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Centralized monitoring software



(version v2.35) Program installation and configuration

This document describes the installation and configuration process of program package *Monas MS v2.35*.

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# 1 The purpose of Monas MS

Program *Monas MS* is an applicable program package for display, processing and storage of messages received by centralized security and monitoring stations.

## 1.1 Computer and network requirements

Program package *Monas MS* may be installed in one computer or in several computers connected to a single network. In order to install *Monas MS* v2.35 computer must meet the following minimum requirements.

Operating system						
32 bit (for 200	0 - 5000 objects)	64 bit (for > 5000 objects)				
Processor freq	uency: ≥2 GHz	Processor:	Intel I7 or better			
Memory:	2-4 GB RAM	Memory:	6 GB RAM			
Hard drive:	100 GB of free space	Hard drive:	100 GB of free space			
Database: 150 GB of free space		Database : 500 GB of free space (20 000 objects ≈7 GB/month)				
Windows XP, Win 7 and upper		Win7 and upper Windows Server 2008 Hardware Raid (several parallel discs)				

#### Note:

Computer parameters may be lower if a separate Monas MS client workplace is being installed in a network. Meeting OS Win XP installation requirements is sufficient.

To use the program in a monitoring station the following must be foreseen:

1) Adequate number of serial ports RS232 in the computer to which *Monas MS server* is being installed to connect required equipment. The use of USB or other artifices is not recommended. If necessary, use ports that are inserted into the computer motherboard;

- 2) Color display monitors: at least 21", 1920x1080 resolution;
- 3) At least one audio speaker for audio signals;
- 4) Standby power supply source to ensure continuous monitoring station operation for at least 1-2 hours.

Computer in an Ethernet network:

Computers must operate in a single network in order to install *Monas MS* in several workplaces.

1) Network speed should be sufficient for handling massive data traffic (not less than 10 Mbit/sec.). If necessary, create a separate centralized monitoring station subnetwork and block unauthorised access into its operation;

2) An external connection to the server must be secured, router configured and necessary ports forwarded if electronic Google map is used;

3) An external connection to car's Garmin navigation using connection equipment A1 TRAX must be secured, router configured and necessary ports forwarded if connection with fast reaction group is used;

4) An external connection to operator's SMS center must be secured, router configured and necessary ports forwarded or a local SMS modem with chosen operator's SIM card set up if SMS communication with the clients is carried out;

5) The program should be installed on a computer with OS Win7 or newer with enabled IIS (Internet Information Service) v7+ and ASP.NET setting, router configured so that data flow via port 3800 is directed

to a computer with installed Monas MS WEB if remote WEB workplace will be installed and used; Recommended network structure for *Monas MS* installation is displayed in the picture below. Two separate subnetworks (station and office) are projected in order to avoid unauthorised access into the operation of the monitoring station.



All data receiving equipment is connected to the computer with installed *Monas MS server*. *Monas MS server* and database can be installed on the same computer. Powerful servers may be used for big stations (projected tens of thousands of secured objects). It is recommended to store and save data in a separate backup server. It is advisable to install *Monas MS client* administrator workplace in the same computer for convenient connection.

Other *Monas MS client* workplaces should be installed to separate computers depending on tasks to be performed in the station.

# 2 Program installation

## Note:

DotNet Framework 4.0 must be installed, that Monas Ms would work properly. Usually win8 and upper versions already have this program.

Main software suite is comprised of database *Monas.Net Database* working in MS SQL Server 2008 R2 database management system and programs *Monas MS server* and *Monas MS client*. Secure access USB key is used to set program operation parameters. Sentinel driver is necessary to ensure its functioning. These programs are installed in the order listed below:

- 1) Database Monas.Database;
- 2) Monas MS server;
- *3)* Monas MS client;
- 4) Sentinel driver;

*Station* icon appears on the desktop after *Monas MS server* is finished. This part of the program is necessary to determine the port for connection with mobile crews when NAV program module is used.

TRIKDIS Monas MS v2.35\_IM\_EN\_161223 Program module *Monas MS WEB* is installed additionally in order to ensure remote installer connection to the program.

All other program options are indicated in the secure access key and do not require additional program installation.

#### Note:

*Real computer IP address (local 127.0.0.1 or external, e.g. 192.168.X.X) is indicated when Monas MS is being installed on one computer.* 

*Firstly, network is configured and IP addresses of the devices are set when the program is being installed on a network. Real computer IP addresses are indicated during program installation and configuration.* 

### 2.1 Database installation

Note:

It is very important to set your region parameters, before database installation (in control panel – clock, language, region):

- 1. Location
- 2. Language for non-unicode programs
- 3. Date separator "." (2016.01.01 arba 01.01.2016)

1. Open subdirectory *Database* in *Monas MS* v2.35 *install* directory. Double-click on the program installation file *setup.exe*.



3. InstallShield Wizard window will open. Click Install.



Note:

Do not close the operating system window when it pops up now or at a later stage. Wait until it closes by itself. It might take several minutes.

4. A prompt message asking to reboot the computer will pop up. Click Yes.



5. Database installation wizard window will open after the reboot. Click **Next**.



6. Database user information window will open. Click Next.

Monas.Net Database - InstallShield Wizard     X       Customer Information     Please enter your information.	Image: Monas. Net Database - InstallShield Wizard     X       Database Server     Select database server and authentication method
User Name:	Database server that you are installing to: (IOCA)/SQLEXPRESS
	Connect using: © <u>Wi</u> ndows authentication credentials of current user © Server authentication using the Login ID and password below
	Logn ID: jsa Password: eeee Name of database catalog: Prowse
Instalishield	InstallShield

7. Database server window will open. Click Next and then click Install.



#### Note:

Specify the location for database installation if installation error is displayed. Different computers have differently named directories.

#### In order to do so:

1. Specify the database. Click *Browse...* and select a different location for installation.

If installation does not start, select *Server authentication using the Login ID and password below*, specify the Login ID - *sa* and password – *root*. Click *Next*.

