



# **Telematics Software Solution**

CGS Fleet Management

User Guide

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## 1. Introduction

Telematics software solution is a GPS tracking mechanism that will allow telematics providers to monitor and manage their vehicles remotely. The main approach is to connect a 3<sup>rd</sup> party system that involves data translation among different formats, and often aggregating separate sets of data together to satisfy the data exchange. The platform will securely enable the assigned vehicles to exchange data and live streaming with remote servers via a cellular bearer.

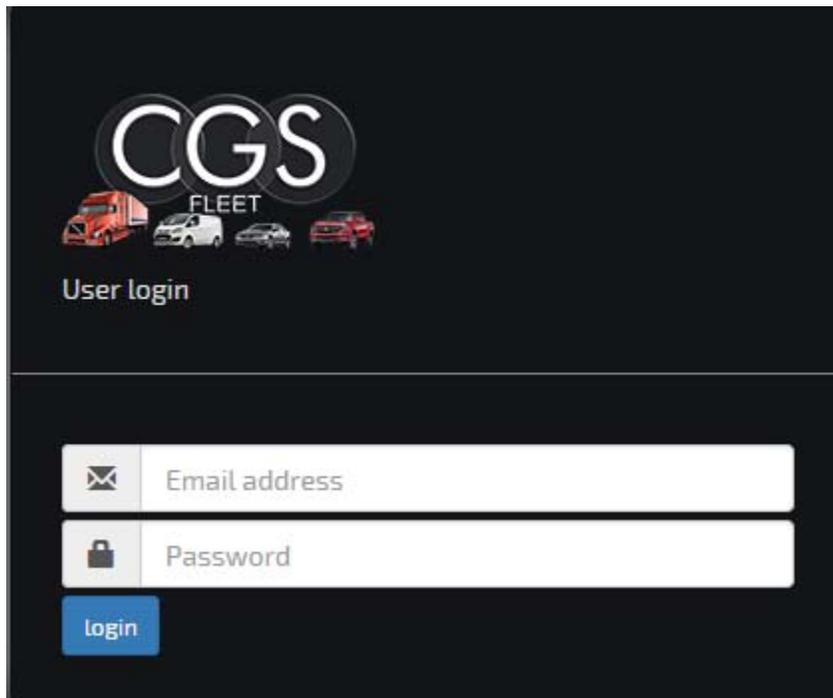
These remote servers will store all the data that's accumulated from the active devices and process remote service requests, which provide the users with summary about their vehicle's status and all the driving data.

The Platform delivers this expanding web of connectivity by creating Middleware which connects proprietary, and open interfaces together.

### a. Portal Login

To launch the TSP portal:

- Use the provided credentials to access the portal.



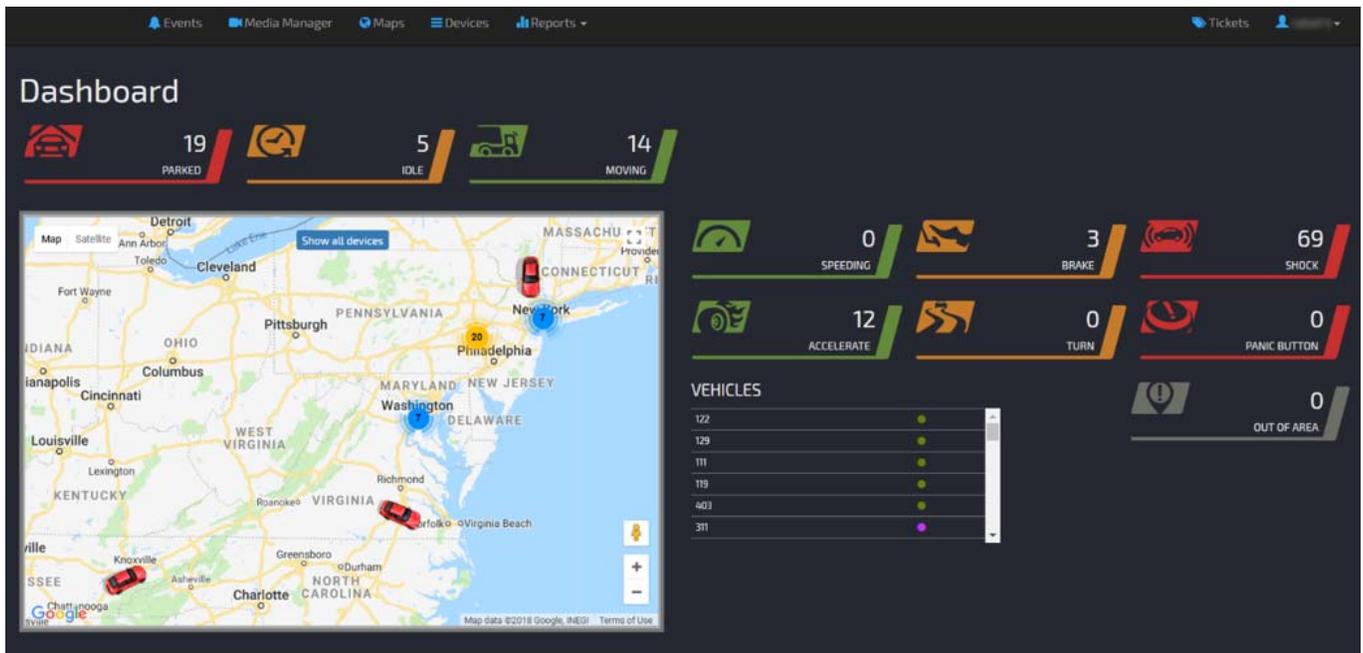
The image shows a user login interface for CGS Fleet Management. At the top, the logo features the letters 'CGS' in a large, white, sans-serif font, with 'FLEET' written in a smaller font below it. Underneath the text are four small icons representing different types of vehicles: a red truck, a white van, a silver car, and a red car. Below the logo and icons, the text 'User login' is displayed in a white, sans-serif font. The main part of the interface consists of two white input fields stacked vertically. The first field is labeled 'Email address' and has a small envelope icon to its left. The second field is labeled 'Password' and has a small padlock icon to its left. Below these fields is a blue button with the word 'login' written in white, lowercase letters.

## 2. Accessible Features

### a. Dashboard

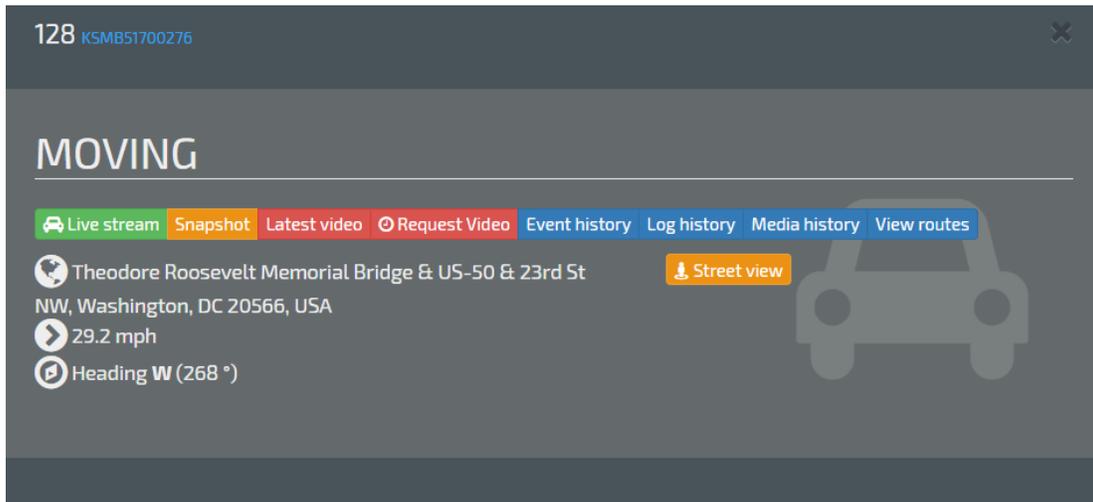
*Dashboard* gateway will list at the glance statistical graphics that will help in identifying the occurred events up to the current date. The user can navigate through the dashboard as follows:

- *Vehicles table* will list all the registered vehicles identifying their current status as follows:
  - Red: vehicle is currently parked.
  - Idle: vehicle is currently idle.
  - Green: vehicle is currently moving.
  - Purple: vehicle lost connection.

