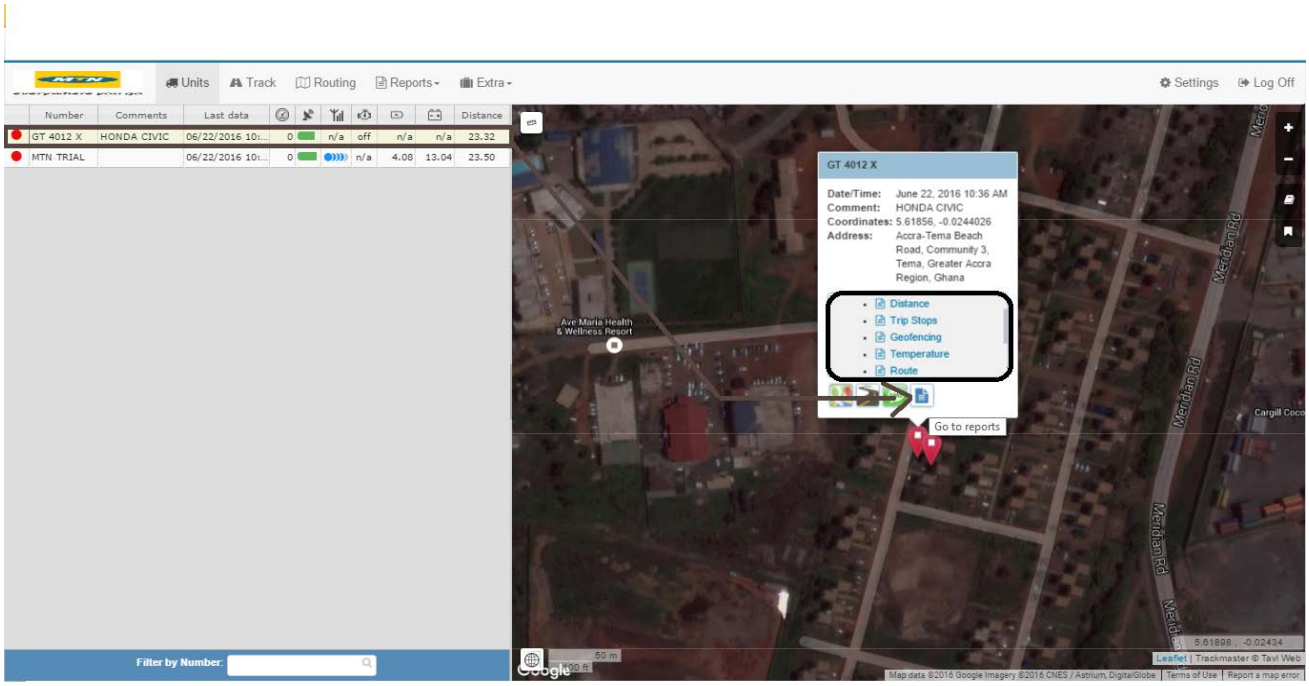


Figure 25. GoToReports

4.9 Filtering by number

If you have lots of devices maybe hundreds or thousands, it is very difficult to find the device you need. It is not. This feature lets you find any device by its number. Not necessary to write all number just write few first digits and will see much less devices “Figure 26”

