RS-Global system
Tracking Server v.3.3.x. program

User manual

1.2007

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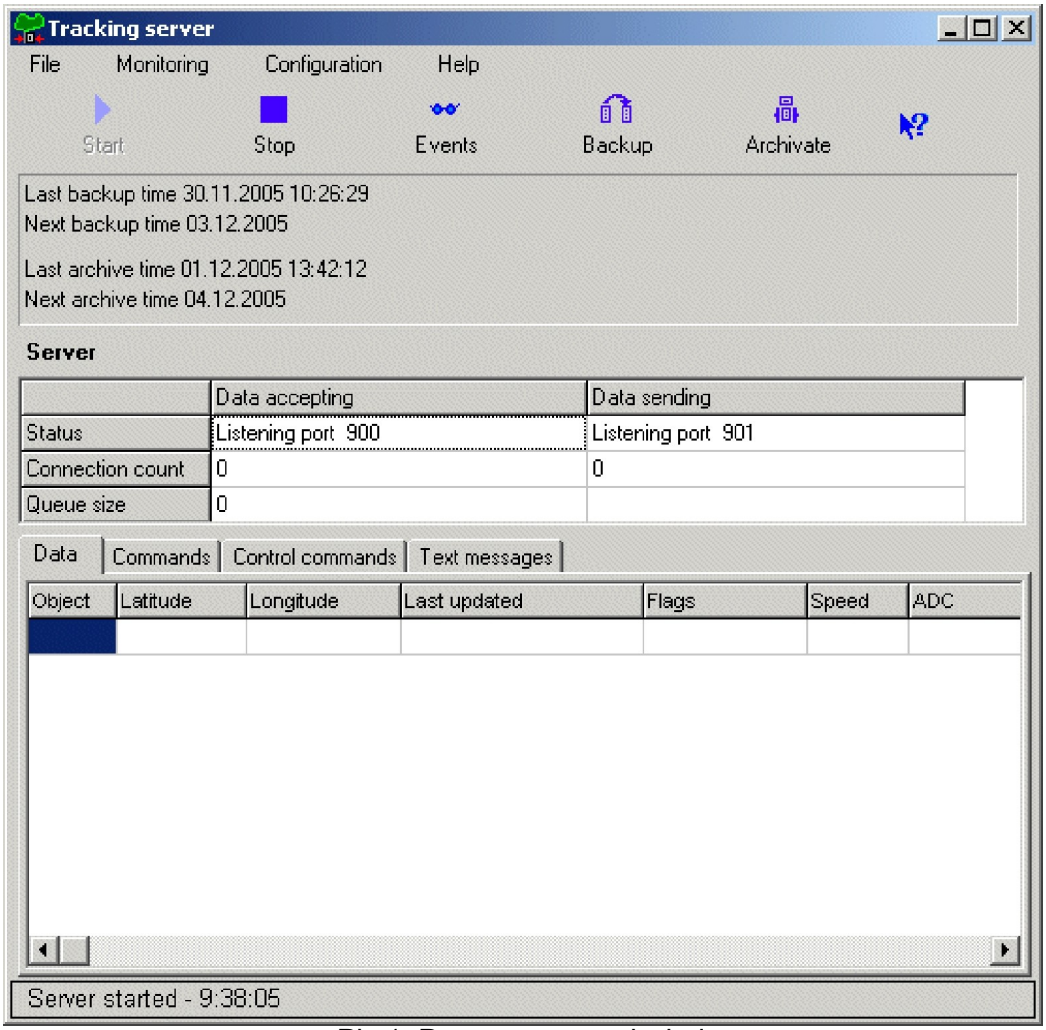
1. General information.

Tracking Server program is designed for information gathering, saving, processing and providing to user. Program general window appearance is shown on Pic.1.

Attention!!! This program version is only compatible with **Tracking View** version **not less than 3.3.x**.



Pic.1. Program general window

Monitoring paragraph of the Main Menu allows receiving information about connections on both ports used by the program.

