EMBARC
Information Technology (P) Ltd.

Find'n'Secure™

Automatic Tracking & Security Software

Embarc Information Technology (Pvt) Ltd.

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Please check up for updated version of user manual at: http://www.findnsecure.com/downloads.html

Use of Google API

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INTRODUCTION

GPS TRACKING SYSTEM

The Global Positioning System (GPS) is a satellite-based navigation system made up of a network of 24 satellites placed into orbit by the U.S. Department of Defense. GPS was originally intended for military applications, but in the 1980s, the US government made the system available for civilian use free of cost. Initially the highest quality signal was reserved for military use, while the signal available for civilian use was intentionally degraded ("Selective Availability"). Selective Availability was ended in 2000, improving the precision of civilian GPS from about 100m to about 20m. GPS works in any weather conditions, anywhere in the world, 24 hours a day.

GPS satellites circle the earth twice daily and transmit signal information. GPS receivers use the information to calculate the user's location by the method of triangulation. Basically, the GPS receiver compares the time a signal was transmitted by a satellite with the time it was received. The time difference tells the GPS receiver how far away the satellite is. The receiver must lock on to the signal of at least three satellites to calculate a 2-D position, the latitudinal and longitudinal position, and track movement. Using four or more satellites, the receiver can determine the user's 3-D position, the latitude, longitude, and altitude. Once the position has been determined, the GPS unit can calculate other information such as speed, track, trip distance, bearing and more.

GPS TRACKING UNIT

A **GPS tracking** unit is a device that uses the Global Positioning System to determine the precise location of a vehicle, person, or any other asset to which it is attached and to record the position of the asset at regular intervals. The recorded location data can be stored within the tracking unit, or it may be transmitted to a central location data base, or internet-connected computer, using a cellular (GSM/CDMA), radio, or satellite modem embedded in the unit. This allows the asset's location to be displayed against a map backdrop either in real-time or when analyzing the track later, using customized software.

APPLICATION OF GPS TRACKING SYSTEMS

Most common application of GPS tracking system is applied for tracking of moving objects, such as, vehicles. Vehicle tracking systems are commonly used by fleet operators for fleet management functions such as routing, dispatch,

on-board information and security. Other applications include monitoring driving, such as an employer of an employee, or a parent with a teen driver. Vehicle tracking systems are also popular in consumer vehicles as a theft prevention and retrieval device. Police can simply see the vehicle in real-time over the tracking system and locate the stolen vehicle.

Remote controlling of the vehicle through GPS tracking system is also possible. In such a case owner of the vehicle can give commands to the tracking unit for various operations like blocking the engine or cutting fuel supply to engine etc.

GPS personal tracking system is commonly used for tracking of persons, pets etc. You can keep track of your loved ones in real time using a completely accurate and totally reliable GPS software package via the internet so you know exactly where your kids, parents, pets, asset are at any given point in time.

FIND'N'SECURE®

Embarc Information Technology Pvt. Ltd., a leading provider of GPS tracking and security system from India, aims at offering innovative and cost effective tracking and security solutions comprising of hardware as well as software.

GPS tracking technology is best suited for fleet management. It is a unique way for companies and individuals to monitor and control their cars, jeeps, trucks and other vehicles to their precise details by sitting in the office. Find'n'Secure® GPS tracking system will enable you to monitor the movements of your employees, drivers, vehicles or any other asset accurately. With Find'n'Secure® vehicle tracking system in your company's fleet of vehicles, you will find a smart way of fleet management by tracking your vehicles.

Whether you own one truck or a fleet of thousands of vehicles, our highly skilled GPS fleet consultants will assist you in selecting the right type of vehicle tracking system that will give an edge to your company.

USER INTERFACE

Welcome to the Find'n'Secure® users interface. In this section, we will cover the basic and advanced operations of the software available to the users (Fleet / Customer Care). Find'n'Secure software is compatible with all the major browsers including:

- Internet Explorer 9.0+
- Firefox® 17.0+
- Google® Chrome 22.0+
- Apple® Safari 6.0+

It is always recommended to keep your browsers updated to the latest build as these are free to download and provide various new features and prior bug fix. Most of these browsers are compatible with old or new Windows, Macintosh or Linux platforms.

Once you have completed the above pre-requisites you can simply open your favorite browser and visit http://www.findnsecure.com and click on **Members Login**, this will redirect you to the main software portal where you are presented with the login page asking for your credentials and change your preferences like language and time zone.

Software login module is equipped with state-of-art time-zone selection GUI utility. If you will click on the clock icon in-front of the time-zone list, it will open up this utility. It has in-built magnetic mouse pointer which helps in easy navigation and easy selection of the time-zone.

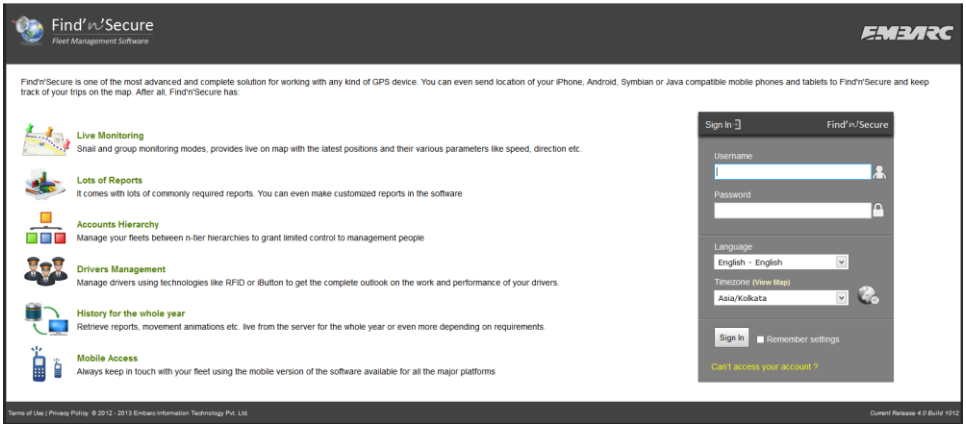


Figure 1: Login

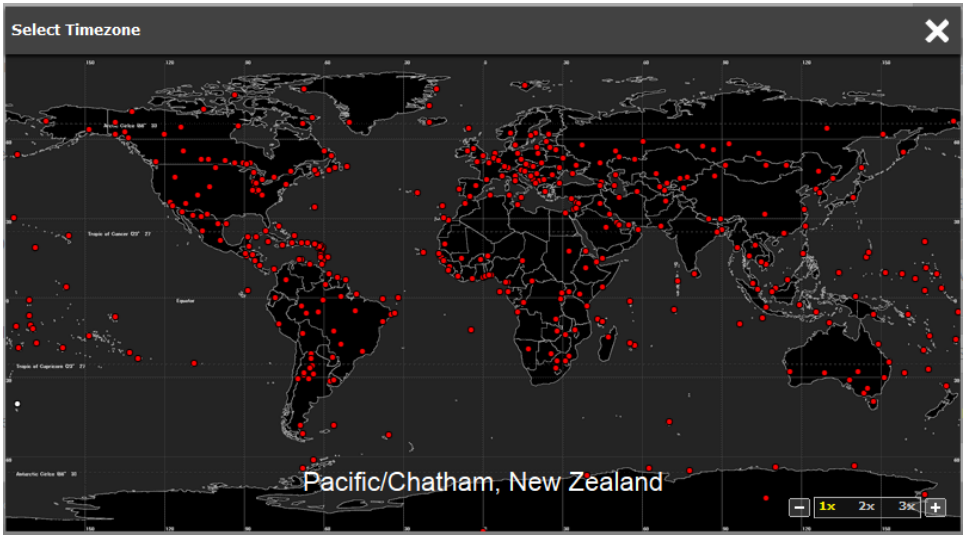


Figure 2: Time zone Selection

Login panel also has forgot password panel which allows you to receive your password in the registered email in case you have forgotten your password.

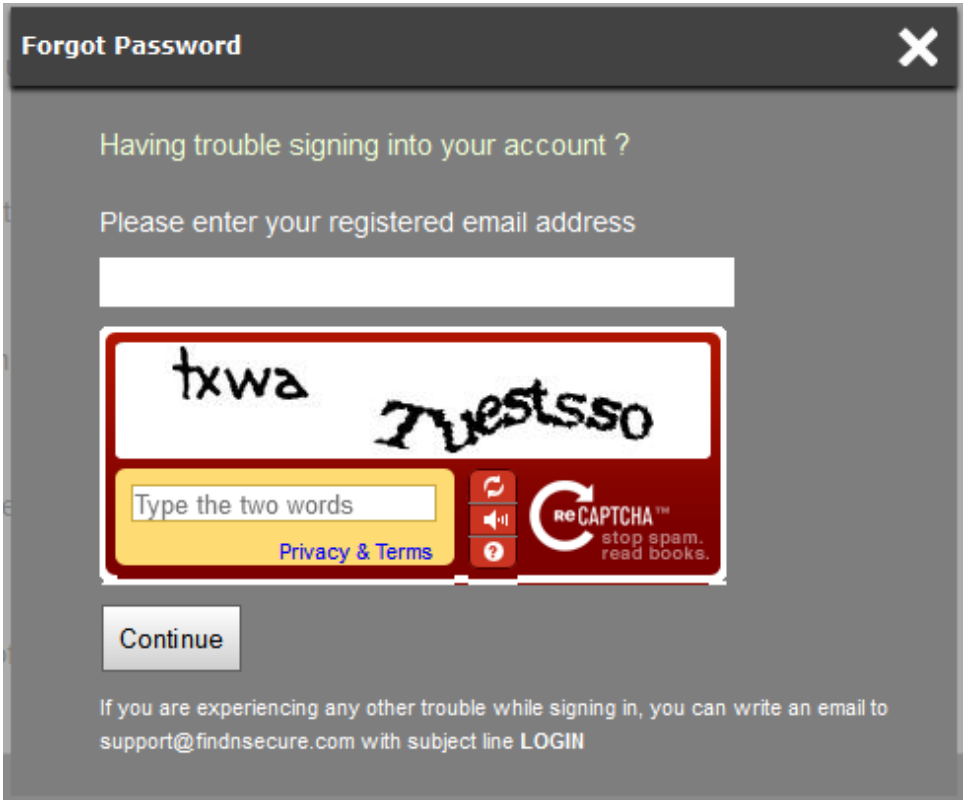


Figure 3: Forgot Password

Service provider to whom you have subscribed assigns you specific username/password which you should use to login the software.

We shall now explore the GUI of the user panel for Fleet Account. Once you have successfully logged in the software you will see the graphical user interface for Fleet Account which is divided into two sections. The left half is a menu containing various utilities and the right half is the Home page of the user. The utilities contained in the Menu are:

- Home
- Map View
- List View
- Job Scheduler
- Add/Remove POI (Point of Interest)

- Geofence Drawing
- Geofence Management
- Geofence Messenger
- Path Drawing
- Path Scheduler
- Route Optimizer
- ETA (Estimated Time of Arrival)
- Reports
- Drivers Management
- School Management
- Student Management
- Contacts Directory

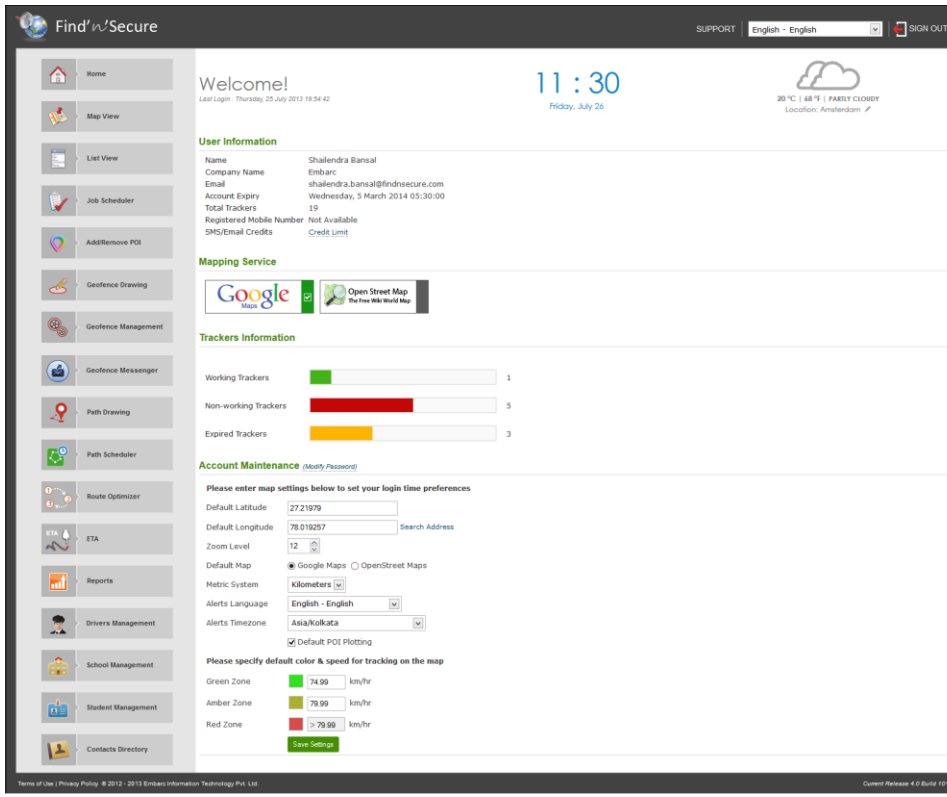
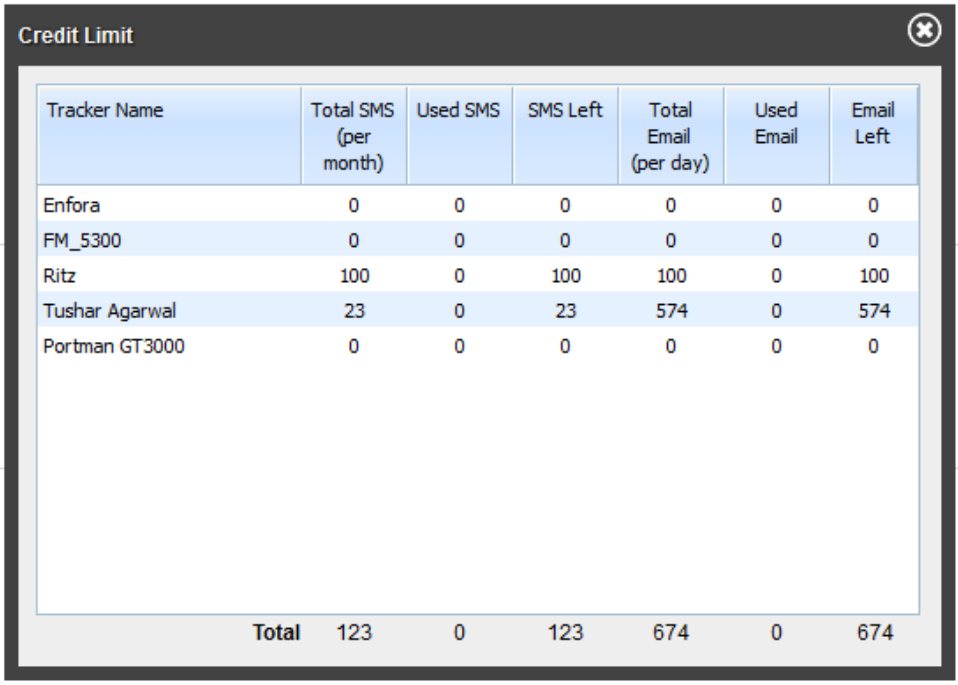


Figure 4: Home

HOME

The home page is divided into four sections, namely:

User Information: This section contains basic information about the user. If SMS/Email credits apply, they can also be viewed in this section. SMS/Email credits will update automatically, every minute.



Tracker Name	Total SMS (per month)	Used SMS	SMS Left	Total Email (per day)	Used Email	Email Left
Enfora	0	0	0	0	0	0
FM_5300	0	0	0	0	0	0
Ritz	100	0	100	100	0	100
Tushar Agarwal	23	0	23	574	0	574
Portman GT3000	0	0	0	0	0	0
Total	123	0	123	674	0	674

Figure 5: Credit Limits

Mapping Service: This section displays the mapping services available to the fleet user. Also, the current mapping service is marked in green. To change current mapping service, simply click on the mapping service you wish to use for the current session. You'll see the green mark move as you change the mapping service.

Figure 6: Mapping Services

Trackers Information: This section shows, graphically, the number of working, non-working, and expired trackers in this account. Click the Expired Trackers status indicator, to view the list of expired trackers.

Account Maintenance: The users can set their preferences in this section. Once you have entered all settings, you can click the **Save Settings** button to commit changes. There is also an option to change password of this account. To change password, click on **Modify Password**, adjacent to Account Maintenance heading and a window similar to Figure 7: Modify Password will be shown.

