
















# **MEDUSA - Geoflex User's Manual**

## Table of Contents

<b>1</b>	<b>PRESENTATION .....</b>	<b>5</b>
<b>2</b>	<b>CONNECTION.....</b>	<b>6</b>
<b>3</b>	<b>TOOLBAR.....</b>	<b>8</b>
3.1	DISPLAY THE KEY  .....	8
3.2	MANAGE THE DISPLAY OF CARTOGRAPHIC LAYERS  .....	9
3.3	PRINT THE MAP  .....	10
3.4	EXPORT DATA  .....	10
3.5	CHANGE THE MAP BACKGROUND  .....	10
3.6	ACTIVATE/DEACTIVATE THE MAP MATCHING    .....	10
3.7	MEASURE A DISTANCE  .....	11
<b>4</b>	<b>ADMINISTRATION MENU.....</b>	<b>12</b>
4.1	DISPLAY "ASSISTANCE AND CONTACTS"  .....	13
4.2	MANAGE USER ACCOUNTS  .....	14
4.2.1	Create a new client or guest account .....	15
4.2.2	Modify client or guest accounts .....	16
4.2.3	Delete client or guest accounts .....	17
4.3	MANAGE VEHICLES AND GROUPS OF VEHICLES  .....	17
4.3.1	Create a new group .....	18
4.3.2	Modify groups .....	19
4.3.3	Delete groups .....	19
4.4	MANAGE SURVEILLANCES.....	20
4.5	FILE TRANSFERT MANAGEMENT  .....	20
4.5.1	Upload a new file .....	21

4.5.2	Files history.....	21
4.5.3	Files process.....	22
4.6	LOG OUT  .....	22
<b>5</b>	<b>CONSULTATION OF DATA ON THE MAP .....</b>	<b>23</b>
5.1	CURSORS .....	23
5.2	ICONS AND ICON CLUSTER .....	23
5.3	ASSET INFO .....	24
5.4	PIE MENUS .....	25
5.4.1	Long left click on the map background.....	25
5.4.2	Long left click on a vehicle.....	37
5.4.3	Long left click on a cluster of assets.....	43
<b>6</b>	<b>FILTERS.....</b>	<b>45</b>
6.1	FUNCTION 1: FILTERS («CLOSED» MODE) .....	45
6.2	FUNCTION 2: FILTERS («OPEN» MODE) .....	45
6.2.1	Entering assets .....	46
6.2.2	Entering zones if applicable.....	47
6.2.3	Entering the period .....	48
6.2.4	Button bar .....	49
6.3	FUNCTION 3: «CURRENT ALARMS» TAB.....	50
6.3.1	Current alarms table .....	51
6.3.2	Alarm history table .....	52
6.4	FUNCTION 4: «DRIVE-BY TIME» TAB.....	53
6.4.1	The drive-by time filter .....	54
6.4.2	Select a drive-by location .....	54
6.4.3	Drive-by time table.....	56
6.5	FUNCTION 5: «QUICK FILTER» TAB.....	58
6.6	FUNCTION 6: «REFRESH» BUTTON  .....	59
<b>7</b>	<b>CONSULTING THE DATA TABLE .....</b>	<b>60</b>
7.1	DATA GROUPS .....	61
7.2	DATA TABLE .....	63
7.2.1	The three column display modes.....	63
7.2.2	Link with the map.....	65
7.2.3	Graphs .....	65
7.3	EXPORT .....	67
<b>8</b>	<b>EGNOS ASSETS.....</b>	<b>68</b>
<b>9</b>	<b>REPORTS MODULE.....</b>	<b>69</b>

9.1	GENERATE A REPORT AS AND WHEN NEEDED .....	70
9.2	GENERATED REPORTS .....	71
9.3	EXPORTS .....	71
<b>GLOSSARY .....</b>		<b>72</b>

## 1 PRESENTATION

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Geoflex is the Novacom Services web interface. It can be accessed 24/7 via the internet, enabling the users to consult the information transmitted from their assets on the ground by the satellite network or GSM/GPRS.

The platform converts assets' raw data into exploitable information. It uses Web technologies which do not require any special software other than a standard browser and the Flash plug-in.

Numerous functions are therefore available online from any PC connected to the internet:

- Consultation and storage of the data collected for 4 months
- Viewing of the positions of assets on a detailed mapping system
- Editing of summary reports and activity reports
- Consultation of dashboards and graphs providing a better view of relevant information
- Surveillance management, with the option of sending alerts by e-mail or by SMS
- Querying the positions of assets in real time and the option of changing transmission rates from assets
- Sharing information with customers and partners by creating personalised access.

This online guide explains all the functions of the platform. Depending on user profile (guest or customer) and rights of access, some functions presented in this online guide may not be available on the platform. Unlike customers, guests have restricted access to information and their access is set solely by the customer.

### Recommended configuration

- Recommended screen configuration: from 1280x1024 (not required)
- Most recent version of the Flash plug-in is required. Geoflex can be used with any browser allowing the download of the Flash plug-in.

Click on this link for further information about configuration:

<http://helpx.adobe.com/flash-player/kb/find-version-flash-player.html>

## 2 CONNECTION



The following steps shall be followed to access to Geoflex:

1. Connect to Geoflex from the URL: <https://geoflex.novacom-services.com>
2. Enter user name and password (both user name and password are case-sensitive)
3. Select the language (multilingual application)
4. User IDs can be recorded, so it can automatically appear during next log in. To do so, tick the box to the right of "Remember my IDs on this computer?"
5. Click "Identification". The data are then expressed in the computer's time zone
6. Reset the password when connecting to Geoflex for the first time.

### **Warning:**

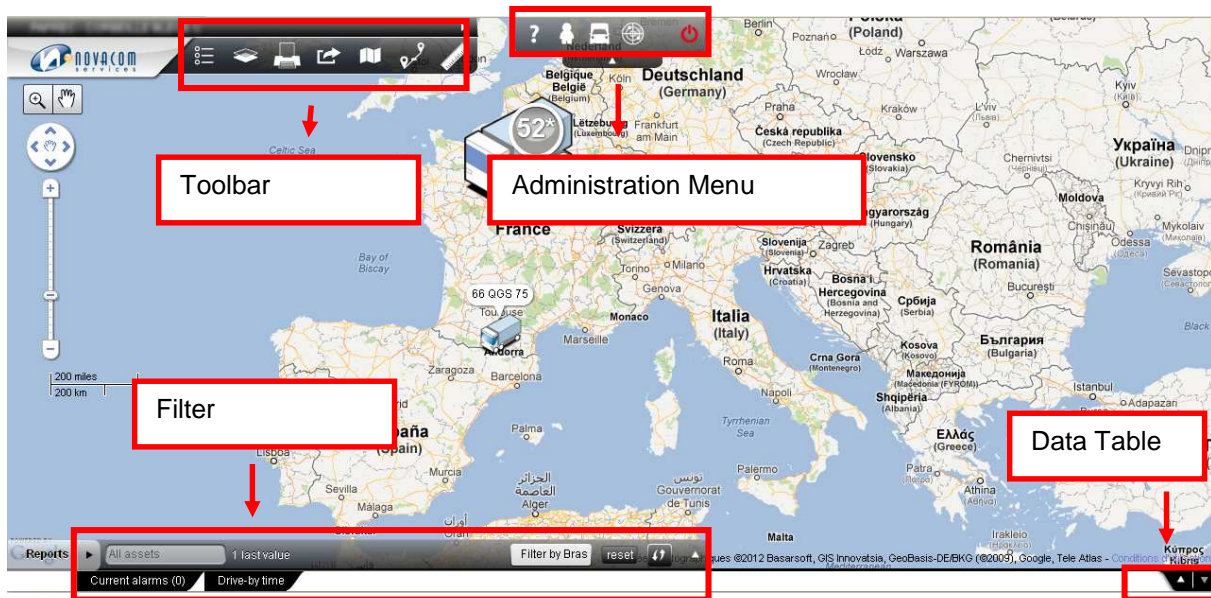
If you have forgotten your password, contact Novacom Technical Support ([support@novacom-services.com](mailto:support@novacom-services.com)).

Passwords:

- must be 8 to 12 characters long
- must contain at least one letter, one number and one special character (for example &, “, ?, (, -, \_, @, ), ], \$, £, µ, \*, \$, !, ?, ;, :,)
- expire three months after creation, and another one needs to be entered (different from the previous five)
- need to be reset by the user after every password update by an administrator.



Finally, after 5 incorrect attempts, the account is deactivated, and it is necessary to contact Technical Support to reactivate it.

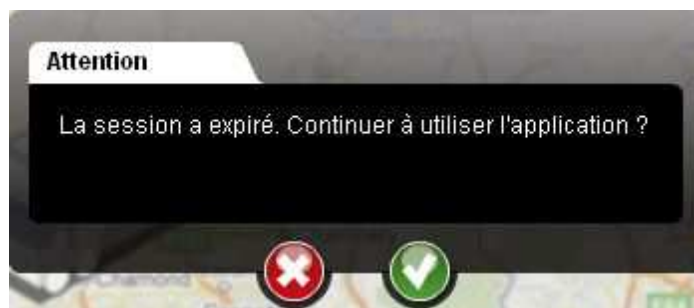
The following figure shows the homepage and the map displaying the latest received position of tracked assets.



The logo on the upper left of the map can be customized. Contact Technical Support ([support@novacom-services.com](mailto:support@novacom-services.com)) for more information.

### Warning:

Each session expires after a certain period of inactivity (20 minutes by default). A window then opens and asks the user to log out  or to continue to use the application .



Click the "Log out" button in the administration menu to quit the application and log out.

### 3 TOOLBAR

The toolbar is located on the upper left of the map.



#### 3.1 DISPLAY THE KEY



By clicking on “Display the key”, a central window opens, explaining all the symbols shown on the map:



- Icons and their various states (active/inactive)
- Clusters of assets
- Routes and route points
- Alarm symbols
- Points of interest
- Zones
- The potential route colour.

The symbols which appear on the key may change from one user to another depending on the parameters configured for their account. Contact Technical Support ([support@novacom-services.com](mailto:support@novacom-services.com)) or your administrator for any modification.

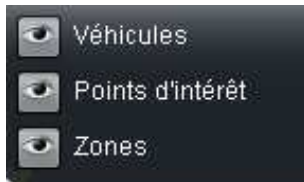


A star in a cluster means that there are different types of assets in this asset cluster.

## 3.2 MANAGE THE DISPLAY OF CARTOGRAPHIC LAYERS



The display of cartographic layers enables selecting the layers to be shown on the map: assets, points of interest and zones.



The eye symbol on the left indicates that the related layer is visible.



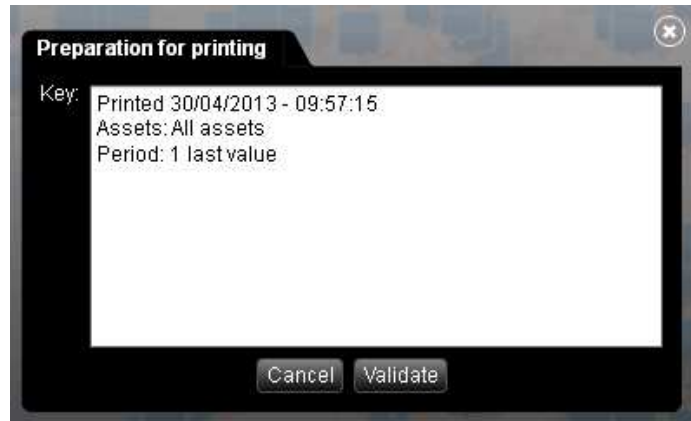
Click on the eye to cross out the symbol , indicating that this layer is no longer visible on the map.

The display of layers can be arranged by dragging and dropping in order to prioritise display of the selected layer.

### 3.3 PRINT THE MAP




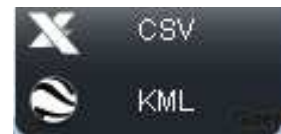
This button allows printing the map background and the information displayed over it, in landscape format by default. Before validating this action, a comment can be entered into the key. This is pre-filled by default with the date and filter entered (assets and period). On the print-out, the key is located below the map.



### 3.4 EXPORT DATA



The export button  allows exporting assets data in CSV format (Excel) or KML format (Google Earth).



### 3.5 CHANGE THE MAP BACKGROUND



This button allows changing the map background and switching between different types of available display: "Plan", "Satellite", "Hybrid" or "Relief".

### 3.6 ACTIVATE/DEACTIVATE THE MAP MATCHING



The Map Matching function allows displaying the route according to the road traffic routes. Therefore these are not straight lines connecting two received points as the crow flies, but tracks following the roadways.

#### **Warning:**

This function offers a display which looks much more attractive, but does not always show the route actually taken between two points.

### 3.7 MEASURE A DISTANCE



This button allows measuring a distance as the crow flies, in order to ascertain its length. To obtain the route value:

- Click a starting point
- Then click an intermediate point, where relevant
- Double click the end point.

A window displaying the route value appears and the route drawn immediately clears.

## 4 ADMINISTRATION MENU

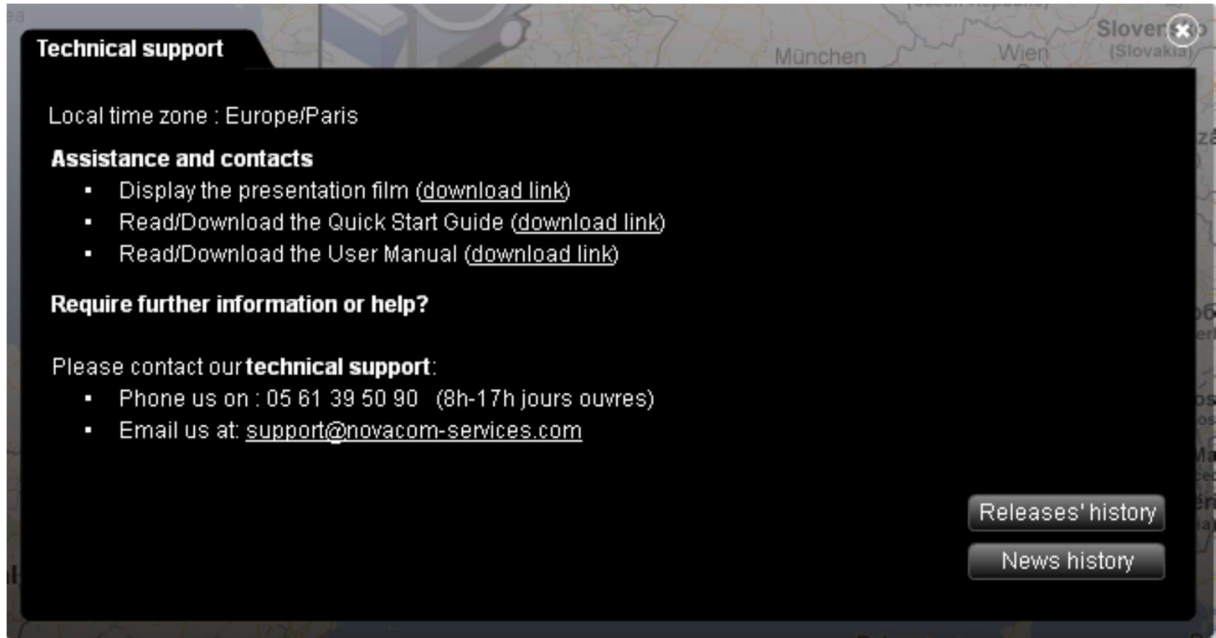



The administration menu is located at the upper middle of the screen. This menu can be minimised by clicking the minimise arrow. This horizontal bar allows the user to partially administer three domains:

- User accounts (“client” or “guest” profiles)
- Groups of vehicles and project (for easier entry) and vehicles (name and icon)
- Association of assets with surveillances.



## 4.1 DISPLAY "ASSISTANCE AND CONTACTS"

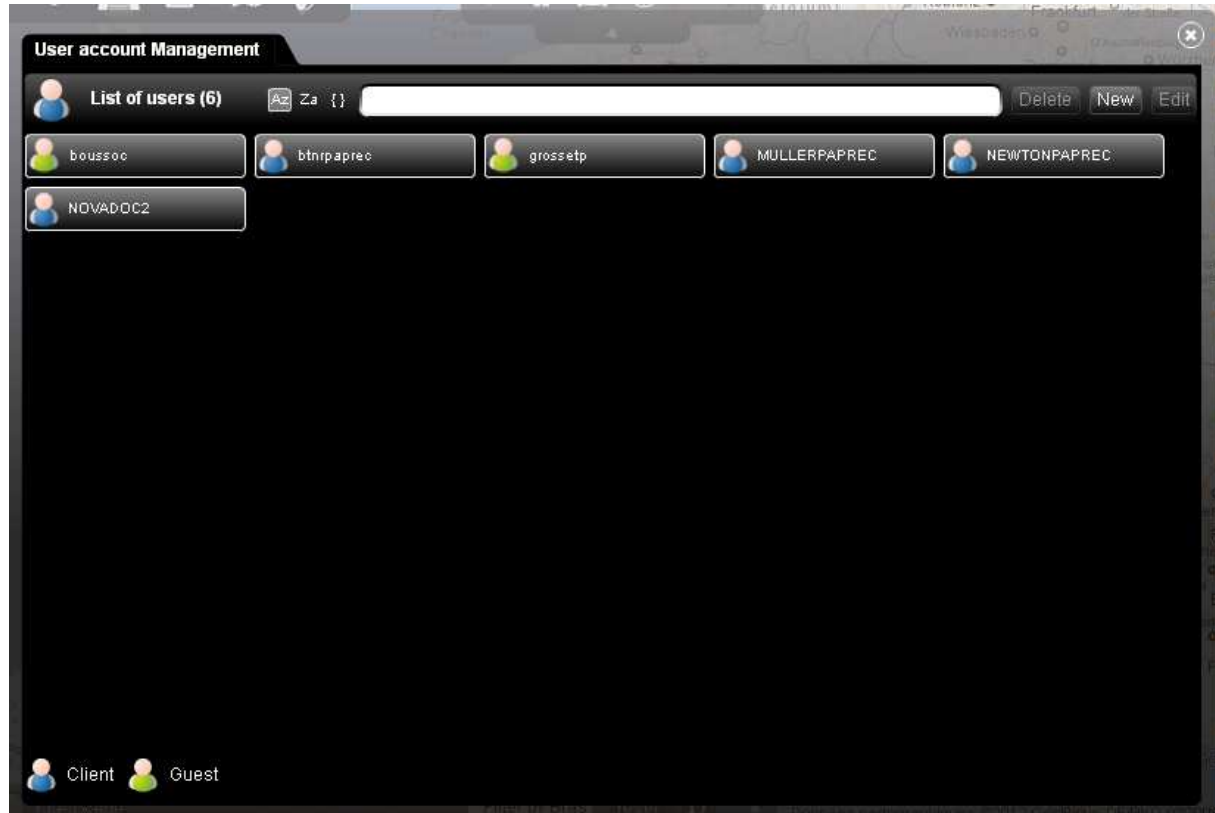





By clicking , a central window opens and displays the contact details for Novacom Technical Support and the hotline opening hours.

