

User Guide

QTRAF Version 1.0



galactio.com/qtraf

Table of Contents

Welcome	1
Software and Service Information	1
System Requirements.....	2
Installation.....	2
Activating QTRAF.....	3
Using QTRAF.....	4
Viewing Incident Reports	5
Viewing Travel Time	9
Colour Coding of the Travel Time Data	9
Recalculating travel time from one exit to the others	10
ERP Page	12
Configuration Page	13
Software Upgrade	13
Glossary of Terms.....	14

Welcome

Welcome to becoming a user of the latest Traffic Advisory Mobile Application, QTRAF and we hope you will enjoy all its capabilities.

QTRAF application provides traffic data all around Singapore at your fingertips in an innovative and easy-to-use interface. With QTRAF, you can get a quick update on the current traffic conditions such as traffic incidents, expressway travel times and the ERP gantries and rates at any time of the day with a simple request. In this way, you can plan your route just before you start your journey on the road.

Hope you have a more enjoyable ride with QTRAF.

Software and Service Information

The following table describes where to get more QTRAF-related updates and service information.

For	Do this
Latest information about QTRAF	Visit Galactio's official website http://www.galactio.com/qtraf for the latest development and version of QTRAF.
Updated User manual	Go to http://www.galactio.com/qtraf for the latest version of this user manual.
QTRAF Support	Contact support@galactio.com
Service and support from your mobile operator	Contact your carrier or go to your mobile operator's website.

The information is provided "as is" without warranty of any kind and is subject to change without notice. Galactio also reserves the right to revise the content of this document at any time without prior notice.

System Requirements

QTRAF runs under the J2ME environment and at the time of release, it is found to be compatible for most of the phones listed below:

- Symbian phones
- Sony Ericsson phones

The application is not officially supported on Windows Mobile and Pocket PC but it has been found that it can run on some of these devices with Java Virtual Machine installed.

Installation

The correct version of the installation files (QTraf.jad & QTraf.jar) have to be copied onto your phone first. You can achieve this by using Bluetooth file transfer or Direct Connection to your PC if your phone supports it.

The correct version to be used is as outline below:

- ALL_PHONES - To be used for most phones. This is targeted at phones which do not have an on-board GPS. This version can use an external GPS paired to the phone by Bluetooth.
- GPS_PHONES – This version is for phones with on-board GPS. If you have one e.g. a Nokia N95 and would like to use the internal GPS receiver, please install this version.
- WIN_PHONES – For Windows Mobile or PPC phones with Java Virtual Machine installed, please try this version. However this version does not support GPS onRoad feature.

After copying the 2 files to your phones, use the phone to navigate to the location where the files are stored inside the phone and select the **QTraf.jad** file.



Some phones do not support installation using the QTRAF.jad file. In such cases, select the other file QTRAF.jar instead for the installation. The procedures for the installation as detailed below will still be the same.

Follow the general steps below to complete the application installation onto the phone.



Actual steps and messages might differ with different phones and models.

1. Select Yes for *Install QTRAF* message.
2. Select *Continue* for the *Security warning* message.
3. Select *Continue* for the *Details* message
4. You might be prompted for the location to install your application. You can select either the phone memory or the storage card as both are supported by the application.
5. Once the installation is completed, locate the application where it is installed to and start the application.

Activating QTRAF

When QTRAF is started up for the first time, you will be prompted to register the program to activate it. Key in your first/ last name, contact and email in the page that pops up and press the Submit button as shown below.

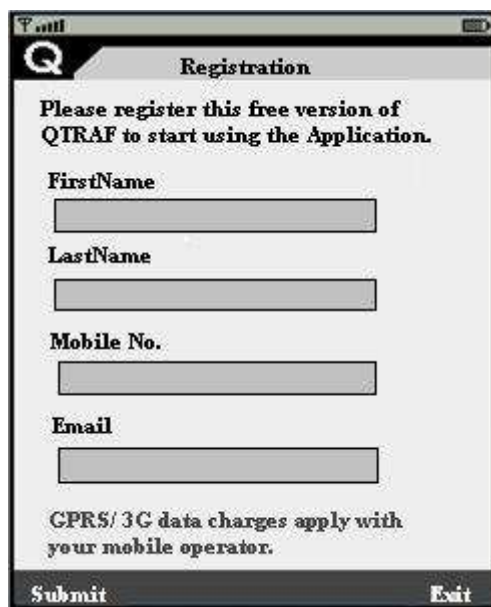


Fig 1-Main Menu

Tips:

1. To input a space character, press the 0 key twice.
2. To input a @ character, press the 1 key repeatedly to reach the character.

