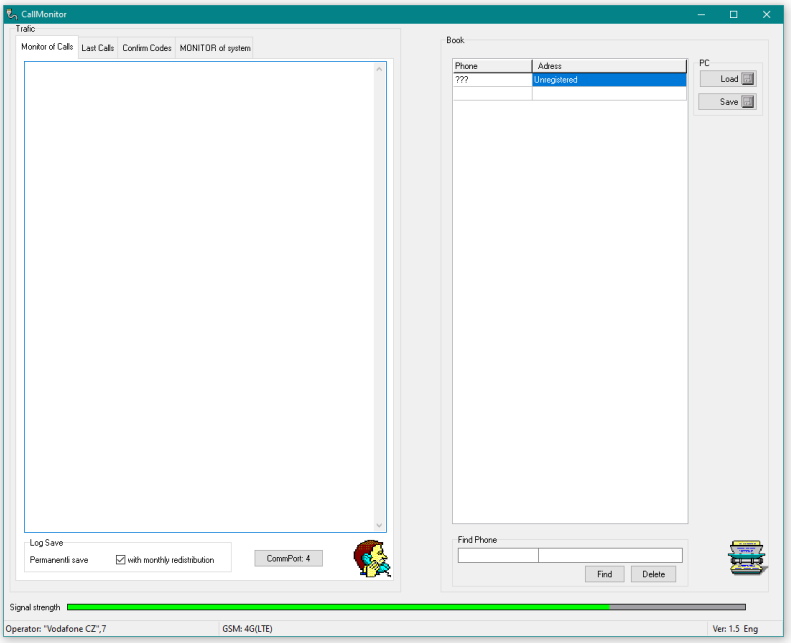
ALPHA Tech

PROGRAM

Call Monitor



Installation and Usage Instructions V 5.0

Since program version 6.0

Basic features:

The CallMonitor program is designed for automatic handling of test/service calls from emergency communication systems and their registration, or for recording emergency calls. The program also records unmet deadlines for periodic test/service calls. CLIP is used to identify the device in incoming calls.

- The program controls the Alphatech BlueGate Analog Brave 4G gateway (from fw gateway 9.07), which provides GSM communication
- Only one gateway can be connected to each running instance of the program at a time.

Program mode for handling test/service calls:

- On each incoming call, the program checks whether the calling number is registered in the database. If so, after the set number of rings, the call will be answered (picked up). It will find out from the database whether it is necessary to send a confirmation code to confirm the receipt of the call. If it finds it in the database, it sends it. Then it hangs up – ending the call. Then it enters the date and time of the test/service call from the registered number into the appropriate database. If a confirmation code with a hook is used, the entry is made after the counterparty has been hooked. If recording is set for individual numbers, it will record the calling number in the file.
- If an SMS message arrives from registered phone numbers (see, for example, sending SMS messages about the device status from the GLWV elevator communicator), the program records it (see further in the manual).
- The telephone numbers of all incoming calls are recorded.
- A list of devices that have not met the required (set) period of test/service calls is automatically created daily/monthly from the table of last calls of registered numbers.

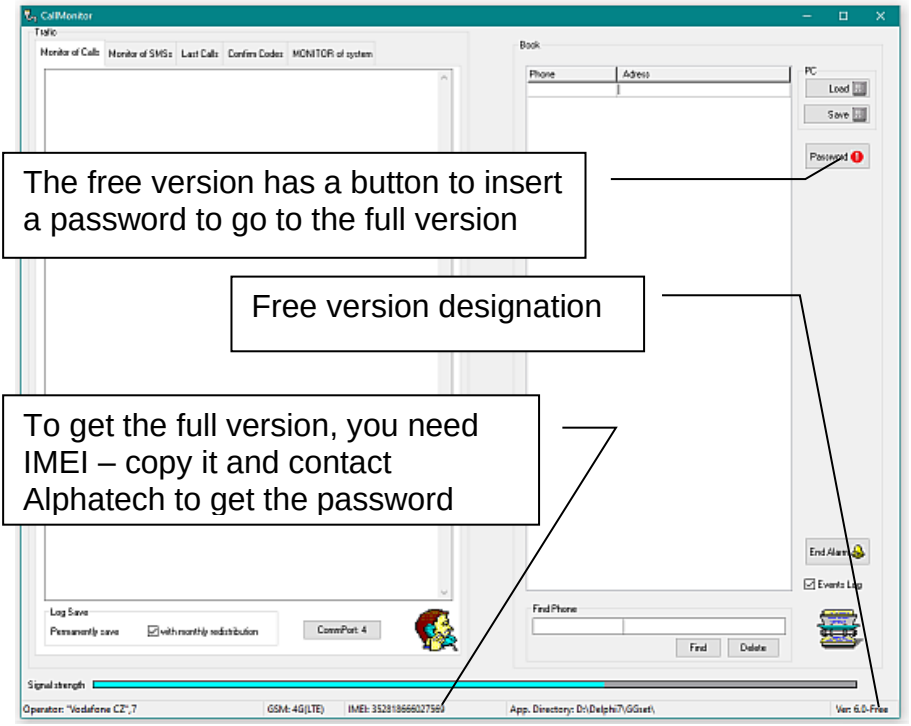
Mode of the program for recording emergency calls:

- On each incoming call, the program checks whether the calling number is registered in the database. If so, it records ringing (and the number of rings).
- If a call is made from a registered number (picked up or rejected according to the settings), the call is recorded.

See examples at the end of the manual.

The CallMonitor program can be available in two variants:

- Free version with all features – limited to searching only in the first 3 rows of the database
- Full version – no limitations.

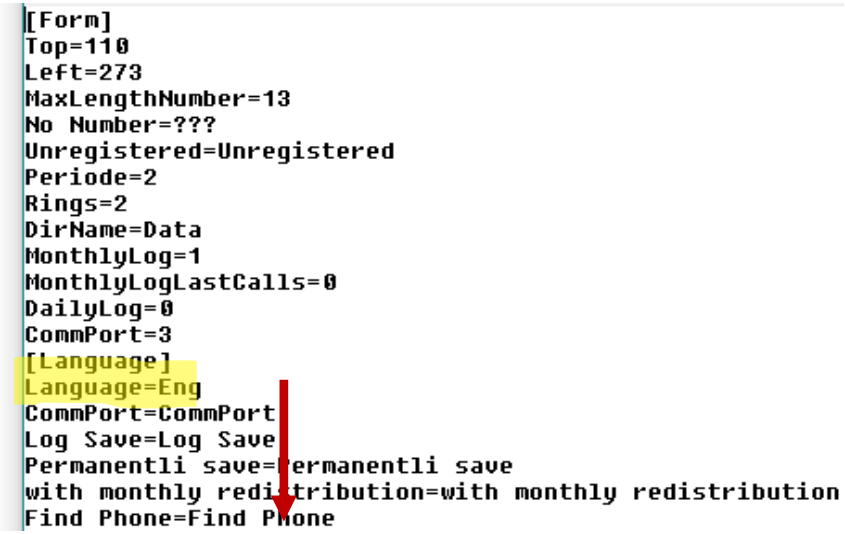


All the functions and features described below are the same for both versions of the program. The only difference is in the limitation of searching in the first 3 rows of the database (the embedded database can have more rows, it is loaded into the program).
The password for the full version is generated depending on the IMEI of the connected GSM gateway. The full version will not work with a different gateway (different IMEI) – it will switch to the free version.

Installation

The CallMonitor program is "portable" – it does not require any installation.

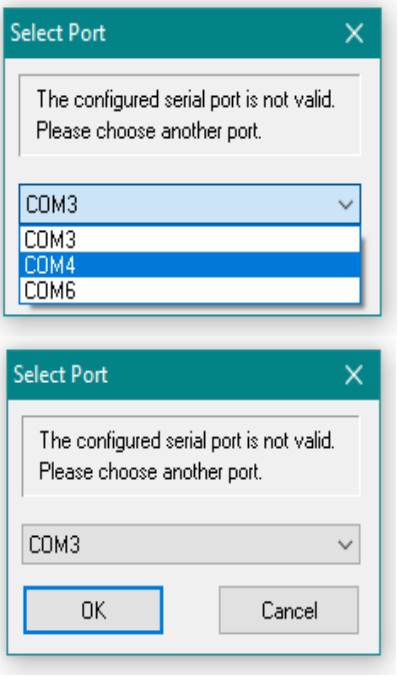
- Create a directory with the desired name and copy the CallMonitor.exe file from the downloaded zip archive to it.
- If you require a language mutation, copy the CallMonitorXX.ini file from the archive to the created directory. For example, for the Czech version of the CallMonitroCZ.ini. Rename the file to CallMonitor.ini. If the program does not find a CallMonitor.ini file in its directory, it automatically creates its own file in the English version.
- You can also create a language version yourself. In the CallMonitor.ini file created by the program, always rewrite the sentences to the right side of the **"=" character** into the desired speech and form. Save the file and test the translation (the new names must not exceed the designated fields, or they must be completely visible). Modify if necessary. Make changes only in the section under [Language]. If you change the notation above [Language], the program function may be corrupted.

