

Starcom GPS Global Solutions

Kylos & Kylos Compact
User's Manual Guide



Version 2.0

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1 Introduction Kylos

Kylos is a sophisticated unit designed for real-time tracking and protection of merchandise. Utilizing its built-in accelerometer, temperature and light sensors, as well as GPS / GPRS facilities for communication, the system can detect when your merchandise has reached the customer. If goods were moved during unauthorized hours or damaged due to incorrect handling, the user will be alerted via the selected communication means, i.e. email, SMS.

The hidden unit allows you to track and monitor any kind of asset without suspicion, enabling an effective merchandise tracking and management. In any unwanted or unsuspected situation, the GPS merchandise system sends you a direct alert, enabling you to protect and locate your goods all over the world at any time.

As a small, stable, autonomous device Kylos gives you full control of all possible events. Thanks to its built in sensors, you have a complete knowledge of your merchandise condition and location at any given moment.

For example, when Kylos merchandise tracking unit is installed, you can track the location of the merchandise and receive an alert if it enters or leaves a particular area, or if it is damaged or dropped.

Kylos is an independent portable device with a built-in battery that does not require external power supply.



Introduction Kylos Compact

The Kylos Compact device by Starcom Systems is a sophisticated portable GPS tracker, designed for the purpose of keeping track and determining the location of assets and possessions as well as keeping your family members and pets safe.

With an integration of cellular communication abilities, GPS technology and innovative built-in sensors, Kylos Compact will display real time location and status information, delivering the utmost in reliable and accurate data for your business and personal tracking needs.

The device itself, which can fit in the palm of your hand, can be attached to assets and worn by people or pets. It can be hidden in almost any item you have chosen to protect, making it totally adaptable to an extensive range of applications and applied to a diverse range of situations.



2 Package Contents Kylos



1. Kylos unit
2. Kylos USB programming cable
3. Unit key
4. AC charger

WARNING: Use only the charger provided by SGS to charge the Kylos battery. Using any other charger could damage your device or battery.

Package Contents Kylos Compact



1. Kylos Compact unit
2. Kylos Compact USB programming cable
3. AC charger

WARNING: Use only the charger provided by Starcom Systems to charge the Kylos Compact battery. Using any other charger could damage your device or battery.

3 Product Description Kylos



Kylos is a combination of:

- ★ GPS locating system
- ★ Cellular based communication capabilities

Together, these provide immediate time event and location information through email, text message or a Web based management application. This guide describes how to install the setup software, configure and monitor the Kylos device.

Sensors

Kylos incorporates several sensors to monitor and report various event types. Kylos also allows connecting external sensors of the same version as its internal sensors.

- ★ **Light sensor** – detects a change of light inside the container (e.g. breaking into the container).
- ★ **Acceleration sensor** – detects impacts to the container.
- ★ **Temperature sensor** – detects temperature around the unit (can be configured for high and low temperature alerts from -127°C to +127°C).

Audible signals

The unit uses audible signals (beeps) to announce its activity. When you insert the battery in the device, it will sound one (1) audible signal (beep), to indicate that it was activated.

After this, the device will connect to the cellular network. Once the device performs a successful connection to the cellular network, it will sound two (2) audible signals (beeps).

At the same time, the device will connect to the GPS and get the location. Once the device performs a successful connection to GPS, it will sound three (3) audible signals (beeps).

Technical specifications

Battery	Type Power	Lithium-ion 3.7V 1,1800mAh
Temperature	Operational Storage	-20°C to 60°C -40°C to 85°C
Operating Humidity		Up to 90%
Measurement		75 x 62 x 31, 75 grams
Cellular Modem	GSM	Quad Band (850, 900, 1800, 1900). Built in antenna
Network	SMS GPRS	Encrypted Protocol TCP/IP over PPP
GPS	Receiver and Antenna Protocol Positioning accuracy Navigation Update Rate Navigation method Time to First Fix (TTFF) Antenna	Internal, NMEA (Binary format) Position: 10m CEP(50%) Velocity: 0.2m/s (50%) 1 second (Default) All-In-View solution 2-Satellite solution, A-GPS Hot Start: 2 sec' Warm Start: 10 sec' Cold Start: 50 sec' Built in
CPU Capacity	Static RAM Non-volatile memory Flash Memory	128 Kb 34 Kb 2048 Kb
Sensors		
Light	Resolution	0.025 LUX
Temperature	Sensitivity Range	0 - 104,448 LUX (Sunlight) from -20°C to +60°C ±2.0°C
Accelerometer	Accuracy	3 Axis, 0.1g resolution identify and report events of impact
Access Port	Type	TTL (USB converter included)
Power Consumption	Sleep/Idle GPS only GPRS only GPS and GPRS	0.05mAh 75 mAh 100mAh 165 mAh
Battery Life	Transmissions rate Every 10 minutes Every 6 hours Every 24 hours	Work time 2.6 Days 90 Days 300 days

Product Description Kylos Compact



1. Emergency button
2. Light sensor
3. LED
4. Power button
5. Micro USB connector

Sensors

Kylos Compact incorporates several sensors to monitor and report various event types.

- ★ **Light sensor** – detects a change of light around the unit (e.g. breaking into the package).
- ★ **Acceleration sensor** – detects impacts to the unit.
- ★ **Temperature sensor** – detects temperature around the unit (can be configured for high and low temperature alerts from -127°C to +127°C).

Buttons and LED

Emergency button – button which sends an emergency alert.

Power button – button which serves to turn the device on and off, and to test the battery status.

LED indicators – the LED indicator will light up when the unit is charging or operating.

- ★ **To turn the unit on**, press the Power button. The LED will flash 5 times with white light.
- ★ **To turn the unit off**, press and hold the Power button until the LED blinks 2 times and then turns off.
- ★ **To send an Emergency alert**, press and hold the Emergency button until the LED turns **green**. Then release the Emergency button, the LED will blink **green** until the unit successfully sends a message (or 5 minutes have passed). The LED will blink **red** until the unit successfully finds the GPS position (or 5 minutes have passed).
- ★ **While the unit is charging** the **red** LED will light up, when fully charged the **green** LED will light up.
- ★ **To check the battery status**, press the Power button and hold it for a second. If the LED turns **green**, the battery is fully charged. If the LED turns **red**, the battery is used and needs charging.

Technical specifications

Battery	Type Power	Lithium-ion 3.7V, 400 mAh
Temperature	Operational Storage	-20°C to 60°C -40°C to 85°C
Operating Humidity		Up to 90%
Measurement		60 x 33 x17 mm, 60 grams
Cellular Modem Communication	GSM/GPRS (default) Optional Modems Antenna Type Data Channels Protocol	Quad Band (850/900/1800/1900) UMTS/HSPA+, CDMA/1xRTT/EV-DO, LTE Built-in (concealed) SMS & TCP/IP Propriety – encrypted
Network	Data	GSM, GPRS and SMS
GPS	Systems Receiver and Antenna Protocol Positioning accuracy Navigation Update Rate Navigation Method Time to First Fix (TTFF) Antenna	GPS, GLONASS Internal NMEA (Binary format) 10m CEP (50%) Velocity: 0.2 m/s (50%) 1 second (default) All-In-View solution 2-Satellite solution, A-GPS Hot Start: 2 sec Warm Start: 10 sec Cold Start: 50 sec Built-in
CPU Capacity	Static RAM Non-volatile memory Flash Memory	128 Kb 34 Kb 2048 Kb
Sensors	Light Temperature Accelerometer	Resolution Sensitivity Range Accuracy
Access Port	Type	TTL (USB cable available)
Power Consumption	Sleep/Idle GPS only GPRS only GPS and GPRS	0.05mAh 75 mAh 100mAh 165 mAh
Battery Life	Transmissions rate Every 10 minutes Every 6 hours Every 24 hours	Work time 10 Hours 13 Days 45 days

Industry approvals and certifications



For available certificates, see:

<https://trello.com/b/YrNJfXNd/certificates>

4 Configuration

Downloading the Software

Download the Installer application setup file and update available at:
<https://trello.com/c/k8Z8QHzZ/1-installer-application-download>

File:	File Size (bytes):	Date Created:
SETUP - Installer Application	5600631	2012/12/04 6:44
UPDATE - Installer Application	2161939	2012/12/04 6:44

Installing the Software

Locate the folder where you saved the installer setup file. Double-click the **InstallSetup.exe**. The Open File dialog box appears.



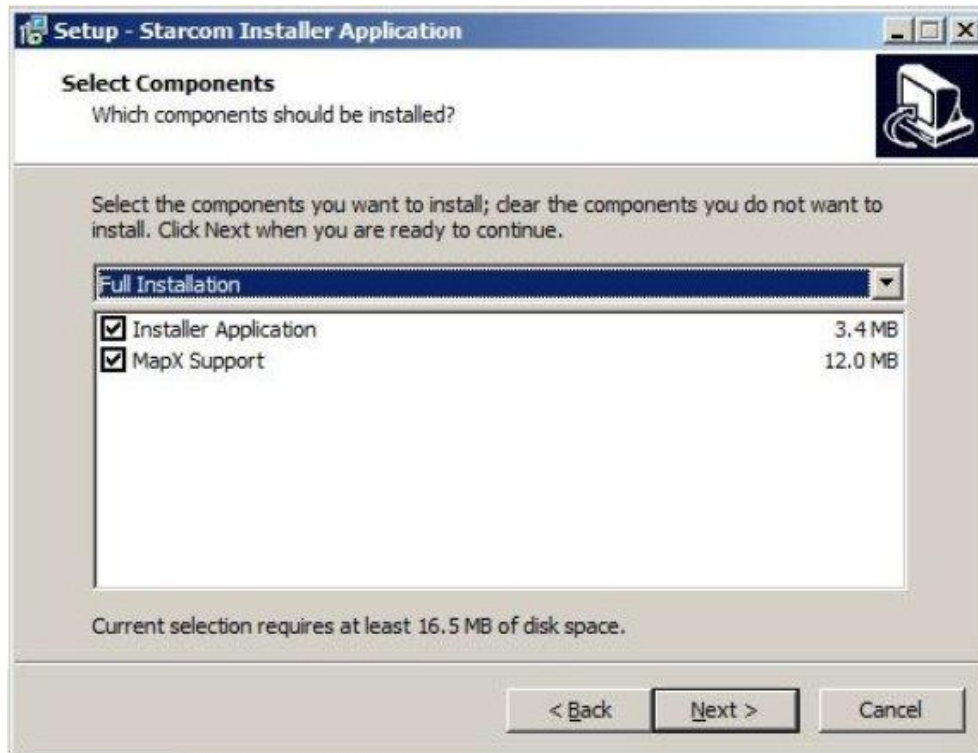
Click **Run**. A Windows Security dialog box appears. Click **Yes**. The Welcome to the Starcom Installer Application Setup Wizard window appears.



Click **Next**. The Select Destination Location window appears.



Click **Next**. The Select Components window appears.



Click **Next**. The Select Start Menu Folder window appears.

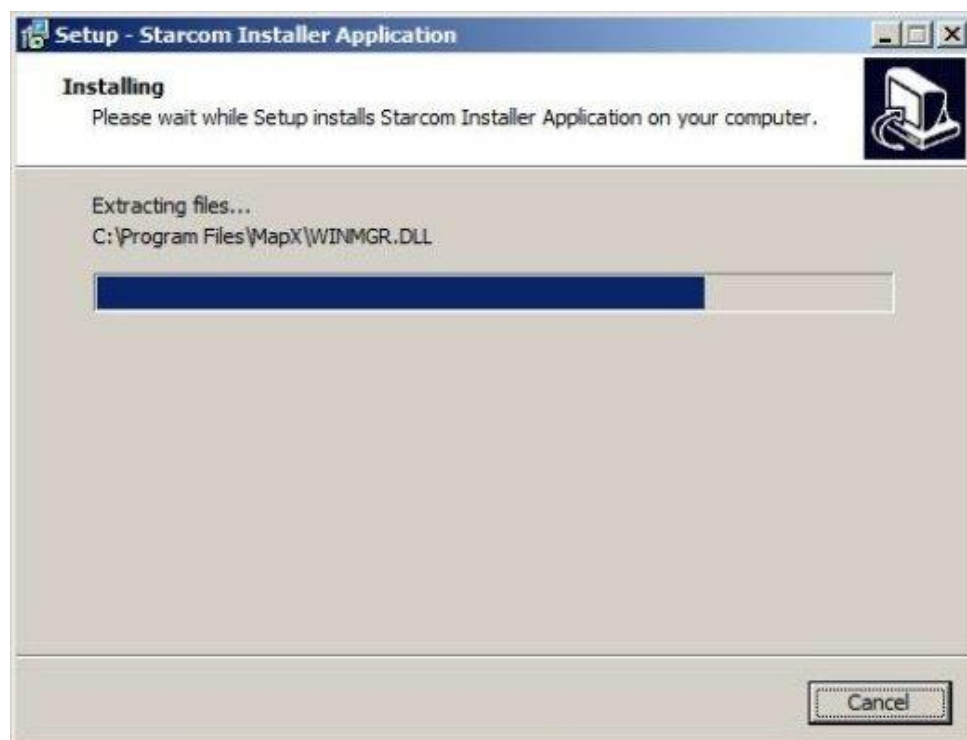


NOTE: Select **Don't create a Start Menu folder** checkbox, if you do not want to create a start menu folder.

Click **Next**. The Ready to install window appears.



Click **Install**. The installation starts and a progress bar appear in the window, indicating the progress of the installation.



When the installation is complete, the Completing the Starcom Installer Application Setup Wizard window appears.



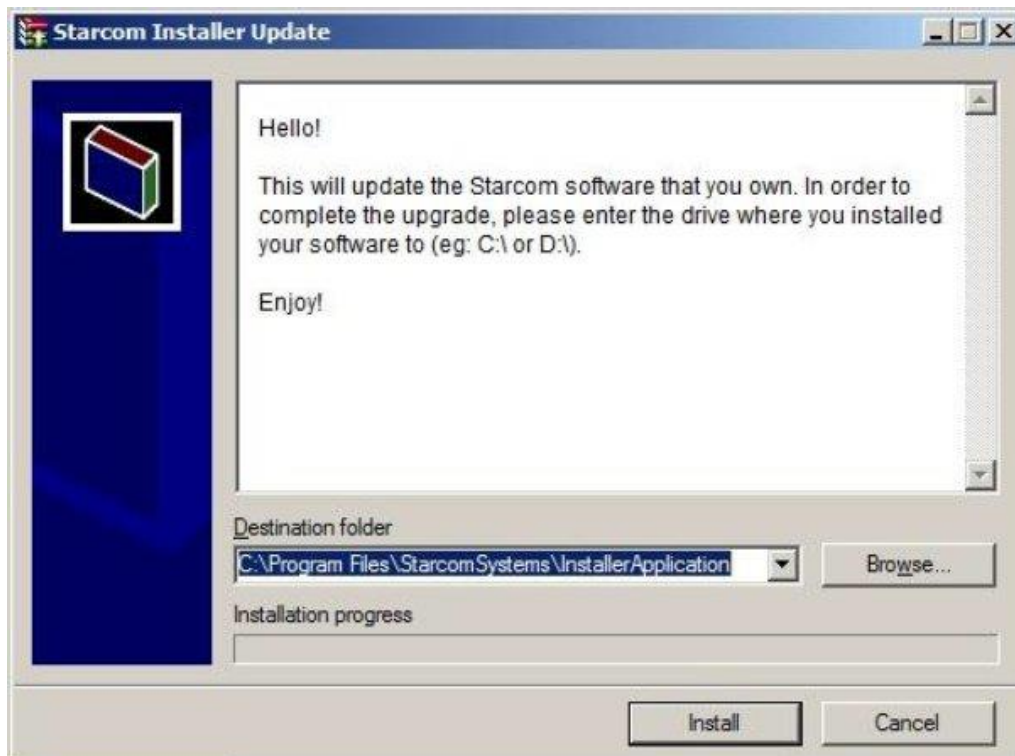
Click **Finish**.

Installing the Update

To install the Installer update software, locate the folder where you saved the update file. Double-click **IUpdate.exe**. The Open File dialog box appears.



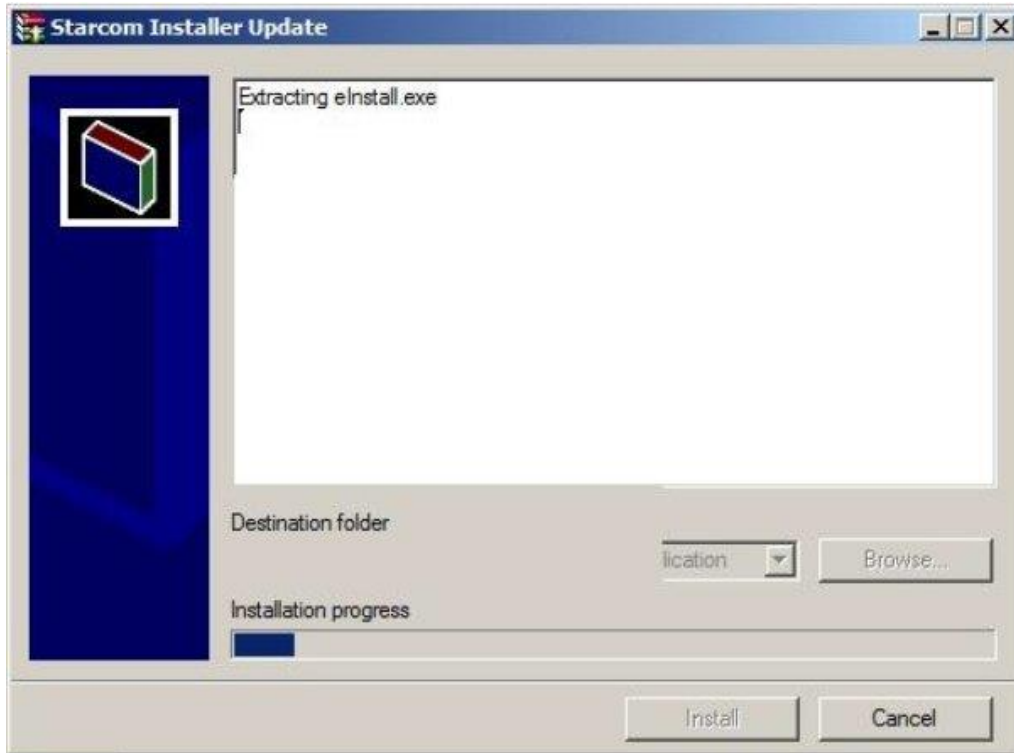
Click **Run**. The Starcom Installer Update window appears.



Verify that the Destination folder points to the location where the Starcom Installer software is installed and click **install**. A Windows Security dialog box appears. Click **Yes**. The Confirm file replace dialog box appears.



Click, **Yes to All**. The installation starts and a progress bar appear in the window, indicating the progress of the installation.



The Starcom Installer Update window closes, when the update is complete.

Installing the cable driver

The Kylos Compact cable driver can be downloaded from the following link:

<http://www.ftdichip.com/Drivers/VCP.htm>

Download the driver for the proper Windows version.

