Quartix

Award Winning Vehicle Tracking

cleardata® solutions

Saving Time ... and Money

Real-time vehicle tracking on the Internet

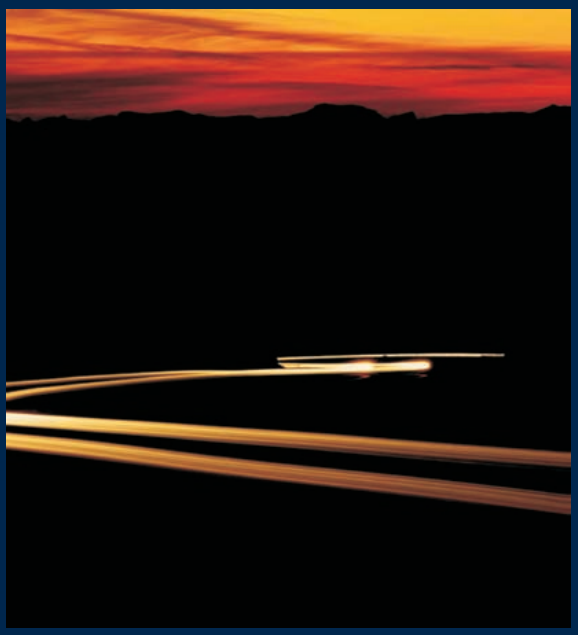
Using the Quartix vehicle tracking system you can track your vehicles in real-time, anytime, using any PC. There is no need for control stations, proprietary software or maps, as everything is accessed over the internet. Our system uses GPS satellites to locate your vehicles, and GPRS technology to ensure that their positions and vehicle log data are constantly updated. Vehicle logs and timesheets are also sent to you by e-mail each morning for maximum convenience.

Reduce overtime, increase capacity

Savings on overtime payments can easily reach thousands of pounds a year - providing a return on investment from the outset. But the real boost to the bottom line comes from increased capacity: most of our customers can get more done each day by using the information that the Quartix system provides. This can help avoid costly weekend working or even enable you to expand the business without increasing fixed costs and manpower.

Managing your duty of care and working time responsibilities

Employment legislation is becoming more complex and onerous all the time. Duty of care legislation and the Working Time Directive, as well as the taxable benefits of commercial vehicles, pose a management burden if proper records are to be maintained and monitored to ensure compliance. The Quartix system is an ideal tool which not only saves time but also provides you with a clearly recorded archive with accurate information.



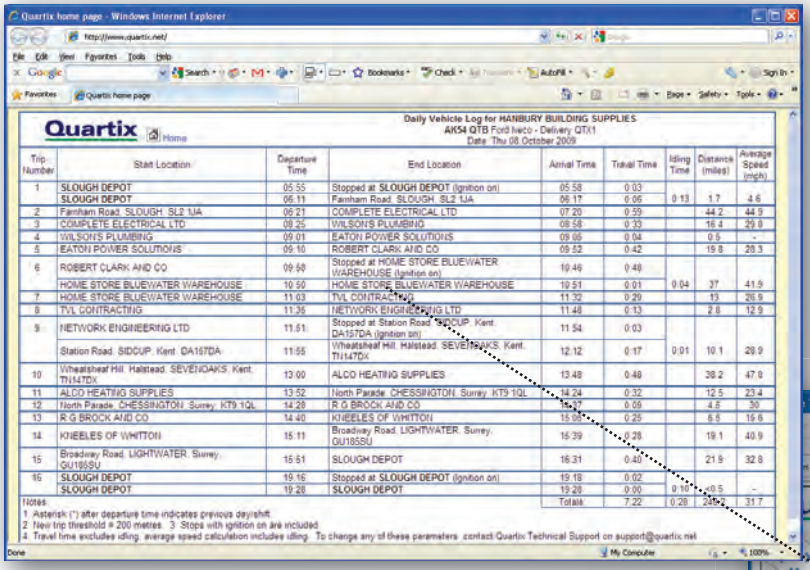
Installation

We have an extensive network of trained installers around the UK, and installations are either carried out on your premises or at a convenient location near you. Little more than an hour is required, and the equipment is all installed discreetly in the vehicle. Moving the system to a new vehicle is also straightforward, and we can normally arrange this within a few days.

Timesheets

TIMESHEETS AVAILABLE ON THE WEB OR DELIVERED TO YOUR MAILBOX

Timesheets with vehicle activity logs are constantly updated and available for you on the Internet at any time you need them. Daily or weekly timesheets can also be sent to you automatically by e-mail, greatly simplifying the tasks of payroll and job costing. Your workforce doesn't have to spend time filling them in, and you don't have to waste time checking the details.


Quartix home page - Windows Internet Explorer

Quartix

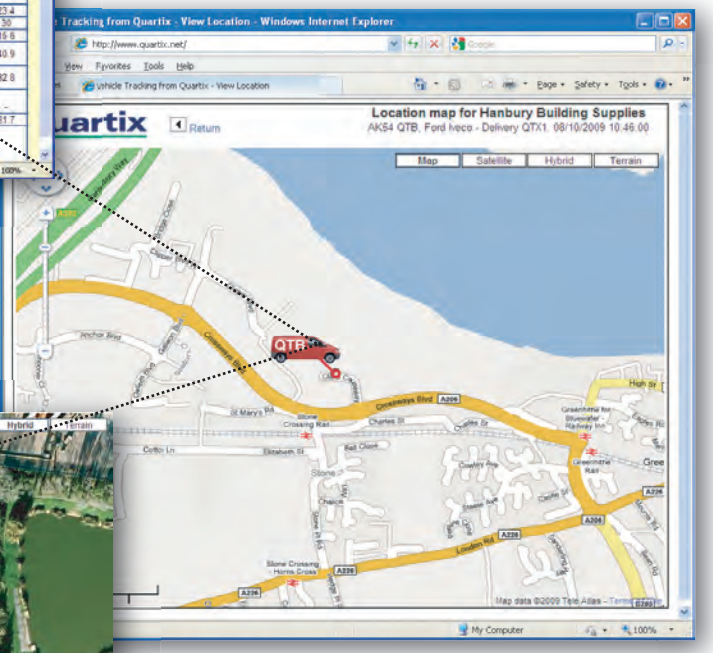
Daily Vehicle Log for HANBURY BUILDING SUPPLIES
AK54 QTB Ford Iveco - Delivery QTX1
Date: Thu 08 October 2009

Trip Number	Start Location	Departure Time	End Location	Arrival Time	Travel Time	Idling Time	Distance (miles)	Average Speed (mph)
1	SLOUGH DEPOT	05:55	Stopped at SLOUGH DEPOT (ignition on)	05:58	0:03			
	SLOUGH DEPOT	06:11	Farnham Road, SLOUGH, SL2 1JA	06:17	0:06	0:13	1.7	4.6
2	Farnham Road, SLOUGH, SL2 1JA	06:21	COMPLETE ELECTRICAL LTD	07:20	0:59		44.2	44.9
3	COMPLETE ELECTRICAL LTD	08:25	WILSON'S PLUMBING	08:58	0:33		16.4	29.8
4	WILSON'S PLUMBING	09:01	EATON POWER SOLUTIONS	09:05	0:04		0.5	-
5	EATON POWER SOLUTIONS	09:10	ROBERT CLARK AND CO	09:53	0:42		19.8	28.3
6	ROBERT CLARK AND CO	09:59	Stopped at HOME STORE BLUEWATER WAREHOUSE (ignition on)	10:46	0:49			
	HOME STORE BLUEWATER WAREHOUSE	10:50	HOME STORE BLUEWATER WAREHOUSE	10:51	0:01	0:04	.37	41.9
7	HOME STORE BLUEWATER WAREHOUSE	11:03	TVL CONTRACTING	11:32	0:29		13	26.9
8	TVL CONTRACTING	11:36	NETWORK ENGINEERING LTD	11:48	0:13		2.8	12.9
9	NETWORK ENGINEERING LTD	11:51	Stopped at Station Road, SIDCUP, Kent, DA157DA (ignition on)	11:54	0:03			
	Station Road, SIDCUP, Kent, DA157DA	11:55	Wheatsheaf Hill, Halstead, SEVENOAKS, Kent, TN147DX	12:12	0:17	0:01	10.1	28.9
10	Wheatsheaf Hill, Halstead, SEVENOAKS, Kent, TN147DX	13:00	ALCO HEATING SUPPLIES	13:48	0:48		38.2	47.9
11	ALCO HEATING SUPPLIES	13:52	North Parade, CHESSINGTON, Surrey, KT9 1QL	14:24	0:32		12.5	23.4
12	North Parade, CHESSINGTON, Surrey, KT9 1QL	14:28	R G BROCK AND CO	14:37	0:09		4.5	30
13	R G BROCK AND CO	14:40	KNEELES OF WHITTON	15:05	0:25		6.5	15.6
14	KNEELES OF WHITTON	15:11	Broadway Road, LIGHTWATER, Surrey, GU185SU	15:39	0:28		19.1	40.9
15	Broadway Road, LIGHTWATER, Surrey, GU185SU	15:51	SLOUGH DEPOT	16:31	0:40		21.9	32.8
16	SLOUGH DEPOT	19:16	Stopped at SLOUGH DEPOT (ignition on)	19:18	0:02			
	SLOUGH DEPOT	19:28	SLOUGH DEPOT	19:28	0:00	0:10	<0.5	-
				Totals	7:22	0:28	245.2	31.7

Notes:
1. Asterisk (*) after departure time indicates previous day/shift.
2. New trip threshold = 200 metres. 3. Stops with ignition on are included.
4. Travel time excludes idling, average speed calculation includes idling. To change any of these parameters, contact Quartix Technical Support on support@quartix.net

CLEAR REPORTS

Daily logs are sent in a clear easy-to-read format. The day is split into separate trips and the level of detail in the report can be specified for each vehicle. Stops with the ignition on and short movements around a site can either be shown or filtered out - it's your choice.


Tracking from Quartix - View Location - Windows Internet Explorer

Location map for Hanbury Building Supplies
AK54 QTB, Ford Iveco - Delivery QTX1, 08/10/2009 10:46:00

Map | Satellite | Hybrid | Terrain

QTB

CUSTOM LOCATIONS & JOB REFERENCES

We can add your customer names and locations to the database if required, or you can do this yourself (see separate section in brochure). These names then replace the street addresses on your customised reports, making it easy to identify sites that you visit regularly.

QUICK LINKS

Embedded in the e-mail report are links to location and route maps - allowing you to get quickly and directly to a visual image of journeys or stopping points that you want to check.

DRIVER IDENTIFICATION

If your drivers use a range of different vehicles, then the Driver ID option ensures that timesheets are still provided for the driver, no matter which vehicle he has used in the course of the week or month. All that is required is a simple magnetic key, which the driver places on a small reader on the dashboard.

GOOGLE MAPS

The system fully supports Google maps and satellite views, providing you with pinpoint accuracy and detail on your vehicles' locations.

