Silverlight
User’s Manual
Version 2.5
Introduction
Logging In & Main Screen
Vehicle List
History & Journeys
Geofences
Main Screen Action Bar
General Settings
Groups
Users
Drivers
Live Map Functions
Job Dashboard
Messaging
Reports
Contact Information
Introduction

VL-Fleet Global Positioning System (GPS) is an affordable 'always on' tracking system using the power of the internet to deliver location information to a browser anywhere in the world. It provides fleet operators with scalability and functionality.

The VL-Fleet tracking unit is hard wired into the vehicle. It records ignition on and off, speed, direction of travel and location all sorted by time and date.

The system offers street level tracking throughout the UK and Northern Ireland, the entire world is available where the account is upgraded to ‘roaming’.

The System is fully web based with the following benefits:
- Log on anywhere with an internet browser
- Multiple logins allowed

The system consists of three key parts:
- Live Tracking
- Reporting
- Historical journey information

Unique features:
- 99% of all street names named
- Worldwide aerial imagery down to 25cm / pixel resolution (1: 1,500)
- Entire system developed in-house, no sub-system outsourcing
- Individual property / business search
- Hosted at a secure facility in the UK
- Private GPRS APN with fixed IP SIM’s (maximises security & availability)
- In-house GPS communications host connected to mobile operators
- Ability to add other GPS devices such as GPS enabled BlackBerry’s
- Full warranty over entire contract
- Direct Debit payment available

Real time Tracking is available in the following times:
- **Bronze** tracking every 5 minutes
- **Silver** tracking every 2 minutes
- **Gold** tracking every 1 minute
Microsoft Silverlight is the latest application framework released by Microsoft and its main purpose is to build rich internet applications tailored specifically for the end user, for more information please visit www.microsoft.com/silverlight.

With this latest software VeriLocation have created a brand new experience to monitor access and control a vehicle fleet installed with our GPS products.

To access the site you must first visit;

www.verilocation.com

If you have not ever used Microsoft Silverlight before a pop up/dialogue box may appear either at the top or bottom of the screen when you try to login informing you to run a browser plugin or download the plugin from Microsoft’s website.

For more information please visit, www.microsoft.com/silverlight.
Logging In

The Login Box is located in the top right of the homepage, you will then be prompted for your username and password.

Please contact VeriLocation customer services on 01604 859854 if you are unable to gain access.

Main Screen

When you have successfully logged on you will be able to see all of your vehicles displayed on the map.

A few more features have now been enabled in the top right you can now see your company name, the login button has changed to logout and an extra drop menu has appeared to the left of the company name with the options Live Map, Job Dashboard, Messaging and Reports these will all be explained later on.
Vehicle List

To access the Vehicle List you will need to be on the main screen and this is located on the left hand side of the screen.

On the vehicle list all your vehicles are default sorted by their Description; you can change the sort criteria by choosing either Description, Latest Position, Nearest To or New Messages from the drop down menu. [1]

Latest Position sorts vehicles in the order of the latest one to report in with its latest location and the vehicles at the bottom have not reported in for the longest amount of time, Nearest To is used in conjunction with the feature which is described later on and New Messages displays vehicles with the newest messages to be read at the top of the box.

The red arrow button to the right changes the sorting from either ascending to descending or the other way around. [2]

Double Clicking any vehicle will make the screen snap to that vehicle on street view level.

The Filter box automatically searches for any registrations matching the criteria you enter into the box so you may want to search for all vehicles beginning ‘FH’ for example. [3]

The Show Group box displays user defined groups for example, ‘Managers’ or ‘Sales’ this is covered later on in the manual. [4]

The red button underneath the sorting button [2] will sort each car into different views be it either “Show journeys for all vehicles” or to show all plots. This will be covered in the History/Journey section. [5]

History & Journeys

To access the list of Journeys your fleet has travelled for a pre-determined time period and to view the history of past journeys you will need click on History/Journey on the top of the vehicle list.

This will then load the History/Journey pane.

Here you will see a list of all the vehicles in your fleet and journeys that have happened for the day so far, this pane will default load the current day till you change the date in the required field. [1]

For example I will now change the current date to 2\textsuperscript{nd} December 2011.

This icon will display all individual plots for the chosen vehicle for the whole day (a vehicle must be clicked on beforehand, before the button is clicked).
When the ignition is turned off, the unit checks in with the site (wakes up) approximately every hour and provides its location.
The timeline at the bottom will replay the plots in chronological order when you click the Play button (the middle button with a triangle on it) for a clear visual representation of the journey taken. PTO action is shown as a white block representing the duration of the PTO for example crane being turned on/off.

The next button shows all the separate journeys for that vehicle in one day.

As you can see from the following screenshot this one vehicle has done 7 separate journeys.

If you double left click on a journey it will zoom in to that journey on the map and colour it in a different colour.

This button will show all plots for the currently clicked on journey see below.
The buttons at the top will now revert to previously covered buttons.

1. Shows plots for selected journey
2. Shows all plots for this day
3. Show all journeys for this day
4. Show journeys for selected vehicle

**View Current Journey**

On the Live Map if you right click on any vehicle and click on View Current Journey you can view the current journey.
Daily Summary

To access the daily summary, on the vehicle list click on the “more” button underneath the vehicle timestamp.

The daily summary will then expand underneath the vehicle and will show the recent journey for the past day, it also shows the timestamp for arrival time, departure time, duration of journey type (stop, travel) and the location.