Once your application is registered, you are ready to use your QTRAF.



When you click on "Submit" button, you may be asked if you want to allow the application to connect to the Internet. Click on "Allow" so that the QTRAF application can complete the registration of the application for you online.



QTRAF Version 1.0 is free for use but for the registration, you will need to use GPRS/ 3G/ 3.5G to access the Internet. Standard operator charges apply for the Internet access according to the subscription plans that you have with the mobile operator. Please contact your mobile operator for the details.



In addition, data charges will also be incurred for the Internet access when you request for traffic data. At our end, we have ensured that the QTRAF traffic data is optimized so that you, as an user can enjoy its benefit at low cost.

Using QTRAF

Start the QTRAF application by clicking on its name. There are 4 menu options as shown in the picture below.



Fig 2-Main Menu

- *Incident Report* – Displays traffic and road-related incidents.
- *Travel Time* – Displays travel time along the expressways.
- *ERP* – Displays the current ERP rate for different gantries.
- *Options* – Configuration options such as font size and frequency between updates from the server can be performed here.



When you click on “Incidents” or “Travel Time” the first time, you may be asked if you want to allow the application to connect to the Internet. Click on “Allow” so that the QTRAF application can access traffic data from Galactio's Traffic Data Server.



Depending on the speed of your data access, it may take a few seconds before the data is downloaded from the server.



You will need to select an Access Point that the application can use for connecting to the Internet. Select an appropriate GPRS access point. Depending on your phone, you may also be able to use Wireless LAN to connect to the Internet.

Viewing Incident Reports

Click on "Incident Reports" to go to the screen that shows reports for current traffic incidents in Singapore. By default, all incident reports except Roadworks are shown for the whole Singapore Island.

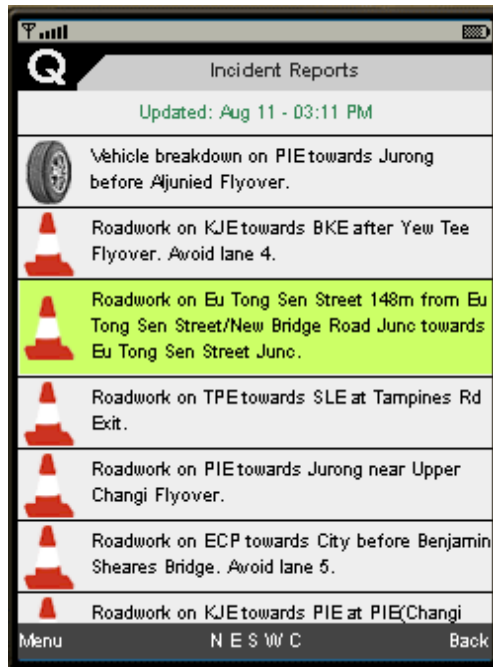


Fig 2.1.1 - Incidents Reports

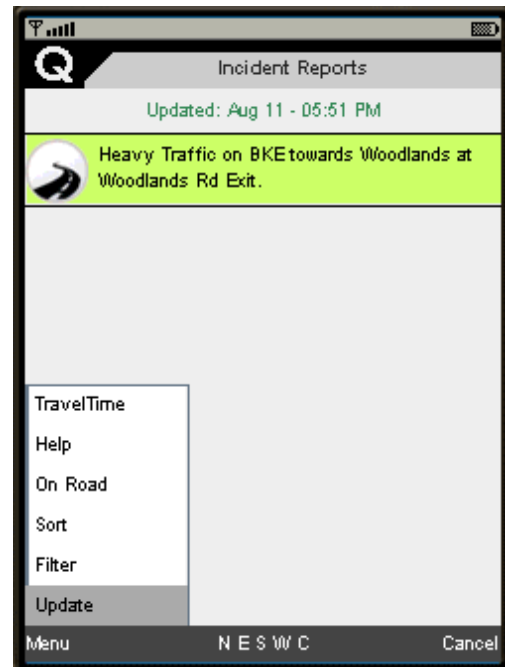


Fig 2.1.2- Showing Menu Options

Traffic Incident Records displayed in QTRAF

Updating Incident Reports

QTRAF updates traffic information in the background after every few minutes, as selected by the user on the Options Screen. However, you can force an update by clicking "Update" in the menu.