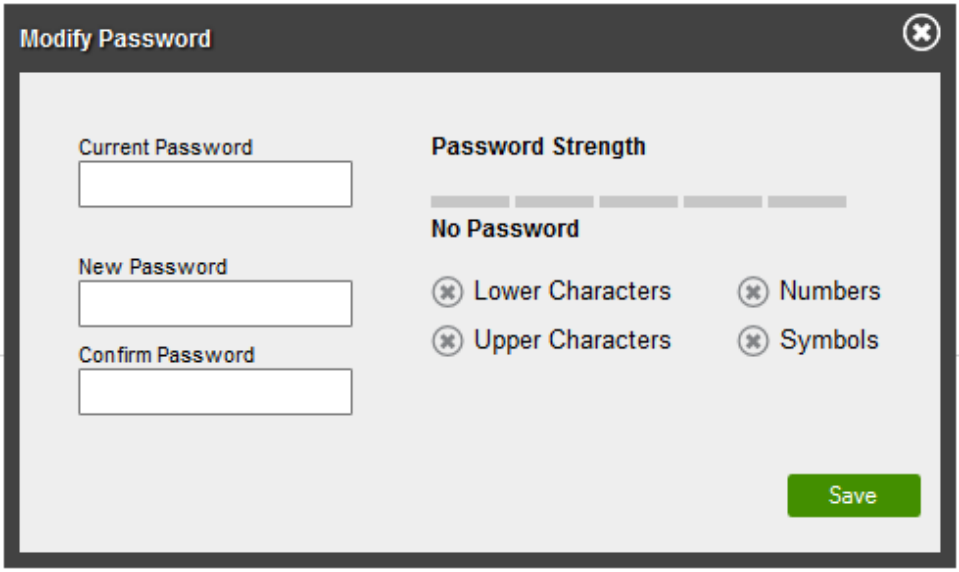


Figure 7: Modify Password

It is always recommended to choose a strong new password. The password change utility automatically check for password strength. Following are the preferences available in this section:

Preference	Description
Default Latitude	Default latitude where the map initializes to, when loaded
Default Longitude	Default longitude where the map initializes to, when loaded
Zoom Level	Default zoom level, when the map loads. Note: Zoom level can be changed any time using map tools. Also, zoom level can differ between different mapping services
Metric System	The default metric system that will be followed throughout
Alerts Language	The language in which you wish to receive alert mails and messages
Alerts Time zone	The time zone in which you wish to receive alert mails and messages
Default POI Plotting	Check to enable POI plotting by default, each time a map loads
Green Zone[1]	Maximum accepted speed of tracker, such that the tracker is still in Green Driving Zone. When tracker path is plotted on map, the color selected in this zone will be used if speed is less than or equal to the speed specified
Amber Zone	Maximum accepted over-speed of

[1] Display colour is available only in Segmented Mode

	tracker, such that the tracker is still in Amber Driving Zone. When tracker path is plotted on map, the color selected in this zone will be used if speed is less than or equal to the speed specified and greater than the speed specified in Green Zone
Red Zone	Speed of tracker, after Amber zone is considered to be Red Zone speed. This should be the speed limit violation level. When tracker path is plotted on map, the color selected in this zone will be used if speed is greater than or equal to the speed specified

MAP VIEW

The Map View module consists of a trackers list on the left and map on right hand side. The list of trackers supports facilities for selecting, searching and filtering of the trackers present in the account.

FILTERS

Trackers can be filtered in two modes:

1. Basic Filters
2. Advanced Filters

BASIC FILTERS

To apply basic filter on trackers, select type of filter you wish to apply and then type in a few characters in the filter textbox. This will immediately filter trackers in the list and only those trackers satisfying the filter criteria are displayed.

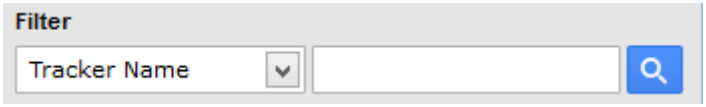


Figure 8: Basic Filters

Basic filters can be applied on the following fields:

- Tracker ID
- Tracker Name
- IMEI
- SIM No.
- Keywords
- Registration Number
- Model

ADVANCED FILTERS

To view Advanced Filters, click the **More Filters** checkbox. A Filters window will be displayed, as show in Figure 9: Advanced Filters

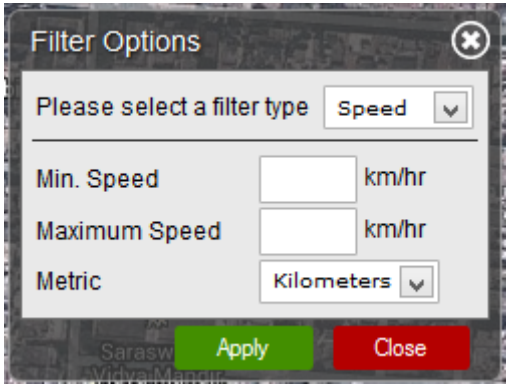


Figure 9: Advanced Filters

Advanced Filters can be applied on the following fields:

- **Speed** Filter trackers according to the minimum and maximum speed limit specified.
- **Status** Filter trackers by their current status. Possible states are Working, Moving, Stopped, Idling, No Data, and Invalid GPS.
- **Latitude/Longitude** Specify the latitude, longitude, and radius of the area in which the tracker should be present. Trackers near this address within the proximity of circle specified by the radius will be shown in the list.
- **Address** Specify the address and radius of the area in which the tracker should be present. Trackers near this address within the proximity of circle specified by the radius will be shown in the list.

Once you have prepared the filter criteria, click on the apply button to apply filters. You can move the filters window to a desired location on the screen, or close it. Please note that closing the filters window will not remove the filters applied. To remove filters, uncheck the **More Filters** checkbox, as shown in Figure 10: More Filters

Figure 10: More Filters

TRACKERS LIST

Tracker Explorer shows the list of the trackers which you have installed in various vehicles or name of people holding the personal trackers or for whatever reason you is using the trackers.

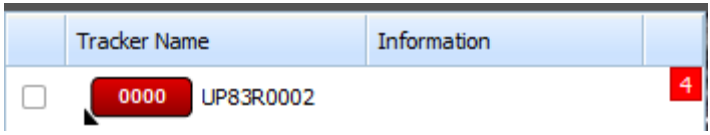


Figure 11: Tracker in Trackers List

Figure 11: Tracker in Trackers List shows a tracker in trackers list. Each tracker has a map placement checkbox, Tracker Name, Information, and events number. When the map placement checkbox is checked the tracker is displayed on the map otherwise it is only displayed in the list and events number is updated each time an event occurs. Every tracker is assigned a unique number e.g. 0000 in Figure 11: Tracker in Trackers List. This number is useful while identifying the tracker when multiple tracker icons are displayed. These tracker icons can also use a Custom Icon Text, which can be changed only by the Administrator. This list can be sorted by clicking on the header, e.g. click on the **Tracker Name** header, to arrange trackers alphabetically.

COLOR OF A TRACKERS' ICON

The color of tracker icon determines the current status of the tracker. Possible states for status of a tracker are:

Color	Description
	Tracker is currently moving

	Tracker is stopped
	Tracker is idling – Ignition status is ON while no movement registered in the vehicle
	Tracker is working, but GPS fix is not valid
	Server has not received data from the tracker since past 24 hours

Next to the tracker icon is the tracker name, which can be changed by the user at any time. In the Information column, the user can view detail about the tracker, e.g. for Vehicle Trackers the license plate number of the vehicle will be displayed.

Field of Application	**Information Displayed**
Vehicle Tracking	License plate number
Personal Tracking	SIM card number
Asset Tracking	Identification number
Offender Tracking	SIM card number

Finally, on the right hand side you will see events count. Whenever an event is generated on a tracker, the event counter increases, showing the total number of events occurred since the time of login. If no event occurs on a tracker the events count is not displayed.

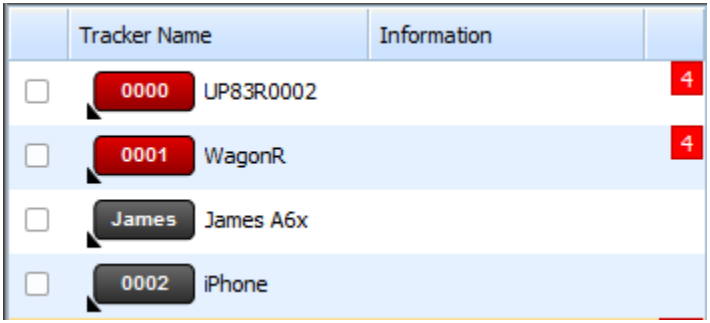


Figure 12: Events Count

In Figure 12: Events Count you can see **4** inside the red rectangle on the right side; this states that 4 events have been generated since the time of login on the tracker UP83R0002.

GROUP VIEW

Initially when Map View page is loaded, group mode is shown. In group mode all the trackers are shown on the map collectively and updated as they move and their status icons change depending on their current status. Multiple trackers in Group View can be seen in Figure 13: Group View.

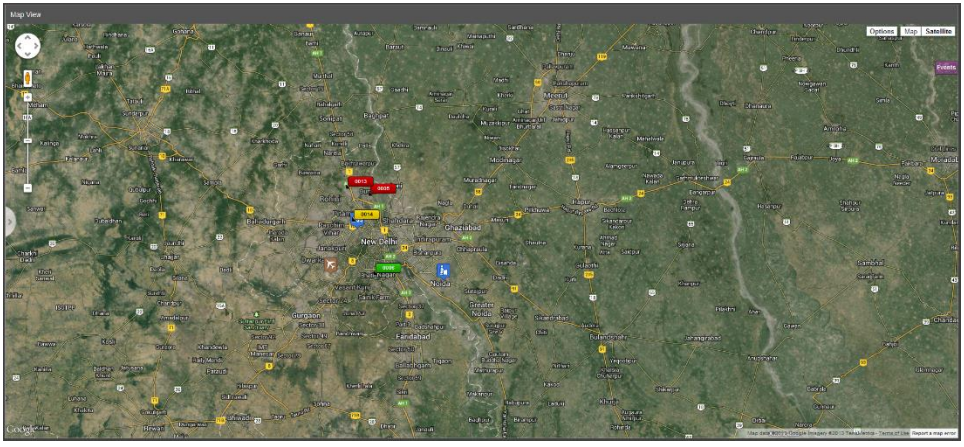


Figure 13: Group View

Figure 13: Group View is a standard representation of maps provided by their respective vendors. We will discuss some standard features of the maps here. For detailed learning you may visit http://maps.google.com or http://www.bing.com/maps or http://www.openstreetmap.org.

Bar on the left side of the map marked with + and – sign are used for adjusting up the zoom level. On the top-right side you can see three options available namely Options, Map, and Satellite.

Type	Description
Map	Only map of the region without any satellite images will be displayed. If your internet connection is slow speed one, it is recommended to select this mode as it requires less data to be transferred to your computer
Satellite	Satellite imagery can be viewed in this mode, with or without labels
Options	These are custom options provided by Find'n'Secure software

You can zoom in the map towards the tracker by scrolling mouse up/down near the tracker or by double clicking on the map. You can also hover the mouse pointer over the tracker icon on the map, to reveal its **Information.**

TRACKERS CLUSTERS

When all trackers are selected at once, using the **Select All** button below the trackers list, clustering of trackers is enabled. When trackers are very close to each other or zoom level of the map is low, then those trackers will form a cluster, with a number indicating number of trackers in that cluster. As you zoom in on a cluster the trackers, further away will break free. This will continue until a specific zoom level (i.e. 17) is reached, where all trackers will pop out of the cluster.

If you do not wish to zoom one by one and just see the separated trackers instantly, you can click the cluster, which will automatically zoom in and ungroup the trackers.

The cluster icon color changes with the number of trackers it contains and follows the scheme given below:

Number of trackers in cluster	Color
< 10	Blue

> 10 & < 100	Yellow
> 100	Red

If you do not wish to view clusters in group mode, you can select trackers one by one from the list, instead of selecting all trackers at once.

Also, when in cluster mode, you can remove some trackers by unchecking the desired trackers from the trackers list.

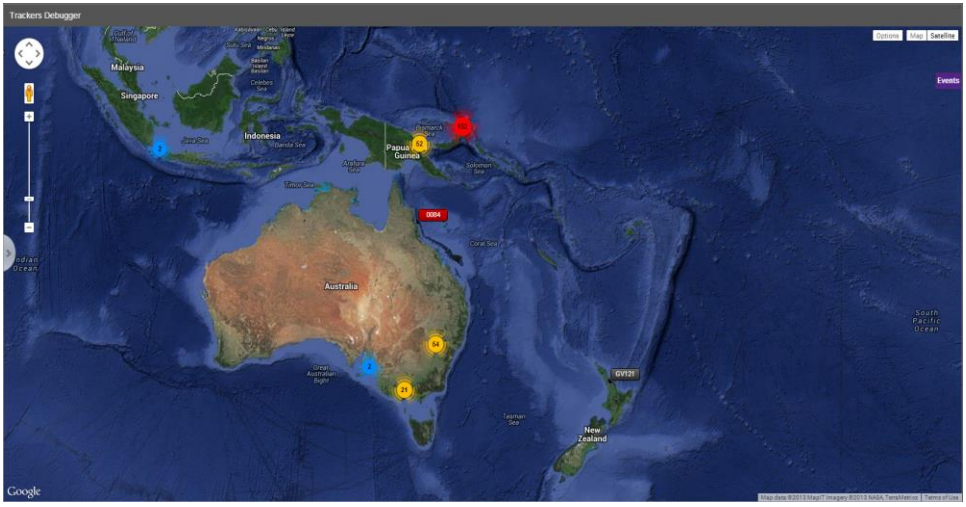


Figure 14: Markers Cluster

MAP INFO-BOX

Tracker icons on the map are clickable and upon clicking them you see various details of the tracker for quick accessibility and unique geo-coding mechanism.

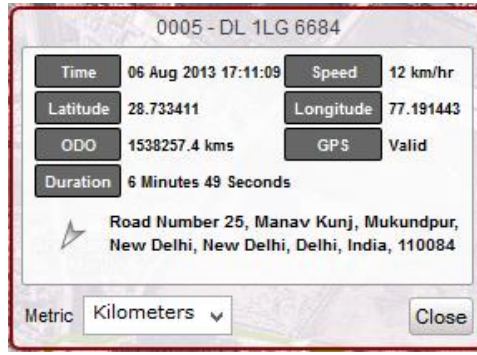


Figure 15: Map Info-box

As you can see in Figure 15: Map Info-box, it contains all the essential details of the vehicle as described below:

Property	**Description**
Unique ID	This ID is assigned by the GUI to identify the tracker on the map. If an Icon Text is specified, it is displayed instead of GUI generated ID. In Figure 15: Map Info-box the above clipart it is 0005
Tracker Name	Besides Unique ID is the name of the tracker
Time	Displays the last known reporting time of the device
Speed	Speed registered at the time of reporting
Latitude	Latitude of the location where location of the vehicle was registered
Longitude	Longitude of the location where location of the vehicle was registered
ODO	Current odometer value of the vehicle, if enabled
GPS	Status of GPS fix Possible Values: Valid/Invalid
Duration	Duration since which the vehicle is in current state
Location	Direction and the location of the vehicle.

	Currently stopped Movement Direction
Metric	Convert the metric system used in the window

SNAIL TRACK VIEW

Clicking on any of the trackers present in the trackers list activates snail track view. Snail Track View is the complete analysis of the particular tracker in real-time. When you click on any of the tracker, the right pane of the browser window is loaded with the individual mode as shown in Figure 16: Snail Track View.

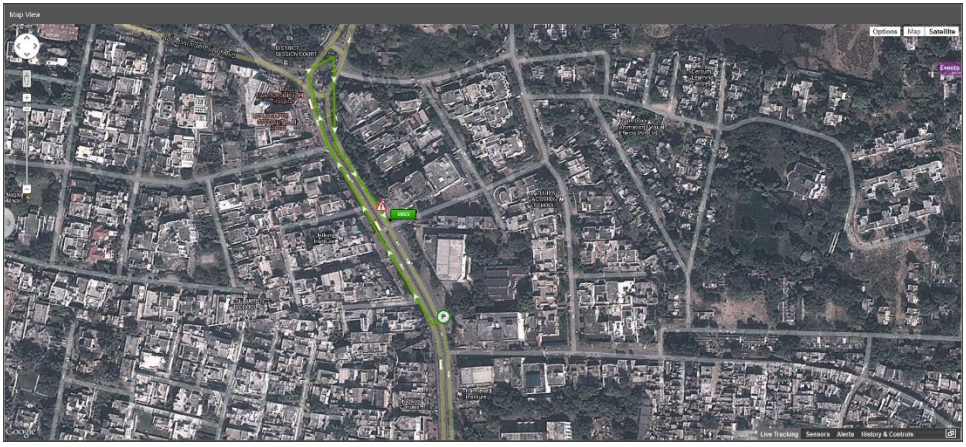


Figure 16: Snail Track View

In this view, snail plotting is automatically enabled and you can see the track on which the tracker is moving. If this tracker is installed inside a vehicle and ignition detection is enabled then you will see the plotting from the place its ignition was turned ON.