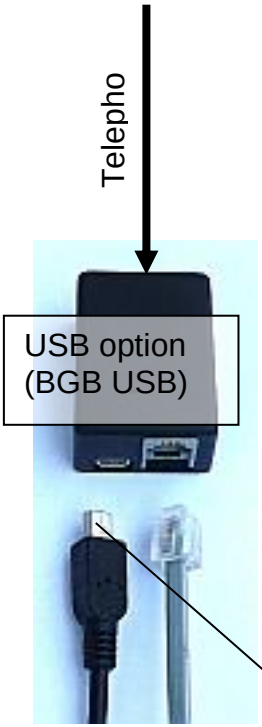


Commissioning

- Connect the BlueGate Analog Brave 4G gateway to your computer via USB option (see gateway manual).

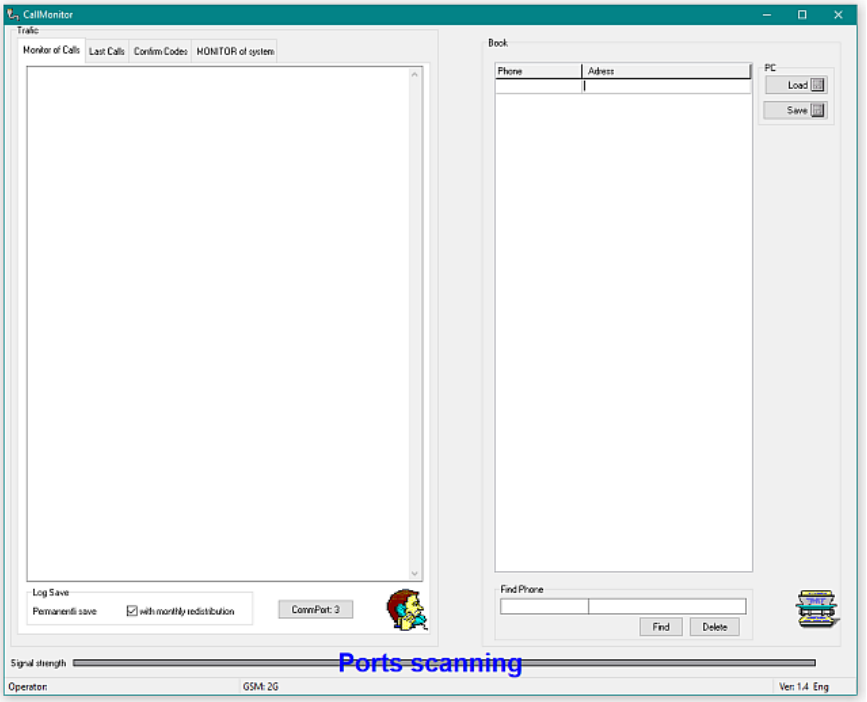
- Turn on the gateway and wait for it to log in to the GSM network (see the gateway manual).
- Launch the program.
- After a while, the program will create a list of available ports, from which you need to select the USB port to which the gateway is connected.



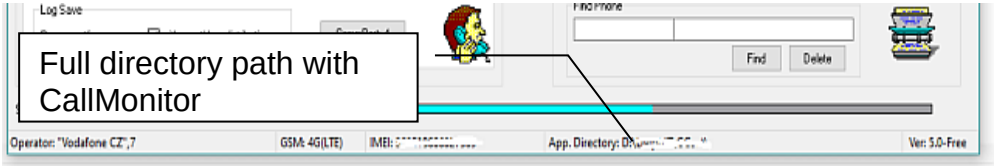


- After entering the port, the initial basic program window appears.

If the communication with the gateway is not running, "Port scanning" will appear (Searching for USB ports – see later in the manual)



If the connection with the gateway is OK, after a while you will see information about the signal strength, operator and connection method (2G/4G).



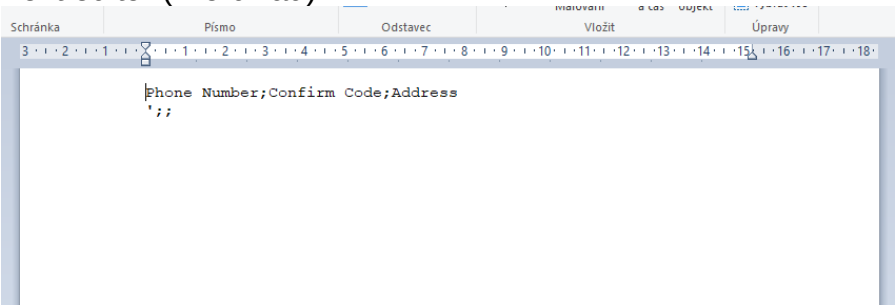
The program will automatically create a subdirectory "Data" – see the path in the picture – where it will store the monitored information (see below). It is ready to use.

Database of registered facilities

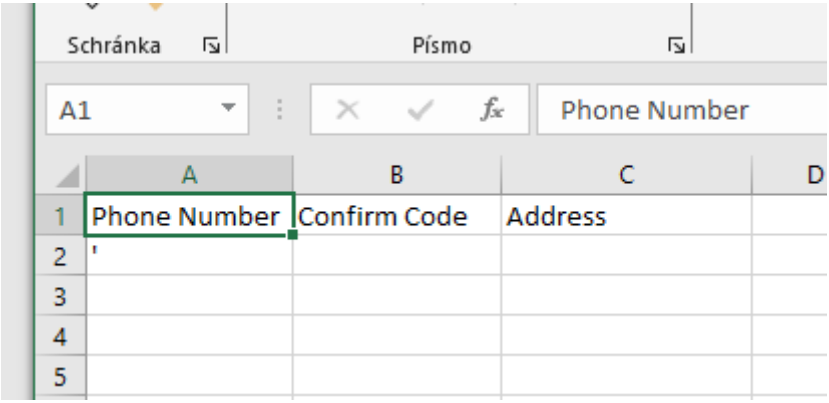
The database is for easy connection to spreadsheet or database programs such as Excel etc. in the .csv format, where the individual information for each phone number (= device) is separated by a semicolon ";".

The necessary pattern can be obtained by saving an empty database: After the first start of the program, click on "Save" in the PC field and create a "CallMonitor.csv" file (details on working with individual elements of the program are further in the manual). After opening the created file in a text editor, spreadsheet, etc., you will see the header of the future database file and the first blank line.

Text editor (WordPad):



Spreadsheet (Excel):



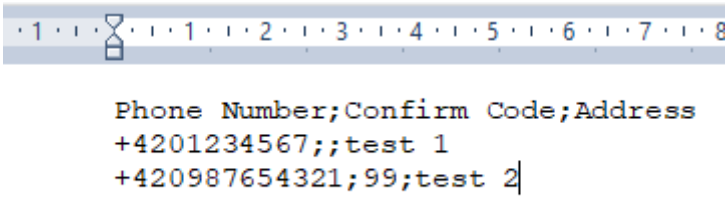
The names of individual columns (fields) are not important, the order of the information is important:

1. Telephone number in international form
2. Confirmation code (if used – not a condition) if not used, the field remains blank
3. Identification – e.g. the address of the location of the device, the name of the company or the phone number of the relevant employee, etc.

Caution: Do not use additional semicolons in individual entries! This would result in incorrect assignment of individual fields!

Example of saving the numbers +42012345678 and +420987654321 to the file you are creating. The second number will have a confirmation code of 99.

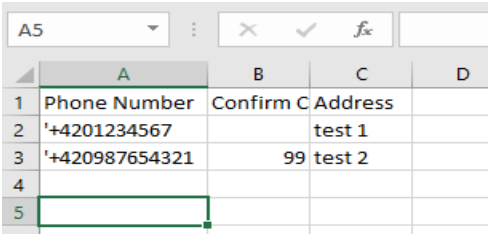
Text editor (WordPad):



You can see how the individual data are separated by semicolons. In the line, without a confirmation code, there are 2 semicolons next to each other – there is actually a missing code between them.

Once you have filled in all the information, save the file. If you used an empty file created by CallMonitor, then under the existing name, if you used a new file, you must enter the name of the CallMonitor.csv when saving.

Spreadsheet (Excel):



	A	B	C	D
1	Phone Number	Confirm C	Address	
2	'+4201234567		test 1	
3	'+420987654321	99	test 2	
4				
5				

If you use a spreadsheet to create the database, we recommend that you mark (set) the entire first column as a text column, or write an apostrophe "'" before each phone number so that the phone number is stored as text. If you don't, the spreadsheet will treat the phone number as a large number. As a large number, it will try to convert the value into an exponential form (e.g. 123E5), so the phone number information disappears.

The CallMonitor program for converting .csv files back into a spreadsheet solves this problem by inserting an apostrophe before each phone number.