Filtering Incident Reports

If you do not want to see all the incident reports, you can go to the Menu and select "Filter" to filter the data by zone (North, East, West, South, Central) and/ or type of Incident (Road Accident, Major Roadworks, Slow Traffic, Vehicle Breakdown, or Other Incidents).



Fig 2.1.3 Filter Page By Area

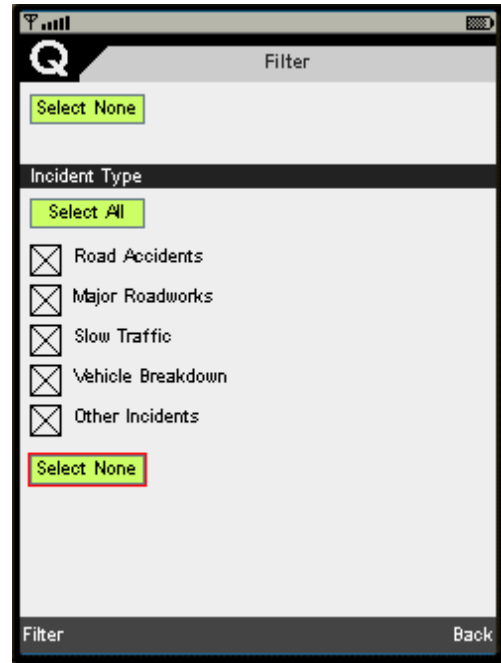


Fig 2.1.4 Filter By Incident Type

Traffic Incident Reports can be filtered by Area (Left) or Incident Type (Right)

Sorting the Data

Incident reports can be sorted by clicking on "Sort" from the menu and selecting the option to sort by. Then, press left softkey labeled as "Done" to return to the sorted list of items as shown below.

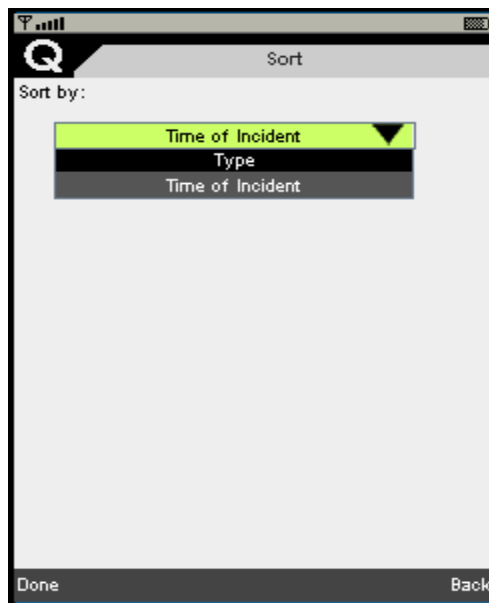


Fig 2.1.5
Sort Traffic Incident Reports

“On Road” Mode

If your mobile phone is connected to a GPS receiver using Bluetooth, QTRAF can automatically filter the data depending on the zone (North, East, West, South, Central) that the phone is in.

If you are traveling within Singapore, you can select “On Road” from the menu to see the data for the zone that you are in. As you move from one zone to another, QTRAF will automatically filter the incident reports depending on your GPS position.

To use the “On Road” feature, you will require a Bluetooth GPS receiver. If you are using this mode, you will need to pair your phone with the external Bluetooth GPS receiver and select that receiver when prompted. Fig 2.1.6 and 2.1.7 shows the device discovery and Bluetooth enabled device list screen.

In the case of the on-board GPS version of the software, QTRAF will automatically connect to the internal GPS receiver of the phone.



Fig 2.1.6
(Searching bluetooth devices)