The <Releases history> button allows discovering the new functions of the web application.



The <News history> button allows consulting the latest news about Novacom Services.

## 4.2 MANAGE USER ACCOUNTS

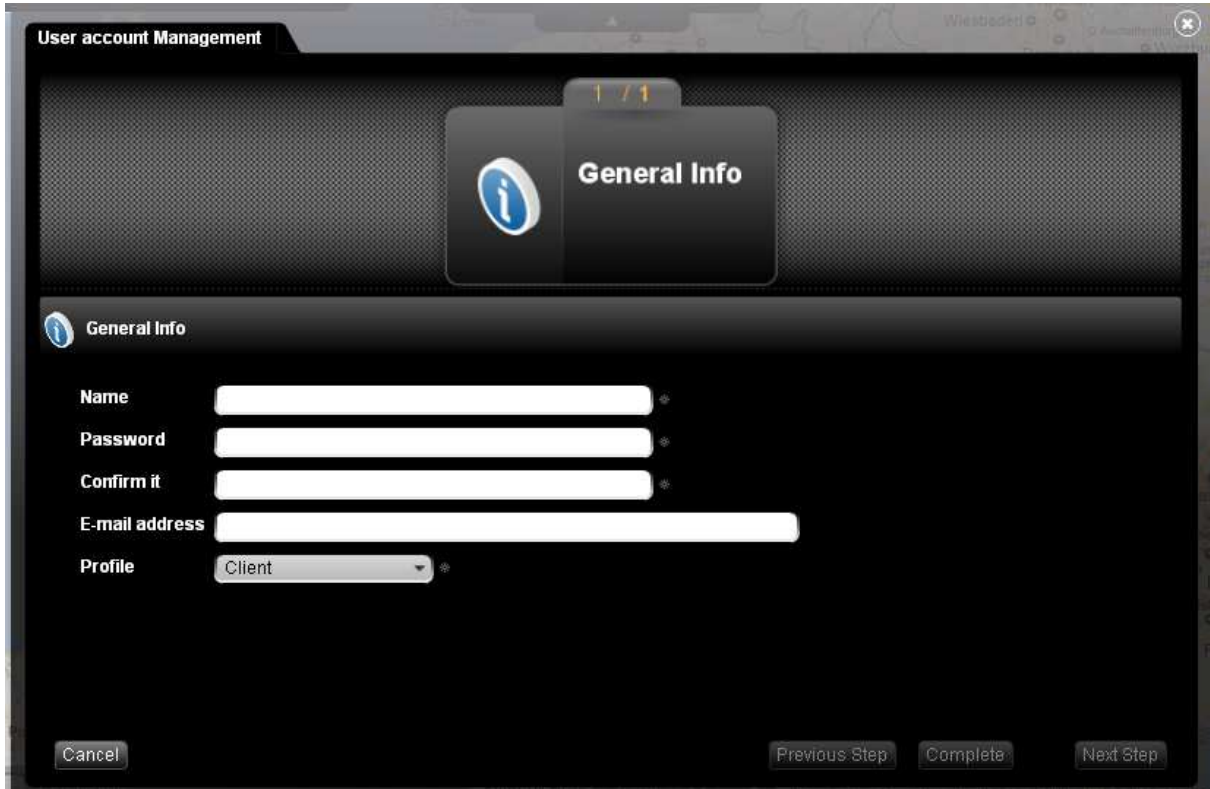


By clicking on  ("User account management"), the user accounts list is shown. The user can choose to display the list in alphabetical order using  and  buttons at the top of the list. The name of a guest account can also be entered directly into the search bar.



The blue icon  corresponds to a client account, whereas the green icon  indicates that this is a guest account.

#### 4.2.1 Create a new client or guest account



**User account Management**

**General Info**

**General Info**

Name

Password

Confirm it

E-mail address

Profile

Cancel Previous Step Complete Next Step

Click the button **New** at the upper right of the list to create new client or guest accounts.

When creating a new user, fill in the following fields:

- The account name (which must be unique)
- The account password (both the user name and password are case-sensitive)
- The e-mail address corresponding to the account
- The profile (client or guest)
- The period of validity of the account, in the case of a guest account (enter the start and end date corresponding to the data acquisition period, i.e. beyond this period the user is still able to log in, but he/she is only able to consult the data between these two dates)
- Whether or not authorisation is granted to validate alarms. Tick the box in front of "Can validate alarms", to authorize the guest to validate alarms
- Authorisation or not for the guest to access Web Services. Tick the box in front of "Can access Web Services", to authorize the guest to access Web Services
- Restriction to data: assets, zones (if the customer has any) and commands (if any already exist).

Click **Complete** to save the data and create the user account. Otherwise, click next to create a guest account and complete the following boxes:

- Rights on assets: assets which can be consulted by the guest

- Rights on Zones: zones which can be consulted by the guest
- Rights on commands: commands which can be made by the guest (e.g. polling, sending files, etc.).

Finally click **Complete** to save.

All the displayed data (map, table, alarms) take account of this configuration (time limit, assets limit, etc.).

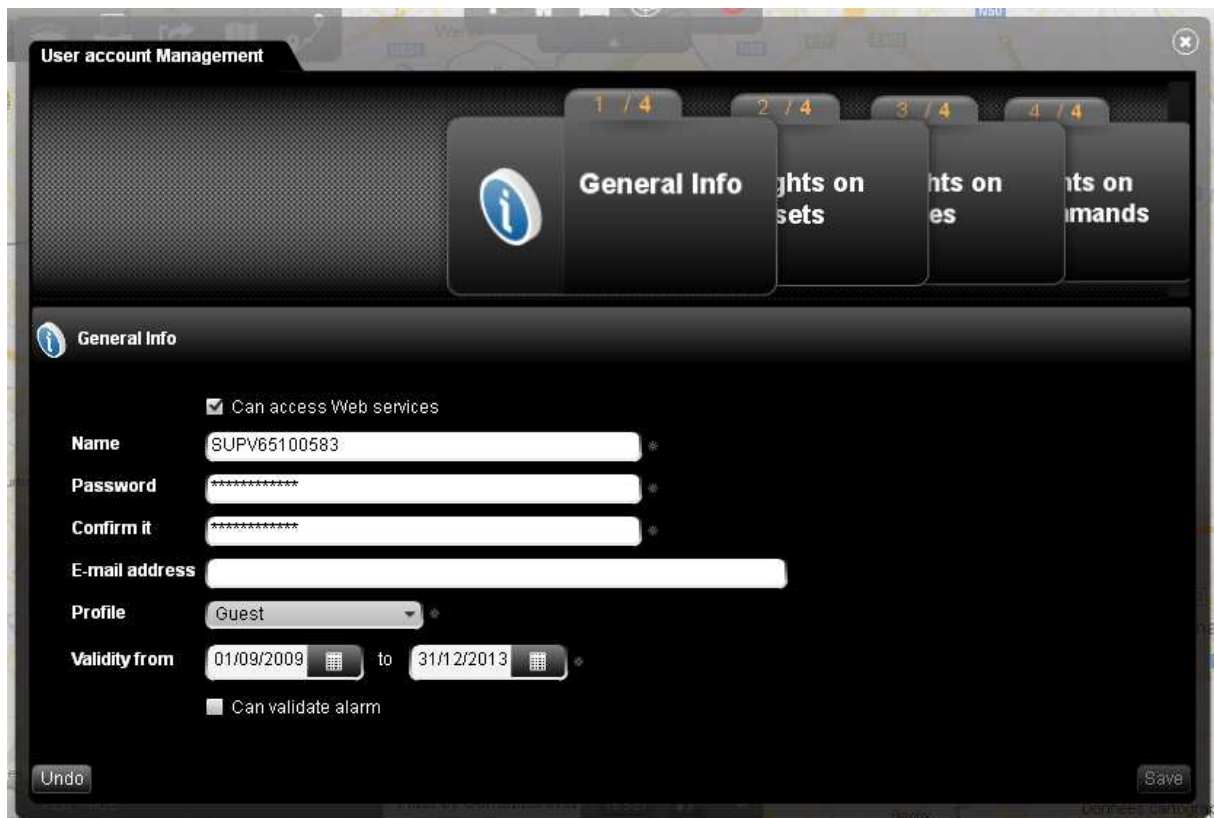
**Note:**

Guests do not have access to the administration bar, and therefore cannot create user accounts, or group accounts, or associate assets with surveillances, but benefit from the creations and allocations of the customer account.

Except for special rights, guests can see all data. The list of assets and zones offered depends on their rights. Guests can only consult current alerts concerning their assets. They can validate them if their profile allows this.

## 4.2.2 Modify client or guest accounts

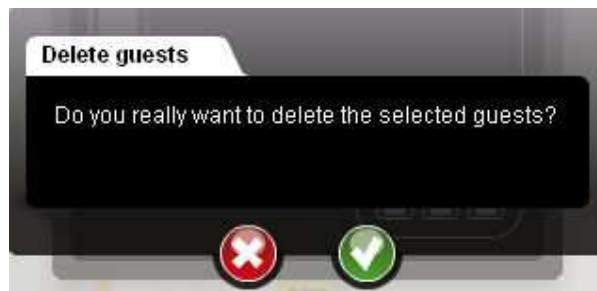
A client or guest account can be selected by clicking on it. It can be modified by clicking on **Edit**. This button gives access to the same information seen in the previous section.



The screenshot shows the 'User account Management' window with the 'General Info' tab selected. The account is for a 'Guest' with the name 'SUPV65100583'. The 'Validity from' date is '01/09/2009' and the 'Validity to' date is '31/12/2013'. The 'Can access Web services' checkbox is checked, and the 'Can validate alarm' checkbox is unchecked. There are 'Undo' and 'Save' buttons at the bottom.

### 4.2.3 Delete client or guest accounts

Once selected a client or guest account (by clicking on it), it can be deleted by clicking on **Delete** button. A confirmation window appears:





Click  to cancel or  to confirm the deletion.

## 4.3 MANAGE VEHICLES AND GROUPS OF VEHICLES



A group is a set of assets with shared characteristics according to user's understanding and needs. For example, a group may be made up of a set of assets with the same technical characteristics, concerning the same activity, or located in the same geographical zone (region, country, etc.). An asset may belong to several groups at once.

A group is therefore defined by a unique name and the list of assets which are part of it.

By clicking on  <Manage vehicles and groups of vehicles>, the list of groups which already exist is displayed. The user can choose to display the list in alphabetical order or by types using **Az Za** and  buttons at the top of the list.

The name of a group can be typed directly into the search bar.

Az Za {} All None

The VOR option (Vehicle Off Road) can also be added, a sensor system to manage vehicles: available (green) or in maintenance (🔴). Contact Technical Support ([support@novacom-services.com](mailto:support@novacom-services.com)) for this option.

#### 4.3.1 Create a new group

To create a new group of assets, click the **New** button at the bottom right of the list. When creating a group, the user must fill in the following fields (in two stages):



- The name of the group
- A description of this new group (optional)
- The validity period of this group. It becomes a "Project"<sup>1</sup>
- The assets which are part of this group (use the arrow to select from the drop down list the assets to be included in the new group).

### 4.3.2 Modify groups

Select a group to be able to update it by clicking **Edit**. This button gives access to the same information as seen in the previous section.

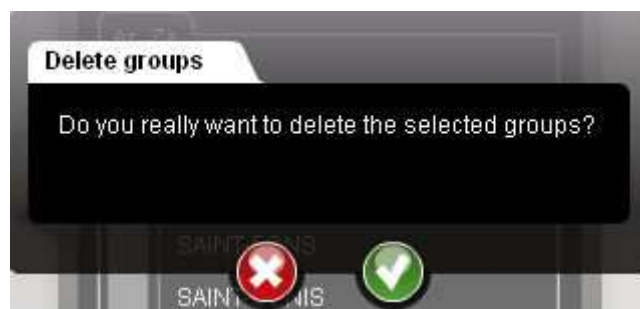
From the window «Group and vehicles management» the user can also modify the name and icon of a vehicle by selecting it in the list and clicking <Edit>.



### 4.3.3 Delete groups

Select a group and click **Delete**.

A confirmation window appears:



Click  to cancel or  to confirm the deletion.

<sup>1</sup> See Glossary in the Appendix

## 4.4 MANAGE SURVEILLANCES

Surveillances will soon be available.

### Note:

Contact Novacom Technical Support ([support@novacom-services.com](mailto:support@novacom-services.com)) to create and configure surveillances.

The creation of surveillance enables:

- Triggering of an alert on numeric data and the sending of an alert
- Message by e-mail or SMS
- Visual differentiation between the different data states submitted (e.g. active/inactive) without triggering an alert.

A surveillance can be created for an asset or a group of assets. A surveillance for a group of assets applies independently for each asset in the group.

## 4.5 FILE TRANSFERT MANAGEMENT



The tool «File transfert management» enables the communication between devices and the platform. For example, it allows the user to send a file for the update of driver's contacts.



By clicking <File transfert management> the file history appears.

File Transfer Management

Assets ▾ All assets

Period start 04/02/2013

Period end 29/04/2013

Filter

Upload File

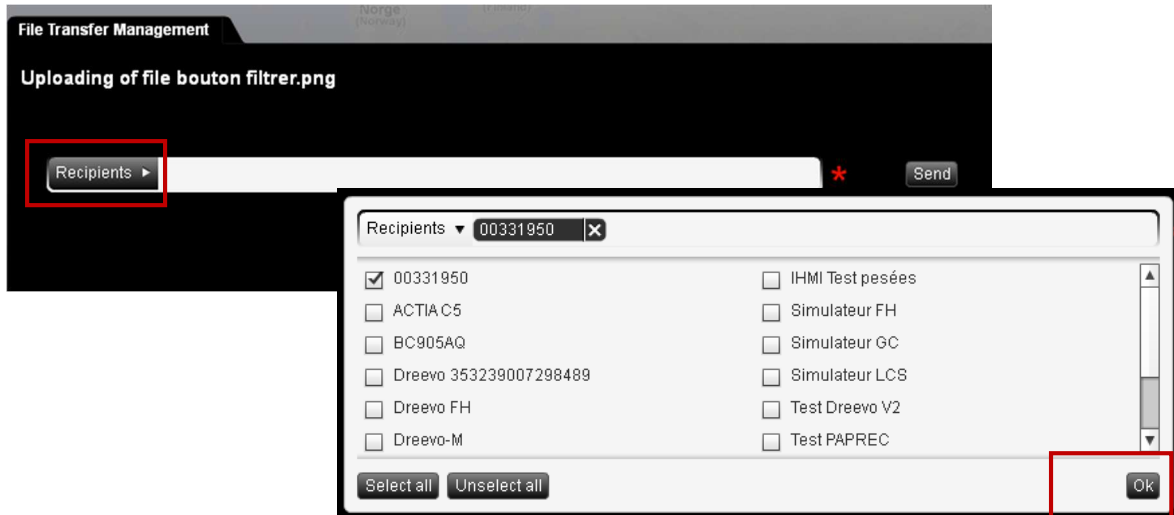
Asset	File				Process	
Name	Name	Extension	Size	Upload ▾	Waiting / Sent / Delivered	Accepted
TEST VANWEI	CPA TABLE VEF	.bav	46158	13/02 16:40	<div><div></div><div></div><div></div></div>	
TEST VANWEI	CPA TABLE VEF	.bav	46158	13/02 15:13	<div><div></div><div></div><div></div></div>	
TEST VANWEI	CPA TABLE VEF	.bav	46163	13/02 15:09	<div><div></div><div></div><div></div></div>	
Simulateur LC	Essai_1	.bt	0	07/02 13:56	<div><div></div></div>	
Simulateur LC	Essai	.bt	0	07/02 11:23	<div><div></div></div>	
Dreevo FH	Dreevo FH@pel	.bt	26		<div><div></div></div>	
Dreevo FH	Dreevo FH@pel	.bt	26		<div><div></div></div>	
Dreevo FH	Dreevo FH@pel	.bt	26		<div><div></div></div>	
Dreevo FH	Dreevo FH@pel	.bt	26		<div><div></div></div>	
Dreevo FH	petitFichier	.bt	26		<div><div></div></div>	

#### 4.5.1 Upload a new file

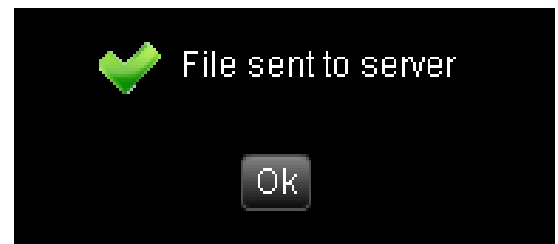
Click **Upload File** to upload a new file.

After having selected the file to upload, a window appears to select the recipient(s) of this file.

Click <Recipients>, select/unselect the vehicles, then <Ok> and <Close>.



A confirmation message appears when the upload is validated.