To save the created database, select the .csv format with the ";" separator. The name will be CallMonitor.csv again

If the CallMonitor program has already been launched when creating the database, you can upload the database to the program using the "Load" button in the PC section – see below. When you start the program, the program loads this database automatically. The program analyzes the database and sorts the information into appropriate tables.

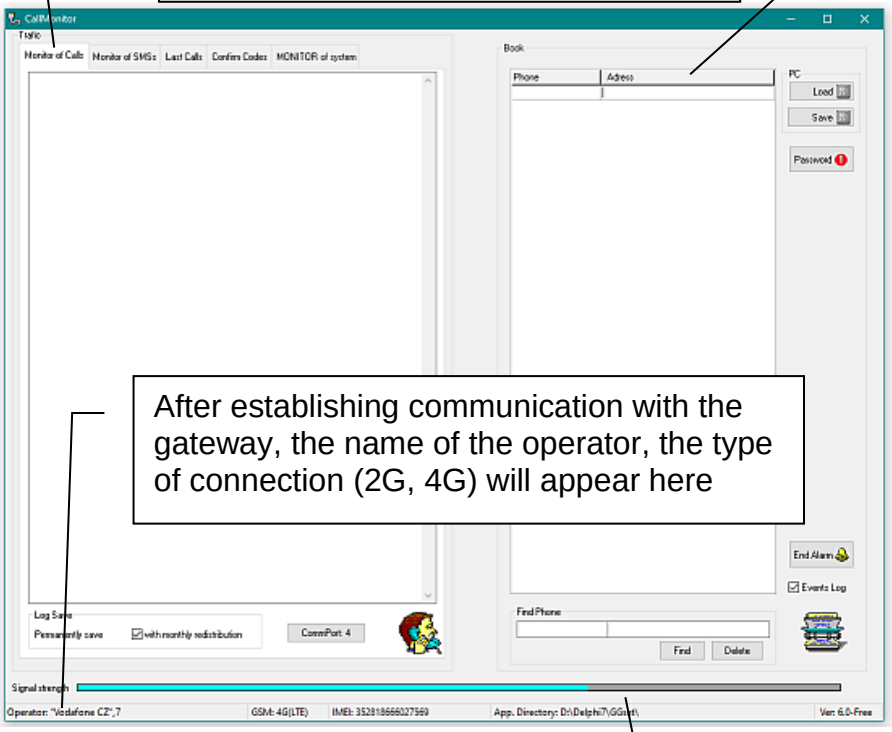
Note:

- Write the phone number in the international form
- You can use digits and characters "*,#,P,X,!" for the confirmation code – the meaning of non-numeric characters "P,X,!" see below

Description of individual program tabs

View and select individual traffic tabs

Table of registered numbers

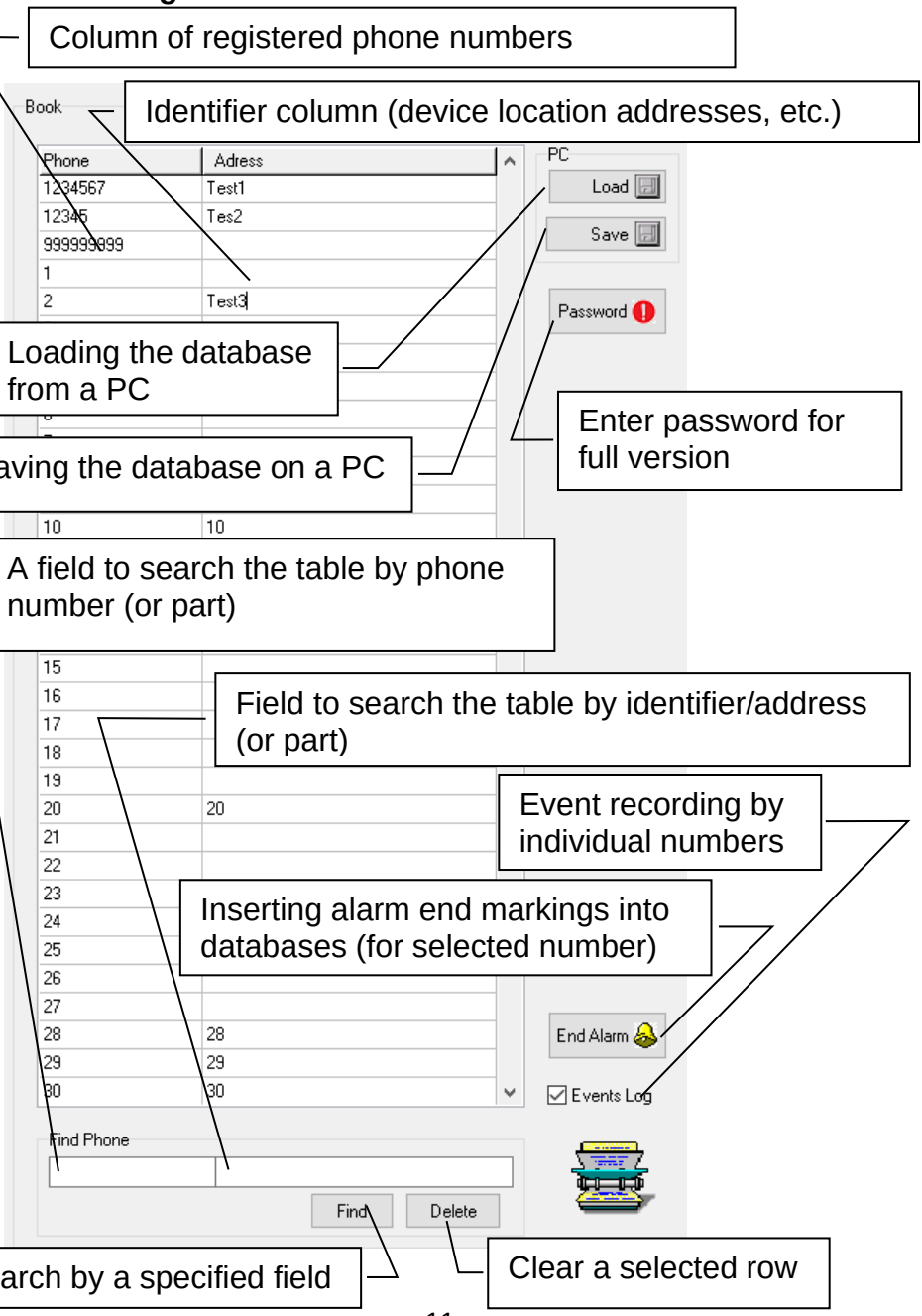


After establishing communication with the gateway, the name of the operator, the type of connection (2G, 4G) will appear here

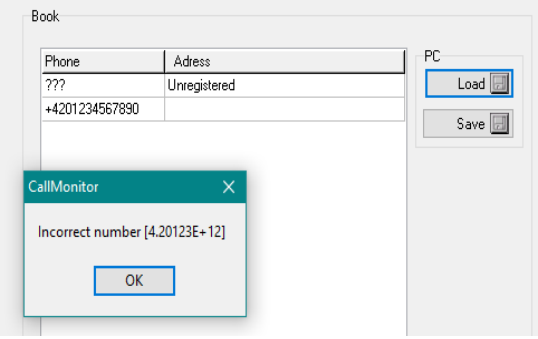
and GSM signal strength in colour:
Green – excellent signal strength
Blue – sufficient signal strength
Red – unsatisfactory signal strength

If you rest your mouse pointer on any element of the program, a tooltip appears.

Table of registered numbers database



- The database of registered numbers is loaded automatically when starting the program (if it has a name of CallMonitor.csv) or by pressing the "Load" button.

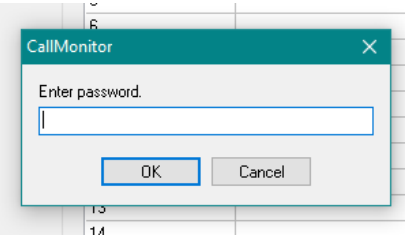


If the program discovers an incorrect value while loading the database, it reports it (in the picture, a case of incorrect conversion from Excel – Excel converted the number to exponential form)

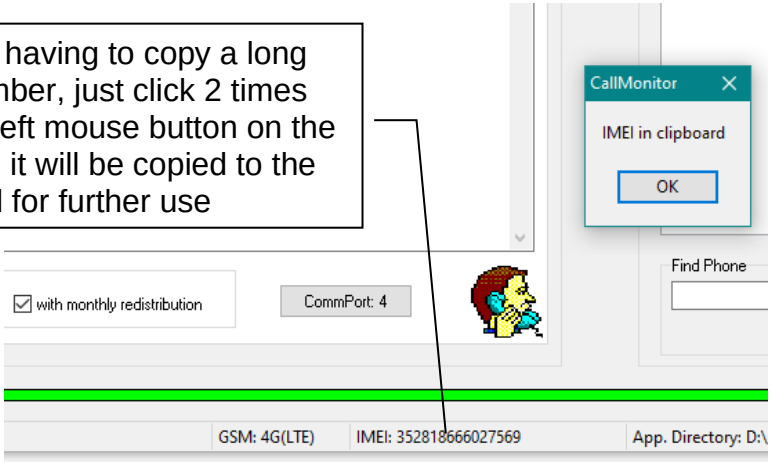
- Registered numbers cannot be edited in the table, only deleted. When you delete a number from a spreadsheet, the phone number is automatically removed from the other spreadsheets as well.
- Only individual number identifiers/addresses can be edited.
- New registered numbers can be added to the database either externally, before a text editor, spreadsheet, etc. creating a database at the beginning of the manual, or it is possible to directly insert incoming unregistered calls by double-clicking on the required number in the table of incoming calls (see below).
- The modified database can be saved again (under the appropriate name – CallMonitor.csv) using the "Save" button.