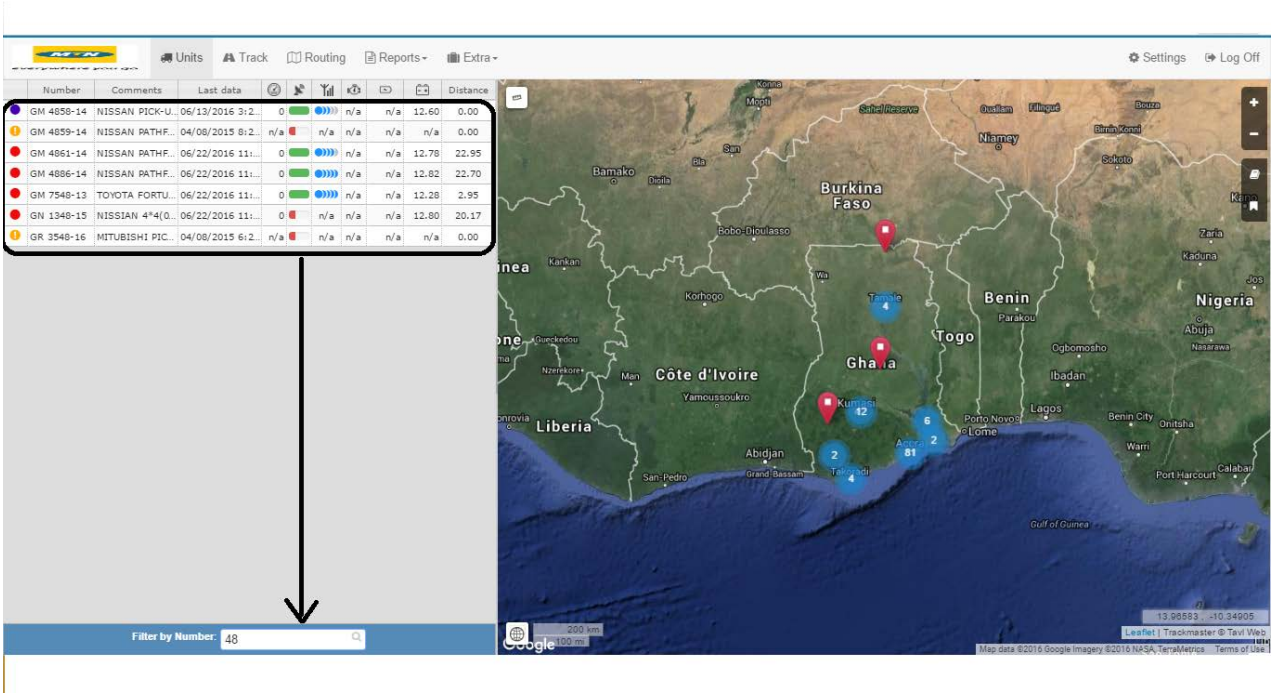


Figure 26. Filter

Settings

If you want to set up details in your device, you have to go to settings like it is shown in the Figure 27.

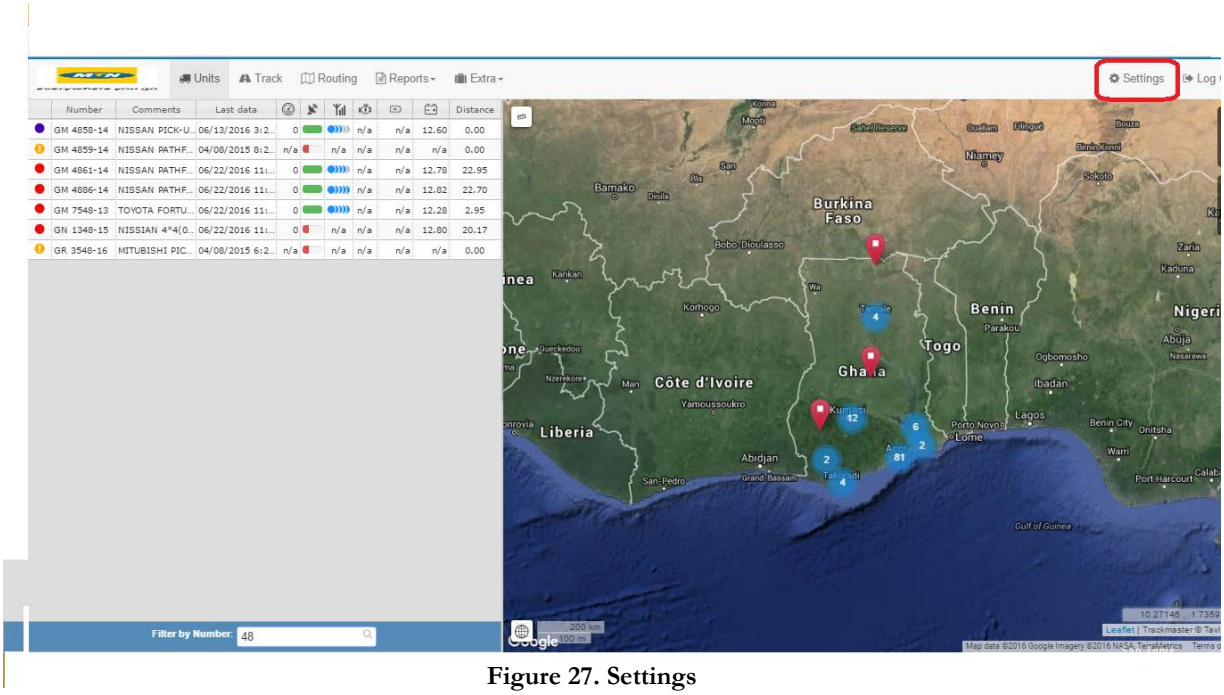


Figure 27. Settings

In “Figure 28” you can see all settings from measurement system to tracking parameters.