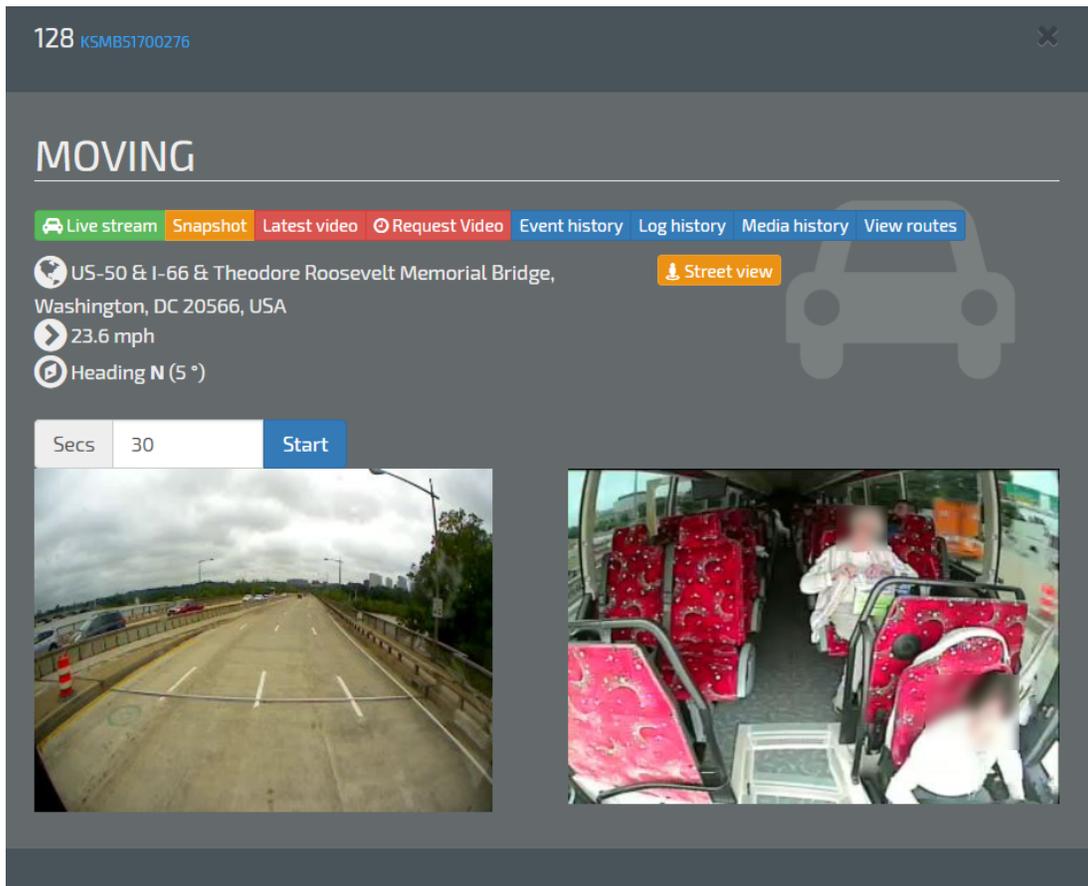


- Click on the desired vehicle to allocate it on the map.

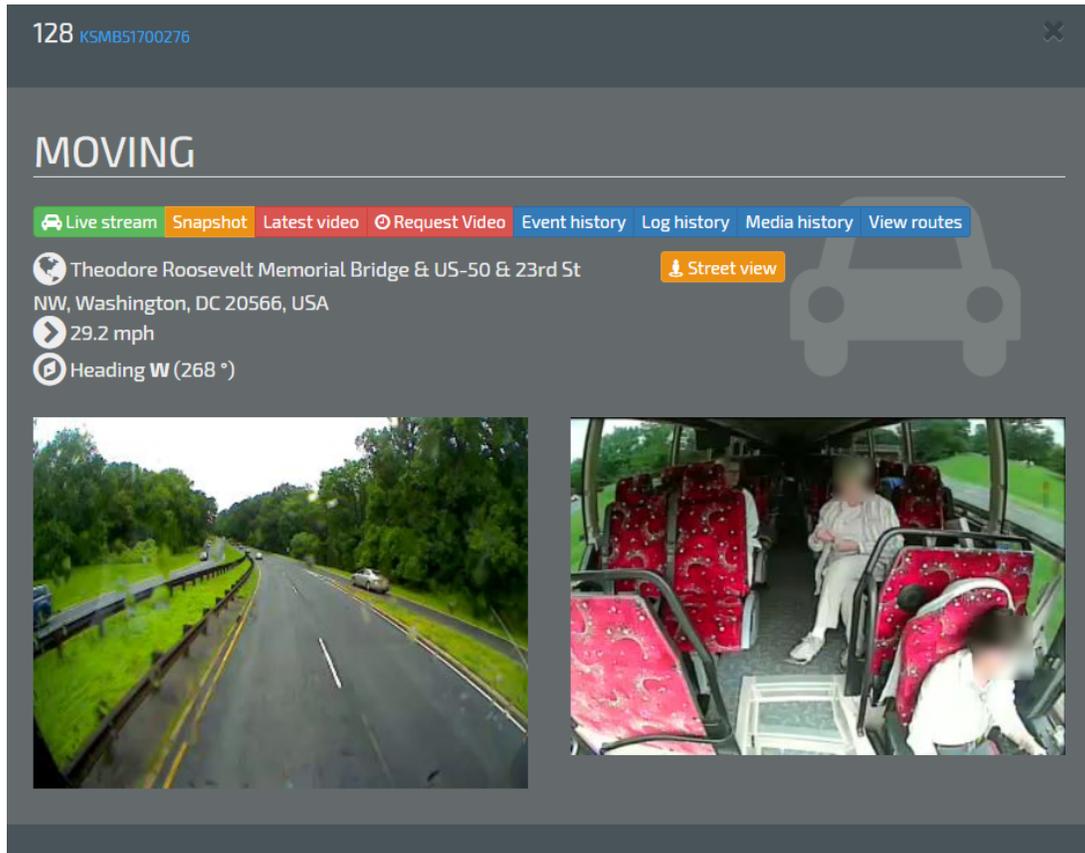
- A summary tab will open up which includes vehicle name, device DRID, current status, location and multiple executable tabs.



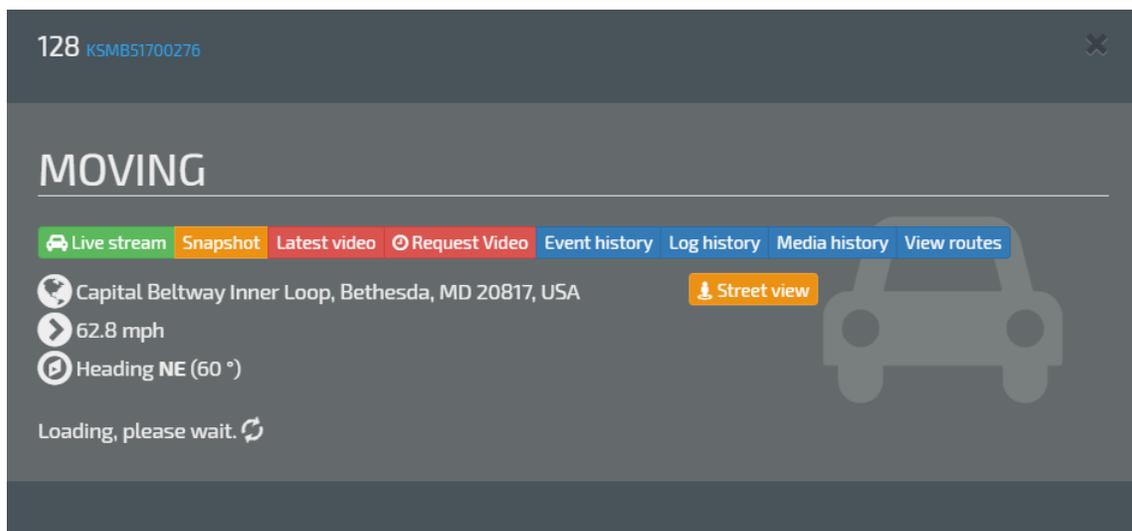
- Executable functional tabs:
  - Live Streaming: a live video streaming will be based upon a certain period of time dedicated in seconds.



- Get Snapshot: uploads live images from the vehicle's current location.