Insert password for full version

To get the full version, you need to click on the "Password" button. And paste the code that you get from Alphatech after sending the IMEI code of the connected gateway. The program is thus linked to the connected gateway.



To avoid having to copy a long IMEI number, just click 2 times with the left mouse button on the IMEI and it will be copied to the clipboard for further use



By connecting the program to another gateway (different IMEI), the password will be invalid and the program will work only in the free version!

Using the "End Alarm" button

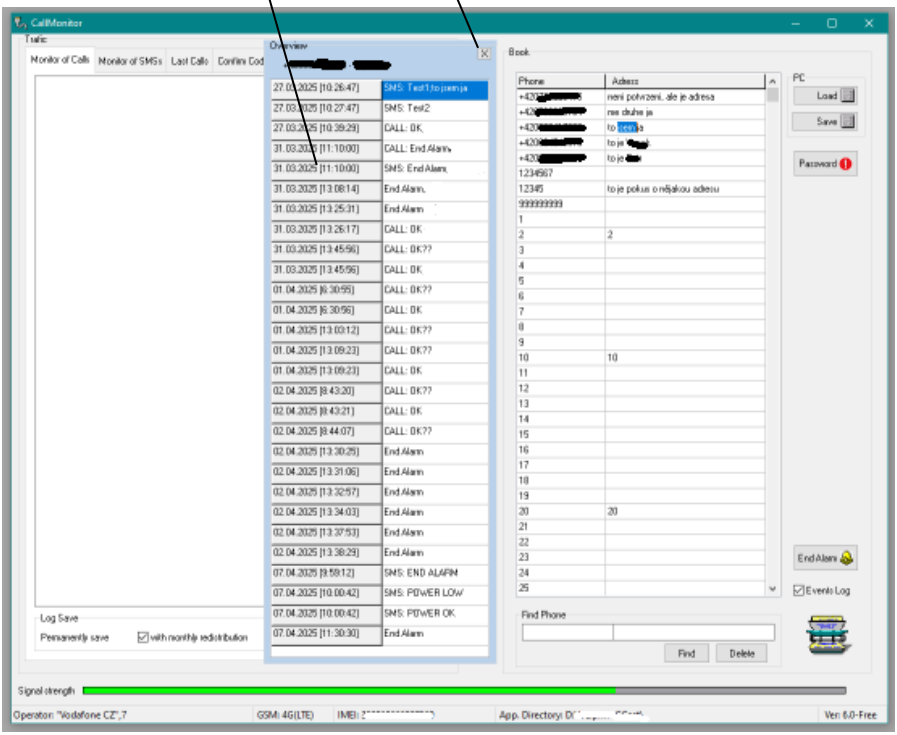
If you need to register the end of the Alarm state, you can use this button. In the table of registered numbers, select (click on) the number for which you want to manually record the end of the alarm. By clicking on the "End Alarm" button, the end alarm designation is saved in the corresponding databases. Of course, if you are using a device that sends an SMS with a message about the end of the Alarm state (e.g. GLWV both when the Alarm state is terminated locally and remotely), you do not have to use the button – the end of the alarm is recorded automatically.

„**EventsLog**" Record events by number
After setting the function, a subdirectory "EventsByNumber" is created in the "Data" directory, where the data of individual events are written selectively for each registered phone number (see the example in the chapter "Used and created databases"

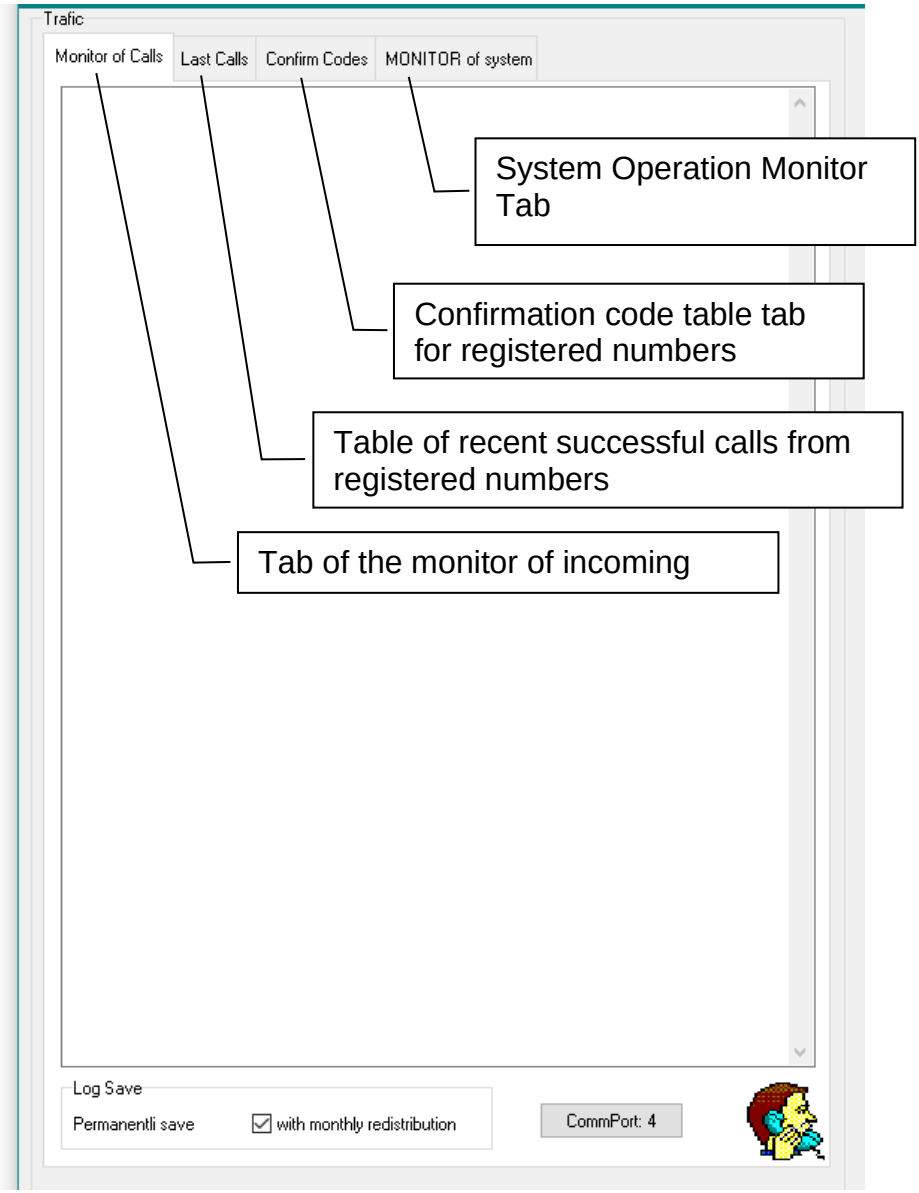
After selecting the phone button in the table of registered numbers and double-clicking on this number, a record of all events belonging to this number will open:

Report header with number and identification

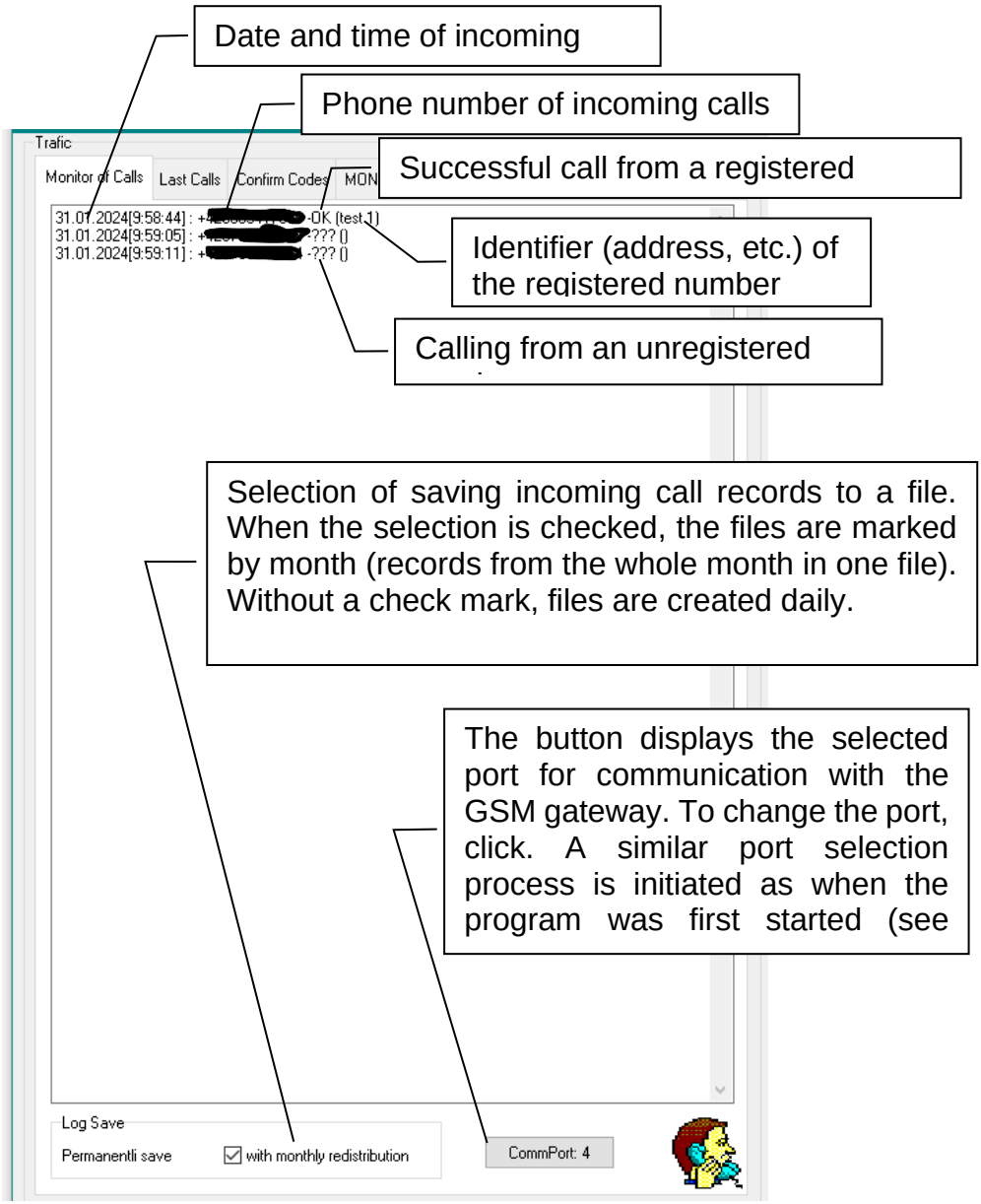
Close the report



Traffic Tabs



Incoming Calls Monitor Tab

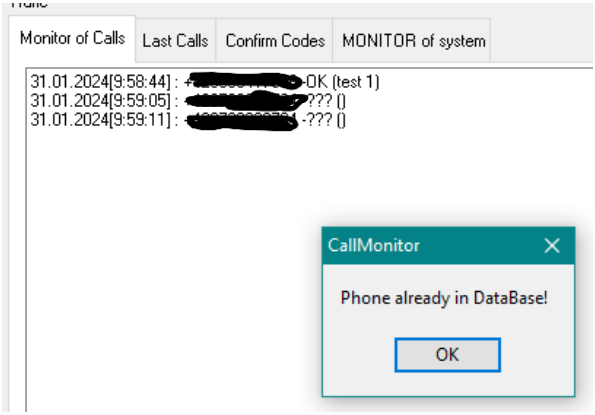


During an incoming registered call, the row with the relevant registration is automatically selected and displayed in the table of the registered numbers database for better identification.

Adding an incoming unregistered call to the registered number database

If you click the left mouse button 2 times in the incoming call monitor with the mouse pointer over the selected unregistered number, a new row with the selected phone number will be added to the table of the registered number database. Furthermore, the necessary identifier can be entered into the table of registered numbers. At the same time, a table of confirmation codes will also be added with a new number, in which you can enter (if necessary) the required code (see below). You can save the entire database again by clicking on the "Save" button (see previous).

When saving a new number to the registered number database, the program checks whether the database does not already contain the required number. If you accidentally click on a number that already exists in the database 2 times, the program will warn you