#### 4.5.2 Files history

Once files are transferred, the user can display the list by increasing/decreasing order of assets names, files names, extension, size or date of upload, by simply clicking on the concerned title.

Asset	File			
Name	Name	Extension	Size	Upload ▼

Files can also be filtered

- Modify the period of upload, (4 months maximum)

Period start   \* Period end   \*

- Select one or more vehicles: click <Recipients> in the top left corner of the window, select /unselect recipients then <Ok>.

















Click **Filter** to apply the selected filter.

### 4.5.3 Files process

The file history also allows the user to check the process of uploaded files. The three colored arrows indicate the process state.



A green logo appears when the file has been accepted. Scroll the mouse over this logo to see the date and time of validation.

Process		
Waiting / Sent / Delivered	Accepted	Accepted
  		
  		
  		
  		

### 4.6 LOG OUT

Click on this button to log out from the application.

## 5 CONSULTATION OF DATA ON THE MAP

The map page enables the user to consult the position of each asset on a map in satellite, hybrid, map or relief mode. By default the mapping system displays the latest positions received by the platform.

### 5.1 CURSORS



Two cursors can be selected: the “magnifying glass” and the “hand”. The user always uses one or the other. By default, the “hand” is selected.

With either of the two cursors, it is possible to zoom in by moving the scroll wheel of the mouse forwards (zoom out by moving it backwards). The zoom is centred on the position of the cursor at the time of the action. A double left click can be used instead of scroll wheel forward.

With the “hand”, it is possible to move the map by holding down the left mouse button.

With the “magnifying glass”, it is possible to draw a rectangle by holding down the left mouse button. When the button is released, an automatic zoom make this rectangle the new viewing frame.

### 5.2 ICONS AND ICON CLUSTER

The last position of each of the assets is represented by an icon. The icon depends on the type of asset (lorry, trailer, truck), which is selected by the user during the account's configuration.



An icon is always accompanied by a label indicating the name of the asset and any alert status. The colour (non-modifiable) and the graphic of the symbol indicate the alert level:



Red with 3 points (severe)



Orange with 2 points (warning)



Yellow with a point (information)



Nothing (no alarm)

Depending on the level of zoom and number of assets displayed, labels and/or icons may overlap. To improve legibility and avoid this problem, labels/icons which are too close are merged, thus making up a larger icon, a cluster of assets.



In this case, the label shows the number of assets grouped together and the highest alert level.

Remember, a star in an asset cluster indicates that there are different types of assets in this cluster. It is also possible to have other representations of the cluster. (See Glossary in the Appendix).




## 5.3 ASSET INFO



Display this table by clicking on an icon or a route point on the map. It shows the key information for this point on the map: the name of the asset, the date and time of the position, as well as the name and the user 6 (max.) favourite items of data on the date of the position.

The “Asset info” panel can be minimised using the arrow located to the right of the name of the asset (this choice is then saved in preferences by clicking on the “Log out” button). By clicking again on the asset, the “Asset info” panel is closed.

The “Asset info” panel updates automatically according to the route point on which the cursor is positioned.

The  button located on the lower right of the table enables configuring the content of the vehicle info panel.

## 5.4 PIE MENUS



The pie menu opens with a long left click on the map or on an icon, and closes again with another left click outside its zone of definition or with a left click triggering another action.

### 5.4.1 Long left click on the map background



By clicking (long left click) anywhere on the map background, this pie menu opens, with five possible functions: closest asset, drive-by time, manage points, find an address and manage zones.

## Closest asset




By clicking “Closest asset”, the user can search the nearest resource (vehicle or POI):

- to a chosen address
- to a zone
- to precise geographical coordinates
- to a point of interest (POI)
- to another asset.

Click **Apply** to confirm the selection. Then a list of the assets is shown closest to selected departure point, with the name of the asset, the distance at which it is located and the estimated travel time.



By clicking on an asset the map is re-centred on the selected asset. Then by clicking on the  (Go to) button, the map is re-centred on the destination, enabling to view the journey to be completed to reach it.

### Management of point of interest

The creation of a point enables, for example, calculation of the position of an asset in relation to any given point (factory, railway station, port, etc.). This point can then be used for specific surveillances.

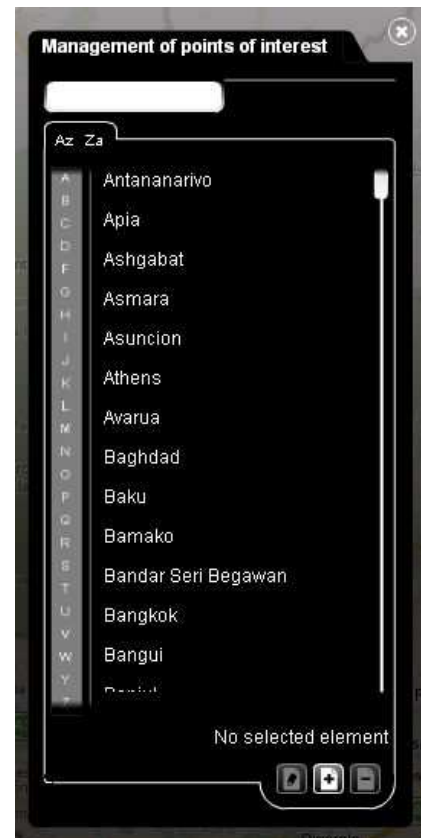
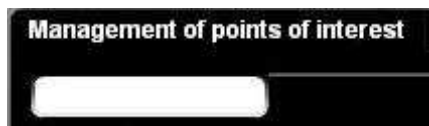


A point of interest is defined by a name, geographical coordinates (longitude/latitude) and a category (hospital, school, warehouse, etc.) represented by a symbol. The name of a point of interest can be viewed by passing the mouse close to it.

By clicking “Manage points”, a window opens, displaying a list of the points of interest which already exist. The list can be displayed in alphabetical order using the **Az Za** buttons at the top of the list.


If the list is long, click on one of the letters to the left to display points beginning with this letter.

The name of a point can also be entered directly into the search bar.





Clicking on a point of interest in the list allows centring the map on this point. Once selected, the point can be edited or deleted (see later in this section).


### Create a new point of interest

To create a new point of interest, click the “Create a new element”  button, at the bottom right of the list. The following window opens.

Fill in the following fields (fields preceded by a red star are compulsory):


- The name of the point of interest
- The category of the point (choose from the drop-down list). A default image list appears
- The description of the point of interest
- The geographical coordinates of the point: latitude and longitude. The cursor on the map automatically changes into a dropper . Click on the map to indicate the exact location of the point of interest. The latitude and longitude fields are then automatically completed with the geographical coordinates
- Click  to save the data and create the new point.

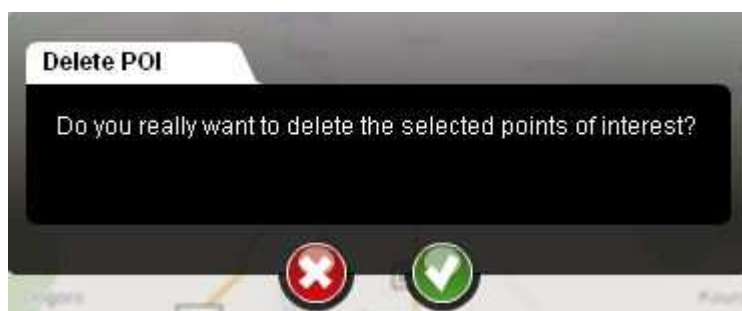
### Modify a point of interest

Select the point of interest from the list, then click “Edit selected element” .

This button gives access to the same information as seen in the previous section. Click on the dropper to move the point on the map.


### Delete a point of interest

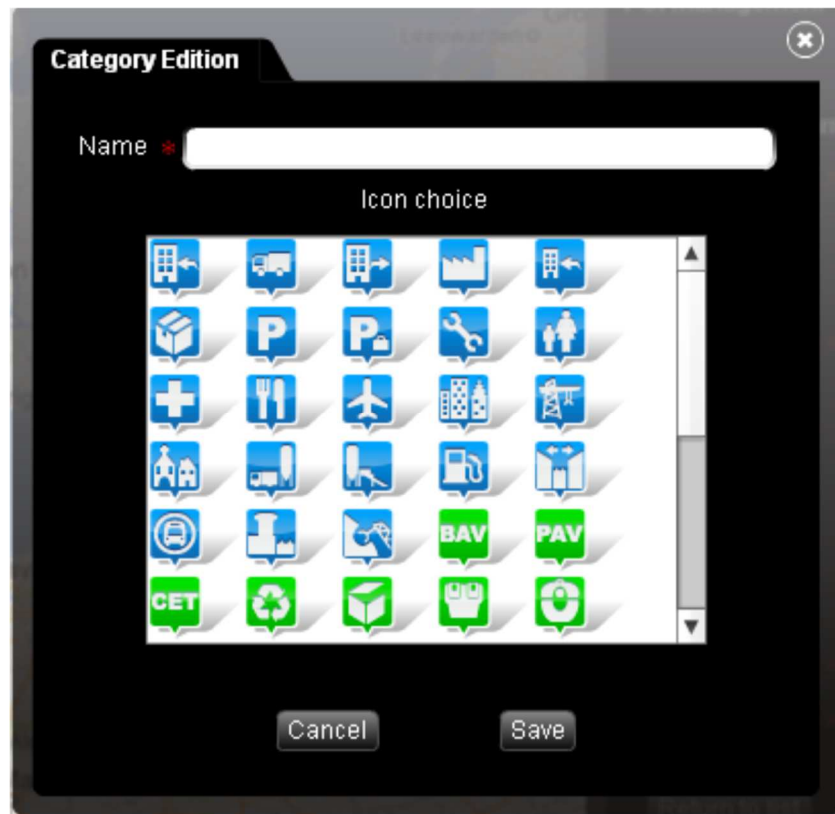
In the same way as before, the user can delete the selected point by clicking “Delete” . A confirmation window appears.



Click  to cancel or  to confirm the deletion.

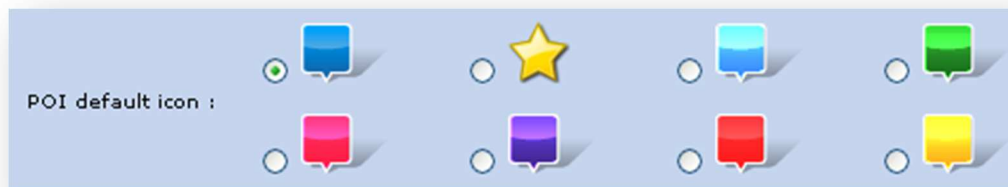
### Create a point of interest category

When creating or modifying a point of interest, a category can be assigned to it. To create a category: click the button . A window appears, offering several icons:



- Select the icon to be assigned to a category
- Enter a name
- Click <Save>.

If the point of interest (POI) has no category, a default icon is assigned to it. The blue rectangle or the yellow star can be selected during configuration of preferences on the generic platform (see Glossary in the Appendix).



### Delete a point of interest category

- Click <category> via the POI editing window
- Select the category to be deleted from the drop-down list
- Click **Edit/Delete Category**. A drop-down list appears



- Click **Delete** button.

### Update a point of interest category


A POI category can be updated in the same way as above.

## Import POI files (.kml extension)



This tool enables the user to import (via KML file) a set of POI that can be associated to an existing category.



Click , chose the KML file to import.

A window appears offering to «Apply POI category on this file». Tick the box to apply. Select the category.



Click <Import> to continue the file import or <Cancel>.

## Manage zones

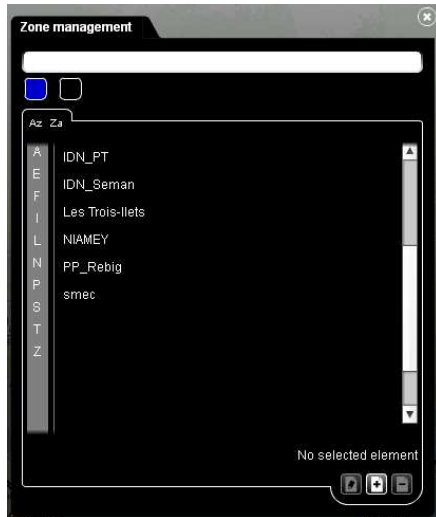


The Novacom platform offers the possibility of creating references zones on the map. A zone is a set of polygons created by the user defining geographical places, for example, a car park, a business, a district, a loading area, etc.

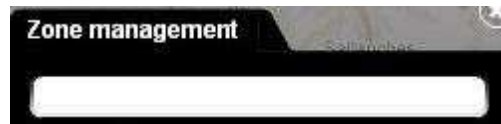
Defining these zones enables the user to:

- Consult data for a defined zone
- Allocate limited access rights to guests
- Create specific surveillances (e.g. arrival/departure, presence in zone, etc.)
- The data for this zone or outside this zone can then be consulted using the search by zone filter.

By clicking “Manage zones”, a window opens, displaying a list of the zones which already exist.




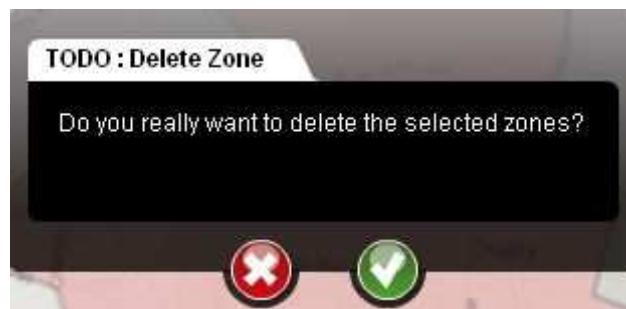
The list can be displayed in alphabetical order using the **Az Za** button at the top of the list. The name of a zone can be also entered directly into the search bar:



This window enables to modify or delete a zone, or create a new one, as follows.


### Delete a zone

Select the zone to be deleted from the list of zones, then click “Delete” . A confirmation window appears.

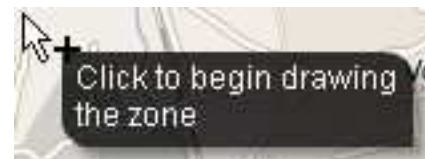


Click  to cancel or  to confirm the deletion.

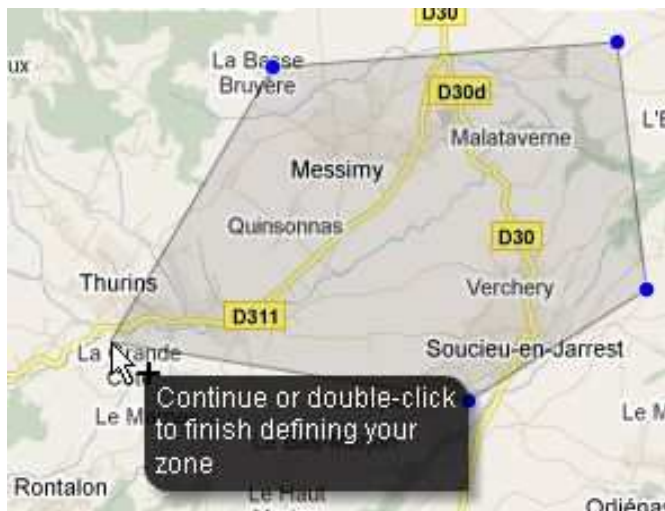
### Create a new zone

Click the “Create a new element”  button, at the bottom right of the list. A window opens enabling to create a new zone.

To create a zone, draw the polygon or polygons which constitute the zone.

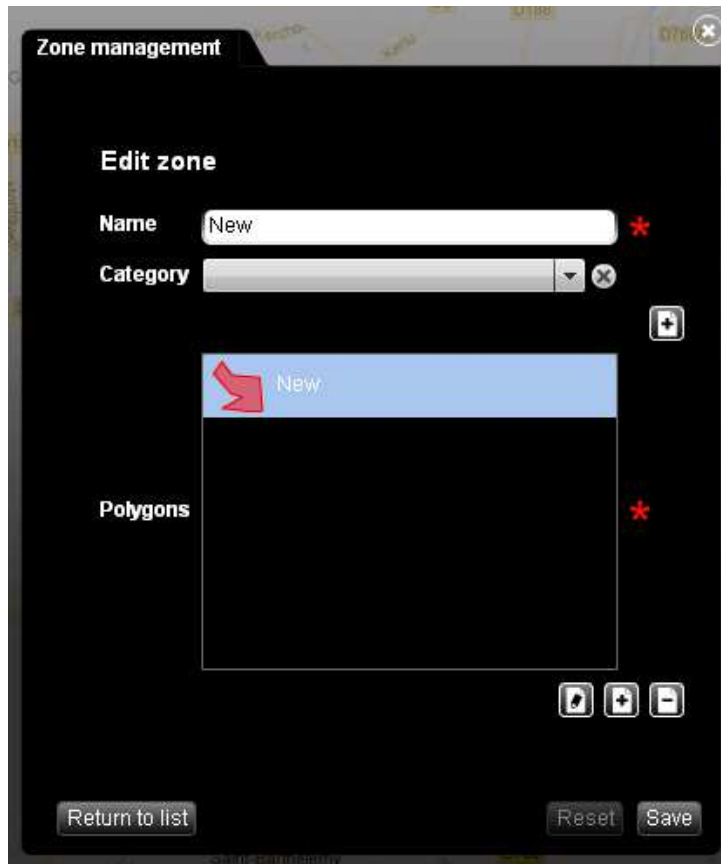



The cursor changes enabling the user to draw a polygon. A tooltip close to the cursor assists the user in creating the polygon. Click once on the map to define the first point of the polygon, then repeat to define the other points forming the polygon. There are two ways to close a polygon:





- By clicking on the first point of the polygon (the one that is created first). This enlarges when the cursor is brought to it
- Or by double clicking on the last created point.


Once the polygon has been created, the name of the zone must be entered in the window.




Click  to save the data and create the new zone.

It is also possible to create other polygons and add them to an existing zone. Create further polygons in the same way as indicated above. Each new polygon created is added to the list of polygons constituting the new zone to be created.