The driver Installation Guide can be found at the following location:

<http://www.ftdichip.com/Support/Documents/InstallGuides.htm>

Download the Installation Guide for the proper Windows version. Follow the instructions in the Guide to install the cable driver.

Inserting the SIM card Kylos

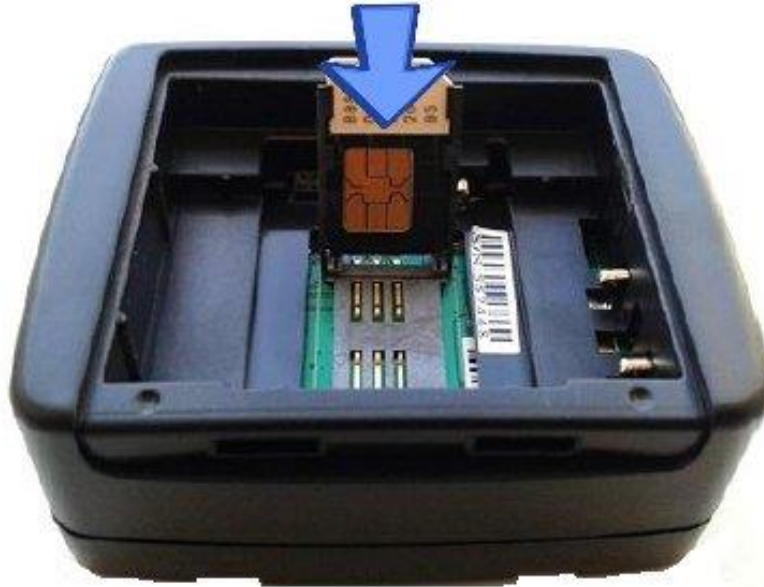
Remove the plastic cover from the unit.



Gently push and pull back the plastic SIM card holder to release and open the SIM card slot. Raise it to an upright position.



Insert the SIM card in the SIM card slot with its gold contacts facing down and its cut-off corner facing out the SIM card slot, as shown in the following image.



Lower the SIM card holder back to the horizontal position. Gently press and push the SIM card holder forward to snap it back into place.



Attaching the battery Kylos

NOTE: Before installation, please verify that the battery is fully charged. Charge the battery for at least 12 hours prior to first use. After that, charge the battery for at least 6 hours before each use.

Hold the battery so that the contacts on the battery match the contacts on the unit.



Gently push the battery into the unit.



Connecting the unit to the computer Kylos

Connect the USB cable connector to the USB port on your computer.

Connect the 5 pin connector to the unit, so that the 2 pins on the cable are pointed towards the upper part of the unit and the 3 pins on the cable point towards the battery.



NOTE: The unit enters sleep mode to save the battery power whenever possible. This means that during the testing process you must keep the unit awake in order to check its functionality.

After you insert the SIM card and the battery, the unit will spend about 5 minutes to attempt connection to the cellular network and to GPS. During this time it will be awake, which will allow you to connect it to the computer and start the configuration.

After the unit performs the connection attempt, it will enter sleep mode. You can wake the unit by removing the battery and inserting it back again.

Inserting the SIM card Kylos Compact

Use a 1.5 mm Allen wrench (hex key) to remove the 4 screws from the Kylos Compact back cover.



Remove the back cover. Carefully lift the battery and place it aside.



Gently push and pull back the Micro-SIM card holder to release and open the SIM card slot. Raise it to an upright position.



Place the Micro-SIM card in the Micro-SIM card slot with its gold contacts facing down, as shown in the following image.



Lower the Micro-SIM card holder back to the horizontal position. Gently press and push the Micro-SIM card holder forward to snap it back into place.



Gently place the battery on top of the board, place back the cover and use the 1.5 mm Allen wrench (hex key) to fasten the screws.

Connecting the unit to the computer

Press the Operation button to turn the unit on.

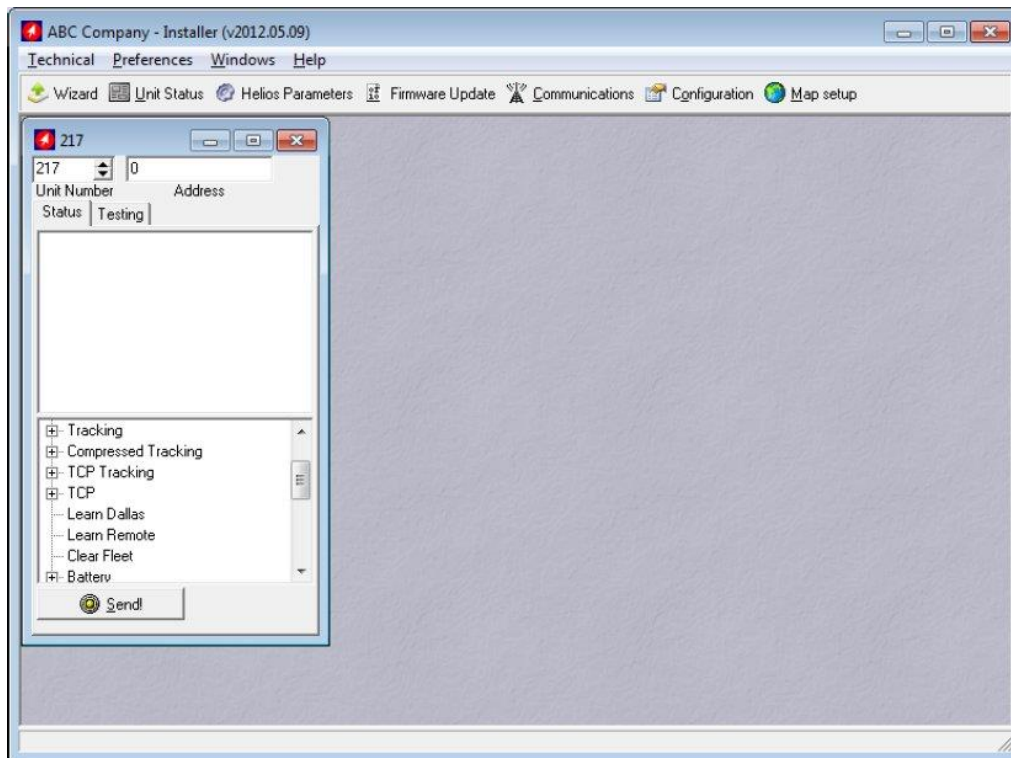
Connect the Kylos Compact programming USB cable to the Micro USB output on the unit and to the USB port on your computer.


Configuring the unit

To open the Installer application, from the **Start** menu select **Starcom Systems > Installer Application**. The Installer company name window appears.

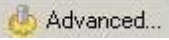


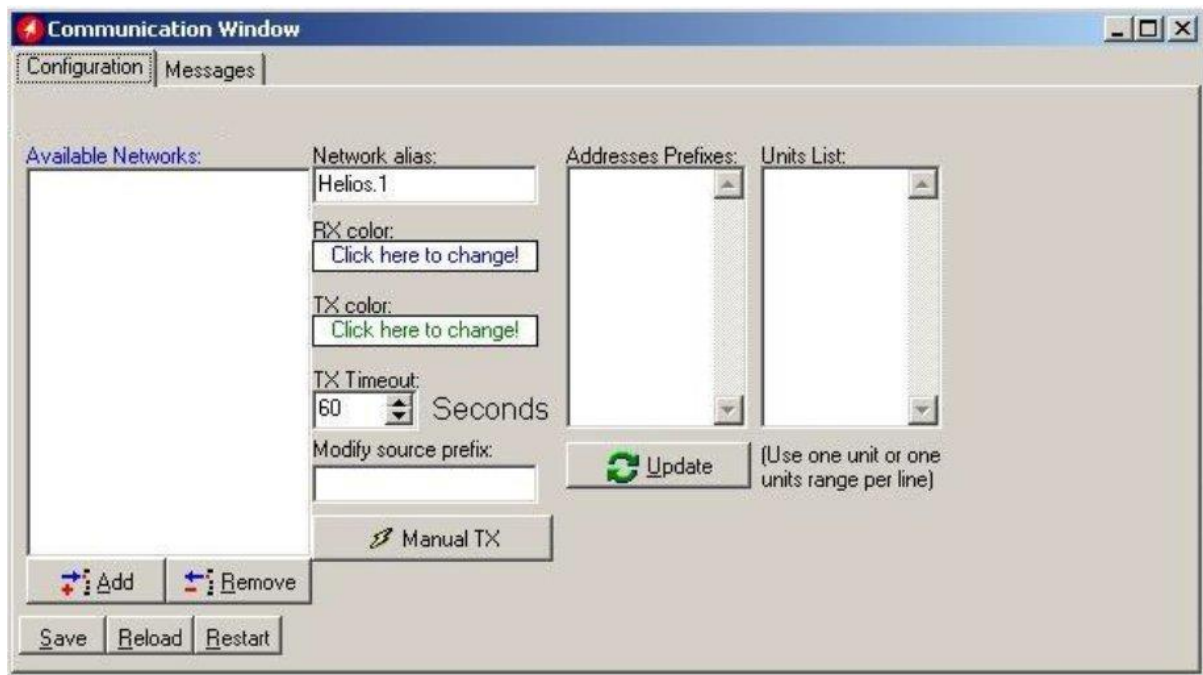
Enter your company name and click **OK**. The Installer window appears.




Click **Technical > Communications**, or press the **Communications** button  on the taskbar at the top of the window.



Click the **Advanced** button  . The Communications Window will appear.

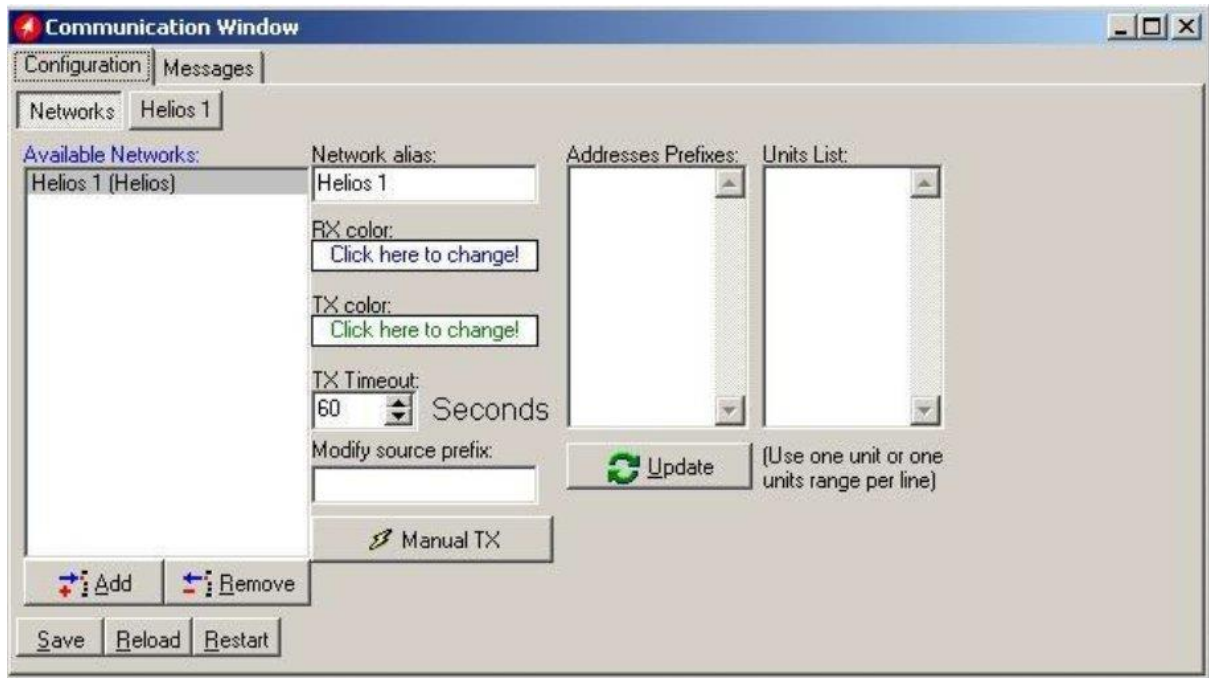


Click the **Add** button  . The Network Selection window appears.

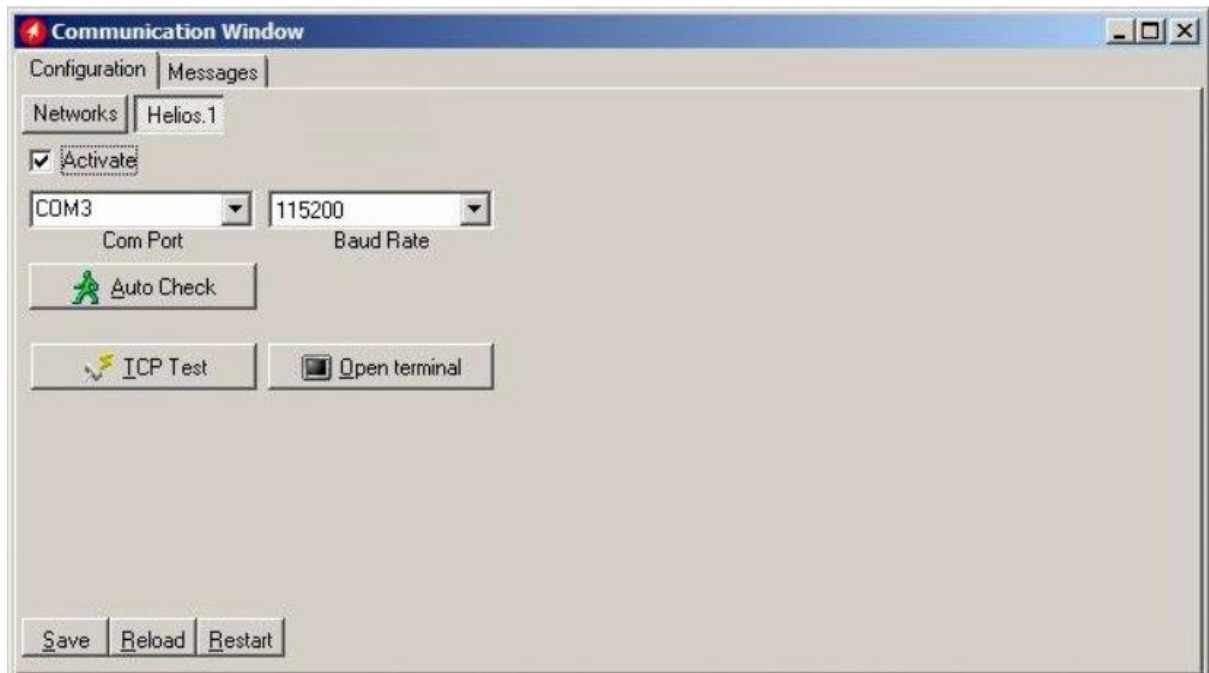


Select **Helios** from the list and press **OK** to add a Helios network.

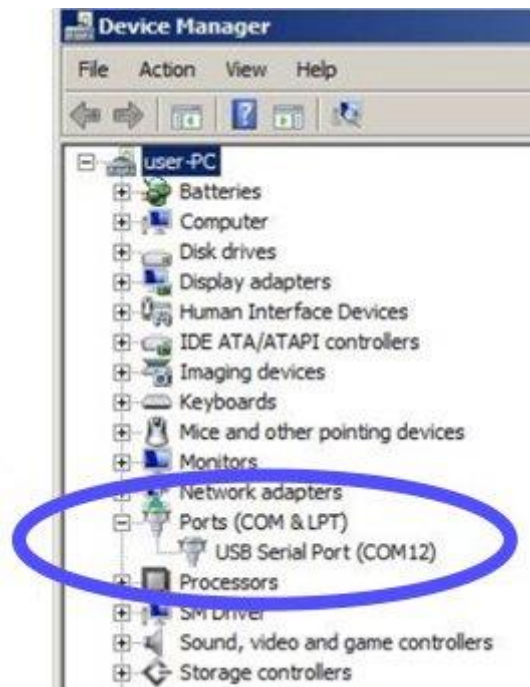
The Communications Window will now display the new connection in the Available Networks list, which is named **Helios 1**. (The name "Helios" in this case of the unit connection to the Installer applies globally to all unit types).



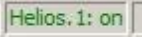
Click on **Helios.1** button to configure and activate the connection.



Select the COM port number of the Kylos cable port in the **Com Port** menu. In order to verify the COM port being used by the unit in your computer, go to **My Computer > Manage > Device Manager > Ports**.



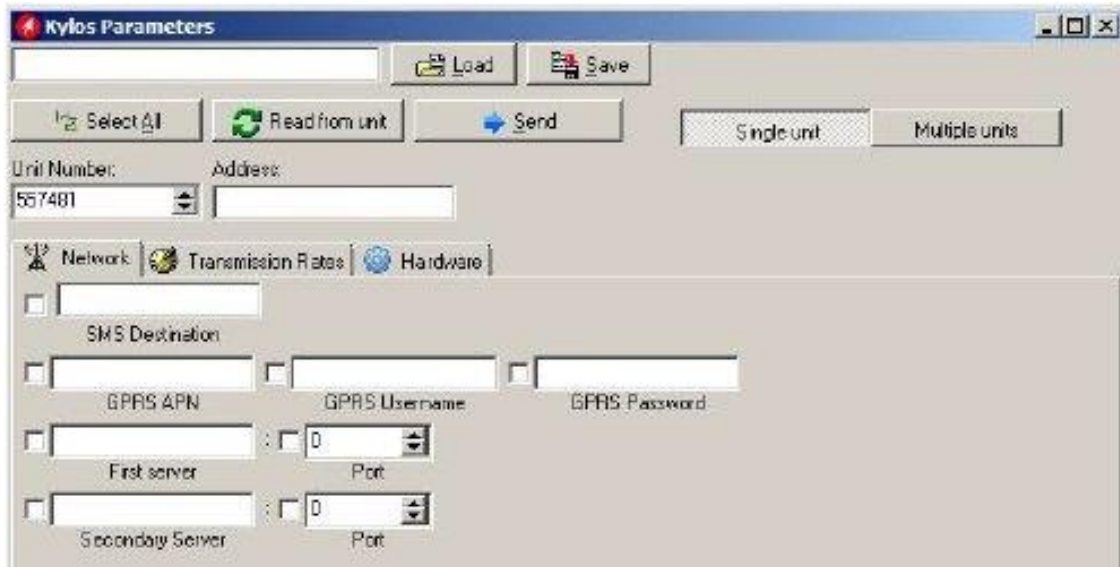
Set the **Baud Rate** to 115200. Check the **Activate** checkbox and click **Save**.

If Kylos has connected successfully, a "Helios.1: on" notification will appear in green color at the bottom left corner of the Installer application main screen  .

To access the unit parameters, press **Technical > Kylos Parameters** or right click on the taskbar at the top of the Installer application window and press **Customize**. Select **Kylos Parameters** and drag/drop it into the taskbar.