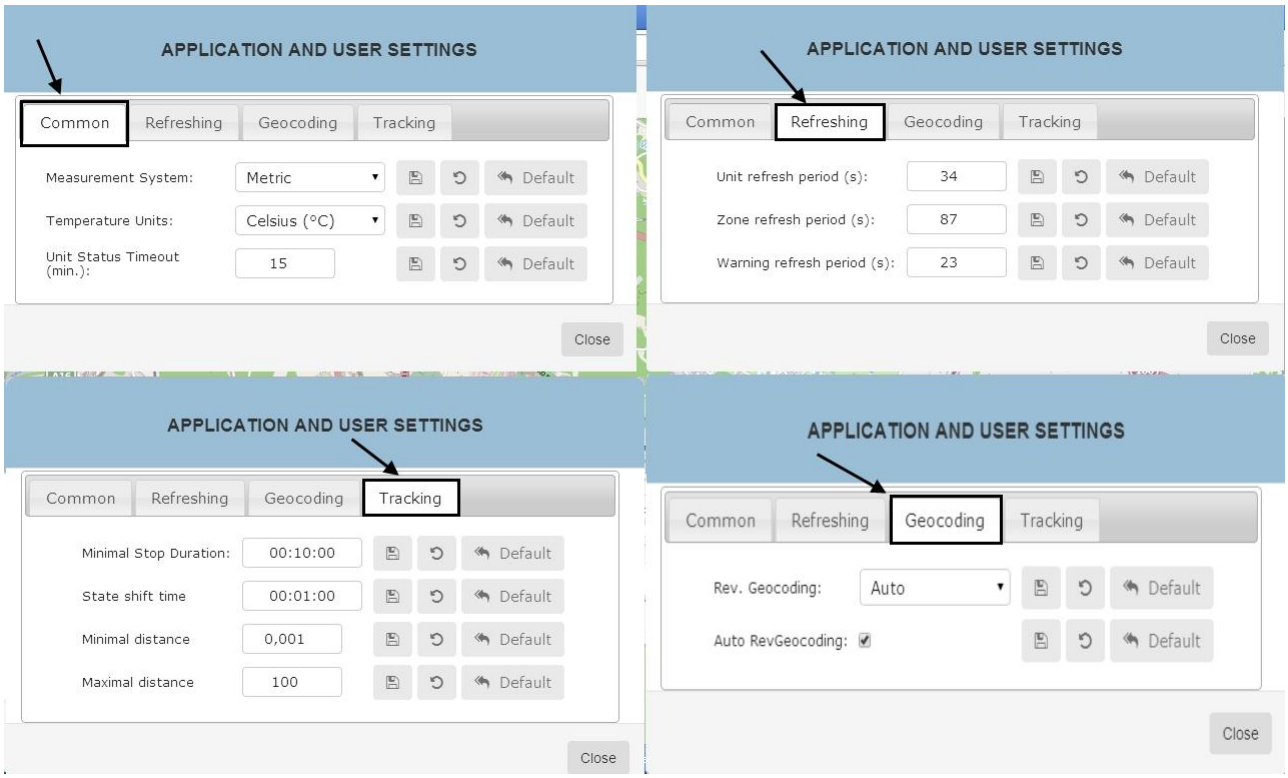


Figure 28. Settings bar

4.11 Warning rules

Feature lets you make 15 different warnings, in configuration menu press rules like shown in "Figure 29".

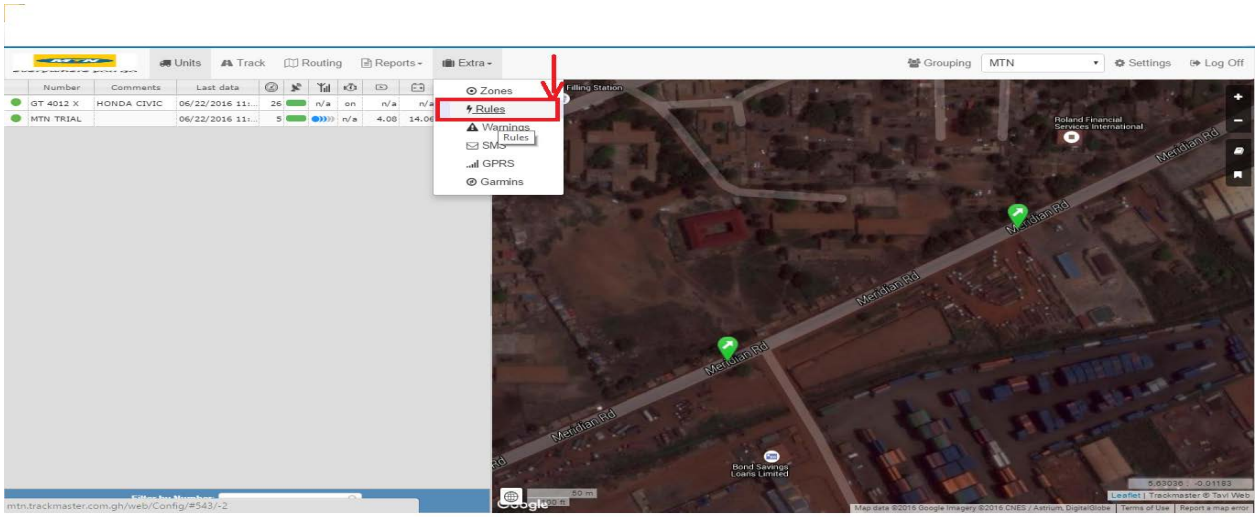
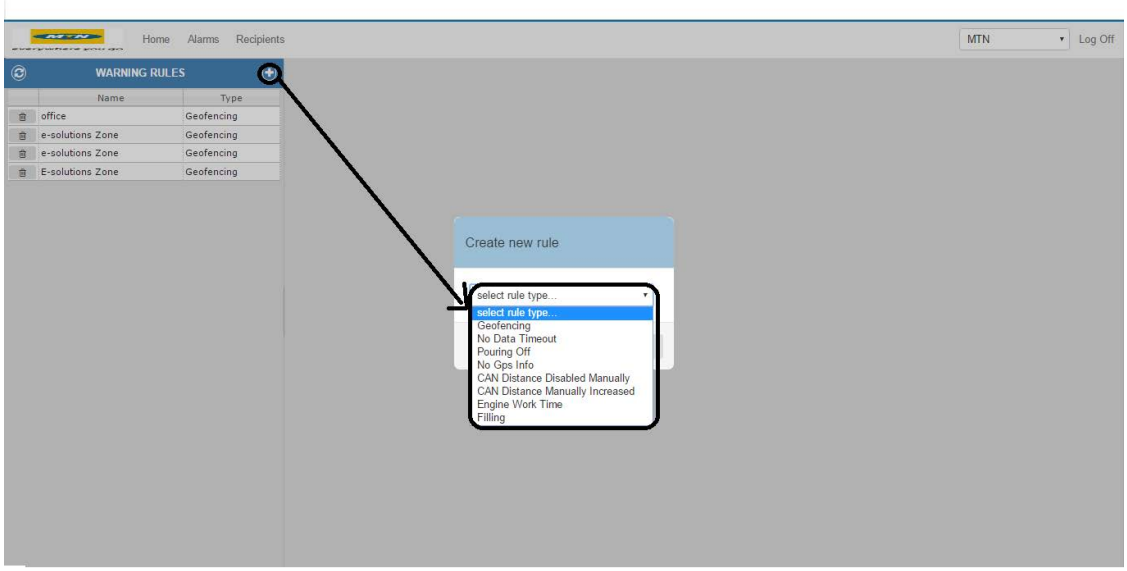


