



Notifications

You can be notified about any unit activity that you consider to be significant. It can be speeding, location, sensors values, etc. A notification can be delivered by e-mail or SMS, shown online in a popup window or replied through other means.

To create, edit and view notifications, open the Notifications panel in the work area at the left.

Notification Type	Status	Count	Other Count	Config	View	Delete
Accelerometer	✓	4	0	1	⚙️	✖️
Alarm	—	1	5	⚙️	📄	✖️
Driver	⚙️	1	2	⚙️	📄	✖️
Idles	STOP	1	19	⚙️	📄	✖️
Inter	+	0	2	⚙️	📄	✖️
Param ctrl	—	0	3	⚙️	📄	✖️
Route control	—	1461	4	⚙️	📄	✖️
SMS ctrl	✓	0	7	⚙️	📄	✖️
Speed	—	35	2	⚙️	📄	✖️
Tatu	✓	0	1	⚙️	📄	✖️
TO	—	1	19	⚙️	📄	✖️
u98	✓	0	2	⚙️	📄	✖️

Alarm

Activation time: 2012-07-05 00:00:00

Deactivation time: 2013-07-05 23:59:59

Notification text: Alarm from unit %UNIT%. At %POS_TIME% it moved %S...

Resource: Duremar

How to Create a Notification

- Push the **New** button.
- Choose unit(s) to create a notification for, and click **Next**. If you have only one unit available, it is selected automatically, and this page is not displayed.
- Select what you would like to control: geofence, speed, alarms, sensor values, message parameter, etc. Push Next.
- Adjust control parameters needed for the notification type selected in the previous window: select geofences, indicate speed limits, etc. **Click Next**.
- Input your text for the notification using special tags listed in the table below. They will be substituted with real values when notification triggers.



- Indicate how the notification should be delivered: sent by e-mail or SMS, popup online, registered in unit history, etc.
- Key in a name for the notification and adjust the schedule for its performance.
- Push OK. The created notification will appear on the list in the left part of the window.

Notification action is what the program will do when a notification triggers.

New Notification

Action

<input type="checkbox"/>	Notify by e-mail
<input type="checkbox"/>	Notify by SMS
<input checked="" type="checkbox"/>	Display online notification in a popup window
<input checked="" type="checkbox"/>	Register event for unit
<input checked="" type="checkbox"/>	Register as violation
<input type="checkbox"/>	Execute a command
<input type="checkbox"/>	Modify users access level
<input type="checkbox"/>	Set counter value
<input type="checkbox"/>	Store counter value as parameter
<input type="checkbox"/>	Register unit status
<input type="checkbox"/>	Modify unit groups
<input type="checkbox"/>	Send a report by e-mail
<input type="checkbox"/>	Assign a route
<input type="checkbox"/>	Reset driver

Notify by E-mail: You can indicate one or more e-mail addresses to send a notification to. When all slots to enter addresses are filled, additional slots appear automatically. Besides, you can check the option *Attach image from triggered message* if the device used takes pictures.

Notify by SMS: Key in one or more telephone numbers in the international format, for example, +2348037058764. When all slots to enter phones are filled, additional slots appear automatically.



<input checked="" type="checkbox"/>	Notify by e-mail
<input checked="" type="checkbox"/>	Attach image from triggered message
<input checked="" type="checkbox"/>	<input type="text" value="user01@company.com"/>
<input checked="" type="checkbox"/>	<input type="text" value="user02@company.com"/>
<input type="checkbox"/>	<input type="text"/>
<input checked="" type="checkbox"/>	Notify by SMS
<input checked="" type="checkbox"/>	<input type="text" value="+26374856277"/>
<input type="checkbox"/>	<input type="text"/>

Display online notification in popup window: A notification can be displayed in a popup window.

Register event for unit: In this case a notification is stored in unit history. If this option is selected, a report on these events can be generated.

Register as violation is additionally proposed. If you check it too, the notification will be registered not only as event but as violation, and one more report type will be available to you.