The plotted lines can be switched to Segmented Mode, by checking Segmented Mode option in the options drop down on right hand side of the map. In segmented mode, hovering mouse over the lines displays the direction, time, and speed of the tracker. Tracking lines are color coded and each consecutive point has alternate shades to easily identify the points of reporting. The line colors can be changed as described in section Home. A sample color configuration is given as follows:

Color	Description
Green	0 ~ 80 Kilometers/Hour
Yellow	80 ~ 100 Kilometers/Hour
Red	> 100 Kilometer/Hours

MAP ICONS NOMENCLATURE

Icon	Description
	Marks the start point of the journey
	Alert sent by the device

INFORMATION PANEL

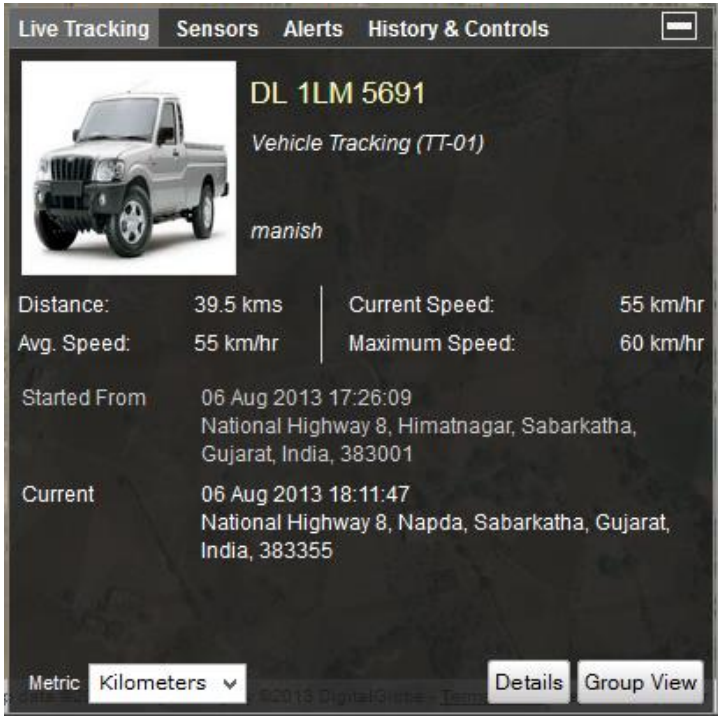


Figure 17: Information Panel

As shown in Figure 17: Information Panel, this panel is divided into four major sections:

LIVE TRACKING

This panel shows the basic details about the tracker. Following properties of the vehicle can be viewed in this panel.

Property	**Description**
Photo	The picture uploaded for this tracker/vehicle
Tracker Name	Name of the tracker is shown beside the photo
Field of Application & Tracker Model	This property describes the field of application of the tracker, e.g. Vehicle Tracking, Personal Tracking, etc. Also, the model of this tracker is displayed next to it.
Information	Information related to this tracker is displayed here, if available. e.g. for Vehicle Tracker, license plate number will be displayed
Driver Information	Displays Name and ID of the driver associated with the vehicle. Note: Driver information will be shown, only if it is enabled
Distance	Distance covered by the tracker since you are watching the tracker
Current Speed	Current speed of the tracker

Average Speed	Average speed for the current trip
Maximum Speed	The maximum speed achieved during the current trip
Started From	Date, Time, and location of the starting point of the tracker
Current	Date, Time, and location of the current position of the tracker
Metric	Change the metric related values in this panel
Details	Click the button, to display tracker card, used to edit information of this tracker
Group Mode	Switch from Individual Mode to Group Mode

SENSORS

This panel displays the sensors enabled for this tracker. e.g. fuel sensor, temperature sensor, RPM Sensor and battery sensor (personal tracking). The software supports up to five fuel and temperature sensors, one RPM sensor, and one battery sensor.

Note: These features are available only in the specific models of the hardware

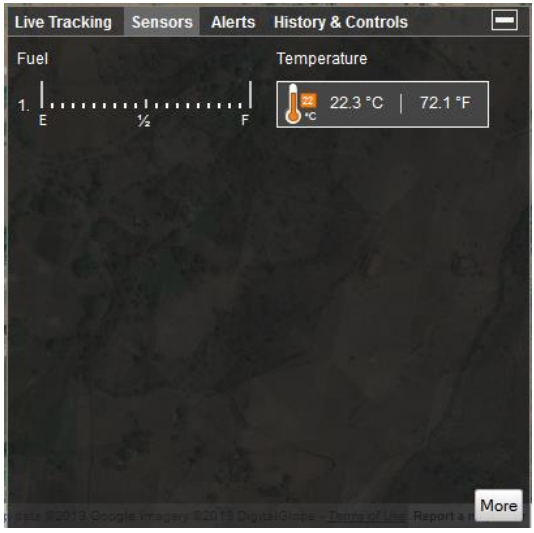


Figure 18: Sensors

ALERTS

This shows all the events and alerts occurring on the device. Left side of the table shows date and time while right side displays the name of event that occurred on the tracker.

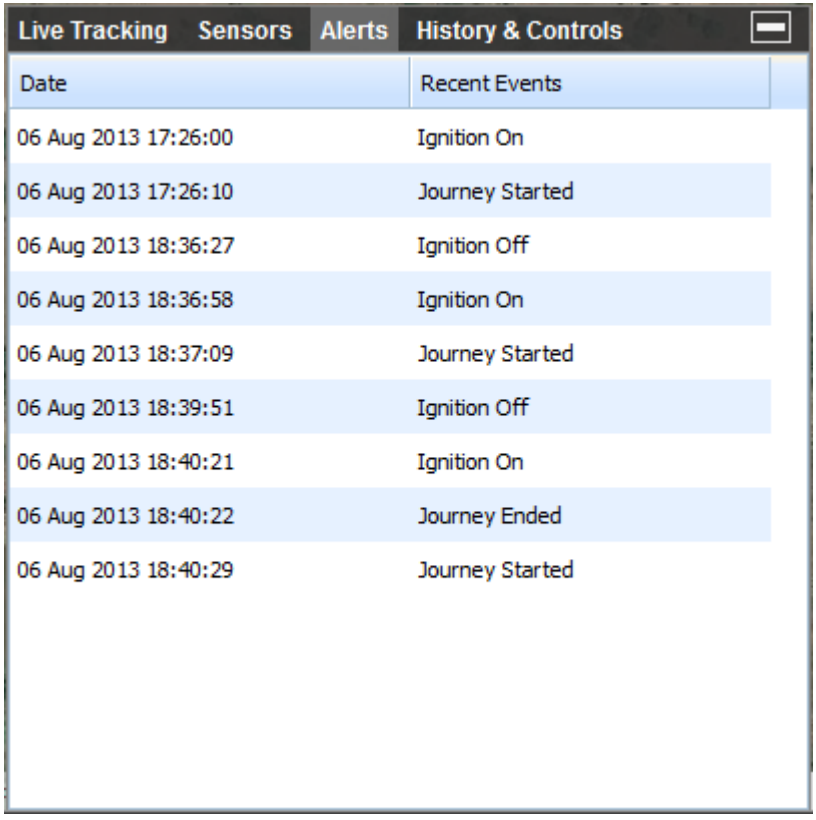


Figure 19: Alerts

Whenever any event occurs on the tracking unit, it is notified to the user by the following three methods:

1. Tracker tab in the Tracker Explorer is appended by a red color rectangle indicating the total number of events occurred
2. Alert window pop's up
3. Email sent to the group user and as per the settings of the tracker.

HISTORY & CONTROLS

This panel provides convenient options to view the history of your tracking unit and if your hardware supports output commands then you can control the unit from your desktop or laptop itself e.g., by blocking the engine, locking the door or blowing the horn to attract public attention in case of theft etc.

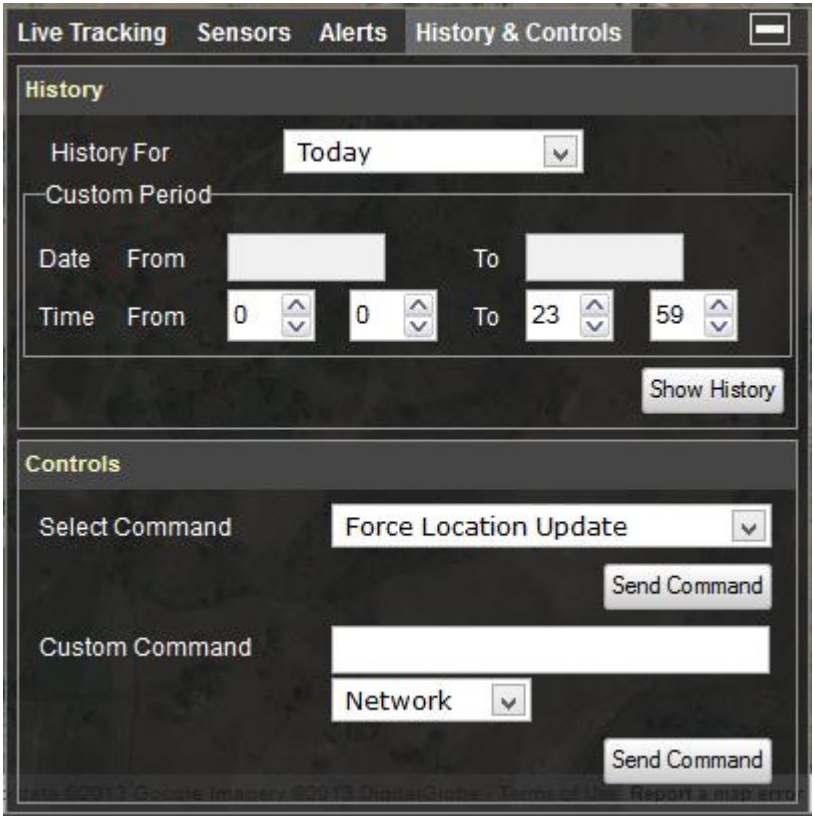


Figure 20: History & Controls

HISTORY

Quick combo-box templates allow you to see the history of the tracker quickly with the options of Today, Yesterday or Custom. Sometimes history of a particular tracker is quite complicated and understanding it may be a daunting task. In such cases, we provide a filter which enables you to make the selection of the time for which you wish to see the history.

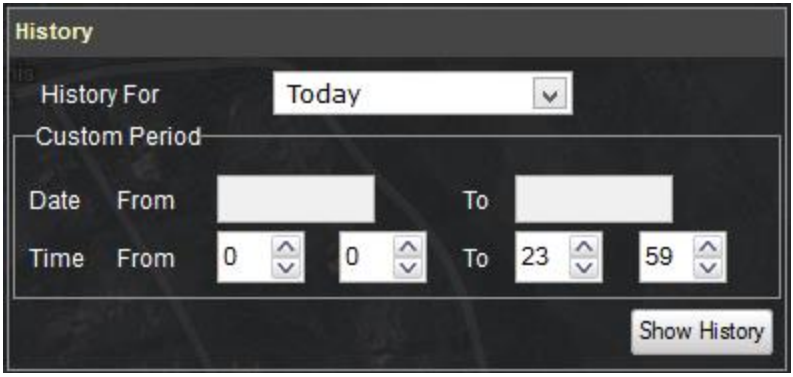


Figure 21: History

Let us show you an example of a complicated history and a simplified version of it. Figure 22: History - 24 Hours shows history for a complete day whereas Figure 23: History - 1 Hour shows the history between 17:00 to 18:00 HRS.

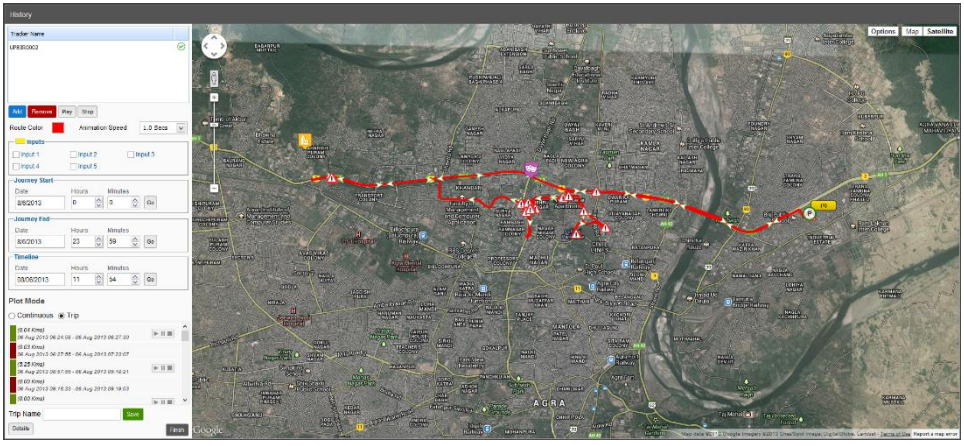


Figure 22: History - 24 Hours

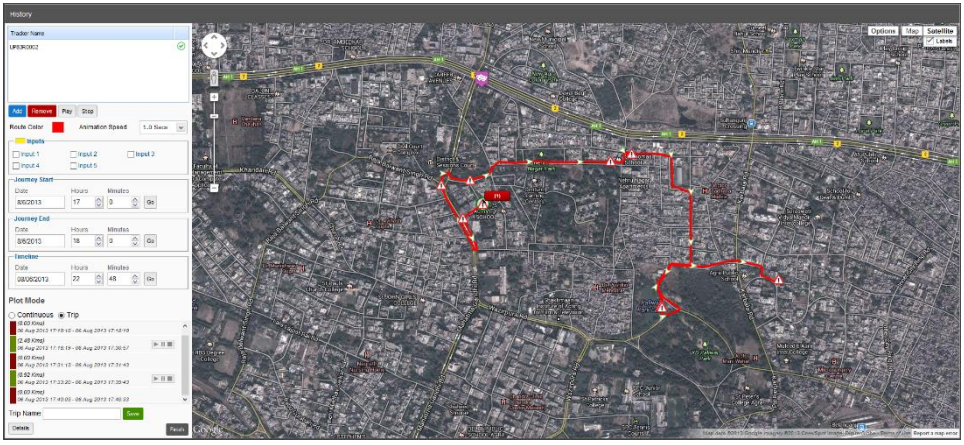


Figure 23: History - 1 Hour

Thus you will find that complicated history (Figure 22: History - 24 Hours) can be easily broken down into segments using time.

HISTORY OPTIONS

The left hand side of this page displays options for the history shown on the map. You may add any number of trackers that are available, to compare histories of multiple trackers at any point of time by clicking the **Add** button below the trackers list. Various options for history configuration are described as:

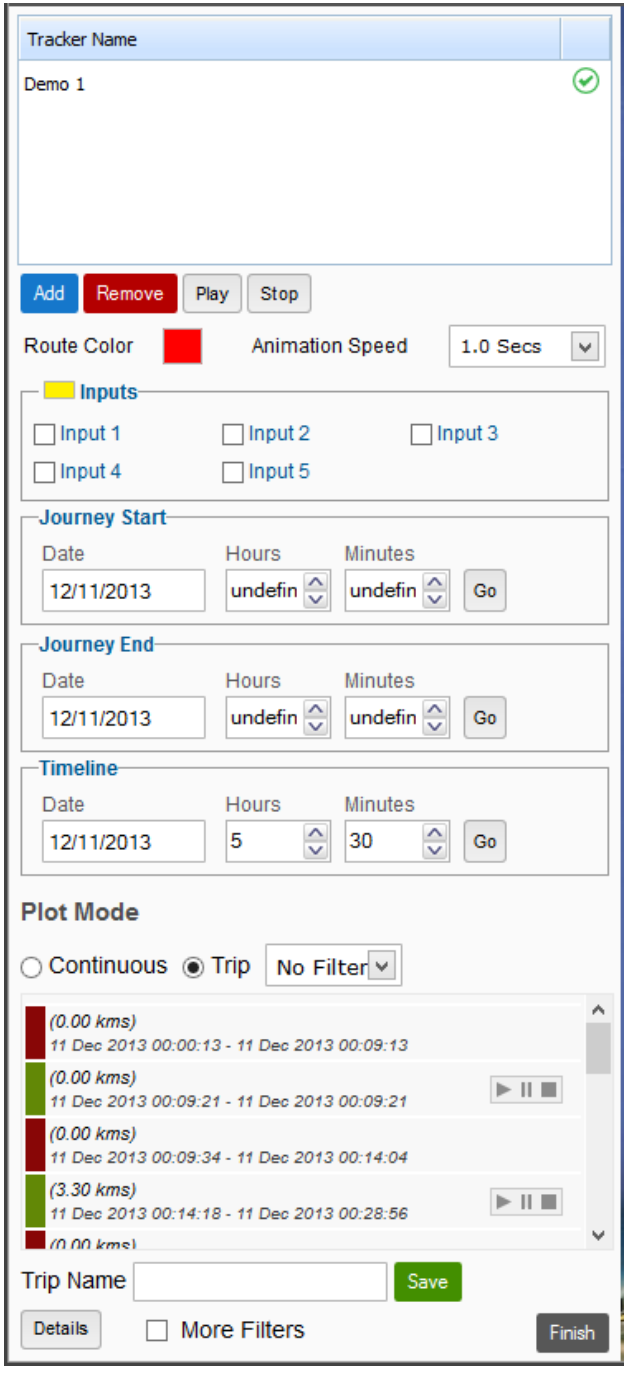


Figure 24: History Options

Property	Description
Trackers List	List of trackers added for viewing history History is being fetched History is available and is loaded History is not available and not loaded
Add	Click this button to add more trackers to History
Remove	Select a tracker from the list and click this button to remove tracker from History
Play	Play selected tracker's history Note: Multiple trackers can also be selected by Crtl/Shift clicking. To stop map panning while history is playing, use the Panning option provided in map options on top right.
Stop	Stop playing selected tracker's history
Route Color	Color used to plot history on map
Animation Speed	Control speed of History playing
Inputs	If you wish to enable coloring of the track for which specified input was ON you can select the input and the color
Journey Start	Modify the start date and time of history
Journey End	Modify the end date and time of history
Timeline	Specify the time on which to locate the position of the tracker. The tracker icon will move to the nearest position at that time.
Plot Mode	Choose the plotting mode **Continuous** Shows the complete history for the period **Trip** Shows trip wise history of the period. Options to play/pause/stop are available for each trip Note: Trip wise history depends on the availability of ignition sensor
Trips Filter	This filter allows you to view either moving trips only, stopped trips, or both trips simultaneously
Trip Name	Change the name of a selected trip

Details	Show additional details of tracker at this location
More Filters	Additional filters for continuous trips, explained in detail in section More Filters

HISTORY INFO-BOX

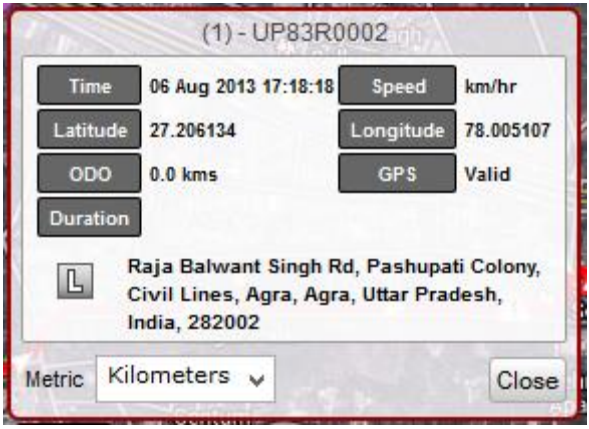


Figure 25: History info-box

Clicking on the tracker icon on map pops up the History Info-box, as shown in Figure 25: History info-box. This windows has the same properties as the info-box shown in Map View (Figure 15: Map Info-box).