🚏 Monas.Net Database - InstallShield Wizard	×	记 Monas.Net Database - InstallShield Wizard
From the list of servers below, select the database server you would like to target.		Database Server           Select database server and authentication method         Image: Comparison of the server and authentication method
(local)\SQLEXPRESS DELL-LATITUDE\SQLEXPRESS		Database server that you are installing to: DELL-LATITUDE\SQLEXPRESS
		Connect using: C <u>Wi</u> ndows authentication credentials of current user C Server authentication using the Login ID and password below
		Login ID: sa Password: •••• Name of database catalog:
InstallShield		Brgwse
OK Cancel		< Back Next > Cancel

2. A prompt asking to reboot the computer will pop up. Click Yes.

🐺 Monas.Net Database Installer Information 🛛 🛛 🔀						
į)	You must restart your system for the configuration changes made to Monas.Net Database to take effect. Click Yes to restart now or No if you plan to restart later.					
	Yes	<u>N</u> o				

3. Computer will restart and installation process will continue automatically. Installation progress in displayed in *Database* installation window.



4. Click *Finish* to finish the installation process.

## 2.2 Monas MS server installation

1. Open subdirectory v2.35 in *Monas MS v2.35 install* directory. Double-click on the program installation file *Monas MS server setup.exe*.

Monas№	MonasMS Server - InstallShield Wizard					
ې	MonasMS Server requires the following items to Install to begin installing these requirements.	be installed on your computer. Click				
Statu	is Requirement					
Pendi	ing Firewall					
Pendi	ing SQLServer2005 BC					
		Install Cancel				

2. InstallShield Wizard window will open. Click Install.



- 3. Do not close the operating system window when it pops up. Wait until it closes by itself. It might take several minutes.
- 4. *Monas MS server* installation wizard window will open. Click *Next*.



5. Monas MS server user information window will open. Click Next.

记 MonasMS Server - InstallShield Wizard	×	记 MonasMS Server - InstallShield Wizard	×
Customer Information Please enter your information.	TRIKDIS	Destination Folder Click Next to install to this folder, or click Change to inst	all to a different folder.
Liser Name:		Install MonasMS Server to: C:\Program Files\Trikdis\MonasMS Server\	<u>C</u> hange
Organization:			
Install5hield	Cancel	InstallShield	Next > Cancel

6. *Monas MS server* installation destination window will open. Click *Next*. Click *Change* to choose a different installation location.

👹 MonasMS Server - InstallShield Wizard	×
Ready to Install the Program The wizard is ready to begin installation.	
Click Install to begin the installation.	
If you want to review or change any of your installation settings, click Back exit the wizard.	Click Cancel to
InstaliShield	
< <u>B</u> ack <u>Install</u>	Cancel

- 7. Click *Install*.
- 8. Installation progress is displayed in *Monas MS server* installation window.



9. Click *Finish* to finish the installation process.

×

# 2.2.1 If Monas MS server was installed manually

If Monas MS server was installed manually, use steps below configure SQL:

- 1. Open SQL Server Configuration Manager;
- 2. Switch to the SQL Server Network Configuration | Protocols for SQLEXPRESS;
- 3. Double-click the TCP/IP protocol;
- 4. Select the Yes value in the Enabled field;
- 5. Switch to the IP Addresses tab;
- 6. Find the ipall section;
- 7. Clear the TCP Dynamic Ports field in that section;
- 8. Specify the 1433 value in the TCP Port field;
- 9. Restart your server and try to connect to your server using just its IP address.



#### Note:

More information how to connect from another computer see: <u>https://technet.microsoft.com/en-us/library/ms345343(v=sql.110).aspx</u> And three ports must be opened:

- 1. SQL port (default 1433);
- 2. Monas MS port (default 8766);
- 3. Time synchronization port (37).

## 2.3 Monas MS client installation

#### Note:

Please ensure that you are installing Monas MS client version consisted with Monas MS server version.

1. *Monas MS client* can be installed on any computer in a network. Open subdirectory v2.35 in *Monas MS* v2.35 install directory. Double-click on the program installation file *Monas MS client setup.exe*.



2. InstallShield Wizard window will open. Click Install.

and the set of the set
MonasMS Client - InstallShield Wizard
MonasMS Client requires the following items to be installed on your computer. Click Install to begin installing these requirements.
Status Requirement
Succeeded salncli x64
Extracting SolCmdLnUtils x64
Decompressing: SqlCmdLnUtils_x64.msi
Install

3. Monas MS client installation wizard window will open. Click Next.

记 MonasMS Client - InstallS	hield Wizard 🗙	🙀 MonasM5 Client - InstallShield Wizard	×
	Welcome to the InstallShield Wizard for MonasMS Client	Customer Information Please enter your information.	
	The InstallShield(R) Wizard will install MonasMS Client on your computer. To continue, click Next.	User Name:	
	WARNING: This program is protected by copyright law and international treaties.		
	< Back Next > Cancel	. Instalishield	Next > Cancel

4. *Monas MS client* user information window will open. Click **Next**.



5. *Monas MS client* installation destination window will open. Click *Next*. Click *Change* to choose a different installation location.

🙀 MonasMS Client - InstallShield Wizard	×
Ready to Install the Program The wizard is ready to begin installation.	TRIKDIS
Click Install to begin the installation.	
If you want to review or change any of your installation settings, click Back. exit the wizard.	Click Cancel to
InstallShield	Cancel

- 6. Click Install.
- 7. Installation progress is displayed in *Monas MS client* installation window.
- 8. Click *Finish* to finish *Monas MS client* installation process.

## 2.4 Security key driver installation.

*Monas MS* program options are indicated in secure access USB key.

DEMO version of the program able to support two workplaces and description and monitoring of up to 30 objects will run if access key is not used (or not inserted). SMS, MAPS, NAV and WEB program modules may not be used.

Access key is inserted into the computer USB port with installed *Monas MS server*. Sentinel driver must be installed on the computer.

1. Open subdirectory Sentinel in *Monas MS* v2.35 install directory. Double-click on the driver installation file *SentinelProtectionInstaller*.