Incoming SMS monitor tab

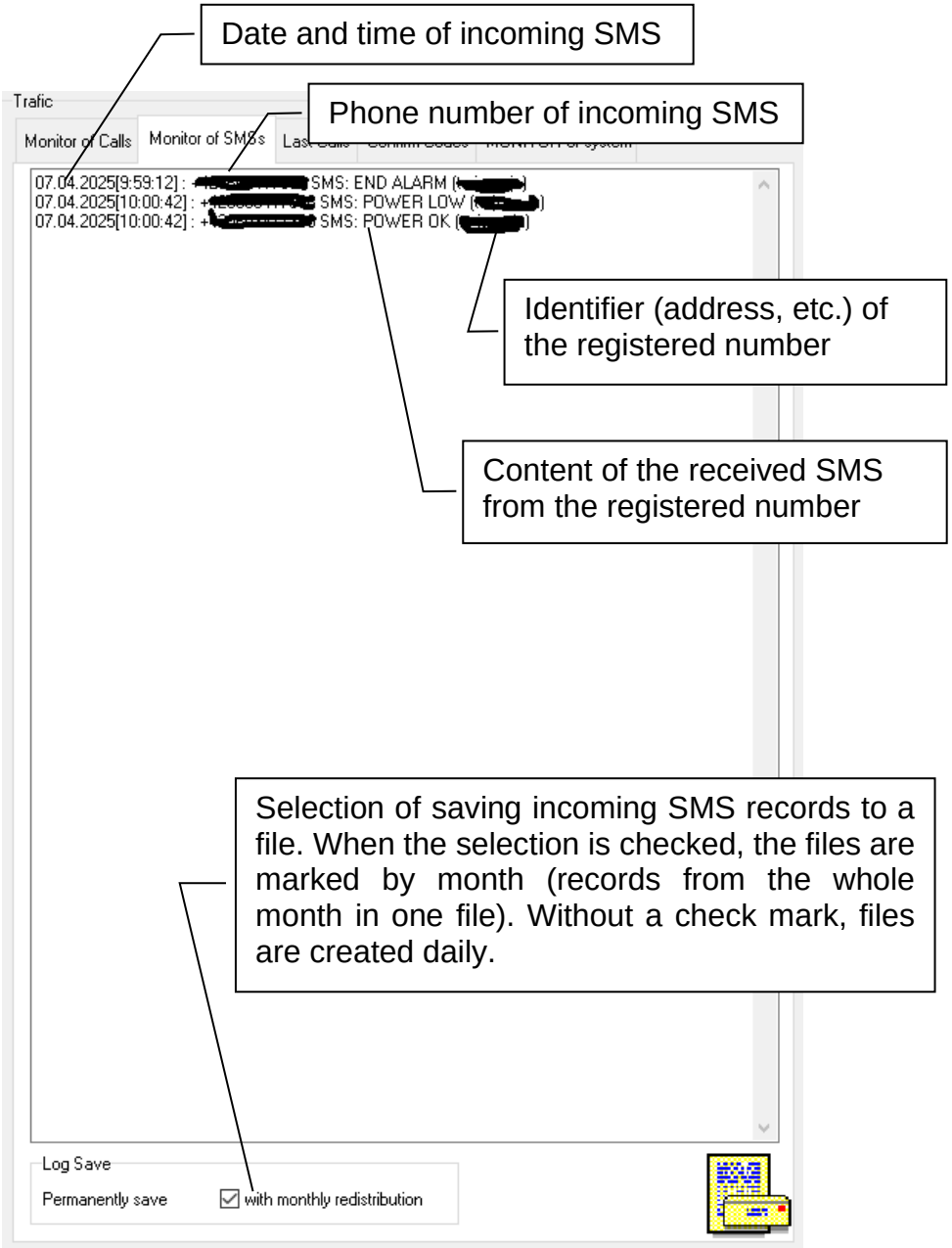
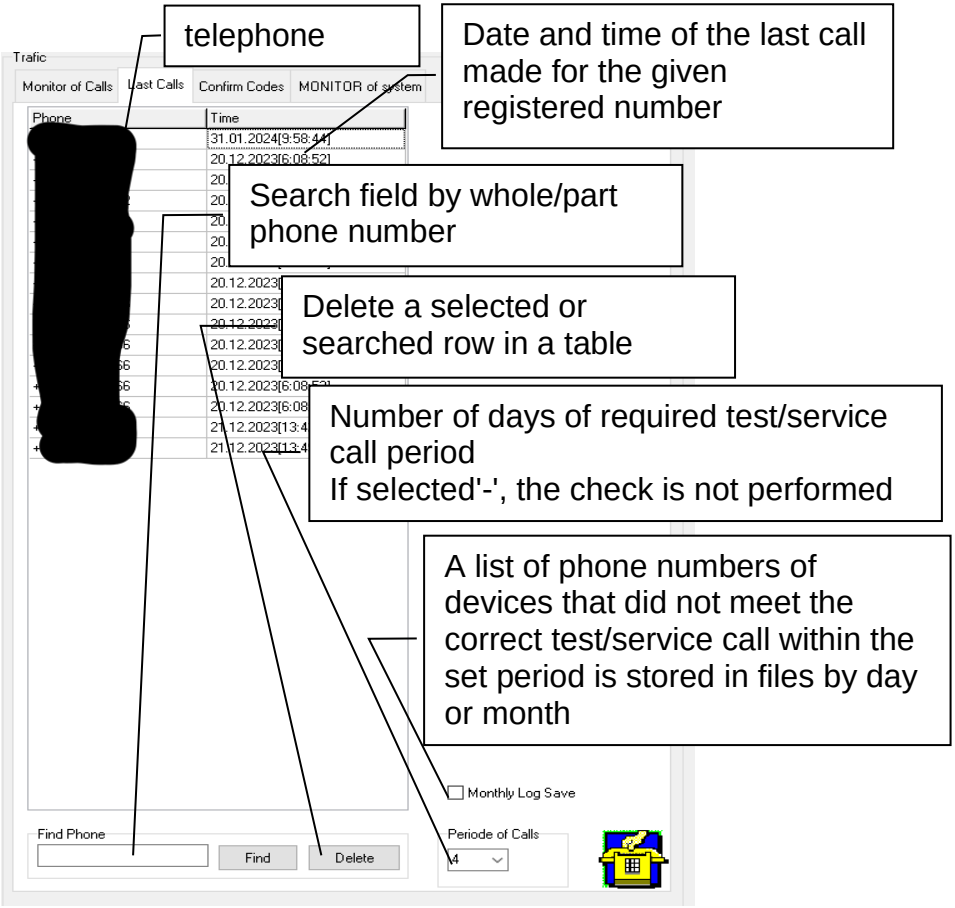
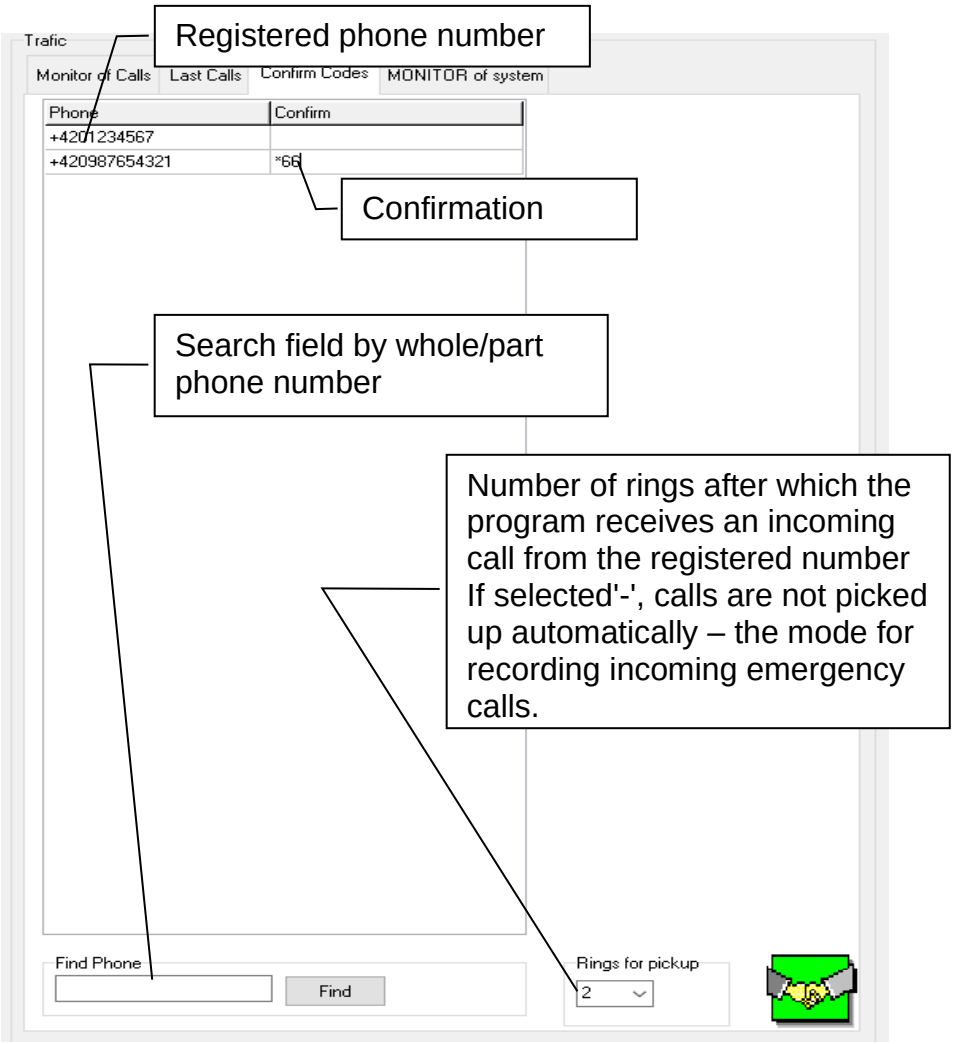


Table of recent successful calls from registered numbers



The table shows a list of registered phone numbers with the date and time of the last recorded call. It works only in the program mode for handling test/service calls (for periods 1-9).
The program searches the table every midnight and creates a list of numbers where the time from the call to the current date is greater than the set period. Lists can be stored on a daily or monthly basis, depending on the requirements (and also the length of the device list).

Confirmation code table tab for registered numbers



In the Confirmation Code Table, each registered number can be assigned a code—a string of allowed characters—to confirm that the call has been received. Of course, it can also be used to accept calls without confirmation (no code is inserted). The confirmation code is a kind of crutch for analog telephone systems, where the answer to the call is detected (unreliably)

only from the end of the ring tone. This problem does not need to be solved on digital systems (GSM, ISDN, IP, etc.), where the information about answering/ending the call is unambiguous. Then there is no need for confirmation codes and the voice channel is clear without disturbing tone dialing sounds.

Allowed characters in the string: 0123456789*#PX!
Special characters:
P – invokes a pause of about 3 seconds between the transmitted characters
X – special character (not transmitting) that tells the program to reject the call – the character is used for emergency call recording mode (see below)
! – special character = do not hang up (not transmitting), which tells the program that the code (series of characters) before the exclamation mark will cause the caller to hang up the line (end the call)

Test/service call handling program mode
Number of rings for receiving calls set 1 to 9

On each incoming call, the program checks whether the calling number is registered in the database. If so, after the set number of rings, the call will be answered (picked up). It will find out from the database whether it is necessary to send a confirmation code to confirm the receipt of the call.

- If it finds it in the database, it sends it and then hangs up – ends the call. If the code needs to be repeated, enter the confirmation code into the appropriate table several times in a row and separate each series with the "P" (pause) character. This way you can set any repetition exactly according to your needs – not like in the previous version of the program: fixed always 2x.
- If everything goes well, the registrant will enter the date and time of the test/service call from the registered number with the note "-OK" in the database
- If a confirmation code is used with a counterparty hook ("!" at the end of the code – see above), the same entry is made after the counterparty is hung.
- If the call is not terminated by the calling device when using the confirmation code with the counterparty hooking ("!" at the end of the code – see above), the call is not terminated by the calling device, but the call must be terminated by the program, it is also written to the appropriate database (the standard requires a test/service call, but does not specify the method of termination). However, the note will contain "-OK??" as a warning about the not entirely correct course.
- Call information can be recorded not only in the daily (monthly) call database, but also (depending on the settings - see below) in the event register for individual phone numbers.

Mode of the program for recording emergency calls
Number of rings to answer call set to '**-**'

The program can work in two ways.

- With an operator who receives and resolves calls. Then it only records incoming calls and their receipt – see below
- Only as a record of emergency calls. Then it registers the registered calls and rejects them.

With an operator – a phone connected to the gateway
On each incoming call, the program checks whether the calling number is registered in the database.

- If so, it records incoming calls marked "RING" and the number of rings that have already taken place. There can be several records in the database in a row ("RING1", "RING2"...). It is recorded when (time and date) the first bell (and possibly the next ringing) came.
- If the call is answered (picked up) by the operator on the connected phone, a record with the note "-OK" is added

From the entire record, it is possible to find out if and when

- An emergency call came
- The caller called or did not call
- Operator response time to calls

Only emergency call records
In the confirmation code database, an X code must be set for phone numbers
On each incoming call, the program checks whether the calling number is registered in the database.

