



Fleet Management System User Guide

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1 Service Overview

The fleet management service is an Internet based Fleet Management service designed to be operated from a freely available browser on Internet connected P.C.'s.

The service offers a wide range of maps covering many parts of the world. An up to date list can be obtained from your local reseller.

2 Logging in

To login, navigate to the logon page by the link provided by your reseller.

Click on the "Log in" link.

Enter your email address and the password provided by your reseller or agent.

If you wish for the PC to remember your email address as the default, tick the "Remember my e-mail address on this computer" box.

Click on the "Log In" link. You should now be logged into the system.

If the login fails, verify your email / password fields and ensure the CAPS lock is not accidentally on (passwords are case sensitive).

2.1 Basic Navigation

Every screen in the system has a common menu bar available to Super users or Users. This is located at the top of the screen at all times.

Home - takes you to the “home page”. It shows you any system announcements or from your reseller and an enhanced version of the menu tabs.

Devices - takes you to an overview page where you can see a range of devices in your fleet.

Company - takes you to a Company orientated section for geofences, alerts and messages.

Reports - takes you to the reports section.

Support - takes you to your own support area where you may change your password and other personal options.

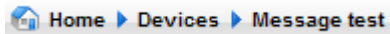
Administration (Super Users only) - takes you to the User, Device and Alarm management functions.

2.2 Crumb Trail

When navigating sections of the site, a crumb trail is constructed automatically.

The crumb trail is always placed immediately below the main menu bar.

An example is shown below:



Clicking on any part of the crumb trail will take you back to the respective part of the site. Clicking on the word **devices** for example will take you back to the device list (fleet overview) page for the respective company.

3 Fleet / Device Management

3.1 Fleet Overview


The fleet overview is the main page for viewing a fleet status. It is the central point for navigating to a fleet or vehicle and viewing its data.


3.1.1 Current locations

This shows the current location of all vehicles in your fleet (when group view is set to **Summary**).





Fields listed are:

- Device Name
- An icon indicating operation status (only one will be shown):
 - In a journey
 - Stopped
 - Out of contact
 - GPS Timeout
- Last location (address details or a geofence name)
- Last contact
- Last GPS Time (super users or above)

Clicking on the Device **name** or the View icon () takes you to the device overview page.

Clicking on the Plot icon () takes you immediately to the device map page.

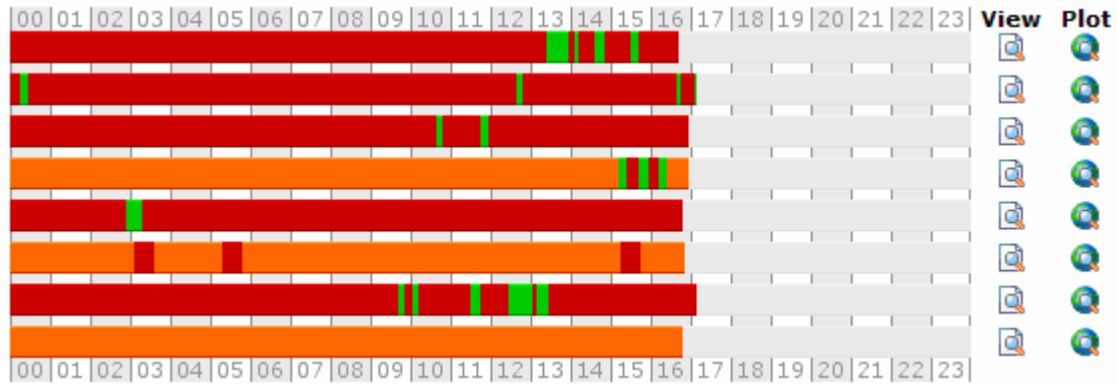
3.1.1.1 Device Status Icon key

Icon	Description
	Vehicle is stationary
	Vehicle is moving
	Vehicle has not had valid GPS within required time period
	Vehicle has not updated within required time period

3.1.2 Utilisation





Changing the **group view** to **Utilisation** displays a fleet utilisation page.

The utilisation component looks like the following image:



Click **Previous** or **Next** day to navigate the utilisation days.

3.1.2.1 Utilisation Icon key

Icon	Description
	Vehicle is moving – click on green to display journey detail
	Vehicle is stopped
	Vehicle inside geofence
	No data available

3.1.3 Last moving


Changing the **group view** to **Last moving** displays the summary page with second column added - the “last moving” times. This is the time the vehicle last moved, i.e. the time the vehicle last ended a journey. This is useful for monitoring how long a vehicle in your fleet has been left unused.