POIs can also be added quickly just by double clicking any location on the map. This is very convenient when you need to mark a historical location as POI.

MORE FILTERS

These filters can be applied to data when the trip is of continuous type.

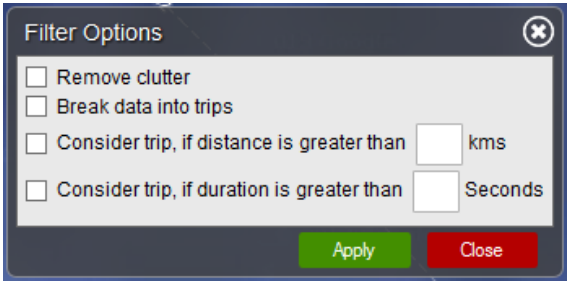


Figure 26: More Filters

The function of each filter is described below:

Filter	Description
Remove Clutter	Removes clutter from the map, caused by incorrect lines created by invalid data
Break data into trips	Break continuous data into trips
Consider trip, if distance is greater than ‘x’ kms	This filter automatically breaks data into trips and makes sure that a trip is not considered as moving if the distance travelled is less than the distance provided Note: The distance provided should be in kilometres
Consider trip, if duration is greater than ‘x’ seconds	This filter automatically breaks data into trips and makes sure that a trip is not considered as moving if the duration of travel is less than the duration provided Note: The duration provided should be in seconds

DETAILS PANE

The details pane displays journey details for the current history.

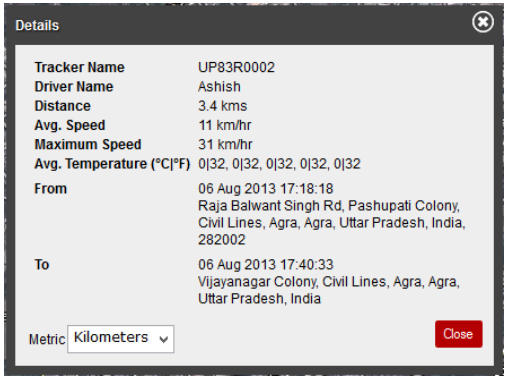


Figure 27: History Details

To Exit from History module, click the **Finish** button. You will be redirected back to Map View.

CONTROLS

Vehicle tracking units may contain functions for controlling the vehicle. Some standard operations are given as follows:

- Force Location Update
- Horn Blow
- Horn Stop
- Lock Doors
- Unlock Doors
- Block Engine
- Unblock Engine

All these operations can be controlled via web-interface if your tracking device supports them. However, the operations listed above may change with the model of tracking device.

There are two options to send commands.

1. **Predefined commands** To send predefined commands follow the steps below:
    - Select the command you wish to send from the drop down box.
    - Choose desired channel of transmission, i.e. Network, SMS
    - Click Send Command
2. **Custom commands** To send custom commands follow the steps below:
    - Type in the command[2] you wish to send, in the **Custom Command** textbox.
    - Choose desired channel of transmission, i.e. Network, SMS
    - Click Send Command

[2] If you do not know custom commands for this device, please refer to Device's User Manual or contact our customer support.

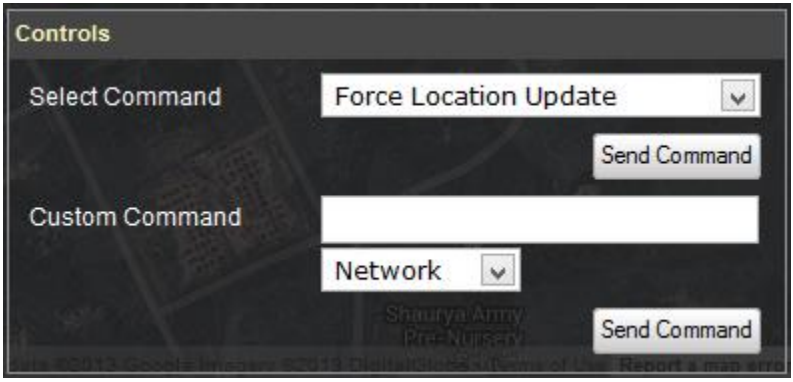


Figure 28: Controls

TRACKER DETAILS

The **Tracker Details** pane consists of all the information related to the use of tracker. To view this pane, you may either double-click over the tracker in the Trackers List or by click the **Details** button in the Live Tracking panel, as shown in Figure 17: Information Panel.

There are three sections in the **Tracker Details** pane, as shown in

1. Basic Information
2. Alerts
3. Reminders

Figure 29: Tracker Details

BASIC INFORMATION

This section consists of basic information about the tracker. The user can modify any of these properties[3] at their own will.

[3] Tracker ID property cannot be changed. It is automatically generated by the system and is a unique ID to identify the tracker. Also, note that the user may not be permitted to change any of these properties if specified by the Administrator.

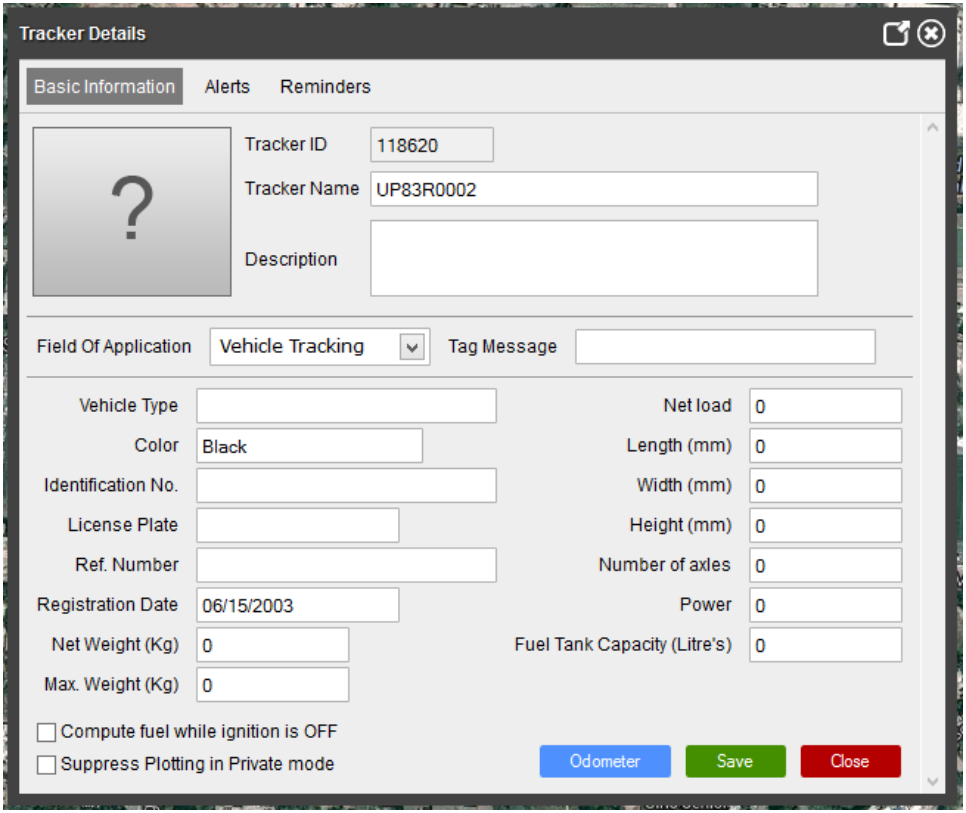


Figure 30: Basic Information

Property	Description
Tracker ID	Unique ID of the tracker, allotted by the system
Photo	Upload an image related to the tracker
Tracker Name	Name of the tracker as seen in the Trackers List
Description	Description about the tracking device
Field of Application	Field in which this tracker is being used, you can select from one of the following: • Vehicle Tracking • Personal Tracking

	• Asset Tracking • Offender Tracker
Tag Message	If RFID scanner is being used by this tracker for identification purpose, tag message will be appended with the tag ID
Fuel Tank Capacity	Comma separated capacities of up to five fuel tanks, in liters
Compute fuel while ignition is OFF	Check to compute fuel while ignition if off
Odometer	Clicking this button displays an Odometer Tuning window, as explained in section Odometer Tuning
Others	*Optional* and for information purpose

ODOMETER TUNING

As you must be aware that the distance computed by GPS, over time is not cent percent similar to the actual distance covered by the vehicle. So, from time to time, when a variation is found in odometer values, you can sync the computed value of the odometer to the actual value, using this module. This module also displays a date-wise list of values of the odometer. These values cannot be modified, but can be removed and added for any date.

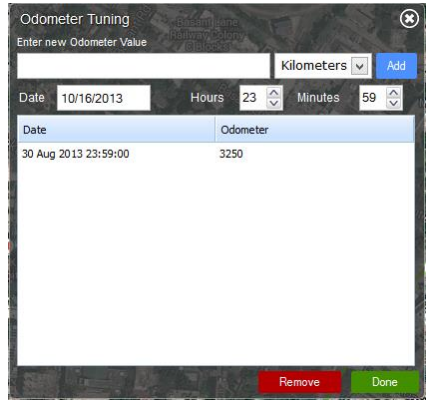


Figure 31: Odometer Tuning

To add new value of odometer, enter the new value, choose metric, date, time, and click the **Add** button on the right. If you enter a wrong value, or wish to remove a previously entered value, select those rows in the list below the click the **Remove** button.

ALERTS

You can configure multiple emails and SMS numbers to which the desired alerts can be sent. You must separate multiple emails and SMS using **semicolon (;)**

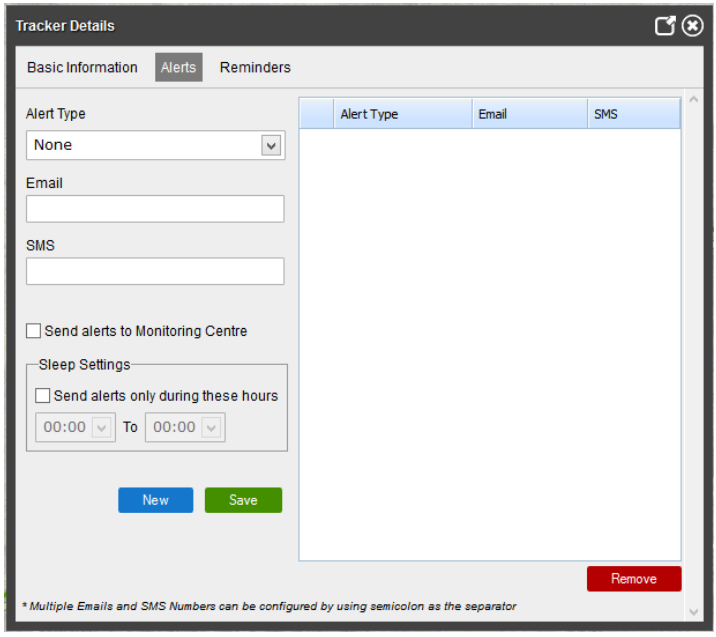


Figure 32: Alerts

REMINDERS

You can add various types of reminders to the tracker for performing maintenance operations on the vehicle. Reminders can be set based on the following:

1. **Distance**: Whenever mentioned distance is completed by the tracker an email is dispatched to the group head. This feature is very useful when you need to be alerted after vehicle has completed certain distance like fuel change or tires change. You can choose an appropriate metric system, using which you wish to enter distance.

2. **Date**: Notification email is sent on **Reminder Date** as soon as **End Date** is reached.

3. **Engine Hours**: Whenever a vehicle completes specified **Engine Hours** on selected **Input**, a notification email is sent.

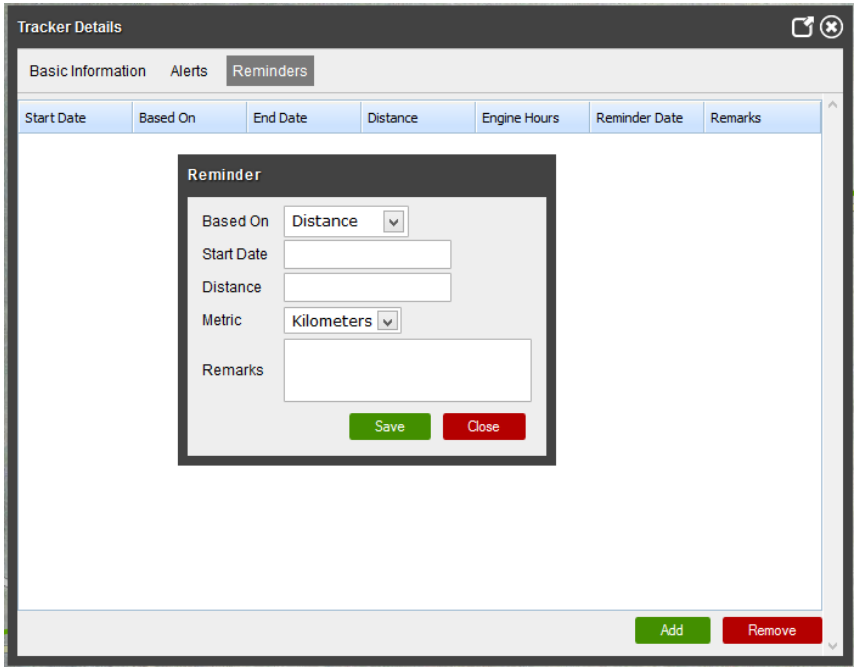


Figure 33: Reminders

EVENTS

An events button is displayed on the right hand side of the map. When you click this button a **Recent Events** window is displayed. This windows lists all the events which have occurred on all the trackers, since the time of login. You can double click on any tracker event in this list, to quickly start Snail Track View of that tracker.

To clear all previous events listed in this window, you may click the **Clear List** button. This will remove all existing events from the list and new events will be added as they are generated.

To close this window, you may click the **Close** button.

This window is shown automatically, whenever an event is generated. The window hides itself after a few seconds. If you require the window not to pop up every time an alert is generated, you can check the **Don't show alerts panel automatically** checkbox. This will result in the window not being displayed automatically, but only when you click the **Events** button on right hand side of the map.

This window is movable and resizable, so you can adjust the size and place it at a convenient location on your screen if you are monitoring events on a number of trackers.

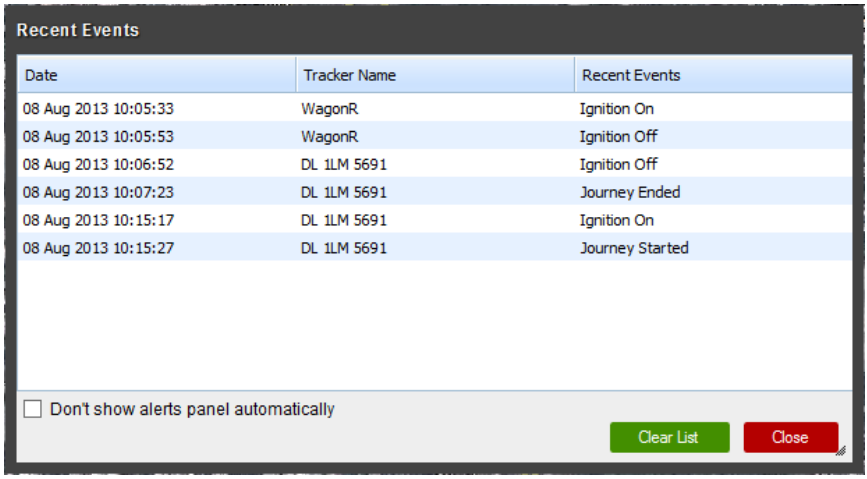


Figure 34: Recent Events

FULL SCREEN MAP VIEW

To have a better viewing area on the map, you can hide the Trackers List to display map on full screen. On right hand side of trackers list, a button to hide the list is displayed, as shown in Figure 35: Hide Trackers List Button.

Figure 35: Hide Trackers List Button

Click the button to hide the list, and click the button again to bring the list back to original state.