2. Program installation wizard window will open. Click *Next*.



3. Select I accept the terms in the license agreement and click Next.



4. Select Complete and click Next.



#### 5. Click Install.



6. When the note window opens, click Yes.

🖥 Sentinel Protection Installer 7.6.4 - InstallShield Wizard
Installing Sentinel Protection Installer 7.6.4 The program features you selected are being installed. Protection Installer
Please wait while the InstallShield Wizard installs Sentinel Protection Installer 7.6.4. This may take several minutes.
Status:
Instalismeld

7. Installation progress is displayed in the program installation window.



8. Click *Finish* to finish the installation process.

Monas MS icons displayed on the desktop:



2

to open Monas MS server and the database;

to open Monas MS client;

to set NAV connection port of the program module;

## 2.5 Monas MS WEB installation.

IIS (Internet Information Service) v7 with ASP.NET setting must be enabled and router configured so that data flow via port 3800 is directed to this computer before installing *Monas MS WEB*. In order to do so:

1. Open Control Panel and select Programs and Features (in OS Win7).

👰 All Control Panel Items			- 🗆 🗵
🕞 🕞 🗢 👰 🔹 Control Panel 👻 All Control Pan	nel Items 👻	👻 🔄 Search Control Panel	2
<u> </u>			
Adjust your computer's settings		View by: Large icons 🔻	
			-
Location and Other Sensors	iii Mail	💣 Mouse	
Network and Sharing Center	Notification Area Icons	Parental Controls	
Performance Information and Tools	Personalization	Phone and Modem	
Power Options	Programs and Features	Recovery	
Region and Language	RemoteApp and Desktop Connections	Sync Center	
System	Sound	Speech Recognition	
Taskbar and Start Menu	Troubleshooting	User Accounts	
💐 Windows Anytime Upgrade	Windows CardSpace	Windows Defender	
Windows Firewall	Windows Update		-

Programs and Features					
🚱 🕞 🗸 Control Panel 🔹 All Control Panel Items 🔹 Programs and Features 🔹 😴 Search Programs and Features 📀					
File Edit View Tools Help					
Control Panel Home View installed updates	Uninstall or change a program To uninstall a program, select it from the list and then	dick Uninstall, Change, or Repair.			
Turn Windows features on or off	Organize 🔻			::: • 🔞	
	Name 🔺	▼ Publisher	✓ Installed… ✓ Siz	e 🗸 🔺	
	(V)µTorrent	BitTorrent Inc.	2013.12.23		
	7-Zip 9.22 (x64 edition)	Igor Pavlov	2013.08.02	4,75 MB	
	Adobe Reader XI (11.0.03)	Adobe Systems Incorporate	d 2013.08.02	127 MB	
	AIMP3 AIMP DevTeam				
	SCCleaner Piriform 2013.07.				
	🕌 Java 7 Update 25 (64-bit)	Orade	2013.08.02	128 MB	
	🛓 Java 7 Update 45	Oracle	2013.12.23	118 MB	
	👹 K-Lite Codec Pack 9.9.5 (Full)		2013.08.02	67,6 MB	
	Microsoft .NET Framework 4.5.1	Microsoft Corporation	2013.12.23	38,8 MB	
	Microsoft Office Professional Plus 2013	Microsoft Corporation	2013.12.23		
	Microsoft Security Essentials	Microsoft Corporation	2013.12.23		
	😪 Microsoft Silverlight	Microsoft Corporation	2013.12.23	100 MB	
	Microsoft SQL Server 2005 Backward compatibility	Microsoft Corporation	2014.01.02	45,7 MB	
	Microsoft SQL Server 2008 R2	Microsoft Corporation	2014.01.02		
	Microsoft SQL Server 2008 R2 Command Line Utilities	Microsoft Corporation	2014.01.02	543 KB	
	Microsoft SQL Server 2008 R2 Native Client	Microsoft Corporation	2014.01.02	6,09 MB	
	📃 Microsoft SQL Server 2008 R2 Setup (English)	Microsoft Corporation	2014.01.02	32,4 MB	
	Microsoft SQL Server 2008 Setup Support Files	Microsoft Corporation	2014.01.02	21,6 MB 🖵	
	•			•	
	Currently installed programs Total size: 8 28 programs installed	75 MB			

2. In a new window click on Turn Windows features on or off and select Internet Information Services.



3. Click *OK*.



- Settings can be checked using the command Control Panel → Administrative Tool → IIS Manager → Help → About IIS (to check IIS version) and Control Panel → Administrative Tool → IIS Manager → Export Server Package (to check whether options are ticked).
- 5. Open subdirectory v2.35 in *Monas MS* v2.35 install directory after OS parameters are set. Double-click on the installation file *Monas MS WEB*.
- 6. Click *Install*.





7. A new window will open. Click Next.



8. *Monas MS WEB* installation destination window will open. Click *Next*. Click *Change* to choose a different installation location.

🖶 MonasMSweb - I	installShield Wizard
Database Server	an unit of a subsection method
Select database s	erver and authentication method
Database server th	at you are installing to:
(local)\SQLEXPRES	S Browse
Connect using:	
Windows auth	nentication credentials of current user
C Server auther	ntication using the Login ID and password below
Login ID:	sa
Password:	
	,
InstallShield	
	< Back Next > Cancel

- 9. *Monas MS WEB* installation window Database Server will open. Click *Browse...* and put database connection information.
- 10. Click *Next*.

🖶 MonasMSweb - InstallShield Wizard	i		×
Ready to Install the Program The wizard is ready to begin installation			C
Click Install to begin the installation.			
If you want to review or change any of exit the wizard.	your installatio	n settings, click Back.	Click Cancel to
InstallShield	< <u>B</u> ack	Instal	Cancel

- 11. A new window will open. Click *Install*.
- 12. Installation progress is displayed in *Monas MS WEB* installation window.