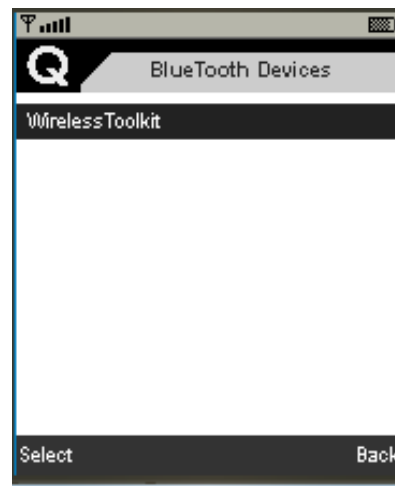
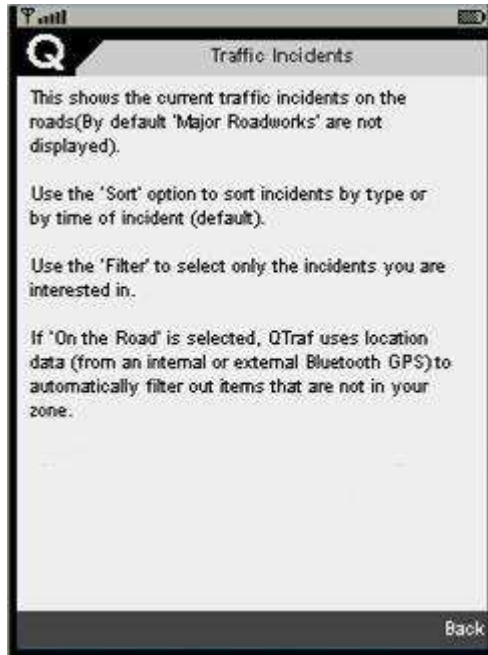


Fig 2.1.7
(Bluetooth Device List Screen)

Help

By Selecting help option in incident Report menu you can get all the information about the options available at incident report menu.



*Fig 2.1.8
Help Screen*

Switch to Travel Time Screen

By Selecting travel time option on incident report menu you can directly switch to previous state of travel time page.

Exiting the Incident Reports

Click on "Back" in the menu to return to the Main Menu.

Viewing Travel Time

Click on "Travel Time" in the main menu to go to the Travel Time section of QTRAF. A list of the eight expressways in Singapore is displayed as shown below. Click on the expressway for which you want to see the travel time. The travel time for traveling from the start of that expressway to the different exits is displayed. The travel time to an exit is shown before the name of the exit.

Colour Coding of the Travel Time Data

The background colour of the exit name is an indication of the relative travel time from that exit to the next one. QTRAF uses a simple colour coding scheme to indicate the relative speed of travel on the expressway:

Green: Traffic is free flowing and the travel time is fast (little or no traffic)

Orange: Traffic is slightly slower than the best travel time (slight traffic)

Red: Traffic is much slower than the best travel time (very slow traffic)

For example, in the picture below, "Normanton Park" is in Orange. It means that right now, there is slight traffic on the AYE between "Normanton Park" and "North Buona Vista Rd" and the travel time is slightly longer than free-flowing. Similarly, "West Coast Rd" is shown in green to indicate that there is smooth traffic between "West Coast Rd" and "Clementi Ave 6 Interchange".



Fig 2.2.1

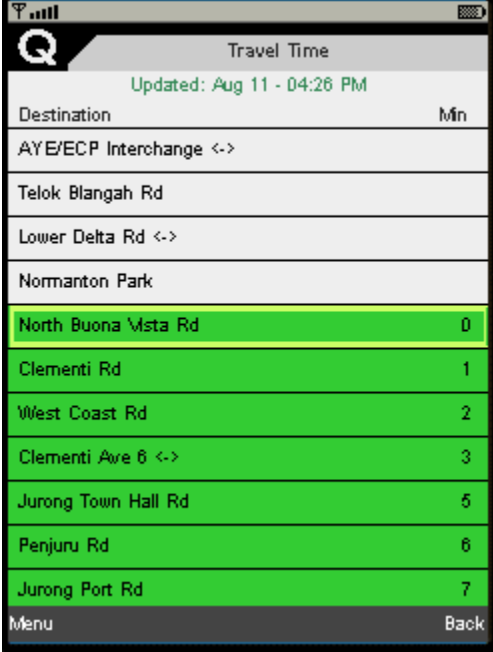


Fig 2.2.2

List of Expressways (Left) and Display on AYE (Right)

Recalculating travel time from one exit to the others

By default, QTRAF shows the travel time from the start of the expressway to each of the different exits. To calculate the travel time from a specific exit, scroll down and click on the exit name.



The screenshot shows a mobile application interface titled "Travel Time". At the top, it says "Updated: Aug 11 - 04:26 PM". Below this is a table with two columns: "Destination" and "Min". The destinations listed are: AYE/ECP Interchange <->, Telok Blangah Rd, Lower Delta Rd <->, Normanton Park, North Buona Vista Rd (highlighted in green), Clementi Rd, West Coast Rd, Clementi Ave 6 <->, Jurong Town Hall Rd, Penjuru Rd, and Jurong Port Rd. At the bottom, there is a "Menu" button and a "Back" button.