3.1.4 Plot Group

The plot group is found on the size bar of the fleet overview page. This feature plots all the group devices on a single map. The map is automatically sized to show all vehicles. Option “Cascade subgroups” plots all additional folders beneath the current folder.

3.1.4.1 Plot Group Large View

The Plot Group screen has a “View Large Map” option on the side bar menu. This option will display the map screen in a window optimised for displaying maps only.

On menu bar at the top of the screen is a live update feature ( Live Updates).

Pressing this button activates a live mapping feature.

Once activated, the client browser maintains a conversation with the host server, periodically checking for device movement. When the check detects any of the devices has moved, the map will be refreshed.

3.1.4.2 Saved Map Views

On any of the map screens, the user can either leave the map screen on its **Default** view or switched to a pre-saved area of the map such as “England” or “Wales” etc.

On the screens that have a live update feature, the saved view has an important function.

On the live update screens, if the view is left as “Default”, the map will pan and zoom to maintain the vehicle(s) in view.

If the view is set to a user choice, then the map will remain fixed and not pan or zoom automatically. This can be useful to maintain a view of the UK for example, watching a fleet fan out over the day.

3.1.5 Find Nearest Device

The “find nearest device” option is located on the fleet overview sidebar menu. It allows the user to search a fleet for a device nearest to either a postcode or a geofence.

3.1.5.1 Searching by postcode

The postcode search is the default choice. First, enter a valid postcode, then choose either “All company devices” (default) or the second choice – which is the current device folder.

Then click search. The results should be shown with the following columns:

- Device name
- Distance from postcode
- Location
- View icon

The nearest vehicle will be at the top of the list, with the distance from the postcode.

Clicking the vehicle name or the view icon will take the user to the device overview screen for that vehicle.

3.1.5.2 Searching by geofence

Change the “search by” option to “Geofence”. The screen should refresh to show a list of geofences.

Next, select a geofence, then choose either “All company devices” (default) or the second choice – which is the current device folder.

Then click search. The results should be shown with the following columns:

- Device name
- Distance from geofence
- Location
- View icon

The nearest vehicle will be at the top of the list, with the distance from the postcode.

Clicking the vehicle name or the view icon will take the user to the device overview screen for that vehicle.

The nearest vehicle will be at the top of the list, with the distance from the geofence.


Clicking the vehicle name or the view icon will take the user to the device overview screen for that vehicle.


3.2 Device Overview

The device overview is intended to present all the key information for a vehicle on a single page. The information included is as follows:

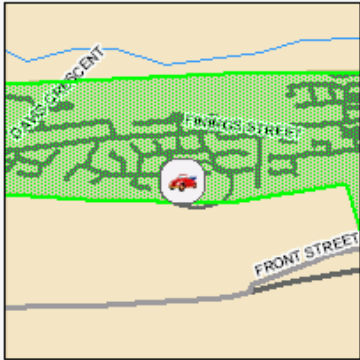
- Device type;
- Location – textual
- Location on map (clicking on map shows a larger map view);
- Latitude / Longitude (WGS84);
- Northing / Easting (OS 1936);
- Last valid GPS fix time;
- Current Speed / heading;
- Current vehicle odometer (if set);
- Vehicle registration (if set);
- Most recent journeys (clicking on this link shows the full journey list):
 - Start / End location;
 - Journey time;
 - Max speed;
 - Journey distance;
 - Maximum acceleration / deceleration during journey (where supported);
 - Idle time (where supported);
 - Driver Name (where supported).
 - “Details” link – clicking on this shows all fixes in the journey;
 - “Plot” link – clicking on this shows the snail trail for the journey.
- Daily journeys
 - Date
 - Start of day
 - End of day
 - Journeys made
 - Driving duration
 - Maximum speed
 - Distance travelled
 - Maximum acceleration / deceleration
 - Idle time
 - “Details” link – clicking on this shows all journeys made on the day;
 - “Plot” link – clicking on this shows the snail trail for the entire day, with individual “journey” markers.


An example is shown below.