Figure 29. Rules



For example, if you choose stop inside geozone, it means that when you stop in configured geozone, you will get a warning. ”Figure31”

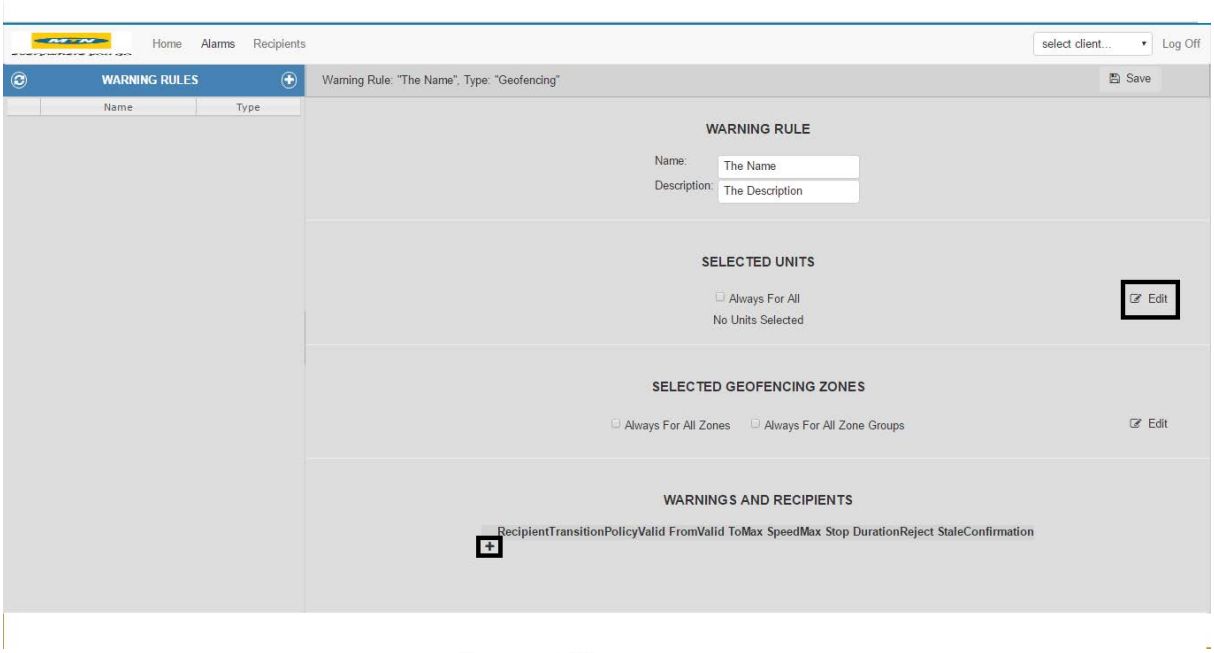


Figure 31.Warning rule geozone

In the WARNING RULE write the warning name, some description (not necessary)

In SELECTED UNITS press edit and in the list choose units which must be controlled by warning.

Reports

If you need to get report of your driven distance, geofencing and etc, press Common and then Reporting like shown in “Figure 34”