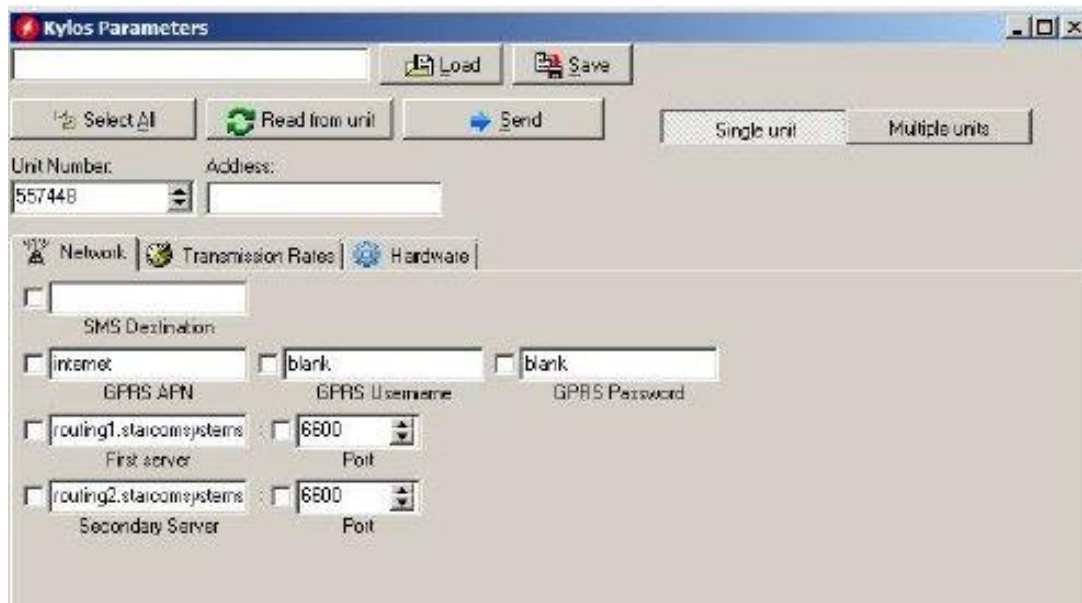
Press on **Kylos Parameters** and use the settings to configure the unit.



Press the **Read from unit** button  to read the parameters already configured in the unit.

Network settings

This tab allows you to enter all the parameters necessary for the unit to connect to the network.



SMS Destination

The unit transmits via GPRS by default and via SMS as a backup, when GPRS connection is not available. The number to be entered in the **SMS Destination** field is the SIM card number used in the SMS Terminal unit connected to the routing server, or the SMPP target number. For more information, see *SMS Notifications guide*.

APN settings

The APN settings are essential in order for the unit to transmit messages and alerts. The APN settings are provided by your cellular operator with the SIM card you are using in the unit.

GPRS APN (Access Point Name) – the name of the gateway provided by your cellular operator (e.g. internet).

GPRS Username – username provided by your cellular operator (e.g. blank).

GPRS Password – password provided by your cellular operator (e.g. blank).

First server – main routing server, which the units transmit to (by default, it is Starcom Systems server 1).

Secondary server – auxiliary routing server, which the units transmit to (by default, it is Starcom Systems server 2).

Port – port open for communication on the routing server (default port is 6600).

Transmission Rates settings

This tab allows you to configure the intervals of regular tracking transmissions, which define how often the unit will transmit its status.



Transmission – interval of regular tracking transmissions, which defines how often the unit will transmit its status.

GPS Peek – interval of the GPS update, which defines how often the unit's GPS module will update its location.

Logging – interval of data logging, during which the unit will wake up only for a few seconds to record its current state, but will not transmit (useful for temperature/humidity/light logging). The information will be transmitted along with the next transmission (tracking/opening/etc.).

Transmission and GPS Peek values are usually left the same. In some instances, these parameters can be configured with different values. For example:

GPS Peek can be *faster* than Transmission when between the regular transmissions the unit can enter or exit a specified perimeter. In such case, a Perimeter event created on Starcom Online will be triggered by the change in the unit location. For more information, see *Chapter 7 – Monitoring. 32*

GPS Peek can be *slower* than Transmission when the unit is installed in a remote location for long periods of time, when the GPS update is not really required. In such case, Transmission can be set for 1 day, for example, and GPS Peek can be set for 5 days (highest value) to save battery power.

For the testing period, you can set the transmission rates at a higher interval (e.g. 10 minutes). Once the unit is tested, you can set the transmission rate at a proper working interval (e.g. 5 hours).

Transmission rates also determine how long the battery will stay charged. Every transmission uses the battery. The faster the transmission rate, the faster the battery will end. To calculate the battery life based on transmission rates, please use the following file:

<https://trello.com/c/44Az7zXU/1-kylos-battery-life-time>

Please note that these are the regular scheduled Tracking transmissions and they do not include the additional random transmissions and alerts, like Light On/Off, Location Update, etc., which also use the battery.

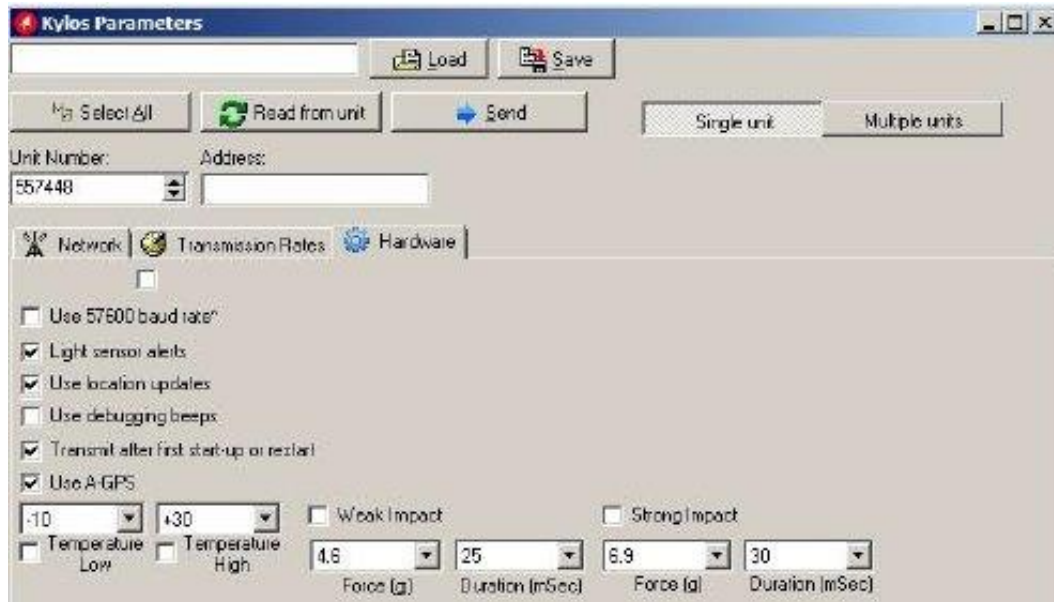
When the device is out of GPRS coverage, the messages will be saved to the unit memory. Messages saved in the memory can be sent when the unit resumes the connection to home cellular network, or to the roaming network, if the SIM card used in the unit has a roaming service enabled by your cellular provider.

SMS – select this option if you want the unit to transmit messages saved in the memory via SMS. The unit transmits by GPRS by default and by SMS as a backup when GPRS connection is not available. For more information, see *Appendix A – Unit Communication in Starcom Systems*.

Roaming GPRS – select this option if you want the unit to transmit messages saved in the memory via roaming GPRS. In order for this to work, the SIM card used in the unit must have a roaming service enabled by your cellular provider.

Hardware settings

This tab allows you to configure various hardware settings.



Use 57600 baud rate – if this option is activated, the device will use 57,600 bps to communicate.

Light sensor alerts – light sensor enabling option. Once activated, the unit will transmit Light On / Light Off alerts based on the light sensor readings.

Use location updates – GPS enabling option. Once activated, the unit's GPS module will be turned on upon every transmission, and location update transmissions will be sent.

Use debugging beeps – factory testing setting. Do not use.

Transmit after first start-up or restart – if this option is activated, a "Power On" message will be transmitted whenever the unit is powered on for the first time, or gets restarted.

Temperature Low / Temperature High – temperature sensor parameters used to define the values for low and high temperature alerts.

Weak Impact / Strong Impact – accelerometer parameters used to define two types of impact (hit, push, drop, etc.) on the device.

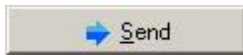
Force (g) – determines the threshold of the force needed to be measured in order to send an alert. Select "Disabled", if you don't wish to use the alert.

Duration (msec) – determines the duration of the force needed to be measured in order to send an alert.

The default values configured in the unit are based on the laboratory testing results, they were found to be acceptable in most cases. These values can be tested and changed according to the specifics of your work. To change these values according to specific conditions, you need to test the unit with different values and choose the best option. The lower the setting, the more often the unit will respond to a weaker impact.


Quarter scale – if on, the Weak Impact force will be scaled in quarter of a g. This option can be used to make the accelerometer more sensitive to smaller impacts.

Once all the necessary parameters are set, press the **Send** button

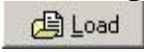

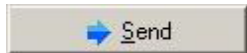


to send the changes you made to the unit.

Saving the configuration

If you are planning to configure other units with the same parameters, you can save these settings as a *.mem file. Click the **Save** button  in the Tetis Parameters window, select the location where you want the configuration file to be saved on your computer, name the file and press **Save**.

Configuring a new unit with the saved configuration


To configure a new unit with the saved parameters, click the **Load** button  in the Tetis Parameters window, browse to the location where you saved the configuration file, select the file and press **Open**. Click the **Select All** button  to select all the parameters and press the **Send** button  to send the changes to the unit.

5 Testing

It is important to test the unit connection to the network, the correct GPS location, the unit status and inputs response before installing the unit in the vehicle. In order to do this, you need to perform the following steps.

TCP test

This test verifies that the SIM card is open to the GPRS network, the unit can connect to the network and make successful TCP/IP transmissions.

Press the **TCP Test** button  (**Communications > Advanced > Communication Window > Configuration > Helios.1**). Wait a few minutes until you receive a pop-up window with a successful connection message.



If at the end of the TCP Test you do not receive a successful message, check your APN settings (Helios Parameters > Network). Contact your cellular provider and make sure the SIM card is open for GPRS. Verify that your SIM card is not protected by a PIN code. If necessary, use a mobile phone to cancel the PIN code.

You can also perform the test manually using the **Terminal** window. Open the Terminal window (**Communications > Advanced > Communication Window > Configuration > Helios.1 > Open Terminal**) and type the following commands:

`\tdm` and press **Enter** (Modem mode). The modem will be turned on.

`\tr` and press **Enter**. This command runs a series of actions to check the parameters such as reception level, visible networks and registered network, SIM card state and information. It also attempts to connect to the routing server. If successful, a "TCP: Send+" message will appear in the Terminal window.

```

Helios.1
\tfiTesting Mode On
\tdm
Modem mode.
\tr
INIT
AT+MIPCALL=0
ERROR
AT+CGPRS?
+CGPRS: 1

OK
AT
OK
AT+MIPCALL=1,"internet","blank","blank"
OK

+MIPCALL: 31.154.153.213

TCP: Registered

TCP: Opening socket
AT+MIPCLOSE=1
ERROR
AT+MIPOPEN=1,1034,"routing11starcomsystems.com",6600,0
    
```

GPS test

NOTE: If you're testing the unit inside the building, it will not be able to get a GPS signal in most cases. In order to get a proper GPS location, the unit has to be placed outside the building, or outside the window, where it can access the satellites.

Open the Terminal window (**Communications > Advanced > Communication Window > Configuration > Helios.1 > Open Terminal**) and type **\tdg** (GPS mode). GPS readings will be displayed. When you see "A,3"... reading, it will indicate a GPS fix signal.

```

Helios.1
$GPUTG,000.0,T,,M,000.0,N,000.0,K,A*0D
$GPGGA,101732.117,3205.0332,N,03448.3701,E,1,10,0.9,86.7,M,17.9,M,,0000*6B
$GPGSA,A,3,11.03,32,19,14,22,01,20,23,31,,1.9,0.9,1.6*3B
$GPGSU,3,1,10,11,74,271,41,01,57,322,43,32,56,319,43,31,36,116,41*75
$GPGSU,3,2,10,20,34,294,39,19,33,201,40,14,25,041,38,23,22,224,39*75
$GPGSU,3,3,10,22,13,077,37,03,12,188,33*7F
$GPRMC,101732.117,A,3205.0332,N,03448.3701,E,000.0,000.0,240113,,A*62
$GPUTG,000.0,T,,M,000.0,N,000.0,K,A*0D
$GPGGA,101733.117,3205.0335,N,03448.3700,E,1,10,0.9,86.1,M,17.9,M,,0000*6A
$GPGSA,A,3,11.03,32,19,14,22,01,20,23,31,,1.9,0.9,1.6*3B
$GPRMC,101733.117,A,3205.0335,N,03448.3700,E,000.0,000.0,240113,,A*65
$GPUTG,000.0,T,,M,000.0,N,000.0,K,A*0D
$GPGGA,101734.117,3205.0330,N,03448.3697,E,1,10,0.9,86.5,M,17.9,M,,0000*63
$GPGSA,A,3,11.03,32,19,14,22,01,20,23,31,,1.9,0.9,1.6*3B
$GPRMC,101734.117,A,3205.0330,N,03448.3697,E,000.0,000.0,240113,,A*68
$GPUTG,000.0,T,,M,000.0,N,000.0,K,A*0D
$GPGGA,101735.117,3205.0328,N,03448.3694,E,1,10,0.9,87.7,M,17.9,M,,0000*6B
$GPGSA,A,3,11.03,32,19,14,22,01,20,23,31,,1.9,0.9,1.6*3B
$GPGSU,3,1,10,11,74,271,42,01,57,322,43,32,56,319,43,31,36,116,41*76
$GPGSU,3,2,10,20,34,294,40,19,33,201,40,14,25,041,38,23,22,224,39*7B
$GPGSU,3,3,10,22,13,077,37,03,12,188,34*78
$GPRMC,101735.117,A,3205.0328,N,03448.3694,E,000.0,000.0,240113,,A*63
$GPUTG,000.0,T,,M,000.0,N,000.0,K,A*0D
$GPGGA,101736.117
    
```

If you do not see any response, type **\tg1** to turn the GPS on and repeat the test.

Unit Status

Open the **Unit Status** window. Enter the unit number in the **Unit Number** field, select **Request status** and press **Send**. The unit information will appear.



Click on the **Inputs** tab, press on the Key, Arm, Doors, etc. buttons on the Simulator, press **Request status** and check the response in the Unit Status window. Use the **Outputs** tab to test the unit's outputs response. Use the **Location** tab to check the unit's GPS data. Use the **Various** tab to see the unit information.

After all the tests have been performed successfully, the unit is ready to be installed in the vehicle.

6 Installations Kylos

Disconnect the USB cable from the unit. Carefully remove the battery and place it back to reset the unit. Close the unit cover.

The unit is now ready to be installed.



Installations Kylos Compact

Disconnect the USB cable from the unit. Press and hold the Power button to turn the unit off.

Before installing the unit, press the Power button and make sure the LED color is green. Otherwise recharge the battery.

Charge the battery for at least **12 hours** prior to first use. After that, charge the battery for at least **6 hours** before each use.

Before installing the unit, press and hold the Power button until you see the LED flash 5 times with white light. Release the button and make sure that both green and red blinks are over.

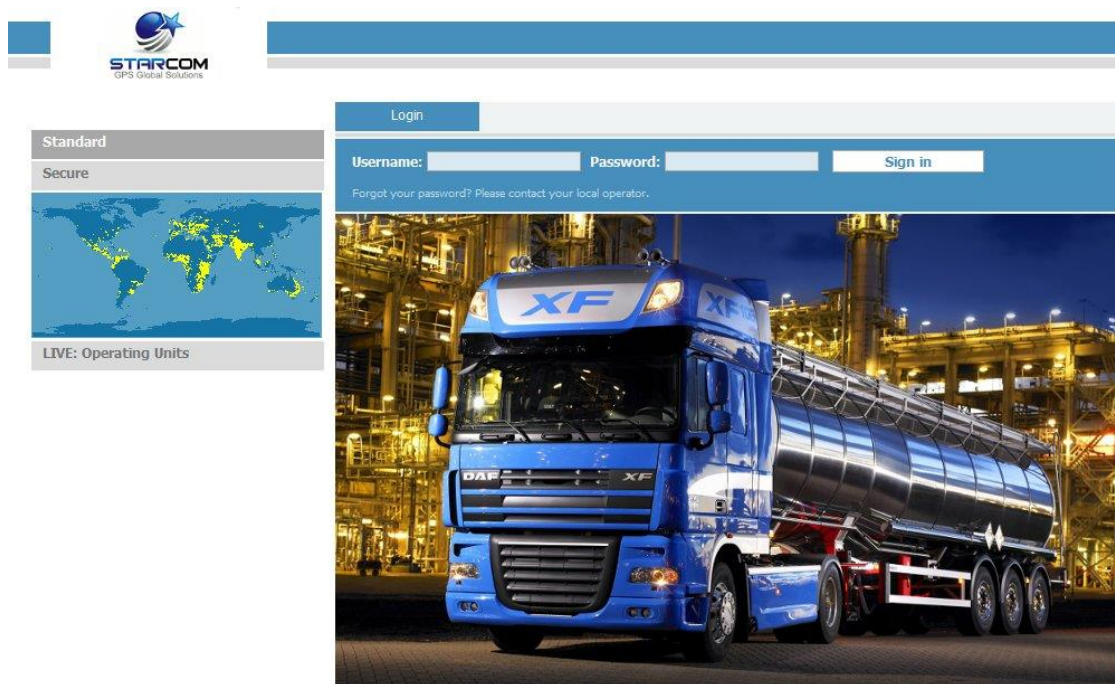
Make sure you get a notification for the Button On.



7 Monitoring

After the unit is installed in the vehicle, you can monitor its status on **SGS Online**. SGS Online is a web based fleet management application with a flexible event generator which allows to set customizable notifications and alerts.

In your browser, go to http://starcomsystems.com/online/de_st.htm Enter your username and password in the **Username** and **Password** fields, and click **Sign in**.