Data accepting column shows information about received data: **Status** field shows number of port, which is used for data receiving; **Connection count** field shows number of communication channels.

Attention!!! Data transmitting from object to server is made using connecting program (**GpsTsc** (GPRS-connection), **MapTsc**, **WinSC** (UHF connection) or others).

Data sending shows information about sent data: **Status** field shows number of port, which is used for data sending; **Connection count** field shows number of communication channels.

In information window that is located lower, you can see information about objects and commands:

Data bookmark gives information about objects, information from witch was received at least once during the session. Available information: Object ID (**Object**), object coordinates latitude/longitude (**Latitude/Longitude**), time of last data update (**Last updated**), object status, moving/stopped state, Online/Offline (**Flags**), object speed (**Speed**), ADC value (**ADC**), object movement direction (**Direction**).

Commands bookmark shows information about commands received from objects. Available information: Object who sent command (**Object**), received command (**command**), time of command receive (**Time**).

Control commands bookmark shows information about commands sent to objects. Available

information: Object to witch command is sent (**Object**), sent command (**command**), time of command sending (**Time**).

Text messages bookmark allows viewing text messages sent from object, witch is in Offline mode, in the way, as they would be seen on mobile phone display. Available information: Object who sent the message (**Object**), message text (**Text**), time of message receiving (**Time**). **To receive text messages, GpsTsc program version must be at least 3.1.6.**

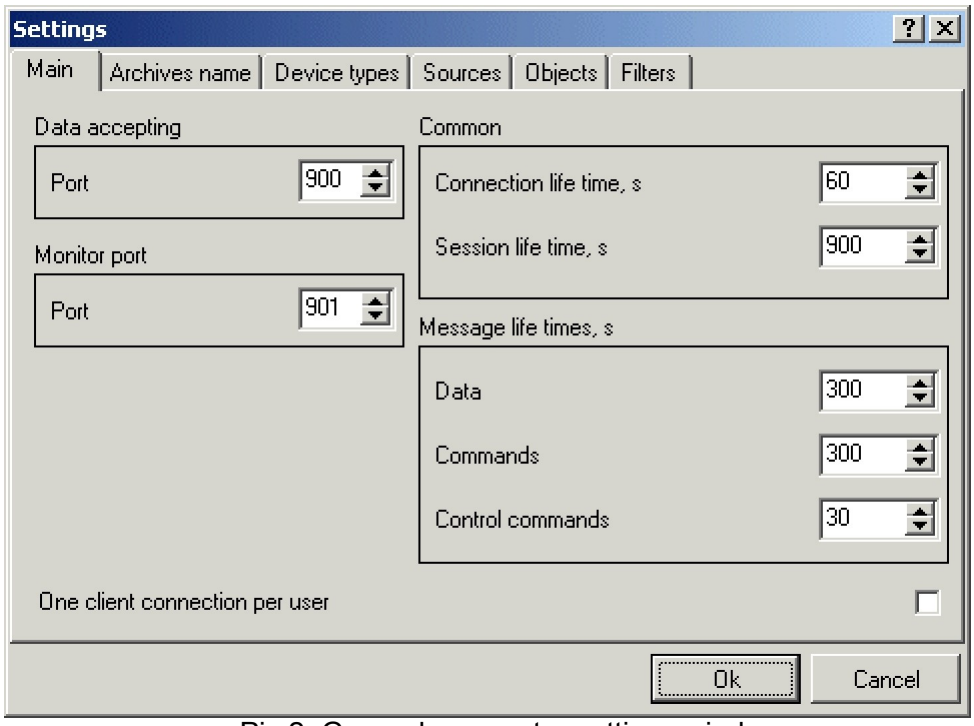
Attention!!! Available command list see in manual for GSM-GPRS-GPS object module.

2. Settings.

Server settings window can be opened through main menu (Configuration/settings).

2.1. General parameter settings.

General parameter settings is made through **Main** bookmark. (See Pic.2.)