<table>
<thead>
<tr>
<th>Daily Summary</th>
<th>03/10/2012</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Arrived</td>
<td>Departed</td>
<td>Duration</td>
<td>What</td>
<td>Where</td>
</tr>
<tr>
<td>01:20:41</td>
<td>Travel</td>
<td>81.7 Miles</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wed 09:36</td>
<td>Wed 09:38</td>
<td>06:02:41</td>
<td>Stop</td>
<td>Mansfield, NG18 5</td>
</tr>
<tr>
<td>06:23:41</td>
<td>Travel</td>
<td>9.4 Miles</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wed 10:04</td>
<td>Wed 10:06</td>
<td>06:02:05</td>
<td>Stop</td>
<td>Commonside, Ashfield, NG17 2</td>
</tr>
<tr>
<td>06:01:10</td>
<td>Travel</td>
<td>0.2 Miles</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wed 10:07</td>
<td>Stop</td>
<td>Commonside, Ashfield, NG17 2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The 1st arrow button rearranges to show the daily summary with latest journey first or in chronological order.

The second button force refreshes this summary box to gather the latest journey information without refreshing the whole page.

Temperature Reading via Live Map

Temperature readings can now be read on the live map by hovering over the vehicle plot point. The highest temperature is always shown first for so in the example the Rear Temp is 20.2 and shown first.

The readings will correspond to how many probes you have installed in your vehicle.
Geofences

To access your pre-defined Geo-fences you need to click on the ‘Geofences’ tab which is located at the top of the vehicle list.

The Geofences tab displays all of your pre-defined ‘Geofences’ in alphabetical order.

Like the vehicle list you can also search for ‘Locations’ in the search box. This also updates the list automatically as you type.

To go to the exact coordinates of a location double click on the name in the list and the screen will zoom into where the location is.

The ‘bin’ icon next to each Geofence will delete the Geofence from the account a pop up box will appear on the screen to ask for confirmation before this happens.

The “Always Show Geofences” shows Geofences on the map all the time as you can see on the next page.
Adding a Geofence

To add a Geofence to the account find the suitable place on the map and right click to bring up a menu that will be covered on later in the guide.

We are only interested in the button “Add Geofence” when you click this a pop up box will appear with several boxes for you to fill out.

The pop up box requires you to enter a Name (Milton Keynes Central for example), Radius is the amount the Geofence covers on the map and the “Email notification Address” box will notify the recipient if any vehicle enters this Geofence.

You can enter additional details in the description box. Once complete click on “Ok”.

The Geofence will then be added to the map if you can see it straight away you may need to zoom in more on the map using either the middle mouse button or the slider bar on the main screen.
Editing a Geofence

To edit a Geofence click on the Geofences tab on the main screen and click on the “pencil” icon to go to the edit screen.

You can now edit the name of the Geofence, the description, enter an email so they can be notified when a vehicle enters a Geofence and even change the radius of the Geofence itself.

When you have made the required changes click on the save Icon which is the floppy disk icon.
Main Screen Action Bar

The Action Bar is the bar at the top of the Main login screen directly underneath your companies name and the logout button.

Map Selection

The first button shows three options on how the map will look on the main screen the options are Road, Aerial and Hybrid.
Address Search

The second button is called ‘Address Search’ the shortcut for this function is Ctrl+F.

When you click the button a bar will appear to the left were we just need to enter either a post code for example ‘MK9 3ES’ or an address ‘10 Hawton Lane’.

When you have entered either an Address or Postcode just click Enter on your keyboard.
The Automatic Best Fit function when clicked automatically makes all the vehicles on your account easily viewable to give you a quick glance/overview of where your vehicles are over a geographical area.

The green “halo” denotes automatic best fit but if you move the map yourself it will cancel the effect and return to its normal state, when the green halo is on it will automatically refresh the best fit to make sure vehicles are viewable all of the time.
The Full Screen button makes the application full screen hiding any browser bars and any Operating System taskbars that may cover your view of the map.

This is especially handy for managers or overseers of the fleet who want a full screen experience possibly on another monitor on their workstation.
General Settings

To access General Settings click on the settings button on the action bar from the main screen, then make sure you are on the General Tab on the settings screen.

There are multiple options for you to choose from each giving you an option to tailor the system for your use.

Each option has a ? question mark next to it and if you hover over this with your mouse it will tell you what each one does.
Groups

You can also define some of your vehicles/drivers into groups for example Sales Team or Managers.

To access the Group Settings open up the Settings and then click on the Groups tab located at the bottom of the popup box.

1 – This is where you enter your new group name and then this will appear in the group’s box.

2 – Search box for Group Members.

3 – Search box for Unassigned Drivers.

4 – Arrows that let you move vehicles between groups.
Creating a Group

To create a group you must first enter a Group Name into the New Group box located at the top of the Groups tab, then click Add Group.

The created group will also appear in the vehicle list in the Show Group drop down menu.

Adding Unassigned Vehicles to a Group

To add unassigned vehicles to the group locate the desired vehicle on the right hand side on the screen and click on the green arrow pointing to the left, you can also use left click and shift to select multiple vehicles.

To remove a driver from the group all you have to do is select the other arrow above it which is pointing to the right.

Groups are handy to use when you need to view certain areas of your fleet or group of vehicles especially using the report function.
You can also add Drivers to groups and then select them for reports in the same manner as adding unassigned vehicles.

First you need to select a group on the left hand side, then select a unassigned driver(s).

When you have clicked on Add (at the bottom of the page) the driver(s) will be added to the selected group and appear under Group Drivers.

Users

You can also create sub accounts on the main account so that each department or driver has a login where the can see just there vehicle or whatever you choose for them to see.

To access user control click on the Settings button on the main action bar then click on the Users tab at the bottom of the settings box.

This is the main Users screen here you can see all current account created [1] the green plus icon to the right is how to create a new sub user account.