Execute a command: For this action, choose a command to be executed over unit(s). The list consists of all commands which are configured in the properties of selected units. So, different commands on the list may be supported by different units. Support status is seen with special indicators:

- command is supported by all selected units;
- Not all of selected units support given command (see details in the tooltip).


For some commands you should set additional parameters like input/output number, online report interval, etc.


Change Access to Units


Choose users which access rights to be modified when trigger conditions occur. Select access level to be set to this user after notification triggers: no access, view, execute commands, edit. This feature can be used, for instance, in the following situation. Let us assume, we have created a user to give him opportunity to track his cargo transportation – we have given him *view* access to a unit which is carrying this cargo. When this unit enters a destination place (a geofence under control), the notification triggers, and the unit becomes unavailable to the user (*view* access is modified to *no access*).


Change access to units


<p><input type="checkbox"/> Users</p> <ul style="list-style-type: none"> <input type="checkbox"/> client-7 <input type="checkbox"/> Duremar <input type="checkbox"/> MorbidCo <input type="checkbox"/> nana <input checked="" type="checkbox"/> octobrian <input type="checkbox"/> R-client1 <input type="checkbox"/> user007 	<p><input checked="" type="checkbox"/> View item and its basic properties</p> <p><input type="radio"/> <input type="radio"/> <input type="radio"/> Actions (add, remove, skip)</p> <ul style="list-style-type: none"> <input checked="" type="radio"/> <input type="radio"/> <input type="radio"/> View detailed item properties <input type="radio"/> <input type="radio"/> <input checked="" type="radio"/> Manage access to this item <input type="radio"/> <input type="radio"/> <input checked="" type="radio"/> Delete item <input checked="" type="radio"/> <input type="radio"/> <input type="radio"/> Rename item <input checked="" type="radio"/> <input type="radio"/> <input type="radio"/> View custom fields <input checked="" type="radio"/> <input type="radio"/> <input type="radio"/> Manage custom fields <input checked="" type="radio"/> <input type="radio"/> <input type="radio"/> Edit not mentioned properties <input checked="" type="radio"/> <input type="radio"/> <input type="radio"/> Change icon <input checked="" type="radio"/> <input type="radio"/> <input type="radio"/> Query reports or messages
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 **Set counter value:** Counter values can be changed (or zeroed) when notification triggers. Select one or more counters (mileage counter, engine hours counter, traffic counter) and set new values for them.

 **Store counter value as parameter:** Current values of mileage or engine hours counters can be stored as parameters in unit data messages (*odometer* or *engine_hours* correspondingly). These parameters can be used to create sensors on their basis (for example, engine hours sensor) and to get initial/final mileage in reports. For more precise calculations, it is recommended to store counters while the unit is parked, for example, once a day at night time.

 **Register unit status:** A new status can be set for unit when a notification triggers. For instance, when unit enters a geofence, *private* state can automatically switch to *business*.

 **Modify unit groups:** You can change the contents of unit groups when a notification triggers – add triggered unit to a group or remove it from a group. On the left there is a list of all available unit groups. Move necessary groups to the right to *Add to group* or *Remove from group* sections.

 **Send a report by E-mail:** Enter e-mail address to send a report to if the notification triggers. Select report template, object, file format(s), and other parameters to get a needed report. Sometimes it is convenient to choose *Triggered unit* option – then the report will be generated for the same unit that the notification has triggered for.



Types of Notifications

New Notification

Select control type:

<input type="radio"/>	Geofence control
<input type="radio"/>	Speed control
<input type="radio"/>	Alarm button trigger
<input type="radio"/>	Digital input activation/deactivation
<input type="radio"/>	Message parameter control
<input type="radio"/>	Sensor value control
<input type="radio"/>	Connection or coordinates loss
<input checked="" type="radio"/>	Idles
<input type="radio"/>	SMS control
<input type="radio"/>	Interposition of units
<input type="radio"/>	Route control
<input type="radio"/>	Driver control
<input type="radio"/>	Maintenance

Geofence control: In case of this choice, in the following window you select geofence(s) to control and control type: control entries to or exits from geofence(s). Those geofences should be created in advance and belong to the same resource with the notification. To choose several geofences at once, hold <ctrl> key and click on needed geofences in sequence.