- If so, it registers incoming calls marked "RING"
- If the calling number is set to the X character in the confirmation code database, the call is rejected immediately (the emergency communicator immediately calls the next number set in the sequence)

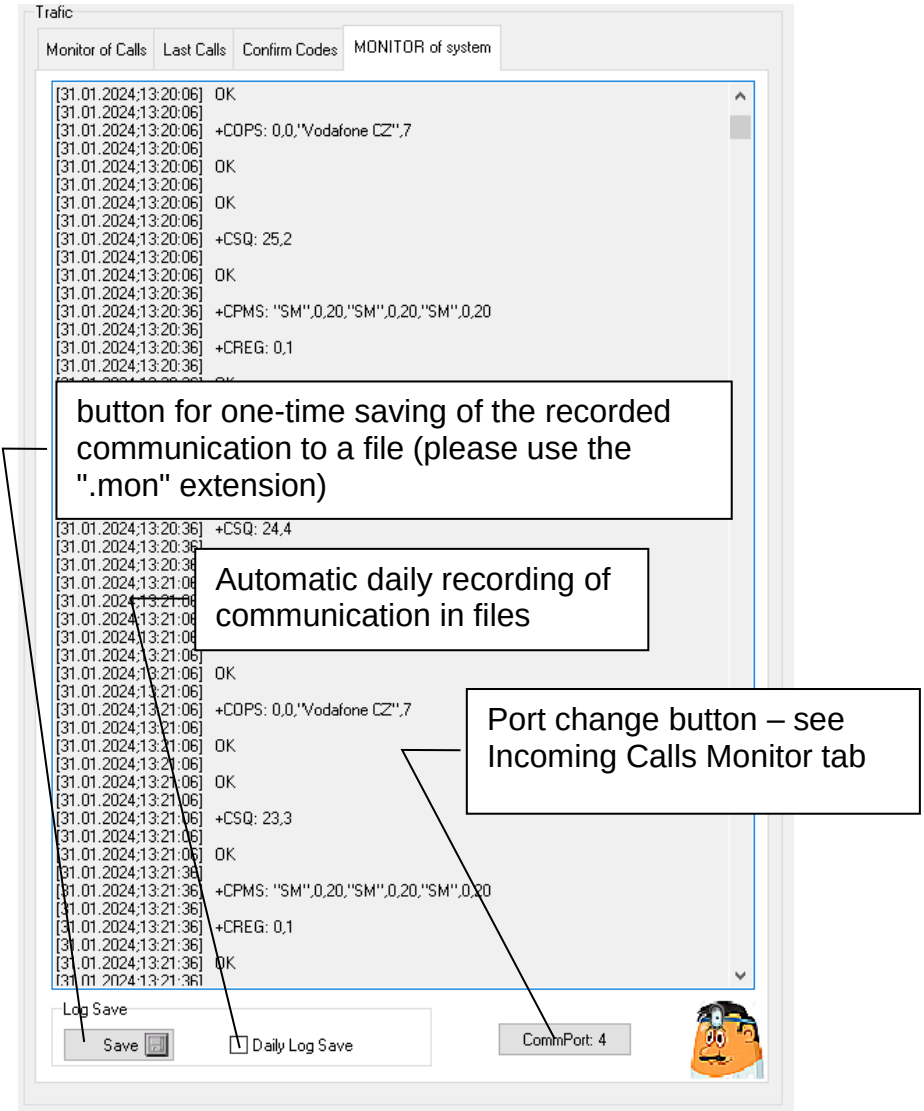
Note1: In the case of rejection of the call (X), i.e. actually redirection to another phone number, the RING records will contain the ">" character as a redirection.

Note2: If the X character is not set, the call will also be redirected to the second number in the sequence, but with a delay – after the time of waiting for pick-up set on the communicator. The record will then contain the appropriate number of rows with the "RING" itself

Note 3: Call information can be recorded not only in the daily (monthly) call database, but also (depending on the settings – see the chapter on the table of registered numbers) in the event register for individual phone numbers.

System Operation Monitor Tab

It is used to record all communication between the program and the GSM gateway. It is designed to diagnose possible problems by means of recorded (and possibly sent) log files.



Databases used and created

In the application directory:
CallMonitor.csv – database of registered numbers
The names of individual columns (fields) are not important, the order of the information is important, the data are separated by a semicolon:

1. (**Phone Number**) An international telephone number
2. (**Confirm Code**) Confirmation code (if used – not a condition) if not used, the field remains blank
3. **Identification** – e.g. the address of the device location, company name or phone number of the relevant employee, etc.

Caution: Do not use additional semicolons in individual entries! This would result in incorrect assignment of individual fields!

In the Data directory:
LogCallMonitor.csv – continuous recording of incoming calls
By renaming it, you can sort by day, month, year – as needed. After renaming, the program always creates a new LogCallMonitor.csv record. After recording the first incoming call, it writes the header (names of individual columns) and the first entry. The data are separated by a semicolon:

1. (**Date**) Date of incoming call
2. (**Time**) Time of incoming call
3. (**Phone Number**) An international telephone number
4. (**Status**) Communication result (OK, OK??, RING)
5. **Identification** – e.g. the address of the device location, company name or phone number of the relevant employee, etc.

LogCallMonitor.csv is the basic data source for any other operations after conversion to a spreadsheet or other program (e.g. for listing on which days a specific number was called, etc.)

Example:
Date; Time; Phone Number; Status; Adress
19.12.2023; 13:22:10;' +42xxxxxxxxx; OK; test 1
20.12.2023; 13:39:30;' +42yyyyyyyy;???;
21.12.2023; 13:42:44;' +42zzzzzzzzzz; OK; Test 2
04.01.2024; 8:12:52;' +42xxxxxxxxx; OK; test 1
05.01.2024; 8:28:56;' +42aaaaaaaaaa; OK??; test 3

Missed Calls 30.01.2024.csv – list of registered phone numbers that did not meet the required test/service call period. Lists can be marked by day or month – see the settings in the previous section. The data are separated by a semicolon:

1. (**Date**) Date of incoming call
2. (**Phone Number**) An international telephone number
3. (**Last Call Time**) Date and time of the last received call
4. (**Number of Days**) The number of days that have elapsed since the last call
5. (**Address**) Identification – e.g. the address of the device's location, company name or phone number of the relevant employee, etc

Example:
Date; Phone Number; Last Call Time; Number of Days; Adress
29.01.2024;' +420xxxxxxxx; 23.01.2024[7:36:10]; 6; test 1
29.01.2024;' +420zzzzzzzz; 25.01.2024[12:10:25]; 4; Test 2

LogSMSMonitor.csv – continuous recording of incoming SMS By renaming it, you can sort by day, month, year – as needed. After renaming, the program always creates a new LogSMSlMonitor.csv record. After the first incoming SMS is recorded, it writes the header (names of individual columns) and the first entry. The data are separated by a semicolon:

1. (**Date**) Date of incoming call
2. (**Time**) Time of incoming call
3. (**Phone Number**) An international telephone number
4. (**SMS**) Content of received SMS
5. **Identification** – e.g. the address of the device location, company name or phone number of the relevant employee, etc.

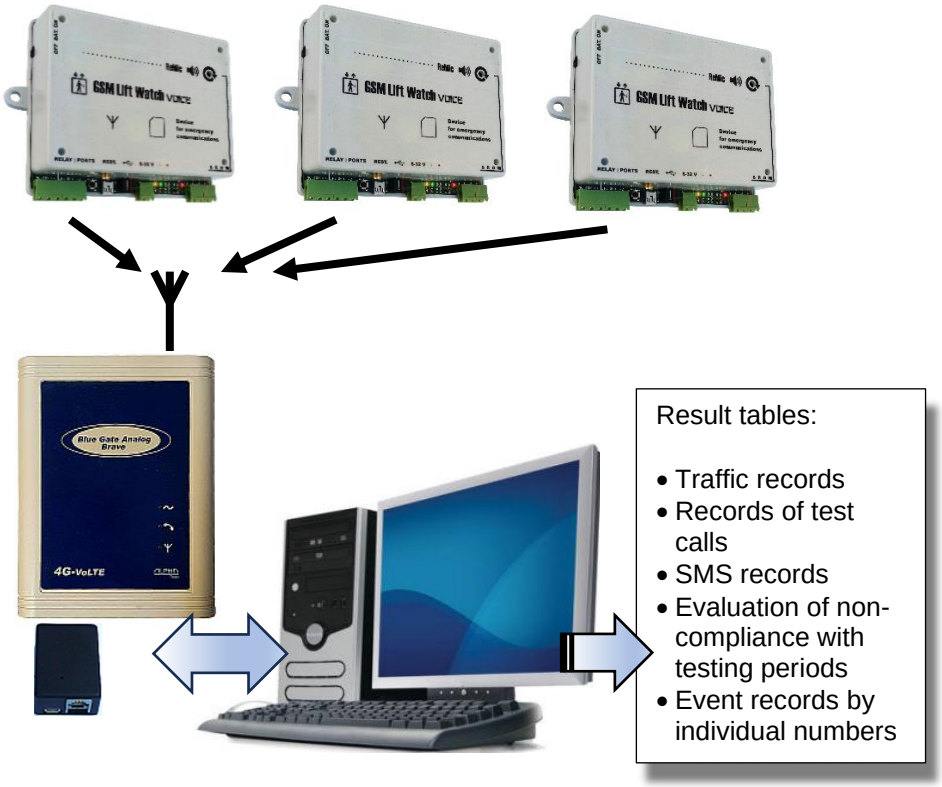
Example:
07.04.2025; 9:59:12;' +42xxxxxxx; END ALARM; test1
07.04.2025; 10:00:42;' +42yyyyyy; POWER LOW; test2
07.04.2025; 10:00:42;' +42zzzzzz; POWER OK; test3

Communication 31.01.2024.mon – automatic recording of all program communication with the GSM gateway during the day (see System operation monitor tab)

Depending on the settings, a subdirectory EventsByNumber may appear in the Data directory, which contains a record of events by individual phone numbers.