Under access rights you can see when you have selected a group what each account can see in the categories of vehicles, drivers, geofences and general.
Creating a new Sub User Account

When you click “New sub user account” a box appears in the bottom right where you can then enter the Name of the account a username and password.

When you click “ok” it will appear in the lists of Account immediately.

Adding vehicles to a Sub User Account

To add vehicles to the sub account click on any vehicle it will then have a blue background meaning it is selected to be moved when you click “Add”, they will then be moved into allowed vehicles.

The same procedure works in all the above tabs in Drivers you can select the drivers the sub account user can assign, in Geofences you can see what Geofences they are allowed to interact with.

General lists some generic settings for the sub account such as if they can manage vehicles, drivers, Geofences etc. or allow messaging.

If you want to edit the account credentials or delete the account in the account pane right click and choose the desired option.
Drivers

The Drivers tab lets you manage and assign drivers to your fleet vehicles ideally in situations where that person will be driving that vehicle for an indefinite amount of time or a prolonged period of time.

To access Driver assignment click on the Settings button on the main action bar then click on the Drivers tab at the bottom of the settings box.

The main screen of the Drivers page shows all available drivers a green plus button to add a new driver and a drop down menu to assign a driver to a vehicle.

To add a driver click on the green icon, it will then prompt you to enter their name, username, password, email address, mobile number or a picture.

Name is the only mandatory field required.

When you have added a driver they will NOT appear in the list of assignments as you have yet to assign them to a vehicle to do that click on the drop down menu at click on their name (in this case John Doe).

You then must choose a unassigned vehicle from the list underneath.

You can select to assign the driver indefinitely or until a particular date when you have made your decision just click on “Assign”.

To make edits or delete a driver in the assignment window right click on the chosen driver and select one of the options.
**Live Map Functions**

On the main map to view information such as the locality, latest timestamp the reason for this time stamp and the direction a vehicle is travelling in, hovers your mouse over the vehicle on the screen.

We can also access some more options and features by right clicking on the vehicle on the live map;

1. View Journeys
2. View Plots
3. Lock to Unit Feature
4. Send Message (if available Messaging service installed e.g. Garmin/MDT)
5. Live track
6. Copy to clipboard so it is easier to paste the vehicle details into another document or program. (You may be asked to allow Silverlight to access the clipboard, if you want to allow it click “Yes”)

![Live Map Functions Image]
View Journeys

When you click on Journeys a calendar will appear with the present date highlighted. We can select a date interval by clicking on another day in the past or by cycling through the months using the arrows at the side of each month.

When you have selected the desired time interval you just need to click Show Journeys.

It will then show the journeys on screen journeys are covered in more detail earlier in the guide.

View Plots

All Plots shows the plots for a certain time period it works the same way that Journeys so where you select the time period from a calendar.

For example if you leave the current date selected it will display all plots for the current day on the world map.

To view more details of each plot look at the left pane or you hover over any individual plot point on the Live Map.

To remove All Plots of the selected vehicle from the main map click the little arrow in the top left to access the vehicle list and where a new tab has appeared called ‘Plots’ just click the red X to remove them from view.
**Lock to Unit**

Lock to Unit is a feature that when a vehicle sends in a new plot point be it an ignition on/off or a journey plot point it will if locked re centre the vehicle to the middle of your screen.

This is particularly handy if you want to keep an eye on a particular vehicle and if you do happen to move off from where the vehicle is it will snap back into place; this is a perfect feature to compliment the full screen function.

To enable Lock onto a vehicle right click on a vehicle and tick the box next to the padlock icon.

This will also be reflected in the vehicle list with a padlock next to the locked vehicle. To disable Locked status right click the vehicle and untick the box or right click the vehicle in the vehicle list and unlock it there.

**Send Message**

The Send Message button is a shortcut to send a message to a vehicle/unit when you click the button a pop up is displayed.

To access this shortcut right click on any vehicle either on the map or in the vehicle list.

When you have selected an adequate expiry time, the correct vehicle and entered the message just click Send.

Messaging is covered in more detail in the Messaging Section.

Again you must have a messaging device installed to use this function correctly such as a Garmin SatNav or a MDT (Messaging Data Terminal).
Live Track

Live Track is also located on the same menu when you right click on a vehicle this will send a request to the unit out in the field to send a location of its current location and this will be updated on the map when the server has processed the request.

Nearest To Function

Nearest To lets you see which vehicles are near to a chosen destination, to start of find the location you want to use for example Stony Stratford.

All you need to do then is right click with your mouse in the general area you’re interested in and click the Nearest To icon which is displayed by a binocular Icon, this will then add a Crosshair to the map.

If you already had the Vehicle list up you would have seen the list automatically re adjust to reflect this change if not if you click on the vehicle list you will now see each vehicle has a distance in miles to the right of its Driver field.

To remove the Nearest To data from the vehicle list go to the Order By box located at the top of the Vehicle List and select one of the other options such as Description.
**Job Dashboard**

To access the Job Dashboard which is the management area for the new Job Push system (this service requires you have a Garmin installed in your vehicle and linked up to the GPS unit) from the main screen drop down menu, where live map is shown click on the current screen there and select ‘Job Dashboard’.

This will then load up the ‘Job Dashboard’.

![Job Dashboard Interface](image-url)
Creating a New Job to a Geofence

On the Job Dashboard screen you will need to first click on the Green plus sign to create a new job a pop up box will then appear on the screen.

Here I have selected the correct vehicle (KP61 KW8) the destination is selected from your current Geofences.

If you want to choose a destination not currently on the list you may want to create a job using a customer location. (See next page)

When you have clicked Save and submitted the job it will appear under Pending tab on the Job dashboard main page until the driver accepts the job and then it will turn to active.
Creating a New Job to a Custom Location

To create a job to a custom location no previous Geofence is needed like before, this feature is ideal for locations that are not visited frequently enough to warrant a Geofence or for one time only visits.