Destination	Min
AYE/ECP Interchange <->	
Telok Blangah Rd	
Lower Delta Rd <->	
Normanton Park	
North Buona Vista Rd	0
Clementi Rd	1
West Coast Rd	2
Clementi Ave 6 <->	3
Jurong Town Hall Rd	5
Penjuru Rd	6
Jurong Port Rd	7

Fig 2.2.3
Calculating travel time from a specific exit

Viewing Data for the other direction of the Expressway

To view data for the other direction of the expressway, simply click on "Toggle Dir" in the menu.

“Connect to” another Expressway

In QTRAF, the names of some exits are underlined and have a "<->" after the name. This indicates that the exit is a transitional point to transfer from one expressway to the other. Clicking on this will bring up the list of expressways to which you can connect from here. Selecting a name from this list will take you to the display of travel time for that expressway.

In the example below, "Clementi Ave 6" is identified as being an expressway from which you can connect to other expressways. Scrolling down to "Clementi Ave 6" and then clicking on "Connect to" in the menu brings up the list of 'Linked Expressways', in this case PIE (Jurong) and PIE (ECP). Clicking on any of these will display the travel time on the expressway in that direction.

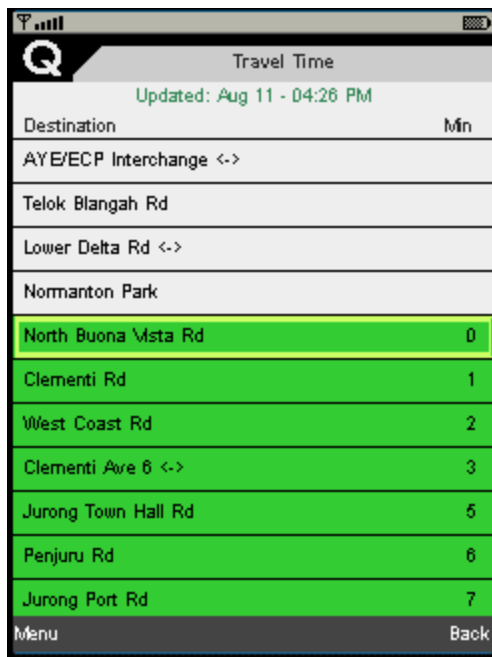


Fig 2.2.4

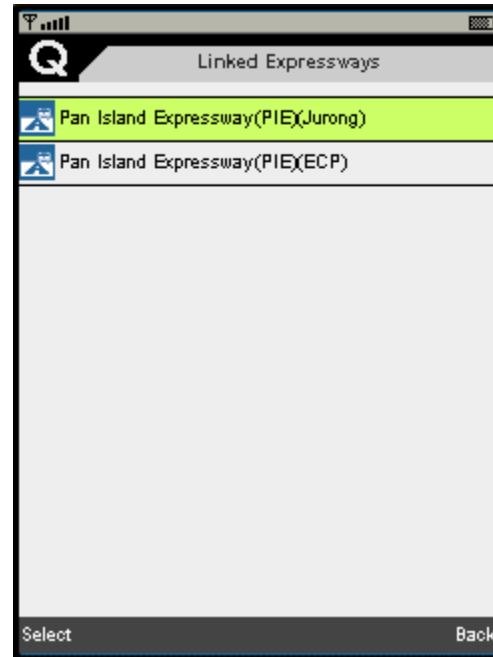


Fig 2.2.5

Connecting from one expressway to another

Incident Reports

Click on this option to switch to the incident reports screen.

Help

Click on help option to read all the information about Travel time screen.

Updating Travel Time

QTRAF updates all traffic information every few minutes as selected on the Options Screen. However, you can force an update by clicking on "Update".

Toggle Dir

Click on this to toggle the direction of travel along the expressway. For example, the default direction on the AYE is towards Jurong. After a toggle, the direction will now be indicating towards the City.

Exiting the Travel Time Display

Click on "Back" in the menu to return to the Main Menu.

ERP Page

Click on ERP option on main menu to switch to the ERP Rates screen. Please select the zone from drop down menu and click on the "Gantry Info" button to view the current ERP rate and all gantry information as shown in Fig 1.31 and 1.3.2 below.