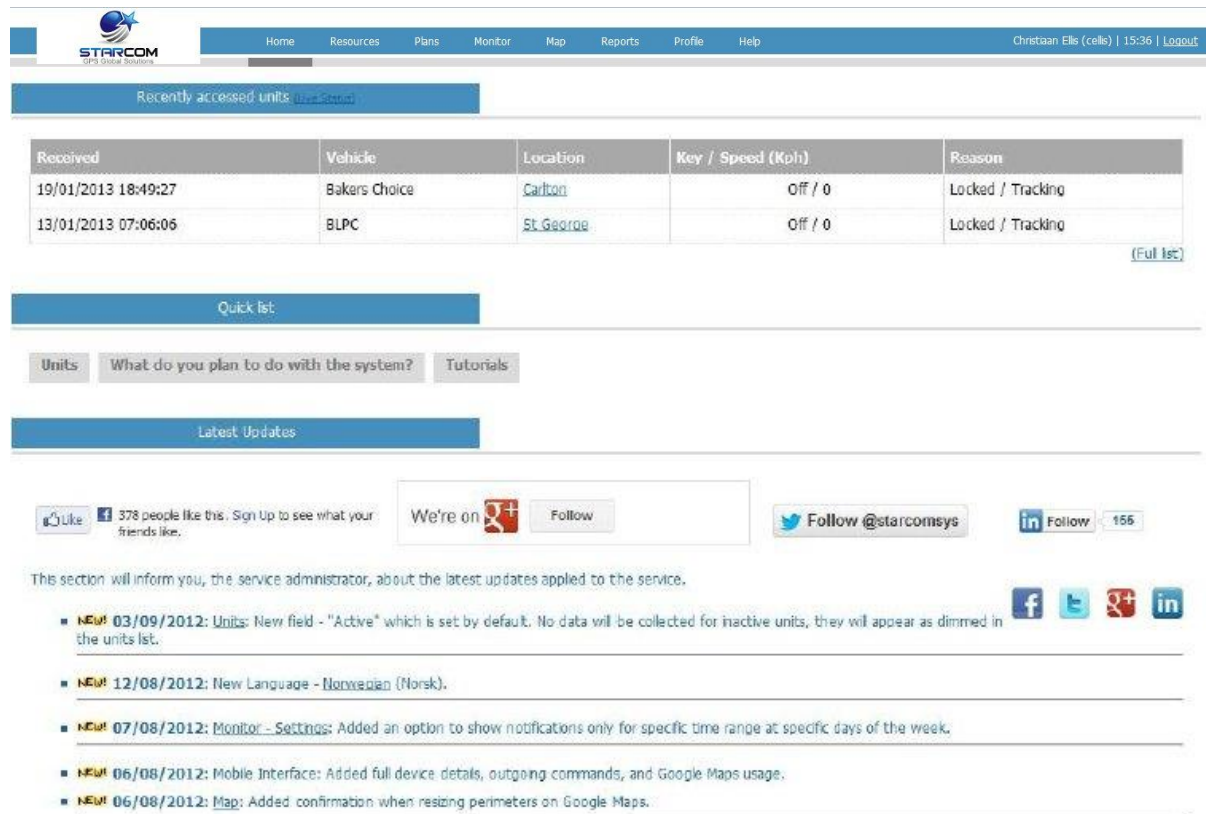


Starcom Online horizontal menu bar features the following categories:

- ★ **Home** – lists the most recently accessed units, including their location.
- ★ **Resources** – allows managing the unit and customer information.
- ★ **Plans** – allows creating and managing events and alerts.
- ★ **Monitor** – monitors the events and alerts from the unit.
- ★ **Map** – displays the actual location of the unit on the map.
- ★ **Reports** – generates reports of the unit activity.
- ★ **Profile** – allows configuring your user properties.
- ★ **Help** – contains tutorials and knowledge base.

Home

The Home section shows recently accessed units and latest site updates.



STARCOM GPS Global Solutions

Home Resources Plans Monitor Map Reports Profile Help Christiaan Ellis (cells) | 15:36 | Logout

Recently accessed units [Live Status](#)

Received	Vehicle	Location	Key / Speed (Kph)	Reason
19/01/2013 18:49:27	Bakers Choice	Carlton	Off / 0	Locked / Tracking
13/01/2013 07:06:06	BLPC	St George	Off / 0	Locked / Tracking


[Full list](#)


Quick list


Units What do you plan to do with the system? Tutorials

Latest Updates

Like 378 people like this. Sign up to see what your friends like.

We're on  Follow

 Follow @starcomsys

 Follow 156

This section will inform you, the service administrator, about the latest updates applied to the service.

- NEW 03/09/2012:** Units: New field - "Active" which is set by default. No data will be collected for inactive units, they will appear as dimmed in the units list.
- NEW 12/08/2012:** New Language - Norwegian (Norsk).
- NEW 07/08/2012:** Monitor - Settings: Added an option to show notifications only for specific time range at specific days of the week.
- NEW 06/08/2012:** Mobile Interface: Added full device details, outgoing commands, and Google Maps usage.
- NEW 06/08/2012:** Map: Added confirmation when resizing perimeters on Google Maps.

In the Home section, you can find the following additional links:

Live status – displays the current status of all live units, as shown in the following image.



Received	Vehicle	Location	Key / Speed (Kph)	Reason
19/01/2013 18:49:27	Bakers Choice	Carlton	Off / 0	Locked / Tracking
13/01/2013 07:06:06	BLPC	St George	Off / 0	Locked / Tracking

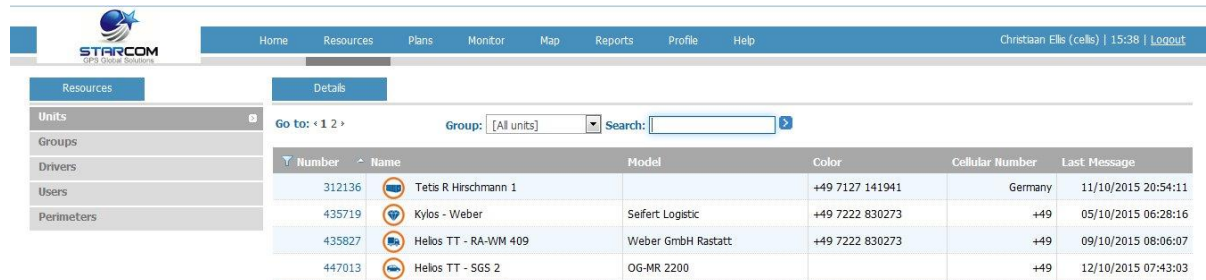
Full list – opens the Resources section that displays a full list of all your units.

Location – opens the Map section that displays a map showing the current location of the unit.

Quick List – links that enable you to access the Resources and Plans sections.

Resources

The Resources section shows all your units.



Number	Name	Model	Color	Cellular Number	Last Message
312136	Tets R Hirschmann 1		+49 7127 141941	Germany	11/10/2015 20:54:11
435719	Kylos - Weber	Seifert Logistic	+49 7222 830273	+49	05/10/2015 06:28:16
435827	Helos TT - RA-WM 409	Weber GmbH Rastatt	+49 7222 830273	+49	09/10/2015 08:06:07
447013	Helos TT - SGS 2	OG-MR 2200		+49	12/10/2015 07:43:03

On the left side, the Resources section features the following tabs:

Units – lists the units.

Groups – lists the groups of units and helps you create new and modify the existing groups.

Users – lists the users and helps you create new and modify the existing users.

Perimeters – lists perimeters and helps you define new and modify the existing perimeters.

Units

The **Units** page features the **Details** area, which arranges the unit information in the following columns:

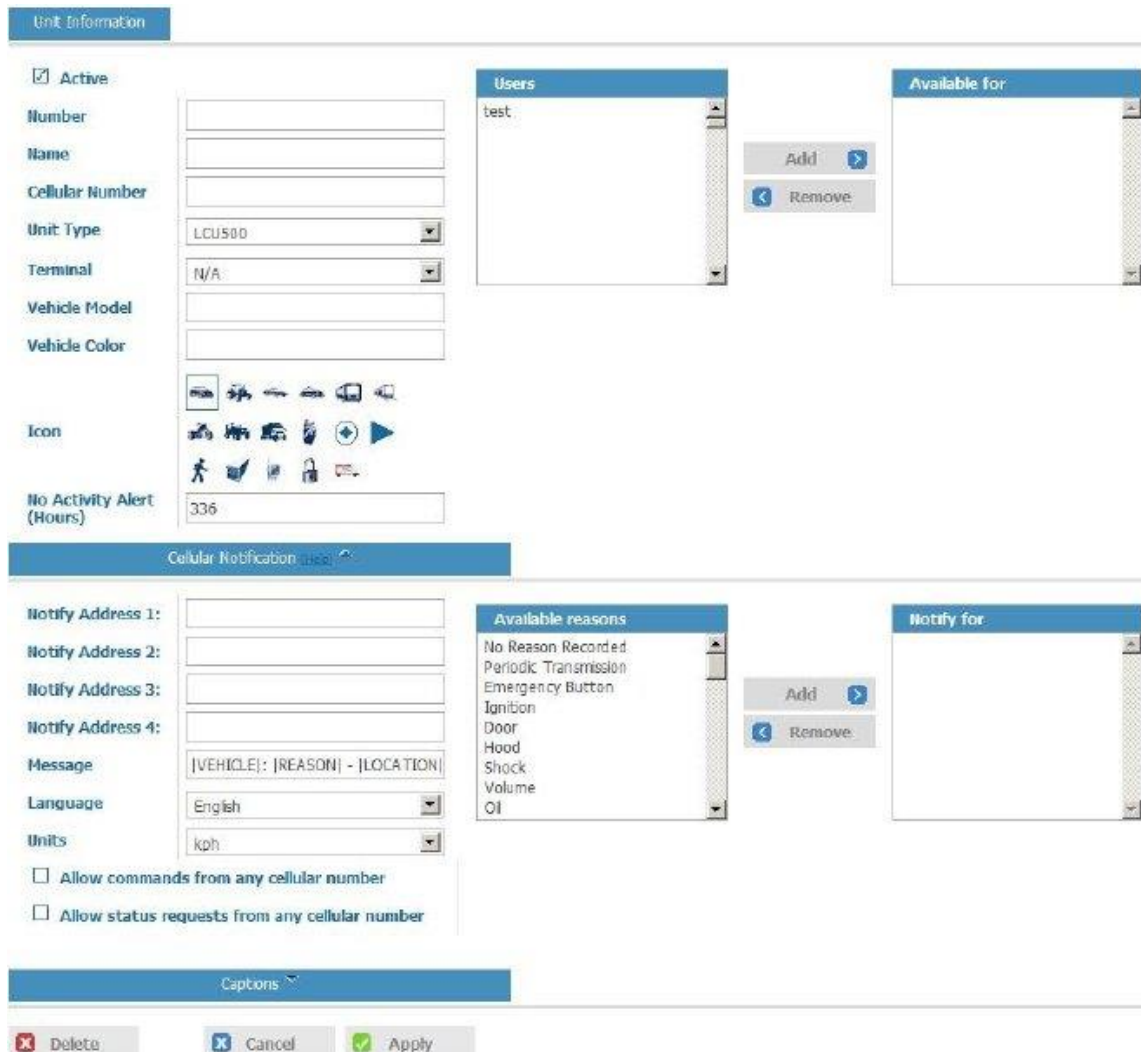
Number – the unit serial number. Clicking on the unit number link will display the **Unit Information** page, where you can modify the unit information.

Name – displays the icon and the name of the unit. Clicking on it will reveal a pop-up menu with the quick access links to the Map and the Reports sections.

Cellular Number – displays the phone number of the SIM card installed in the unit.

Last Message – displays the time and date of the last message transmitted by the unit.

To create a new unit, click **New** (not available for evaluation kit users). The Unit Information page opens.



Active – when selected (set by default), makes the unit active on Starcom Online. To make the unit inactive, deselect this checkbox. No data will be collected for inactive units; they will appear as dimmed in the units list.

Use this section to enter the unit **Number** and **Name**. In the **Cellular Number** field, enter the number of the SIM card installed in the unit. In the **Unit Type** list, select Helios. Use the **Terminal** list to select the type of terminal connected to the unit.

No Activity Alert (Hours) – used to receive an alert when the unit has stopped transmitting. The default value is 336 hours (2 weeks).

In the **Users** list, select the users you want to make the unit available for and click **Add**. The users will be moved to the **Available for** list.

Use the **Cellular Notification** section to configure the cellular notifications for different events.

Notify Address 1-4 – enter the cellular numbers you want to use to send commands to the unit, or to receive notifications on when the events occur.

Message – modify the notification message format.

Language – select the language in which you want to receive the message.

Units (kph/mph) – select the measurement you want to receive the speed data in.

In the **Available reasons** list, select the reasons you want to receive an alert for and click **Add**. The reasons will be moved to the **Notify for** list.

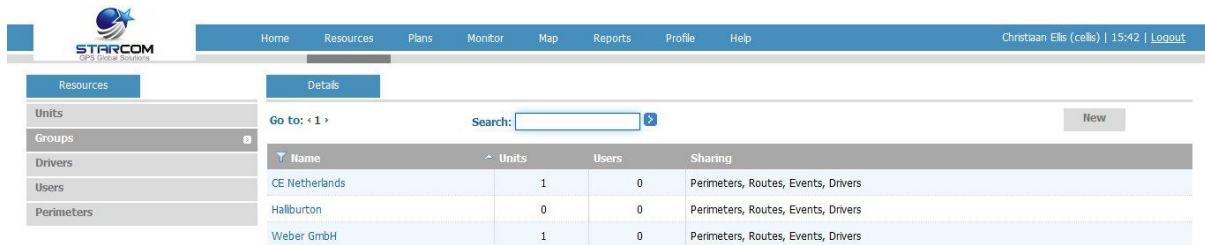
When finished, click **Apply**. The new unit is saved.

To modify a unit, in the **Units** page, click on the unit name link of the unit you want to modify. The Unit Information page appears. Modify the unit details as required. Click **Apply**. The modified unit details are saved.

To delete a unit, in the **Units** page, click on the unit name link of the unit you want to delete. The Unit Information page appears. Click **Delete**. The unit is deleted.

Groups

You can create new and modify the existing groups of units.



To create a new group, click **New**. The Group page opens.



In the **Name** field enter the name of the new group.

In the **Units** list, select the units you want to include in the group and click **Add**. The units will be moved to the **In Group** list.

In the **Users** list, select the users you want to include in the group and click **Add**. The users will be moved to the **Available for** list.

In the **Sharing** section, click the respective checkbox, if you want the group to **Share Perimeters**, **Share Events**, or **Share Drivers**.

Click **Apply**. The new group is saved.

To modify a group, in the **Groups** page, click on the group name link of the group you want to modify. The Group page appears. Modify the group details as required. Click **Apply**. The modified group details are saved.

To delete a group, in the **Groups** page, click on the group name link of the group you want to delete. The Group page appears. Click **Delete**. The group is deleted.

Users

You can create new and modify the existing users.



Username	Full Name	Company	Phone	E-Mail	Last Login	Created By
testuser	Test	Test		test@test.com	N/A	

To create a new user, click **New**. The Users page opens. Here you can enter the new user information and define their access permissions.

Users

Username:	<input type="text"/>	<input type="checkbox"/> Account is locked
Password:	<input type="password"/>	
Full Name:	<input type="text"/>	Service: <input type="text" value="Private"/>
Company:	<input type="text"/>	
Address:	<input type="text"/>	Report Access...
City:	<input type="text"/>	<input type="checkbox"/> Google Maps access
ZIP Code:	<input type="text"/>	<input type="checkbox"/> Profile section access
Country:	<input type="text" value="Barbados"/>	<input type="checkbox"/> Editing units
Phone:	<input type="text"/>	<input checked="" type="checkbox"/> Allow status requests
E-Mail:	<input type="text"/>	<input checked="" type="checkbox"/> Allow outgoing commands
Language:	<input type="text" value="English"/>	<input type="checkbox"/> Allow stopping vehicle
Time Zone:	GMT -4	<input type="checkbox"/> Allow logic state changing
Date Format:	15/01/2013	<input type="checkbox"/> Allow clearing fleet
Time Format:	17:09:00	<input type="checkbox"/> Wiring table access
Distance Units:	km	<input checked="" type="checkbox"/> Cellular Commands
Speed Units:	kph	<input checked="" type="checkbox"/> Cellular Notification
Default map type:	Flash Maps	<input type="checkbox"/> Monitoring
Map Tooltip Format:	{VEHICLE} {SPEED}	<input type="checkbox"/> Lock account after 5 bad login attempts
<input type="checkbox"/> Show all my units on the map		<input type="checkbox"/> Force password changing once a month
<input type="checkbox"/> Show coordinates in reports		<input type="checkbox"/> Allow changing tracking interval
<input type="checkbox"/> Flash Maps		<input type="checkbox"/> Drivers

Besides entering the user information, you can select the following options:

Show all my units on the map –all the user’s units will be displayed on the Map page. If this option is disabled, only the selected unit will be displayed.

Show coordinates in reports – the user’s reports will include the GPS coordinates.

Service: Private / Commercial / Advanced – defines the level of user access for the Plans and the Reports sections.

Report Access – allows to select which reports will be accessible for the user.

Google Maps access – enables Google Maps access on the Maps page.

Profile section access – enables the user to view his Profile section.

Editing units – enables the user to edit the unit details.

Allow status requests – enables the user to make unit status requests.

Cellular Commands – enables the user to send commands to the unit from a cellular phone.

Cellular Notification – enables the user to receive cellular notifications.

Monitoring – enables the user to view the Monitoring page.

Lock account after 5 bad login attempts – locks access to Starcom Online account after the user has made 5 bad login attempts.

Force password changing once a month – requires the user to change the password once a month.

Allow editing cellular number – enables the user to edit the phone number of the SIM card installed in the unit.

Allow changing tracking interval – enables the user to change the time of the unit tracking interval.

After you configured all the parameters, click **Apply**. The new user is saved.

To modify a user, in the **Users** page click on the user name link of the user you want to modify. The Users page appears. Modify the user details as required. Click **Apply**. The modified user details are saved.

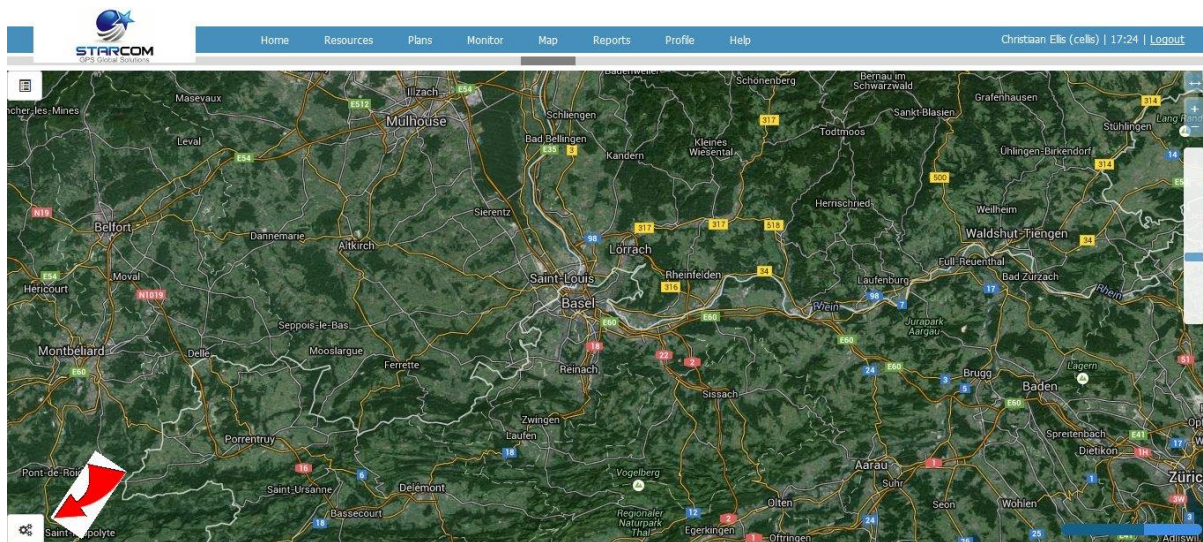
To delete a user, in the **Users** page click on the user name link of the user you want to delete. The Users page appears. Click **Delete**. The user is deleted.