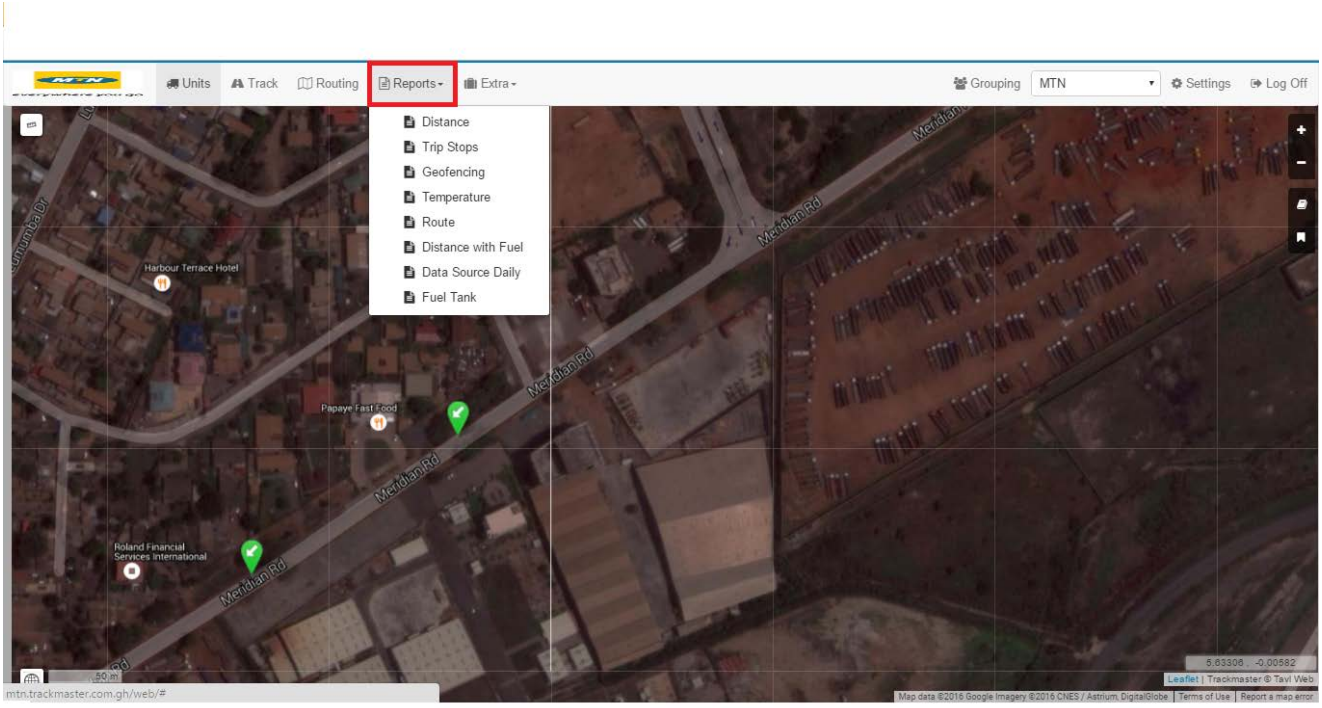


Figure 34. Reporting

Then you will see the reports window (Figure 35).

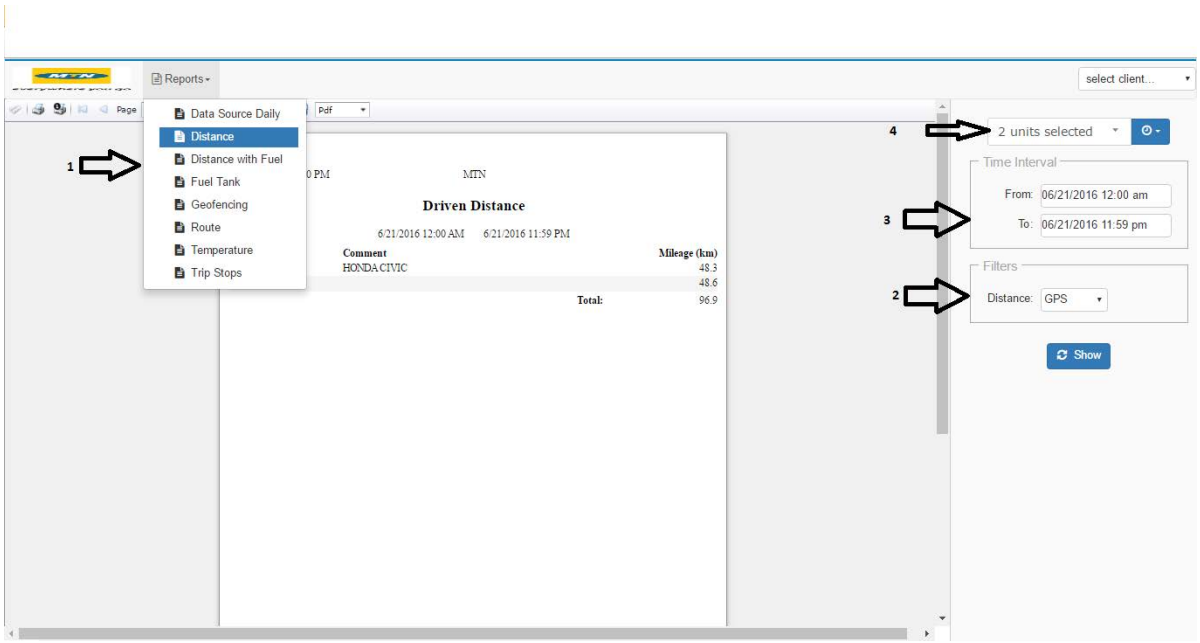
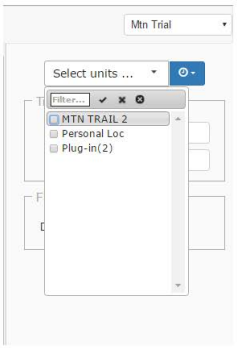