Vehicle Route Map Display

It couldn't be simpler. This page demonstrates how to access and review vehicle activity using the 'route map' option. To try this out for yourself, telephone or e-mail us for demonstration password details and then follow the procedure set out below:

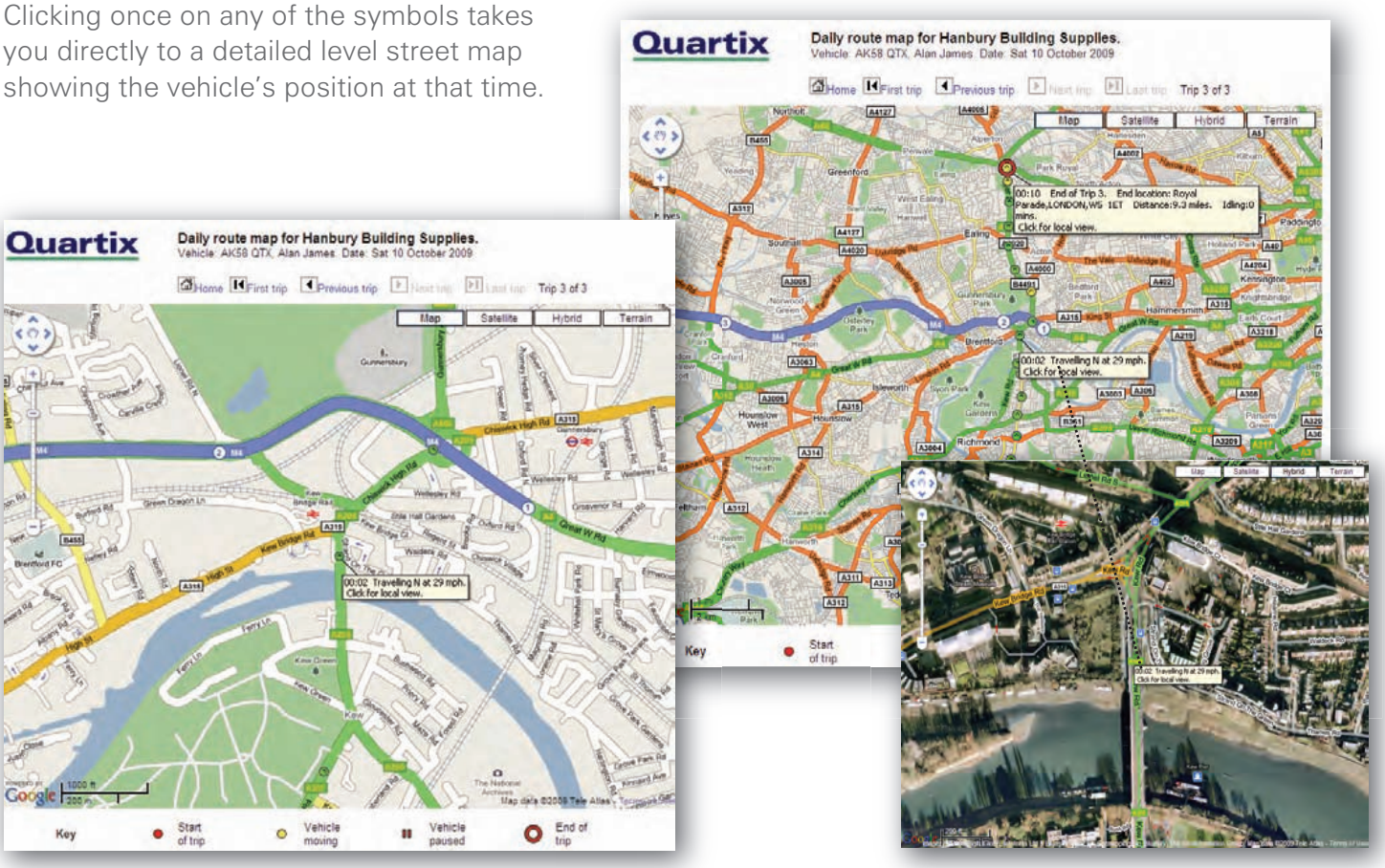
1. Go to www.quartix.net and enter your subscriber ID, username and password in the three boxes provided, and click the button beneath to log in.
2. Select the "Daily Route Map" option from the list on the left hand side.
3. When prompted, select a vehicle from the list, enter a date and click "OK".
4. Follow the instructions around the screen example below to step through the day's activity.

You can zoom in or zoom out using the slider bar at the top left, and move around the maps by clicking and holding the left button down while you move the map around.

A series of symbols shows the route taken. When the mouse is held over any of these, speed and time information are displayed.

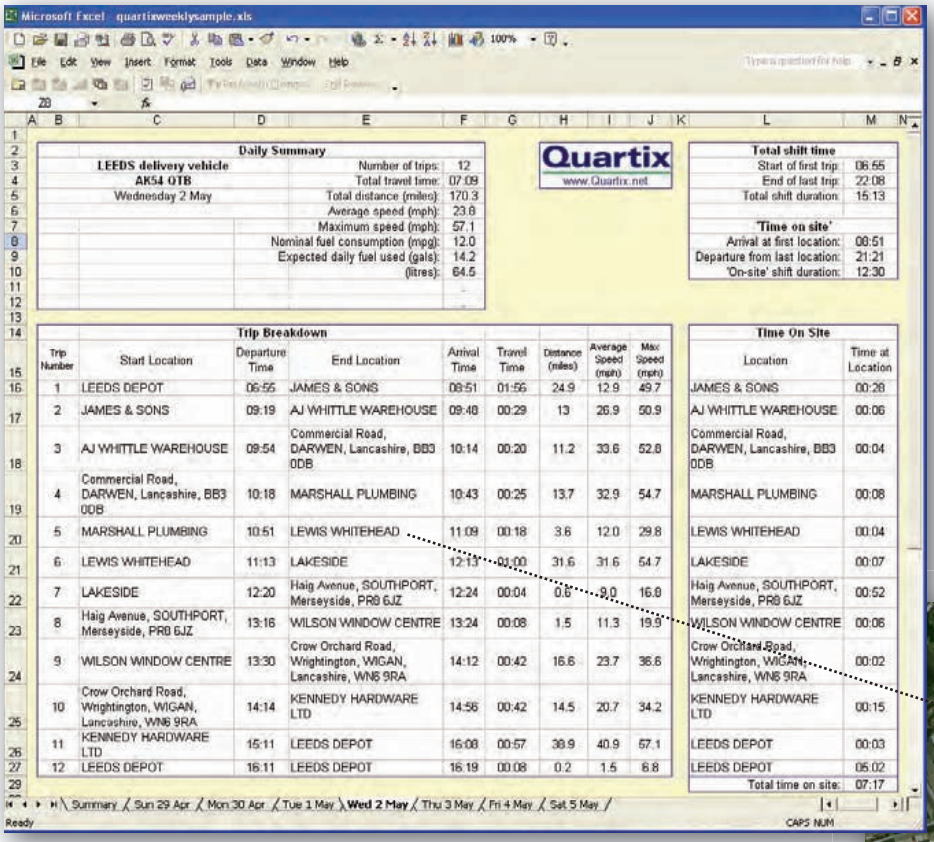
Clicking once on any of the symbols takes you directly to a detailed level street map showing the vehicle's position at that time.

The "Live Tracking" and "Daily Vehicle Log" options can be used in exactly the same way. For Live Tracking you will remain logged in until you leave the site, but for other options you will only remain logged until you have been inactive for 20 minutes. You can step through the day's journeys by using the next/previous trip buttons.



Switching to satellite or hybrid views allow you to move right into a detailed view of the street or site where the vehicle is situated.

Excel Management Reports



Daily Summary

LEEDS delivery vehicle	
AK54 QTB	
Wednesday 2 May	
Number of trips:	12
Total travel time:	07:09
Total distance (miles):	170.3
Average speed (mph):	23.8
Maximum speed (mph):	57.1
Nominal fuel consumption (mpg):	12.0
Expected daily fuel used (gals):	14.2
(litres):	64.5

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Total shift time

Start of first trip:	06:55
End of last trip:	22:08
Total shift duration:	15:13
'Time on site'	
Arrival at first location:	08:51
Departure from last location:	21:21
'On-site' shift duration:	12:30

Trip Breakdown

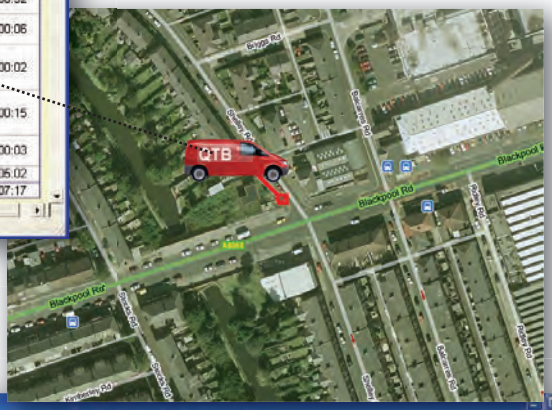
Trip Number	Start Location	Departure Time	End Location	Arrival Time	Travel Time	Distance (miles)	Average Speed (mph)	Max Speed (mph)
1	LEEDS DEPOT	06:55	JAMES & SONS	08:51	01:56	24.9	12.9	49.7
2	JAMES & SONS	09:19	AJ WHITTLE WAREHOUSE	09:48	00:29	13	26.9	50.9
3	AJ WHITTLE WAREHOUSE	09:54	Commercial Road, DARWEN, Lancashire, BB3 0DB	10:14	00:20	11.2	33.6	52.8
4	Commercial Road, DARWEN, Lancashire, BB3 0DB	10:18	MARSHALL PLUMBING	10:43	00:25	13.7	32.9	54.7
5	MARSHALL PLUMBING	10:51	LEWIS WHITEHEAD	11:09	00:18	3.6	12.0	29.8
6	LEWIS WHITEHEAD	11:13	LAKESIDE	12:13	01:00	31.6	31.6	54.7
7	LAKESIDE	12:20	Haig Avenue, SOUTHPORT, Merseyside, PR8 6JZ	12:24	00:04	0.6	9.0	16.8
8	Haig Avenue, SOUTHPORT, Merseyside, PR8 6JZ	13:16	WILSON WINDOW CENTRE	13:24	00:08	1.5	11.3	19.9
9	WILSON WINDOW CENTRE	13:30	Crow Orchard Road, Wrightington, WIGAN, Lancashire, WN6 9RA	14:12	00:42	16.6	23.7	36.6
10	Crow Orchard Road, Wrightington, WIGAN, Lancashire, WN6 9RA	14:14	KENNEDY HARDWARE LTD	14:56	00:42	14.5	20.7	34.2
11	KENNEDY HARDWARE LTD	15:11	LEEDS DEPOT	16:08	00:57	38.9	40.9	57.1
12	LEEDS DEPOT	16:11	LEEDS DEPOT	16:19	00:08	0.2	1.5	6.8