Perimeters

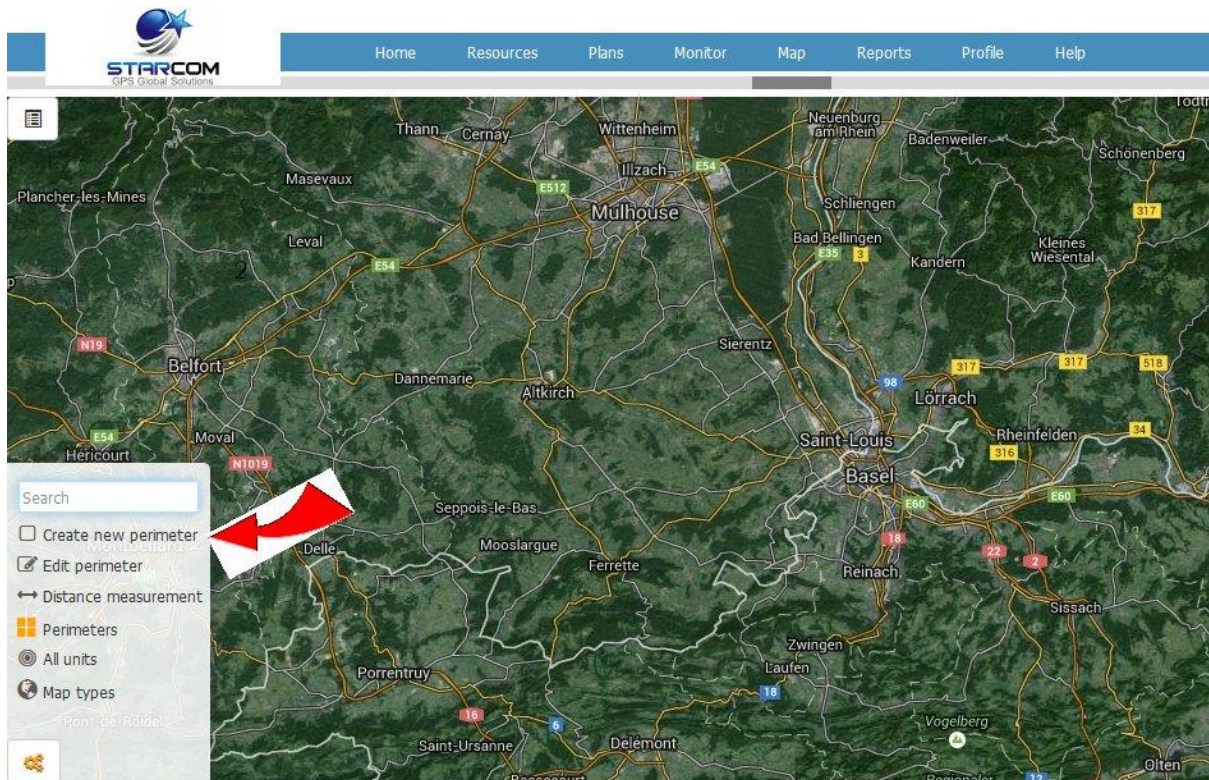
You can create new and modify the existing perimeters.



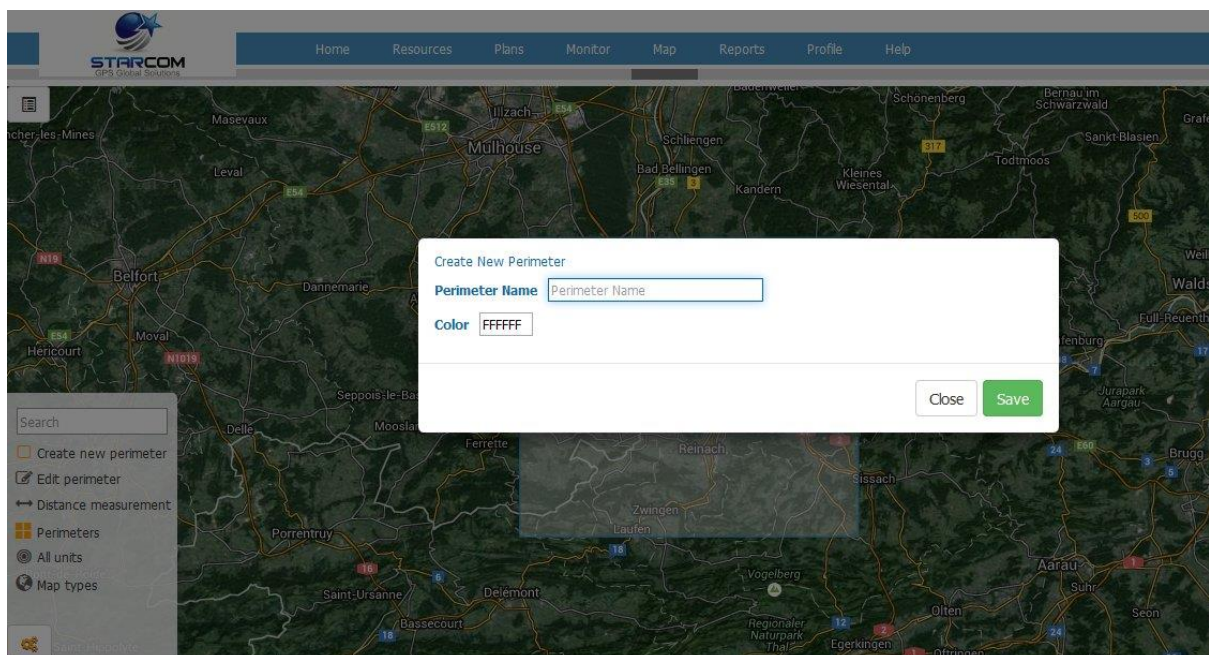
To create a new perimeter, click the **Button** at the bottom left corner of the map to open the Perimeter function



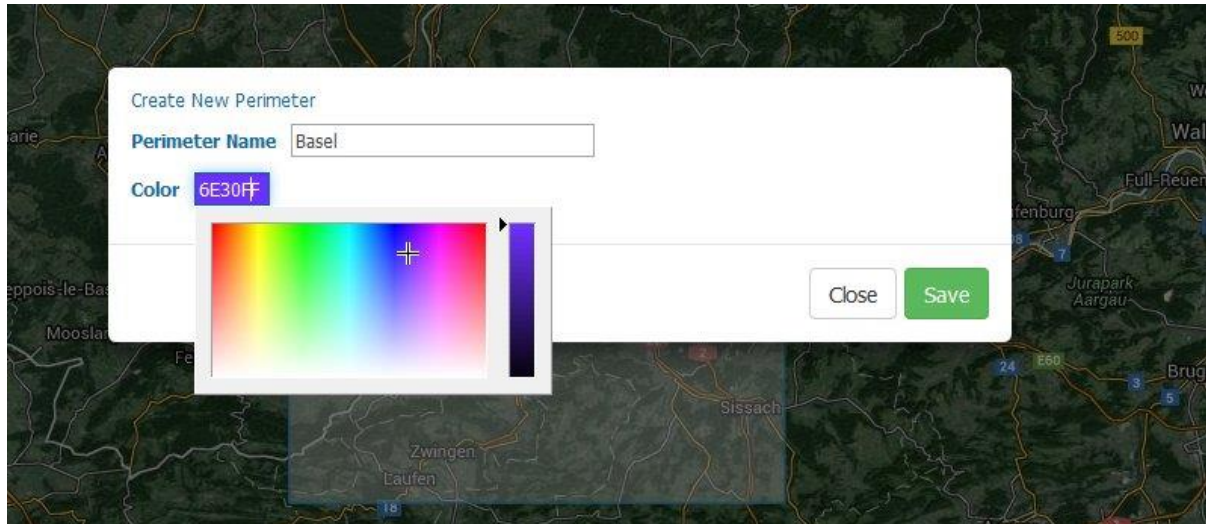
To create a new perimeter, click **Create New Perimeter**. The **Create New Perimeter** box will change color to **Orange**.



The cursor changes to a + and allows you to drag a rectangle over the area you want to demarcate as a perimeter. Once the area is selected, a text box appears.



In the **Text** field, enter the name of the perimeter. From the **Color** palette, choose a color for the perimeter. Click **Save**. The new perimeter is saved and appears on the map.



Plans

The Plans section enables you to create usage plans and to view plans that already exist.



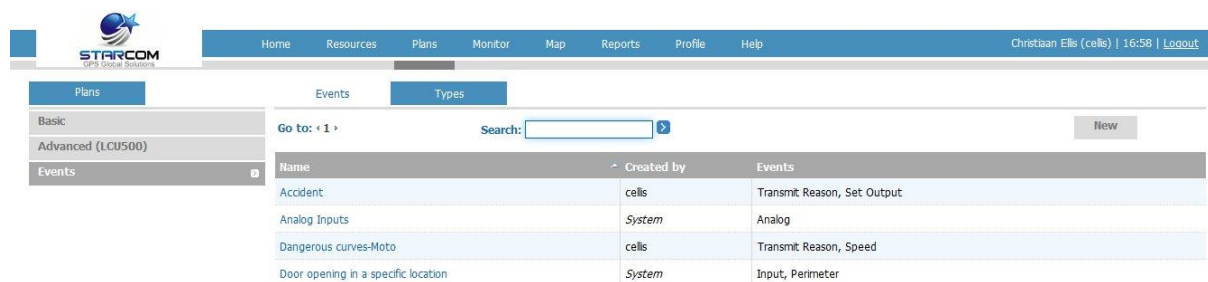
On the left side, the Plans section features the following tabs:

Basic – allows to set up basic plans for LCU500 units. Do not use.

Advanced – allows to set up advanced plans for LCU500 units. Do not use.

Events – allows to create events for your units.

To create a new event, you need to create an event Type first. Click **Types**. The Types page opens.



In this section, you can see the types of events already created in the system. You can use one of them, or create a new type.

To create a new event type, click **New**. Enter the name of the event type in the **Name** field. Leave **Day of the week** and **Time Range** as "Changeable", later you will be able to change these settings in the event itself.

Event Type ▲

Name:

Day of the week:

- Changeable
- Monday
- Tuesday
- Wednesday
- Thursday
- Friday
- Saturday
- Sunday

Time Range:

Changeable

: to : (h:m)

Events

Click the **Add Event** button and select the event type you want to create from the dropdown list.

Events

Add Event

Remove Event

Type:

Value:

Operand:

Add Event

✖ Delete

Wait

Wait

Set Output

Input

Speed

Perimeter

Roaming

GPRS

Tracking

Mileage

Analog

Logic State

RPM

Transmit Reason

Modem

Most of the types listed here relate to the Helios units. The event types that can be used for Tetis are: **Perimeter**, **Roaming** and **GPRS**.

Set the necessary **Value**. You can leave the **Condition** as "Changeable", later you will be able to change it in the event itself. Select the necessary operand in the **Operand** list, as follows:

And – when you create several events, this event and the following one will be performed simultaneously.

And then – when you create several events, the following event will start only after the first one is performed.

Transmit – the event will be transmitted.

End – ends an event. For example, you can create an output event, which after it performs the necessary actions will simply end.

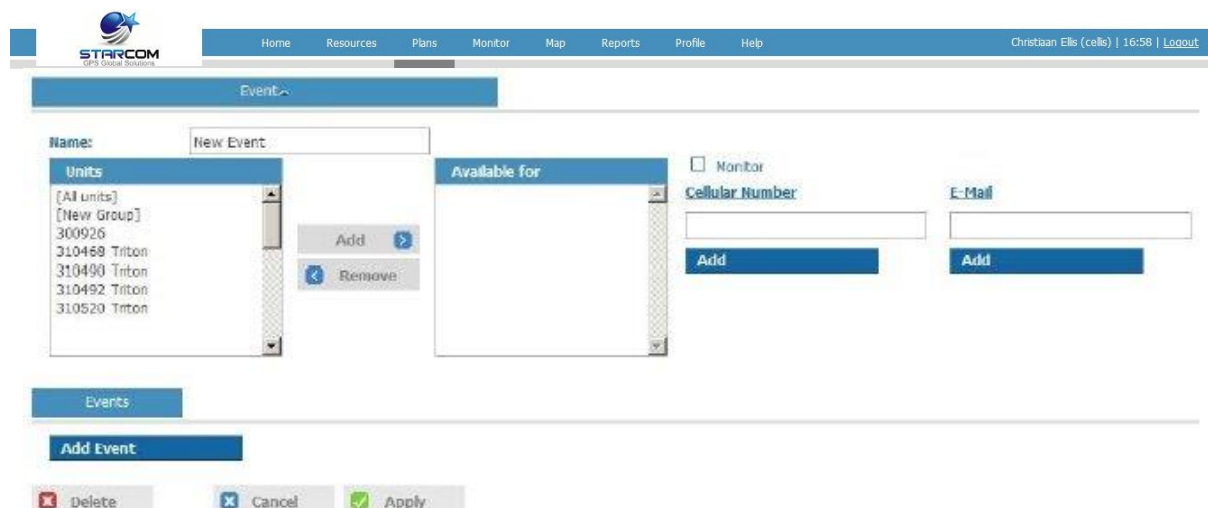
You can create a complex event type, which consists of several events.

When finished, click **Apply**. The new event type is saved.

To create a new event, click **New** in the Events section.

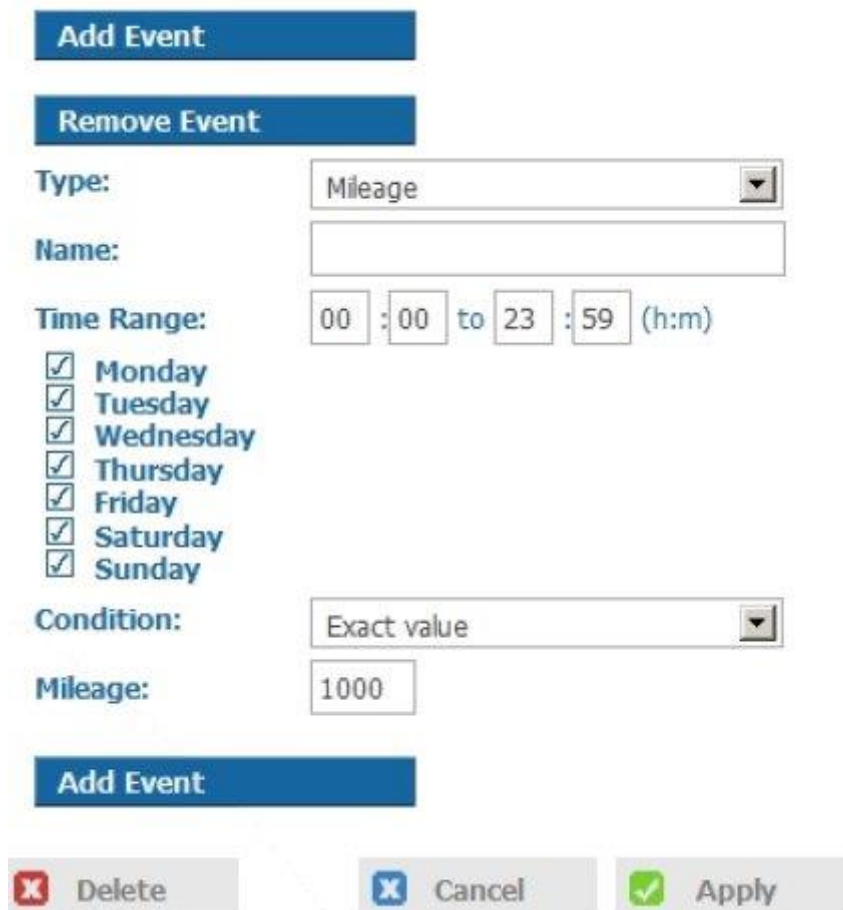


Enter the name of the event in the **Name** field. In the **Units** list, select the units you want to include in the event and click **Add**. The units will be moved to the **Available for** list.



Enter the cellular number and email address to receive the event notification. If you select the Monitor checkbox, the event will be displayed on the Monitor page (see below) in real time.

Click the **Add Event** button and select the type of the event you want to create from the dropdown list.



Add Event

Remove Event

Type: Mileage

Name:

Time Range: 00 : 00 to 23 : 59 (h:m)

Monday
 Tuesday
 Wednesday
 Thursday
 Friday
 Saturday
 Sunday

Condition: Exact value

Mileage: 1000

Add Event

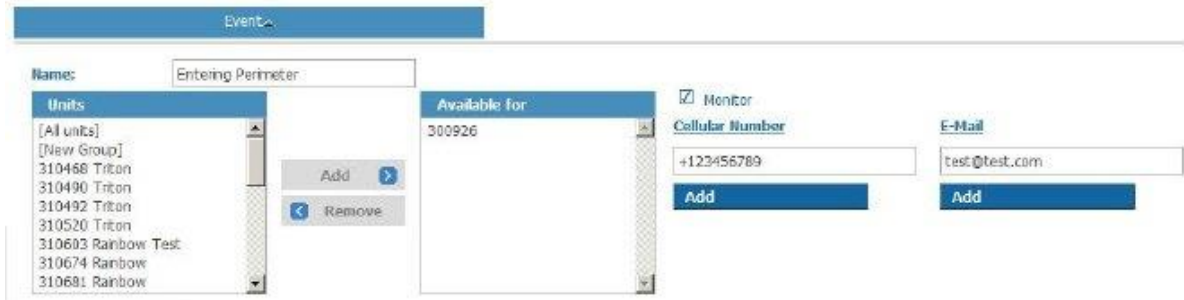
Specify the time and date range and the event condition.

When finished, click **Apply**. The new event is saved.

For example, let’s create an event, which will send an alert when the vehicle goes over a certain speed in a specific location.

For this, we will use a Location event type already created in the system and create a new event based on this type.