Pic.2. General parameter settings window.

In **Data accepting** field is specified number of port, through witch server will receive data from the objects. In **Monitor port** field is specified number of port, through witch server will connect with user. **Connection life time, s** determines the time, after witch, session will be closed if there is no activity. **Session life time, s** field determines the time, during witch you can restart Tracking view program without session interruption. Fields combined into **Message life times, s** block aren't used in this version of program and shouldn't be configured.

One client connection per unit checkbox, when active, doesn't allow two or more users to connect simultaneously, if they have same login and password.

2.2. Archive parameter settings.

Archive parameter configuration is made using **Archives name** bookmark.

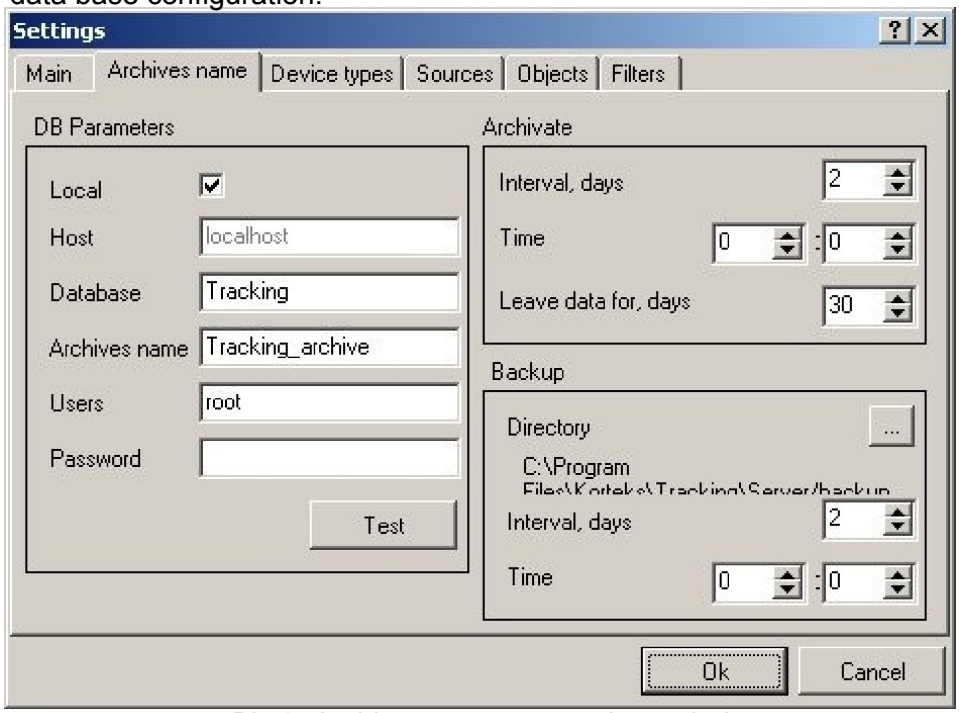
(See Pic.3.) **DB Parameters** block– data base parameters:

Local checkbox determines whether database will be saved on the same computer where server is installed or no.

In **Host** field is specified IP-address of the computer where database will be stored. This computer **must** have MySQL installed. (field isn't active if **Local** checkbox is activated).

Database field determines name of the directory where database will be saved. **Archives name** field determines the name of the directory where archive will be saved.

It's not recommended to change **Users** and **Password** fields, because it can cause problems with data base configuration.



Pic.3. Archive parameter settings window.

In **Archivate** block is configured data archive process algorithm:

Interval, days – determines time interval between archive processes.

Time – determines archivation time.

Leave data for, days – determines, after what time data will be sent to archive.