Time On Site

Location	Time at Location
JAMES & SONS	00:28
AJ WHITTLE WAREHOUSE	00:06
Commercial Road, DARWEN, Lancashire, BB3 0DB	00:04
MARSHALL PLUMBING	00:08
LEWIS WHITEHEAD	00:04
LAKESIDE	00:07
Haig Avenue, SOUTHPORT, Merseyside, PR8 6JZ	00:52
WILSON WINDOW CENTRE	00:06
Crow Orchard Road, Wrightington, WIGAN, Lancashire, WN6 9RA	00:02
KENNEDY HARDWARE LTD	00:15
LEEDS DEPOT	00:03
LEEDS DEPOT	05:02
Total time on site:	07:17

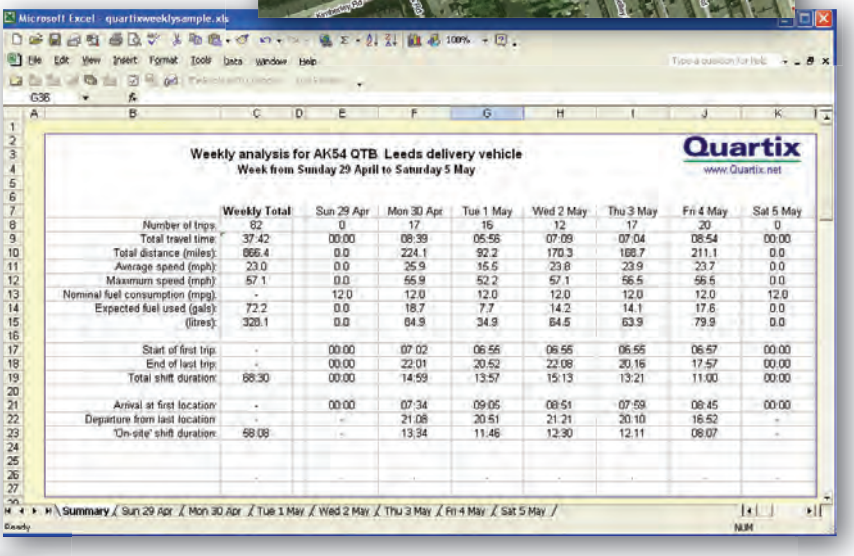
WEEKLY EXCEL REPORTS

Ease-of-use is the key to deriving cost benefit from a tracking system. The weekly Microsoft Excel workbook report (such as the one shown) provides a detailed sheet for each day of the week for each vehicle, together with a summary sheet for the week as a whole. It is e-mailed to you automatically.



MANAGEMENT AND FINANCIAL INFORMATION

Key management information covered by the Excel report includes: mileage and petrol usage, maximum speeds, shift times, driving time and time spent at each site. The report is an invaluable tool for the management of your responsibilities under the Working Time Directive, Duty of Care legislation and in assessing taxable benefits. Private mileage can be entered in the report, providing a breakdown of business and private mileage for each day and the week as a whole.



Weekly analysis for AK54 QTB Leeds delivery vehicle
Week from Sunday 29 April to Saturday 5 May

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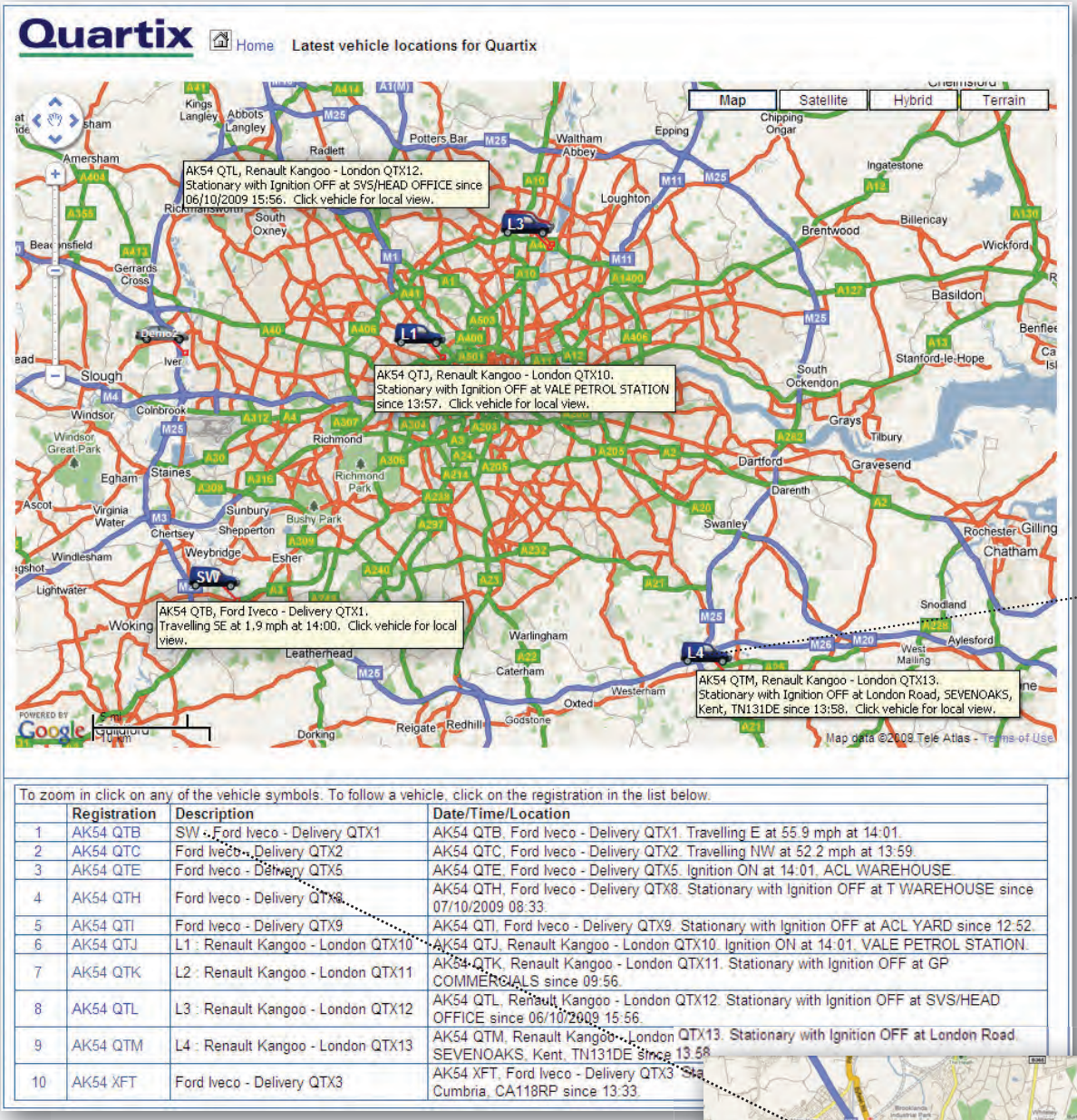
	Weekly Total	Sun 29 Apr	Mon 30 Apr	Tue 1 May	Wed 2 May	Thu 3 May	Fri 4 May	Sat 5 May
Number of trips:	82	0	17	16	12	17	20	0
Total travel time:	37:42	00:00	08:39	05:55	07:09	07:04	08:54	00:00
Total distance (miles):	866.4	0.0	224.1	92.2	170.3	188.7	211.1	0.0
Average speed (mph):	23.0	0.0	25.9	15.5	23.8	23.9	23.7	0.0
Maximum speed (mph):	57.1	0.0	55.9	52.2	57.1	56.5	56.5	0.0
Nominal fuel consumption (mpg):	-	12.0	12.0	12.0	12.0	12.0	12.0	12.0
Expected fuel used (gals):	72.2	0.0	18.7	7.7	14.2	14.1	17.6	0.0
(litres):	328.1	0.0	84.9	34.9	64.5	63.9	79.9	0.0
Start of first trip:	-	00:00	07:02	06:55	06:55	06:55	06:57	00:00
End of last trip:	-	00:00	22:01	20:52	22:08	20:16	17:57	00:00
Total shift duration:	68:30	00:00	14:59	13:57	15:13	13:21	11:00	00:00
Arrival at first location:	-	00:00	07:34	09:05	08:51	07:59	08:45	00:00
Departure from last location:	-	-	21:08	20:51	21:21	20:10	16:52	-
'On-site' shift duration:	58:08	-	13:34	11:46	12:30	12:11	08:07	-

CO2 REDUCTIONS

Based on the estimated fuel consumption of each vehicle, the Quartix system provides an analysis and summary of CO2 emissions for each vehicle, which are then reported for the fleet as a whole in the monthly report. It's an invaluable tool in helping you reduce your fleet's carbon footprint.

Live Tracking on the Internet



To zoom in click on any of the vehicle symbols. To follow a vehicle, click on the registration in the list below.

	Registration	Description	Date/Time/Location
1	AK54 QTB	SW - Ford Iveco - Delivery QTX1	AK54 QTB, Ford Iveco - Delivery QTX1. Travelling E at 55.9 mph at 14:01.
2	AK54 QTC	Ford Iveco - Delivery QTX2	AK54 QTC, Ford Iveco - Delivery QTX2. Travelling NW at 52.2 mph at 13:59.
3	AK54 QTE	Ford Iveco - Delivery QTX5	AK54 QTE, Ford Iveco - Delivery QTX5. Ignition ON at 14:01. ACL WAREHOUSE.
4	AK54 QTH	Ford Iveco - Delivery QTX8	AK54 QTH, Ford Iveco - Delivery QTX8. Stationary with Ignition OFF at T WAREHOUSE since 07/10/2009 08:33.
5	AK54 QTI	Ford Iveco - Delivery QTX9	AK54 QTI, Ford Iveco - Delivery QTX9. Stationary with Ignition OFF at ACL YARD since 12:52.
6	AK54 QTJ	L1 : Renault Kangoo - London QTX10	AK54 QTJ, Renault Kangoo - London QTX10. Ignition ON at 14:01. VALE PETROL STATION.
7	AK54 QTK	L2 : Renault Kangoo - London QTX11	AK54 QTK, Renault Kangoo - London QTX11. Stationary with Ignition OFF at GP COMMERCIALS since 09:56.
8	AK54 QTL	L3 : Renault Kangoo - London QTX12	AK54 QTL, Renault Kangoo - London QTX12. Stationary with Ignition OFF at SVS/HEAD OFFICE since 06/10/2009 15:56.
9	AK54 QTM	L4 : Renault Kangoo - London QTX13	AK54 QTM, Renault Kangoo - London QTX13. Stationary with Ignition OFF at London Road, SEVENOAKS, Kent, TN131DE since 13:58.
10	AK54 XFT	Ford Iveco - Delivery QTX3	AK54 XFT, Ford Iveco - Delivery QTX3 Sta... Cumbria, CA118RP since 13:33.

A REAL INTERNET SOLUTION TO TRACKING

A unique feature of the Quartix solution is that it requires no software, maps or special configuration settings to run. This means that you can view the position of all of your vehicles in real-time, anytime, from any PC connected to the internet, just by logging on to our web-site using your username and password details.