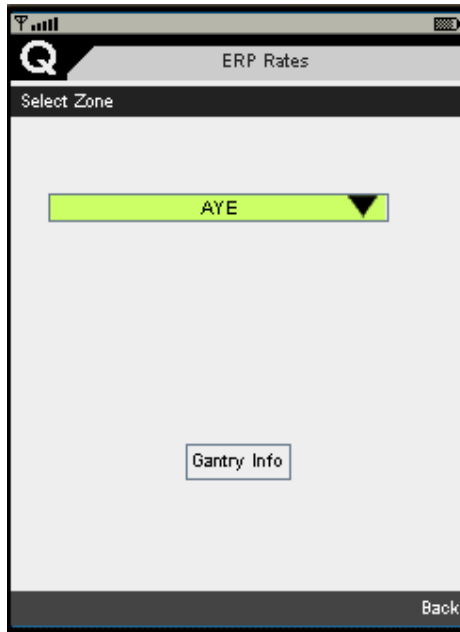


Fig 2.3.1 (Select Zone To see ERP)

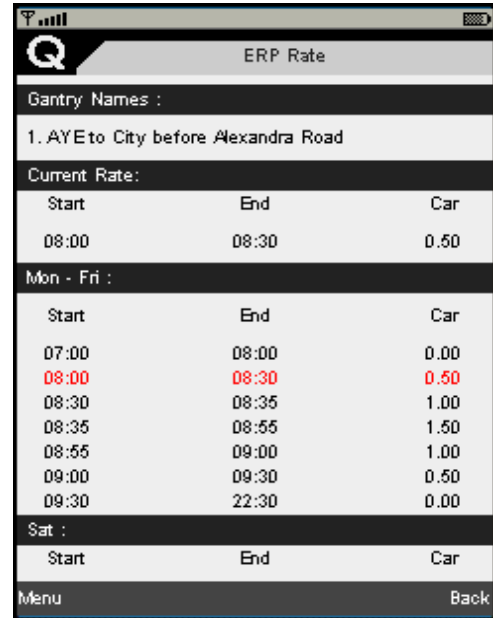


Fig 2.3.2 (Current ERP Rate)

Configuration Page

In the configuration page, you can select options to configure the download frequency and the font size. After changing a selection, please click on "Save" in the menu options and then "Back" to return to the previous menu. The following options are available as shown in Fig 2.4.

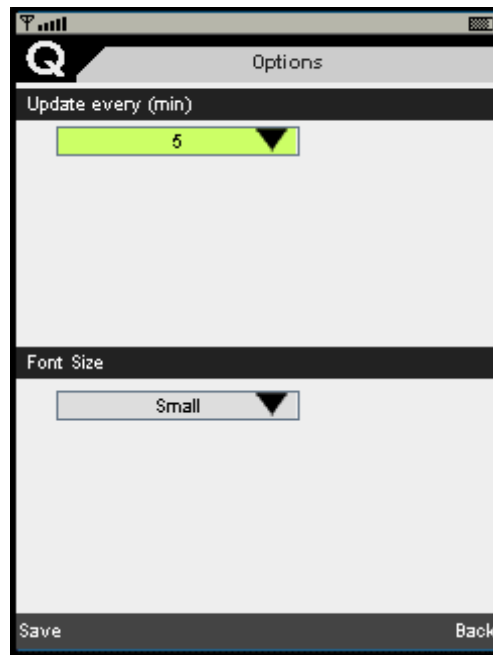


Fig 2.4(Option Screen)

Update Every (mins)

QTRAF automatically updates traffic information every five minutes. To change the frequency, select the new time from drop down list.

Font Size

This setting allows you to select a different font size for the display of Travel Time information and the Incident Records. Select from "Small" "Medium" and "Large".

Software Upgrade

As QTRAF is constantly under going upgrading and improvement to its capabilities, do check back at our website galactio.com/qtraf to know about the exciting features and products that are being line up with QTRAF.

Glossary of Terms

ERP

Electronic Road Pricing scheme is an electronic toll collection scheme adopted in Singapore to manage traffic by road pricing during peak hours.

GPRS

General Packet Radio Service, is a standard for wireless communications that delivers wireless packet data services to GSM customers. GPRS offers Internet connection to mobile users and allowing a mobile user to take part in video conferences and surf multimedia web sites.

GPS

Global Positioning System, is a satellite-based positioning technology that allows a GPS receiver to determine its location in longitude and latitude on Earth.

J2ME

Java 2 Platform Micro Edition, is a highly optimized version of the Java runtime environment that is targeted at small, standalone or connectable consumer and embedded devices.

QTRAF

Quantum Traffic, is the name of this application serving Real Time Traffic Information around Singapore.

Wireless LAN

Wireless Local Area Network, is one in which a mobile user can connect to a local area network (LAN) through a wireless (radio) connection.

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