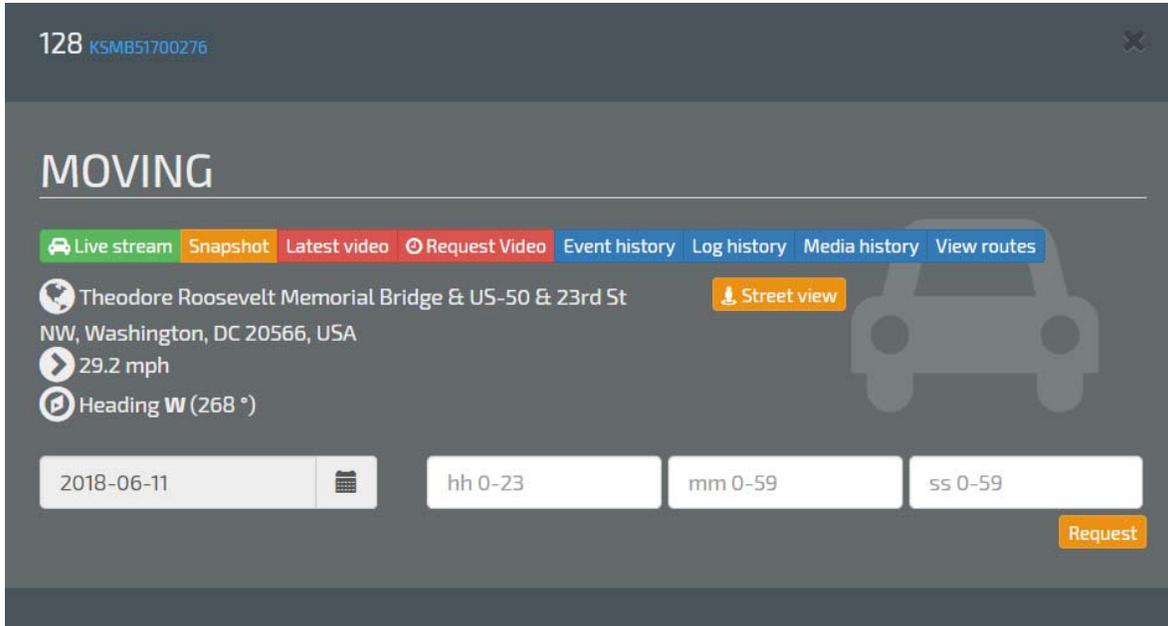


- Latest Video: an auto-upload of 20 seconds video of the vehicle's current location that can be found under *Media History* tab.



- Request Video: will retrieve a 20 seconds video upon the specified date and time.

- All the requested videos will be listed under *Media Manage* tab, labeled as *Requester Name*.
- If the device is offline, all the user requests will be queued and processed once the device is online.



- Event History: a list of all the triggered events upon the current date that can be exported in Excel or PDF.

The screenshot shows a vehicle tracking interface for a vehicle with ID 128 (KSMBS1700276). The status is 'MOVING'. Navigation options include Live stream, Snapshot, Latest video, Request Video, Event history, Log history, Media history, and View routes. The current location is U.S. Hwy 15/501, Thurmont, MD 21788, USA, with a speed of 64.0 mph and heading NE (39°). There are buttons for Export and PDF. A table of event history is displayed below.

Event	Position	Heading	Speed (mi)	Time
SevereShock	Washington National Pike Maryland 20871	NW (318 °)	41.0	2018-06-11 10:57:33
IgnitionOn	West Basin Drive Southwest District of Columbia 20006	N (21 °)	0.0	2018-06-11 10:09:42
IgnitionOff	West Basin Drive Southwest District of Columbia 20006	NE (30 °)	0.0	2018-06-11 09:52:14
IgnitionOn	Ohio Drive Southwest District of Columbia 20006	NW (320 °)	0.0	2018-06-11 09:42:59
IgnitionOff	Ohio Drive Southwest District of Columbia 20006	SE (133 °)	0.6	2018-06-11 09:15:22
IgnitionOn	Atlantic Boulevard Virginia 20166	SE (158 °)	0.0	2018-06-11 08:08:38
IgnitionOff	Atlantic Boulevard Virginia 20166	SE (146 °)	0.6	2018-06-11 07:34:04
IgnitionOn	Rudder Road Virginia 20166	W (272 °)	0.6	2018-06-11 06:52:33

- Log History: a list of all the camera events upon the current date that can be exported in Excel or PDF format.



# MOVING

- Live stream
- Snapshot
- Latest video
- Request Video
- Event history
- Log history
- Media history
- View routes

U.S. Hwy 15/501, Thurmont, MD 21788, USA

Street view

64.0 mph

Heading NE (39 °)

- Export
- PDF

Event	Position	Heading	Speed (mi)	Time
LiveTrack	Gettysburg Village Drive Pennsylvania 17325-8988	NW (301 °)	0.0	2018-06-11 11:47:55
LiveTrack	Gettysburg Village Drive Pennsylvania 17325-8988	NW (301 °)	0.6	2018-06-11 11:47:40
LiveTrack	Gettysburg Village Drive Pennsylvania 17325-8988	NW (301 °)	5.0	2018-06-11 11:47:25
LiveTrack	Gettysburg Village Drive Pennsylvania 17325-8988	W (283 °)	9.9	2018-06-11 11:47:10
LiveTrack	Gettysburg Village Drive Pennsylvania 17325-8988	NW (335 °)	0.6	2018-06-11 11:46:54
LiveTrack	Gettysburg Village Drive Pennsylvania 17325-8988	NW (335 °)	0.6	2018-06-11 11:46:39

- o Media History: a list of all the manual requested & auto-uploaded media for the past 7 days.

128 K5MB51700276

## MOVING

[Live stream](#)
[Snapshot](#)
[Latest video](#)
[Request Video](#)
[Event history](#)
[Log history](#)
[Media history](#)
[View routes](#)

U.S. Hwy 15/501, Thurmont, MD 21788, USA [Street view](#)

64.0 mph

Heading NE (39 °)

Media history for the past 7 days

128  
2018-06-11 10:57:23  
AUTOUPLOAD 20 SECS

128  
2018-06-11 10:35:25  
AUTOUPLOAD 20 SECS

128  
2018-06-11 10:33:45  
AUTOUPLOAD 20 SECS

128

128 K5MB51700276

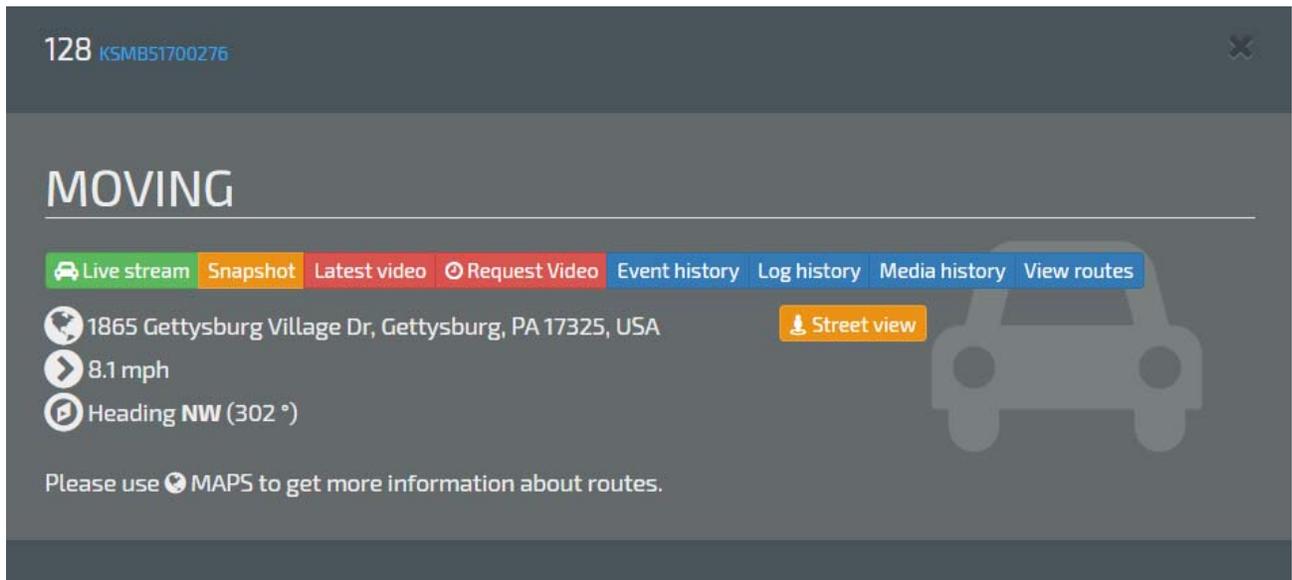
2018-06-11 10:57:23 00:00:20 [Download MDT](#)