As there are no restrictions on how many PC's you use for the system, and there are no charges for software or map licences, you can use as many displays as you need around your business. You can also provide access to the system for key customers, so that they can be kept updated on progress. Easy-to-use, intuitive navigation tools and links are built into the user interface, making the Quartix system one of the most reliable and user-friendly systems available.

LINKS TO INDIVIDUAL VEHICLE LOCATIONS

In order to simplify the process of finding a specific vehicle in a larger fleet, there are links provided to the vehicle registration numbers in the table beneath the map. Clicking on any of these links pinpoints the exact position of that vehicle, from which you can use the zoom in/out slider bar.

Real-Time GPRS Data

REAL-TIME VEHICLE DATA USING THE GPRS NETWORK

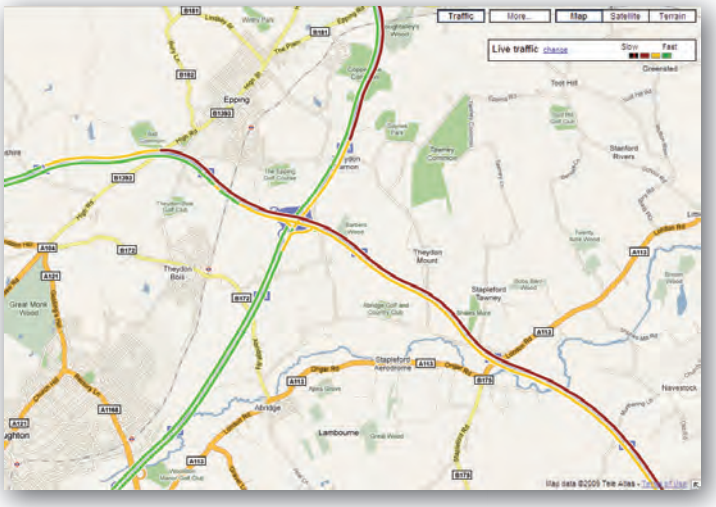
The Quartix system uses the Orange GPRS network to maintain a real-time link with our servers. Vehicle locations are updated every minute while the vehicle is on the move, and as soon as the ignition is turned on or off. The data update period can be adjusted right down to 10 seconds if required. Once the 'all vehicle' screen is displayed (see main image) it will continue to update the positions of the vehicles as new data arrives.

LOCATING THE RIGHT VEHICLE FOR A CALL-OUT: POST-CODE SEARCH

Vehicle groups can be set up and shown in different colours or as different icons, so that you can easily find the nearest vehicle of the right type for a service request or pick-up. Clicking on the vehicle icon takes you immediately to a screen showing the exact position of the vehicle (see vehicle number L4 on the example). You can also specify a post-code, and the system will report the closest vehicle to that location, showing the distance from it.

VEHICLE STATUS INFORMATION

The table beneath the map display shows the status of each vehicle, including its speed and direction and, if the vehicle has stopped how long it has been stationary for. The description and registration number details can be customised to make the vehicles easy to recognise.



RANGE OF DISPLAY OPTIONS

All street maps are downloaded in real-time, and street name and address information is regularly updated from Royal Mail. In addition to this you can set the system to display the maps and status information in a range of formats. This is especially useful if a wide-screen display is being used in a service department, for example.

TRAFFIC INFORMATION

Clicking on the "Google" logo at the bottom left of the map display highlights the current state of traffic around the vehicle. You can use this to update your clients on progress and expected arrival times without needing to disturb your driver.

Monthly Excel Report

IMPROVE VEHICLE UTILISATION ACROSS YOUR FLEET

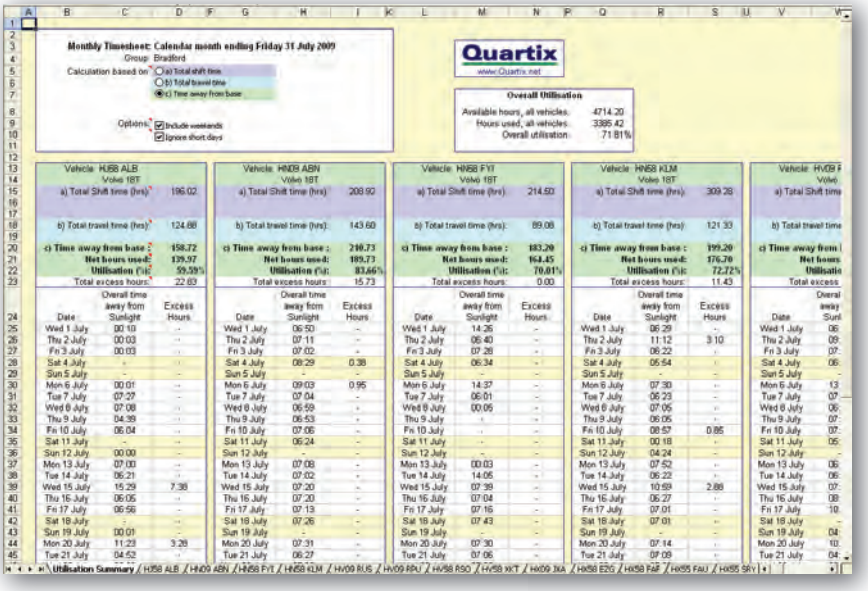
The monthly summary report provides a clear picture of the movement and usage of all vehicles in a specific group, for a calendar month. Groups can be categorised according to vehicle type, region of operation, depot or function.

DETAILS OF VEHICLE USAGE

The report is structured to provide a separate detailed worksheet for each vehicle in a designated group, allowing easy viewing of the number of trips made, mileage recorded, expected fuel consumption and length of time that it has been away from base - for every day of the month.

FLEET SUMMARY INFORMATION

In addition to the detailed vehicle-specific worksheets the report also provides two further worksheets and a chart which summarise vehicle usage in terms of mileage covered, and fleet and driver capacity utilisation – which may be calculated in a variety of ways.



CALCULATING FLEET UTILISATION

The report can calculate fleet utilisation based on a range of different parameters, according to your requirements:

Time spent away from the specified base location (which may be different for each vehicle).

Travelling time.

Total time from first to last use of vehicle during each shift.

ADDITIONAL FEATURES

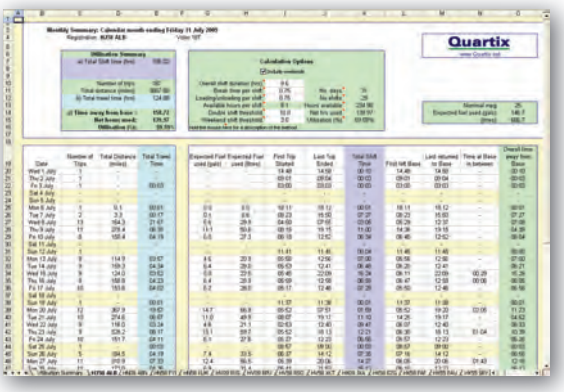
The report has a user-friendly 'view down' spreadsheet layout, featuring vehicle-specific columns and utilisation is summarised on a daily and monthly basis. Weekends can be included or excluded at vehicle level. Pop-up help boxes describe the way the various features and calculations are used.
Excess hours are highlighted – management can specify shift times and any overtime hours will be shown.
Monthly recorded mileages can be compared against the vehicle odometer readings.
Additional vehicle movement data and analysis can be appended to each monthly vehicle summary page.

ACCESSING THE REPORT

Log onto the system as an administrator.

Click 'Extended Reporting' menu option.

Select the 'Monthly Summary Spreadsheet' and follow the instructions.



Improving Fleet Utilisation

POTENTIAL BENEFITS AND EFFICIENCY IMPROVEMENTS

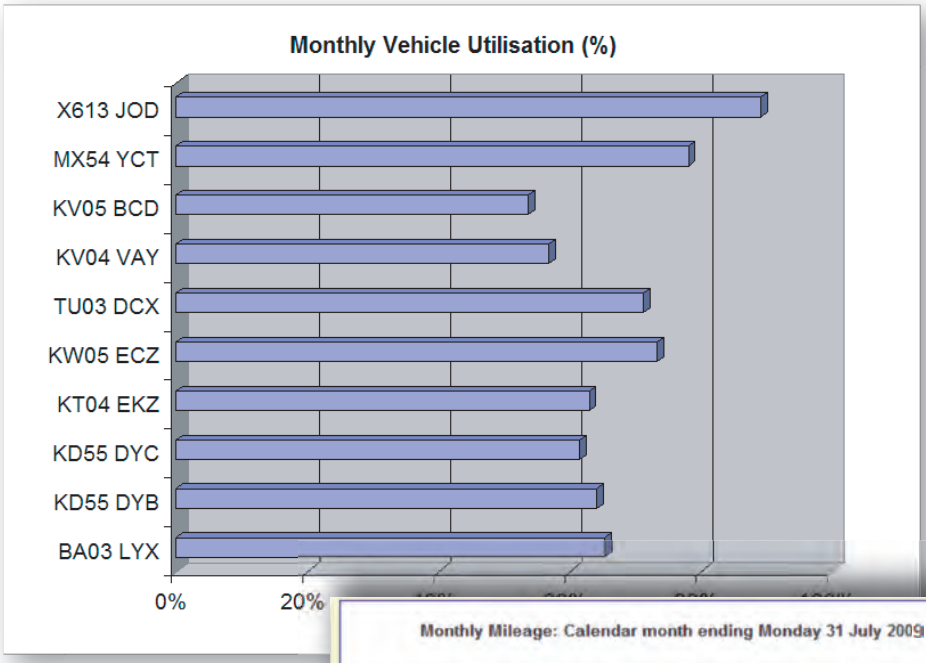
The monthly report allows you to identify those vehicles which are not being used to capacity. From the utilisation chart (see below) you can easily home in on the problem areas. Within the same workbook the user can go into the utilisation detail for that vehicle – which will quickly highlight the routes or days of the month on which the use of the vehicle could be improved.

Here are some of the potential benefits:

By rescheduling calls or routes to other vehicles, improvements of up to 15% in capacity are often achievable.

Vehicles can be re-allocated or transferred to other depots.

Purchase of additional vehicles for the fleet can be deferred until the existing vehicles are fully utilised.



Vehicle utilisation for the month is shown in an Excel bar chart.

Similarly, low percentage utilisation can be sufficient justification for deferring purchase of additional fleet vehicles.