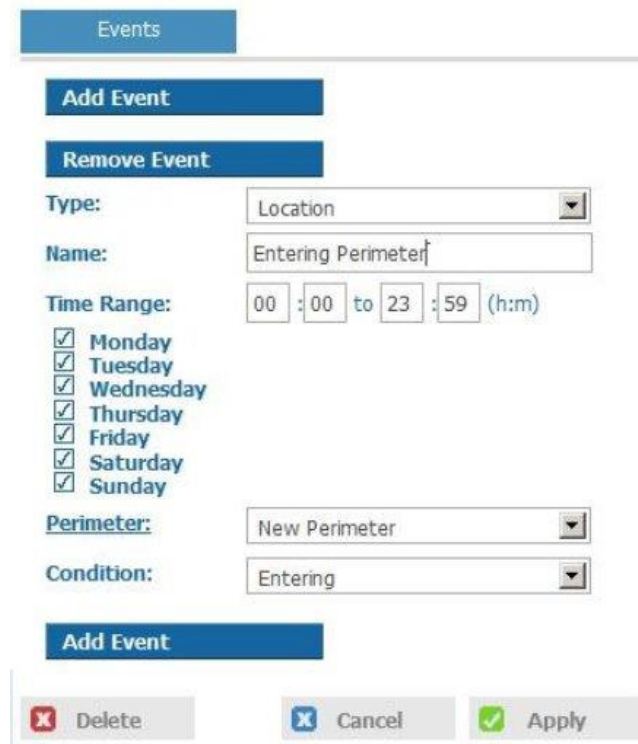
Go to **Events** and click **New**.



Enter the name of the event in the **Name** field. In the **Units** list, select the units you want to include in the event and click **Add**. The units will be moved to the **Available for** list.

Enter the cellular number and email address to receive the event notification. Select the Monitor checkbox, if you want the event will to be displayed on the Monitor page in real time.

Click the **Add Event** button and select the **Location** type in the **Type** list.



Enter the name of the event in the **Name** field. Select the necessary time and date range.

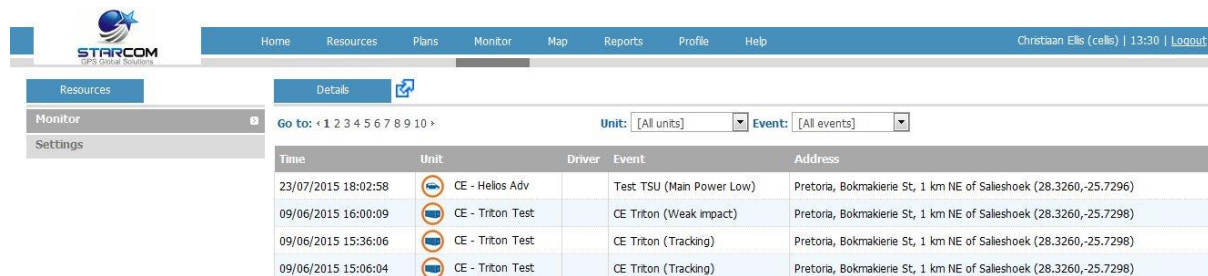
Select the necessary perimeter in the **Perimeter** list.

Select **Entering** in the **Condition** list.

Click **Apply**. The new event, which will send an alert when the unit enters a specific location, is created.

Monitor

The Monitor section allows you to select a set of events for a specific unit type and to see them displayed in real time.



The screenshot shows the STARCOM web interface. The top navigation bar includes Home, Resources, Plans, Monitor, Map, Reports, Profile, and Help. The user is logged in as Christiaan Ellis (celis) at 13:30. The left sidebar has tabs for Resources, Monitor, and Settings. The main content area is titled 'Details' and shows a 'Go to:' navigation bar with a 'Unit:' dropdown set to '[All units]' and an 'Event:' dropdown set to '[All events]'. Below this is a table with the following data:

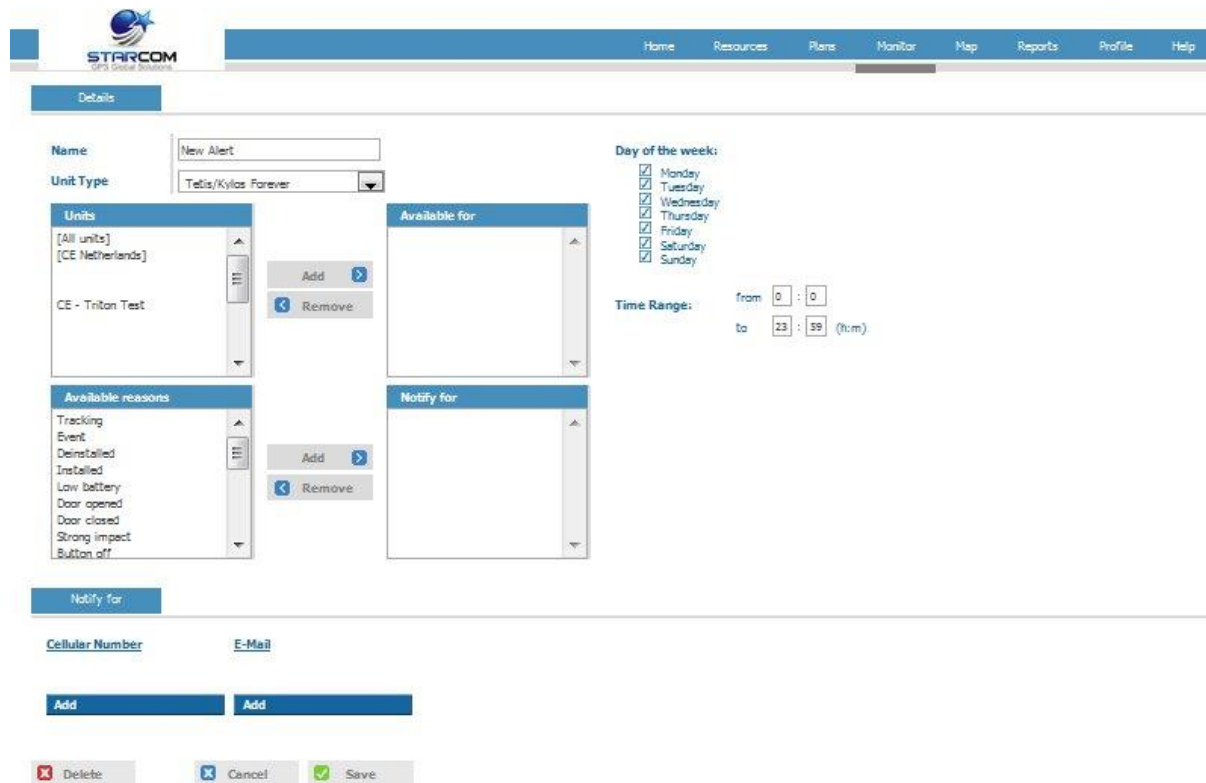
Time	Unit	Driver	Event	Address
23/07/2015 18:02:58	CE - Helios Adv		Test TSU (Main Power Low)	Pretoria, Bokmakierie St, 1 km NE of Saleshoek (28.3260,-25.7296)
09/06/2015 16:00:09	CE - Triton Test		CE Triton (Weak impact)	Pretoria, Bokmakierie St, 1 km NE of Saleshoek (28.3260,-25.7298)
09/06/2015 15:36:06	CE - Triton Test		CE Triton (Tracking)	Pretoria, Bokmakierie St, 1 km NE of Saleshoek (28.3260,-25.7298)
09/06/2015 15:06:04	CE - Triton Test		CE Triton (Tracking)	Pretoria, Bokmakierie St, 1 km NE of Saleshoek (28.3260,-25.7298)

On the left side, the Monitor section features the following tabs:

Monitor – displays the events in real time.

Settings – allows creating new and modifying existing monitoring events.

To create a new event, go to the **Settings** tab and click **New**. The Details page opens. In the **Name** field, enter a name for the new event.



Select **Watchlock /Kylos** in the **Unit Type** list.

In the **Units** list, select the units you want to include in the event and click **Add**. The units will be moved to the **Available for** list.

In the **Available reasons** list, select the reasons you wish to receive an alert for and click **Add**. The reasons will be moved to the **Notify for** list.

- ★ Main Power Low – alerts you of the battery getting low.
- ★ Door Opened/Door Closed – alert created when the container door is being opened/closed (Door button is pressed/un-pressed).
- ★ Weak Impact/Strong Impact – events which show two types of impact on a container.
- ★ Button Off/Button On – alert that appears when the Operation button located on the Antennas Compartment of the unit is pressed. This can serve as a simple test to indicate whether the unit is working.
- ★ Location Update – event which will update you on the unit location status.

- ★ Power On – alert that is sent when the unit turns on.
- ★ Light On/Light Off – event which alerts upon a change of light inside the container. The Tetis light sensor readings are indicated by numerical values (when the unit is located in a well-lighted place the light sensor value will be higher than in a dark place). Those values appear on the Map page and in the reports.
- ★ Temperature High/Temperature Low – alert sent when the unit’s temperature sensor detects when the temperature gets lower or higher than the defined low and high temperature values.
- ★ No Activity – this event can be used to receive alerts when devices have stopped transmitting. The default value is 336 hours (2 weeks).

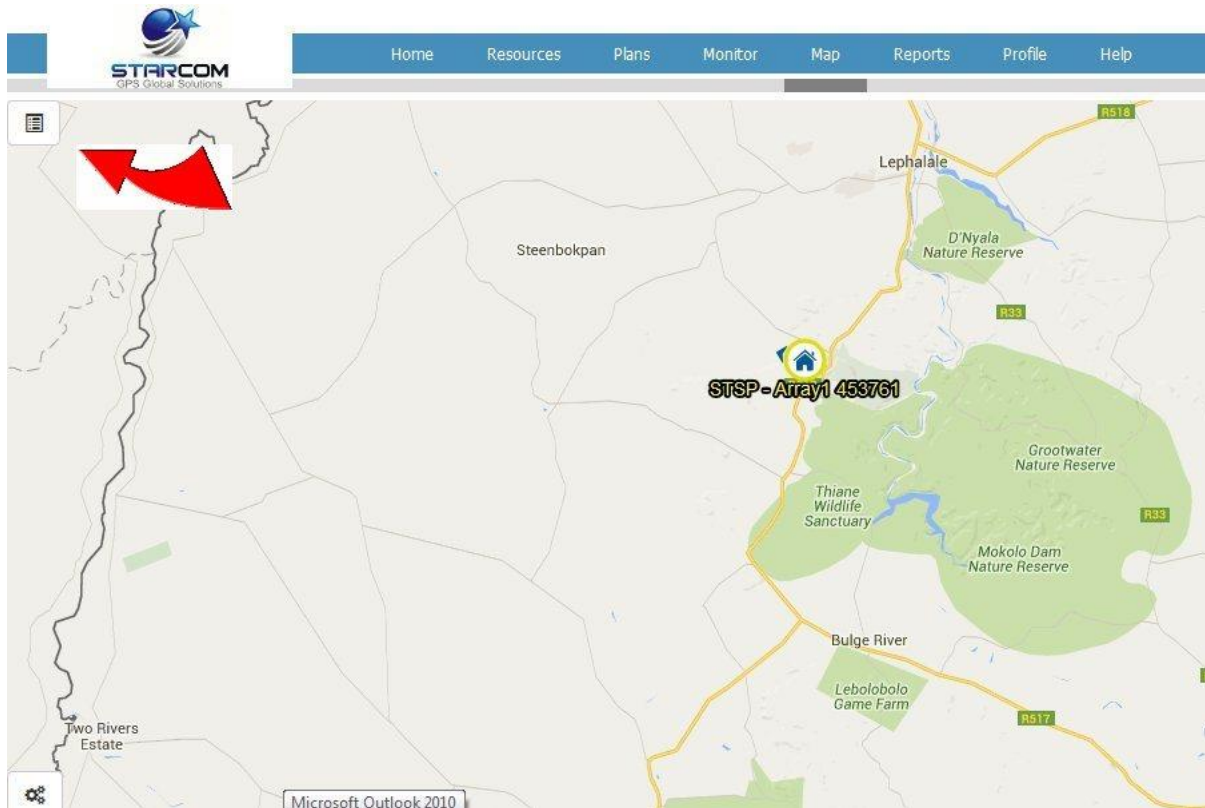
Enter the cellular number and email for the notification to be sent to in the **Notify for** section.

Press **Apply**. The new monitoring event is saved.

Once the events are generated by the units, they will appear on the Monitor page. You will also receive a notification by SMS. The email notifications are accumulated and sent once every half an hour to avoid spamming.

Map

The Map page displays the location of a single unit, or a group of units. It also shows the unit information and commands.



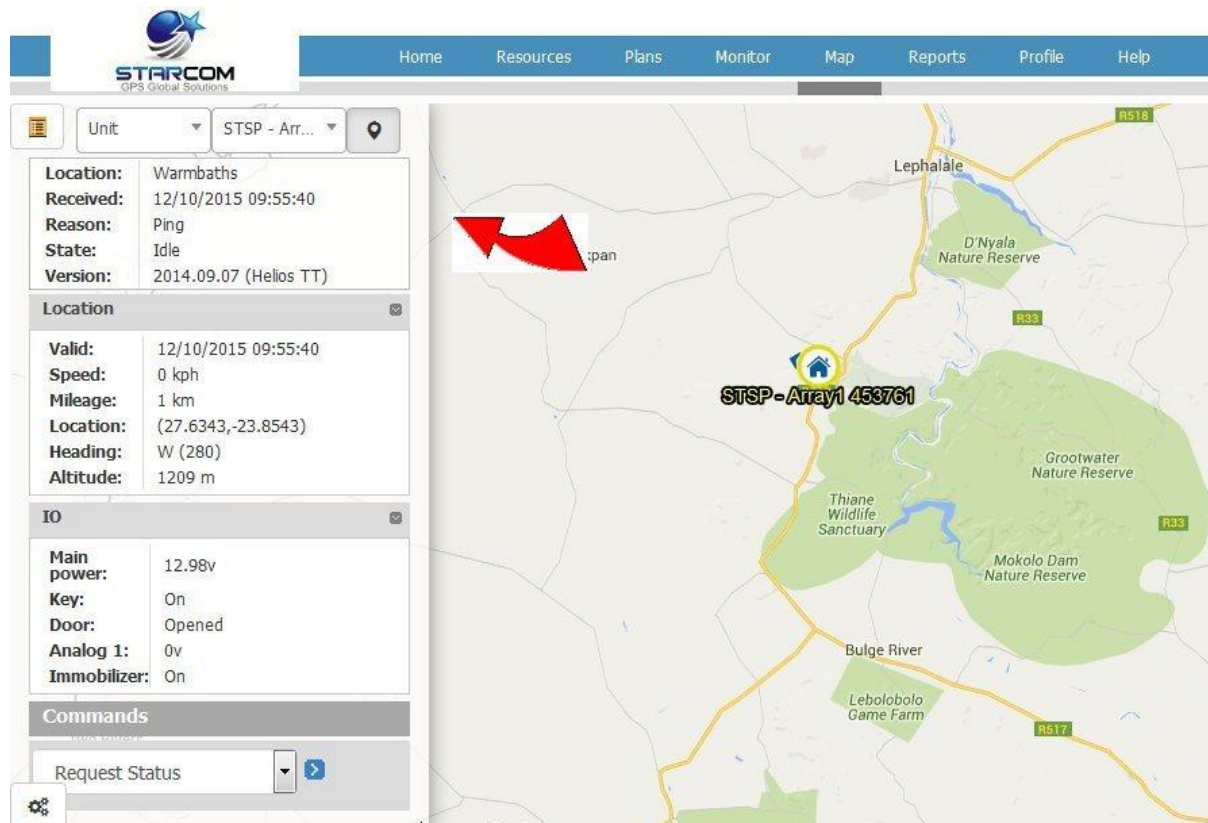
You can select unit, or a group of units in the dropdown list on the left.

In the Search field, you can enter the unit number to be displayed.

You can switch the map view between Flash Maps (regular map) and Google Maps by clicking the link at the bottom right corner of the page.

The **Red Arrow** shows the new hide / un-hide system for Unit information on page 61 and 62.

Once you select the unit, its location will be displayed on the map and its information will appear on the left.

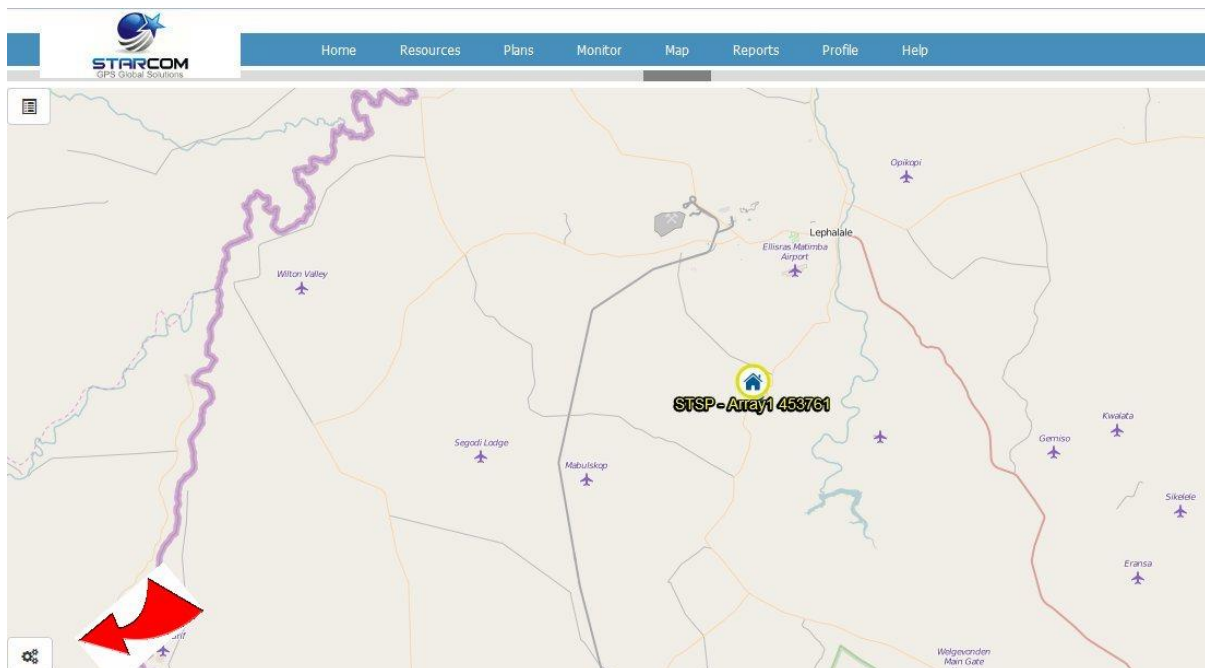


The following unit information is displayed:

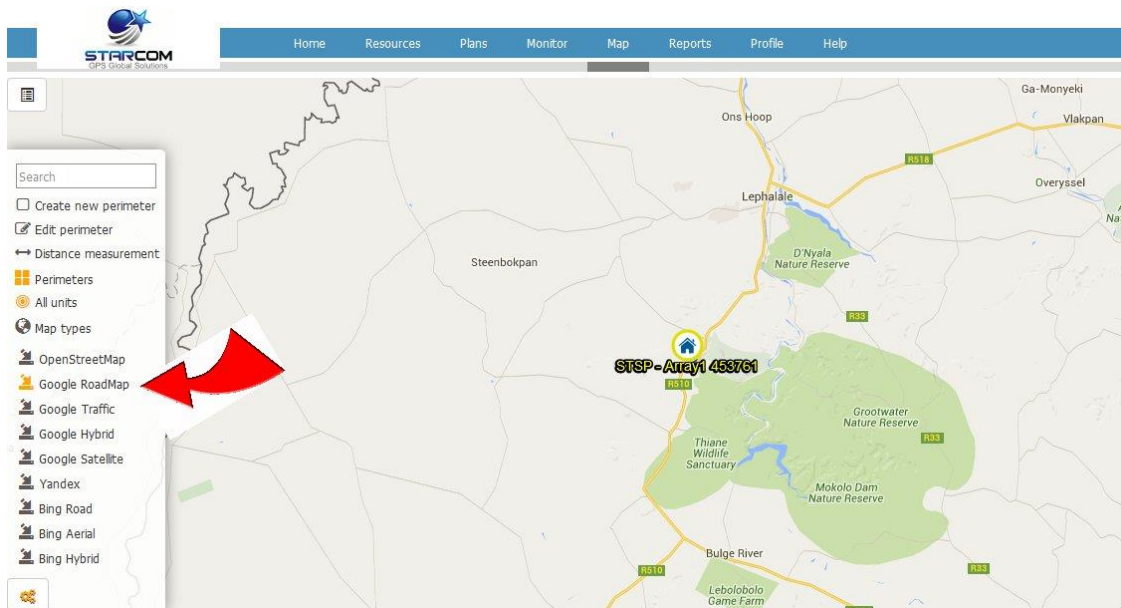
- ★ **Code** – the unit name
- ★ **Location** – the address of the last GPS position of the unit
- ★ **Received** – the date and time of last transmission from the unit
- ★ **Reason** – the reason for the transmission
- ★ **State** – the unit logic state
- ★ **Version** – the unit firmware version
- ★ **Location** – the GPS location of the unit, including:
 - **Valid** – the date and time of the last location transmission from the unit
 - **Speed** – the last recorded speed of the unit
 - **Mileage** – the last recorded mileage of the unit

- **Location** – the GPS coordinates of the last position of the unit
- **Heading** – the vehicle moving direction
- **Altitude** – the last altitude of the unit
- ★ **IO** – unit input and output information
- ★ **Commands**
 - **Request Status** – requests the current status of the unit
 - **Tracking** – overrides the unit transmission rate settings and forces the unit to transmit according to the specified interval.
 - **Stop Tracking** – stops the tracking command and returns the unit to its regular transmission rate
 - **Set Mileage** – sets the specified mileage value in the unit

The following map shows where to open > **Create new perimeter, Edit perimeter, Distance measurement, Perimeters, All Units, Map types, OpenStreetMap, Google RoadMap, Google Traffic, Google Hybrid, Google Satellite, Yandex, Bing Road, Bing Aerial, Bing Hybrid**<



The following is an example of the map page showing Google Roadmaps.