Message test


Last Contact Time 10/03/2007 07:46:44
Device Type V502 (V2+ firmware)

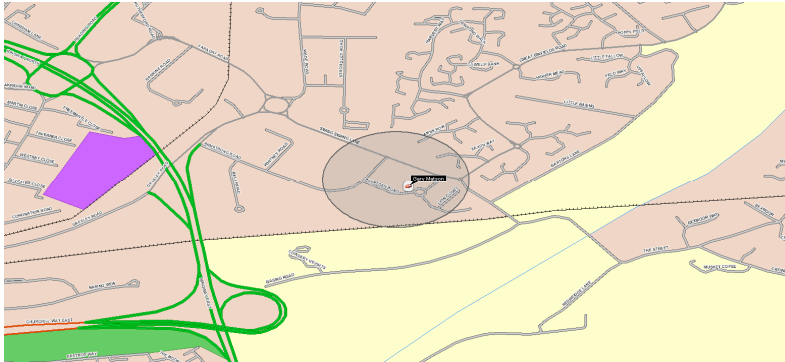
Last Known Location



Location	Head Office 
Lat	54.7968521°
Lon	-1.680016°
British National Grid	544720.6641N, 420570.1644E
Last GPS time	10/03/2007 07:42:32
Speed	1mph
Heading	NE (46°)
Odometer	0mile(s)

3.2.1 Current map position

This screen shows the current map position for the selected vehicle.




The system optimises the map size to fit the computer monitor viewing the site.

Zooming and position can be moved by activating the feature (zoom in/out or position) on the toolbox in the top left of the screen.

To zoom out (after activating this feature on the toolbox), draw a “box” by clicking on the map and holding down the mouse button, then drag a box down and to the right of the initial click. A box should be drawn. When the button is released, the map is zoomed out. The smaller the box, the larger the zoom out.

To Zoom in (after activating this feature on the toolbox), draw a “box” by clicking on the map and holding down the mouse button, then drag a box down and to the right of the initial click. A box should be drawn. When the button is released, the map is zoomed in to the contents of the box just drawn.

3.2.1.1 Current Map Live Update

On the current map screen side bar menu is a live update feature (Live Updates).

Pressing this button activates a live mapping feature.

Once activated, the client browser maintains a conversation with the host server, periodically checking for device movement. When the check detects the device has moved, the map will be refreshed.

3.2.2 Journey History

Clicking on the “detail” link for any journey will show a list of sequential fixes for the chosen journey.
















The following columns will be shown:

- Date / time
- Location (address or geofence name)
- Speed
- Distance
- Heading
- Max acceleration *
- Max Deceleration *
- Idle time *
- Driver Tag *
- Flags * (see icon key)

* Some fields are hardware dependant.

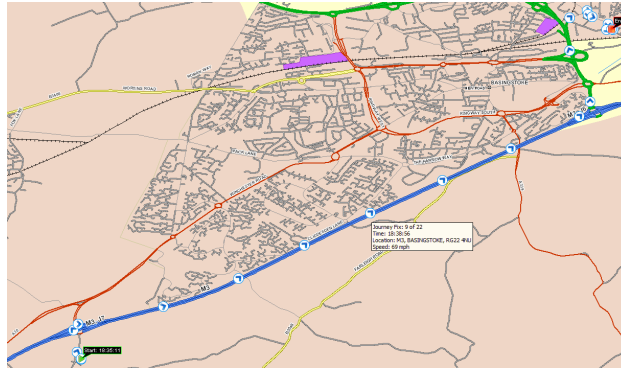
3.2.2.1 History Icon key

A key for the icons is shown on the left hand side of the history screen. Note – not all features listed on the key are supported by all devices.

Icon	Description
	Journey Start
	Journey End
	Ignition on
	Ignition off
	Live report
	Stored report
	Reports to follow
	Timed report
	Distance report
	Polled report
	Geofence alarm
	Panic Report
	Power on / Restart
	GPS Timeout
	Low Battery

3.2.3 Journey Snail Trail

Clicking on the “plot” link for any journey will show a “snail trail” for the chosen journey.



Hovering over any arrow shows the number, time, location and speed of the respective fix.

3.2.4 Polling a device

Certain devices can be polled (by Super Users) which in turn updates the system with current data.

In the case of the V502, this will result in an SMS (chargeable) being sent from the host to the device requesting an update.

In all cases, a progress screen will be shown informing the user of the polling progress.

3.2.5 Device Status

Certain devices can be interrogated for their current operational status.

In the case of the V502, this will result in a set of spatial and communication data being returned.

3.2.6 I/O Values

Most devices support a range of Inputs and Outputs (I/O).