In addition you can narrow trigger case adjusting speed limitations or sensor value range inside (outside) the geofence. Then the notification will trigger when a unit being inside (outside) a controlled geofence breaks these limitations.

For additional speed control, indicate lower and higher speed limit, and the notification will trigger if beyond the limits.

For sensor control you can set trigger inside the indicated values as well as outside them. Choose sensor types on the dropdown list or set the mask using a wildcard symbol (*). If there will be two or more sensors of the same type or mask found, their values can be summed or calculated separately (select the corresponding option).


Geofence control

Check type:

Geofences under control:

Speed limit:

Sensor value control:


 **Speed control:** Define the minimum and/or maximum speed values. If a unit goes out of this range, the notification will trigger. In addition, you can activate *sensor value control*; in this case the notification will trigger only if both conditions are met.


Speed control

No less than, km/h:

No more than, km/h:

Sensor value control

 **Alarm button trigger:** For this type of notification no specific settings are needed.


 **Digital input activation/deactivation:** Specify the number of digital input and select control type: trigger on input activation or deactivation.

Digital input activation/deactivation

Digital input, (1-32):

Check for activation:

Check for deactivation:

 **Message Parameter Control:** Four control types are provided: value range, text mask, parameter availability, and parameter lack. Only real parameters i.e. sent by device itself can be considered whereas virtual parameters such as speed, altitude etc. cannot be controlled by this type of notification.

To control *Value range*, specify parameter name, define minimum and maximum values for it, and select whether to trigger in the specified range or out of it. If you need to get notifications for all parameters except 0, set 0 as min and as max value and choose trigger type 'Out of specified range'.

To control *text*, enter parameter name and *Text mask* using wildcard symbols (? and *).

For *Parameter availability* and *Parameter lack* it is enough to indicate parameter name. These two last mentioned options can be interpreted as parameter appearance and disappearance if on the last page of the dialog you set the option 'Generate notification only when state changed'. For *in* and *out* parameters it is possible only to control parameter availability/lack.

Message parameter control

Control type: Value range


Parameter name: adc1

Value from: -1

Value to: 1

Trigger in specified range:

Trigger out of specified range:

 **Sensor Value Control:** Choose sensor type on the dropdown list or set the mask using a wildcard symbol (*). Preset minimum and maximum values, indicate if you want similar sensors to be summed or calculated separately, and select control type: trigger in the specified range or out of it. If there will be two or more sensors of the same type or mask found, their values can be summed or calculated separately (select the corresponding option).

Sensor value control

Specify sensor: By type

Sensor type: Temperature sensor

Value from: -20

Value to: -10

Similar sensors: Calculate separately

Trigger: Out of specified range

 **Connection or coordinates loss:** Choose control type:

- Connection loss: It can be a simple connection loss when no messages are received from the unit during a period of time.



- **Coordinates loss:** There are also cases when all sensors are active and their values are known, but it is impossible to locate the unit. It is especially true if someone covered GPS receiver.

Indicate loss time: how long (in minutes) the connection/coordinates loss should continue before a notification triggers.

Connection or coordinates loss

Control type: Connection loss ▼

Time interval, min: 60

Idles: Indicate speed and time for this type of control. Speed should be more than 0 km/h in order to exclude possible equipment errors. Indicate also time allowed for staying. If this time exceeded, this will be considered as an idle, and the notification will trigger. In addition, you can activate *sensor value control* – in this case the notification will trigger only if both conditions are met. It is convenient to control idles with engine on, for example.