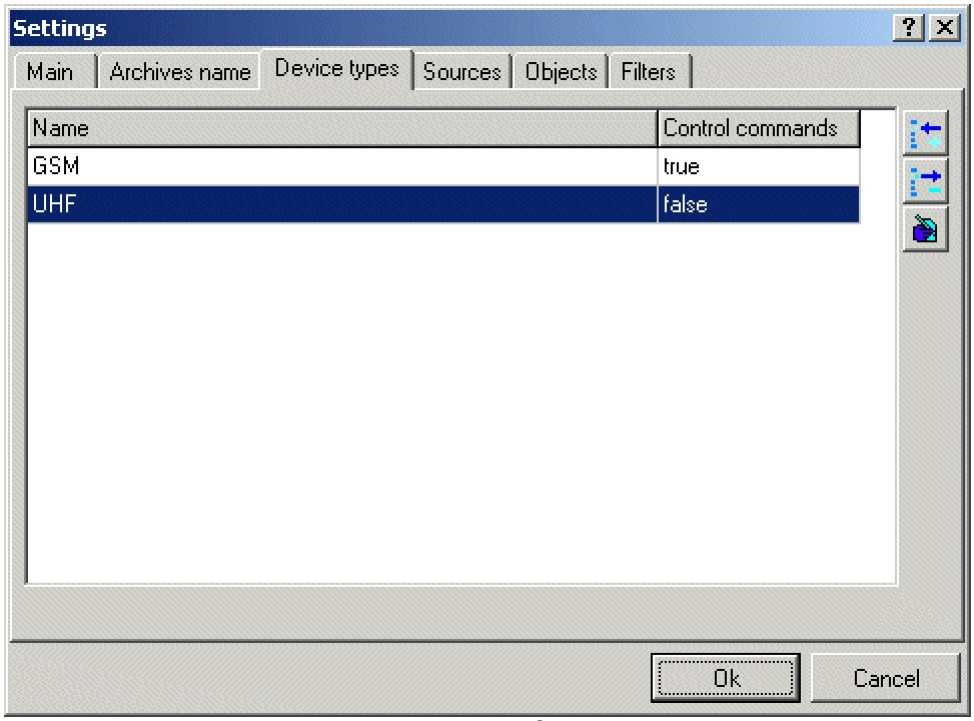
In **Backup** block is configured data backup algorithm

Directory – user can specify path to folder, where backup copy will be stored.

Interval, days – determines time interval between two backup copies creations.

Time – determines backup copy creation time.

2.3 Device type configuration and status assigning.



Pic.4 Device type configuration window.

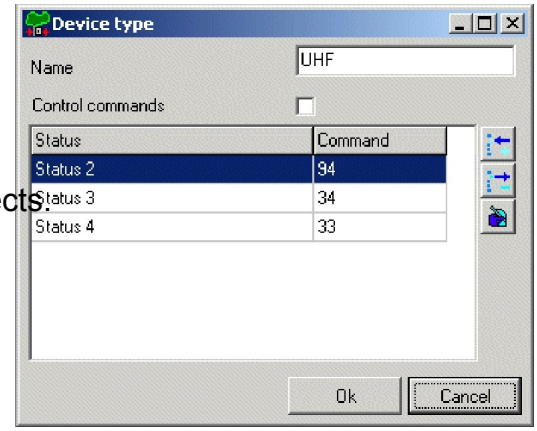
In this window are configured device types and statuses for them.

When pressing icon, “add device type” window will appear.

In this window you can specify following parameters:

Name – device type name.

Control commands checkbox, when active, allows sending control commands to the objects of this type.



Also in this window you can assign statuses for the objects.