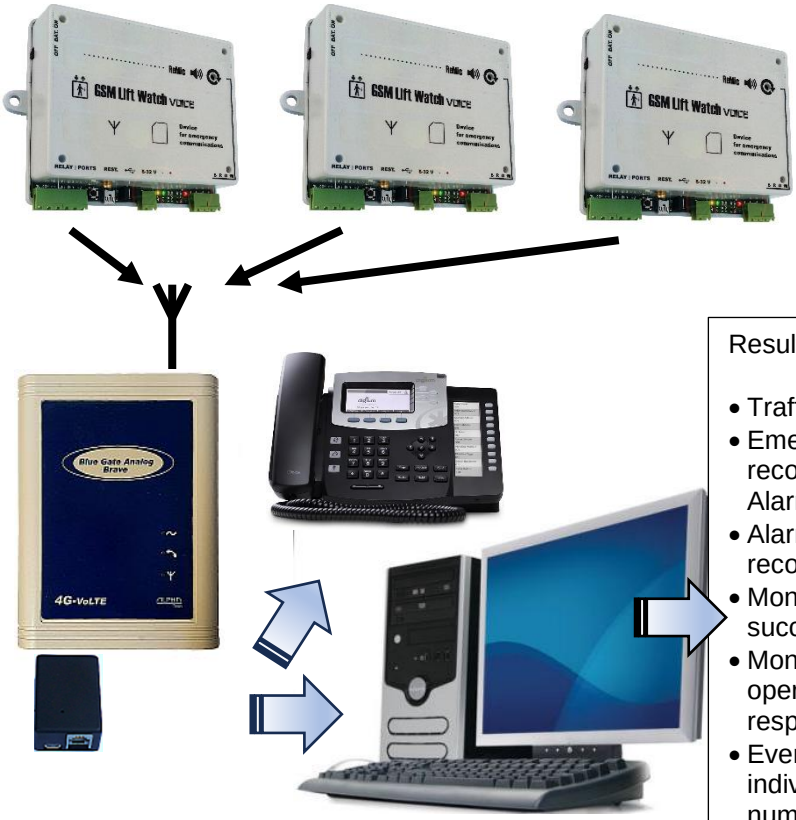
Example:
The +42xxxxxxxxx.csv file contains all the events that CallMonitor has recorded in connection with this number:
27.03.2025; 10:27:47; CALL: RING>
01.04.2025; 6:30:56; CALL: OK
02.04.2025; 8:44:07; CALL: OK??
07.04.2025; 9:59:12 A.M.S.
07.04.2025; 10:00:42;SMS: POWER LOW
07.04.2025; 10:00:42;SMS: POWER OK

Example of handling test/service calls



- Devices: BlueGate Analog Brave 4G, BGBUSB, PC with WIN7 and higher and with USB
- Create a database of registered numbers – see page 5 and others
- Set the number of rings for receiving calls from 1 to 9 (usually 1 to 2) – see page 15
- Set the number of days of the required period of test/service call to 3 days according to the standard (can also be done in other ways) – see page 14
- Alternatively, fill in the table of confirmation codes – see page 15
- The monitored information will be available in individual files in the Data subdirectory – see page 21 and further

Example of handling emergency calls with an operator

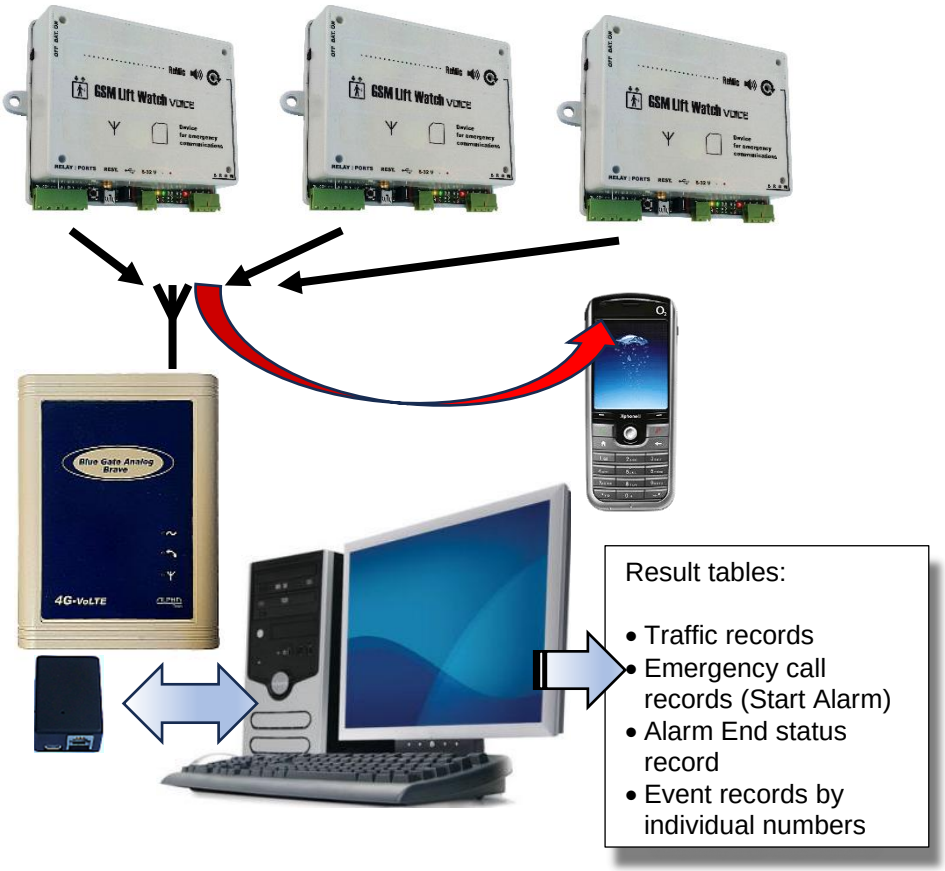


Result tables:

- Traffic records
- Emergency call records (Start Alarm)
- Alarm End status record
- Monitoring success (calling)
- Monitoring operator response
- Event records by individual numbers

- Devices: BlueGate Analog Brave 4G, BGBUSB, PC with WIN7 and higher and with USB, regular analog phone
- Create a database of registered numbers – see page 5 and others
- Set the number of rings to answer the call to "-" (do not answer)
- The table of confirmation codes must not contain an "X" – see pages 16 and 18
- The monitored information will be available in individual files in the Data subdirectory – see page 21 and further

Example of emergency calls without an operator – with redirection to another number



- Devices: BlueGate Analog Brave 4G, BGBUSB, PC with WIN7 and higher and with USB
- Create a database of registered numbers – see page 5 and others
- Set the number of rings to answer the call to "-" (do not answer)
- The table of confirmation codes should contain an "X" for all numbers to be served – see pages 16 and 18
- The monitored information will be available in individual files in the Data subdirectory – see page 21 and further

Upgrading CallMonitor

If you get a newer version of the program, just overwrite the existing file CallMonitor.exe a newer version and all the settings used will be preserved (the program is of the "portable" type – it is not installed).

Password and other entries remain in the CallMonitor.ini file, they are only added with new entries. A problem may arise in the Czech version, where the file will be supplemented with English items while maintaining the existing ini file. Then it is better to use CZ.ini from the new version of the program and:

- Re-enter the password you are using for the full version

or

- Add a new CallMonitor.ini file with a line with the Password from the old CallMonitor.ini.

Alphatech spol. s r.o.
Jeremenkova 88
140 00 Prague 4
tel. 244 461 016

Email: info@alphatech.cz
internet: https://www.alphatech.cz
our GPS coordinates (WGS 84)
N 50°02′35.5″ E 14°25′42.0″

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