Modifying (with the  button) or deleting (with the  button) one or more polygons, which are part of a zone, is also possible.

As above, click  to save the data for the zone.

### Modify a zone

Select the zone to modify from the list of available zones. Then click “Edit the selected element” . This enables modifying the name of the zone, add polygons or delete them (see above).

## Find an address



By clicking on “Find an address”, a window opens, enabling to enter an address in the search bar and to select a country. The text field is filled with the address which opened the pie menu.

Find an address

Find an address

641 South Eighth Street - MK9 3 Milton Keynes
United King...

Ex: Place de la République, 75003, Paris

Search

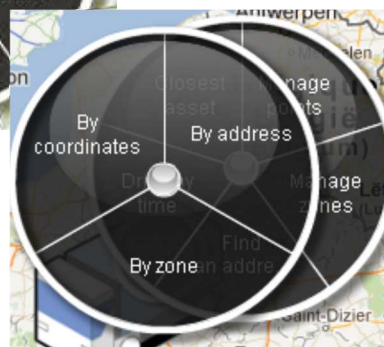
Click **Search** or press the key “Enter” (on the keyboard) to show the location on the map.



## Drive-by time

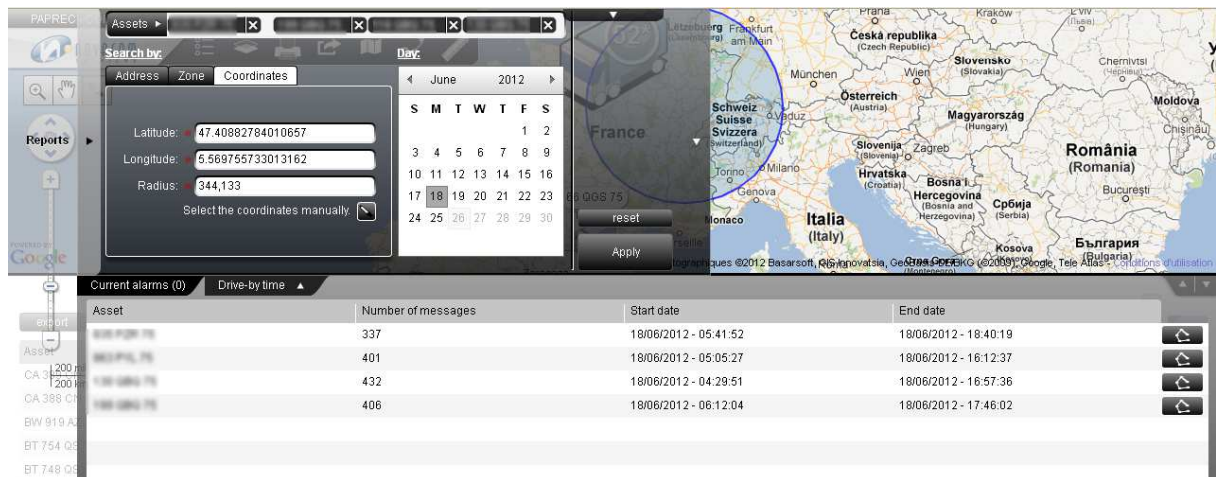


By clicking “Drive-by time” a new circular menu is displayed. This menu enables the search for assets which have gone to an address or to a defined zone and on a specific date.



The filter then opens, enabling to configure a search by selecting the assets, the date and the location (address, zone or coordinates).

See the “Filters” chapter, “Drive-by times” tab.



## 5.4.2 Long left click on a vehicle

### Request a position



By clicking “Request a position”, a query is sent to the terminal of the selected asset in order to discover its current position (if this command is available for the asset). The current position of the asset is then shown on the map (this function is also called “Polling”).



## Display a route



Routes enable viewing a record of the positions of an asset on the map.

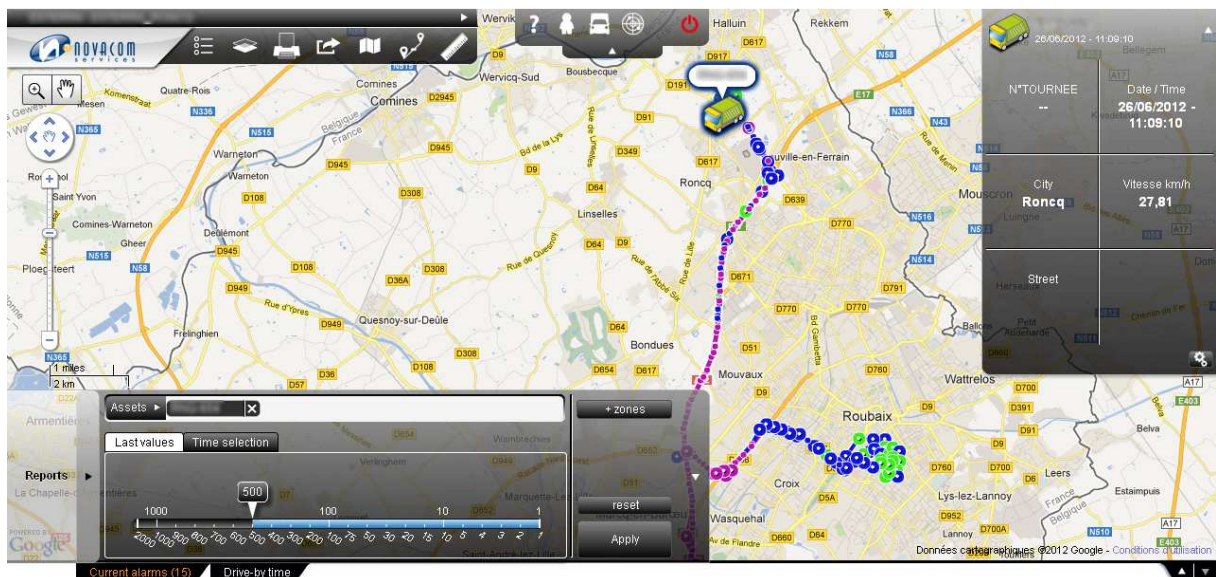
By clicking “Display route”, a new pie menu is displayed, offering several choices to define the route to be displayed:

- The latest 10, 100 or 1000 positions
- Over a time interval: the positions from today, yesterday or most recently.



This action automatically updates the selection filter with the corresponding filter (asset and period) and applies it (see the “Filters” chapter).

Using the filter, the user can also select other values in the latest positions (“Latest values” tab) or other time intervals (“Time selection” tab). The route is then displayed on the map.



The latest position on a route is indicated by the vehicle icon.



By moving the cursor towards the route, the closest point appears and enlarges. By clicking on this point, the date and time when the asset passed this point are displayed (in the “Asset info” panel, upper right), together with the measurements corresponding to this point (user’s 6 favourite items of data).

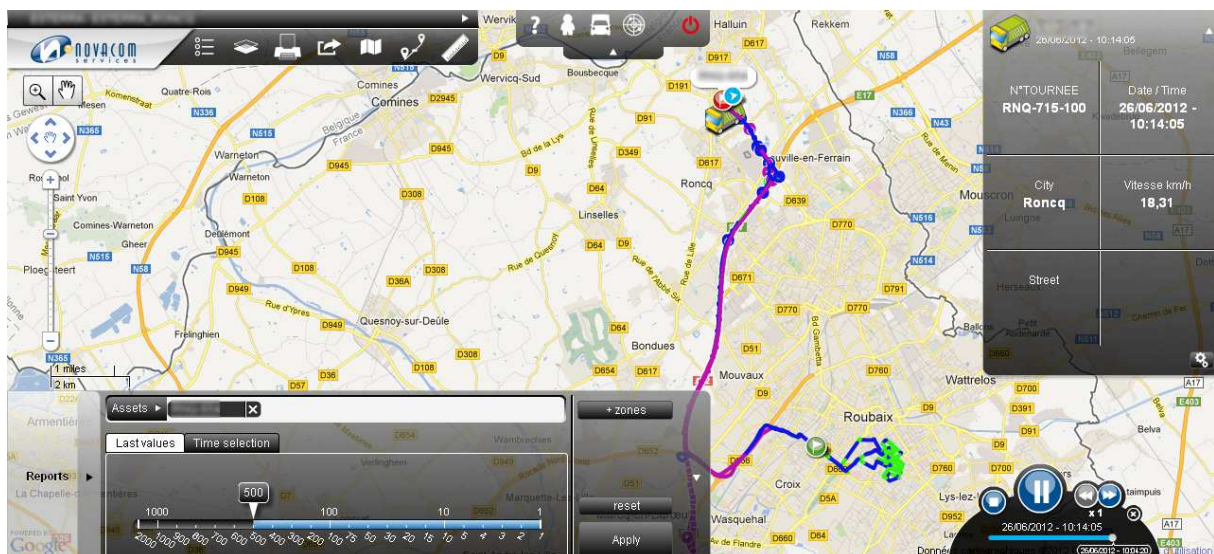
Depending on the level of zoom, the route may not display all points.

### Animate a route



From the display of the route on the map, a long left click on the asset can be used to animate the route, thanks to the playback function.

By clicking on “Animate route”, the playback function is displayed on the map, enabling the user to view (replay) the route taken (according to the selection criteria above mentioned).



The playback function is only accessible if a route is already displayed on the map.



The playback function allows launching the playback device on the route of the clicked asset. The user can activate the animation (play button), stop the animation, pause, accelerate the animation or position the cursor according to his/her needs, in order to display the animation at the desired time.

### Estimate arrival



By clicking on “Estimate arrival”, a pop-up is displayed, offering several choices: estimate arrival at an address, a POI (Point Of Interest) or a zone.

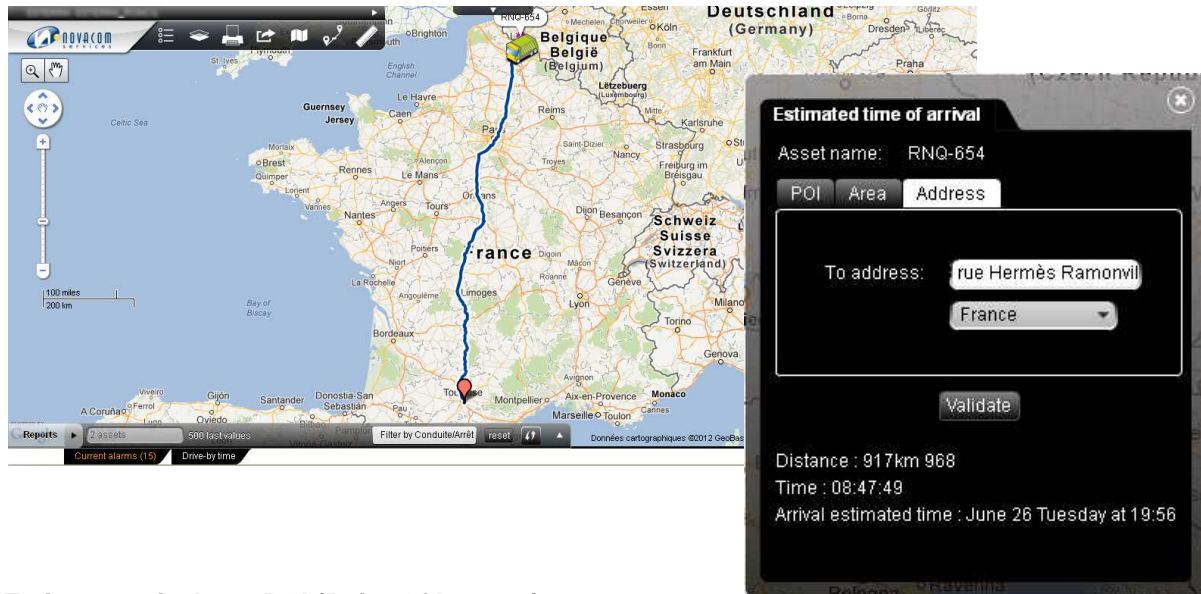
### Estimate arrival at an address

- Click the button <Address>
- Enter the destination address
- Choose the destination country

A screenshot of a pop-up window titled 'Estimated time of arrival'. It contains the following elements:

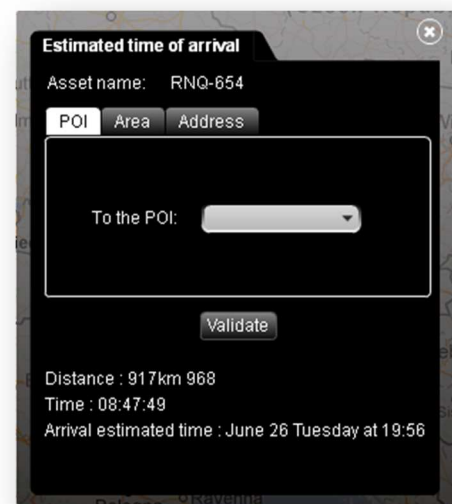
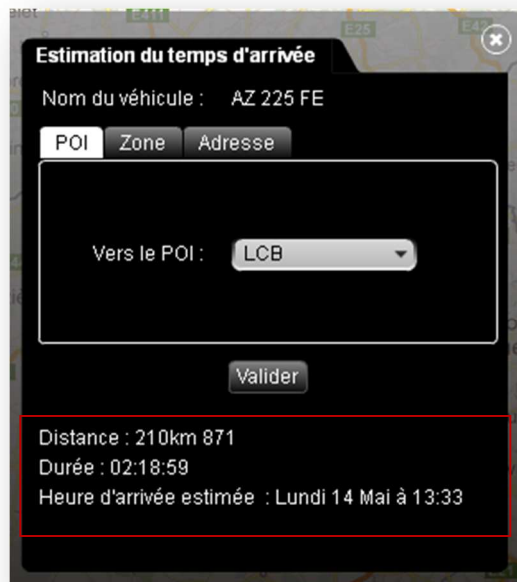
- 'Asset name: RNQ-654'
- Three tabs: 'POI', 'Area', and 'Address' (which is selected).
- A text input field labeled 'To address:'.
- A dropdown menu showing 'France'.
- A 'Validate' button.
- Fields for 'Distance:', 'Time:', and 'Arrival estimated time:'.

- Click **Validate**. The distance and estimated time between the latest position of the asset and the arrival location are then displayed below the destination address. In parallel, the route is displayed on the map.



### Estimate arrival at a POI (Point Of Interest)

- Click the button **POI**
- Select the destination point of interest from the drop-down list (from among the points of interest that has been already registered)
- Click **Validate**



The distance and time estimated between the latest position of the asset and the arrival location are then displayed below the point of interest.

### Estimate arrival in a zone

- Click **Area**
- Choose from the drop-down list the destination zone (from among the zones that has been already registered)
- Click **Validate**.

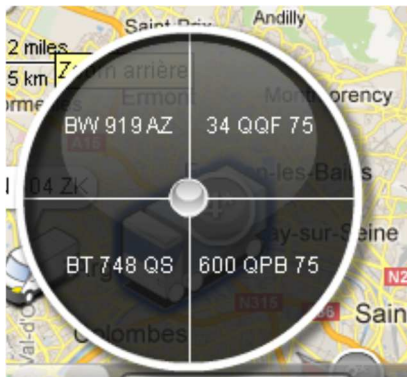
The distance and the time estimated between the latest position of the asset and the arrival location are then displayed below the zone.

### 5.4.3 Long left click on a cluster of assets

If there are fewer than 9 assets clustered together



The pie menu then shows the 2 to 8 assets in the cluster of assets.



Each segment of the pie menu displays the name of one of the assets. By clicking on the name of an asset in this pie menu, the “Asset info” panel on the upper right is automatically updated, showing the information described earlier in the “Asset info” chapter.

Furthermore, by clicking on the name of an asset in this pie menu, another pie menu is superimposed (menu already seen earlier).



In the same way as above, it is possible to request a position, estimate the arrival time of the asset or display its route(s).

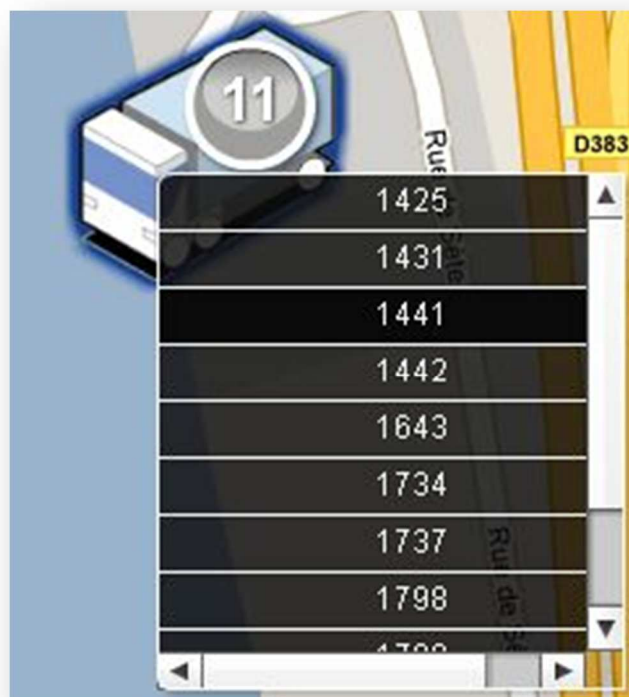
### If there are more than 8 assets clustered together

The pie menu then offers two options:



- To zoom in, so that the assets are visible at the closest zoom level. Then the requested asset can be chosen or further zoom can be performed on another cluster of more than 8 assets
- Cancel, to close the pie menu.

If the assets have the same GPS position and it is therefore impossible to tell them apart at maximum zoom level, a window opens listing the assets present in this cluster. The functioning is then the same as for a cluster of fewer than 9 assets.



## 6 FILTERS

This module enables filtering the consulted data.



It has six functions.