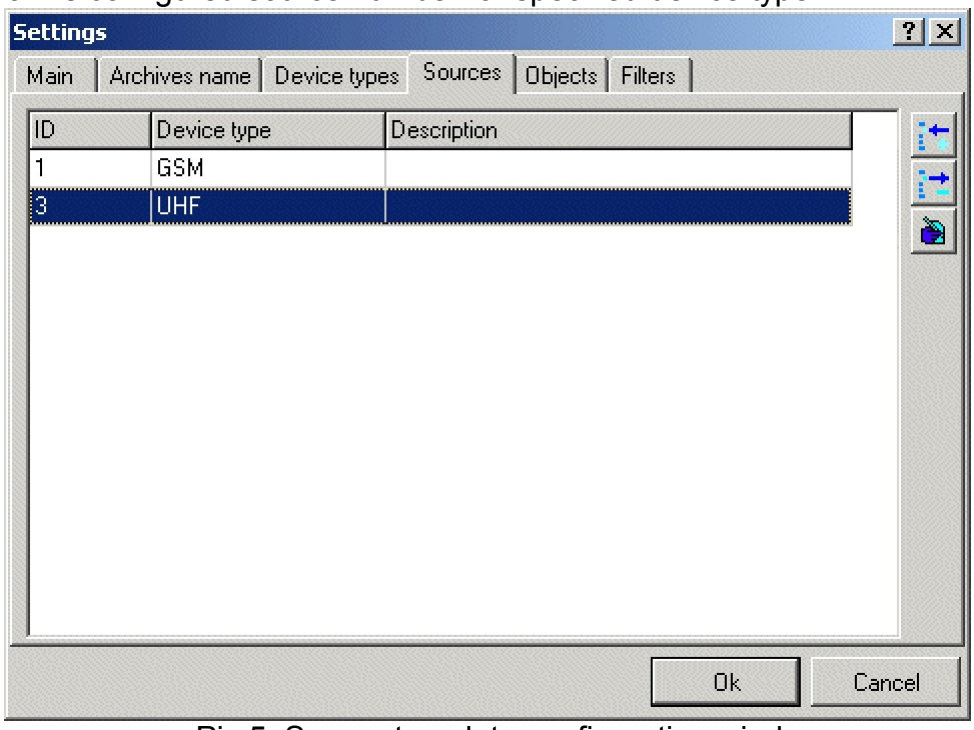
When you press icon, status assign window will de opened. There you can choose necessary status color and assign event code, which will activate this status.

There are 4 status types. Each of them has their own color. Status colors are fixed and cannot be changed:

- **Status 1** – displayed in white color and by default used as “Unknown status”.
- **Status 2** – displayed in green color and by default used as “Armed” status
- **Status 3** – displayed in pink color and by default used as “Disarmed” status
- **Status 4** – displayed in red color and by default used as “Alarm” status

2.4. Source template configuration

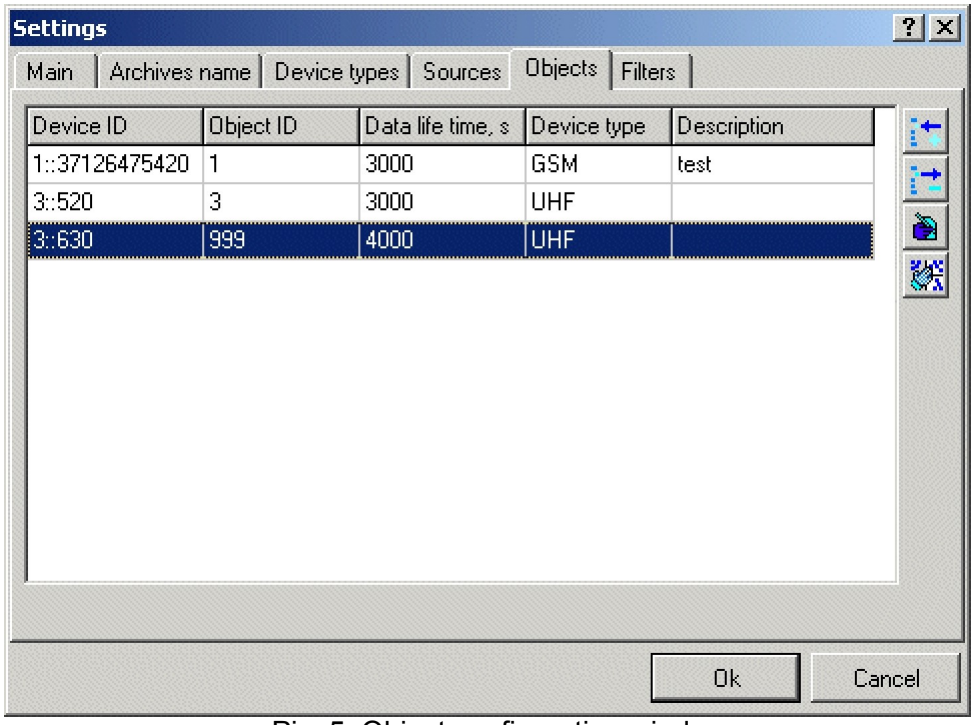
In this window is configured source number for specified device type.