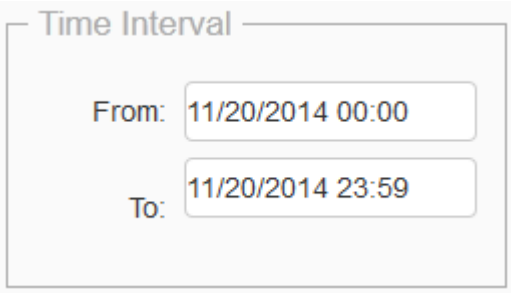
Figure 35 Reports window

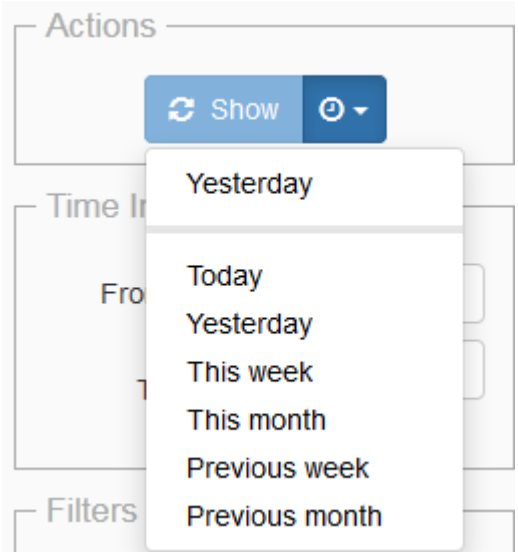
1. Select report type (detailed information for each report is in chapters 4.13.1 – 4.13.8)
2. In order to get a certain report, in the Filters bar you need to select units (at least one), and other settings (those occur when a particular report is chosen).



If you have a lot of devices, for the faster and a more comfortable unit selection process, Filters menu has a toolbar. There you can type a particular unit name which you want to select, or choose to mark/unmark all units in the list.

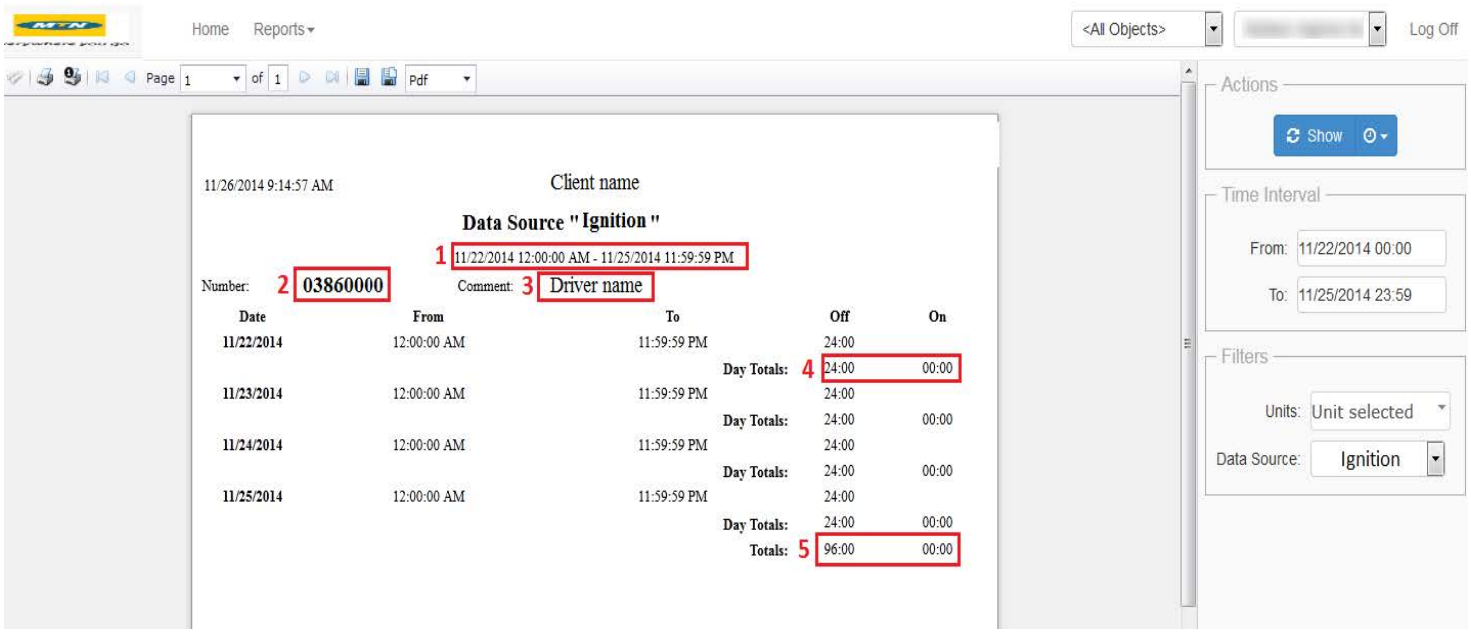
3. Set the date and time, from when till when you need to get a report.





Data Source Daily report

This report is used to show for how long a selected data source of the chosen unit was on/off every day (Figure 39).