The V502 has a wide range of I/O points. To view the points, navigate to the Device Overview screen and follow the link on the sidebar menu “Current I/O Values”.

3.2.6.1 V502 I/O Values

There are a number of V502 firmware releases deployed in the field. For the following example, a version 2.0 device is shown. Any of these can have alarms set on them.

Analog Point	Units	Description
Battery	Volts	Voltage of input supply. This can be the vehicle alternator, or the vehicle battery if the ignition is off.
Speed	Kph	Current speed of vehicle
Max Speed	Kph	Max speed of vehicle in current journey
Max Acceleration	m/s ²	Max Acceleration of vehicle in current journey
Max Deceleration	m/s ²	Max Deceleration of vehicle in current journey
Idle Time	Mins	Idle time of vehicle in current journey

Digital Point	Low	High	Description
Timed report	No	Yes	Fix was a timed (confidence) report
Distance report	No	Yes	Fix was a distance or heading report
Polled report	No	Yes	Fix was polled by a user
Geofence alarm report	No	Yes	Fix was due to an onboard geofence breach
Panic mode report	Off	On	Fix was due to panic input being activated
External I/O event	No	Yes	Fix was due to an external I/O change
Journey Start	No	Yes	Fix was due to journey start
Journey Stop	No	Yes	Fix was due to journey stop
Digital in 1 (Voice control)	Off	On	Digital in 1 state (raw input)
Digital in 2 (Alarm input)	Off	On	Digital in 2 state (raw input)
Digital in 3 (Ignition circuit)	Off	On	Digital in 3 state (raw input)
Digital in 4 (Panic button)	Off	On	Digital in 4 state (raw input)
Digital Out 1	Off	On	Digital out 1 state
Digital Out 2	Off	On	Digital out 2 state
Digital Out 3	Off	On	Digital out 3 state
Digital Out 4	Off	On	Digital out 4 state
Ignition Status	Off	On	Ignition status. In ignition mode 0, this is a GPS derived ignition based on speed. In ignition mode 1, this is the true ignition state based on the value of Digital in 3
Power On	No	Yes	Device has just powered up – only present on first fix after powerup
GPS Timeout	No	Yes	Device has GPS timeout – present while no GPS
Low Battery Level	Normal	Low	Low battery level detected – level set by device configuration parameter page.
Reports to follow	No	Yes	There are reports on the device onboard memory queued, waiting to be sent.
Storage	Live	Stored	The fix came from live readings or from the memory
Extension Data	None	Present	There is extension data present (RFID, Transcan, Datacold500 etc)
Status 7	N/A	N/A	Spare bit.

4 Company Operations

The “company” menu option is where company orientated functions are performed.

4.1 Alerts

The Alerts option lists all current alerts on the system for the company being viewed.

The following columns are listed:

- Device Name
- Date / time of alarm transition
- Alert text
- Cleared flag
- Ack (acknowledged flag)

An alarm will appear in this list and remain until it is “cleared” and “acknowledged” as with most standard HMI interfaces (Human Machine Interfaces).

The list can be filtered by the combo box on the left hand menu area.

Filter options are:

- All alerts
- Analogue points
- Digital points
- Device alerts
- Geofence alerts

4.1.1 Manual Acknowledgement

Devices can either be acknowledged by the system or by a user. To acknowledge an alarm that is not auto-acknowledged, simply click on the “Ack” box for the respective alarm. The screen should then refresh, showing the acknowledged alarm.

4.2 Geofences

Geofences can either be circular or polygon in shape.

Circular geofences can also be downloaded to certain device types for improved accuracy on reporting breaches.

The geofence menu option allows the user to list, modify and create new geofences.

For detailed configuration information, see the later configuration section.

4.3 Geofence Searching

A geofence in a large list can be hard to locate. There is a search option available on the left hand menu area called “search for a geofence”.

Enter part of the geofence name you require and press “Search”.

A screen will appear with a list of geofences matching your search criteria.

The list will include the following columns:

- Geofence name
- Lat (Latitude)
- Lon (Longitude)
- Radius (in metres)
- View, Edit and Delete icons

4.4 Messaging

The messaging section allows user text messages to be sent to and from hardware supporting this feature.

The interface is similar to typical email applications in terms of its folder structure.

The outgoing messages in the case of V502 devices are queued for transmission over GPRS. *They are only sent when the device next decides to connect to the host server.* This could be an indeterminate amount of time.