Pic.5. Source template configuration window.

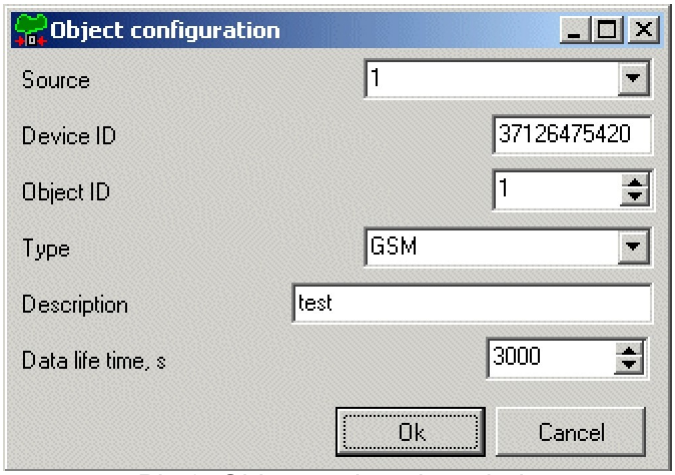
When you press  icon, template configuration window will be opened. There you should specify source number, device type (see p.2.3.) and template description.

2.5. Object configuration.



Pic. 5. Object configuration window.

Object configuration is made through **Objects** bookmark. (see Pic.5.)
In this window you have to assign all objects that will be connected to sever. To do this you  have to press icon. Object registration window will appear.



Pic.6. Object registration window.

Source ID – Number of channel that will be used to connect with object. Must be same as assigned in **GpsTsc, MapTsc** or **WinCS** programs**.**

Device ID – Object phone number or ID (if UHF module). Phone number **must** be with international code.

Object ID – Number, witch will be used to display object in **TrackingView** program. **Type –** device type. See p.2.3.

Description – Information field filled by user. Object description.

Data life time, s – determines, after what time received data and commands will be sent to archive. If you need to register more than one object, you have to use electronic USB dongle made by the Guardant Company. This dongles and software for them are included into server package. You can register objects only if dongle is inserted into USB-port and ready for work. In every dongle are assigned number of objects that user can register.

2.5.1. Guardant dongle driver installation and remote programming.

1 **– Driver installation**.

First of all, to avoid to avoid system conflicts and to ensure dongle stable work you have to install last version of **Guardant** drivers. To do this:

1. Start **INSTDRV.exe** file, witch is located in **Drivers_4.88** directory.
2. Press **[Install driver]** button in **Guardant driver installation** dialog window.
3. Restart computer if necessary.
4. Connect dongle to USB-port.
5. After connecting dongle, standard **New hardware wizard** will appear. You have to choose **Automatic installation** and press «**Next**» button.
6. After searching and configuring Wizard will report that these drivers isn't signed by Microsoft Corporation and will recommend to abort installation. To continue driver installation you have to press «**Continue anyway**». After that driver installation will be finished.
7. If dongle drivers were correctly initialized by operating system, green light will appear on the dongle. Also dongle should appear in the Windows Device manager's list.

Attention!!! It's recommended to repeat articles 4-7 separately for each USB-port of the computer.

2 – Dongle memory remote programming.

For whole or partial dongle memory programming you have to start **GSREMOTE.exe** utility.