### 6.1 FUNCTION 1: FILTERS («CLOSED» MODE)




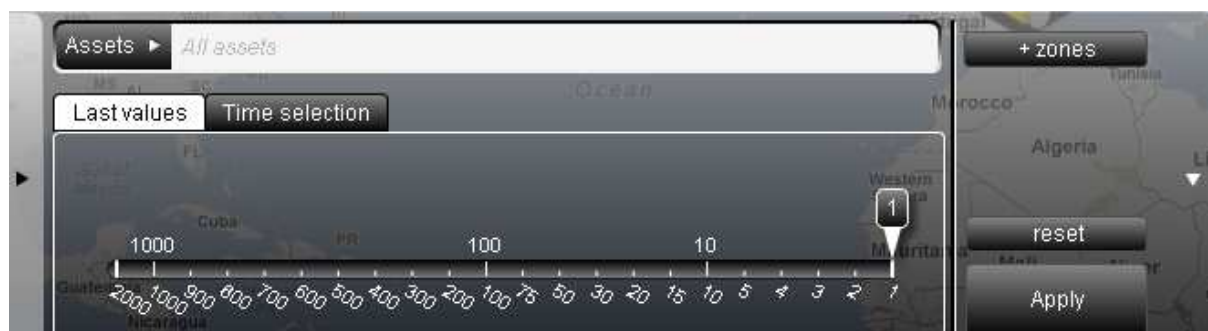
This restricted mode reminds the user of the entered filter, i.e.:

- If a single asset/group/zone has been entered, its name is displayed
- If several assets/groups/zones have been entered, their number is displayed
- If all assets/zones have been entered, the filter indicates this too.

In this mode, the rest of the screen is available for consultation of data.

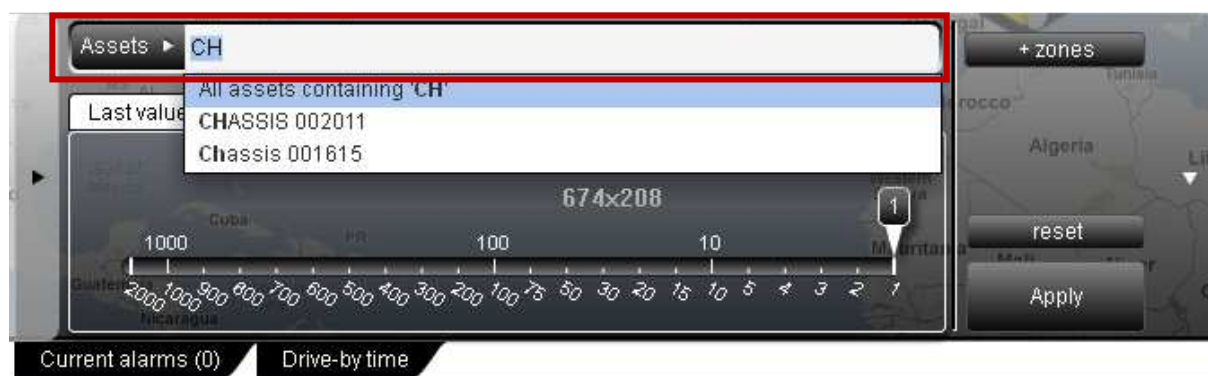
### 6.2 FUNCTION 2: FILTERS («OPEN» MODE)

Click on , and the filter window opens.



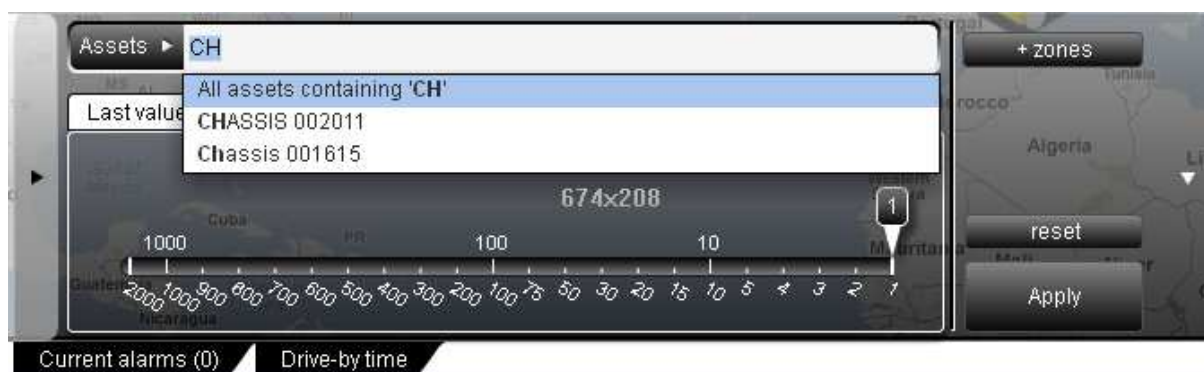
Then perform filtering with different entries (assets, zones, periods).


### 6.2.1 Entering assets

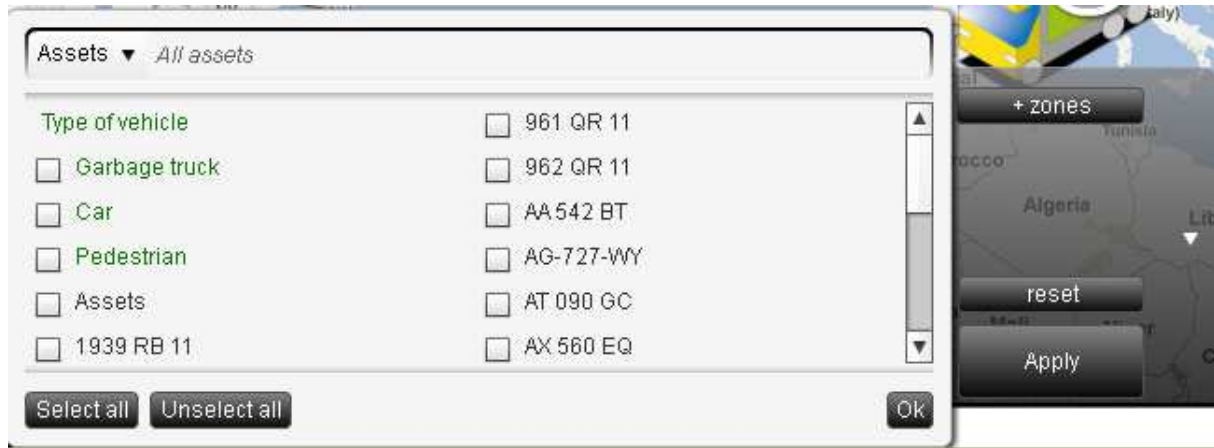



In the “Assets” area, the needed assets can be selected. The following options can be used:

- To enter directly the name of the asset (if known), or part of the name. In this case, a window opens below offering assets to be selected (corresponding to the entry)



- Or by clicking the “Assets” button or  , to the right of the “Assets” button, to choose from the drop-down list the assets or groups of assets to be selected by ticking the corresponding box(es).

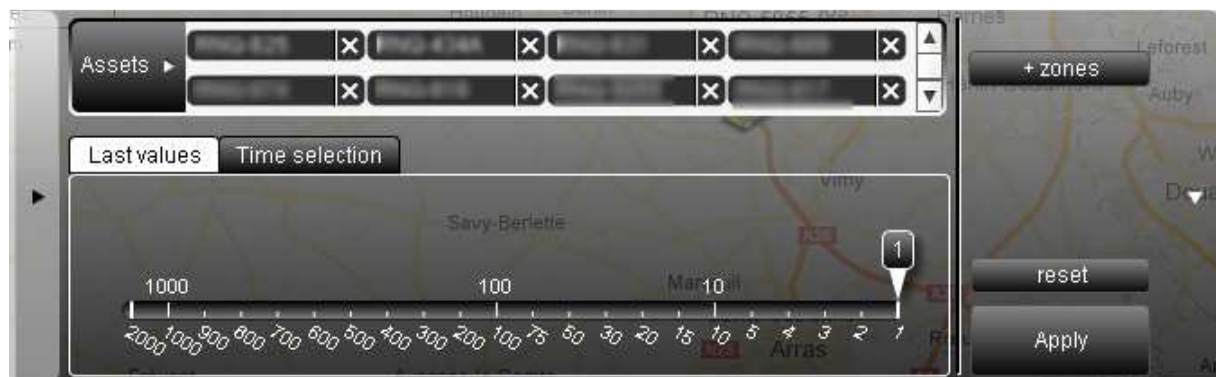


It is also possible to select all the assets or none of them (“Unselect all”). Click  to confirm the selection.

The groups are listed before the assets. If no group has been configured, the “Groups” heading is not shown.

An asset or a group in the selection can be deleted in three different ways:

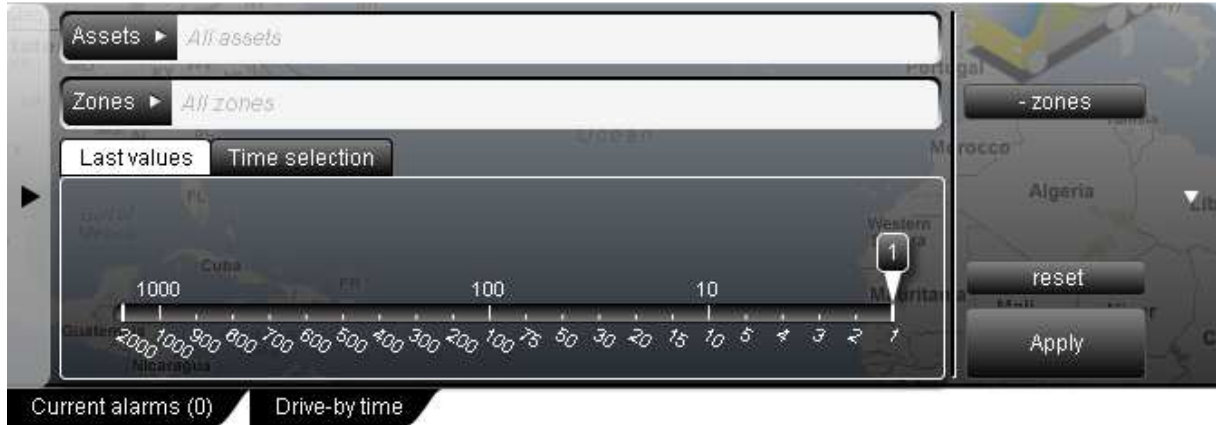
- By clicking on the “X” to the right of the asset name



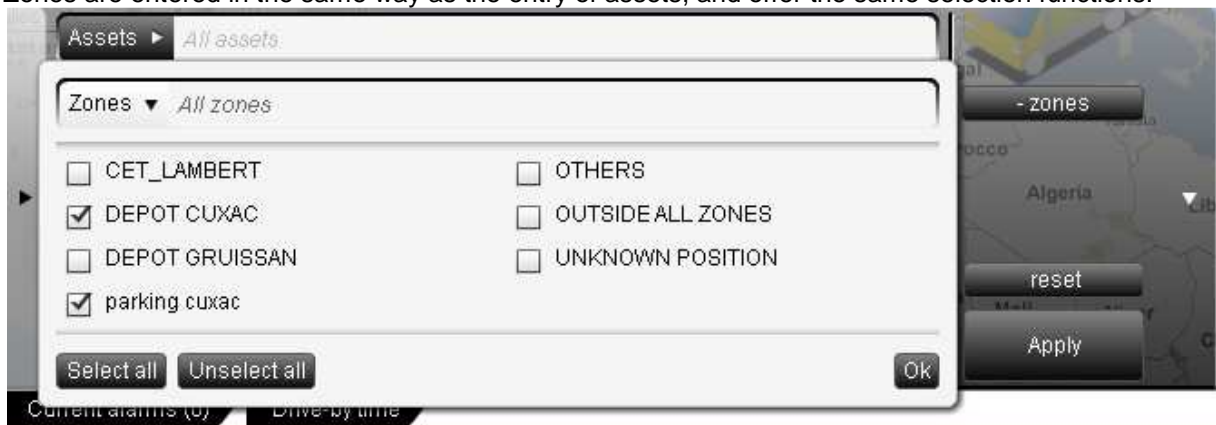
- By opening the assets drop-down list and unselecting the box(es) corresponding to the asset(s) to be deleted from the selection
- By using the keyboard.

## 6.2.2 Entering zones if applicable

By clicking **+ zones**, to the right of the assets selection area, a “zones” line is added below the assets: it allows selecting the needed zones.



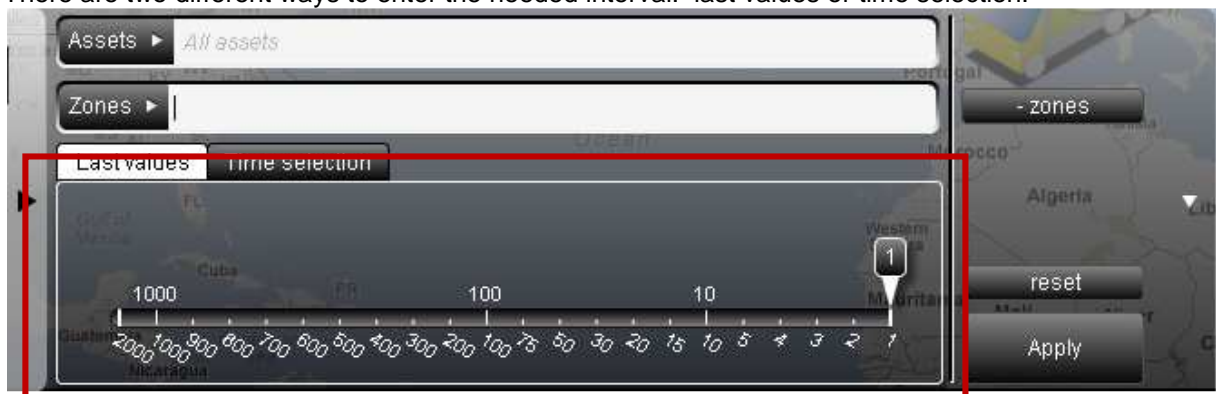
Zones are entered in the same way as the entry of assets, and offer the same selection functions.



Zones can be also removed from filtering by clicking **- zones**.

### 6.2.3 Entering the period

There are two different ways to enter the needed interval: last values or time selection.



### Last values

This scale enables the selection of the latest positions to display, up to the latest 2,000 positions of an asset (far left).



### Time selection

This chronological scale shows a time line ranging from D-3 to D, segmented in hours and in days. It enables, for example, selecting just the last 9 hours or the last 2 days.

The upper cursor represents the period start date, and the lower cursor the end date. They can be moved along the chronological scale to select the period of interest.

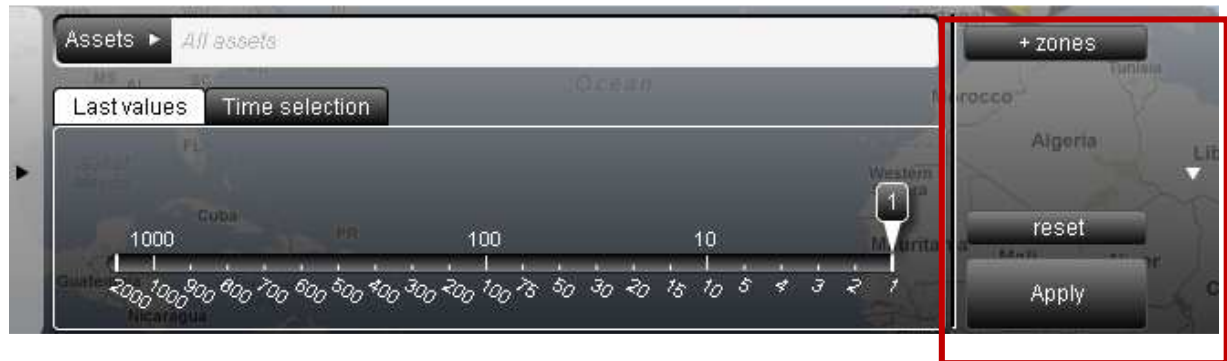


There is also the option of opening an interactive calendar on each of the cursors in order to enter a more precise date until 126 days in the past.



### 6.2.4 Button bar

On the right, in addition to the **+ zones** and **- zones** buttons, which enable the user to show or hide the zone filter, there are 3 other buttons.



### Reset


This button allows restoring the first filter applied upon log-in. This button is also accessible in “Closed” mode.



### Apply

This is the button which validates the form. By clicking **Apply**, the map and table display the data related to the entered filter. The filter window closes automatically (“Closed” mode).

### Minimize

This button , which takes up the entire right area of the filter, allows closing the filter window (“Closed” mode).

### Warning:

In case the filter is closed after making an entry, but without validating it with the **Apply** button, a window appears to ask the user to choose between to continue without saving the filter changes or to cancel the closure. Then click the **Apply** button to save filter changes.

## 6.3 FUNCTION 3: «CURRENT ALARMS» TAB

This tab enables accessing current alarms. By clicking on it, a table opens above, showing current alarms and their history. This window can be closed in the same way as it is opened, by clicking on the tab.



There are two tables in the “Alarms” tab, but only one is shown at a time:

- By clicking on “Current alarms”, the table of current alarms is displayed (if there are no alarms, a message indicates their absence)

Date/Time	Asset	Surveillance	Message	Validation	Comment
09/05/2012 - 13:09:47		PROBLEME GPS	Problème de GPS	Validate	
08/05/2012 - 08:30:00		PANNE	PANNE VEHICULE	Validate	
03/05/2012 - 16:07:33		SURVEILLANCE PAR ZONE	Véhicule dans la zone	Validate	
26/04/2012 - 14:13:31		EMISSION DONNEES	Absence d'émission de + 48	Validate	
25/04/2012 - 16:35:08		EMISSION DONNEES	Absence d'émission de + 48	Validate	
25/04/2012 - 12:23:19		EMISSION DONNEES	Absence d'émission de + 48	Validate	

- By clicking on “History”, the alarm history table is shown.