Monthly Mileage: Calendar month ending Monday 31 July 2009

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Vehicle: BA03 LYX Ford Transit Total number trips: 357 Number of days used: 20 Total Monthly mileage: 2026.6		
Date	Number of Trips	Daily distance (miles)
Sat 1 Jul	0	0.0
Sun 2 Jul	0	0.0
Mon 3 Jul	19	72.1
Tue 4 Jul	23	70.3
Wed 5 Jul	18	175.5
Thu 6 Jul	3	10.6
Fri 7 Jul	7	44.5
Sat 8 Jul	0	0.0
Sun 9 Jul	0	0.0
Mon 10 Jul	4	117.1
Tue 11 Jul	0	0.0
Wed 12 Jul	0	0.0
Thu 13 Jul	33	127.4
Fri 14 Jul	34	181.5
Sat 15 Jul	17	16.7
Sun 16 Jul	6	62.5
Mon 17 Jul	37	147.2
Tue 18 Jul	25	129.4
Wed 19 Jul	15	65.5

Vehicle: KD55 DYB Ford Transit Total number trips: 363 Number of days used: 21 Total Monthly mileage: 1687.7		
Date	Number of Trips	Daily distance (miles)
Sat 1 Jul	0	0.0
Sun 2 Jul	0	0.0
Mon 3 Jul	15	46.1
Tue 4 Jul	22	87.1
Wed 5 Jul	27	97.0
Thu 6 Jul	48	102.0
Fri 7 Jul	0	0.0
Sat 8 Jul	3	4.7
Sun 9 Jul	1	9.7
Mon 10 Jul	13	65.0
Tue 11 Jul	19	66.6
Wed 12 Jul	13	150.9
Thu 13 Jul	23	81.0
Fri 14 Jul	17	93.7
Sat 15 Jul	2	10.8
Sun 16 Jul	0	0.0
Mon 17 Jul	0	0.0
Tue 18 Jul	16	47.8
Wed 19 Jul	21	176.8

Vehicle: KD55 DYC Ford Transit Total number trips: 323 Number of days used: 20 Total Monthly mileage: 1280.8		
Date	Number of Trips	Daily distance (miles)
Sat 1 Jul	0	0.0
Sun 2 Jul	0	0.0
Mon 3 Jul	0	0.0
Tue 4 Jul	0	0.0
Wed 5 Jul	3	19.0
Thu 6 Jul	33	103.9
Fri 7 Jul	35	107.4
Sat 8 Jul	3	26.8
Sun 9 Jul	1	0.8
Mon 10 Jul	16	62.5
Tue 11 Jul	16	57.4
Wed 12 Jul	5	34.1
Thu 13 Jul	0	0.0
Fri 14 Jul	16	160.8
Sat 15 Jul	0	0.0
Sun 16 Jul	1	46.8
Mon 17 Jul	16	60.0
Tue 18 Jul	21	73.8
Wed 19 Jul	22	61.6

The monthly mileage report shows the distance covered by each vehicle for every day of the month.

Weekly Route Reports

ELIMINATING INEFFICIENCIES AND DUPLICATION BY ROUTE ANALYSIS

Available on either a daily or weekly basis, this key management tool is of particular value to fleets operating from multiple depots, or with groups of vehicles covering different areas. The Weekly Route Chart provides a national or regional overview of mobile workforce activity in any selected week, displayed clearly on a colour plot in Microsoft Excel®. This can greatly assist you in optimising your fleet operations.

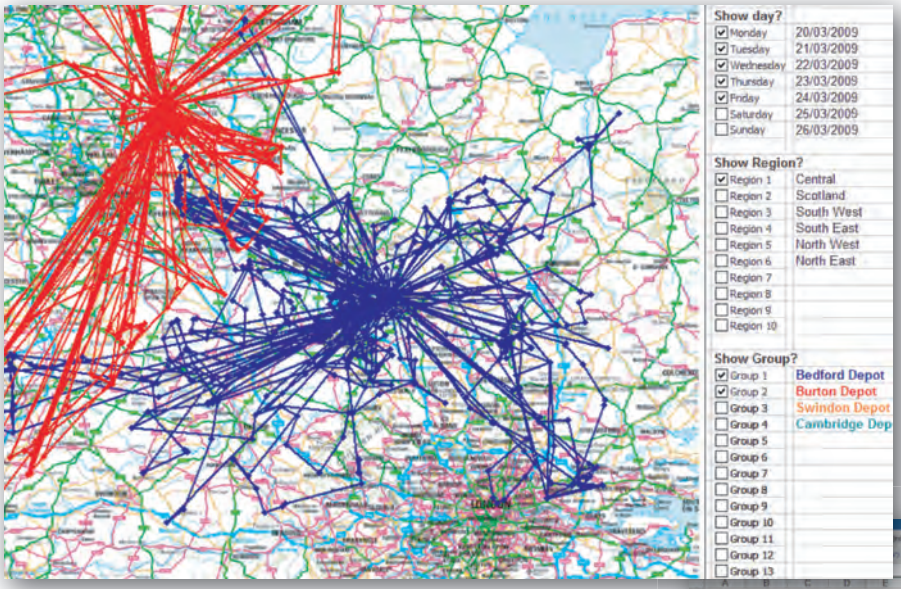
This facility offers significant business benefits:

COST SAVINGS through the easy identification of journey duplication and overlap by vehicles from adjacent depots. Removing these inefficiencies will result in greatly reduced fuel expenditure and maintenance costs.

STREAMLINING of fleet whilst retaining excellent standards of customer service through raised levels of operation.

MORE EFFICIENT ALLOCATION of service/delivery calls through improved insight into longer term fleet activity.

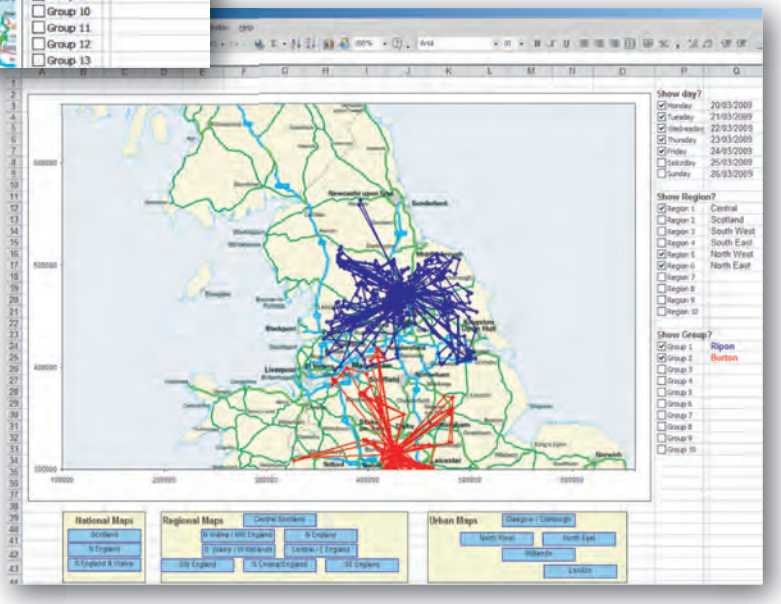
OPTIMUM ALLOCATION of new clients to specific depots, based on a graphical overview of current routes.



A typical route chart for two depots

ACCESSING THE REPORT

The procedure for accessing this report is the same as that for the monthly report, described on the previous page. These reports are accessible for you from any PC with Internet access – no special tools or software are required.



KEY FEATURES OF THE REPORTS

7 days' routes are summarised on a single map.

Each vehicle or group is shown in a different colour for clarity.

Check boxes are provided for selection of the groups and/or days to be compared on screen.

Access is provided to regional and urban maps covering all UK routes.

Choice of available map scales.

An 'omit' option is provided, to limit viewing (where required), to designated vehicles and/or events.

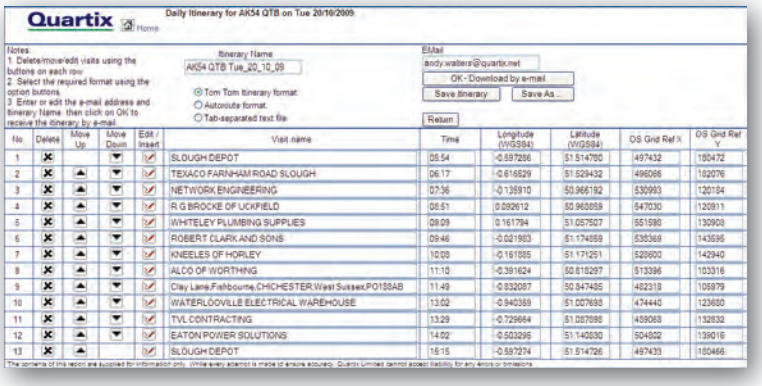
Six months' historical fleet activity data are readily available from our servers.

Data Export

EXPORTING ROUTES AND DATA FROM THE QUARTIX SYSTEM

The Quartix system incorporates data export facilities in a wide range of formats, and these can be used for links to anything from satellite navigation systems through to full integration with a corporate CRM system. The instructions below demonstrate how an itinerary can be exported and edited for use in a satnav or route planning system.

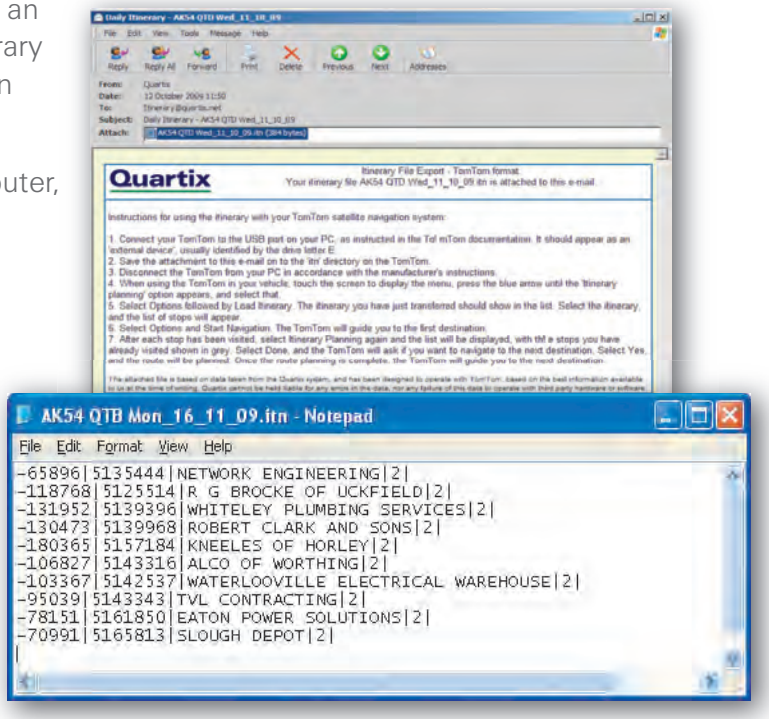
- Log-in to Quartix using an Administrator account and select the "Extended Reporting" option, followed by "Itinerary Planning".
- Call up the required vehicle and date, and enter an email address to receive the data.
- When the itinerary is shown on the screen, you can remove or insert stops or change the order of the route, and specify the format for the data (TomTom®, MapPoint® or text file).



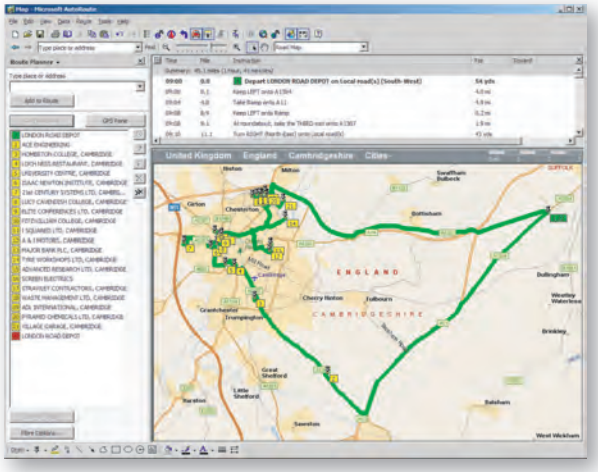
Part of a typical itinerary being exported from the Quartix web site

- You will automatically receive the itinerary file as an email attachment, containing details of the itinerary in a format suitable to be imported into your own route planning or satnav system.
- Once the data file has been saved on your computer, it can easily be imported into your application.