4.5 Device Groups

Device groups can be created by Super Users and devices moved between them.

To create a new group, click on the “Device Groups” option on the “Company” page.

Click on the folder you wish to create a group in, then click “New sub-group”.

Entry the name of a group and click “Save”.

The new device group is created.

4.5.1 Secure Groups

The device groups created previously can be secured to only allow access to certain groups of users. For more information and configuration of these secure groups, contact your reseller.

5 Reports

All reports can be produced in either PDF or native Microsoft Excel format. The same reports can also be scheduled by Super Users.

5.1 Journeys

The journeys report offers two types of view:

- Detailed – a journey by journey report
- Summary – a count of journeys day by day

Report Parameters

Group: All Groups Single Group

Device:

Working Days:

Show geofence names

Start Date: End Date:

Detailed Report Summary Report

[🏠 Reports](#) [📄 Create PDF](#) [📊 Create Excel Spreadsheet](#)

The report can also be filtered by groups and devices if required by choosing the respective options.

The working day / out of hours can also be specified (to set working day periods, see the appropriate section on Company configuration).

5.2 Locations



The location report lists all locations visited during the specified date range:

Group: All Groups Single Group

Device:

Working Days:

Show geofence names

Start Date:  End Date: 

[← Reports](#) [Create PDF](#) [Create Excel Spreadsheet](#)

5.3 Geofences

The geofence report lists all geofences visited. There are various options for sorting the report: by Day, Device or Geofence.



Report Parameters

Group: All Groups Single Group

Device:

Geofence:

Working Days:

Start Date:  End Date: 

Group By:

[← Reports](#) [Create PDF](#) [Create Excel Spreadsheet](#)

5.4 Events

The event report lists all position fixes on selected vehicles that have had certain events occur. Adding events together on a list includes positions that have any of the events on.

The example below shows three events being searched.

Report Parameters

Group: All Groups Single Group

Device:

Show geofence names

Start Date: End Date:

Events

Event Type
Proximity to a postcode (DH7 9FJ, 10 miles)
Panic alert raised
Speed exceeded (50mph)

[Add a new event](#)

[Reports](#) [Create Excel Spreadsheet](#)

The current list of searchable parameters is shown below:

- Proximity to a postcode
Requires a postcode and a search radius
- Proximity to latitude and longitude coordinates
Requires a Latitude, longitude and search radius
- Panic alert raised
- Journey started
- Journey ended
- Device powered up
- Device polled for current location
- GPS timeout occurred
- Idle time exceeded
Idle time limit required
- Rapid changes in idle time
Idle time deviation required
- Speed exceeded
Speed limit required
- Driver ID changed

5.5 Fleet Management

The fleet management “detailed” report lists all vehicles that have had their management information completed.

Report Parameters

Group: All Groups Single Group

Device:

Detailed Report Summary Report

[← Reports](#) [📄 Create PDF](#) [📊 Create Excel Spreadsheet](#)

The “Summary” report lists only vehicles that have events due within the time period specified during the report selection.

Report Parameters

Group: All Groups Single Group

Device:

Detailed Report Summary Report

Days Ahead: Distance Ahead:

[← Reports](#) [📄 Create PDF](#) [📊 Create Excel Spreadsheet](#)

Setting “Days ahead” to 14 lists all vehicles on the report that have events due within 14 days, e.g. Road tax, insurance, servicing etc.

Setting Distance ahead to “1000” lists all vehicles on the report that have servicing due within that mileage.

5.6 Device Configuration

This report lists the basic device configuration such as SMS number, Unique Identifier, Firmware version etc.

5.7 Report Scheduling

All reports can be scheduled to be sent via email.

The “Scheduled Reports” option on the report tab shows the currently scheduled reports:

Report	Format	Schedule			
Device Configuration	Excel	Daily (Mon, Tue, Wed, Thu, Fri, Sat, Sun)			
Journeys	PDF	Daily (Mon, Tue)			

[Reports Menu](#)
[Create a new schedule](#)

From this list, scheduled reports can be adjusted or deleted. Clicking on the “Create a new schedule” allows a Super User to create a new scheduled report

5.7.1 Adding a new schedule

The configuration is by a standard wizard approach:

<p>Step 1 – Choose the report</p> <p>Select Report (Step 1 of 4)</p> <p>Please specify the type of report you wish to schedule:</p> <p> <input checked="" type="radio"/> Journeys Report <input type="radio"/> Locations Report <input type="radio"/> Geofences Report <input type="radio"/> Fleet Management Report <input type="radio"/> Device Configuration Report <input type="radio"/> Billing Report </p> <p>Set Report Parameters</p>	<p>Step 2 – Specify the parameters</p> <p>Specify Parameters (Step 2 of 4)</p> <p>Please specify the parameter values to use for this scheduled journeys report.</p> <p> Group: <input checked="" type="radio"/> All Groups <input type="radio"/> Single Group Device: <input type="text" value="All Devices"/> Working Days: <input type="text" value="N/A"/> <input checked="" type="radio"/> Detailed Report <input type="radio"/> Summary Report </p> <p>Delivery Options</p>
<p>Step 3 – Delivery options</p> <p>Delivery Options (Step 3 of 4)</p> <p>Frequency: <input checked="" type="radio"/> Daily <input type="radio"/> Monthly</p> <p>on: <input type="checkbox"/> Monday <input type="checkbox"/> Tuesday <input type="checkbox"/> Wednesday <input type="checkbox"/> Thursday <input type="checkbox"/> Friday <input type="checkbox"/> Saturday <input type="checkbox"/> Sunday</p> <p>around: <input type="text" value="00:00"/></p> <p>for the: <input type="text" value="Previous Day"/></p> <p>in: <input type="text" value="PDF"/> format</p> <p>Select Recipients</p>	<p>Step 4 – Choose recipients</p> <p>Recipients (Step 4 of 4)</p> <p> <input type="checkbox"/> Reseller Account <input type="checkbox"/> User Account </p> <p>Finish</p>

On Step 3, there are a flexible set of delivery times.

For example, to select a report on your fleet, for the previous week, in PDF format, to be delivered to your inbox on Monday morning each week, your settings would be:

Delivery Options (Step 3 of 4)

Frequency: Daily Monthly

- on:
- Monday
 - Tuesday
 - Wednesday
 - Thursday
 - Friday
 - Saturday
 - Sunday

around:

for the:

in: format

Select Recipients 

6 End user configuration options

6.1 User accounts

The user options are set on the “Your account” link on the “Support tab”. This is available to all user levels.

6.1.1 Account details

This option allows the user to change their First name / Last Name and their SMS number (if applicable).

6.1.2 Changing your password

This option allows the user to change their password. The standard mechanism of entering the old password, followed by the new one (repeated) is used.

6.1.3 Preferences / Automatic Timezone Feature

This option allows the user to alter their viewing preferences.

Map units can be set to display in either Miles or Kilometres.

The timezone can also be set for the display of all timezones. The native storage of all time related data is UTC (GMT). For the user display, the dates are dynamically converted to the required timezone when displayed for a user, a report (or a scheduled report).

Daylight savings enabled timezones automatically apply daylight savings when required.

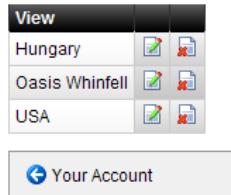
Show distances in:

Time Zone: Always display dates and times in UTC (GMT)

Display dates and times using a specific time zone

6.1.4 Map Views

This lists all “Map views” that are configured on the current user account. Map views are simply stored “extents” or map areas. These save the user constantly mapping to certain areas of the maps repeatedly.



6.2 Geofences

A geofence is a generic term applied to a geographical area on a map which triggers certain events. These can be:

- Alter the current location name of a vehicle to the geofence name (commonly called a place marker);
- Send an alert if the vehicle leaves the geofence;
- Send an alert if the vehicle enters the geofence (sometimes called a banned geofence);
- Any combination of the above.


6.2.1 Types

6.2.1.1 Circular

These are created using the Company -> Geofence -> “Create new geofence” option.

- Search for a postcode
- Draw geofence
- Enter lat and lon values
- Select a system-defined zone

Any of the above options takes the user to Step 2 where the geofence Latitude and Longitude are specified either from a Postcode search, drawing a geofence on a map, entering coordinates directly or selecting a system defined “zone”.

Or from a part of the site that shows current or historical positions of a vehicle with the following icon beside it: 

Clicking the icon takes the user immediately to step 3 of the Geofence wizard which requires the following data:

- Lat (this is completed from the position just clicked)
- Lon (this is completed from the position just clicked)
- Name
- Radius
- Place Marker

The name is the name of the geofence as it should appear on reports or alerts.