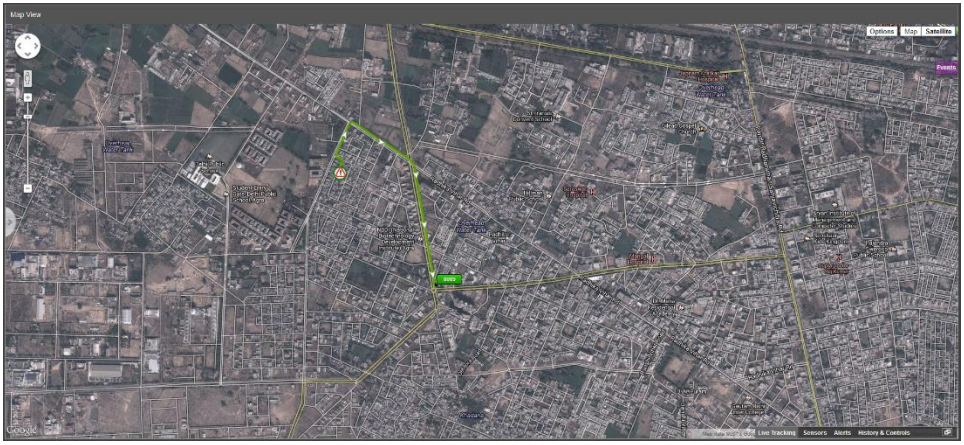


Figure 36: Full Screen Map

QUICK POI

A POI can quickly be added by double clicking on the map at the location where a POI is required. When you add a POI, a POI details window is displayed, which contains information about this POI. The latitude, longitude, and description are automatically filled. You can fill in the remaining required fields and click on **Save** button to add this POI. If you change the POI type, the POI icon changes accordingly. POI color only applies to **Default** type POIs, and is displayed as it is changed.

If you want to refine the POI position, you can drag the POI and drop it to the new appropriate location. As soon as the POI is dropped, the filled in latitude, longitude, and description are updated.

Once the POI is saved, you cannot edit/modify its information from here. You'll need to go to Add/Remove POI (Point of Interest) to modify information associated with this POI.
However, you can remove this POI by clicking on the POI icon and clicking the **Remove** button thereafter.

MAP OPTIONS

In top right corner of the map, an **Options** button is displayed. It consists of a number of features, which you can enable/disable.

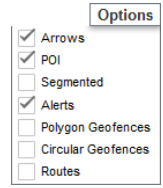


Figure 37: Map Options

Option	Description
Arrows	Show/Hide arrows on path plotted in Snail Track View
POI	Show/Hide POIs
Segmented	Switch from non-segmented plot mode to segmented mode, as described in section Snail Track View. Note: Non-segmented is much faster that segmented mode and should be preferred.
Alerts	Show/Hide alert icons from map, while in Snail Track View
Polygon Geofences	If the selected tracker has a polygon Geofence associated with it, it can be shown on the map by checking this option.
Circular Geofences	If the selected tracker has a circular Geofence associated with it, it can be shown on the map by checking this option.
Routes	If the selected tracker has a path associated with it, it can be shown on the map by checking this option.

LIST VIEW

This module displays all the trackers, similar to Map View, but in a textual form. This view is usually faster and very convenient if you need to have a location/status overview of the entire fleet. The list shown in this module is stretched over the entire page to incorporate a number of parameters that are essential for tracking in a fleet management system.

Each tracker row has a color associated with it, depending on the current status of the tracker, as discussed in section Color of a Trackers' Icon.

Figure 38: List View

The fields displayed in this module are described as follows:

Property	**Description**
Tracker Name	The first column of this list displays the name of the tracker
Date	Displays the last known reporting date & time of the device
Status	Current status of the tracker in textual form
Duration	Duration since which the vehicle is in current state
Speed	Current speed of the tracker
Driver	Name of the driver currently associated with the tracker

Place	Address of current location of the vehicle
Fuel	Percentage of fuel level for up to five fuel sensors
Temperature	Temperature for up to five temperature sensors

JOB SCHEDULER

This module is used to assign and schedule tasks to a tracker and driver.

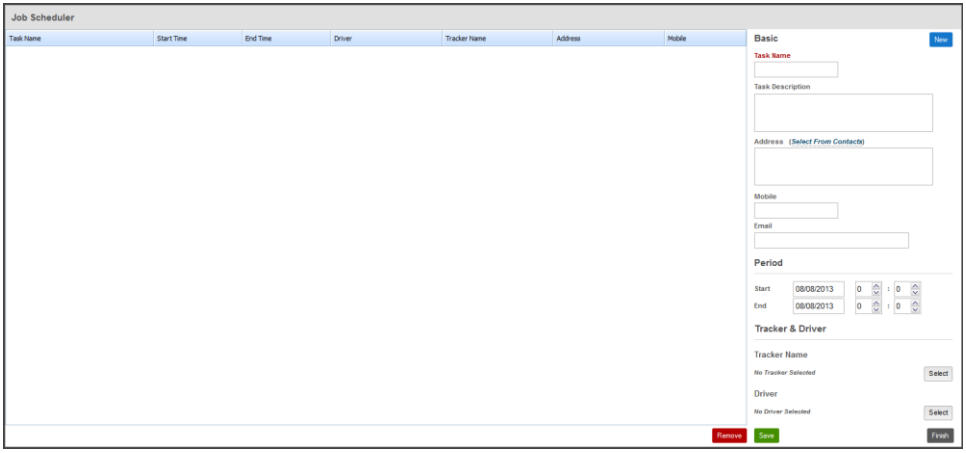


Figure 39: Job Scheduler

CREATE NEW TASK

Click the **New** button on top right corner. The following table will explain all the options available in this module:

Field	**Description**
Task Name	Name that you want to assign to this task
Task Description	Description of stated task
Address	Address to which this task is associated
Mobile	Mobile number of the associated person
Email	Email of the associated person
Start	Date and time on which this task will start
End	Date and time on which this task will end
Tracker Name	Tracker to which this task is assigned

Driver	Driver to whom this task is assigned

Once you have filled up all the essential fields, click on **Save**

REMOVE A TASK

All the currently scheduled tasks appear in the list on left hand side. You must select all the tasks that you want to remove and then click on the **Remove** button.

ADD/REMOVE POI (POINT OF INTEREST)

Using this module, you can add/modify/remove multiple Points of Interest (POIs). These POIs are helpful in identifying a location on map and add that desired location to the geocoding database. You can add point of interest on the map simply by double-clicking anywhere on the map.

ADD POI

To add a new POI, navigate to the location of interest using the search tool, on top right hand corner. Double click on the desired location on the map and a window titled 'Edit Place mark' will pop up, as shown in Figure 40: Edit Place mark.

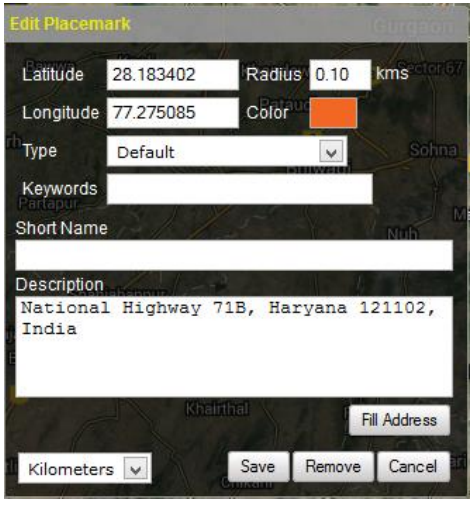


Figure 40: Edit Place mark

This window contains the latitude & longitude of the location that was double clicked on. If you change this latitude and longitude to some other location you can click on the **'Fill Address'** button to fetch address for this new location. Following are the fields in this window:

Field	Description
Latitude	Latitude on which POI should be added. By default it is the location where mouse was double-clicked
Longitude	Longitude on which POI should be added. By default it is the location where mouse was double-clicked
Radius	Radius of the circular area in which this POI is applicable
Color	Color of the default icon
Type	Icon type to be used on the map
Keywords	Keywords to search POI
Short Name	Name of this location which is shown when mouse is hovered on its icon
Description	Description for this location
Metric	The metric system used to specify radius
Fill Address	Fetch address from the specified latitude and longitude
Save	Add new location on the map
Remove	Remove this POI from the database. Note that a POI once removed cannot be undone
Cancel	Cancels the add/modify operation and closes the window

MODIFY POI

To modify an existing POI, locate the POI in the list on left hand side. When you select the POI, that you wish to modify, you'll be able to see the POI icon placed on the map. Click on that icon to display the 'Edit Place mark' window as shown in **Error! Reference source not found.**. In this window, you can make he desired changes and click the 'Save' button when done, so that all changes are stored successfully.

REMOVE POI

There are multiple methods to remove a POI:

1. Remove single POI by choosing from list
2. Remove single POI using 'Edit Place mark' window
3. Remove multiple POI by selecting from list

To remove a POI, select the POI from the list of existing POIs from the list on the left hand side. Click the 'Remove' button to remove the selected POI. You may also click on the POI icon, of the selected POI, on the map; thereby displaying the 'Edit Place mark' window. In that window you'll be able to see the 'Remove' button on the bottom left. Click that button to remove the selected POI. It is also possible to select multiple POIs from the list by pressing the Ctrl or Shift button on the keyboard and then selecting the desired POIs using the mouse. After you have selected all POIs that should be removed, click the 'Remove' button below the list. This will remove all the selected POIs.

UPLOAD POI LIST

If you need to add multiple POIs all at once, you can prepare upload the POIs' list using this feature. To create a POI list, you first need to download the POI format, using the 'Download POI Format' button on the bottom left. There are detailed instructions in the download package on how to create a POI file for uploading on the server. Once you have created the POI file, following the appropriate methods, you are ready to upload that file to the server. Click on 'Upload POI List' button in bottom left, which will display a file browser window. Select the file you wish to upload and click "OK". This process may take some time, depending on the number of POIs you are uploading. Wait for some time until you get a message indicating whether the file was successfully uploaded or not.

GEOFENCE DRAWING

A Geofence is a virtual perimeter on a geographic area using location-based service, so that when the geofencing device enters or exits the defined area, a notification is generated. Geofencing is a critical element to telematics hardware and software. It allows users of the system to draw zones around places of work, customers' sites and secure areas.

Geofencing notifies you when an electronically tracked asset in motion, such as a person, boat or a vehicle equipped with a vehicle tracking device, crosses a virtual boundary. The notification may be sent to a cell phone, email, or Find'n'Secure® tracking software. It includes complete information such as the time, date and location that the virtual boundary was crossed, allowing for an immediate investigation or response to the situation.

The Geofence may be used to monitor whether a tracked asset stays within the defined boundaries. It may also warn of an asset's approach to a location, in the case of reverse geofencing.

Geofencing uses a Global Positioning System (GPS) vehicle tracking or other equipment like personal trackers with GPS technology to compare the asset position to predefined virtual boundaries. The Geofence may be established as a simple shape, such as a rectangle surrounding your yard, or as large, polygonal, overlapping areas. It may also define "off-limits" destinations, like an address or geographic area. Geofencing is commonly used to manage mobile employees. A broad range of geofencing applications potentially lies ahead. The following lists just a few of the current geofencing uses:

- Manage a fleet of delivery drivers, service technicians, sales representatives, school buses, taxis, snowplows and town vehicles within a region.
- Limit fleet travel and sales regions to specific routes.
- Ensure up-to-the-minute safety of valuable, hazardous or dangerous cargo.
- Manage employees by exception rather than scrutinizing trusted employees.
- Provide advance warning of arrival at customer sites, docking bays, and ports in order to minimize loading and unloading delays.

- Prevent crossing of city, state, or regional borders or out of country cargo shipments.
- Provide warning that a child, family member or pet is leaving a yard, block, or city limits.
- Remotely disable vehicles if a boundary that has been crossed is restricted, unauthorized or unsafe.
- Alert victims of the approach of a known violent or sexual predator.
- Track domestic violence or sex offenders to enforce probation stipulations.
- Prevent vehicles from being stolen or used for unauthorized or illegal purposes.
- Prevent wildlife from infringing on livestock or crop raiding, such as in the case of Kenya's Save the Elephant group.

Find'n'Secure® software is equipped with state-of-art geofencing support to ensure maximum benefit.

The Geofence draw tool is shown in Figure 41: Geofence Drawing. It is somewhat similar to the Map View module in visual appearance i.e. left side is the toolbar helping you in drawing the Geofence and right side is the map on which you can see and modify the Geofence boundaries.

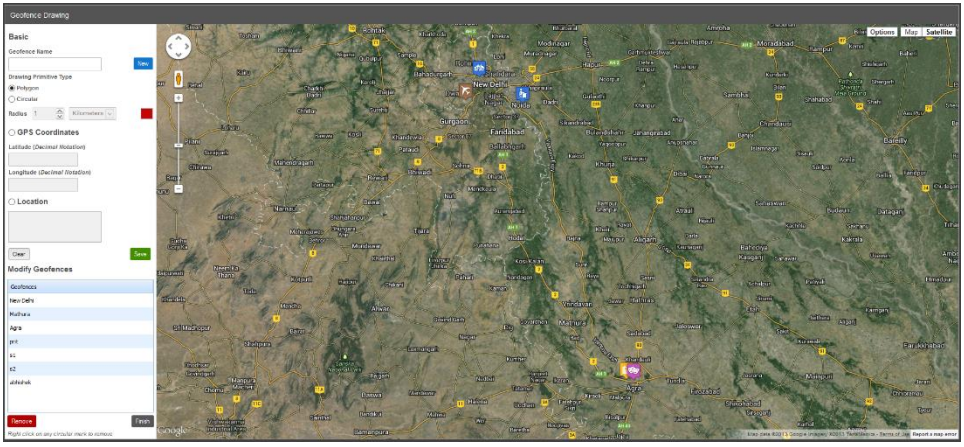


Figure 41: Geofence Drawing

Find'n'Secure® supports two basic types of geofences

1. Polygon

2. Circular

The following table describes the functions of various options present in the toolbar on the left side of the screen

Property	Description
Geofence Name	Name of this Geofence
Polygon	Select polygon mode for drawing Geofence on the map
Circular	Select circular mode for drawing Geofence on the map
Radius	Set radius of the circular Geofence
Color	Choose a color for this Geofence
Latitude	Latitude for custom navigation of the map
Longitude	Longitude for custom navigation of the map
Location	Navigate map to the desired location address
Clear	Clears all the points on the map
Save	Save the Geofence to the server.

The left side of this module also lists the geofences that you have already created and are saved on the server.

CREATE A NEW GEOFENCE

To create a new Geofence, click the **New** button, located near the Geofence Name textbox. You may now navigate to a desired location on the map, by using the search methods: Latitude/Longitude search and Location search. Once you are at this location, you can draw the Geofence of the selected type.

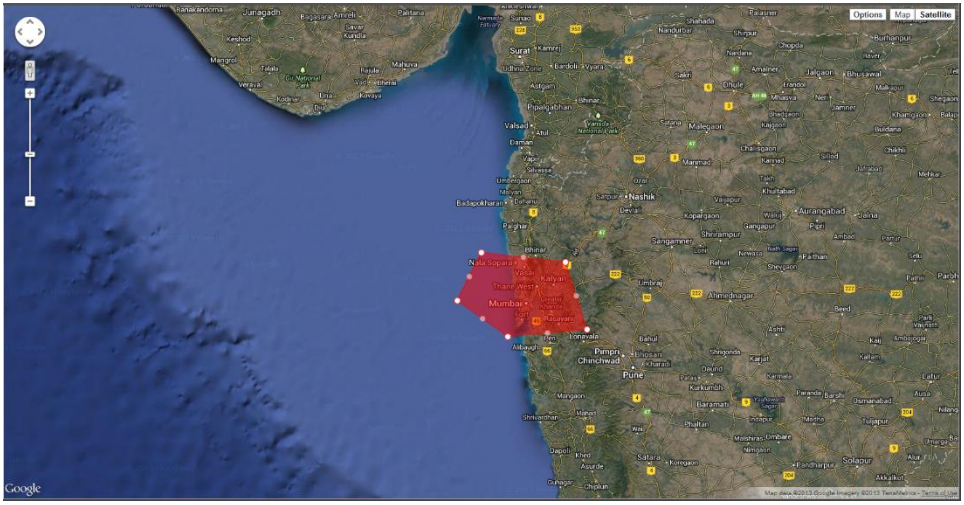


Figure 42: Geofence

POLYGON GEOFENCE

Select '**Polygon**' in Drawing Primitive Type section. Drawing polygon Geofence is as simple as clicking on the map. Single click on the map places a new point over it. You may continue clicking over the map to create a fence in the clockwise or counter-clockwise direction as shown in Figure 43: Polygon Geofence:

Figure 43: Polygon Geofence

You may also adjust the Geofence by clicking and holding the left mouse button over the circular mark icon and dragging as shown below in Figure 44: Edit Polygon Geofence:

Figure 44: Edit Polygon Geofence

Once you have completed the drawing of the Geofence, make sure you have filled up all details and click **Save** button.

CIRCULAR GEOFENCE

Select **Circular** in in Drawing Primitive Type section. Click anywhere on the map to create a circular Geofence of specified radius.

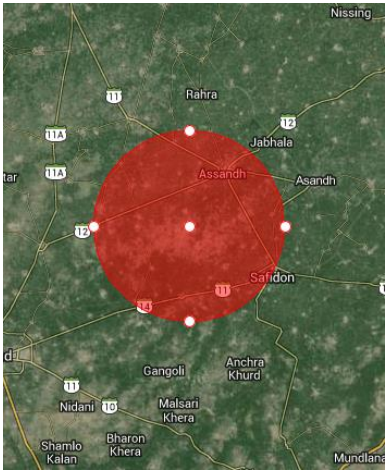


Figure 45: Circular Geofence

Dragging the center circular mark will move the Geofence, while dragging the other marks will modify the radius of the Geofence. You may also change the radius of this Geofence using the options panel.

Once you have completed the drawing of the Geofence, make sure you have filled up all details and click **Save** button.

MODIFY A GEOFENCE

To modify an already existing Geofence, select the desired Geofence from the list of geofences. This will plot the Geofence on the map, which you can move and edit. If you make a mistake, and wish to remove an point, you can right click on that point to remove it.

REMOVE A GEOFENCE

To remove a Geofence select one of more Geofence(s) from the list and click the **Remove** button.

GEOFENCE MANAGEMENT

This utility allows you to assign geofences to trackers, which you created using the Geofence drawing tool.