Date/Time	Asset	Surveillance	Message	Validation	Comment
09/05/2012 - 13:09:47		PROBLEME GPS	Problème de GPS	Validate	
08/05/2012 - 08:30:00		PANNE	PANNE VEHICULE	Validate	
03/05/2012 - 16:07:33		SURVEILLANCE PAR ZONE	Véhicule dans la zone	Validate	
26/04/2012 - 14:13:31		EMISSION DONNEES	Absence d'émission de + 48	Validate	
25/04/2012 - 16:35:08		EMISSION DONNEES	Absence d'émission de + 48	Validate	
25/04/2012 - 12:23:19		EMISSION DONNEES	Absence d'émission de + 48	Validate	

By default, the alarms are sorted by descending order of date (from the most recent to the oldest), but selection within this column and within the other columns is possible. The order of the columns can be changed by dragging and dropping. The new order is then saved in preferences. The size of the columns can also be expanded or reduced.

### 6.3.1 Current alarms table

Date/Time	Asset	Surveillance	Message	Validation	Comment
09/05/2012 - 13:09:47	⚠️ RNQ-5006	PROBLEME GPS	Problème de GPS	Validate	
08/05/2012 - 08:30:00	⚠️ RNQ-5006	PANNE	PANNE VEHICULE	Validate	
03/05/2012 - 16:07:33	🟡 RNQ-658	SURVEILLANCE PAR ZONE	Véhicule dans la zone	Validate	
26/04/2012 - 14:13:31	🟡 RNQ-5005	EMISSION DONNEES	Absence d'émission de + 48	Validate	
25/04/2012 - 16:35:08	🟡 RNQ-631	EMISSION DONNEES	Absence d'émission de + 48	Validate	
25/04/2012 - 12:23:19	🟡 RNQ-5094	EMISSION DONNEES	Absence d'émission de + 48	Validate	

The number of current alarms is shown in brackets. The colour of the letters in the tab depends on the level of the highest current alarm.

Date/Time
09/05/2012 - 13:09:47
08/05/2012 - 08:30:00
03/05/2012 - 16:07:33
26/04/2012 - 14:13:31
25/04/2012 - 16:35:08
25/04/2012 - 12:23:19

- Red (severe)
- Orange (warning)
- Yellow (information)
- White (no alarm)

The validate button (Validate) allows the alarm to be validated, with the option of entering a comment to the right. If validated, the alarm disappears from the list.

### 6.3.2 Alarm history table

The alarm history displays alarms corresponding to the selected assets and period.

Date/Time	Asset	Surveillance	Message	Validated by	Date of validation	Comment
23/06/2012 - 08:43:19		VOIE INACCESSIBLE	VOIE INACCESSIBLE	Surveillance	23/06/2012 - 09:57:59	
23/06/2012 - 07:46:29		VOIE INACCESSIBLE	VOIE INACCESSIBLE	Surveillance	23/06/2012 - 08:24:52	
23/06/2012 - 07:41:52		VOIE INACCESSIBLE	VOIE INACCESSIBLE	Surveillance	23/06/2012 - 07:51:17	
23/06/2012 - 06:37:04		VOIE INACCESSIBLE	VOIE INACCESSIBLE	Surveillance	23/06/2012 - 09:04:27	
22/06/2012 - 16:33:12		VOIE INACCESSIBLE	VOIE INACCESSIBLE	Surveillance	22/06/2012 - 17:29:00	
18/06/2012 - 14:26:24		EMISSION DONNEES	Absence d'émission de			
22/06/2012 - 13:41:55		VOIE INACCESSIBLE	VOIE INACCESSIBLE	Surveillance	22/06/2012 - 14:12:25	
22/06/2012 - 13:45:42		VOIE INACCESSIBLE	VOIE INACCESSIBLE	Surveillance	22/06/2012 - 14:01:55	
22/06/2012 - 13:35:22		PANNE	PANNE VEHICULE	Surveillance	22/06/2012 - 16:48:19	

It displays:

- The date and time of alarm triggering
- The alarm level (with the same symbols as on the map)
- The asset
- The name of the surveillance
- The message entered in the surveillance
- The validating person
- The date and time of validation
- Any comments entered upon validation of the alarm.

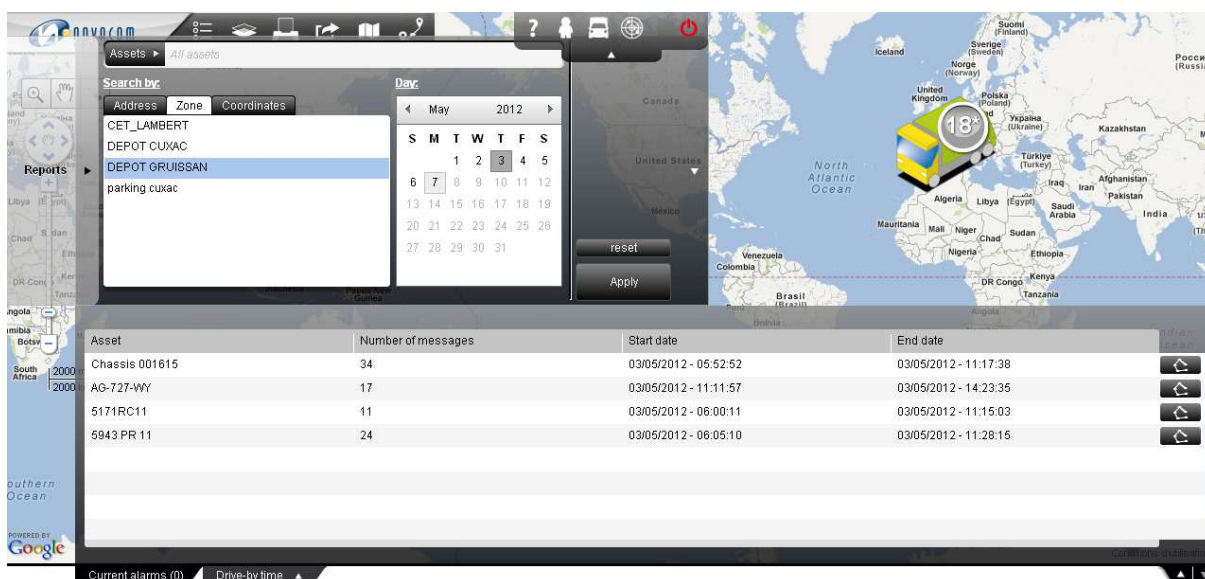
The user can therefore filter the information in the history table by selecting the assets and period desired in the filter which opens automatically with the history (see “Filters” chapter).

## 6.4 FUNCTION 4: «DRIVE-BY TIME» TAB

This tab enables searching for assets which have gone to an address or to a defined zone and on a specific date.

This tab is the same as the “Drive-by time” command, accessible through the pie menu opened by a long click on the map background.

By clicking on the “Drive-by time” tab, the drive-by times filter window opens, together with the table presenting the list of assets corresponding to the search.



The screenshot shows the MEDUSA Geoflex User's Manual interface. The 'Drive-by time' tab is active, displaying a search filter window and a table of assets.

**Search filter window:**

- Search by:** Address, Zone, Coordinates
- Address:** CET\_LAMBERT, DEPOT CUXAC, DEPOT GRUISSAN, parking cuxac
- Day:** May 2012
- Calendar:** S M T W T F S, 1 2 3 4 5, 6 7 8 9 10 11 12, 13 14 15 16 17 18 19, 20 21 22 23 24 25 26, 27 28 29 30 31
- Buttons:** reset, Apply

**Table of assets:**

Asset	Number of messages	Start date	End date
Chassis 001615	34	03/05/2012 - 05:52:52	03/05/2012 - 11:17:38
AG-727-WY	17	03/05/2012 - 11:11:57	03/05/2012 - 14:23:35
5171RC11	11	03/05/2012 - 06:00:11	03/05/2012 - 11:15:03
5943 PR 11	24	03/05/2012 - 06:05:10	03/05/2012 - 11:28:15

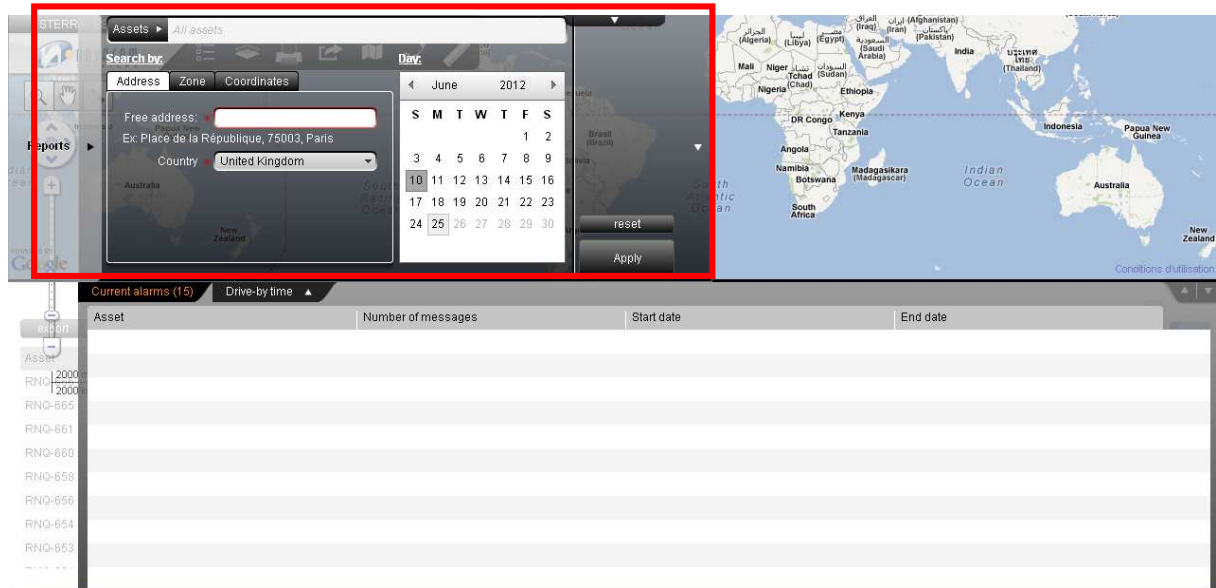
**Map:** A map of Europe showing the location of the assets. A yellow car icon is visible on the map, indicating the location of the assets.

**Bottom bar:** Current alarms (0) | Drive-by time

## 6.4.1 The drive-by time filter

This filter enables selecting:

- One or more assets from the list (see "Filters" chapter)
- A date, by entering a day via the calendar
- The location visited (free address, zone or geographical coordinates using a dropper).



## 6.4.2 Select a drive-by location

A drive-by location can be selected in the filter by searching for:

- An address



Enter the selected address in this zone and select the country. Free addresses only work in Europe. The red asterisk indicates that these are required fields for a search by address.

**Search by:**

Address Zone Coordinates

Free address: \* LONDON  
Ex: Place de la République, 75003, Paris

Country: \* United Kingdom

Correspondances: \* SW1A 2 Londres

Clicking the button ( **Apply** ) on the right in the filter button bar, the filter asks to select the desired address in the drop-down list from among the possible addresses to the right of "Correspondences".

- A zone

**Search by:**

Address Zone Coordinates

Zone Atelier

Zone MERCEDES

Zone Vexor

Choose, from among the different registered zones, the one which corresponds to the search.

- Geographical coordinates


**Search by:**


Address Zone Coordinates

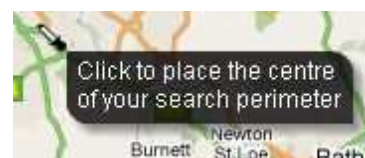
Latitude: \*

Longitude: \*

Radius: \*

Select the coordinates manually. 

The geographical coordinates of the location can be entered by using the dropper .



By clicking on the dropper, the cursor on the map changes into a dropper enabling to select a circular zone on the map (disc).

Click once on the map to define the centre, then click again to define the radius of the disc, which represent the surface area of the zone. A disc is then drawn transparently between the first and second click. The geographical coordinates of this disc are automatically shown in the fields "Latitude", "Longitude" and "Radius".



Click the **Apply** button on the right in the filter buttons bar to validate the selections. The data is then shown automatically in the table below.


Asset	Number of messages	Start date	End date
Asset	2	10/06/2012 - 12:32:22	10/06/2012 - 12:34:23
RNQ-690	1	10/06/2012 - 19:58:46	10/06/2012 - 19:58:46
RNQ-691	160	10/06/2012 - 12:46:10	10/06/2012 - 15:16:06
RNQ-692	499	10/06/2012 - 12:31:00	10/06/2012 - 17:43:40
RNQ-693	306	10/06/2012 - 12:23:48	10/06/2012 - 15:07:50
RNQ-694	603	10/06/2012 - 00:00:20	10/06/2012 - 15:15:09
RNQ-695	1	10/06/2012 - 17:09:47	10/06/2012 - 17:09:47
RNQ-696	1	10/06/2012 - 15:19:34	10/06/2012 - 15:19:34
RNQ-697	1	10/06/2012 - 15:01:37	10/06/2012 - 15:01:37
RNQ-698	1	10/06/2012 - 19:24:07	10/06/2012 - 19:24:07

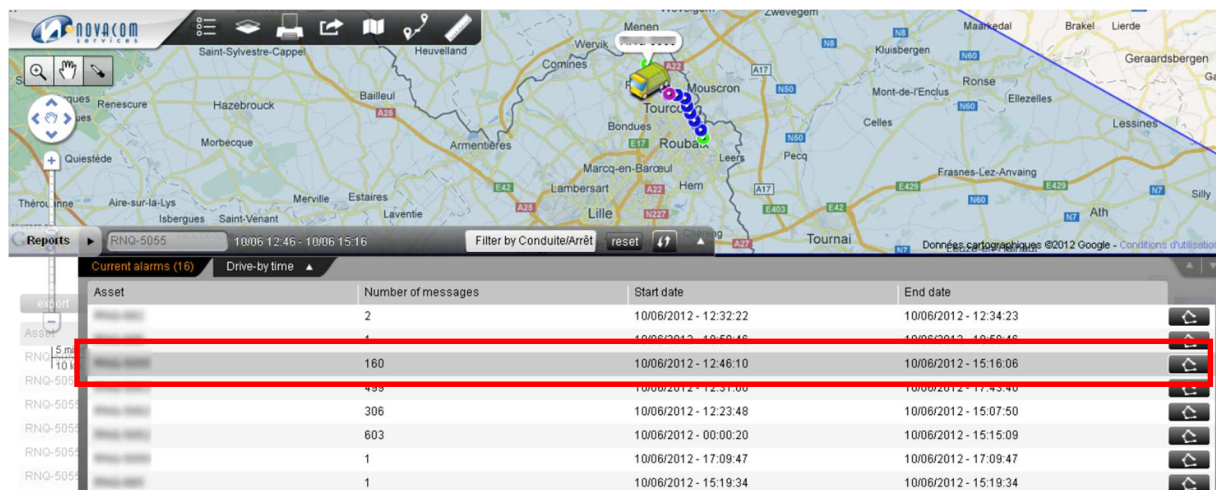
### 6.4.3 Drive-by time table

The filter result is shown in the form of a table with the following columns:

- The name of the assets which have driven by the selected location
- The number of messages: number of positions sent within the zone
- The first date: the date and time of when the asset first drove by
- The latest date: the date and time when the asset most recently drove by.

Current alarms (15)		Drive-by time	
Asset	Number of messages	Start date	End date
Asset-001	2	10/06/2012 - 12:32:22	10/06/2012 - 12:34:23
Asset-002	1	10/06/2012 - 19:58:46	10/06/2012 - 19:58:46
Asset-003	160	10/06/2012 - 12:46:10	10/06/2012 - 15:16:06
Asset-004	499	10/06/2012 - 12:31:00	10/06/2012 - 17:43:40
Asset-005	306	10/06/2012 - 12:23:48	10/06/2012 - 15:07:50
Asset-006	603	10/06/2012 - 00:00:20	10/06/2012 - 15:15:09

By clicking on , the map displays the route of the asset in the selected zone.




Asset	Number of messages	Start date	End date
Asset-001	2	10/06/2012 - 12:32:22	10/06/2012 - 12:34:23
Asset-002	1	10/06/2012 - 19:58:46	10/06/2012 - 19:58:46
Asset-003	160	10/06/2012 - 12:46:10	10/06/2012 - 15:16:06
Asset-004	499	10/06/2012 - 12:31:00	10/06/2012 - 17:43:40
Asset-005	306	10/06/2012 - 12:23:48	10/06/2012 - 15:07:50
Asset-006	603	10/06/2012 - 00:00:20	10/06/2012 - 15:15:09
Asset-007	1	10/06/2012 - 17:09:47	10/06/2012 - 17:09:47
Asset-008	1	10/06/2012 - 15:19:34	10/06/2012 - 15:19:34

In the Drive-by time table, click the column heading to sort data within each column (sort by assets, sort by number of messages, sort by date). An upward or downward arrow appears to the right of the column heading.

The order of the columns can be changed by dragging and dropping.

## 6.5 FUNCTION 5: «QUICK FILTER» TAB

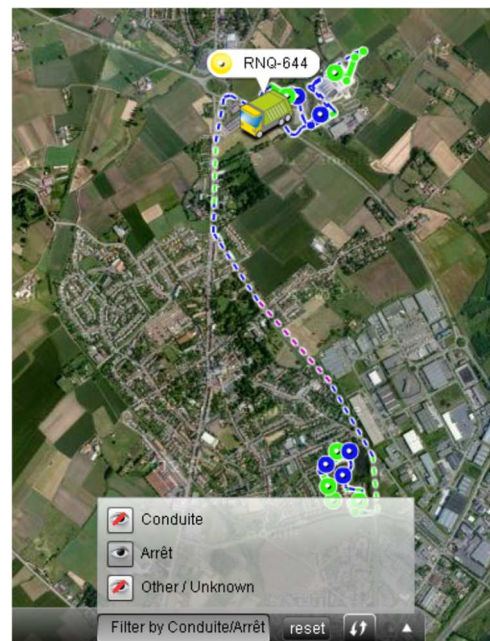
The quick filter allows defining the display of assets according to their status. It varies depending on the sensors. The example below shows the case of a “filter by conduit/arret”:

- To see driving assets only: click the eye to the left of “Arret” to hide stationary assets
- To display stationary assets only: click the eye to the left of “Conduite”  to hide driving assets.