The radius should be at least 50 metres (to minimise false alerts), but not too big (e.g. 1000 metres) so the vehicle never leaves the geofence.

The “Placemark” option uses the Geofence name in the vehicle journey history whenever the device is inside the circle.

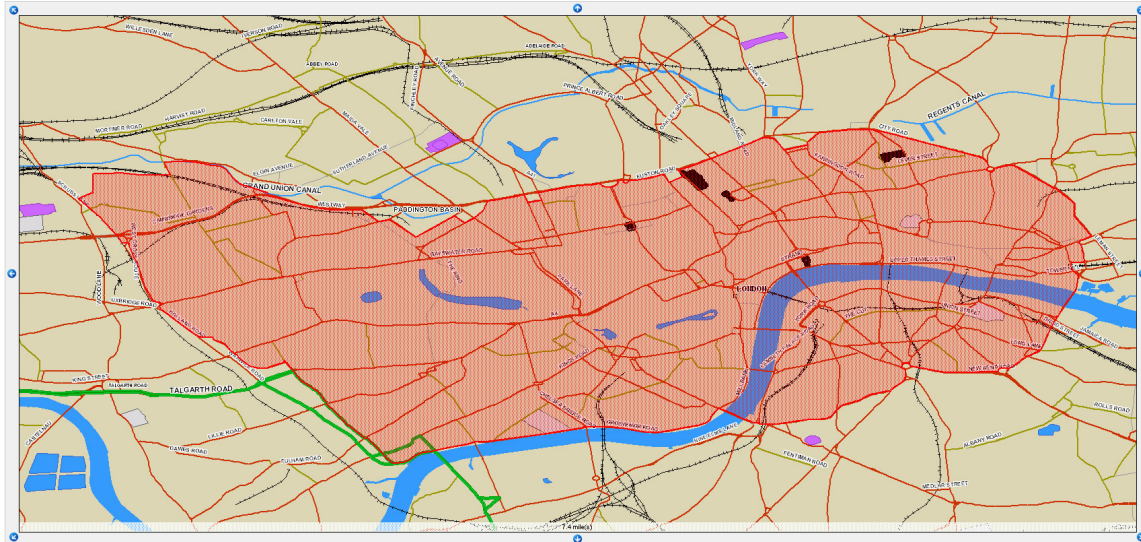
Step 4 specifies which devices to attach the geofence to. The choices are:

- All devices in all groups
- All devices in a single group
- A single device

Clicking “Create geofence” completes the geofence creation.

6.2.1.2 Polygon (Zones)

Currently, Polygon geofences can be defined by the system administrator. An example of a polygon geofence is the London congestion zone.



These geofences are “selected” and configured in the normal way as shown previously in Step 1 of the Circular geofence menu.

6.2.2 Geofence Storage

Geofences are always determined on the host service, but require timely fixes at appropriate times to make them meaningful. Geofences are always stored on the host, but in certain devices, they can also be downloaded.

6.2.2.1 Host based

These are available for all device types and all geofence calculations are done on the host service.

Calculations are made on each and every fix received.

6.2.2.2 Device based

Device based geofences can be used to make geofence reporting more precise.

For example, with devices that support adaptive fixing, i.e. when travelling in a straight line, only send a fix every 5km, there is the possibility a geofences breach could be missed.

Take the example where a vehicle is travelling in a straight line and it sends a fix. It is currently outside geofence X. It then passes through geofence X and continues in a straight line until it is outside geofence X again. Then, several Km after, a second fix is sent. The host system has no data to indicate that the vehicle has ever passed in and out of the geofences. In effect, the geofences breach was missed.

The V502 has a feature whereby geofences can be downloaded to the device. When breach conditions are met (which are evaluated constantly), this overrides the adaptive fixing and causes a fix to be sent to the host instantaneously.

Breach conditions can be:

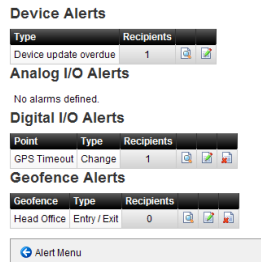
Entry;

Exit;

Entry or Exit.

6.3 Alerts

Alerts can be set from the Administration -> Devices -> *Vehicle X* -> Alarm Overview option where “Vehicle X” is a specific vehicle.



6.3.1 Device

The only current device alert is “contact overdue”. The previous screen shows a single recipient has been configured for this alert.