🖟 MonasMSweb - InstallShield Wizard	🛱 MonasMSweb - InstallShield Wizard
Installing MonasMSweb The program features you selected are being installed.	InstallShield Wizard Completed
Please wait while the InstallShield Wizard installs MonasMSweb. This may take several minutes.	The InstallShield Wizard has successfully installed MonasMSweb. Click Finish to exit the wizard.
Status:	and the second se
	Show the Windows Installer log
InstaliShield	< <u>B</u> ack <b>Finish</b> Cancel

13. Click *Finish* to finish Monas MS WEB installation process.

# 3 Starting and closing the program

*Monas MS* should be started in accordance to the procedure laid down: program *Monas MS server* is started first, then – *Monas MS Client* programs. Program *Monas MS server* might be set to start automatically upon computer startup during the installation process. In such case, *Monas MS client* may be started upon computer startup.

Program is closed in reversed order: all *Monas MS client* programs are closed first to be followed by *Monas MS server*.

## 3.1 Starting Monas MS for the first time

Double-click on *Monas MS server* desktop icon . A prompt asking to select the program language will pop up. Select the language and click *Select Language*.

	Language Choose Form	
	Choose Program Language	
	English	
	C Šánhźčé	
	Select Language	
Confirm		×
?	Would you like to enable sending of error reports to the developers so You can change the setting later at any time.	they can analyze and fix it?
	<u>Y</u> es <u>N</u> o	

#### Note:

If you wish error reports to be sent to program developers click Yes.

Windows Firewall window will open. Allow *Monas MS server* to share data with other programs. Select *Domain networks, such as a workplace network* (or specify the network) and click *Allow access*.

Windows Securi	ity Alert				
Windows Firewall has blocked some features of this program					
Windows Firewall ha domain networks.	as blocked som	e features of MonasNETServer MS on all public, private and			
1.8	Name:	MonasNETServer MS			
	Publisher:	UAB "Trikdis"			
	Pat <u>h</u> :	C:\program files\trikdis\monasnetserver ms\monasnetserver ms.exe			
Allow MonasNETSer	ver MS to com	municate on these networks:			
Domain networks, such as a workplace network					
Private networks, such as my home or work network					
Public networks, such as those in airports and coffee shops (not recommended because these networks often have little or no security)					
What are the risks of allowing a program through a firewall?					
		Allow access Cancel			

Database Connection window will open. Select destination address ...(local)\SQLEXPRESS, in the box **User** put in **root** and in **Password** – put in **root**. If a different destination address is used, put in **sa** in the box **User** and **root** in the box **Password**. Click **Save and Connect**.

Database Connection	Database Connection
Address	Address
IRENIJUS-PC\SQLEXPRESS	DELL-LATITUDE\SQLEXPRESS
+IRENIJUS-PC\SQLEXPRESS	+DELL-LATITUDE\SQLEXPRESS
Retry	Retry
User Password	User Password
root	\$ <b>a</b>
Save and Connect Finish	Save and Connect Finish

A prompt asking to update the database may pop up if the database version is different from the version used by *Monas MS server*. Click **OK**.

Confirm	×		
?	Database will be updated. Continue?	[Checki	Please wait ng and updating databases]
	OK Cancel		

Progress is displayed in the installation window.

Active program icon will appear in the taskbar. Move the mouse on the active program icon. Right-click on it to reveal options *Show/Stop*. Select *Show*. A new window will open. Put in the short program administrator name and the password.

😨 Short name	×
Short name	
1	
Password	
xxx	
ОК	Cancel

Short name [1] and password [adm]. Click **OK**. Main *Monas MS server* program window will open.

It is important that server and database are running. Start parameters are displayed in the status bar at the bottom of the main window.

<b>N</b>	1ain					
<u>F</u> ile	<u>V</u> iew	Connections	Configuration	<u>A</u> bout		
	I = I = I = I					
Data			Convers Cha		llager 1	
Data	base: co	Innected	Server: Sto	opea	Juser: 1	

If server is not running, select the command *Connections*  $\rightarrow$  *Server*  $\rightarrow$  *Set Port* and put in the IP address (*Server IP*) and used port (*Server Port*) of the computer with installed *Monas MS server*.

Server Port		
Server IP	Server Port	
127.0.0.1	8760	\$
192.168.0.12	-	
127.0.0.1	Cancel	

#### Note:

Address 127.0.0.1 is used when the program works in only one computer, external IP address is used in all other cases. Port 8760.

Another port may be chosen. It is important that the same port is specified in both server and client programs.

Open the server by using the command *Connections*  $\rightarrow$  *Server*  $\rightarrow$  *Start Server*.

Use command *Connections*  $\rightarrow$  *Database* to connect to a database or to select a different one. A new window will open. Select the database specified during the installation, put in the user name and the password.

Database Connection
Address
+DELL-LATITUDE\SQLEXPRESS
- P 1
Hetry
User Password
Save and Connect

Database Connection
Address
DELL-LATITUDE\SQLEXPRESS
+DELL-LATITUDE\SQLEXPRESS
Retry
User Password
sa ××××
Save and Connect Finish

Select the working language of *Monas MS server*. Prompt the language selection window by using the command *Configuration*  $\rightarrow$  *General Parameters*, select the desired language and click **Set**.

I Options	×
General parameters Other Options  Choosing language English Set Lietuviy English Sofricté	
Output program's generated events	
DK Cancel	

Close *Monas MS server* using the command *File*  $\rightarrow$  *Close*.

Confirm	×
Close program?	
<u>Y</u> es	No

Click Yes.

Insert the access key into the USB port of the computer with installed *Monas MS server*. Start *Monas MS server* as described above.

#### Notes:

1. Note DEMO will disappear and options selected in access key will be activated once access key is inserted and Monas MS server restarted.

2. A prompt asking to update the database may pop up if the database version is different from the version used by Monas MS server. Click **Yes**.

曝 Main				
<u>File ⊻iew Connections</u>	Configuration <u>A</u> bout			
Database: connected	Server: Started on 127.0.0.1:8760	Liser: 1	Perceiving TCP server: Started on 192-168-1 100-8 Forwarding - off	

Double-click on *Monas MS client icon*. In a new window specify the IP address of the computer with installed *Monas MS server*. Click **OK**.