0:00 / 0:20

**Note:**

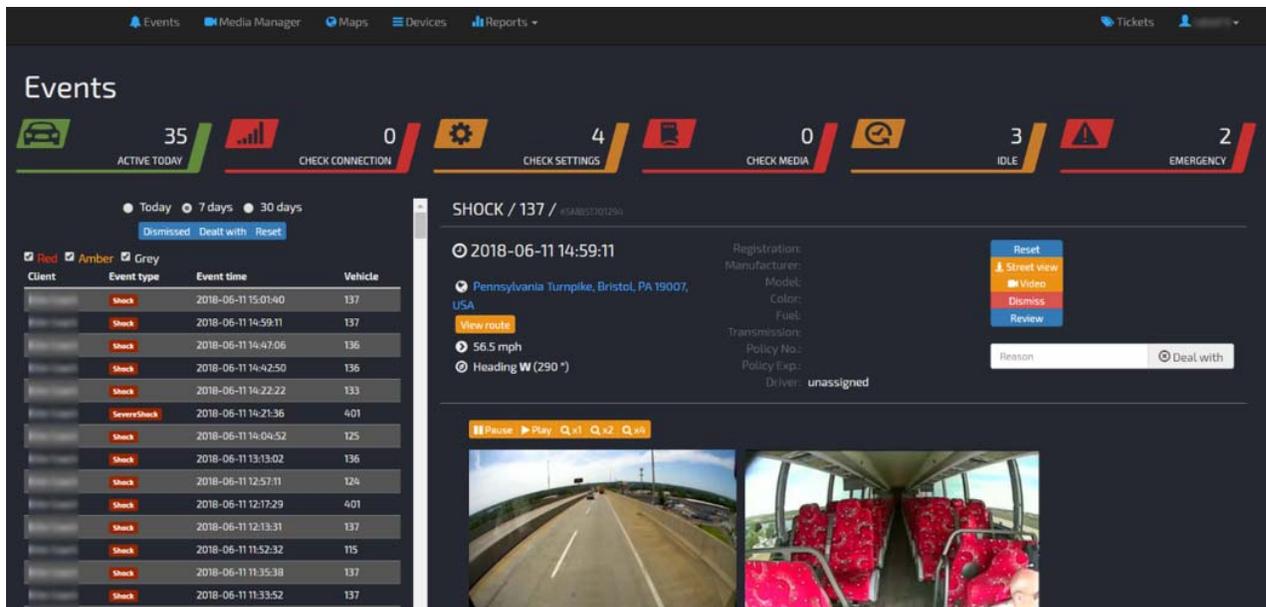
- The device should be online in order to respond to *Get Snapshot & Get Video* request.
- The user can download MP4 file footage by clicking on *Download* tab.
- For data analysis, and drive behavior report, click on *MDT File* tab. This file extension will require the Software Analysis tool provided from SmartWitness (<http://support.smartwitness.com>).

- View Routes: provides a detailed geographical summary of vehicle's trip (can be accessible via *Maps* tab).

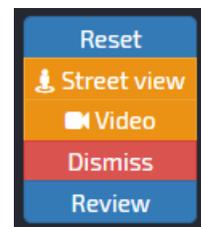


- The dashboard will present all the triggered events using graphical statistics, where the only executable tabs will be (Speeding, Brake, Shock, Acceleration, Turn, Panic and Out of area).
  - Upon clicking on any of those tabs, a summary list will pop out including the device name, position, speed and date-time stamp.
  - The summary can be exported in Excel or PDF format.
  - Out of area icon will list all the vehicles that were triggered out the predefined GEO fence.
- b. Events
 

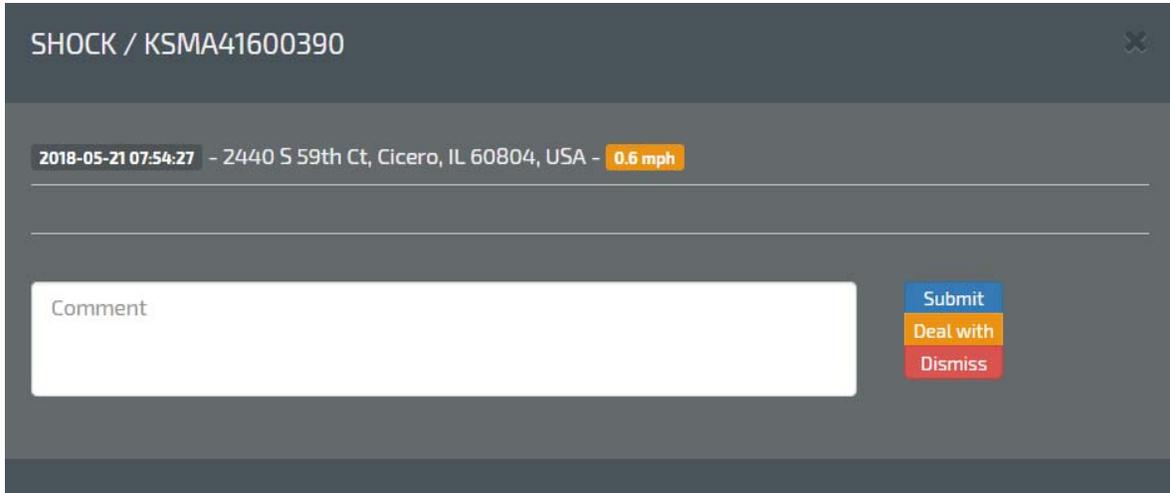
*Events* tab will generate a summary list of all the triggered events. The listed events can be filtered as of the current date, 7-days & 30 days.



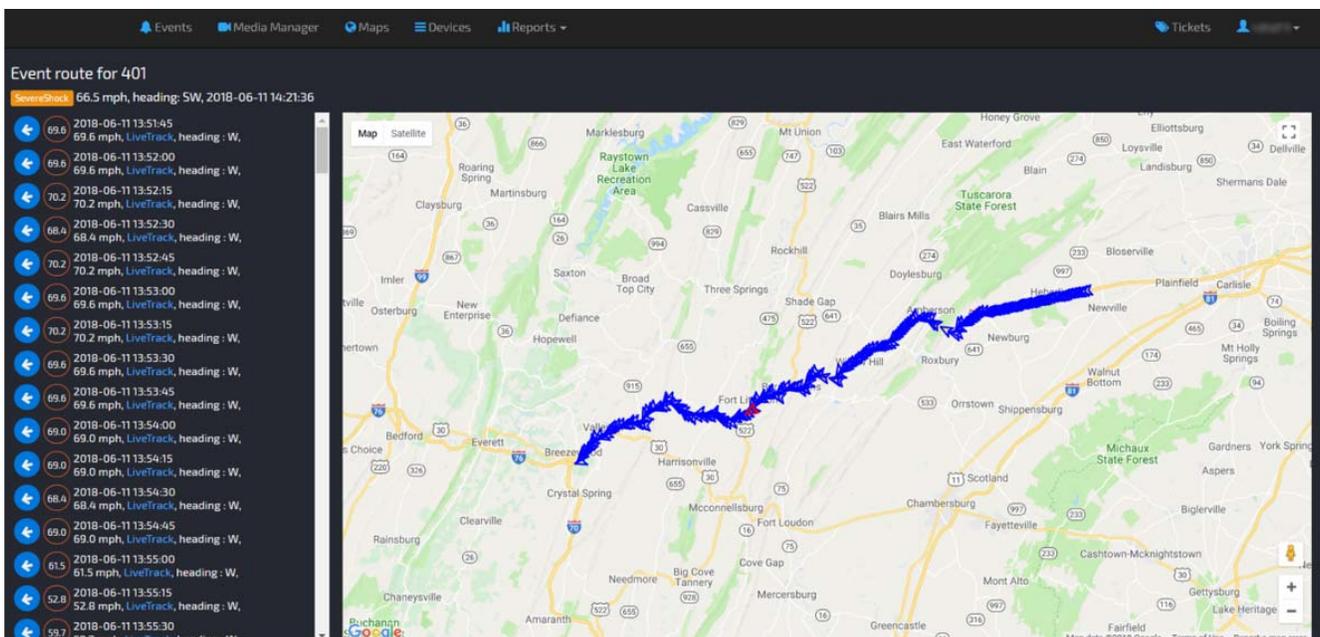
- A color code adjustment can be used to trigger certain events as follows:
  - Red: lists Shock, Severe Shock and Panic events.
  - Amber: lists Brake, Acceleration and Turn events.
  - Gray: list Speed events.
- The user can review any of the listed events by selecting one. A 10 seconds low resolution footage will be presented, that includes the device name and DRID, vehicle's information, registered speed, time stamp and event's location.
- In case of an accident occurrence the user can have a street view of the event by clicking on *Street View* tab.
- The user can retrieve MP4 footage of the event by clicking on *Video* tab. This tab will be colored green to indicate that the video was requested previously, and will playback within the same window. Otherwise, a message stating *Request has been submitted* will show up.
- The user can dismiss the unnecessary events by clicking on *Dismiss* tab. However, the events will be listed in a separate tab called *Dismissed*.