To start you will need to go back to the Live Map, when you found the location on the map, right click and click on Add Job.

You then need to choose the desired vehicle, the destination field is the location you selected earlier and enter a job description when complete click “save”, when the driver accepts the job it will appear on the map.

Creating a New Job from a Search

You can also create a job from a point you have searched for using the search function (page 12) example you may enter Gatwick into the search bar.

If this is the desired location right click on the orange pin and click on Add Job, you will know if you have clicked on the pin correctly as it shows the place name and options to remove the markers as seen below.

The main difference adding jobs this way is that the destination is displayed as the name of the marker not “custom location”.
**Messaging**

To access Messaging locate the drop down at the top right of the screen and select ‘Messaging’, this will then load the messaging main screen which is set to show the Inbox as a default.

1 – This is the search box you can enter any parameter such as Registration, Driver or a message title.

2 – New Message creates a new message you must enter your message in a pop box that appears (explained later on) Reply/Forward only work if a message is selected before these buttons are used.

3 – This is where you can select if you want to view the Mailbox (Inbox and Sent Items together), Inbox for incoming messages or Sent Items for outgoing messages.

4 – This shows all the messages for that certain category that you are selected (Inbox, Sent Items etc.) you can then choose which categories to show by clicking the plus signs and to minimize categories just click the – sign.

5 – Month selection to view old and archived messages depending on the month chosen.
Sending a Message

To send a message click the ‘New Message’ button located at the top of the messaging screen.

You will then need to choose an expiry time to determine when the message will no longer be kept in an unread status. You can choose from many intervals including 10 minutes up to and including 24 hours.

Messages can be sent to all vehicles, groups or individual vehicles.

When you click send the message will be sent.

Incoming Messages

Messages can also be sent back to you via the Garmin/MDT (Messaging Data Terminal) interface (if installed) you will know when you have a message to read either by seeing the message itself in the Messaging Inbox or an orange envelope will appear next to the vehicle it was sent from. A sound may also be heard when a new message is received if the option is turned on in General settings.

To read the message just double left click to be taken directly to the message.
**Skype Integration**


To start using Skype integration the first step of action is to include a mobile number in either a vehicle registration or a driver’s name; you must contact us to make these changes visible on the website and your account.

If you have Skype installed correctly and have enough credits on your Skype account to make the call to the mobile number, all you need to do is to right click on the vehicle and click call phone.
Reports

To access Messaging locate the drop down at the top right of the screen and select ‘Reports’, this will then load the Reports main screen.

Currently at time of writing the following reports are available:

1. All Vehicle Summary
2. Business Journeys (Expenses)
3. Detailed Plots
4. Driver Behaviour (Accelerometer)
5. Driver Fuel Efficiency (CAN)
6. Driver Report (CAN)
7. Duty of Care
8. Fleet Summary (CAN)
9. FMS League Table (CAN)
10. Fuel Level Changes (CAN)
11. Geofence Delivery
12. Geofence Visits
13. Job Details
14. Journey Overview
15. Journey Overview (CAN)
16. Odometer / Vehicle Locations
17. RFID
18. Stationary Time
19. Telematics Events
20. Vehicle / Driver / Geofence List
21. Vehicle Checks
22. Vehicle Inactivity
23. Weekly Driver
1. All Vehicle Summary

A good overview report that shows the sort of distances each vehicle and associated driver is doing within a date range – helpful to identify high costs per driver.

To start you first must select the desired data range at you can do this at the bottom of the left hand pane.

When you have entered the correct parameters click on Run Report and a report will be rendered on the screen.

The report will then show you Distance travelled, Journey Time, Journey Cost (for personal and business), Journey Cost (for business only), Number of Journeys, Average Distance and Average Cost.

![Image of All Vehicle Summary report]
2. Business Journeys (Expenses)

Business Journeys is a report ideal for calculating the cost of journeys to reclaim on expenses.

The first thing is to check the current journey cost value is correct which is at the top of the report.

Once you are happy with the value you must now select the vehicle and date range which is located in the bottom left, then you need to click on Get Journeys.

The right hand side of the screen will now populate with journeys you can now utilise the buttons at the top of the report if needed to select all weekdays or you can select the each journey individually by selecting Business Journey on the right hand side.

When you have chosen the correct Journeys you must ensure you click on Update otherwise your choices will not be saved.

To run the report after saving the correct journeys all you need to do is click on Run Report.

This will then show the journeys previously selected with the distance and calculate the total cost of each journey and give an overall cost for all the journeys in that particular day.
3. Detailed Plots

List all plots for a specified time period, can also be run for all vehicles, a particular vehicle and you can even set a minimum speed so you can see for example all speed over a minimum of 70 mph.

The report shows the Time, Speed, Direction, Reason and Location of each Plot Point.

Reason codes include:
- Ignition on / off
- Travelling
- Wakeup – where vehicle reports in every hour whilst not moving
- Over speed – where over speed limit is breached (set by VeriLocation for client)
- Geofence – including London congestion zone alert
4. Driver Behaviour (Accelerometer)

This report will show any accelerometer events (your GPS unit needs to be calibrated beforehand for this to work, only on some models) it will list the driver; each event and the % compared to the company average and give score to determine how a good driver they are.

First select the specified date range the report will then be rendered and displayed on the right.