📱 Server list			×
Select server			
127.0.0.1			
Cancel	Betru	ΟΚ	
			J

#### Note:

*IP address should be specified according to the configuration of the computer network.* 

A new window will open. Put in the short program administrator name and the password.

💈 Short name	×
Short name	
1	
Password	
XXX	
ОК	Cancel

Factory settings:
short name – [administrator] and password [admin].
or
short name - [1] and password [adm].
Click **OK**. Main *Monas MS client* program window will open.

🖉 Main						
File Data Con	nfiguration Rep	iorts Help				10:53:17 2014 m. gegužė 16 d.
Events List	Object state	Map				
Received	Time	Object Nr.	Object	Event Code	Event	Received les
•						
Received	Time	Object Nr.	Object	Event Code	Event	Received lev
•						) D
Received	Time	Object Nr.	Object	Event Code	Event	Received lev
1						
Database: connec	cted 5	erver: connected	User: 1	Pending Events: 0		

It is important that server and database are running. Start parameters are displayed in the status bar at the bottom of the window. If the database is not running, it can be started using the command Configuration  $\rightarrow$ 

## TRIKDIS Monas MS v2.35\_IM\_EN\_161223

Database. A new window will open. Specify the used database, and put in the user name and the password used for database.

## Note:

As address not only domain name can be used, but also SQL database full IP address.

📱 Database Connection	×
Address DELL-LATITUDE\SQLEXP	RESS
User sa	Password ****
Save and Connect	Finish

Factory settings:	
user - [root] and password [root]	
or	
user - [sa] and password [root]	

Click Save and Connect to open the database.

Select the working language of *Monas MS client*. If you want to change the working language, use the command *Configuration*  $\rightarrow$  *Options*  $\rightarrow$  *General Parameters*, select the desired language and click **Set**.

🖉 Options						×
Main Window Configuration Events Parameters	Main screen sounds and colors	General parameters	Object parameters	Drivers	Map	1
Choosing language						
Language						
English Set						
English						
Šóńńźćé	tevelopers					
Millow application to send enor reports to						
	ОК	Cancel				

Restart Monas MS client. Language settings will have changed.

## 3.2 Starting *Monas MS server* the next time

Double-click on the icon. Active program icon will appear in the taskbar and *Monas MS server* will start. Start *Monas MS client* if program settings do not have to be changed.

If *Monas MS server* program settings need to be changed, move the mouse on the active program icon. Rightclick to reveal option *Show/Stop*. Select *Show*. A new window will open. Put in the short administrator name and the password.

繴 Short name	×
Short name	
1	
Password	
XXX	
ОК	Cancel

Factory settings: short name - [1] and password [adm].

Click **OK**. Main Monas MS server program window will open.



It is important that server and database are running. Start parameters are displayed in the status bar at the bottom of the main window. If server is not running, open it by using the command *Connections*  $\rightarrow$  *Server*  $\rightarrow$  *Start Server*.

Main	₹ ×
ile View Connections Configuration About	
Detabase	
Server   Set Port	
Receive TCP protocol Start Server	
TCP output Stop Server	

# 3.3 Starting Monas MS client the next time

This program can be installed either on the same computer as the server or on a different one.

Double-click on the icon. A new window will open. Put in the short program user name and the password.

繴 Short name	×
Short name	
1	
Password	
XXX	
ОК	Cancel

Factory settings: short name - [1] and password [adm].

Click **OK**. Main Monas MS client program window will open.

	ingaratori riop	Juits Help				TO.SO.TY Continingegaze
vents List	Object state	e Map				
leceived	Time	Object Nr.	Object	Event Code	Event	Receive
eceived	Time	Object Nr.	Object	Event Code	Event	Receiv
				1		
· · ·	T.					
	Ime	Ubject Nr.	Ubject	Event Code	Event	Hecelv
ceived						
ceived						
ceived						
eceived						

In is important that server and database are running. Start parameters are displayed in the status bar at the bottom of the main window. If the database is not running, it can be started by using the command *Configuration*  $\rightarrow$  *Database*. A new window will open. Select the database in use, put in the user name and the password.

	Factory settings: user - [root] and password [root].
Save and Connect Finish	Click <b>Save and Connect</b> and the database will start

# 3.4 Closing Monas MS client

Program is closed using the command *File*  $\rightarrow$  *Close*.



Click Yes to close the program.

## 3.5 Closing Monas MS server

Move the mouse on the active program icon. Right-click to reveal option *Show/Stop*. Select *Stop*.

Confirm		×
Close program?		
Yes	No	

Click Yes and program will close.

If nothing happens after selecting *Stop*, select *Show*. A new window will open. Put in the short program administrator name and the password. Try to close the program again.

## 4 Monas MS server configuration

Program configuration is carried out once *Monas MS server* is started in order to ensure the correct interaction between the parts of the program.



#### Database and server configuration and connection

It is important that server and database are running. Start parameters are displayed in the status bar at the bottom of the main window. Detailed start process is described in section "Starting *Monas MS* for the first time".

If database is not running, it can be started by using the command *Configuration*  $\rightarrow$  *Database*.

If *Monas MS server* is not running, it can be started by using the command *Connections*  $\rightarrow$  *Server*  $\rightarrow$  *Start Server*. Command *Connections*  $\rightarrow$  *Server*  $\rightarrow$  *Set Port* will open the window that displays *Monas MS server* installation IP address and port.

Server Port			
Server IP		Server Port	
127.0.0.1	•	8760	\$
OK		Cancel	

#### Note:

Addresses specified in the picture are most commonly used when Monas MS is installed on one computer.

Same actions are performed when *Monas MS* is to be installed on several computers working in one network. Real IP addresses of network devices are specified.

## 4.1 Connection and configuration of data receivers

Messages from receivers are received via consistent COM (RS232) ports or through the local network using TCP protocol. The latter option must be activated using the secure access key.

Open the port window using the command *Configuration*  $\rightarrow$  *COM Ports* and specify parameters of the necessary COM (RS232) ports. Click **New** to enter a new port, **Change** to change its parameters, **Delete** to delete a port from the list and **Clean** to clear messages stored in that port.