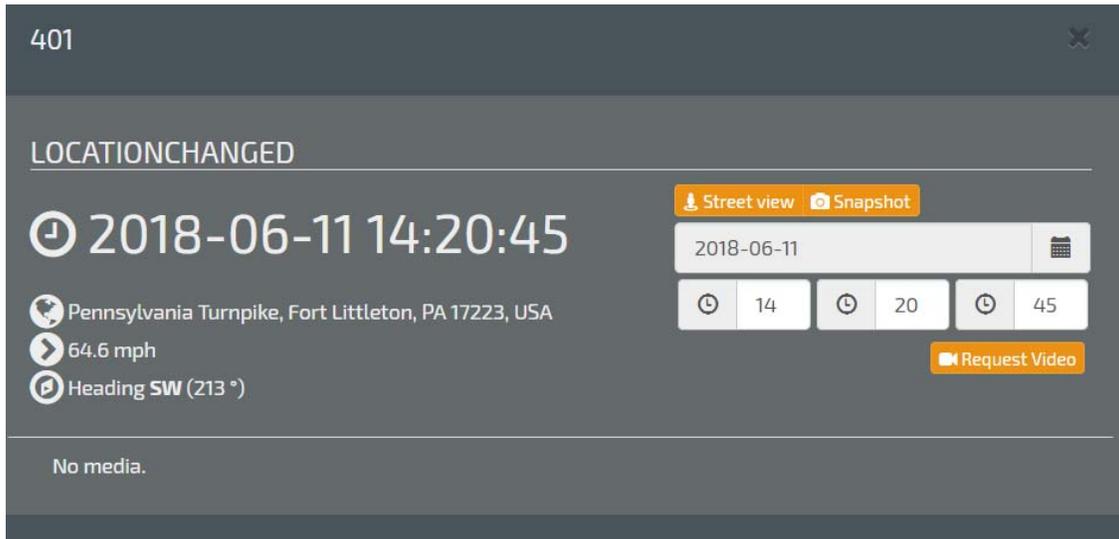
- The user can review and arrange the triggered events by clicking on *Review* tab. This tab will provide the user with the ability to write comments one each event in order to manage them.



- Event route will be listed under *View Route* tab for the selected vehicle.
  - Click on *View Route* tab.
  - A new window will pop out listing all the routes corresponding to the triggered event.



- These routes are being registered as a live track every 15 seconds increments, including the event itself, which is being colored differently so the user can allocate the exact event.
- The user can click on any of the routes to request a snapshot/video as follows.

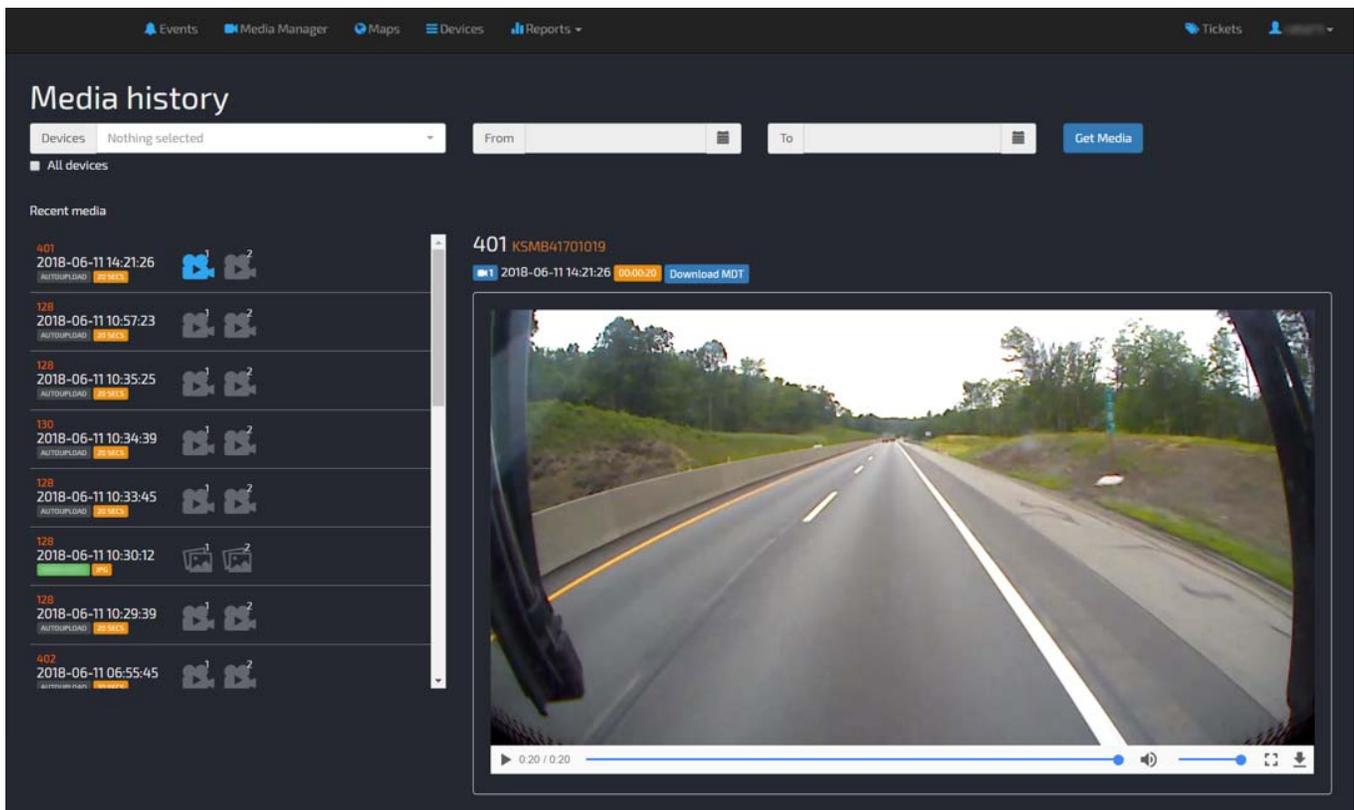


- *Events gateway* will include executable graphical icons that generate summary reports of the following:
  - **Active Today:** lists the devices that are currently active.
  - **Check Connection:** indicates devices that stopped reporting without having a proper *"Ignition Off"* event for more than 1 hour.
  - **Check Settings:** lists the devices that stopped reporting for the past 7 days.
  - **Check Media:** shows devices that reported SD card errors and requires SD card formatting.
  - **Idle:** lists devices that are active but not moving for certain period of time (Usually when vehicle is parked for 30 minutes, without dedicating *Ignition Off* event).
  - **Emergency:** lists devices that triggered Panic &/ Severe Shock events.

### c. Media Manager

*Media Manager* gateway allows users to allocate media by selecting device/(s) upon a certain period of time.