Driver Name: Andrew Hurst  

<table>
<thead>
<tr>
<th>Triggered Events (LED light activated)</th>
<th>Andrew Hurst</th>
<th>Company Average</th>
<th>% Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Overspeed &gt; 70 mph</td>
<td>46</td>
<td>99.54</td>
<td>51.37%</td>
</tr>
<tr>
<td>2. Acceleration (+0.3g)</td>
<td>0</td>
<td>4.00</td>
<td>0.00%</td>
</tr>
<tr>
<td>3. Cornering (+0.1g)</td>
<td>42</td>
<td>375.50</td>
<td>11.19%</td>
</tr>
<tr>
<td>4. Braking (-0.3g)</td>
<td>35</td>
<td>18.48</td>
<td>189.39%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Andrew Hurst</th>
<th>Company Average</th>
<th>% Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distance Travelled (mi)</td>
<td>860.89</td>
<td>560.51</td>
<td></td>
</tr>
<tr>
<td>Overall Score</td>
<td>123.00</td>
<td>487.52</td>
<td></td>
</tr>
<tr>
<td>Score per 1,000 mi</td>
<td>142.87</td>
<td>869.79</td>
<td>16.43%</td>
</tr>
<tr>
<td>Less than 100% = GOOD</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The above driver is a safer driver compared to the company average as their overall score is only 16.43%.
5. Driver Fuel Efficiency (CAN)

This report requires installation of CANbus equipment.

This report will show each individual drivers MPG and miles per week for 8 weeks since the start date of the report. It offers an easy to see overview of each drivers MPG.

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Adrian D'Agostino</td>
<td>10.15 (14223224)</td>
<td>9.72 (1547335)</td>
<td>9.48 (2001324)</td>
<td>9.09 (2012368)</td>
<td>8.31 (2022027)</td>
<td>7.59 (2054004)</td>
<td>8.66 (2055055)</td>
<td>9.08 (1015992)</td>
<td>10.20 (1421958)</td>
</tr>
<tr>
<td>Alan Farmer</td>
<td>11.20 (1422349)</td>
<td>12.02 (1325735)</td>
<td>10.33 (7551465)</td>
<td>11.13 (9885103)</td>
<td>11.21 (1043733)</td>
<td>11.20 (1169759)</td>
<td>10.95 (2033154)</td>
<td>11.97 (1418239)</td>
<td>11.12 (1034687)</td>
</tr>
<tr>
<td>Alan Robb</td>
<td>12.24 (215851)</td>
<td>10.30 (1069989)</td>
<td>12.35 (1864656)</td>
<td>11.61 (2246359)</td>
<td>11.15 (2227553)</td>
<td>11.52 (1740642)</td>
<td>11.56 (1850546)</td>
<td>9.60 (1655374)</td>
<td>11.20 (103533)</td>
</tr>
<tr>
<td>Barry</td>
<td>9.47 (1831403)</td>
<td>9.62 (1083051)</td>
<td>9.22 (1187652)</td>
<td>9.55 (2313123)</td>
<td>9.87 (1323005)</td>
<td>9.29 (2456657)</td>
<td>9.20 (1720448)</td>
<td>8.41 (10279122)</td>
<td>9.41 (120333)</td>
</tr>
<tr>
<td>Ben Addict</td>
<td>0.00 (0)</td>
<td>0.25 (6112042)</td>
<td>0.13 (3477128)</td>
<td>0.92 (3280552)</td>
<td>0.91 (6301542)</td>
<td>0.94 (1328827)</td>
<td>0.97 (2085497)</td>
<td>7.68 (1853923)</td>
<td>8.54 (491244)</td>
</tr>
<tr>
<td>Dennis</td>
<td>0.00 (0)</td>
<td>0.00 (0)</td>
<td>0.00 (0)</td>
<td>0.00 (0)</td>
<td>0.00 (0)</td>
<td>0.20 (2040782)</td>
<td>7.19 (2041403)</td>
<td>9.21 (209318)</td>
<td>8.48 (1675559)</td>
</tr>
<tr>
<td>Dennis Freeman</td>
<td>0.00 (0)</td>
<td>0.00 (0)</td>
<td>0.00 (0)</td>
<td>0.00 (0)</td>
<td>0.00 (0)</td>
<td>0.00 (0)</td>
<td>0.00 (0)</td>
<td>0.00 (0)</td>
<td>0.07 (1285444)</td>
</tr>
</tbody>
</table>
6. Driver Report (CAN)

This report requires installation of CANbus equipment.

Once you have selected the required data and an appropriate output the following report will then appear.

For the report each field (Miles Driven, Harsh Brake) is divided into two sections the blue bar is the driver’s amount of times that the particular parameters have been met and the red is the average for the whole fleet. So fields such as Miles driven and MPG take into account the whole fleet with the number being higher the more vehicles you have on your account.

The dashboard metre at the top shows the drivers percentage score where higher is better and as the scores goes eventually into the green the better the driver.
7. Duty of Care

Where companies wish to check on driver hours as part of the Working Time Directive it is possible to run this report.

Select the “Max Driving Time” for example 150 minutes.

<table>
<thead>
<tr>
<th>Start Location</th>
<th>End Location</th>
<th>Duration</th>
<th>Distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simon Godwin</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thu, 19 Jan 2012 07:00  RV60 UVU (SG Garmin)</td>
<td>10:17 (Sh Enfield Ac mgt cq), Enfield, EN3 7</td>
<td>03:17</td>
<td></td>
</tr>
<tr>
<td>Thu, 19 Jan 2012 10:17  Gamston (Simon home), Rashcliffe, NG2 6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SS 8310-253</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mon, 16 Jan 2012 10:53  Wakefield, WF1 3</td>
<td>67.33 Belle Vue, Doncaster, DN1 5</td>
<td>12:37</td>
<td></td>
</tr>
</tbody>
</table>

It will then produce a list by driver of each journey that has exceeded 150 minutes, showing Start Location, End Location, Duration and Distance of each journey.
8. Fleet Summary (CAN)

This report requires installation of CANbus equipment.