Attention!!! During work with utility, programmable dongle must be inserted into USB-port.

After start you will see program start window, where you have to choose «**whole or partial dongle's memory contents**» and press «**Next**» button. Utility will generate question-number, witch you have to send to secured software provider using phone or e-mail. After that, if you don't expect the answer soon, you can finish working with program by pressing **[Finish]** button.

When software provider receives question-number, he makes necessary changes in the mask-file and receives answer in the form of a number or update file (according to update method), and sends it back to user.

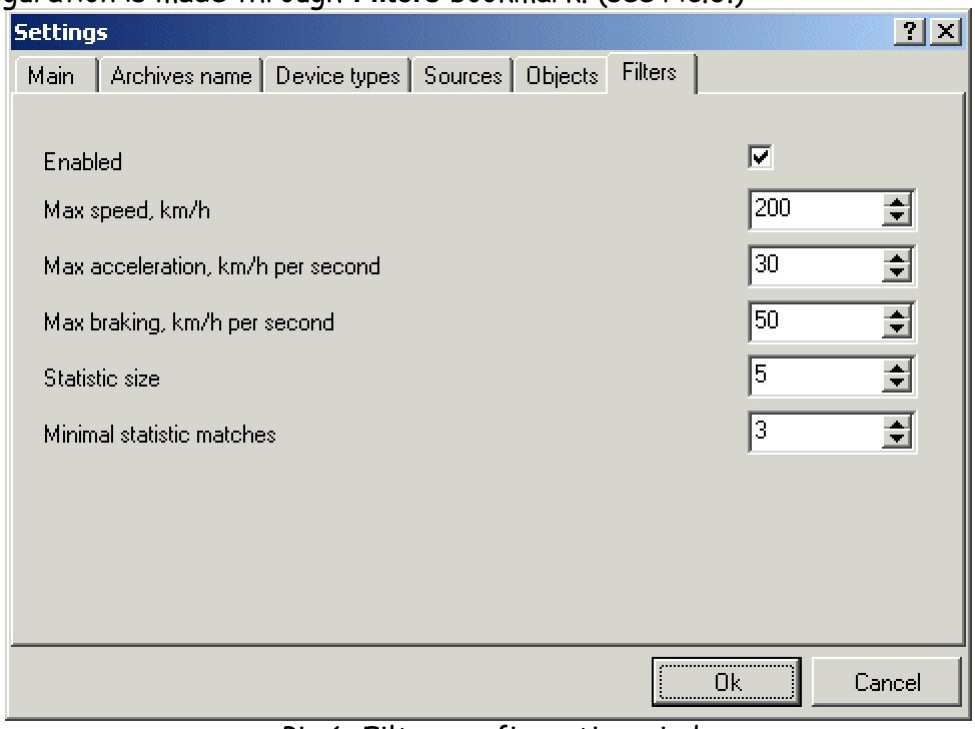
If program work session was finished, user must start program once again, choose necessary option and in next dialog select «Process number-answer received from software vendor» (selected by default). If work session wasn't canceled, just press «**Next**» button.

Than user must specify if he's programming whole dongle memory, or just a part of it, by selecting appropriate parameter. In the former case, in new dialog window user must specify a path to the received update file, in latter case – additionally specify, if answer was received in the form of hexadecimal number or file. Number is entered in the appropriate field, or file path is specified.

After that user gains access to the last dialog window, where system informs about update procedure result.

2.6 Filter configuration

Filter configuration is made through **Filters** bookmark. (see Pic.6.)



Pic.6. Filter configuration window.

To minimize invalid route points appearance in the archive, program uses filter. Filter works the following way: Program extracts from archive number of route points set in the **Statistic size** field. Every route point is compared to previous and verified, if it fits into limitations specified in the **Max speed, km/h**, **Max acceleration, km/h per second** and **Max braking, km/h per second** fields. Minimal number of route points that fit into the limitations is specified in the **Minimal statistic matches** field.