TomTom® itinerary planning screen, showing a list of stops exported from Quartix.



An itinerary file for use with a satnav system, with full instructions.



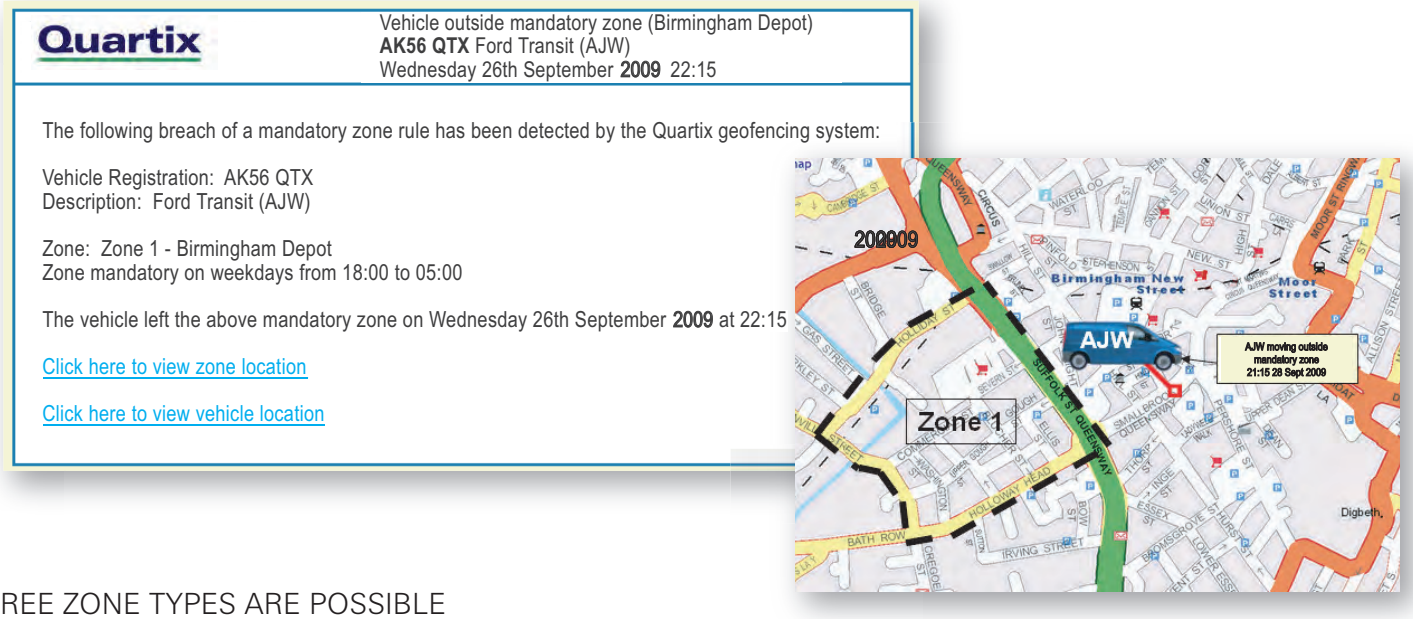
A route exported from Quartix and optimised by Microsoft MapPoint®.

BENEFITS - many of our customers use this tool for assistance in training new or relief drivers: with routes pre-loaded in a navigation system it can make a significant improvement in driver effectiveness.

Geofencing: Real-Time Alarms

KEEPING YOUR VEHICLES ON TRACK

The Quartix system offers complete flexibility in setting up real-time alarms to inform you of unauthorised vehicle movements and other exceptions. In essence, the system allows you to set up a series of geographic zones together with the time-based rules of when vehicles should be inside or outside each zone.



THREE ZONE TYPES ARE POSSIBLE

Named locations – comprising a named building or area, such as a depot, the driver's home address or a customer location. These are set up as shown on the 'Privacy and Customisation' page.

Geographical zones – these can be setup to encompass any shape on a map (see the example above) and are intended to show the boundaries of a territory, borough or similar.

Standard zones – for use in notification of vehicle entry in areas such as the London Congestion Zone.

TWO MODES OF OPERATION CAN BE SET UP

Mandatory mode – the vehicle must be inside the chosen zone for the times specified.

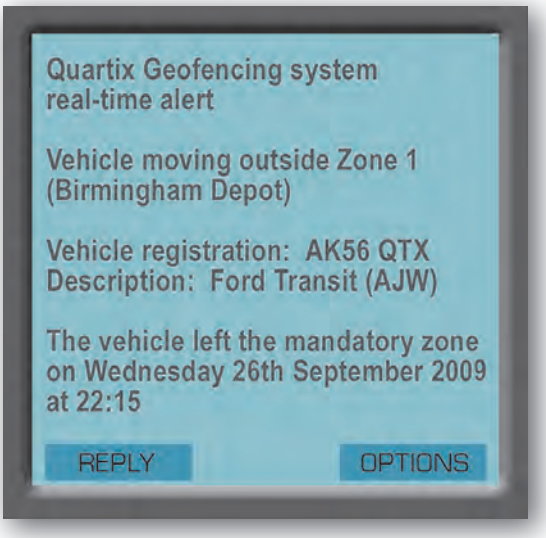
Prohibited mode – the vehicle must not enter the zone during the times specified.

TEXT ALARMS

The system can be set to send alarm messages to a mobile phone. These can be set up in either of the following ways:

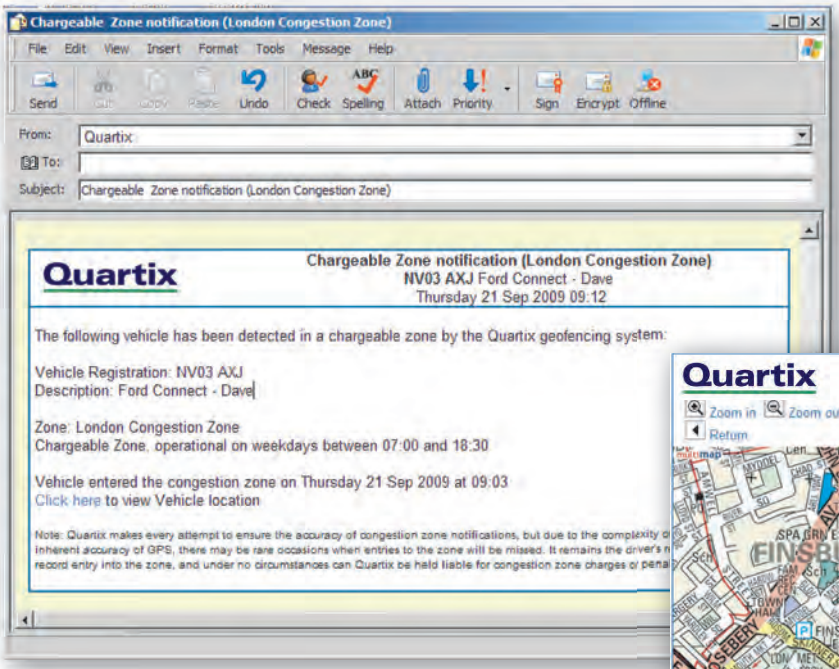
Out-of-hours or geofence alerts – if the vehicle ignition is activated outside preset working hours, or if a geofence rule is broken, a text alarm is sent to alert the driver or owner.

Break-in – if the vehicle is fitted with an alarm system, it can normally be wired to an input on the Quartix system. This in turn sends a text alarm to a mobile phone in the case of a break-in.

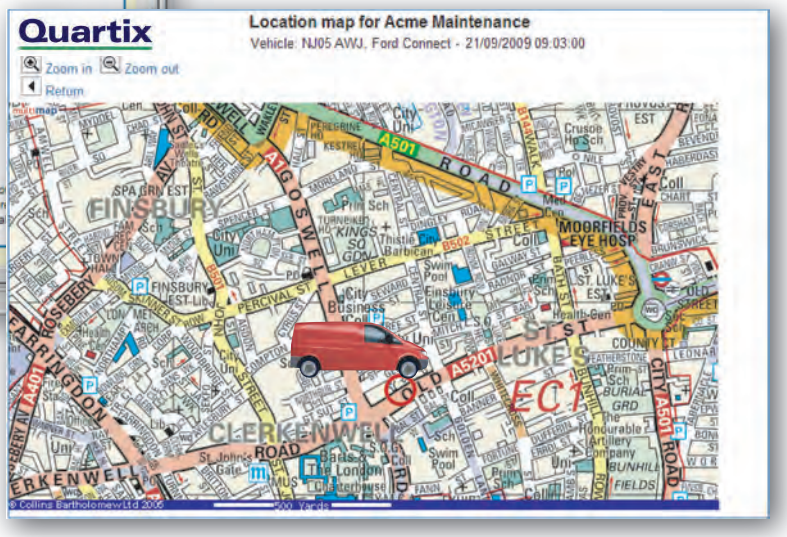


Prohibited/Congestion Zone Alert

Emailed notification varies according to mode. For Prohibited Mode, notification will be sent every time the zone is breached. However, breach of a chargeable zone will be notified just once in any given charging period.



London Congestion Zone notification



The user can link from the e-mail to a local map showing the exact location of the vehicle.

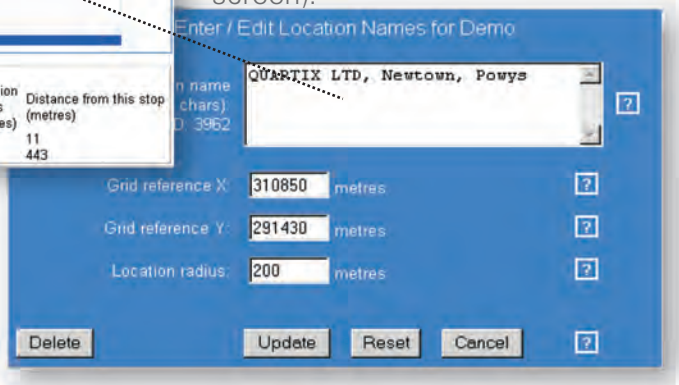
Text or email alerts can notify you if one of your vehicles is at a channel port, for example.

Privacy and Customisation

CUSTOMISING LOCATION NAMES

All vehicle logs and reports produced by the system, including Excel worksheets and real-time locations, highlight your custom location names. These can either be entered by you or by Quartix.

Using an administrator login you can access the "Edit Location" screen directly from the map linked to each stop point on the log. This shows all the existing named locations on that screen by highlighting them in blue (see adjacent screen).