In the Data Source Daily report window (Figure 39) marked fields are used for:

1. A period of time for which the report is calculated.

2. Object‟s number (or it can be for example: a device serial number).

3. A comment (there can be written driver‟s name or other information).

4. Two calculated time values for one day (the first one shows how long a data source was turned Off, the second one is how long a selected data source was put into action - On).

5. Two calculated values of the data source being Off/On for the total period of time in the report.

Distance report

This report (Figure 40) shows a total driven distance of a selected object for the chosen period of time.

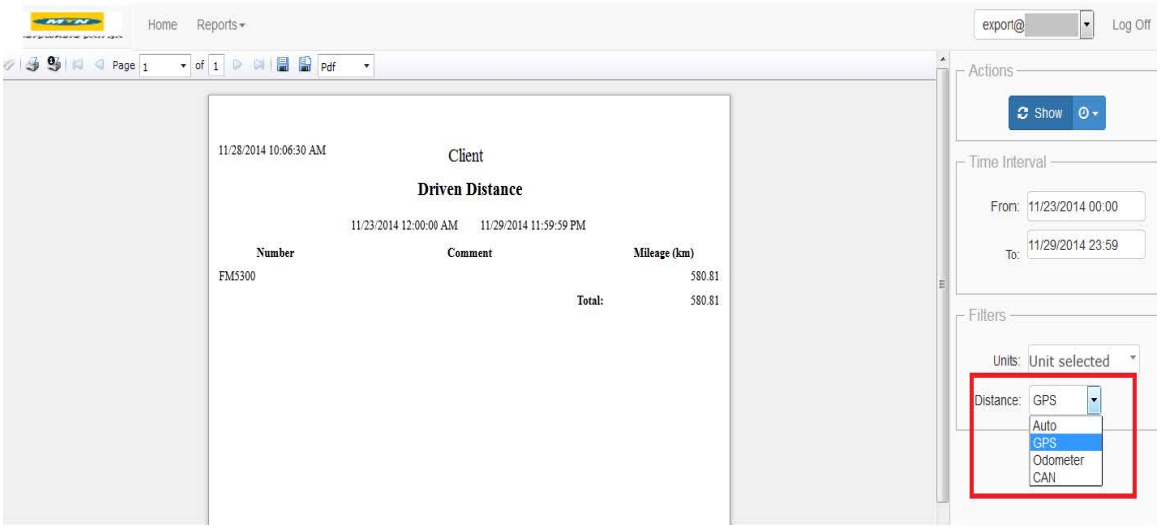


Figure Driven Distance report window

Here, in the marked Filters bar field you have to additionally choose a distance source type for the report (Auto/GPS/Odometer/CAN)

4.13.6 Route report

This report (Figure 44) shows a complex information of object,,s journey during a certain period of time.

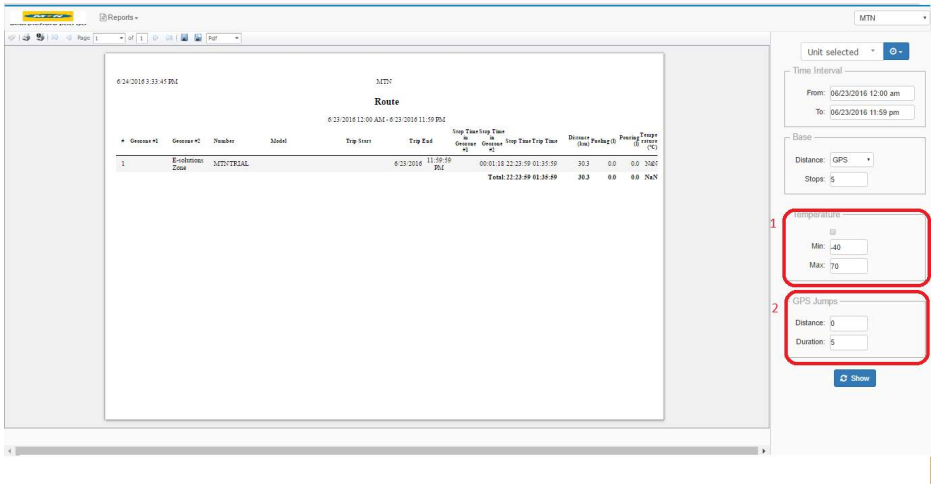


Figure 44. Route report window

Here in the Base bar you can set a number that will be the minimum stop duration inside second zone (minutes). Two bars bellow are used for:

1. If a temperature is measured in the unit, you can include this parameter in the report by checking the Temperature bar and choosing it,,s ranges.

2. GPS Jumps bar is used for setting a Distance (maximum GPS jump distance in kilometers) and Duration (a maximum GPS jump duration in minutes). It is done to measure possible deviation from unit,,s correct location when GPS signal is bad.

In this report you can get the information about an object:

- What configured geozones were crossed;
- When each trip was started/ended;
- How long it has stopped in a certain geozone;
- What was the total time of being on Stop for a set period of time;
- How long did the each trip take;
- How far did the object go in a set period of time;
- Fuel tank filling and pouring amounts in liters;
- A temperature value if it is measured in an object.

Trip Stops report

This report (Figure 46) shows when exactly and for how long a selected unit stopped/drove, and how far did it go in a certain location.