H	Co	omports							×
	Nur	Comport	Protocol	Bitrate	Data bits	Parity	Stop bits	Receiver	Status
	1	COM1	Surgard MRL2-DG	9600	8	None	1	RF11_140428	Open
	2	COM4	Surgard MRL2-DG	9600	8	None	1	IPcom_Win	Open
ľ									
		Ne	w Chai	nge	Delete	.	Clea	r	Close
				-					

In the window *Change port* specify the name of the receiver, the protocol used for connection with the computer, select a port and its settings, enter the lines, specify their types and names and select *Follow Receiver*.

Please note the protocol used by the receiver for connection with a computer and the port settings. Program allows using different protocols for separate ports. Enter all lines.

Select *Radio Line* if the connection between the receiver and the computer is carried out in Surgard MLR2-DG protocol and radio security system RAS-2M messages are being transmitted. This will allow the display of the events in the screen correctly. *Phone Line* is selected in all other cases.

In specific cases messages received through one line have to be forwarded to another one by changing the line number. It can be done by choosing the desired line, ticking *Forward to* and indicating the number of that line. Received messages will be displayed in the screen under another line number.

🐺 Change comport				×
Receiver Name	Lines			
IPcom_Win	N Name T	ype Redirected	Redirected to	New Line
Protocol	1. PI	hone Line No		
Setup	2. Pi	honeLine No		Delete Line
Settings	3. P	honeLine No		
	4. Pi	noneLine No		Line
	6 P	honeLine No		1
Baud rate 9600	T I 7. PI	hone Line No		Lines tupe
Data bits 8	L' 🗾 8. PI	hone Line No		
EnrwardTothis port	9. PI	hone Line No		
	A. P	honeLine No	_	Line
Parity None 🗾	B. Pi	honeLine No		
Flow control None		honeLine No	-	Beditect to 1
Clear	<u>р.</u> н	IONE LINE INO		
	01			
	40			
COM buffer is empty.				

#### Note:

Information on possible message forwarding to other devices is laid out in other documents.

Connection with receiving devices may be checked by following the command  $Data \rightarrow COM$  port data. Choose the desired port. Messages received via that port and data exchange will be displayed in real time.

🂵 View comport data	×
Comport	
COM1 Clear	
5032 185008E 31831 20215032 184181E 3883B13615032 184181E 3883B1451	

Open the settings window using the command *Connections*  $\rightarrow$  *Receive TCP protocol* if messages are received using the TCP protocol. In the settings window specify the IP address and the port of the device the data is received from, select *Open* and *Follow Receiver*.

Receiving TCP address	
Server IP 192.168.1.100	Server Port 8760
V Started	🔽 Seek receiver
ОК	Cancel

5 Creation and segmentation of automatic database backup schedule

# 5.1 Schedule creation

Database backup schedule is created by using the command *Configuration*  $\rightarrow$  *Database* in program *Monas MS* server.

Backup	×
Full backup Previous months	
Start time 2014.05.24 💌 00:00:00 👗	
Backup period	
0 👽 Month 1 👽 Day 0 🗲 Hour	
File limit 3 主 Note: specifying 0 means no file count limitation.	
Backup directories	
C:\Monas MS kopijos\	Add backup dir
	Change backup dir
	Remove backup dir
Folder to store temporary files	
ОК	Cancel

Information on when and how often databases are created (object slips, current and last month messages) and where they are stored is displayed in tab *Full backup*. Copies may be stored in several locations. File limit is also specified.

Select when the first database copy will be created in the box Start time.

Select the frequency and periodicity of how often database copies will be created in the boxes *Backup period*, *Month, Day, Hour*. Time is shown according to the set periodicity, that is, the next copy creation date will be later than now (time is reset upon reopening the *Backup copy* window) in the box *Start time*.

The number of the latest copies to be stored in the specified directories and the older ones to be deleted is set in the box *File limit.* 0 means that all data copies will be stored.

Locations for storing created database copies are shown in the box *Backup directories*. Database copies may be stored in several locations.

Because a not archived database file can not be very large when database copies are created, the location of a directory where temporary files are stored is specified in the box *File to store temporary files*. Temporary files are deleted once a database copy is created.

Received event files are displayed in tab Previous months.

Backup	×
Full backup Previous months	
1. 2013 12	Make backup Remove Import events
OK	Cancel

Created database copies have an extension .mnr and their names YYYYMMDD\_HH:mm:ss.mnr refer to the date and time when the file was created. All data in relation to the objects and event descriptions, received and processed events, archived (processed) events of the current month, archived events of the last month and settings of the ports used by *Monas MS server* are stored in the file.

Click *Make backup* to create a selected month events database copy and save into a data logger. Copied files will have an extension .mnb.

Monthly data can be deleted from the SQL server in order to clear up the space and save resources. Click *Remove* to delete events in a selected month (it is recommended to make a copy prior to this). Deleted data will not be available in *Reports*.

Old events that are deleted from the database can be uploaded and rewatched if their copy is on the disc (extension .mnb). Click *Import events* and select the desired .mnb file to upload the events. Uploaded events can be found in *Reports*. Response comments are uploaded together with the events.

# 5.2 Segmentation of received messages

Automatic segmentation of received messages is carried out in order to reduce the database space and make the creation of reports faster, therefore, messages older than two months are moved to separate databases stored in different files. Segmentation is carried out on the first half of the first day of the month. If necessary, segmented messages can be stored in both, a database and in a separate data logger. Segmented messages in the database can be used for creating reports, or those stored in a data logger for restoring a failed database. Databases of event segmented last month are displayed in window *Previous months*. Event segmentation is carried out on the last day of every month at 23:59:59, all messages received that month are moved to a new database.

For example:

October events will be segmented and moved to a separate database on the 30th of November at 23:59:59. A note 2011 10 will be displayed in this table on the 1st of December at 00:00:00 (depending on the length of segmentation, time may be 00:00:15). Months displayed in this window refer to the available data for report creation.

# 6 Monas MS client configuration

# 6.1 Key controls

Monas MS client is controlled by using menu bar commands or/and keyboard shortcuts.