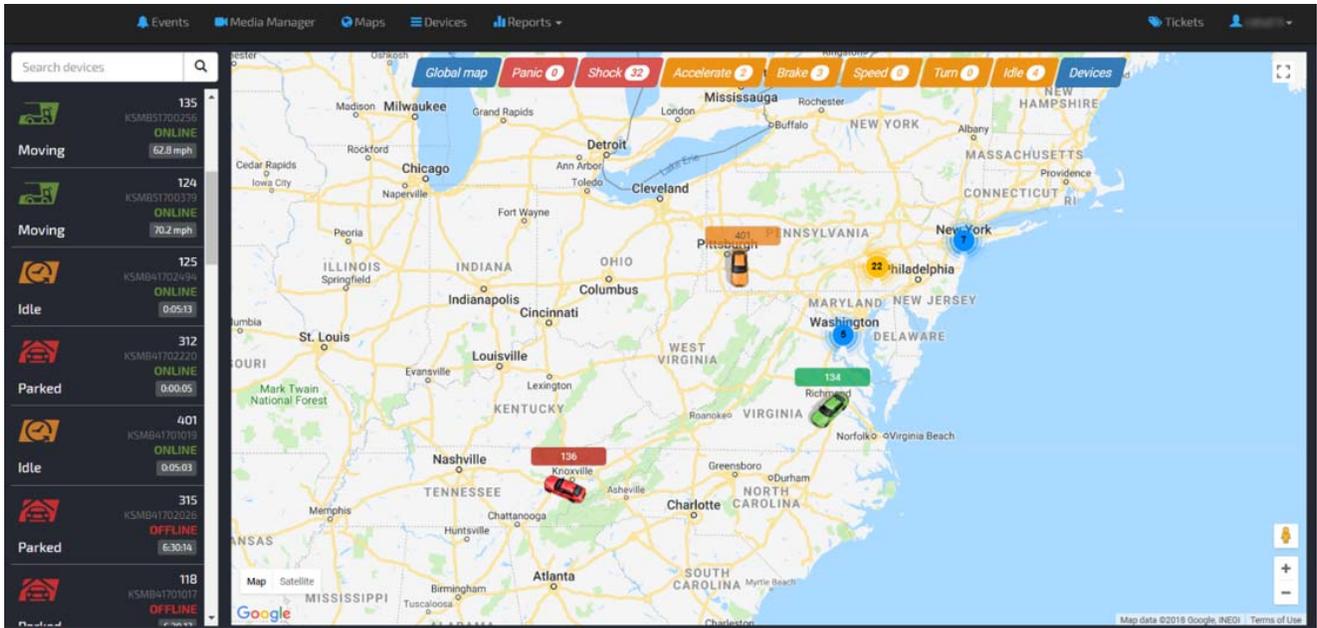
- A 20 seconds footage for each triggered event with date & time stamp including the requester name.
- Videos will be labeled according to the recorded camera.
- User can download the footage as of MP4/ MDT version.



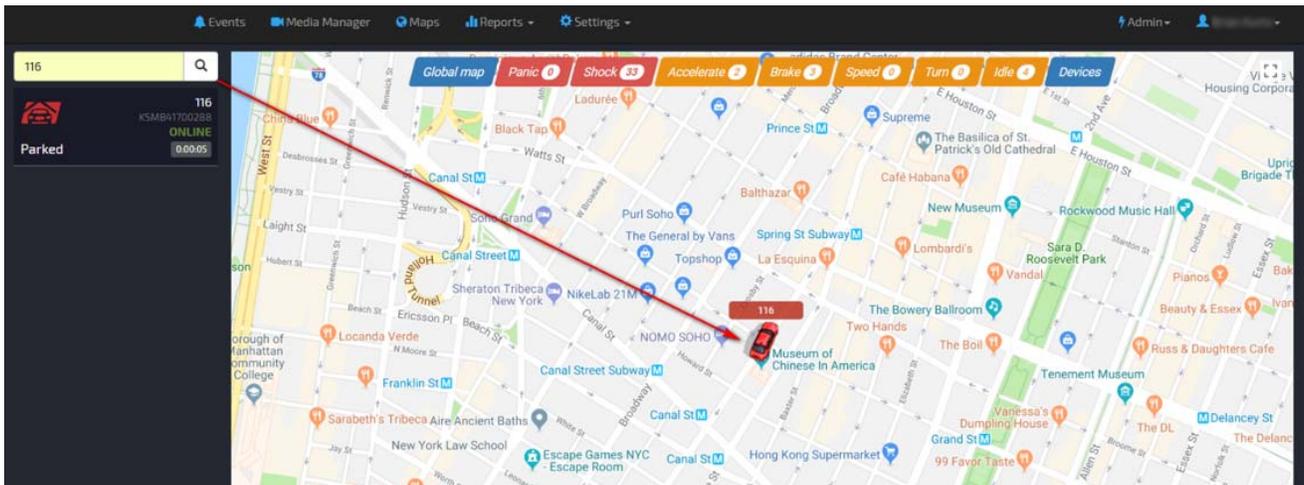
### d. Maps

*Maps* gateway allows users to allocate and view their vehicles.

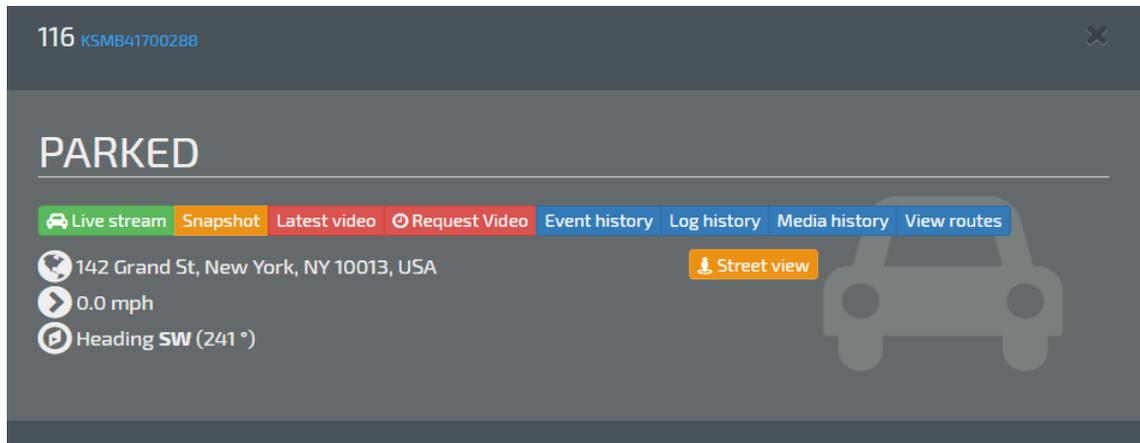
- Events are being presented as graphical executable icons which can be used as a searching mechanism (Search by: Panic, Shock, Acceleration, Brake, Speed, Turn or Idle).
- The map will cluster the nearly located vehicles, or indicate them via colored arrow according to its current status (Idle, Parked, Moving or Lost Connection).



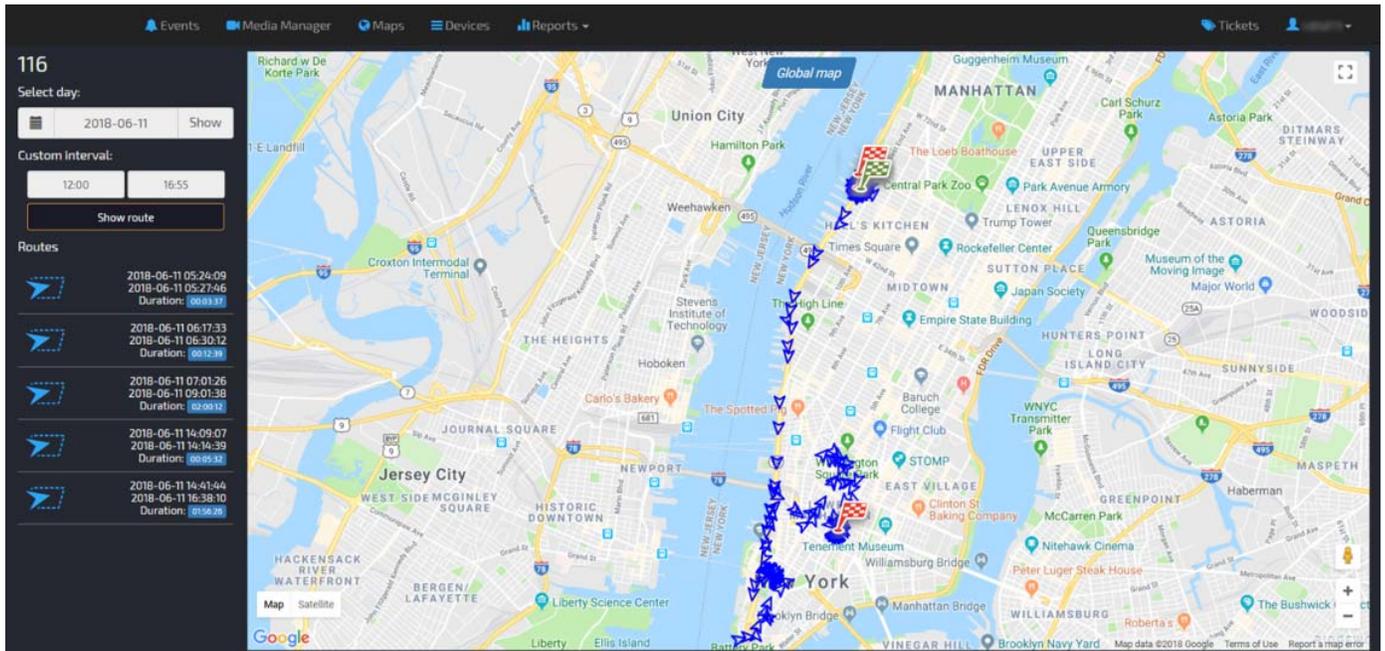
- A quick search mechanism that allocates the current location of any vehicle by typing vehicle's ID.