This report provides:
- Provides fleet managers with a top level view of the entire fleet.
- Date range selectable.
- Summarises utilisation and splits by driving time, idling and standing time.
- MPG given for entire fleet and summary of distance and fuel used.

### Fleet Summary Report

<table>
<thead>
<tr>
<th>Fleet Summary</th>
<th>Period = 6 Days</th>
<th>Total Hours</th>
<th>Total</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date Range Selected</td>
<td>16-Jan-2012 00:00</td>
<td>23-Jan-2012 13:54</td>
<td>Number of Vehicles 02</td>
<td></td>
</tr>
<tr>
<td>Ignition On</td>
<td>Driving Time</td>
<td>207/50</td>
<td>66.55</td>
<td></td>
</tr>
<tr>
<td>Idling Time</td>
<td>66.55</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumption</td>
<td>50</td>
<td>2.44</td>
<td>150.32</td>
<td></td>
</tr>
<tr>
<td>Total Fuel Used</td>
<td>12.606</td>
<td>55</td>
<td>gal</td>
<td></td>
</tr>
<tr>
<td>Driving</td>
<td>11.445</td>
<td>46.08</td>
<td>gal</td>
<td></td>
</tr>
<tr>
<td>PTO</td>
<td>22.04</td>
<td>1.00</td>
<td>gal</td>
<td></td>
</tr>
</tbody>
</table>

### Key Metrics
- Distance travelled (miles)
- Fuel used (litres)
- MPG (calculated from fuel used and distance)
- Driving Time in hours and minutes shown and also as a percentage of total engine on time.
- Idling Time in hours and minutes with percentage of total engine on time.
- Throttle in excess of 95% in hours and minutes and as a percentage of total driving time. A low figure is preferred.
- Green band driving time as shown on the vehicle rev counter. The higher the better.
- Harsh braking alarms per hour. Zero is the perfect score.
- Last report is when vehicle last reported into the server.
- End odometer is the CANbus vehicle odometer reading as would be seen on the vehicle dash.

Below the summary data each vehicle is shown with the following metrics by vehicle:
- Distance travelled (miles)
- Fuel used (litres)
- MPG (calculated from fuel used and distance)
- Driving Time in hours and minutes shown and also as a percentage of total engine on time.
- Idling Time in hours and minutes with percentage of total engine on time.
- Throttle in excess of 95% in hours and minutes and as a percentage of total driving time. A low figure is preferred.
- Green band driving time as shown on the vehicle rev counter. The higher the better.
- Harsh braking alarms per hour. Zero is the perfect score.
- Last report is when vehicle last reported into the server.
- End odometer is the CANbus vehicle odometer reading as would be seen on the vehicle dash.
9. FMS League Table (CAN)

This report requires installation of CANbus equipment.

Where CANbus system has been purchased it is possible to see causes of mpg levels by vehicle.

Report allows selection of either vehicle or driver by date range.

For this period it then shows total distance travelled, mpg (as km / litre). The results are listed with best mpg (km/l) first then second best etc. This 1\textsuperscript{st}, 2\textsuperscript{nd}, 3\textsuperscript{rd} index is shown against each metric to the left of each actual figure. The second metric is then harsh braking, over revving, over torque and finally over acceleration. From experience we find that there is a direct correlation between mpg and the over torque metric (see the index figures roughly align to the mpg index)

Over torque is typically where the accelerator is “floored” with poor use of gears.

<table>
<thead>
<tr>
<th>Distance (mi)</th>
<th>Y7 NWH</th>
<th>W4 NWH</th>
<th>SM67 CYZ</th>
<th>SN66 EJE</th>
<th>SN58 EJF</th>
<th>SN57 CZA</th>
<th>SN56 EJG</th>
<th>T6 NWH</th>
<th>T4 NWH</th>
</tr>
</thead>
<tbody>
<tr>
<td>MPG</td>
<td>20.09</td>
<td>11.72</td>
<td>10.85</td>
<td>10.53</td>
<td>10.25</td>
<td>10.16</td>
<td>10.15</td>
<td>9.22</td>
<td>9.07</td>
</tr>
<tr>
<td>Harsh Brake / Km</td>
<td>0.02</td>
<td>0.54</td>
<td>0.49</td>
<td>0.15</td>
<td>0.02</td>
<td>0.39</td>
<td>0.13</td>
<td>1.74</td>
<td>1.13</td>
</tr>
<tr>
<td>Over Rev / Km</td>
<td>0.01</td>
<td>0.89</td>
<td>1.0477</td>
<td>36.94</td>
<td>32.34</td>
<td>41.21</td>
<td>33.22</td>
<td>3.14</td>
<td>25.28</td>
</tr>
<tr>
<td>Over Torque / Km</td>
<td>0.04</td>
<td>1.94</td>
<td>6.0</td>
<td>34.0</td>
<td>39.0</td>
<td>2.81</td>
<td>4.86</td>
<td>16.0</td>
<td>15.0</td>
</tr>
<tr>
<td>Over Accel / Km</td>
<td>0.00</td>
<td>0.00</td>
<td>54.42</td>
<td>1.48</td>
<td>1.35</td>
<td>2.39</td>
<td>1.35</td>
<td>0.00</td>
<td>10.31</td>
</tr>
</tbody>
</table>
10. Fuel Level Changes (CAN)

This report requires installation of CANbus equipment.

This report displays for a certain period of time how much the fuel level of a tank in a vehicle changes between an ignition off and an ignition on.

As per previous reports you are able to filter the report even further down by selecting a group filter or a particular vehicle.

The tick box for “only changes outside Geofences” is used to narrow the locations down even further. If you suspect drivers may be affecting the fuel level off of site/depot then as long as your site/depot has a Geofence round it will ignore these locations for this report.