Command *File*  $\rightarrow$  *Log out...* allows one operator to finish the shift and the other to start one.

Command *File*  $\rightarrow$  *Clear...* deletes messages from the top processed messages window.

Command *File*  $\rightarrow$  *Users...* is used to set program user access and options.

Command *File*  $\rightarrow$  *Close* is used to close *Monas MS client*.

Command *Data*  $\rightarrow$  is used for creating databases on secured objects.

Command Configuration  $\rightarrow$  Options is used to set desired main window properties.

Command Configuration  $\rightarrow$  Archive is used to move data from received messages window to processed messages window.

Command Configuration  $\rightarrow$  Unlock is used when moving received messages to processed messages window is not allowed.

Command *Configuration*  $\rightarrow$  *Shortcuts* is used to create a key combination for a selected action from the list.

Press [New] button	Ctrl+N	
Press [Edit] button	No shortcut	
Press [Delete] button	No shortcut	
Press [Copy] button	No shortcut	
Check [Use main]	No shortcut	
Jump to [Main data] tab	F2	
Jump to [Schemas] tab	F4	
Jump to [History] tab	F3	
Jump to [Responsable persons] tab	F7	
New object	No shortcut	
Delete object	No shortcut	
Print object	No shortcut	
Filter objects	Ctrl+P	
Jump to [Test] tab	F5	
Jump to [Opening/closing] tab	F6	
Jump to [Disabled events] tab	F8	
Click [Clear] button	Ctrl+I	
Jump to [Events] tab	F11	
Jump to [Description] tab	F1	
Create new subgroup	No shortcut	
Copy object	No shortcut	
Jump to [Generate event] tab	F10	
Click [Apply] button when editing object	Ctrl+4	
Click [Cancel] button when editing object	Ctrl+5	
		_

Choose the action and press a desired key combination on the keyboard. Select the desired combination and click *Enter* in order to delete it.

Commands Configuration  $\rightarrow$  Database and Configuration  $\rightarrow$  TCP server allows to change the database and server addresses. These commands are used when the existing network configuration is being changed or new workplaces are installed.

Command Configuration  $\rightarrow$  Receiver time setting is used to set the time on radio receiver RI-4010VT which works using Monas2 protocol.

Command *Reports*  $\rightarrow$  is used to create event reports.

Command  $Help \rightarrow About$  displays brief information on the program version: name of the program, version, date of creation, developers and main functions.

# 6.2 Setting main window properties

Properties of the main window of *Monas MS client* are set by using the command *Configuration*  $\rightarrow$  *Options*. Choose the working language in tab *General Parameters*.

Specify the information that will be seen once a new message arrives (left tab) concerning active events in the window (mid tab) and on processed events (right tab) in tab *Main Window Configuration*.

P Options	Main and a star [ Course	lauratur Diintanun bu Din	x l.Har
Charter     Construction (Construction)     Events Parameters	Main screen sounds and colors   Genera	a parameters   Ubject parameters   Drive	rs   map
Vext event 2 sec.	iv nue scieeri	see in window J235 💽	
New Events     Active Events       Selected Fields       Received       Time       Dbject Nr.       Dbject Event       Event Code       Event       Received level       Retranslator       Retranslator level	Availabled Fields Address Contract Destination Phone Partition Notes Receiver Name Line Retranslator Nr. City Region		
Use 'Show repeated' checkbox override     Check box is checked by default     Check box is unchecked by default     Check box is unchecked by default			
	OK Cance	4	

Tick *Clear* to disable the display of events in the top window on the program startup.

Box *Next event* refers to time after which a new message window will be opened.

Tick *Hide screen* to close the message window. If ticked, message window is minimised and operation sees the entire width of the screen once there are no processed messages. If unticked, an empty message window taking up half of the screen will be displayed.

Set the number of messages to be displayed on the screen in the box *See in window...* Other messages can be checked using the report properties.

Some message codes and responses are displayed in tab *Event Parameters*. Settings of this tab normally are not changed.

Options		×
Main Window Configuration Events Parameters Main scree	n sounds and colors General parameters Object parameters Drivers Map	
Registration Non reaction time 60 🛫 s. 🔽 Save repeated	Events showing on screen 59 🛖 min.	
Unknown Object Reaction Service 🔽 🔽 React	Unknown Event Reaction Service	
Test from objects		
NoTest from object Reaction No test	Event Code FFF	
Test not on time Reaction Test		
Object Opened/Closed not in time	Event locking	
Opened not in time Reaction Open	Do not lock events	
Closed not in time Reaction Close		
Object no open/close at the time		
Object no open in timeReaction Time control	Event Code	
Object no close in timeReaction Time control	Event Code FF2	
Special object state	Reminder reaction override	
Reaction Alarm	Use custom reaction	
Automatically send SMS for new events	 _	
🗖 Enable		

Tick *Unknown Object – React* to display all received objects (including not described ones) on the screen. Untick to display only described objects.

Some program responses and used message codes can be changed in this tab.

Sound properties, color indications and notes of the monitoring schedule are set in tab *Main screen sounds and colors*.

Active event sounds       Sec.         Sound stats after	ain Window Configuration	Events Parameters Main scr	een sounds and colors General	parameters Object parameter	s Drivers Map
New events sound       ▼ Play sound for new events         Sound playing interval       15 ★ sec.         Sound for new events       DING.WAV         Object status color         Object is closed       Object         Status unknown       Close         Special object state       Is monitored         Object not secured state       Is nonitored         Object not secured state       Is not monitored         Open/Close       Open, if at least one subgroup is closed         Unknown object status       Closed, if at least one subgroup is closed	Active event sounds Sound starts after Sound delay interval	0 🔹 sec. 5 🔹 sec.			
Object status color         Object is opened       Open         Normal object state       Is monitored         Object is closed       Close         Status unknown       Object not secured state       Is not monitored         On schedule       Right         Not on schedule       Not on schedule         Unknown object status       Closed, if at least one subgroup is closed	New events sound Play sound for new events Sound playing interval Sound for new events	ents 15 sec. DING.WAV	Play sound for new arc	nive events	
Unknown object status	Object status color Object is opened Object is closed Status unknown On schedule Not by schedule	Close Right Not on schedule	Normal object state Special object state Object not secured state Open/Close O Open, if at least one	Is monitored Sp. monitoring Is not monitored subgroup is open	
	Unknown object status		C Closed, if at least or	e subgroup is closed	

Set the time after which a signal will be heard following a received message in the box *Sound starts after*. It is recommended to set it to 0 sec. Signal intervals can be set in the window *Sound delay interval*.