ACTIVATE GEOFENCE

When you open the Geofence Management tool, you will be presented with two lists. First one is a list of trackers and second one is the list of geofences.

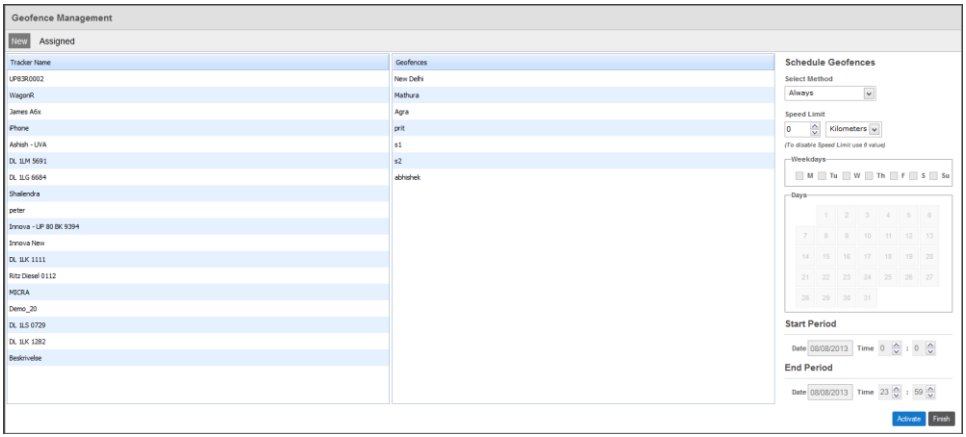


Figure 46: Geofence Management

Various Menu items of this utility are explained below :

Property	Description
Select Method	This dropdown has the following options : **Always**: Geofence is always on **Date of Month**: Geofence is activated on selected dates of every month at specified time **Everyday**: Geofence is automatically turned on every day for the selected period for example every day from 10.00 PM to 6.00 AM **Period**: Geofence is activated only for the particular period you select, e.g., 20th June 2009, From 6.00 AM to 10.00 AM **Weekdays**: Geofence will only be activated on specified days of every week at specified time
Weekdays	Specify the days of week, on which the Geofence should be activated. This option is only enabled for method **Weekdays.**
Days	Select dates of month on which the Geofence should be activated. This option is only enabled for method **Date of**

	Month.
Start Date	Starting date of the Geofence.
Start Time	24 hours clock hour from which Geofence shall start.
End Date	The date on which the Geofence will stop.
End Time	24 hours clock hour at which Geofence shall end.

After you have set all options, click the **Activate** button to activate Geofence. You can activate multiple fences on the multiple trackers by holding down the Ctrl key on your keyboard while selecting the trackers and the fences.

DEACTIVATE GEOFENCE

By default, periodic geofences are removed automatically from the server but for other geofences you need to remove them manually. For this, the functionality of deactivating the geofences is provided.

Click on the **Assigned** tab next to the **New** tab and you will see all the currently active fences on the server as shown in Figure 47: Deactivate Geofence. You may select single or multiple geofences whichever you wish to deactivate and click on the **Deactivate** button to deactivate them.

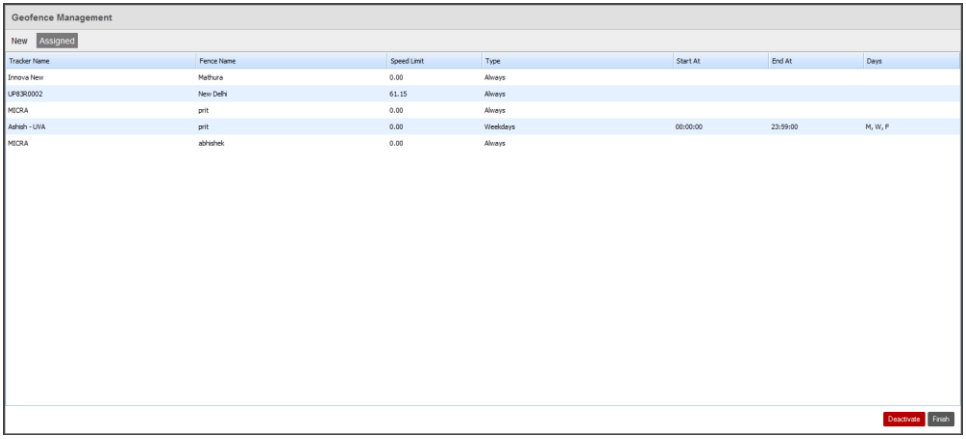


Figure 47: Deactivate Geofence

GEOFENCE MESSENGER

This module is used to create alert and messages rules on fences. One or more contacts can be scheduled to receive alert messages for each Geofence. Figure 48: Geofence Messenger shows alerts associated with a Geofence to two contacts.

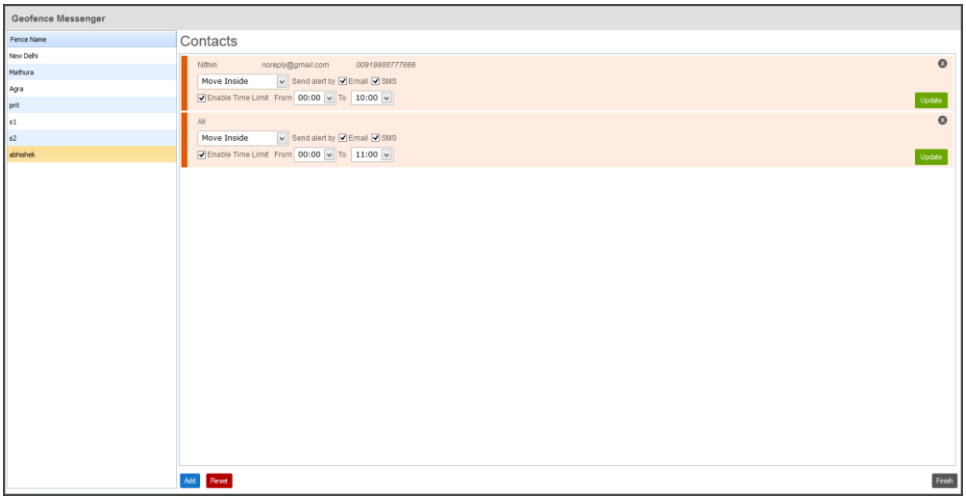


Figure 48: Geofence Messenger

ADD A NEW RULE

To add a new rule in Geofence messenger, click the **Add** button and a window as shown in Figure 49: Add Rule to Geofence Messenger pops up.

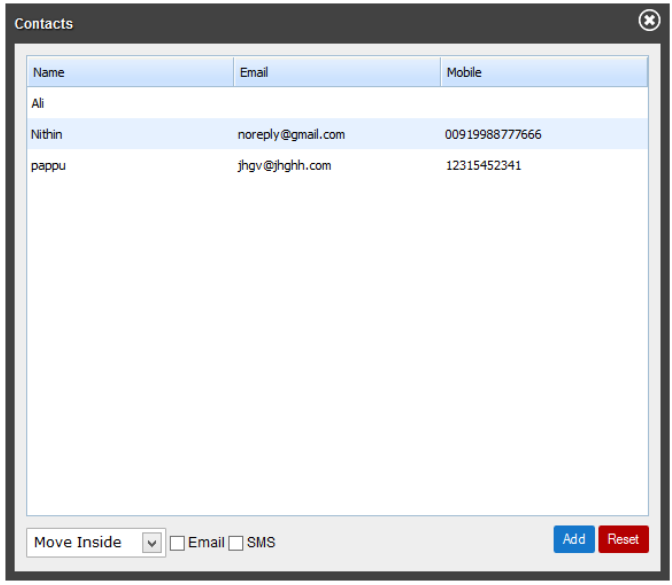


Figure 49: Add Rule to Geofence Messenger

Select the contact(s), specify the alert criteria and alert method, and click the **Add** button in that window to add those contacts to messenger.

MODIFY AN EXISTING RULE

Select the fence name from the fence list, so that the contacts associated with that fence are loaded. Edit the alert criteria or alert method is required. If you need to enable time duration, of when to receive alerts you can set that too from that panel. After you have made the changes, click the **Update** button.

REMOVE A RULE

Select the fence name from the fence list, so that the contacts associated with that fence are loaded. Click the button on the right hand side to remove the rule.

To exit from Geofence Messenger module, click the **Finish** button.

PATH DRAWING

A Path is a virtual route on a geographic area using location-based service, so that when the device enters or exits the defined route, a notification is generated.

The Path Draw tool is shown in Figure 50: Path Draw. It is somewhat similar to the Map View module in visual appearance i.e. left side is the toolbar helping you in drawing the path and right side is the map on which you can see and modify the path.

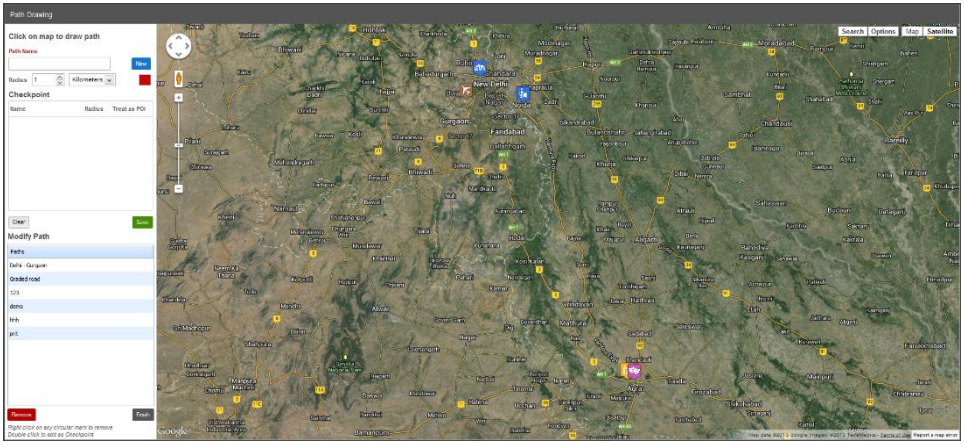


Figure 50: Path Draw

Find'n'Secure® supports specification of checkpoints on the path. Each checkpoint can be assigned a name, radius and can be treated as POI. To add/modify POI at a point, you can double click on the circular mark.

The following table describes the functions of various options present in the toolbar on the left side of the screen

Property	Description
Path Name	Name of this path
Radius	Set radius of the path, which can be visualized as width of track in 2D plane
Color	Choose a color for this path

Checkpoint	List of checkpoints along the path
Clear	Clears all the points on the map
Save	Save the path to the server.

The left side of this module also lists the paths that you have already created and are saved on the server.

CREATE A NEW PATH

To create a new path, click the **New** button, located near the Path Name textbox. You may now navigate to a desired location on the map, by using the search tool provided in the top right corner of the map. Once you are at the desired location, you can start drawing the path.

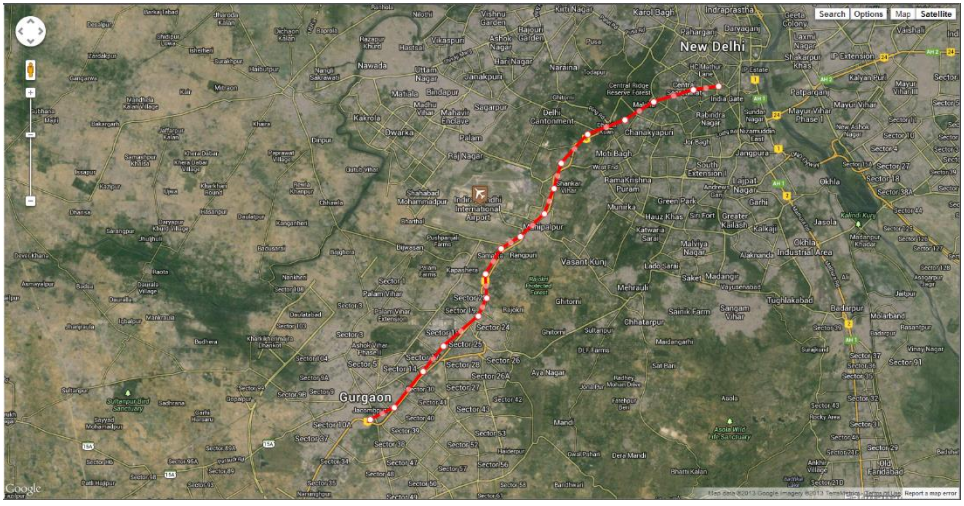


Figure 51: Path Example

Once you have completed the drawing a path, make sure you have filled up all details and click **Save** button.

MODIFY A PATH

To modify an existing path, select the desired path from the list of paths. This will plot the path on the map, which you can move and edit. If you make a mistake, and wish to remove a point, you can right click on that point to remove it.

REMOVE A PATH

To remove a path select one of more path(s) from the list and click the **Remove** button.

PATH SCHEDULER

This utility allows you to assign paths to trackers, which you created using the Path drawing tool.

ACTIVATE PATH

When you open the Path Scheduler tool, you will be presented with two lists. First one is a list of trackers and second one is the list of paths.

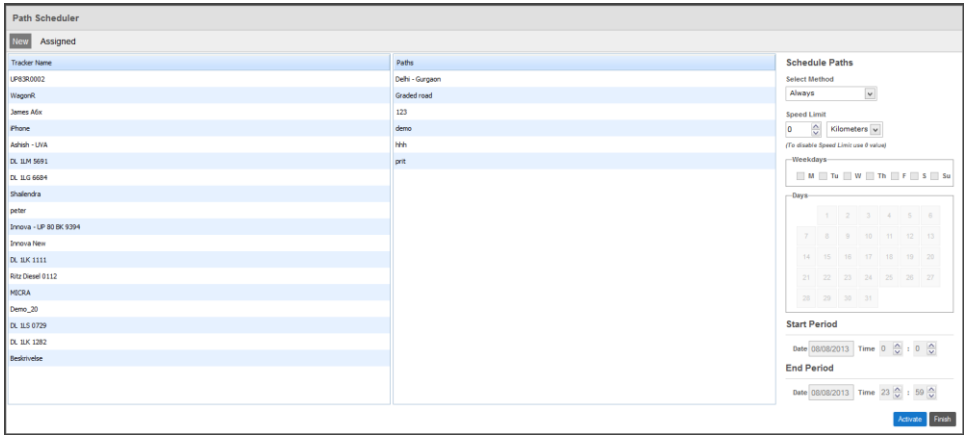


Figure 52: Path Scheduler

Various Menu items of this utility are explained below:

Property	Description
Select Method	This dropdown has the following options : **Always**: Path is always on **Date of Month**: Path is activated on selected dates of every month at specified time

	Every day: Path is automatically turned on every day for the selected period for example every day from 10.00 PM to 6.00 AM **Period**: Path is activated only for the particular period you select, e.g., 20th June 2009, From 6.00 AM to 10.00 AM **Weekdays**: Path will only be activated on specified days of every week at specified time
Weekdays	Specify the days of week, on which the path should be activated. This option is only enabled for method **Weekdays.**
Days	Select dates of month on which the path should be activated. This option is only enabled for method **Date of Month**.
Start Date	Starting date of the path.
Start Time	24 hours clock hour from which path shall start.
End Date	The date on which the path will stop.
End Time	24 hours clock hour at which path shall end.

After you have set all options, click the **Activate** button to activate path. You can activate multiple paths on the multiple trackers by holding down the Ctrl key on your keyboard while selecting the trackers and the paths.

DEACTIVATE PATH

By default, periodic path are removed automatically from the server but for other path you need to remove them manually. For this, the functionality of deactivating the path is provided.

Click on the **Assigned** tab next to the **New** tab and you will see all the currently active paths on the server as shown in Figure 53: Deactivate Path. You may select single or multiple path whichever you wish to deactivate and click on the **Deactivate** button to deactivate them.

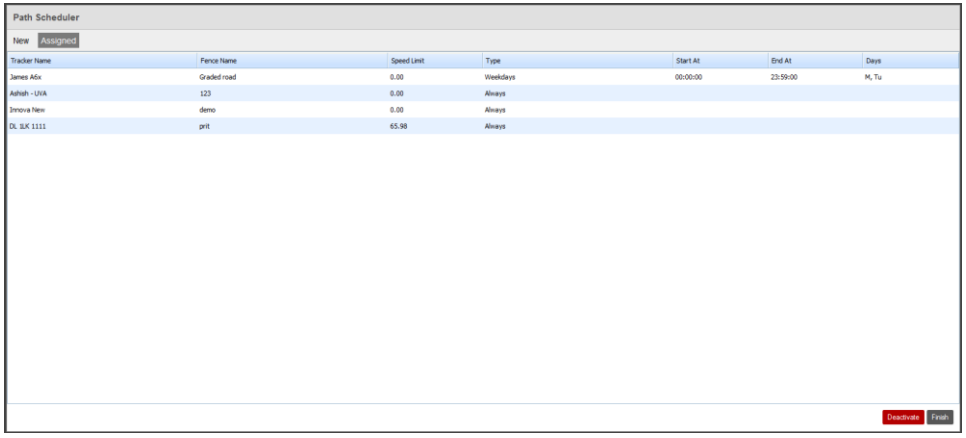


Figure 53: Deactivate Path

ROUTE OPTIMIZER

This module is used to determine optimized path from one point to another. You are provided with an option to choose points using four different methods:

1. **Map Click:** click anywhere on the map to mark a point and add to list
2. **Geofences:** A list of geofences is provided, first point of which will be used as the point to optimize
3. **POI:** A list of POIs is provided to choose the location indicated by that POI
4. **Tracker:** List of trackers is provided, current location of the tracker will be used as the point to optimize

All the points you choose will be added to the **Locations** list, which you can arrange again according to preference, by dragging the points as desired.