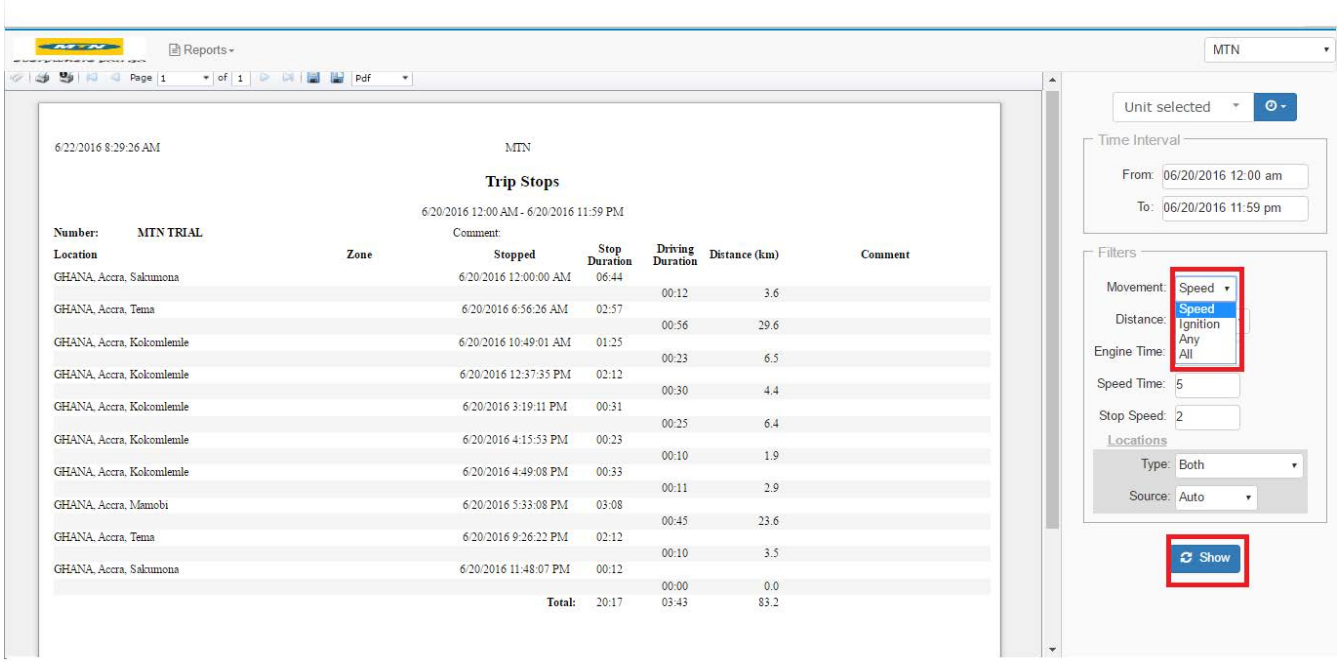


Figure 46. Trip Stops report window

Here you have to select movement detection source (Speed/Ignition/Any/All). Also locations can be configured based on a chosen location information source type (Both/Reverse Geocoding/Geofencing) and reverse geocoding source type.

4.13.5 Geofencing report

This report (Figure 43) is used to show what geozones a selected unit has crossed (during a reported period of time) and when exactly this has happened.

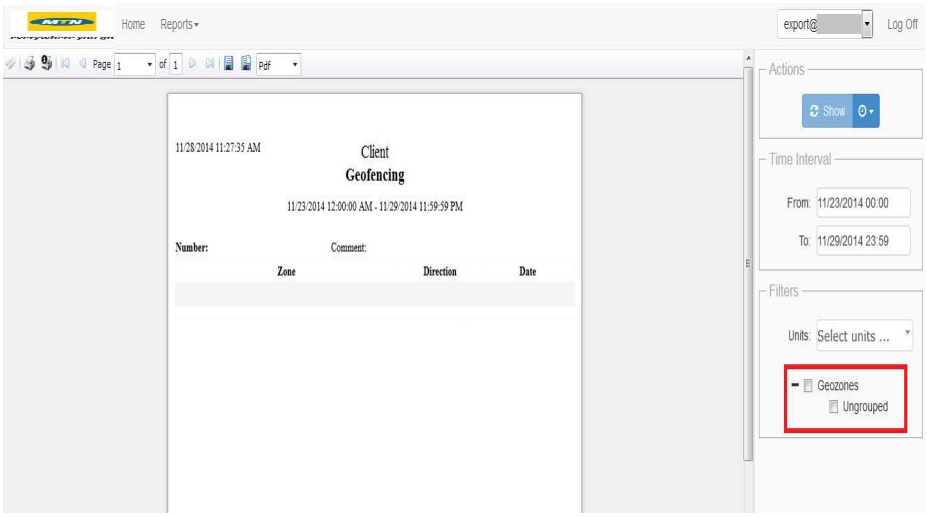


Figure 43. Geofencing report window

Here, in the marked field Geozones can be ticked if you want to use all the created zones (including Ungrouped zones) as a report source. Otherwise you can select only a certain zone i there are more of them to choose from.

FUEL TANK

Under Construction (Call Technical Support Team)