MODIFYING OR ADDING A LOCATION

A list of all custom locations is provided immediately beneath the map screen - the number corresponds to the number in the blue circles on the map. By clicking on the name of the location its position and radius can be modified. Adding a new location is just as straightforward: clicking on the link at the top of the table opens the edit location dialog box with a new entry in it, which can then be named and modified to suit.

CONFIGURING VEHICLE SETTINGS

Each vehicle can be configured in order to tailor the reports to your needs, and this service is provided at no charge. This can also be carried out using the administrator login. The screen below shows the main parameters that can be changed, including: the registration number and the vehicle description to be used on the reports, whether the report is to show periods of idling, the new trip threshold (which, if required, can be set to eliminate short trips, such as movements around a car park or yard, for example), and the shift start and stop times to be used in compiling the reports.

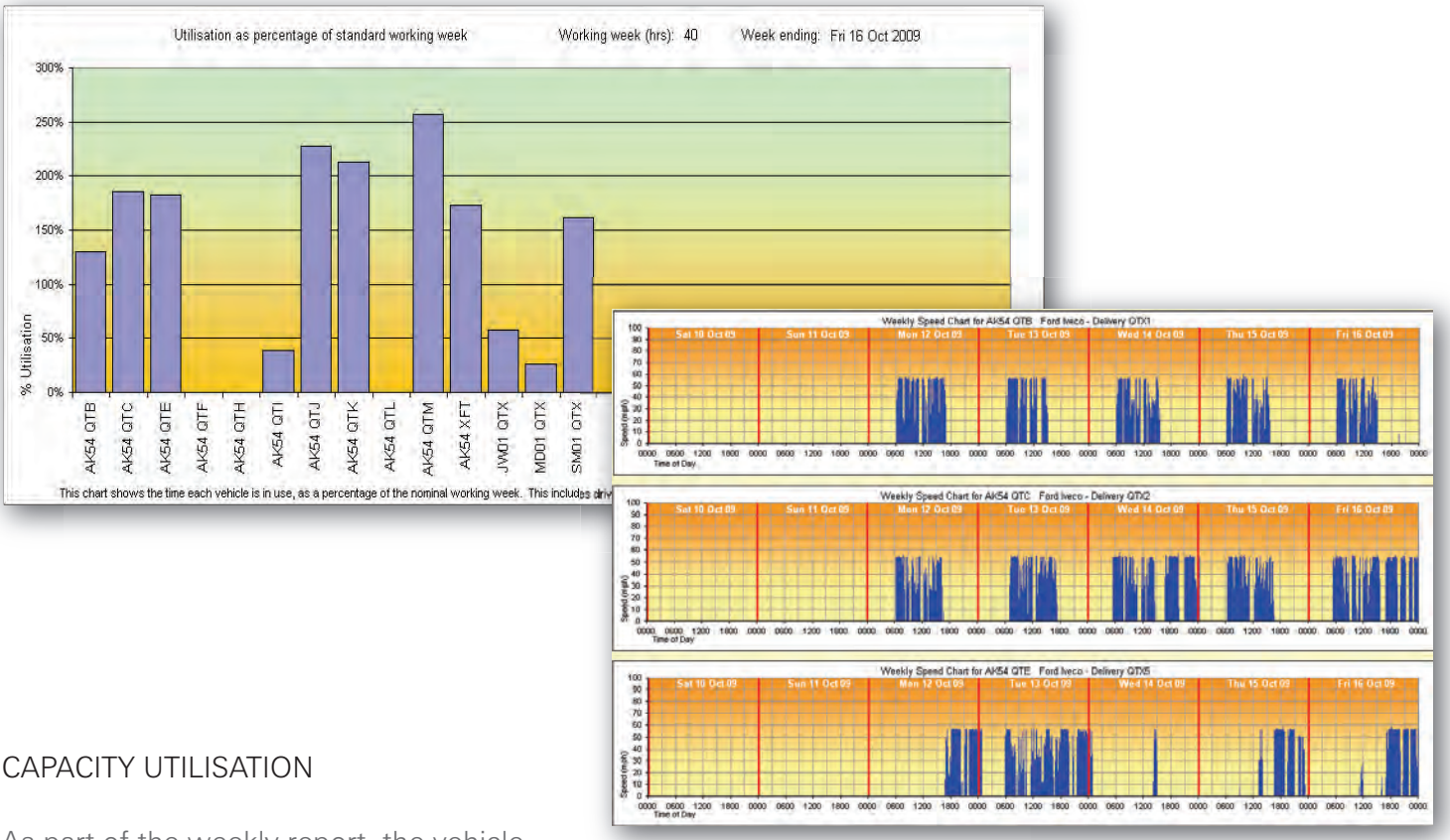
DATA PROTECTION AND THE HUMAN RIGHTS ACTS - DRIVER PRIVACY

The Quartix system has two important features which help in respecting the requirements of this legislation for vehicles which are used for private, as well as business, journeys.

- *Disabling of vehicle monitoring* - by using one of the configuration screens (similar to the one shown here) it is possible to disable the monitoring and storage of vehicle movement information for non business hours The system will report the mileage covered during this period, but not the locations visited.

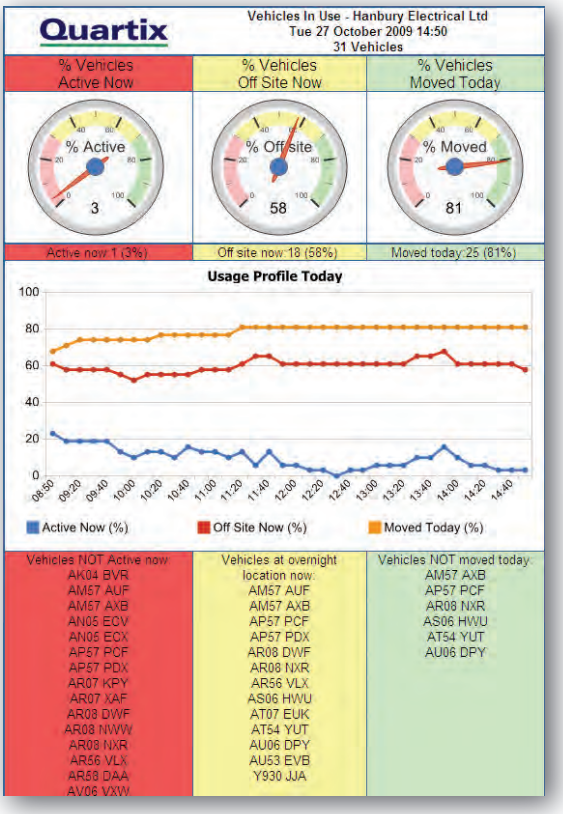
- *Access privileges* - each user account can be set to provide access to just the information required to carry out that person's job. For example, service or support centre staff may need to know where all operatives are in real-time in order to locate the nearest person for a job, but they would not need to have access to the driver's working hours or timesheets.

Performance Indicators & Dashboards



CAPACITY UTILISATION

As part of the weekly report, the vehicle utilisation chart provides a concise analysis of fleet usage. It can be used to re-assign workloads and also in optimising the size of the fleet.



SPEED & RISK ASSESSMENT

Health and safety are of paramount importance in the management of a mobile workforce.

The speed chart shown here provides a clear view of driving hours, break times and speed profiles for a week's activity for all drivers, making it an invaluable tool in assessing workloads and risks in the business.

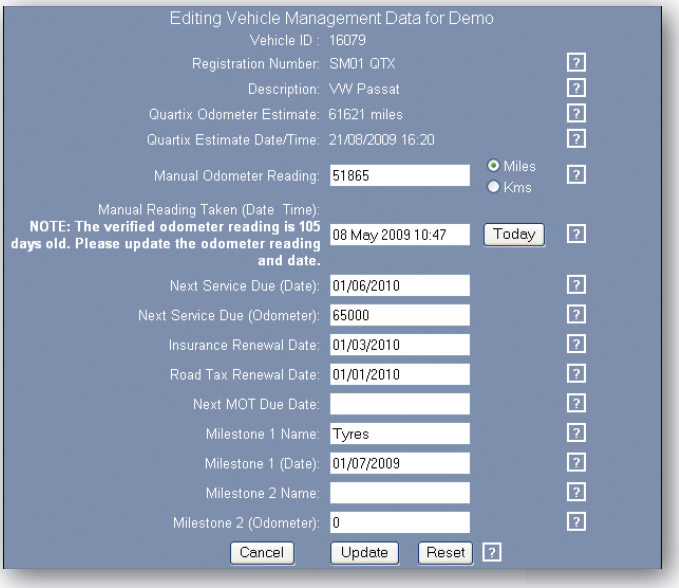
PERFORMANCE DASHBOARDS

Performance dashboards put real-time business information at your fingertips. Available on the Internet from any location, they provide you with a "snapshot" of how your business is performing at any instant.

The example shown opposite provides an analysis in percentage terms of which vehicles have been used so far today, which ones are active currently and which vehicles have not been used. It can be viewed from any browser and automatically updates through the day.

At head office users can access dashboards which show the performance level at each depot, colour coded to show utilisation levels at each location.

Fleet Management



FLEET MAINTENANCE

Managing service schedules in a large fleet is an onerous task. The Quartix system helps to automate the process by helping you manage service schedules, MOTs., insurance and tax renewal, as well as allowing you to set custom milestones and reminders.

To use this tool you simply enter the vehicle odometer reading and key milestones. The Quartix system then accumulates the mileage from that date and notifies you when the vehicle needs servicing.

EMAIL ALERTS

The fleet maintenance system generates automated alerts by e-mail, which are attached to the weekly spreadsheet reports.

Custom reminders can be generated to inspect tyres at a certain mileage, for example.

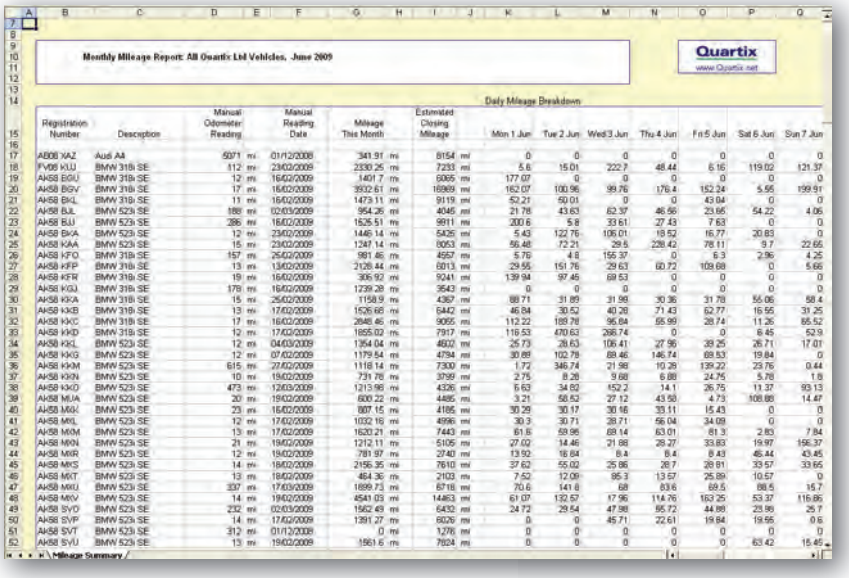
Quartix

Weekly spreadsheet AK54 QTA w-e 2009-09-30.xls attached
AK54 QTA, Andy
Week ending: 30 September 2009

Latest manual odometer reading:	125000 miles
Manual reading taken:	10 June 2009 16:14 **Note: 110 days since manual reading - please update.**
Quartix odometer estimate:	137397 miles
Quartix estimate calculated:	01 October 2009 15:12
Next service due (date):	**15 September 2009 *** WARNING: OVERDUE *****
Next service due (odometer):	140,000 miles
Insurance renewal (date):	01 November 2009
Road tax renewal (date):	31 December 2009
Next MOT due (date):	15 November 2009
Lease renewal due (date):	01 December 2009
Replacement due (odometer):	200,000 miles

Notes:
1. The above status report is based on information entered into the Quartix system by the user.
2. The Quartix odometer estimate is based on distances monitored since the last manual reading.
3. To ensure consistency with the vehicle's odometer, the manual reading should be updated on a monthly basis.