Idles control

Speed, no more than, km/h: 0

Max idle time allowed, min: 10

Sensor value control

SMS Control: You can receive a notification when a certain SMS message comes. To define, which SMS messages you are interested in, enter a mask for message text. This feature can be useful, for example, when a device sends SMS of certain content in case of malfunction.

SMS control

Enter SMS text mask: *

Interposition of units: This type of notification allows you to control approaching of units to each other and moving away from each other. Select control type (approaching or moving away) and specify radius in meters; if this distance between units is insufficient or exceeded, then the notification will trigger. Choose units which position will be estimated regarding the units which were chosen for the notification itself.



In addition you can narrow trigger case adjusting speed limitations or sensor value range (like in geofence control).

Interposition of units

Check type: Control approaching to units
 Control moving away from units

Radius, meters:

Units under control:

- Fish Boat
- Fura 1475683 AC
- Mazda 326 OA 1107
- Riviera
- Sensor Rich very very long name of unit it is
- SMS Sim2
- SMS Sim003
- SMS Sim004
- SMS Sim007
- SMS Sim008
- SMS Sim009

Speed limit:

Sensor value control:

Route Control: For this type of notification, select statuses to control: round start, round finish, arrival to check point, check point skip, departure from check point, etc. Additionally, you can specify name masks for routes, schedule and/or round.

Route control

Route name mask:

Schedule name mask:

Round name mask:

Round started:

Round finished:

Round aborted:

Arrival at check point:

Check point skipped:

Departure from control point:

Delay:

Outrunning:

Return to schedule:

Driver Control: Choose control type: driver assignment or driver reset. To control both activities, two notifications of different types will be required. Using this notification you can control all drivers (*) or just some of them; input driver's name (or code) mask.



Driver control

Driver assignment:

Driver reset:

Driver code mask:

✂ Routine Servicing: First, you choose trigger type: notify when service term approaches or notify when service term is expired. Then indicate the interval before or after the term for the notification to trigger. This interval can be in days, kilometers or engine hours or all. You can control all intervals existing in the Service Intervals tab in unit properties or just several intervals. To indicate certain intervals, disable 'Control all service intervals' option and enter a mask using wildcard symbols like asterisk (*) and question sign (?).

Notification about maintenance triggers only once – when a critical point is met (mileage, engine hours or time) about any maintenance interval. Then information about service work done should be delivered through event registrar or through unit properties dialog. Only after that, the notification starts working again.

Routine servicing

Notify when service term approaches:

Notify when service term is expired:

Mileage interval: km

Engine hours interval: h

Days interval: days

Control all service intervals:

Online Notifications

Online notifications will pop up in a separate window and can be accompanied by a special sound. As more notifications come, they are stored in the same window.

Newly come notifications are added to the list on the top. The captions of unread notifications are highlighted with a blue background. The caption for an online notification is taken from the triggered notification itself. To expand or minimize a notification, use the switch button +/-.

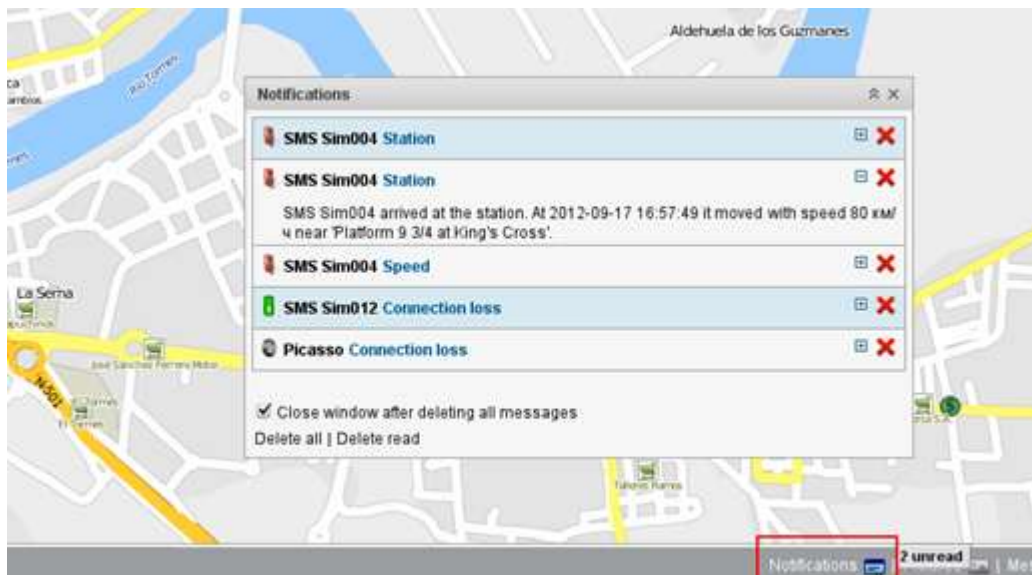
If clicking on a notification, the map is centered on the place where the event happened. If clicking on a unit name, map is centered on the latest unit position.