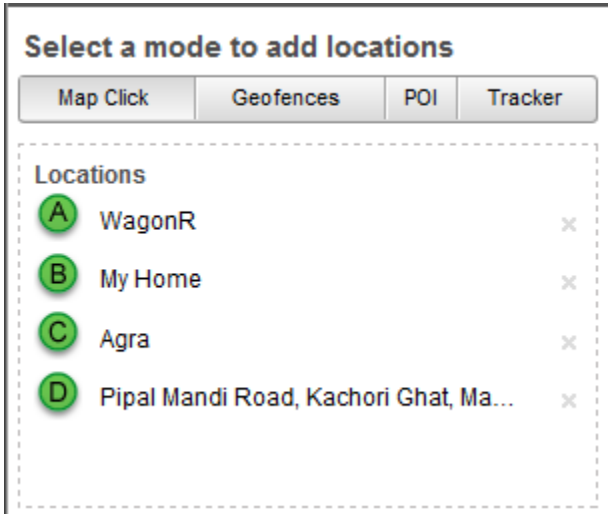


Figure 54: Route Optimizer Points

In Figure 54: Route Optimizer Points we have selected locations, one from each method. Once you are ready to optimize points, you can click the **Get Directions** button to start the optimization process.

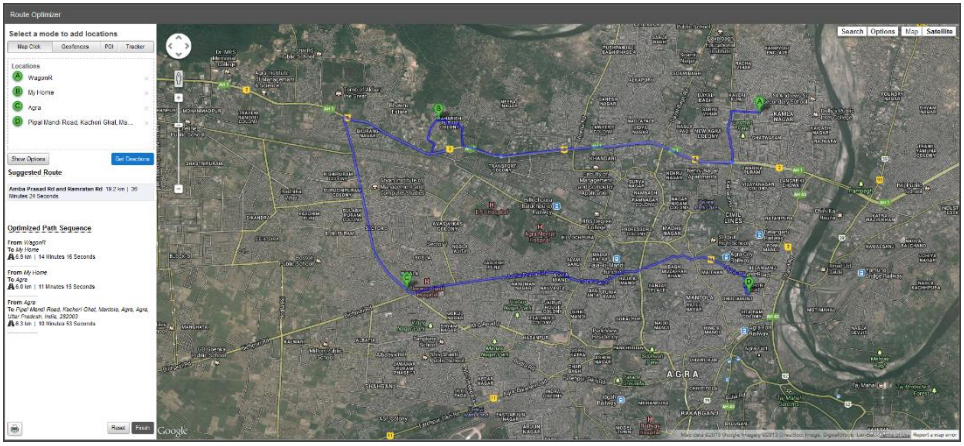


Figure 55: Optimized Path

After the optimization process is complete, you can see the result similar to the one seen in Figure 55: Optimized Path. Optimized path is plotted on the map, points in the **Locations** list are reordered, suggested routes are provided, and optimized path sequence is also shown.

SUGGESTED ROUTE

A list if suggested routes is provided, which displays the path name, total distance and time required to complete the path. You may click a suggested route to plot the route on map.

OPTIMIZED PATH SEQUENCE

This section lists the optimized path sequence from one point to the other. For each stub of the path, you'll be able to see the distance and estimated time to traverse the path. In some places, where time in traffic is available, it will also be provided, as shown in Figure 56: Optimized Path Sequence.

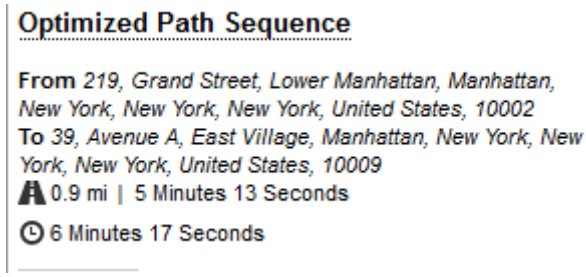


Figure 56: Optimized Path Sequence

PRINT OPTIMIZED PATH

You can also print this optimized path sequence by clicking the icon on bottom left. A new window as shown in Figure 57: Print Optimized Route will pop up.

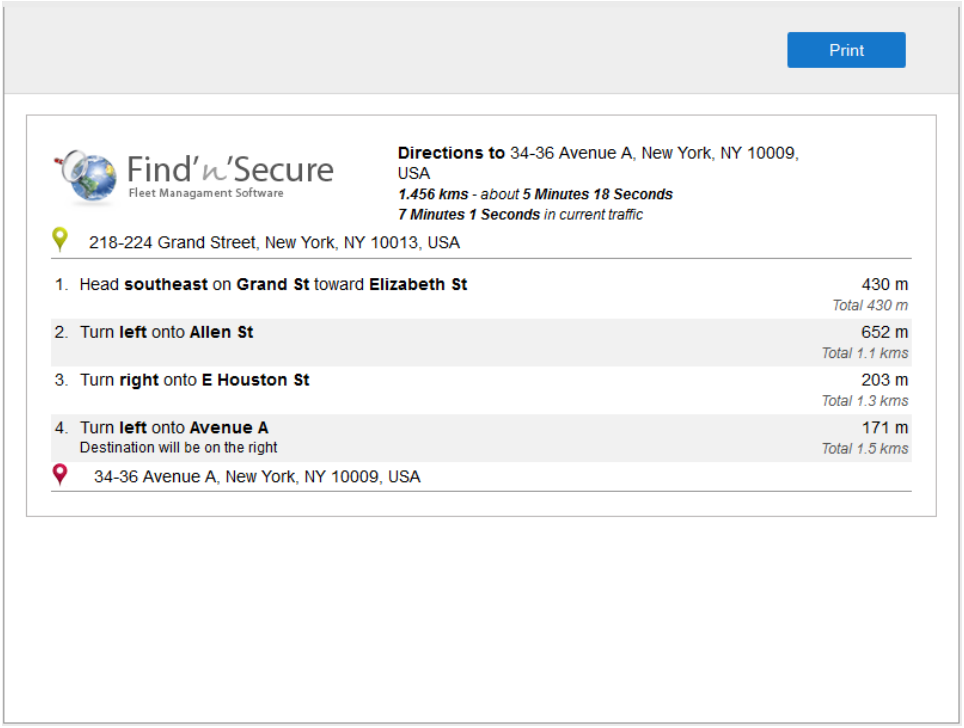


Figure 57: Print Optimized Route

When you click the **Print** button in this window, the system print dialog will open and you can then proceed to printout.

ETA (ESTIMATED TIME OF ARRIVAL)

This module allows you to compute ETA of a tracker to a specified location.

To calculate ETA, follow the steps below:

1. Select a tracker from the trackers list. The **Tracker Location** field in the right hand side **Details** window is updated to contain current location address of the tracker.
2. Click on the map to mark a point, which should be considered as destination for the tracker. This location's address will also be filled up in the **Reference Location** field in the **Details** window.
3. Click the **ETA** button in the **Details** window to start computing ETA. The result is also displayed in the same window as shown in Figure 58: ETA.

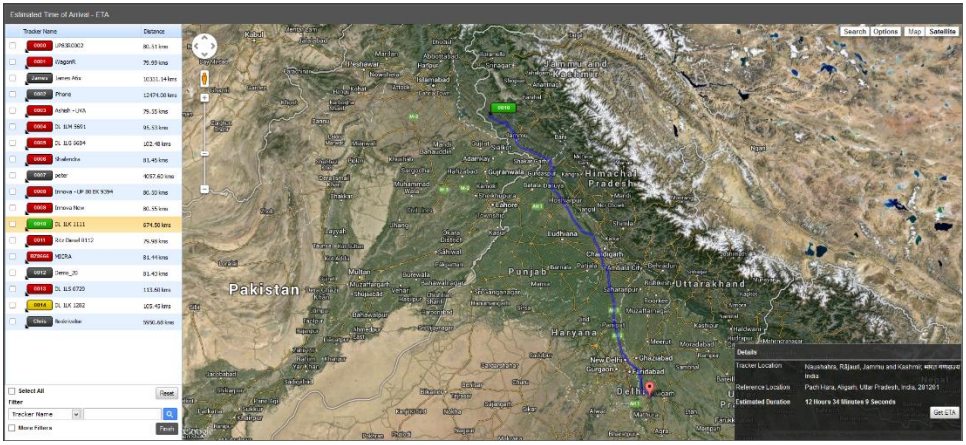


Figure 58: ETA

REPORTS

Find'n'Secure® software is equipped with handy to use reports. Reporting is an essential tool when you need to do complete analysis of a tracker for a certain period of time. **Findnsecure** comes with the following pre-defined reports:

Report	**Description**
Consolidated Report	Consolidated report containing all the essential parameters of travelling
Geofence Report	Geofencing In/Out report for the trackers
Trips Report	Computes various trips done by the tracker and reports with complete statistics
Events Report	Reports all the events generated by the tracker in the specified period
Overspeed Report	Reports all the speed violations done by the tracker

Fuel Analysis Report	Computes fuel consumption report for a tracker
Temperature Analysis Report	Computes statistics of the temperature recordings
Idling Report	Reports all the places and the durations where vehicle was idling
Stopover Report	Reports all the places and the durations where vehicle was stopped
Current Fleet Report	Generates report with all the positions and status of your current fleet
Job Allocation Report	Shows all the completed and scheduled jobs for the specified period
Summary Report	Shows history of the path taken in textual format
Journey Report (Vehicle)	Reports all the journeys based on Odometer and business/private mode
Journey Report	Reports of all the journeys based on Driver, Odometer and business/private mode
Path Completion Report	Display completion report for the scheduled path(s)
Accident Report	In case of an impact this reports shows the pre-impact and post-impact analysis
Overspeed Report (Ex)	Extended Overspeed report with distance, duration and maximum

	speed reached
Overspeed In Geofence	Overspeeding violations in hardware Geofence areas
Trip Report (Single Line)	Detailed trip report with support of private and business distances
Driver Scoring Report	Calculates the score of the drivers based on their driving performance
Engine Hours	Compute Working Engine Hours
Student Management Report	Show details of each student

The most unique feature of the Find'n'Secure® software is the raw data providing mechanism for the expansion of the reports. You can make use of this facility in the enterprise version for creating custom reports by utilizing MySQL database system. The following file formats are supported by the reports in the software:

1. HTML
2. PDF
3. XLSX

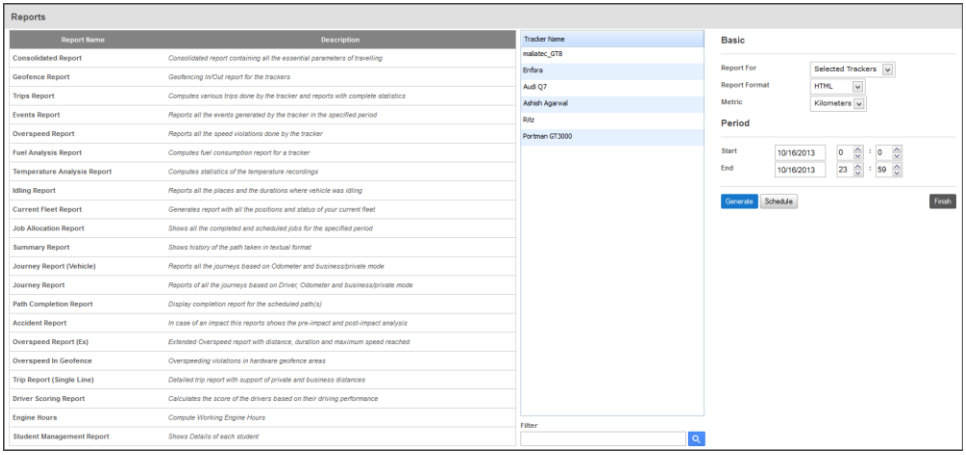
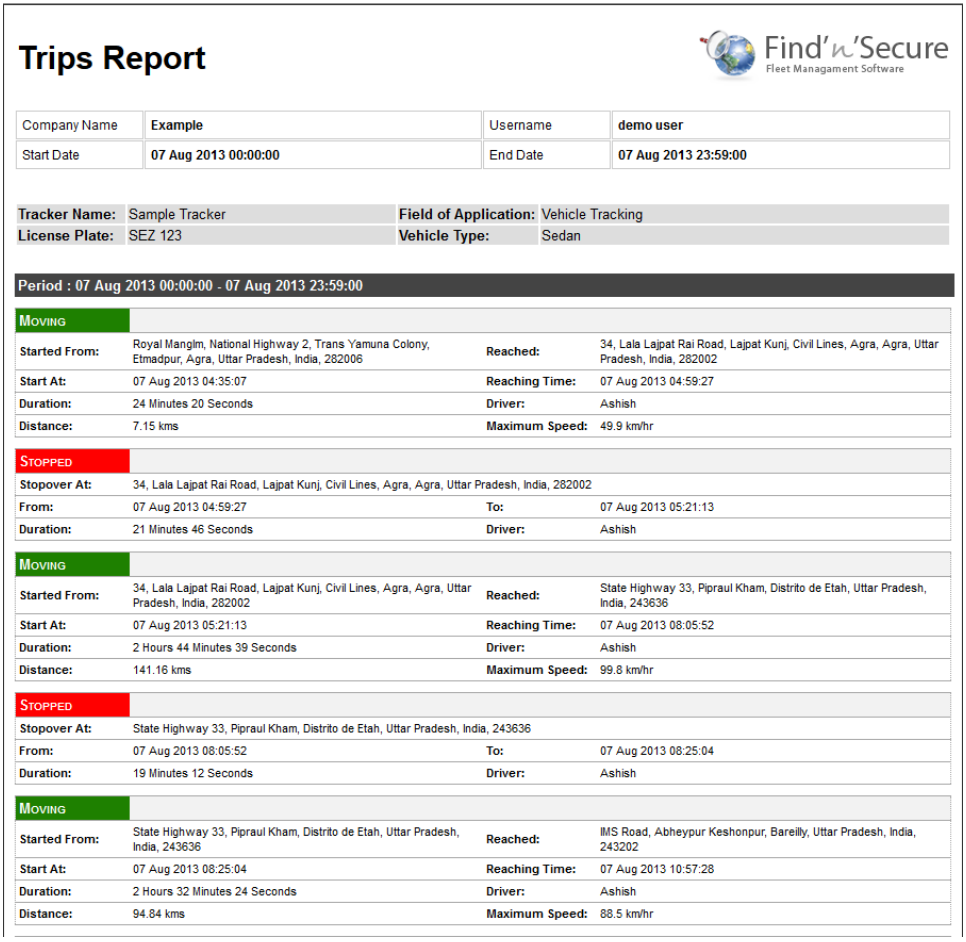


Figure 59: Reports

As shown in Figure 59: Reports, you can select the report type from the reports list on the left side of the screen. Then select one or more trackers from the Trackers List and set the parameters as per your requirement. Click on the **Generate** button to get the report.

SAMPLE REPORT

In Figure 60: Trips Report a sample **Trips Report** for a tracker is shown, which is self-explanatory.



Trips Report

Find'n'Secure
Fleet Managament Software

Company Name	Example	Username	demo user
Start Date	07 Aug 2013 00:00:00	End Date	07 Aug 2013 23:59:00

Tracker Name:	Sample Tracker	Field of Application:	Vehicle Tracking
License Plate:	SEZ 123	Vehicle Type:	Sedan

Period : 07 Aug 2013 00:00:00 - 07 Aug 2013 23:59:00

MOVING

Started From:	Royal Manglm, National Highway 2, Trans Yamuna Colony, Etmadpur, Agra, Uttar Pradesh, India, 282006	Reached:	34, Lala Lajpat Rai Road, Lajpat Kunj, Civil Lines, Agra, Agra, Uttar Pradesh, India, 282002
Start At:	07 Aug 2013 04:35:07	Reaching Time:	07 Aug 2013 04:59:27
Duration:	24 Minutes 20 Seconds	Driver:	Ashish
Distance:	7.15 kms	Maximum Speed:	49.9 km/hr

STOPPED

Stopover At:	34, Lala Lajpat Rai Road, Lajpat Kunj, Civil Lines, Agra, Agra, Uttar Pradesh, India, 282002		
From:	07 Aug 2013 04:59:27	To:	07 Aug 2013 05:21:13
Duration:	21 Minutes 46 Seconds	Driver:	Ashish

MOVING

Started From:	34, Lala Lajpat Rai Road, Lajpat Kunj, Civil Lines, Agra, Agra, Uttar Pradesh, India, 282002	Reached:	State Highway 33, Pipraul Kham, Distrito de Etah, Uttar Pradesh, India, 243636
Start At:	07 Aug 2013 05:21:13	Reaching Time:	07 Aug 2013 08:05:52
Duration:	2 Hours 44 Minutes 39 Seconds	Driver:	Ashish
Distance:	141.16 kms	Maximum Speed:	99.8 km/hr

STOPPED

Stopover At:	State Highway 33, Pipraul Kham, Distrito de Etah, Uttar Pradesh, India, 243636		
From:	07 Aug 2013 08:05:52	To:	07 Aug 2013 08:25:04
Duration:	19 Minutes 12 Seconds	Driver:	Ashish

MOVING

Started From:	State Highway 33, Pipraul Kham, Distrito de Etah, Uttar Pradesh, India, 243636	Reached:	IMS Road, Abheypur Keshonpur, Bareilly, Uttar Pradesh, India, 243202
Start At:	07 Aug 2013 08:25:04	Reaching Time:	07 Aug 2013 10:57:28
Duration:	2 Hours 32 Minutes 24 Seconds	Driver:	Ashish
Distance:	94.84 kms	Maximum Speed:	88.5 km/hr

Figure 60: Trips Report

SCHEDULING REPORTS

Scheduling of reports allows you to automatically receive reports via email.