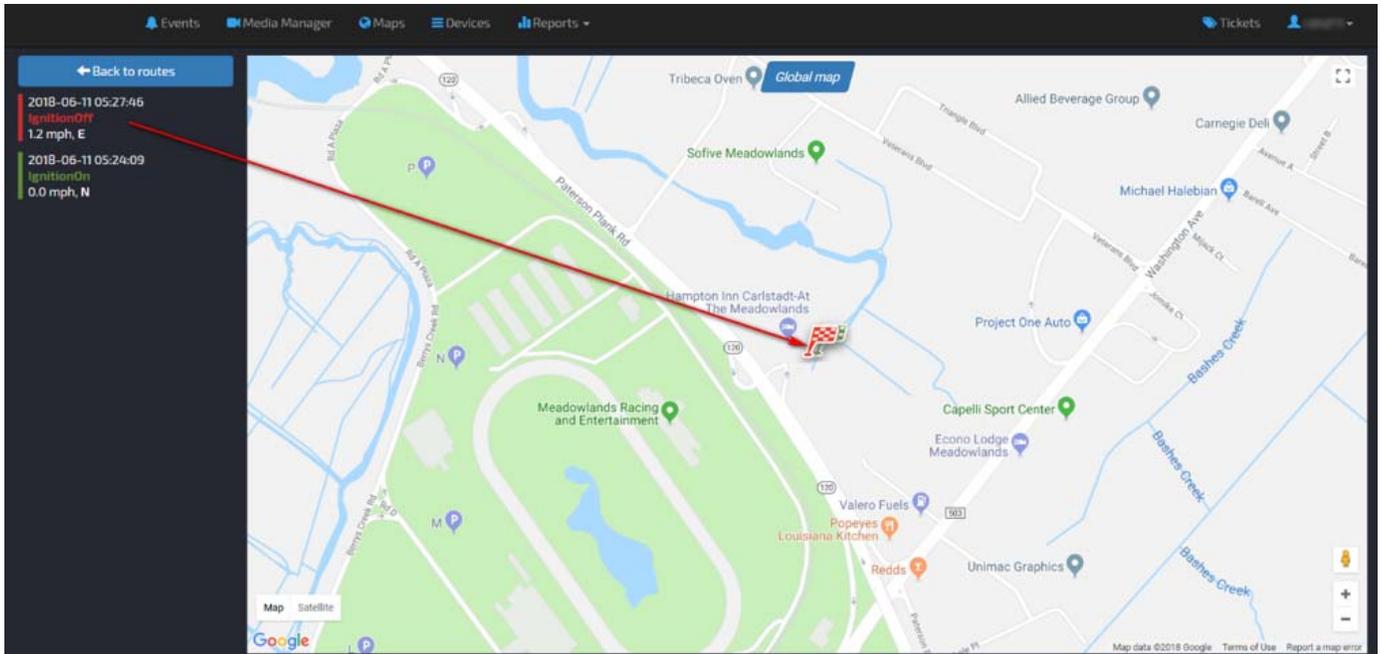
- In order to have a detailed GPS tracking, users can click on the pulled vehicle's icon. The following window will open up.



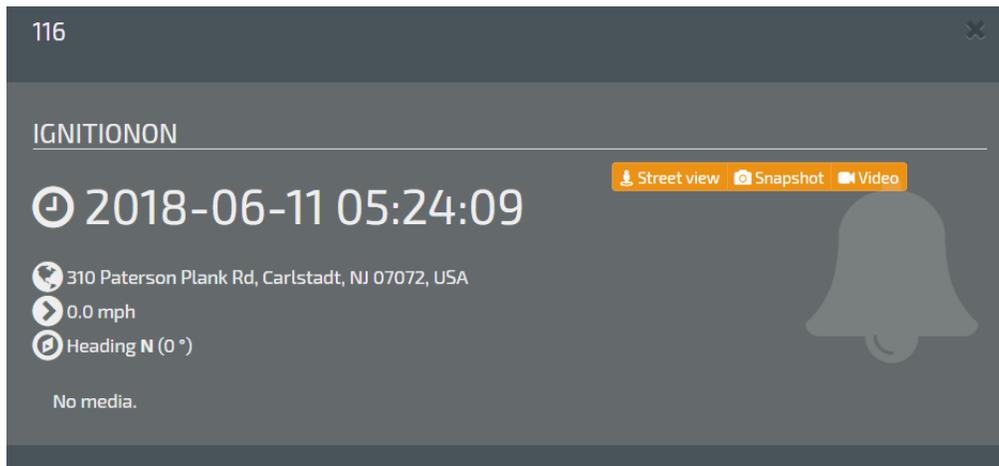
- Click on *View Routes* tab.
- Specify the desired date.
- Click on *Show* tab.
- A list of all the driven routes will show up with the corresponding time and period duration.
- User can customize duration period to facilitate navigation process.



- All the listed routes are executable. Users can retrieve an image &/ video by clicking on the desired point on the map.



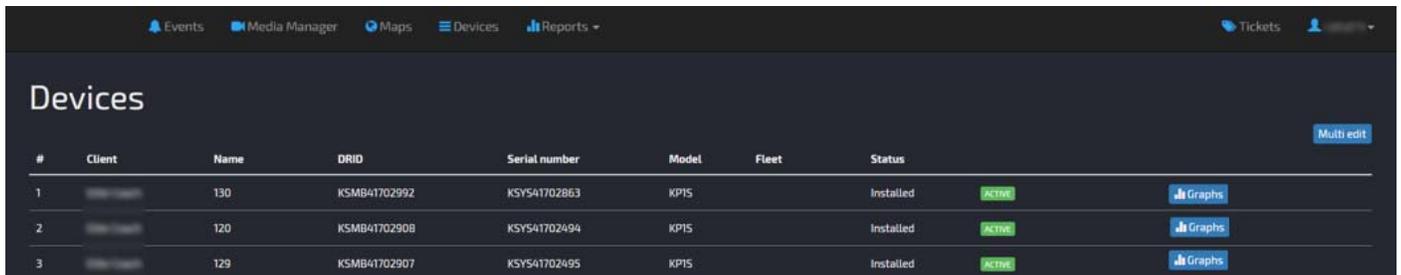
- o Click on the flag in order to request video/image.



e. Devices

User can view a summary of all the devices by clicking on *Device* tab.

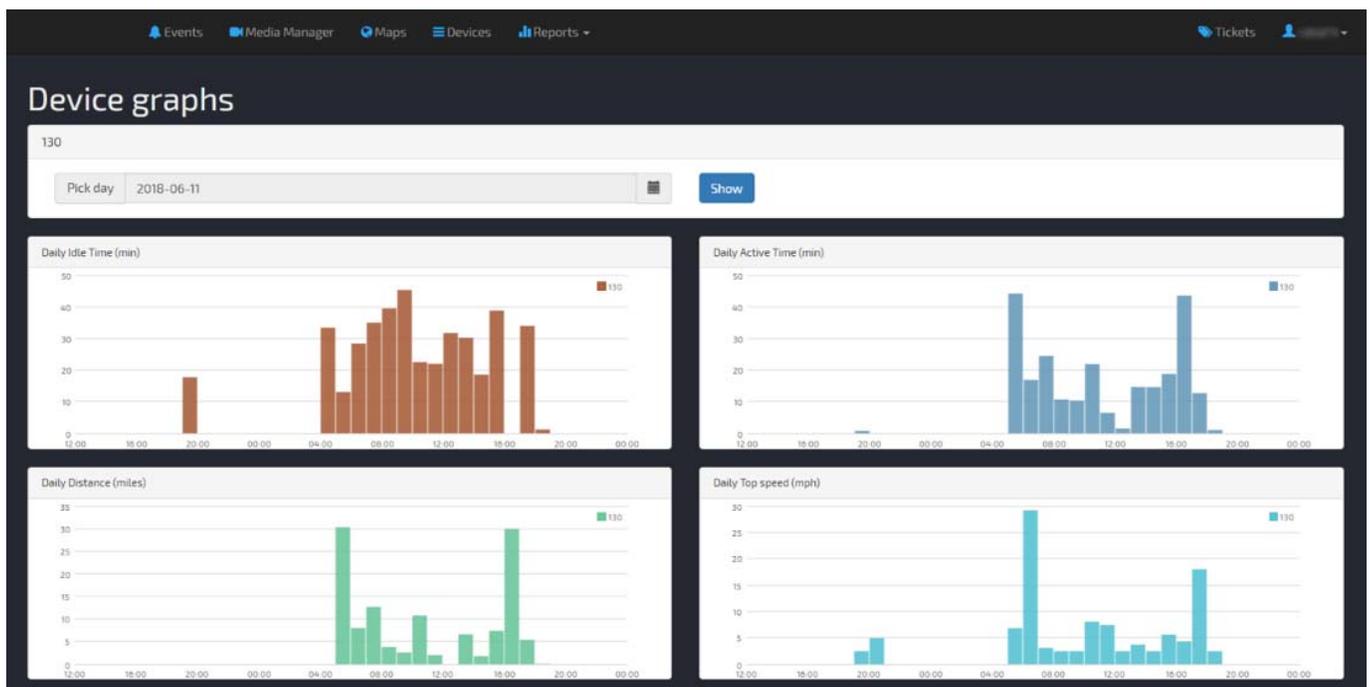
- User can view graphical charts for certain device by clicking on *Graphs* tab.