On the left bottom there are Map Options. Clicking on the Options menu will reveal the following options.

★ Search

As you type the name of a search criterion in the search field, a list of matching names, from which you can select the required name, appears.

★ Tools

- **Edit perimeter** – allows you to edit an existing perimeter.
- **Create new perimeter** – allows to create a new perimeter.
- **Distance measurement** – allows to measure the distance between two points on the map.

★ Map types

You can select the following map types: OpenStreetMap, Google RoadMap, Google Satellite, Google Hybrid, Bing Road, Bing Aerial, Bing Hybrid, Yandex, Native.

★ Show

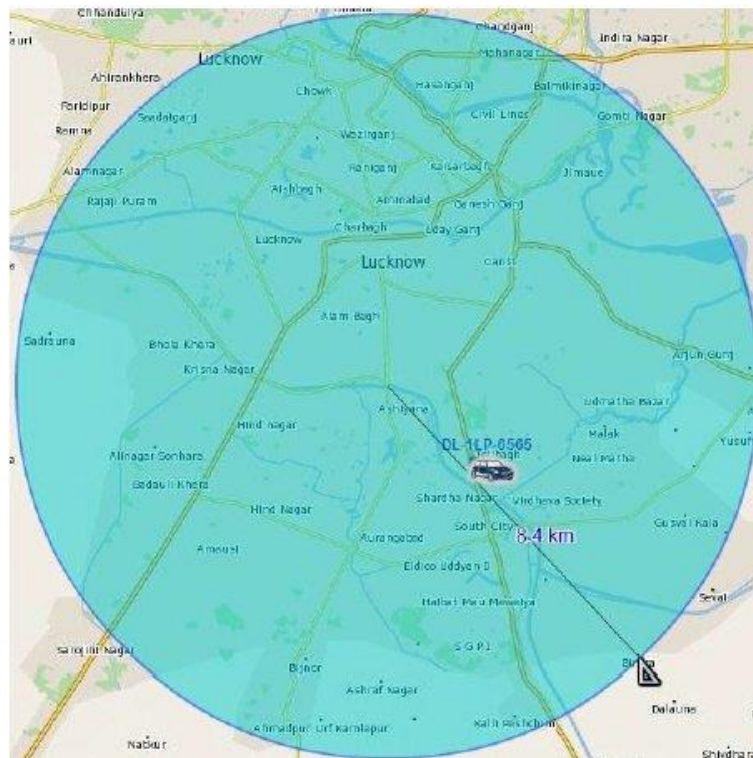
- **Traffic** – shows the current traffic conditions (where applicable).
- **Perimeters** – displays your perimeters on the map.
- **Labels** – displays the unit name next to the unit icon on the map.
- **All units** – displays all your units on the map at once.

Measuring the Distance between Two Points

Using the Distance Measurement tool, you can measure the distance between two points on the map.

To measure the distance between two points on the map:

1. On the map select the Distance Measurement tool, and move the mouse to the position on the map from which you want to measure the distance to another point.
2. From that point drag the mouse to the required position. While you are dragging the mouse the distance from the original point is indicated on the map, as shown in the following image.

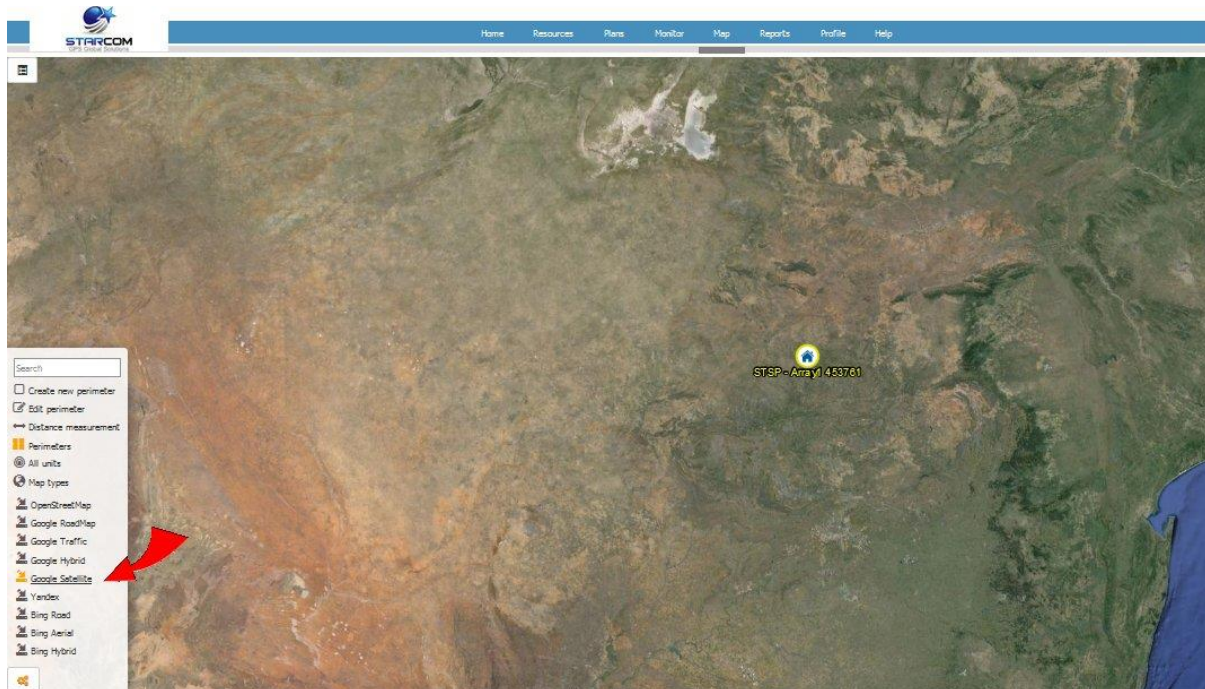


In the image above you can see that the measured distance is 8.4 km.

Viewing a Satellite Image

You can view a satellite image instead of the map view.

To view a satellite image, click on the Satellite button. The Map now shows a satellite image of the area in view.



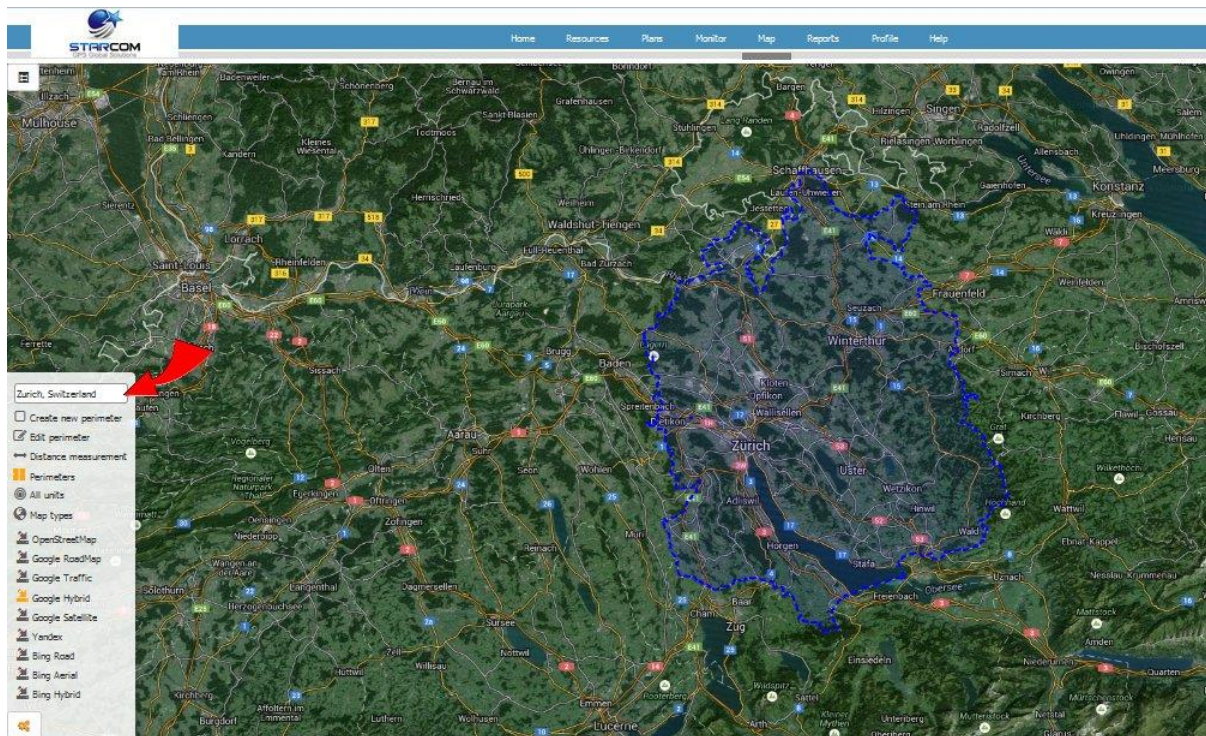
You can use any of the map tools on a satellite image.

Searching the Map

You can search a map using the Search tool.

To search a map:

1. Go to the Search map tool.

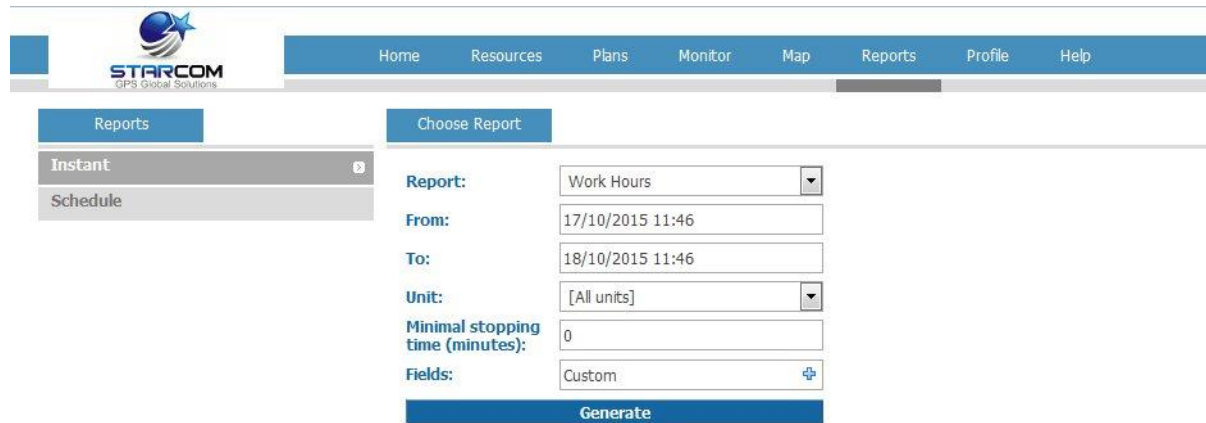


2. Enter the City and Street in the respective fields, and click the Search arrow. The map updates and shows the selected location.

NOTE: As you type the name of a search criterion, a list of matching names, from which you can select the required name, appears.

Reports

The Reports section allows you to generate different unit reports and to schedule automatically generated reports.



On the left side, the Reports section features the following tabs:

Instant – allows to generate reports on demand for a single unit or a group of units for a specific time period (date and time range).

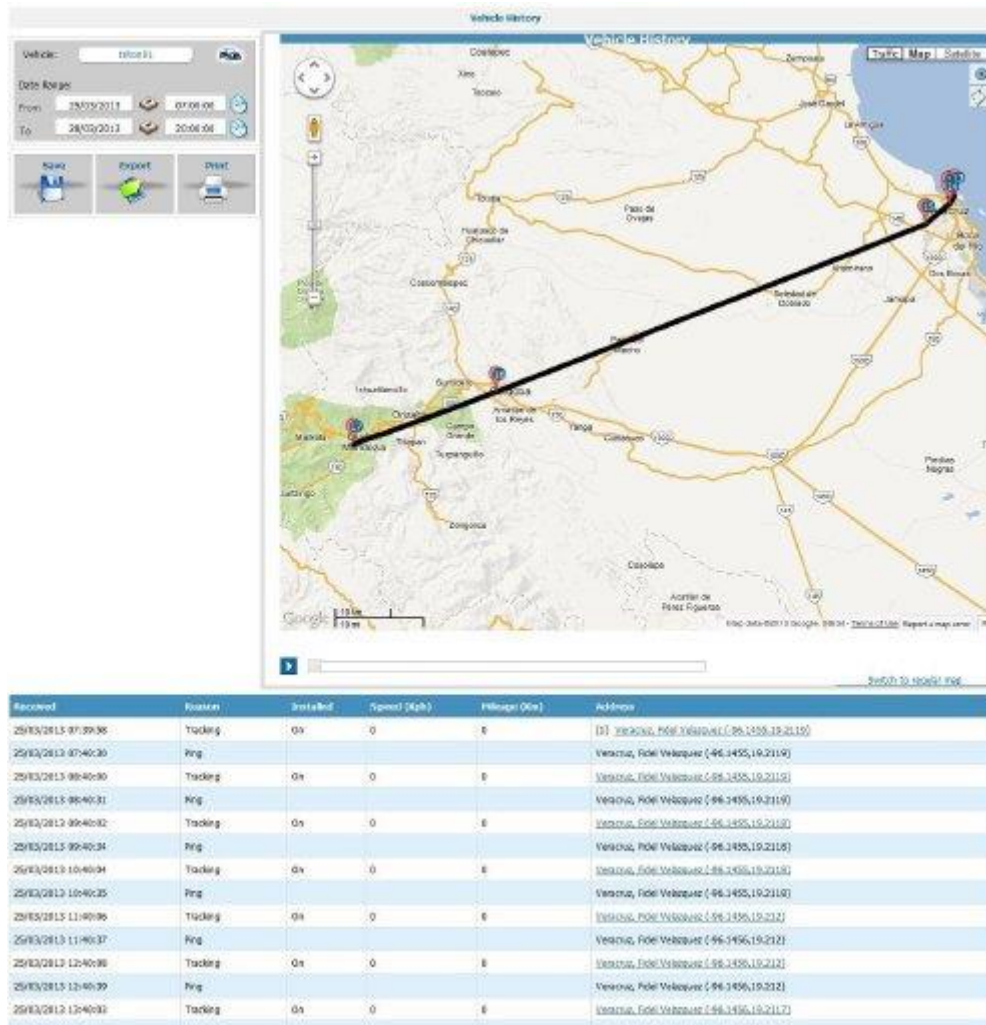
Schedule – allows to define scheduled reports that generate automatically on a daily, monthly or weekly basis.

NOTE: The reports can be generated for the last 30 days only.

You can generate the following types of reports: **Work Hours, Work Hours Summary, Work Hours Group Summary, History, History – Technical, Violations, Live Status, Events, Perimeter Entry, Transmit Reasons, Monitored events, Stop Hours.**

To generate a report, select the report type in the **Report** dropdown list. Select the unit or group of units in the **Unit** dropdown list. Specify the dates and times in the **Date Range**. Click **Generate**.

The following is an example of a report generated for one unit on one day and for a specific time period.



The report includes a map area and tracking details area. The map area shows a map of the area in which the unit is located showing points of movement of the unit. The tracking details area lists the tracking data of the unit.

The pointers on the map correspond with the numbers in the address column of the detailed list of transmissions received from the unit. These numbers indicate the points of movement of the unit. The total number of map pointers available per report is 50.

On the bottom of the Map section there is a Play button that enables you to play back the movement of the unit on the map.



To save the report, click **Save**. The report is saved as an *.htm file in a zip file in your default downloads folder.



To export a report, click **Export**. The report is exported as a *.csv file, which can be viewed in Excel, to your default downloads folder.