The minimum change does as it states and will filter the results depending on what you enter in this box here, the smaller % the likely more results will be displayed.

The report above shows both positive gains in fuel (for example where the tank might have filled up) and also red change where fuel has decreased with the negative amount shown in the change column.

The first timestamp is the ignition off and the second timestamp in the second column is the ignition on and the vehicle will have not moved in between these two times.

It is worth to note that slight % changes in fuel may be because of how the vehicle stopped and when the fuel was measured the fuel might have settled more on one side offsetting the reading.
11. Geofence Delivery

This report will show you information when a vehicle goes from one Geofence to another Geofence.

The Geofence you select before you run the report is the place of origin or in other words were the journey starts.

The report will then show all the journeys originating from for example Northampton Yard to Millbrook. To the right is data specific for each day/vehicle such as departure/arrival, duration, distance, average speed and how long on site (the Geofence).

CO2 will not be calculated if you do not have a CANbus device installed.
12. Geofence Visits

This report will show you which vehicle has visited which Geofence, which driver has been to which Geofence and who has visited a certain Geofence, this is chosen at the beginning by selecting the right option in Group By.

The reports will look all the same but change on how you grouped them, the Fuel Level % will only work when there is a CANbus device installed.
13. Job Details

Job Details report logs the various stages of the Garmin functionality including the job push system.

The report details for each vehicle (or the vehicle selected before the report is run) the Job ID and its Job History showing each stage of the job deployment. Each stage has a corresponding message as explained below:

- Garmin connected (Garmin is connected to the tracking unit via the FMI cable)
- Garmin disconnected (Garmin is disconnected from the tracking unit)
- Status change to pending (The job has been sent to the unit but has not been received)
- Status change to Inactive (unread) (Job has been received by the unit but unread by the driver)
- Status change to Inactive (read) (Job has been received by the unit and read by the driver but not set as an active job)
- Status change to Active (Job has been received by the unit and read by the driver and set as an active job)
## 14. Journey Overview

Journey Overview report lists the journeys the selected vehicle(s) has taken over a specific date range.

Once you have selected the applicable filters such as which vehicle and the date ranges, the report will populate on the right showing journey’s for each day, start time of Journey, driver, start point, destination and time between journeys.

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Location and Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thu, 14 Jun 2012 10:30</td>
<td>KP61 KWN [VL Garmin]</td>
<td>Billworth (OvermapVeriLocation HQ), South - Edgwick (Zenith Contractors), Coventry, CV6 5 00:19:00</td>
</tr>
<tr>
<td>11:20</td>
<td></td>
<td>Edgwick (Zenith Contractors), Coventry, CV6 5 - VeriLocation 00:25:49</td>
</tr>
<tr>
<td>11:46</td>
<td></td>
<td>Edgwick (Zenith Contractors), Coventry, CV6 5 - VeriLocation 00:45:03</td>
</tr>
<tr>
<td>12:31</td>
<td></td>
<td>Edgwick (Zenith Contractors), Coventry, CV6 5 - VeriLocation 00:18:01</td>
</tr>
<tr>
<td>13:44</td>
<td></td>
<td>Edgwick (Zenith Contractors), Coventry, CV6 5 - VeriLocation 01:12:48</td>
</tr>
<tr>
<td>14:57</td>
<td></td>
<td>Barton Seagrave (Knights Of Old Kettering), Ketter - Daventry, NN5 8 00:35:51</td>
</tr>
<tr>
<td>16:02</td>
<td></td>
<td>Daventry, NN5 8 - VeriLocation 00:00:00</td>
</tr>
<tr>
<td>Thu, 14 Jun 2012 16:11</td>
<td></td>
<td>Harlestone (Sebs), Daventry, NN7 4 - VeriLocation 03:18:28</td>
</tr>
</tbody>
</table>
15. Journey Overview (CAN)

This report requires installation of CANbus equipment.

This report is ideal to use as a driver de-brief document for that day’s work.

The very top box summarises the vehicles selected:
- Average MPG
- Total Trips
- Total Distance
- Total Journey Time
- Total Fuel Used in Litres

After the summary each Journey is broken down into different details such as Torque, Accelerating, Cruise, RPM, Speed and Idle.
### 16. Odometer/Vehicle Locations

This is a simple report that will on the chosen start date show the Odometer reading at the given time and location (it is one reading per day at a specific time).