To delete a notification, click on a red cross against it. Is it possible also to delete all notifications or delete all read notifications (*Delete all* or *Delete read*). Usually, the

window closes automatically when you delete all notifications. However, you can remove the flag *Close window after deleting all messages*, and then the window will remain on the screen even without notifications.

You can hide or show the notification window. To hide it, click on the Notifications icon on the bottom again (or use the standard little cross in the upper right-hand corner of the Notifications window). If the icon blinks, it means there are unread notifications. If you place the mouse pointer over the icon, in the tooltip you can see the number of unread notifications.

By default, the notification window appears automatically when a new online notification triggers.





Notification Parameters

Notification Properties – Zona

General | Time Limitations

Notification name: Zona

Time interval:
from: 9 June 2011 23:00
to: 9 June 2012 22:59

Control period from current time: For last hour

Min duration of alarm state: Activate immediately

Max triggers: 3

Generate notification:
 Only when state changed
 For all messages

Min duration of the previous state: Not important

Max time difference between messages: 1 h

Timeout: 10 sec

Cancel Back OK

In the given window you can set general parameters for a notification as well as define the specific character of its operation. The set of parameters can vary depending on notification type.

- **Notification name:** Enter a name. It will be displayed on the list of notifications and in the notification itself.
- **Time interval:** The period after which the notification will be deleted.
- **Control period from current time:** This is a period of between the time when the notification triggered and the current server time. If this interval is exceeded, the message is not taken into account.
- **Min duration of alarm state:** This parameter is aimed to exclude cases of accidental trigger that can be caused by equipment errors and inaccuracy. For example, a tracker can show that a unit left a geofence but returned 10 seconds later. In this field you can define how much time the alarm state have to continue in order to be registered. Choose an interval from 10 seconds up to 1 day.
- **Max triggers:** How many notifications can be delivered until it will be automatically deleted.



- **Generate notification:**
 - Only when state changed
 - For all messages

In the first case the notification will trigger when unit state changes, i.e. if at the moment when the notification was activated a unit is already in an alarm state, the notification will not trigger.

In the second case the notification will trigger as soon as an alarm state is detected. If the second option is selected, the following parameters are not needed.

- **Min duration of the previous state:** This parameter is needed to exclude excessive triggers. For example, the unit can return to the normal state for a very short time and then returns back to the alarm state. In order that the notification in such a case would not trigger twice, this parameter is used. Choose an interval from 10 seconds up to 1 day.
- **Max time difference between messages:** Maximum time between the latest message and the previous one to form a notification. If the interval between the current message and the previous one exceeds this value, the notification does not trigger.
- **Timeout:** Delay from the moment when message was received and before it it will be checked. This delay is especially recommended if a unit has a black box that usually requires time to unload all messages stored in the period of communication loss (for instance, while it was abroad).
- **Enabled:** If activated, the notification after creation/editing will be active. If not, it will be disabled.
- **Time limitations:** It is possible to set limitations depending on time, day or month. For example, the control can be performed only on weekdays and within working hours.