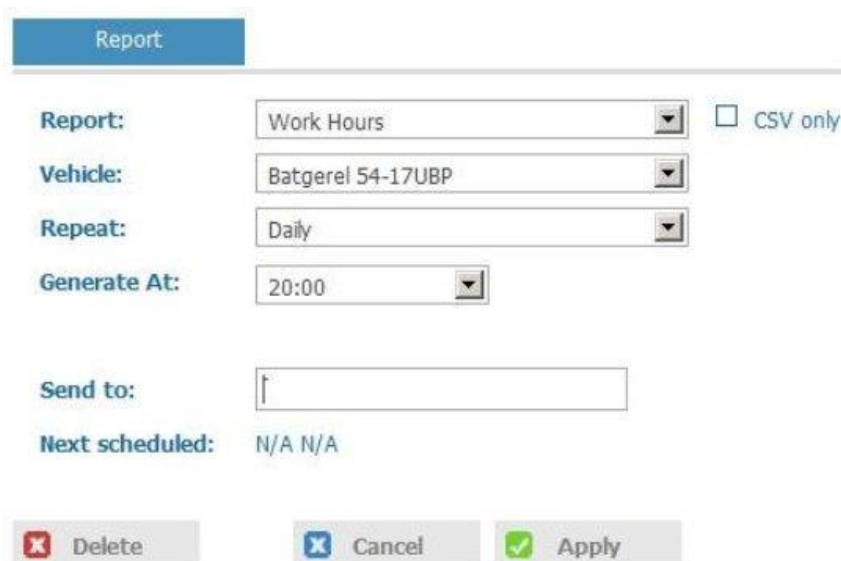
To print a report, click **Print**. The report appears in your default browser window where you can select the printer to print out the report.

Scheduled reports

To create a scheduled report, in the **Reports** section, click **Schedule**. The Schedule page appears



Click **New**. The Report Scheduling page opens.



Report

Report: Work Hours CSV only

Vehicle: Batgerel 54-17UBP

Repeat: Daily

Generate At: 20:00

Send to:

Next scheduled: N/A N/A

From the **Report** dropdown list, select the type of report you want to create.

Tick the **CSV only** checkbox, if you do not want a map provided with the report.

From the **Unit** dropdown list, select the unit or group of units for the report.

From the **Repeat** dropdown list, select if you want the report repeated **Daily**, **Weekly** or **Monthly**.

From the **Generate At** dropdown list, select the time at which you want to generate the report.

The **Send to** field is populated with the default email address for the unit.

You can change this address or add additional email addresses, separated by a semicolon.

Click **Apply**. The report schedule is saved and added to the list of scheduled reports.



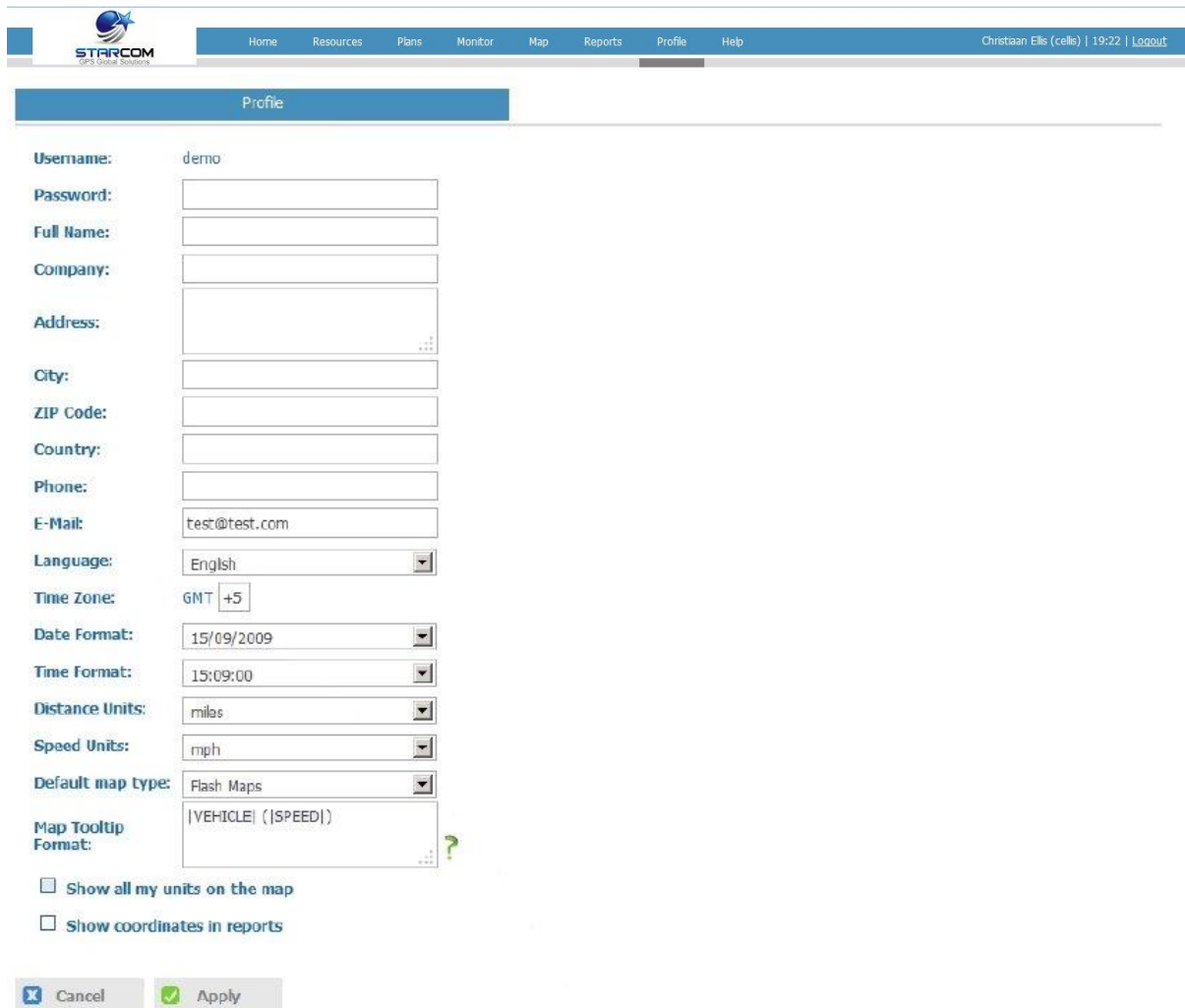
Reports		Details		
Instant		Go to: < 1 >	Search: <input type="text"/>	New
Schedule		Generate ^	Report	E-Mail
		Daily at 20:00	Work Hours: 827905 Helos Ubx	test@test.com ; test2@test.com
				Last Issued
				N/A N/A

To modify a scheduled report, in **Reports**, click **Schedule**. In the **Details** section, under the Generate column, click the link of the report schedule you want to modify. The Report Scheduling page appears. Modify the report schedule as required. Click **Apply**. The modified schedule details are saved.

To delete a scheduled report, in **Reports**, click **Schedule**. In the **Details** section, under the Generate column, click the link of the report schedule you want to delete. The Report Scheduling page appears. Click **Delete**. The scheduled report is deleted.

Profile

The Profile section shows your profile details that were created when you purchased your units. You can view and modify these details as required.



The screenshot shows the STARCOM Profile page. At the top, there is a navigation bar with the STARCOM logo on the left and menu items: Home, Resources, Plans, Monitor, Map, Reports, Profile, and Help. On the right side of the navigation bar, it displays 'Christiaan Ellis (cells) | 19:22 | Logout'. Below the navigation bar, the 'Profile' tab is selected. The main content area contains a form with the following fields and options:

- Username:** demo
- Password:** [Empty text box]
- Full Name:** [Empty text box]
- Company:** [Empty text box]
- Address:** [Empty text box]
- City:** [Empty text box]
- ZIP Code:** [Empty text box]
- Country:** [Empty text box]
- Phone:** [Empty text box]
- E-Mail:** test@test.com
- Language:** English (dropdown menu)
- Time Zone:** GMT +5
- Date Format:** 15/09/2009 (dropdown menu)
- Time Format:** 15:09:00 (dropdown menu)
- Distance Units:** miles (dropdown menu)
- Speed Units:** mph (dropdown menu)
- Default map type:** Flash Maps (dropdown menu)
- Map Tooltip Format:** |VEHICLE| (|SPEED|) (text box with a help icon)
- Show all my units on the map
- Show coordinates in reports

At the bottom of the form, there are two buttons: 'Cancel' and 'Apply'.

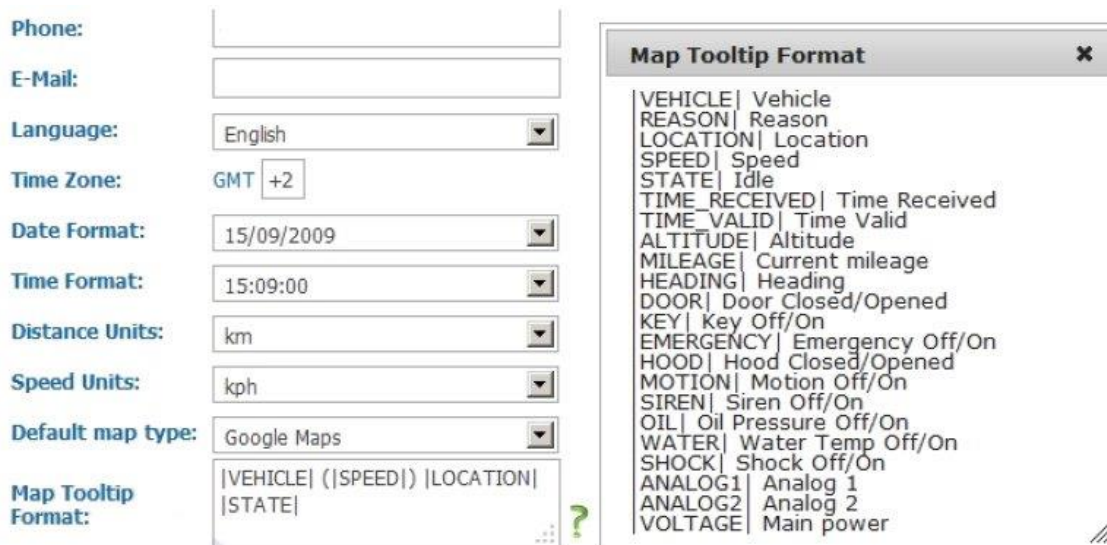
To view or modify your profile, click the **Profile** tab, and modify the information as required.

Click **Apply**. The changes are saved.

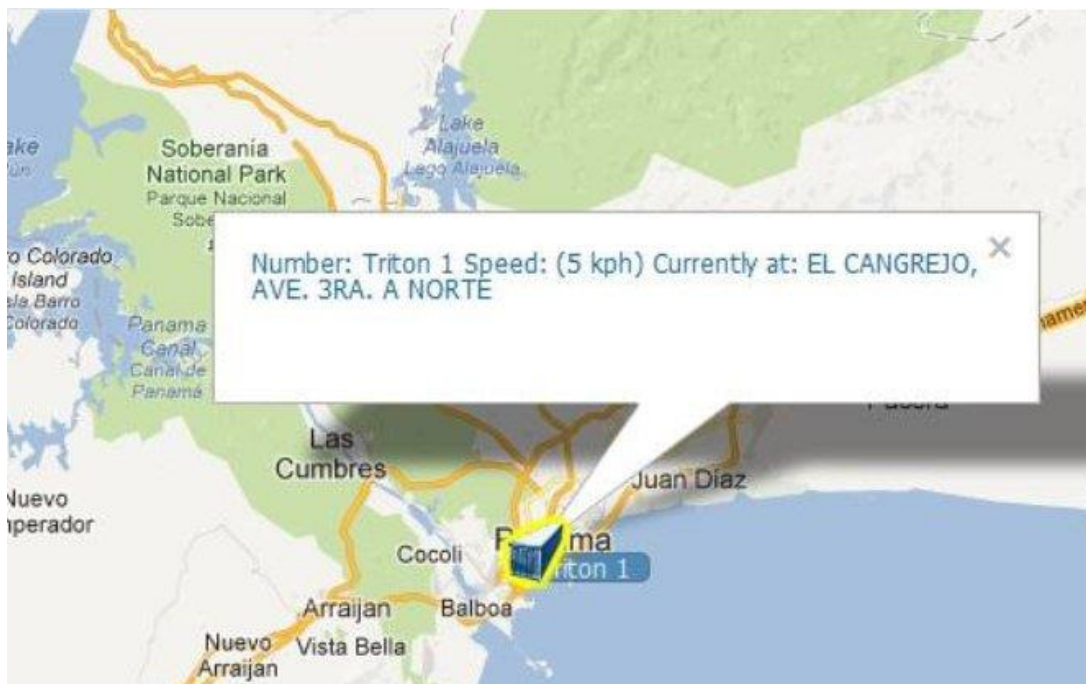
Using Map Tooltip Format

The Map Tooltip Format field lets you configure the information that will appear in the info window on the Map page when you select a unit.

To see all the parameters that can be configured in the Map Tooltip Format field, click on the green question mark located to the right of the field. The Map Tooltip Format legend window will appear.



Once you made all the necessary changes, click **Apply**. Then go to the Map page and check the unit info window.



Help

The Help section contains answers to some frequently asked questions, Starcom Online tutorials, and vehicle wiring database.



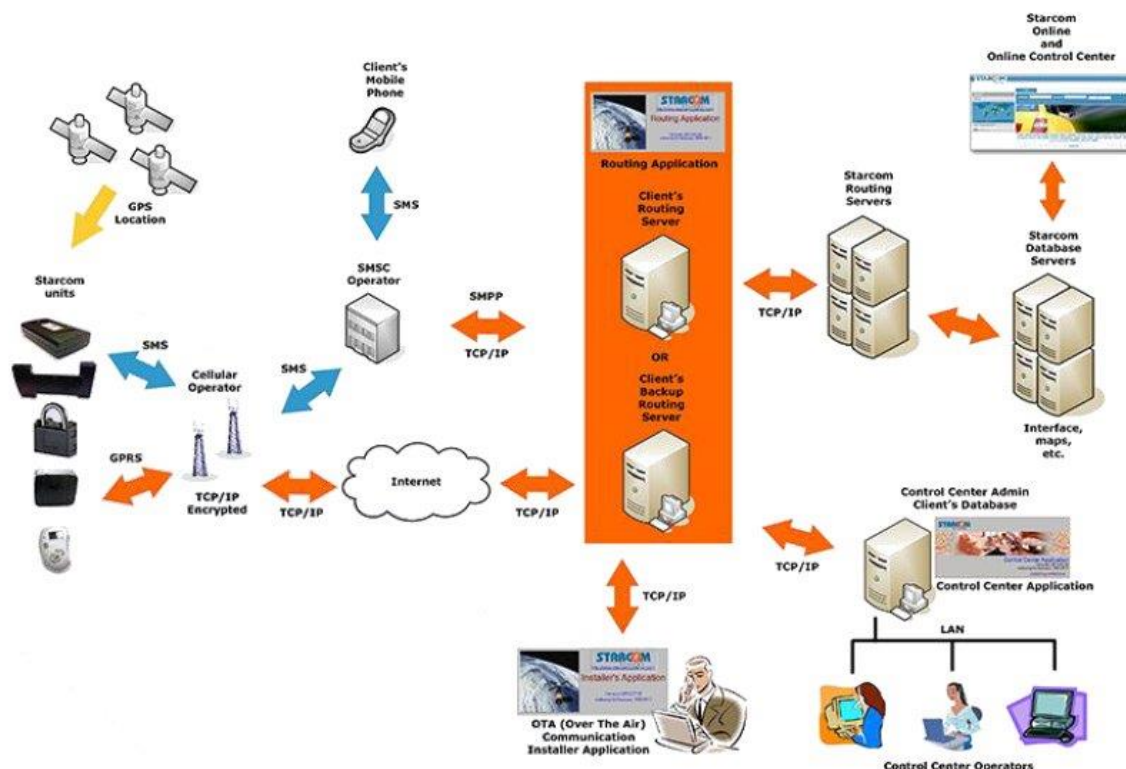
The screenshot shows the STARCOM website's Help section. At the top, there is a navigation bar with the STARCOM logo on the left and menu items: Home, Resources, Plans, Monitor, Map, Reports, Profile, and Help. Below the navigation bar, there is a sub-menu on the left with 'Help' selected, and 'Tutorials' and 'Wiring' listed below it. The main content area is titled 'Contents' and lists three categories of help topics:

- Cellular Notification**
 - How do I set up a unit for cellular notification?
 - How do I send commands to the unit from my cellular phone?
- Reports**
 - How can I get reports on a regular basis delivered to my e-mail?
 - How can I remove a report from the scheduled reports list, so I won't get it by email any more?
- Unit Configuration**
 - How do I configure analog devices?

Click on the appropriate tab to access the necessary information.

Appendix A – Unit Communication in Starcom Systems

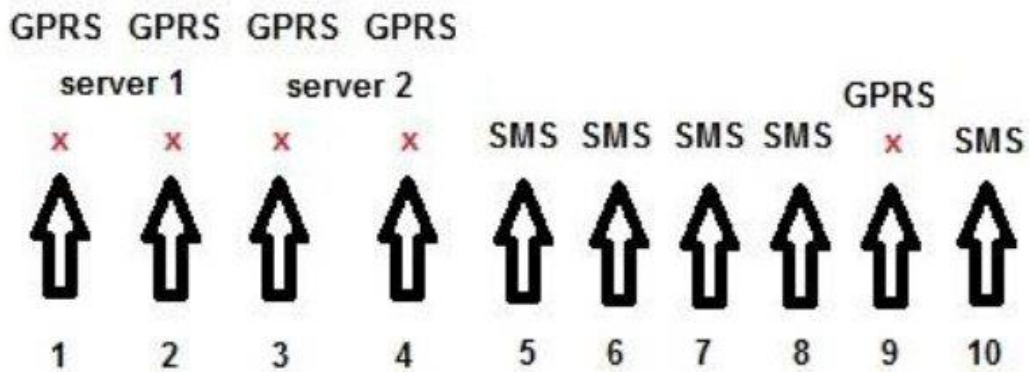
Kylos Compact is the mobile component of SGS’s advanced tracking and monitoring system. The system uses advanced software algorithms for field tracking of units and provides customers with a selection of real-time information about the tracked device. The following image illustrates the SGS communication channels.



The unit transmits messages according to the values specified in Helios Parameters > Transmission Rates settings (GPRS, SMS).

When the unit’s modem is turned on, it tries to connect to the network and transmit via GPRS (4 attempts: 2 on the first server and 2 on the second server). If it fails to connect to the network, it will switch to the SMS channel (if it is configured to transmit via SMS) after about 4 minutes, because it makes four attempts to connect via GPRS. It will constantly try to transmit via SMS.

The next attempt to transmit via GPRS will be repeated in 5 minutes. Every 5 minutes, the unit will attempt to connect to the network and transmit via GPRS. This process is illustrated in the following figure.



The unit saves all the information that could not be sent in its memory. Once it is able to connect to the network again, it will transmit all the stored data.

The device sends encrypted data to the routing server. When the routing receives it, it is decoded and encoded at the same time and sent to all the recipients configured in the system.

The message size is 140 bytes (70 bytes data and 70 bytes header).

For more information, see *Routing, Control Center* and *SMS Notifications* guides.

Appendix B – Contacts

For more information about Starcom GPS Global Solutions Company, please visit: <http://www.starcomgpsglobal.com>

For more information about Starcom GPS Global Solutions products, please visit: <https://trello.com/b/NjmQefGw/product-info-clients>

Support

Should you have any questions regarding our system, please contact SGS technical support. For personalized support, use **Email:** info@starcomgpsglobal.com or **Skype:** **judson012** or **christiaanids**