This quick filter can also be applied to a route. The portions where the asset was stationary are shown. The rest of the route is displayed as a transparent dotted line.

The procedure is the same for detecting reverse movements or other important events, depending on the client.



## 6.6 FUNCTION 6: «REFRESH» BUTTON



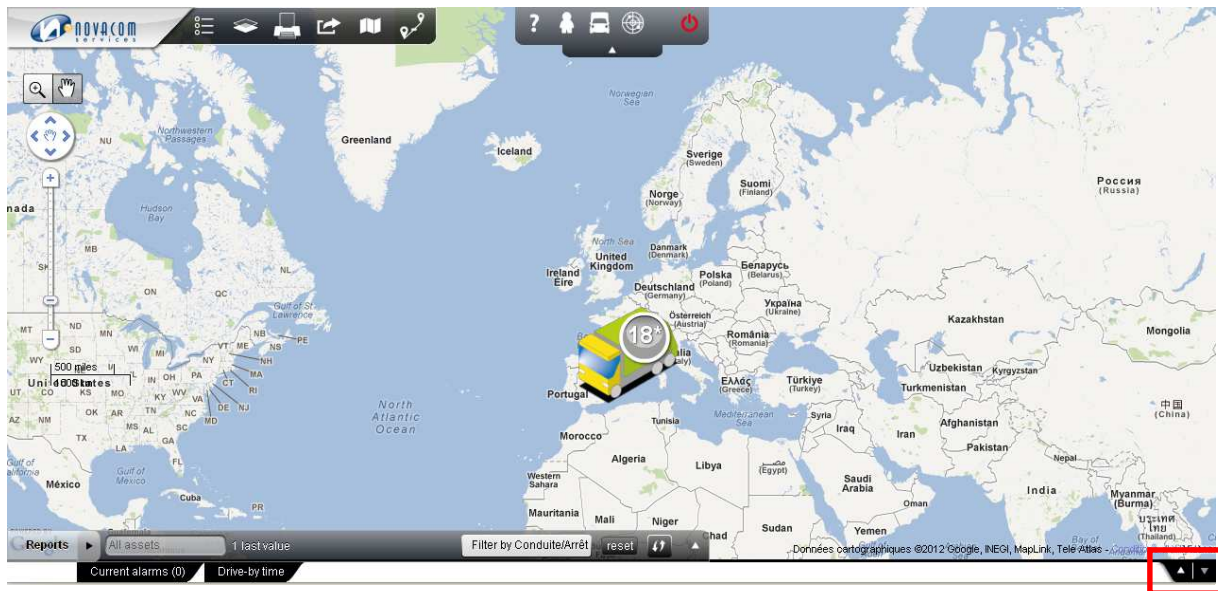
The “Refresh” button is accessible from the minimised filter:




- A short click allows reapplying the current filter
- A long click keeps the button activated and triggers the auto-refresh. Client preferences enable the choice of the refresh period and map re-centring.

This refresh button also works with the data table. A tool-tip also explains how it works when the mouse cursor passes over it.


## 7 CONSULTING THE DATA TABLE

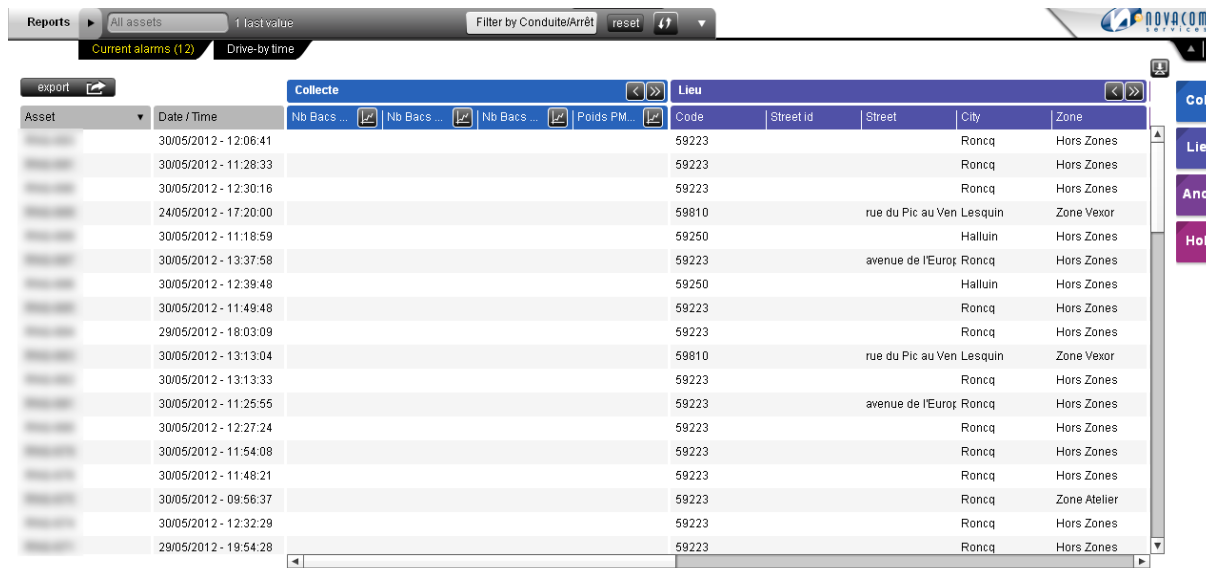


Clicking the  button on the tab, located on the lower right, opens the data table, which allows consulting the data on the assets in the form of a summary table.


The screenshot shows the MEDUSA Geoflex interface with a map of France. Several assets are highlighted by yellow and blue markers. Below the map is a data table with the following columns:

Asset	Date / Time	Nb Bacs ...	Nb Bacs ...	Nb Bacs ...	Poids PM ...	Lieu	Code	Street id	N°RUE	Street	City
	25/06/2012 - 14:51:32	0	0	0	0		59170	0		boulevard Émile J Croix	
	25/06/2012 - 14:31:55	0	0	0	0		59223	0		avenue Jean Mon Roncq	
	25/06/2012 - 14:40:14	0	0	0	0		59890	0		rue Poincaré	Quesnoy-sur-De
	25/06/2012 - 14:12:35	0	0	0	0		59810	0		rue Descat	Lesquin
	25/06/2012 - 14:52:10	0	0	0	0		59890	0		chemin des Trois	Quesnoy-sur-De
	25/06/2012 - 11:41:35	0	0	0	0		59223	0			Roncq
	25/06/2012 - 14:48:38	0	0	0	0		59890	0		drève du grand M	Quesnoy-sur-De
	22/06/2012 - 06:52:13	0	0	0	0		59223	0		avenue Konrad Av Roncq	

The table can be displayed either at the bottom of the screen, or in full screen mode by clicking again on the  button on the tab.



Asset	Date / Time	Collecte	Lieu
	30/05/2012 - 12:06:41		59223 Roncq Hors Zones
	30/05/2012 - 11:28:33		59223 Roncq Hors Zones
	30/05/2012 - 12:30:16		59223 Roncq Hors Zones
	24/05/2012 - 17:20:00		59810 rue du Pic au Ven Lesquin Zone Vexor
	30/05/2012 - 11:18:59		59250 Halluin Hors Zones
	30/05/2012 - 13:37:58		59223 avenue de l'Euro Roncq Hors Zones
	30/05/2012 - 12:39:48		59250 Halluin Hors Zones
	30/05/2012 - 11:49:48		59223 Roncq Hors Zones
	29/05/2012 - 18:03:09		59223 Roncq Hors Zones
	30/05/2012 - 13:13:04		59810 rue du Pic au Ven Lesquin Zone Vexor
	30/05/2012 - 13:13:33		59223 Roncq Hors Zones
	30/05/2012 - 11:25:55		59223 avenue de l'Euro Roncq Hors Zones
	30/05/2012 - 12:27:24		59223 Roncq Hors Zones
	30/05/2012 - 11:54:08		59223 Roncq Hors Zones
	30/05/2012 - 11:48:21		59223 Roncq Hors Zones
	30/05/2012 - 09:56:37		59223 Roncq Zone Atelier
	30/05/2012 - 12:32:29		59223 Roncq Hors Zones
	29/05/2012 - 19:54:28		59223 Roncq Hors Zones

Click the  button on the tab to reduce or close the table.

Similar to the mapping system, the data table displays the data recorded in the filter (see “Filters” chapter).

The table allows managing the data to be sent. Moreover it can be personalised according to user's needs. Finally the table can be exported and saved in CSV format (Excel).

## 7.1 DATA GROUPS

Data groups are constituted by theme, each group having a different colour in the table as on the buttons. For example, the data group “Location” contains the “Post code”, “Street”, “City”, “Zone” data, etc.

The data groups can be modified and configured by Novacom Technical Support or the administrator.

They are represented on the screen by a vertical bar located on the right side of the screen.




The user can choose the data groups to be displayed. Clicking on a data group to the right of the table deactivates the display of this data in the table. This allows displaying in the table only the data groups of interest.



When a data group is deactivated, the button to the right of the table is white.

The order of these buttons can be changed by dragging and dropping, thereby also modifying the order of the columns in the table. Therefore data groups can be arranged according to the user needs. Moreover, columns in the table can also be expanded or reduced. To save this new order in

preferences, click to the button: <saves table order in preferences>  .

## 7.2 DATA TABLE

The table displays the data related to the filter entered in the filter selection (see “Filters” chapter).

Asset	Date / Time	Nb Bacs ...	Nb Bacs ...	Nb Bacs ...	Poids PM...	Code	Street id	Street	City	Zone
	30/05/2012 - 12:06:41					59223			Roncq	Hors Zones
	30/05/2012 - 11:28:33					59223			Roncq	Hors Zones
	30/05/2012 - 12:30:16					59223			Roncq	Hors Zones
	24/05/2012 - 17:20:00					59810		rue du Pic au Ven	Lesquin	Zone Vexor
	30/05/2012 - 11:18:59					59250			Halluin	Hors Zones
	30/05/2012 - 13:37:58					59223		avenue de l'Euro	Roncq	Hors Zones
	30/05/2012 - 12:39:48					59250			Halluin	Hors Zones
	30/05/2012 - 11:49:48					59223			Roncq	Hors Zones
	29/05/2012 - 18:03:09					59223			Roncq	Hors Zones
	30/05/2012 - 13:13:04					59810		rue du Pic au Ven	Lesquin	Zone Vexor
	30/05/2012 - 13:13:33					59223			Roncq	Hors Zones
	30/05/2012 - 11:25:55					59223		avenue de l'Euro	Roncq	Hors Zones
	30/05/2012 - 12:27:24					59223			Roncq	Hors Zones
	30/05/2012 - 11:54:08					59223			Roncq	Hors Zones
	30/05/2012 - 11:48:21					59223			Roncq	Hors Zones
	30/05/2012 - 09:56:37					59223			Roncq	Zone Atelier
	30/05/2012 - 12:32:29					59223			Roncq	Hors Zones
	29/05/2012 - 19:54:28					59223			Roncq	Hors Zones

Each line represents the different items of data for an asset on a date and each column corresponds to a defined item of data. The different items of data are gathered together in groups, as already explained.


A group is represented in the table by a large column encompassing several sub-columns (the data for the group). The name of the asset and the date/time are always visible in the table.

### 7.2.1 The three column display modes

The columns representing the data groups can be displayed in three different ways:

- Reduced mode
- Full mode
- Normal mode.

#### Reduced mode

In normal mode or full mode, click the  arrow to reduce the data group column and switch it to reduced mode.

Lieu  					
Code postal	Identifiant rue	N°RUE	Rue	Ville	Zone
59223				Roubaix	Hors Zones
59290			rue Corneille	Wazemmes	Hors Zones
59223				Roubaix	Hors Zones
59810			rue du Pic au Ven	Lansuesme	Zone Vexor
59090			rue de la Deûle	Quennoy-sur-Deûle	Hors Zones
59090			rue d'Ypres	Quénécourt	Hors Zones
59090			chemin des Broyes	Quennoy-sur-Deûle	Hors Zones
59290			rue des Frères Grégoire	Wazemmes	Hors Zones
59090			rue du Général Kellermann	Quennoy-sur-Deûle	Hors Zones

In this mode, the group is represented by a single item of data. The data group column has only one "data" sub-column, by default the first item of data for the group.

Lieu  
Code postal
59910
59223
59420
59810
59420
59780
59910
59223

The item of data to be displayed in this mode can be modified in full mode or normal mode (see below) by dragging and dropping the "data" column of interest into first position. Therefore, in reduced mode, this column is the only one displayed.


### Full mode





In reduced mode or normal mode, click the  arrow to expand the data group column and switch it to full mode.

In this mode, the data group column displays all its sub-columns (the different items of data for the group). Under the heading of each of these sub-columns, the user can choose, by ticking the box or not, which data have to be displayed in normal mode. These data selections are saved in preferences. Selected data (ticked box) and non-selected data do not have the same colour.

## Normal mode

In full mode, click the  arrow to reduce the data group column and switch it to normal mode. This mode only displays the data chosen in full mode (ticked data).


Lieu 		
Code postal	Rue	Ville
59650	rue Colombine	Villeneuve-d'Ascq
59650	rue de Lille	Villeneuve-d'Ascq
59420	rue Pierre Prévost	Mouvaux
59890	allée du Tap'auto	Deûlémont
59118	avenue du Docteur	Wambrechies
59223		Roncq
59223	avenue Konrad Adenauer	Roncq

In reduced mode, click the  arrow to expand the data group column and switch it to normal mode.

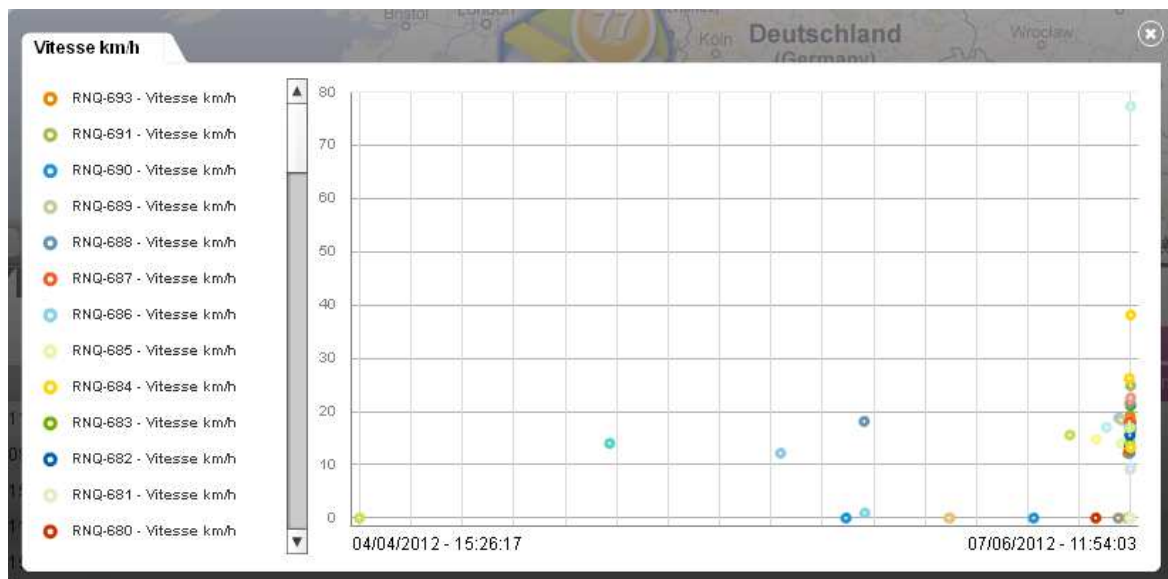
## 7.2.2 Link with the map


The data table and the mapping system are linked. Therefore, when clicking on a line in the table, the map positions itself to show the position related to the data in the line. Vice versa, when clicking on an asset on the map, the table indicates the first line and, on a grey background, the data corresponding to this asset.

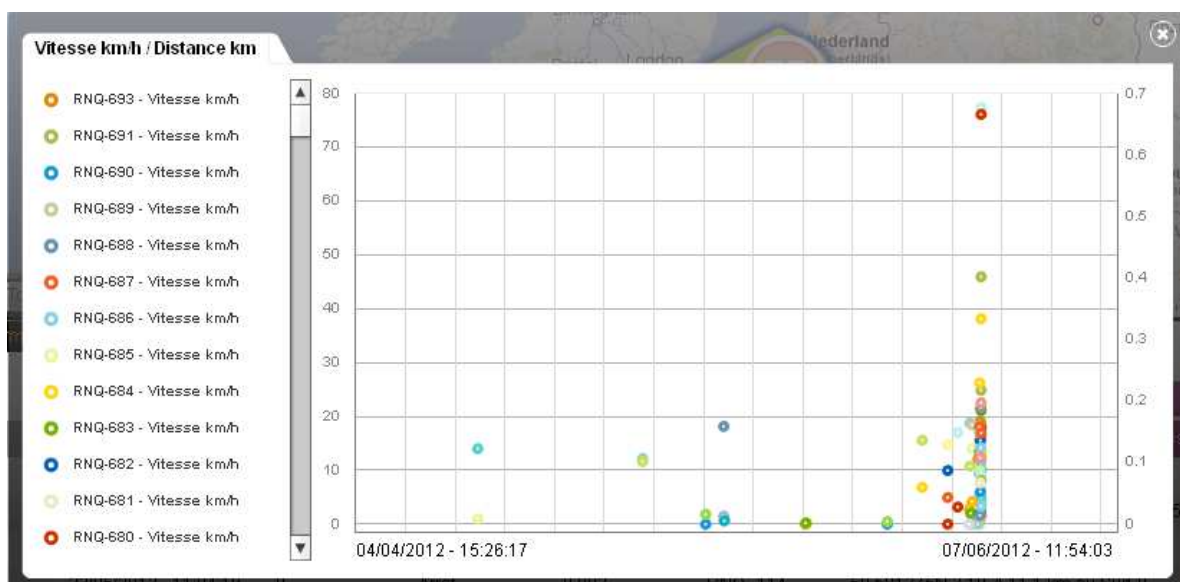
## 7.2.3 Graphs

For the sub-columns (data) which display numerical values, a button representing a graph  is available to the right of the name of the item of data (the sub-column heading).