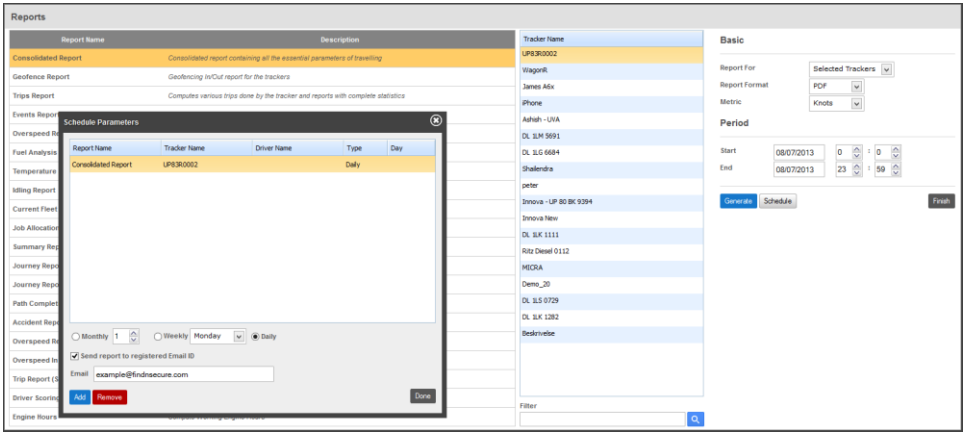


Figure 61: Scheduling a Report

Reports can be sent to your email monthly, weekly or daily depending upon your choice. To add a new report to your schedule:

1. Select the report you wish to schedule
2. Choose the tracker you wish to schedule the report on
3. Set the parameters, e.g. required Report Format, Metric
4. Click on **Schedule** button
5. Select one of **Monthly**/**Weekly**/**Daily**. You may have to choose a date for monthly report to be delivered and day of week for weekly report.
6. You may then opt to send reports to the registered email ID of the tracker, or enter the email ID you wish to receive reports on.
7. Click **Add**. This schedule will be added in the schedules list above.
8. Click **Done**

DRIVERS MANAGEMENT

This module stores driver information and manages drivers working in your company or home etc.

ADD A DRIVER

To add a driver, click the **New** button on top right and fill up the card in the right pane. Click on **Save** to complete the addition process. Following are the fields provided in the drivers management pane:

Field	Description

Name	Driver's name
Type	Indicates the method of driver identification. The options available are: **iButton** is the most commonly used driver identification method **RFID** tag can also be used to identify a driver uniquely **Static** driver, once assigned to a vehicle is considered to be the only person driving the vehicle
Tag ID	Only required with iButton and RFID type drivers. This is the tag ID provided with iButton/RFID.
Assign To	You may wish to assign a driver to a selected number of trackers (to be chosen later), or entire fleet of trackers.
Mobile	Mobile number of the driver
Reference Number	A reference number of the driver, if available
License Number	The drivers' license number of the driver
License Valid Up to	The expiry date of driver's license
Date of Joining	Date on which the driver joined the company
Date of Birth	Birth date of the driver

Location	Complete postal address of the driver

All fields marked in red are mandatory, while others are optional. It a recommended to fill up as much data as possible for record keeping.

After you have saved the driver, you may see a **Trackers** button besides the **Finish** button, if during the driver creation process you chose to assign the driver to a selected number of trackers. You can now select the trackers on which you wish to assign this driver, and click the **Assign** button. To view assigned drivers, you may click on the **Assigned** tab in the same window. If you wish to remove some assigned trackers from the driver, select those trackers from the assigned trackers list and click the **Remove** button.

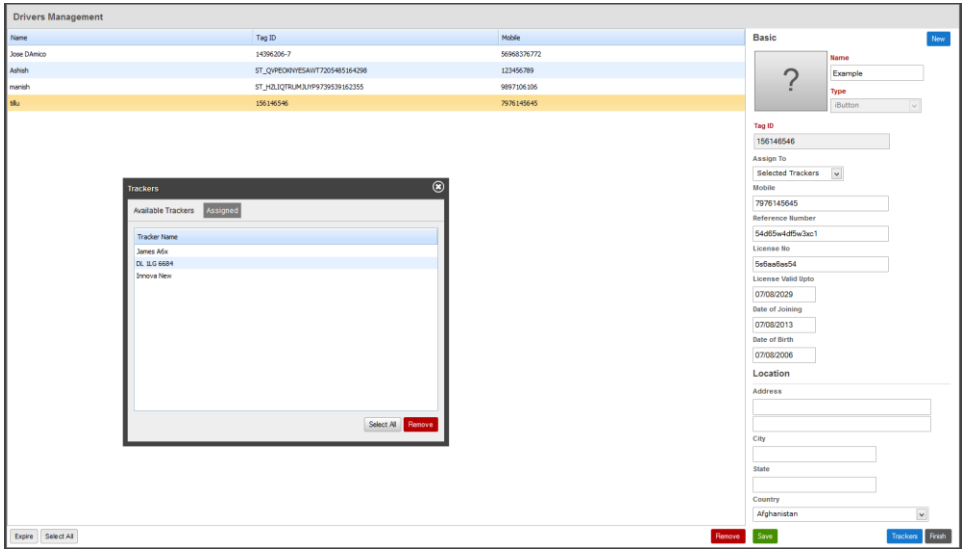


Figure 62: Drivers Management

MODIFY A DRIVER

Left hand side of the page displays a list of existing drivers. To modify a driver, you may click on any driver you wish and all his details will be filled up in the driver details card on the right. Modify the details as desired and click the save button to commit those changes.

REMOVE A DRIVER

If wish to remove one or more drivers, which can be done by selecting driver(s) from the drivers list on the left and clicking the remove button below it.

EXPIRE A DRIVER

In many situations you may wish to remove a driver but save his data. Expiring a driver does just that. You may select one more drivers, and click on the **Expire** button. This will invalidate the driver by changing his Tag ID, but will retain his data.

SCHOOL MANAGEMENT

This module creates and maintains a list of schools and their timings to be used with the Student Management module. You can create as many schools you require using this module and configure details for each of them.

ADD A SCHOOL

To add a school click the **New** button on top right. Fill all the details in the school details card and then click the **Save** button.

Following are the fields required in this module:

Field	**Description**
Name	Name of school
Contact Email	Email ID of contact person at school
Phone	Phone number of school or contact person
Address/City/State/Country	Complete postal address of school
School GPS Coordinates	Latitude/Longitude/Radius of the school. To facilitate the latitude/longitude determination process, a search tool is provided to mark the school on map

	and also set its radius.
Joining Time	Time at which school starts (after which the student is not allowed to enter school)
Leaving Time	Time at which school gets over (before which the student is not allowed to leave school)

When you save a school, it is added to the schools list on the left.

MODIFY A SCHOOL

Choose the school you wish to modify from the schools list on the left. This will fill up the school details card which you may modify as desired. Click the **Save** button to commit all changes.

REMOVE A SCHOOL

Select one or more schools from the schools list on the left and click the **Remove** button to permanently remove all details of the school(s).

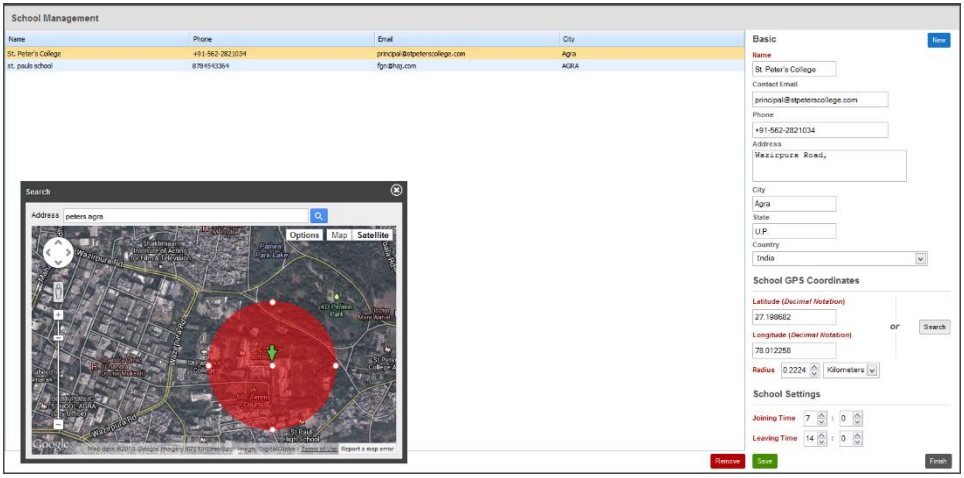


Figure 63: School Management

STUDENT MANAGEMENT

This module creates and maintains a list of students and their timings. This module is closely related to the School Management module. You can create as many students you require using this module and assign a school to each of them.

ADD A STUDENT

To add a student click the **New** button on top right. Fill all the details in the student details card and then click the **Save** button.

Following are the fields required in this module:

Field	**Description**
Student Name	Name of student
Tag Name/Number	RFID tag ID of the student
Gender	Gender of student
Class	Class in which the student in studying
Roll Number	Roll number of the student
Contact Email	Email of the contact person/parent
Contact SMS	Phone number of contact person/parent
Home GPS Coordinates	Latitude/Longitude/Radius of student's home To facilitate the latitude/longitude determination process, a search tool is provided to mark student's home on map and also set its radius

School Settings	Select the school in which the student is enrolled. School timings will be set automatically You may also opt to receive alerts on school pickup and school drop
Pick Up	Time at which the student will be picked up from home (earliest time of pick up) Check **Send Alert** to receive alert for approaching school vehicle for pick up. Alert will be sent when vehicle is at a distance equal to that of notify distance
Drop Down	Time at which student will be dropped at home (last time by which the student reaches home) Check **Send Alert** to receive alert for approaching school vehicle for drop down. Alert will be sent when vehicle is at a distance equal to that of notify distance
Notify distance	Notify distance of school vehicle from the location where student will be picked up and dropped

When you save a student, it is added to the students list on the left.

MODIFY A STUDENT

Choose the student you wish to modify from the students list on the left. This will fill up the student details card which you may modify as desired. Click the **Save** button to commit all changes.

REMOVE A STUDENT

Select one or more students from the students list on the left and click the **Remove** button to permanently remove all details of the student(s).

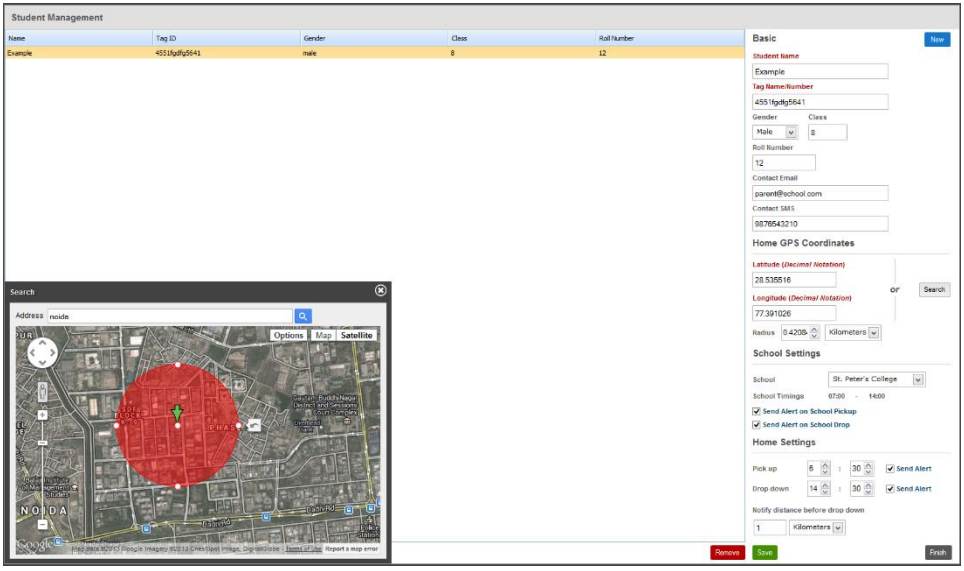


Figure 64: Student Management

CONTACTS DIRECTORY

Directory services offer you to create a database on the server with information about your clients. Directory is a very useful tool for dispatch system and it is integrated with the Job Scheduler and Geofence Messenger modules.

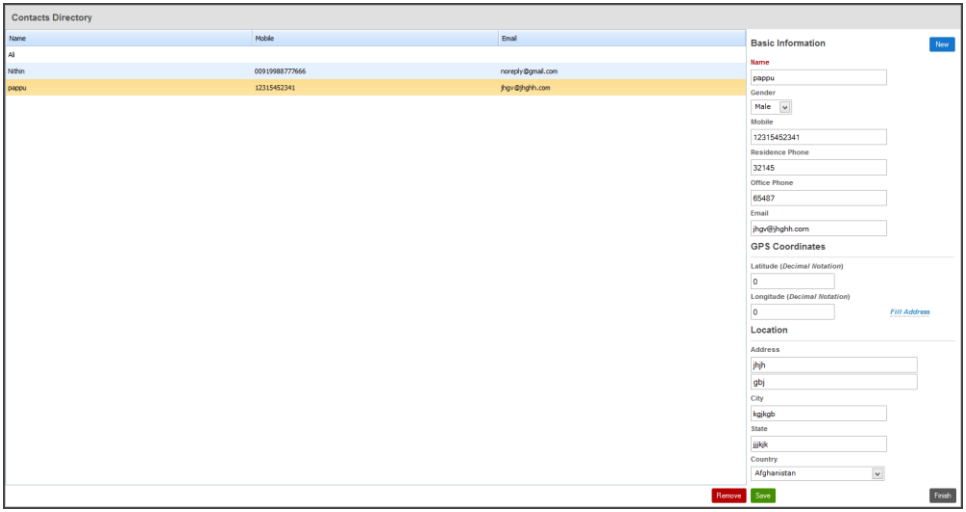


Figure 65: Contacts Directory

You can enter details of your clients in the fields of this tool. **Name** field is mandatory. Once you have completed the entries, simply click on the **Save** button to save the details on the server.

You may click on any of the records in the list to edit or remove the contacts.

Two unique fields in this Directory are Latitude and Longitude of your client which you can find out from Map View module. You may then click on **Fill Address** to fill contact's address by geocoding latitude/longitude.

CUSTOMER CARE INTERFACE

Your customer care center can be a vital utility in providing fast after sales service to your clients. Keeping this in mind Find'n'Secure® software provides customer care accounts described in the administration section.

When you login as a customer care executive you have the complete list of the client accounts accessible to you. You may select the account to whom you wish to provide the service and login to his account without the need of asking your client about his username or password. Figure 66: Customer Care displays the customer care interface:

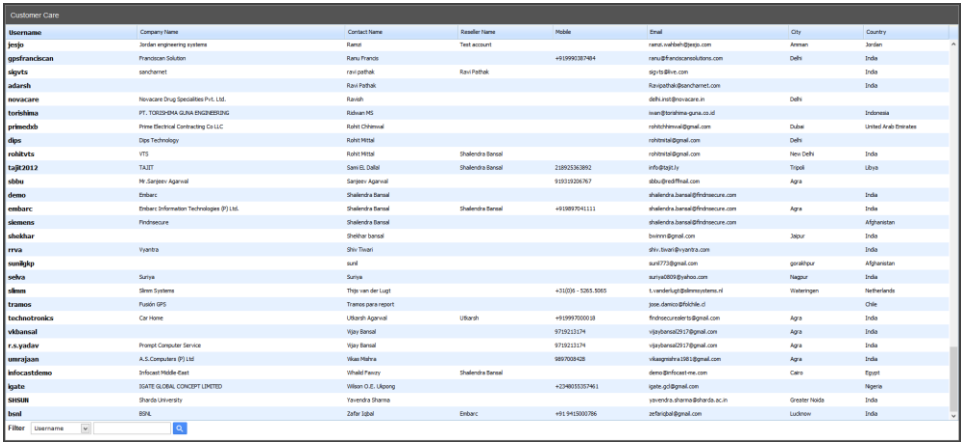


Figure 66: Customer Care Interface

Once you enter a user account though customer care panel, you can click **Sign Out** on top right corner, to return to Customer Care panel. This enables you to visit a number of accounts and return back easily, without ever having to re-enter your password.

This module also provides features for sorting the users' accounts list by any of the field displayed, just by clicking the header of the desired field. The fields displayed in Customer Care panel are given as follows:

Field	**Description**
Username	Username of account

Company Name	Name of company to which the account belongs
Contact Name	Name of the contact person, related to this user account
Reseller Name	Name of reseller of this account, if available
Mobile	Mobile number of contact person of this account
Email	Email ID of contact person of this account
City	City of residence of contact person of this account
Country	Country of residence of contact person of this account

Some day-to-day scenarios are explained below to understand this utility:

SCENARIO 1

The vehicle of your customer has been stolen and he doesn't have internet accessibility. He rings you up for help and wants that the engine of his vehicle be blocked and reported to police. Your Customer Care executive may enter into the customer's account without asking him the username and password by simply double clicking on his name in the list appearing in Figure 66: Customer Care Interface and after verifying his credentials may carry out the activity of tracking the vehicle, blocking the engine and informing the police.

SCENARIO 2

One of your customers has forgotten the location of his car parked by him in the market. He rings you up to help him in locating the car by blowing its horn. Your customer care executive may enter into his account by double clicking on

the customer’s name and then carry out the activity of blow horn after verifying his credentials.