The screenshot shows the 'Devices' dashboard with a navigation bar at the top containing 'Events', 'Media Manager', 'Maps', 'Devices', and 'Reports'. The main content area is titled 'Devices' and features a table with columns: '#', 'Client', 'Name', 'DRID', 'Serial number', 'Model', 'Fleet', 'Status', and 'Graphs'. There are three rows of device data, each with a 'Graphs' button. A 'Multi edit' button is located in the top right corner of the table area.

#	Client	Name	DRID	Serial number	Model	Fleet	Status	Graphs	
1		130	KSMB41702992	KSYS41702863	KPIS		Installed	ACTIVE	Graphs
2		120	KSMB41702908	KSYS41702494	KPIS		Installed	ACTIVE	Graphs
3		129	KSMB41702907	KSYS41702495	KPIS		Installed	ACTIVE	Graphs

- The user can view view graphical charts as follows:
  - Click on *Graphs* tab.



f. Reports

This feature allows the user to generate summary reports by clicking on *Reports* tab.

i. Summary

- Click on *Reports* tab.
- Select *Summary* feature.
- Specify the desired period range.

- Filter by device/s, fleets, or all devices.
- Export the spreadsheet either in Excel/PDF format.

Summary report for all devices

From: 2018-06-01 To: 2018-06-12

Devices: 4 items selected Fleets: Nothing selected

Export PDF Show

Name	DRID	Idle (min)	Active (min)	Distance(miles)	Max speed(mph)	Average speed(mph)	Accelerate	Brake	Turn	Shock	Severe Shock	Alarm in	Media Error
120	KSMB41702908	1480.7	3418.6	2346.9	72.7	39.9	3	2	0	0	0	0	0
112	KSMB41702905	1646.7	3742.1	2378.6	73.9	32.4	3	1	0	4	0	0	0
108	KSMB41700644	396.7	798.7	543.3	72.1	34.1	2	0	0	1	0	0	0
126	KSMB41703142	2029.1	3146.4	2047.8	77.7	32.1	3	3	0	6	0	0	0
Period totals		5553.2	11105.8	7316.6			11	6	0	11	0	0	0

## ii. Detailed

- Click on *Reports* tab.
- Select *Detailed* feature.
- Specify the period range.
- Select certain device to view and the status type (Idle/Active time, Distance, Speed, Events, Log history).
- Export the spreadsheet either in Excel/PDF format.

Detailed report per devices

From: 2018-06-01 To: 2018-06-12

Device: 112 Type: Events

Export PDF Show

Event type	Name	DRID	Driver	Date	mph
SHOCK	112	KSMB41702905		2018-06-11 08:11:55	26.1
ACCELERATE	112	KSMB41702905		2018-06-10 21:07:41	0
ACCELERATE	112	KSMB41702905		2018-06-09 19:31:38	16.8
SHOCK	112	KSMB41702905		2018-06-09 08:49:14	60.9
ACCELERATE	112	KSMB41702905		2018-06-05 17:35:38	69.6
SHOCK	112	KSMB41702905		2018-06-05 06:38:21	64
SHOCK	112	KSMB41702905		2018-06-04 06:03:12	69
BRAKE	112	KSMB41702905		2018-06-03 05:52:53	62.8
Period average					46.2

## iii. Current Idle

- Click on *Reports* tab.
- Select *Current Idle* feature.
- A summary of all the currently idle devices will be listed.

- Export the spreadsheet either in Excel/PDF format.

The screenshot shows the 'Current Idle Devices' dashboard. At the top, there are navigation tabs: Events, Media Manager, Maps, Devices, and Reports. On the right, there are 'Tickets' and a user profile icon. Below the title, there are 'Export' and 'PDF' buttons. The main content is a table with the following columns: #, Name, DRID, Last Ign. On, Last contact, Idle since, Idle for, and Cameras.

#	Name	DRID	Last Ign. On	Last contact	Idle since	Idle for	Cameras
1	311	KSMB41701153	2018-06-12 08:03:41	2018-06-12 09:53:55	2018-06-12 09:48:40	00:05:15	2
2	119	KSMB41700678	2018-06-12 14:44:54	2018-06-12 09:54:05	2018-06-12 09:48:57	00:05:08	2
3	112	KSMB41702905	2018-06-12 14:47:49	2018-06-12 09:54:06	2018-06-12 09:49:05	00:05:01	2
4	132	KSMB41700105	2018-06-12 12:06:17	2018-06-12 09:53:56	2018-06-12 09:48:52	00:05:04	2
5	130	KSMB41702992	2018-06-12 11:49:03	2018-06-12 09:54:02	2018-06-12 09:49:02	00:05:00	2
6	126	KSMB41703142	2018-06-12 14:44:45	2018-06-12 09:53:51	2018-06-12 09:48:44	00:05:07	1

#### iv. Location History

- Click on *Reports* tab.
- Select *Location History* feature.
- Choose certain vehicle to view.
- Specify the time period.
- User can generate a report based on triggered events (Panic, Shock, Turn, Brake, Acceleration and Speed) by clicking on *Events Only* tab otherwise, all the camera events will be listed (Live track, Device online/offline, Ignition on/off, etc.).
- Export the spreadsheet either in Excel/PDF format.

The screenshot shows the 'Location history' dashboard. At the top, there are navigation tabs: Events, Media Manager, Maps, Devices, and Reports. On the right, there are 'Tickets' and a user profile icon. Below the title, there are filters for 'Devices' (set to 130), 'From' (2018-06-01), 'To' (2018-06-12), and a checkbox for 'Events only'. There are 'Export' and 'PDF' buttons, and a 'Show' button. The main content is a table with the following columns: Name, Event, Time, Address, Location, Heading, and Speed.

Name	Event	Time	Address	Location	Heading	Speed
130 KSMB41702992	LiveTrack	2018-06-01 00:00:06	Buchanan Drive Lancaster County Pennsylvania 17522	40.200298, -76.204002	NE (29°)	0
130 KSMB41702992	LiveTrack	2018-06-01 00:00:16	Buchanan Drive Lancaster County Pennsylvania 17522	40.200298, -76.204002	N (21°)	0
130 KSMB41702992	LiveTrack	2018-06-01 00:00:34	Buchanan Drive Lancaster County Pennsylvania 17522	40.200298, -76.204002	N (21°)	0
130 KSMB41702992	LiveTrack	2018-06-01 00:00:50	Buchanan Drive Lancaster County Pennsylvania 17522	40.200298, -76.203987	N (21°)	1
130 KSMB41702992	LiveTrack	2018-06-01 00:01:08	Buchanan Drive Lancaster County Pennsylvania 17522	40.200310, -76.203987	NE (45°)	0

#### v. Overdue Maintenance

- Click on *Reports* tab.
- Select *Overdue Maintenance* feature.
- A summary report will be listing all the vehicles that require certain maintenance care.
- Export the spreadsheet either in Excel/PDF format.

Name	DRID	PM type	Current miles	Service miles	Miles left	Service date
Lab-KP1-2cam	KSMAS1600536	Brakes	15000	20000	5000	2017-11-15

- User can modify the required maintenance by clicking on *PM* tab.

g. Tickets

User can view or create a new ticket by clicking on *Create Ticket* tab.