When the user clicks on it, a central window opens and displays the evolution curves of each item of data over the period of the filter entered (one colour per asset).




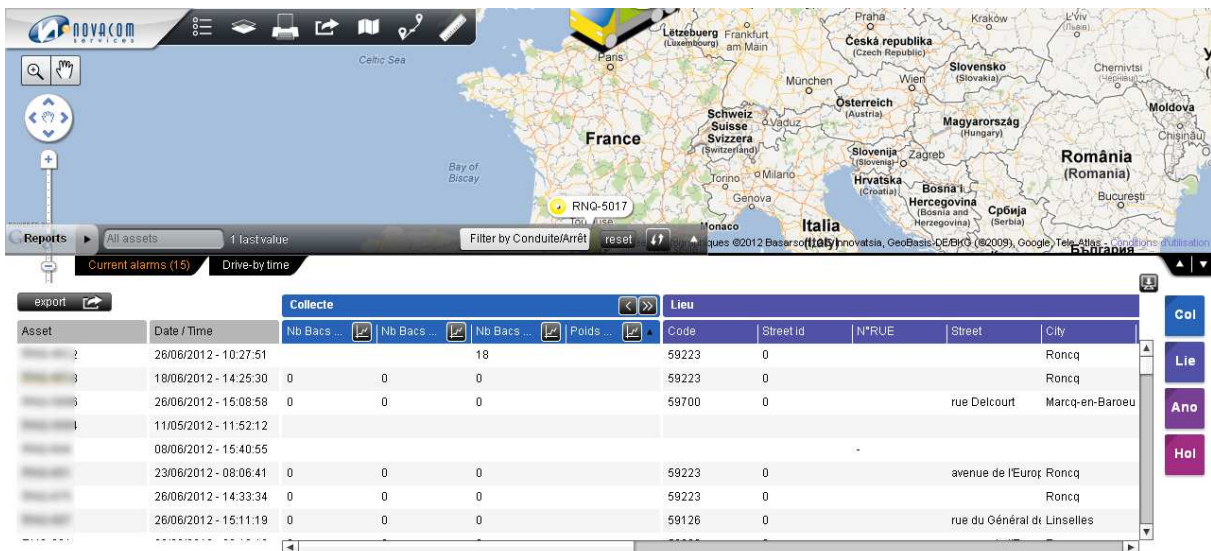
This window can be moved by using the mouse. Moreover, another data item can be superimposed by clicking again on the graph button  of another sub-column.



In this case, the “graph” buttons of the data used are in white. However, to ensure legibility, a graph cannot represent more than two items of data at once. The “graph” buttons for the other data are therefore deactivated when two items of data are already represented on the graph.

## 7.3 EXPORT

The “Export” button  allows downloading, as a CSV file (Excel) the entire table displayed on the screen (taking account of the displayed columns). The file can be stored in a directory chosen by the user.

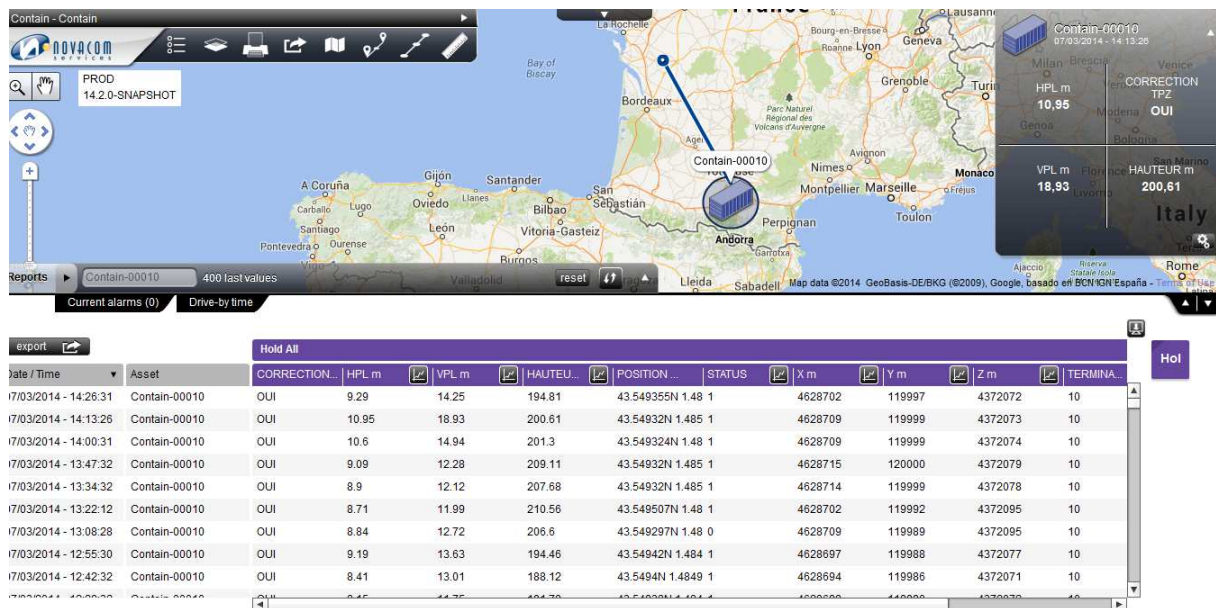


The screenshot shows the NOVACOM services interface. At the top, there's a map of Europe with a yellow marker over France. Below the map, there's a navigation bar with various icons. The main content area displays a table of data. The table has columns for 'Asset', 'Date / Time', 'Nb Bacs', 'Nb Bacs', 'Nb Bacs', 'Poids', 'Code', 'Street id', 'N°RUE', 'Street', and 'City'. The table contains several rows of data, including dates and times, and street names like 'Rue Dalcourt' and 'avenue de l'Euro'. On the right side of the table, there are buttons for 'Col', 'Lie', 'Ano', and 'Ho'. At the bottom left of the table, there's an 'export' button with a download icon.

Asset	Date / Time	Nb Bacs	Nb Bacs	Nb Bacs	Poids	Code	Street id	N°RUE	Street	City
	26/06/2012 - 10:27:51			18		59223	0			Roncq
	18/06/2012 - 14:25:30	0	0	0		59223	0			Roncq
	26/06/2012 - 15:08:58	0	0	0		59700	0		rue Dalcourt	Marcq-en-Baroeu
	11/05/2012 - 11:52:12									
	08/06/2012 - 15:40:55									
	23/06/2012 - 08:06:41	0	0	0		59223	0		avenue de l'Euro	Roncq
	26/06/2012 - 14:33:34	0	0	0		59223	0			Roncq
	26/06/2012 - 15:11:19	0	0	0		59126	0		rue du Général de Linselles	

## 8 EGNOS ASSETS

EGNOS-augmented positions can be identified in the chart by the field “CORRECTION TPZ=OUI”. Moreover, in case protection levels calculation is available for that position, HPL and VPL values (horizontal and vertical protection level, respectively) are different from 0 or -1. On the map, a circle is drawn around the container's position when it is EGNOS-augmented.





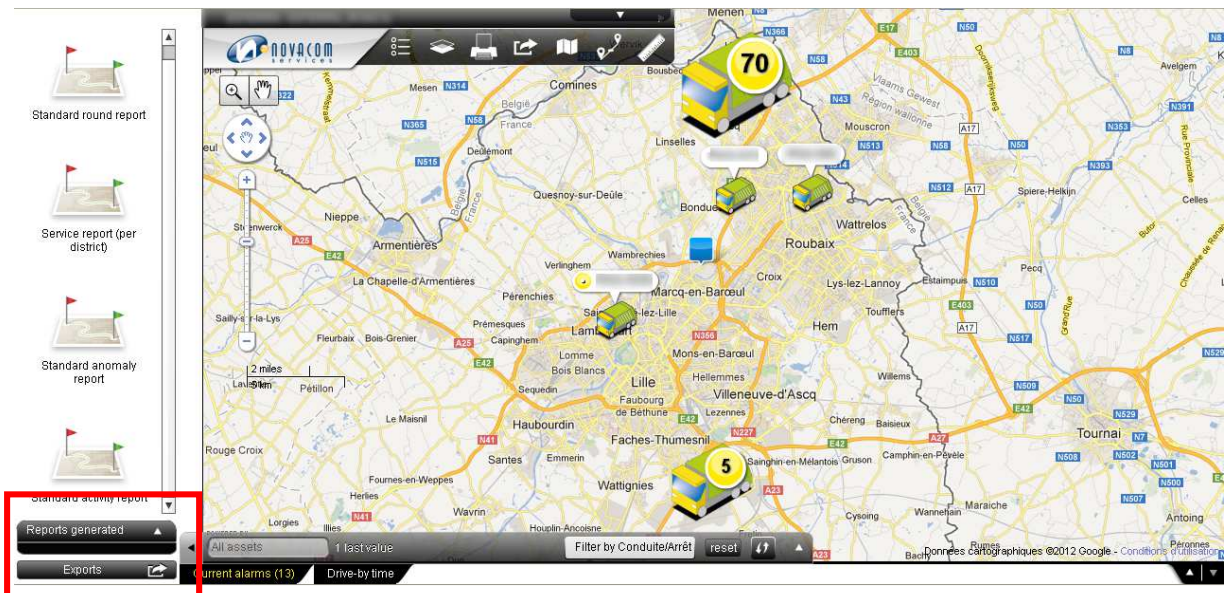
## 9 REPORTS MODULE

The Novacom platform allows the user to edit reports summarising the data received from the assets. These are specific reports, adapted to the needs of each customer.



The configuration and consultation of reports are an optional extra. To access this function or obtain further information, please contact Novacom Technical Support ([support@novacom-services.com](mailto:support@novacom-services.com)).

Clicking the button , a window on the left is opened offering a list of reports to consult (click  to minimise the menu).



In this area, it is possible to edit and save a report.

The user then has access to different types of report (to be configured by Novacom Technical Support or by the administrator). There are several kinds of reports depending on customer's line of business:

- Activity report, with or without proximity calculation

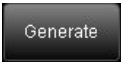
- Summary report
- Round report
- Anomaly report
- Service report
- Time in zone report
- Operational report, etc.

For each report, the user can configure, with the assistance of Novacom Technical Support, regular automatic dispatches by e-mail, or generate the reports as and when needed.

## 9.1 GENERATE A REPORT AS AND WHEN NEEDED

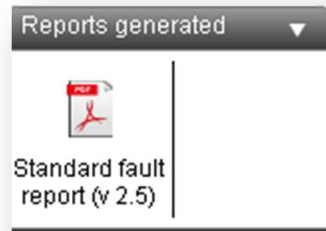
By clicking on a report, a window is displayed, asking to select a period, the assets of interest, and the format of the report (html, PDF or Excel).



Click  button to generate the report. While the report is being generated, the user can continue to use the application.

## 9.2 GENERATED REPORTS

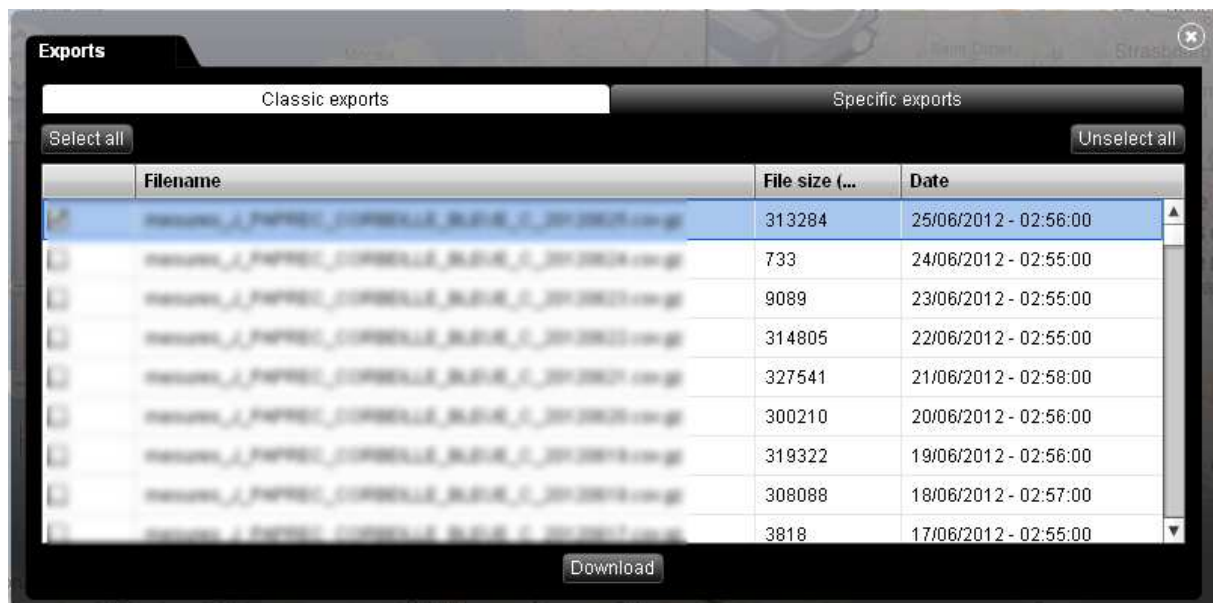
Generated reports are stored in the “Reports generated” area, on the lower left, ready for consultation. Click on the arrow to the right of the heading to close this item.



## 9.3 EXPORTS

This function enables downloading all data received from terminals, within a given period of time and in CSV file format (Excel).

It can be personalised and configured to suit the user needs. To activate this function or obtain further information, please contact Novacom Technical Support ([support@novacom-services.com](mailto:support@novacom-services.com)).



## GLOSSARY

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### A

#### ➤ **Alert/alarm:**

An alert or an alarm is triggered when the parameters of a sensor, set during creation of a surveillance, are breached.

#### ➤ **“Asset info” panel:**

This displays the key information concerning a point on the map: the name of the asset which has passed, the date and time of the position, together with the name and value of the 6 favorite sensors on the date of the position.

#### ➤ **Asset:**

Asset here means any equipment, mobile vehicle or fixed station equipped with a terminal (lorry, boat, meter, etc.).

### C

#### ➤ **Client:**

A client profile user has access to all consultation, configuration and command services associated with the assets of the company that is Novacom Service's client.

#### ➤ **Cluster of assets/icons:**

Depending on the level of zoom and number of assets displayed, labels and/or icons may overlap. To improve legibility and avoid this problem, labels/icons which are too close are merged, thus making up a larger icon, a cluster of assets.

### D

#### ➤ **Data:**

An item of data corresponds to a type of information sent from the asset. The information may be a text, a GPS position, a tension level, a temperature, etc.

#### ➤ **Display preferences:**

Display preferences are saved when the user log out of the application by clicking on the log out button in the administration menu. The order of the table columns (measurements, alarms, drive-by times), the dashboard (minimised or not), the groups of sensors and sensors displayed in the data table are then saved.

#### ➤ **Distribution address:**

The distribution address provides the coordinates (SMS, e-mail or FTP) of the data recipient.

## E

### ➤ **Exporting:**

Exporting data allows saving and storing this information.

## F

### ➤ **Filter:**

The filter (located at the bottom of the mapping system) allows the user to refine the consultation criteria and to select one or several assets, over a number of defined positions or over a range of dates.

## G

### ➤ **Group:**

A group is composed of a set of assets with shared characteristics according to user's understanding and needs.

For example, a group may be made up of a set of assets with the same technical characteristics, concerning the same activity, or located in the same geographical zone (region, country, etc.).

### ➤ **Guest**

A Guest profile user only has access to the information defined by the customer user (homepage, data, mapping system, reports, alerts). They can consult and potentially validate alerts.

## M

### ➤ **Map Matching:**

The Map Matching function allows displaying the route according to the road traffic routes. These are not therefore straight lines connecting two received points as the crow flies, but tracks following the roadways.

### ➤ **Message:**

A message is all measurements for an asset at a given moment.

## P

### ➤ **Platform:**

The platform is a an intelligent data centre, collecting, processing and sending information to/from terminals installed on the assets and offering advanced online applications.

### ➤ **Point:**

A point enables: proximity calculations to be made, specific surveillances to be created.

### ➤ **Polling:**

Polling involves an ad-hoc request for real-time information, at regular times (e.g. at 2.00 pm and 5.00 pm) and/or for a defined interval of time (e.g. every 30 minutes) for one or several assets or group of assets. Generally, this is a position request command.

➤ **Project:**

A project corresponds to a set of assets created for a given period. A log is kept for all the assets belonging to a project, whereas for a group of assets, no log is kept.

**R**

➤ **Reset:**

The "Reset" button enables the user to re-set a selection or to restore the first filter applied upon login.

**S**

➤ **Super client:**

A user with super-client profile has access to all the functions for consultation, configuration and command associated with the equipment of all the client accounts of their entity. They are the administrators of all their accounts and can carry out all possible configurations, without limit of entitlement.

➤ **Surveillance:**

A surveillance allows defining the parameters for triggering an alert generated by the platform. A surveillance enables the monitoring of the behavior of an asset in accordance with generic criteria and the triggering of certain actions such as the sending of alerts when this behavior matches the surveillance criteria.

**T**

➤ **Technical Support:**

Novacom Technical Support or customer service is available every day from Monday to Friday, 7.00 am to 5.00 pm. Contact the Novacom hotline by telephone on 05 61 39 50 90 or by e-mail: [support@novacom-services.com](mailto:support@novacom-services.com).

➤ **Terminal:**

A terminal is a telecommunication modem connected to one or several assets. It enables exchanges of information between the asset and the platform.

**Z**

➤ **Zone:**

A zone enables: consultation of data within a defined zone, allocation of limited access rights to guests, creation of specific surveillances (crossing of zone, presence in zone, arrival in zone, departure from zone).

**END OF DOCUMENT**