<table>
<thead>
<tr>
<th>Registration</th>
<th>Driver</th>
<th>Location</th>
<th>Timestamp</th>
<th>Odometer (m)</th>
<th>Distance (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BP57 KGY</td>
<td>Glynne Rees</td>
<td>Wigan -</td>
<td>07:34</td>
<td>94,313,955</td>
<td>58,603.63</td>
</tr>
<tr>
<td>DX06 JPU</td>
<td>Andrew Parker</td>
<td>South Staffordshire -</td>
<td>00:15</td>
<td>440,135,270</td>
<td>273,487.70</td>
</tr>
<tr>
<td>CE92 UPA</td>
<td>Casual 2</td>
<td>Bromsgrove -</td>
<td>00:01</td>
<td>701,267,310</td>
<td>435,741.10</td>
</tr>
<tr>
<td>CN06 LUE</td>
<td>Ben Jackson</td>
<td>Tameside -</td>
<td>09:20</td>
<td>115,654,555</td>
<td>71,864.41</td>
</tr>
<tr>
<td>CN53 MMK</td>
<td>Rob Guthrie</td>
<td>Torbay -</td>
<td>00:06</td>
<td>533,803,570</td>
<td>331,690.20</td>
</tr>
<tr>
<td>CN53 MMO</td>
<td>Lee Pow</td>
<td>Gosport -</td>
<td>00:35</td>
<td>712,113,569</td>
<td>442,485.90</td>
</tr>
<tr>
<td>DK07 CKD</td>
<td>Peter O'Halleron</td>
<td>Merton -</td>
<td>00:28</td>
<td>397,101,160</td>
<td>246,747.20</td>
</tr>
<tr>
<td>DK07 CKL</td>
<td>John Slater</td>
<td>Guildford -</td>
<td>00:34</td>
<td>582,468,065</td>
<td>361,928.80</td>
</tr>
<tr>
<td>DK07 HYJ</td>
<td>Geoffrey Dunn</td>
<td>Newark and Sherwood -</td>
<td>00:06</td>
<td>481,860,780</td>
<td>299,420.80</td>
</tr>
<tr>
<td>DK07 HYN</td>
<td>No Driver</td>
<td>Norwich -</td>
<td>00:23</td>
<td>586,296,500</td>
<td>364,307.80</td>
</tr>
<tr>
<td>DK56 DDF</td>
<td>Steve Hodkinson</td>
<td>Exeter - J Holt &amp; Sons</td>
<td>00:53</td>
<td>762,347,065</td>
<td>473,700.50</td>
</tr>
<tr>
<td>DK56 DMY</td>
<td>Malcolm Spencer</td>
<td>Redcar and Cleveland -</td>
<td>00:33</td>
<td>715,592,355</td>
<td>444,648.50</td>
</tr>
<tr>
<td>EU56 CWC</td>
<td>John Porter</td>
<td>Tewkesbury -</td>
<td>00:34</td>
<td>454,296,250</td>
<td>282,286.60</td>
</tr>
<tr>
<td>EU56 CWE</td>
<td>Michael Williams</td>
<td>St. Helens -</td>
<td>06:22</td>
<td>378,143,195</td>
<td>233,724.50</td>
</tr>
</tbody>
</table>
17. RFID

This report will show any RFID values from temperature probes installed in the vehicle in a graph design and also in a chronological list.

The green line is the temperature and the red and blue lines are the upper and lower limits preset on the unit.
18. Stationary Time

This report shows the amount of time all vehicles have stayed stationary for the dates/times you entered in the input box at the bottom left.

For this report I ran it from 19th January through to the present day (default).

As you can see from the report it shows the vehicle, driver, location and time and days if applicable that the vehicle has been stationary for.
19. Telematics Events

This report will show any PTO (power take off) action such as a crane moving or a vacuum is turned on, this will be installed at point of installation and commission so not all vehicle will have this feature.

To run the report make sure you are in the Reports section of the site and click on Telematics Events on the right hand side, you will then need to choose any applicable groups or any particular vehicles you want to see the report on otherwise just leave it blank to see the whole fleets action over the period of time.
20. Vehicle/Driver/Geofence List

This simple report which has no date/time range parameters renders a list of all current vehicles, drivers and Geofences on your account.

21. Vehicle Checks

This requires you are using the Vehicle Checks Android application and will be covered in detail on request.

22. Vehicle Inactivity

This report shows over a date range where the vehicle/driver has remained stationary with the ignition on.

For this report I will choose to group by vehicle. (A Geofence can be chosen for this report)

The reports lists all vehicles and then directly underneath the date and for each day, time of inactivity the duration of inactivity and location of inactivity it will also show the Geofence name if there in an applicable one.
23. Weekly Driver

Time on duty is calculated from period between first ignitions on and last ignition off, this does not reflect the amount of time driving but the amount between the first and last ignition. Signature of driver is blank and can be used to capture drivers agreed hours for payroll purposes.

Columns show day reported against, vehicle registration (can change where driver moves vehicles), vehicle base (derived from the configuration entry), first ignition on and last ignition off for the given day, total ignition on time (first number is total time ignition is on and second number is showing the amount of time moving while ignition is on).

To better understand this report a visual aid is shown below the total graph is the ‘time spent on duty’, the green blocks signal the time ‘ignition is on which is moving’, the yellow block shows ‘ignition on car not moving’ (i.e. when in traffic) and at each end is the first and last ignition recorded.

You can also select shift work to be reported instead of days to show more accurate information, if you have drivers who work past midnight selecting ‘report shifts instead of days’ will mean this journey or driving time will be grouped together and not pushed onto the next day.
## Version History

<table>
<thead>
<tr>
<th>Date</th>
<th>Version</th>
<th>Author</th>
</tr>
</thead>
<tbody>
<tr>
<td>10th May 2012</td>
<td>2.1</td>
<td>Jack Wright</td>
</tr>
<tr>
<td>19th June 2012</td>
<td>2.2</td>
<td>Jack Wright</td>
</tr>
<tr>
<td>4th July 2012</td>
<td>2.3</td>
<td>Jack Wright</td>
</tr>
<tr>
<td>21st November 2012</td>
<td>2.4</td>
<td>Jack Wright</td>
</tr>
<tr>
<td>19th February</td>
<td>2.5</td>
<td>Jack Wright</td>
</tr>
</tbody>
</table>
Contact Details

VeriLocation Ltd
24 -26 Queensbridge
Blisworth Hill Barns
Northampton
Northamptonshire
NN4 7BF
United Kingdom

Telephone Number: 01604 859854
Fax: 01604 859876
E-mail: info@overmap.co.uk
Web : www.verilocation.com

Other Information

VeriLocation tracking app is now available for free to existing customers.

VeriLocation Tracking App & Lorry Checklist is also available on Google Play for Android handsets.

Social Networks

VeriLocation is on the following social networks.

Facebook.com/VeriLocation
Twitter.com/VeriLocation
Uk.linkedin.com/company/VeriLocation

Created by Jack Wright