Clicking on the “1” for the recipients shows the current recipient for this alert.

More recipients may be added by clicking “Add a recipient”:

A screen is then presented listing users and recipient options:

The recipient list is the list of users within the company and any additional recipients manually created for receipt of alerts.

The two current delivery options are SMS and eMail.

SMS are charged in addition to the monthly tariff. Email messages are free.

The following “alarm events” trigger the alert. These are standard type telemetry events.

- Created
An alert message is generated when the alert condition is first triggered;
- Acknowledged
An alert message is generated when a user (or the system via an auto-acknowledge) acknowledges the alert “created” condition;
- Cleared
An alert message is generated when the alert “created” condition no longer exists.

6.3.2 Analog

New analog alarms can be configured via the “New analog I/O alarm” menu option on the maintain device “alerts”

Home Administration Devices Message test Alert Overview New Analog I/O Alert

Analog I/O Point: Idle Time

Type: High Alarm

Alert Text:

Auto Acknowledge:

Raise Value:

Clear Value:

Save Cancel

The type of analog alarms available depend on the device type. The example above shows “idle” time.

To monitor when the idle time reaches a high value, change “type” to “High Alarm”.

Enter a suitable alarm message in the “Alarm text” field.

Choose auto acknowledge if you wish subsequent alerts to be raised without operator intervention.

For a high alarm, the “raise value” should be higher than the “clear value”. This implements a form of hysteresis which is important on values such as speed or battery voltage. If the level is varying slightly, oscillation can cause multiple sequential alerts to be generated.

Always try and set the clear value 20-30% lower than the raise value.

Analog I/O Point: Idle Time

Type: High Alarm

Alert Text: High idle time

Auto Acknowledge:

Raise Value: 10

Clear Value: 8

Save Cancel

The alarm list now contains an Analog alert (with no recipients).

Recipients can be added as detailed earlier.

6.3.3 Digital

Digital alerts are created on the following conditions:

- Change
The value has changed from “off to on” or “on to off”
- Change 0 to 1
The value has changed from “off to on”
- Change 1 to 0
The value has changed from “on to off”

Digital I/O Point:

Type:

Alert Text:

Auto Acknowledge:

The alarm text, auto acknowledge and recipients are set the same way as on the analog alerts.

6.3.4 Geofence

Geofence alerts are set as shown below:

Geofence:

Type:

Entry Text:

Exit Text:

Auto Acknowledge:

A geofence should be chosen first.

The “type” can be one of the following:

- Entry
Alert when vehicle enters geofence only;
- Entry / Exit
Alert when vehicle enters or leaves geofence;
- Exit
Alert when vehicle leaves geofence;
- Entry and stop
Alert when vehicle enters geofence and subsequently stops within it;
- Entry and stop / Exit after stop
Alert when vehicle enters geofence and subsequently stops within it and then when it next leaves after the stop event.

The “entry text” is the message to send for the alert when the vehicle enters the geofence.

`%DEVICE%` arrived at `%GEOFENCE%` at `%TIMESTAMP%` is the default text.

`%DEVICE%` will be replaced by the device name

`%GEOFENCE%` will be replaced by the geofence name

`%TIMESTAMP%` will be replaced by the timestamp, corrected into the default COMPANY timezone

`%TIMESTAMPUTC%` will be replaced by the UTC (GMT+0) timestamp.

The “exit text” the message to send for the alert when the vehicle leaves the geofence and it can have the same “placeholders” as the entry option.

7 Abbreviations

Abb.	Description
BNG	British National Grid – Generally used by the Ordnance survey.
FIX	Fix – data relating to a vehicle and point in time. Usually includes a three dimensional fix (Latitude, Longitude, Altitude), along with various other GPS and non-GPS related data (date, time, speed, distance, I/O states etc).
Geofence	A <i>Geographical fenced</i> area on a map which triggers certain events.
GPRS	General Packet Radio Service – a term for an “always on” Internet link from a mobile type device operating over the GSM network.
GPS	Global Positioning System – a network of satellites, free to use, owned by the American Government which allow devices to accurately determine their position and altitude.
HMI	Human Machine Interface – an interface presented to a user which usually links to some sort of machinery.
I/O	Input / Output – usually refers to an electrical connection such as a panic button
V502	Vascotrack V502 GPS tracking device
WGS84	World Geodetic System 1984 – the GPS satellite network uses this as the main coordinate projection