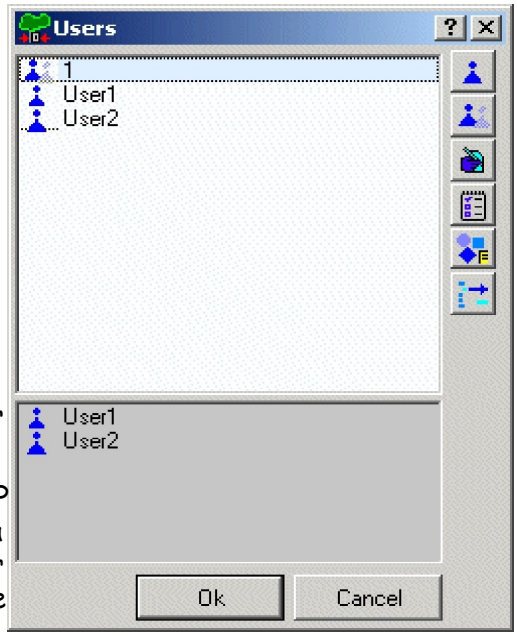
Attention! It is recommended to set **Minimal statistic matches** field value same as value of the **Statistic size** field. But it NEVER should be greater than value of the **Statistic size** field or else all the route points will be deleted.

2.7 User configuration.

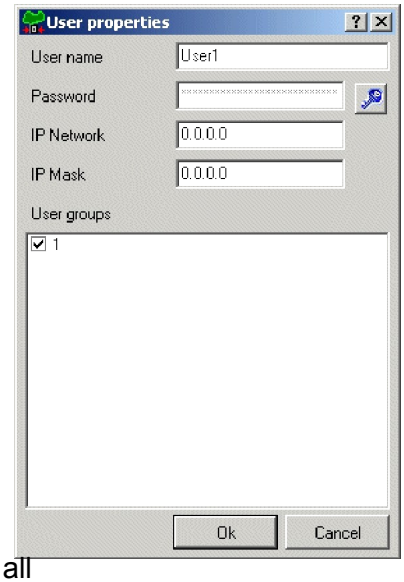
Tracking server program has authorization system that consists of user name and password. If no user is registered, program works with minimum rights. You can add user through main menu (**Configuration/Users**). User window will open. Also in this window you can create groups of users with common rights. When you add a user into the group, he automatically receives all group rights*. To create group you have to press icon and in appeared window enter group name. After name confirmation group rights assignment window will appear.

To add a user you have to press icon. "Add user" window will appear. There, in **User name** field you have to specify user login and then press icon to set password.

In **IP Network** and **IP Mask** fields you can specify user's IP address and/or subnet mask. If user will try to login from a different IP or mask he will be ignored. If any bit of the IP or mask will be set 0, than this bit won't be analysed. If all 4 bits are 0, it means that user can connect to server from any IP or mask.



Pic.7. User configuration window



In the lower field you can choose one or more groups where user will be included. If no group is selected, than user won't be included in any. After accepting user details, user rights assignment window will appear.

Later, user and group rights can be changed.

To change user or group rights, you have to press icon and in appeared window activate checkboxes near necessary rights.

Also you have to press icon and specify ID's of an objects, witch will be available for user to monitor and control.

With the help of icon, you can change name and password of existing user.

* - User rights are added to group rights. So if user has rights to modify archive, but this function is forbidden to group, than user will be able to modify archive anyway.

When you select a group, in the window lower field will be shown all users that are included in that group. When you select a user, in the window lower field will be shown all groups where this user is included.

3. Working with program.

All program control is made using icons that are located in general window upper part.
With the help of **Start** and **Stop** icons you can start or stop server.
With the help of **Events** icon you can see event log from the server start moment. Using **Backup** icon you can activate data backup process.
Using **Archivate** icon you can move data to archive.

Attention!!! When you are making data backup or sending data to archive, timer nullification is made. So next backup or archivation process will take place in time specified in program settings (2 days by default).