While every attempt is made to ensure accuracy, Quartix Limited cannot accept liability for any errors or omissions.



MILEAGE & LEASE MANAGEMENT

The Quartix system offers some powerful tools for managing vehicle lease contracts – both for the fleet manager and lease company. Monthly mileage and odometer reports show actual
vehicle usage against contract mileage rates, thus allowing fleet managers to re-allocate vehicles and avoid punitive additional mileage charges.

Lease companies can use the report to spot early signs of vehicle overuse, and the system also generates a series of automated alerts for unauthorised usage such as international travel.

Hardware Interfaces & Reports

LOCAL AUTHORITY APPLICATIONS

Many local authorities and public organisations are required to provide proof of the services that they have delivered to the community. In addition to knowing the whereabouts of vehicles in the fleet this can also extend to reports on road gritting or sweeping, refuse collection and load monitoring and even grass cutting.

The Quartix system is equipped with multiple hardware interfaces which enable the system to present users with a full log of vehicle activity. An example of a sweeping report is shown below. The system can then also match these reports to speed profiles, highlighting any instances, for example, of a gritter in operation at above the permitted maximum speed.

Contact Quartix for full details of the hardware interfaces and reports available.

Quartix Home

Schmidt Sweepers Report for Quartix
JV55 OTX Schmidt Sweeper
Date Tue 21 July 2009

Trip Number	Start Location	Departure Time	End Location	Arrival Time	Travel Time	Idling Time	Sweeping Start	Sweeping Stop	Sweeping Time	Non-Sweeping Time
1	East Road, CAMBRIDGE, Cambridgeshire, CB112UF	06:36	Stopped at East Road, CAMBRIDGE, Cambridgeshire, CB112UF (Ignition on)	06:38	0:02					
	East Road, CAMBRIDGE, Cambridgeshire, CB112UF	06:43	Stopped at Radford Crescent, CAMBRIDGE, Cambridgeshire, CB120BW (Ignition on)	06:55	0:12		07:01 07:11 07:20	07:09 07:18 07:28	0:08 0:07 0:08	
	Radford Crescent, CAMBRIDGE, Cambridgeshire, CB120BW	07:35	Radford Crescent, CAMBRIDGE, Cambridgeshire, CB120BW	07:35	0:00	0:45				0:22
2	Radford Crescent, CAMBRIDGE, Cambridgeshire, CB120BW	07:44	Stopped at Radford Crescent, CAMBRIDGE, Cambridgeshire, CB120BW (Ignition on)	07:47	0:03		07:46	07:59	0:13	
	Radford Crescent, CAMBRIDGE, Cambridgeshire, CB120BW	07:59	Radford Crescent, CAMBRIDGE, Cambridgeshire, CB120BW	07:59	0:00	0:12				
3	Radford Crescent, CAMBRIDGE, Cambridgeshire, CB120BW	08:07	Radford Crescent, CAMBRIDGE, Cambridgeshire, CB120BW	08:07	0:00					
4	Radford Crescent, CAMBRIDGE, Cambridgeshire, CB120BW	08:24	Stopped at Bebington Close, CAMBRIDGE, Cambridgeshire, CB120DT (Ignition on)	08:33	0:09		08:24	08:33	0:09	
	Bebington Close, CAMBRIDGE, Cambridgeshire, CB120DT	08:39	MAIN DEPOT	08:47	0:08	0:06				0:00
5	MAIN DEPOT	09:51	Stopped at East Road, CAMBRIDGE, Cambridgeshire, CB112UF (Ignition on)	09:54						
	East Road, CAMBRIDGE, Cambridgeshire, CB112UF	09:01	BASILDON DISTRICT COUNCIL	09:01						
6	MAIN DEPOT	09:02	Radford Crescent, CAMBRIDGE, Cambridgeshire, CB120BW	09:16						
7	Radford Crescent, CAMBRIDGE, Cambridgeshire, CB120BW	10:03	Stopped at Radford Crescent, CAMBRIDGE, Cambridgeshire, CB120BW (Ignition on)	10:04						

EMERGENCY SERVICES

Hardware interfaces to the system can be used to monitor the blue light on emergency service vehicles. Data points on route maps are then clearly displayed with a ring around them to show that the vehicle was on emergency call-out. This can then be used to explain any speeding along the route.

Plant & Trailers

PLANT & EQUIPMENT

Plant and equipment theft is increasing at an alarming rate. Fitting conventional tracking systems is, however, not always a viable option as items of plant may lie unused for extended periods and a tracking system could drain the battery.

The Quartix system overcomes this through its own rechargeable battery and by reverting to a very low power mode when it is not reporting. In this way the tracking system can continue to monitor a piece of plant or equipment for up to two months of inactivity. The battery is then recharged as soon as the equipment is in use again.

TRAILERS

The Quartix trailer tracking solution continues to report its position using the power of its own battery, and is also able to detect when the trailer is attached to a tractor unit with the engine running by monitoring fluctuations in the voltage supply.

This means that the system is able to report as a normal fleet tracking system whilst the trailer is on the move, and also act as a theft recovery device when it is detached from its normal tractor unit.

REAL-TIME ALERTS

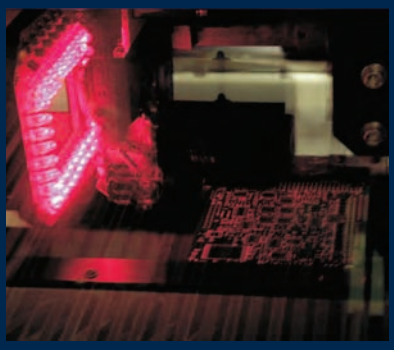
All of the normal geofencing, out-of-hours and other real-time alerts are available for both the plant and trailer tracking systems. The alerts generated by these systems can be sent by e-mail or text message as required.

Quality and Reliability

European Approvals

The Quartix 'Tripcounter' terminal has been approved by the Vehicle Certification Authority for compatibility with vehicle electronic systems. It is also fully compliant with European EMC and safety legislation.

Our manufacturing facility is ISO9001 certified, and final assembly and test are carried out in the UK.



Protection Against Tampering

All connections to the terminal are fully enclosed and protected against tampering. The unit is fully integrated, including both antennae, and it is fitted discreetly inside the vehicle. Nothing is mounted externally.

GPS Receiver

The GPS satellite receiver provides the terminal with accurate position, speed and direction information on a second-by-second basis. Using this and the status of the ignition, the system constantly monitors the activity of the vehicle throughout the day.

GPRS Modem

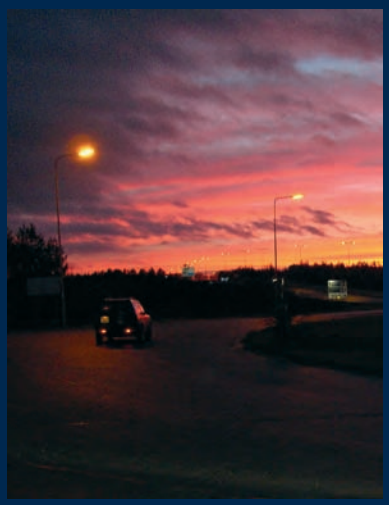
A GPRS/GSM data modem links the Tripcounter terminal to Quartix's web servers using the Orange Internet service - providing a continuous real-time connection using one of the UK's leading mobile data networks.

Multiple Web Servers and Databases

For maximum reliability and system availability, servers based in London (www.quartix.net) and Portsmouth (www.quartix.co.uk) are kept in complete synchronisation. Vehicle terminal units are capable of using either server, and you can view any of your vehicles in real-time on either web site.

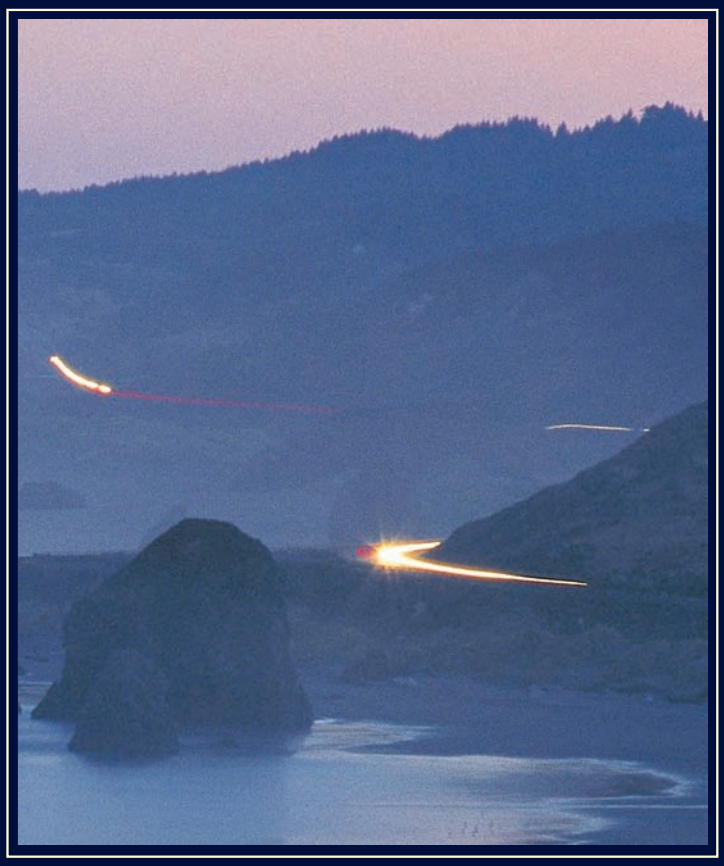
Fully Integrated Design

For optimum reliability the terminal is fully integrated, including both the GPRS and GPS antennae.



Dual Power Supply

For maximum flexibility the system is designed to work with either 12 or 24V vehicle electrical systems - allowing it to be fitted without modification to cars, light commercial and heavy goods vehicles.



For further information, please contact us:

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