Select the signal for new events, its intervals and the melody in the section *New events sound*. It is recommended to keep the factory settings.

Colours and notes of the monitoring status and starting and closing schedules can be set in the section *Object* status color.

# 7 Setting monitoring properties

Properties of *Monas MS client* responses can be set using the command *Configuration*  $\rightarrow$  *Options*.

Event codes that will be formed when secured object status is changed to special or back or when unimportant events are entered are set in the tab *Object parameters*.

Tick the formation of desired messages and specify the even codes. Recommended event codes are presented in the table below.

🗜 Options	× × × × × × × × × × × × × × × × × × ×
Main Window Configuration Events Parameters	Main screen sounds and colors General parameters Object parameters Drivers Map
Object state Generate on activate Event Code E 000 000 (E 123 123)	Disabled events Generate on activate Event Code E 000 000 (E 123 123) Generate on deactivate Event Code E 000 000 (E 123 123)
Object note event Event Code E 100 000 (E 123 123) Reaction Service	Generated events Receiver 0 🚖 Line 0 🚖
Restore seeking Generate when did not receive restore Event Code E 000 000 (E 123 123) Reaction	List refreshing Auto refresh Every 1 = min.
	OK Cancel

Event description	Event code	Note
Object status (secured/not secured/special security)	E B01 000	Message is formed once the monitoring status is changed.
Temporarily unimportant events: upon activation upon restoration	E B02 000 R B02 000	Messages are formed once object event monitoring is changed.
Object comment	E B03 000	Message is formed when a new object comment is entered.
Waiting for restoration	E B04 000	Message is formed if event restoration message is not received within the time period specified in the object comment.

#### Note:

Messages are formed using the receiver and line codes displayed in this table.

Event codes used in the object comments need to be described.

Set the automatic update of the objects list using the setting *List refreshing*. If ticked and the time period is specified, list of the objects in the tab *List* of the main *Monas MS client* window will be updated periodically. Click *Refresh* to update the list manually.

# 8 Setting crew and object monitoring properties

These sections are displayed and filled in only if program modules MAPS and NAV are used.

Possible responses, fast message texts and other control parameters are set in the tab Drivers.

Possible reaction statuses are set in the box *Driver status list,* possible station operator's responses and directions in the box *Custom responses.* 

Set possible crew responses in the box Quick messages.

Options					
ain Window Configuration   Events Parameters	Main screen sounds and colors	General parameters	Object parameters	Drivers N	1ap
ves no vait	Add Delete all group is waiting	object ject g	Adr	te	
uick messages pok round object, no break vailing person			Ada Dele	te	
Triver motion tracking I Generate comment after moving (Started to □ 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	a move):	Default driv	ver reaction time	3 all	
<u> </u>	n driver and object is (Arrived at obj	iect):	min.		

Setting *Generate comment after moving (Started to move)* indicates the distance from the starting point that the crew has to make in order to record the moving and form the note *Started to move*.

Setting *Generate comment when distance between driver and object is (Arrived at object)* indicated the distance to meters between the car and the object in order to record the arrival at the object and form the note *Arrived at object*.

Setting *Default driver reaction time* defines the crew response time. A more detailed description on the crew response times can be found in the object comment section *Driver reaction time*. Value of this setting is used if there are no entries in the indicated section.

Some moving and showing settings can be set in the tab *Map*. Event codes that will be formed once the mobile crew enters the set ground area can be found in the same tab.

Choose the map showing mode. If box *Separate window* is ticked, the map will be opened in a separate window and lists of the objects will be in the main one.

Set the view scale between 1 and 21. 1 means that the view will be from far away (high), 21 – very close. It is a Google Maps parameter. Crew scale is used when a crew is selected in the map, object scale when the object is selected.

Main window       Object Nr.       00 • 0 • 0000 • 00         Separate window       Event: driver left the zone       E000000         //iew scale       14       Event: driver left the zone       E000000         //iew scale       14       Event: driver has returned       E000000         //iver history view       Driver input event code       000         None       Driver input event code       000         Driver return time       10       Minutes         Time when driver is in the zone       E00       Events         Driver siren on channel       Image: Seconds       Events         Driver siren on channel       Image: Seconds       Events event	1ap mode	Zone events			
Separate window         Separate window         Separate window         Fiew scale         Driver scale         14         Diver history view         Driver history view         None         Time         Driver return time         Driver scale         Driver return time         Driver return time         Driver scane         Driver scane         Driver scane         Driver scane         Driver scane         Driver return time         Driver scane	D Main window	Object Nr.	00 · 0 · 0000 · 00 12 · 3 · 4567 · 89		
Driver scale     14       Diviect scale     14       Diviect scale     14       Diviect scale     14       Event: driver has not returned     (£ 000 000 (£ 123 123)       Driver inbut event code     000 (£ 123 123)       Driver input event code     000 (ABC)       Driver return time     10       Driver return time     10       Driver return time     0       Time when driver is in the zone     50       Driver sien on channel     0       Driver sien     0	'iew scale	Event: driver left the zone	E 000 000 (E 123 123)		
Direct scale     14     Event: driver has not returned     E 000 000 (E 123 123)       Driver history view     Driver input event code     000 (ABC)       Time     Driver return time     10 * Minutes       Speed     Time when driver is in the zone     60 * seconds       Driver return time     0 *       Event: driver sien on channel     0 *       Enable driver sien     Image: Second seco	Driver scale	Event: driver has returned	E 000 000 (E 123 123)		
Immer history view     Driver input event code     000       None     Driver input event code     (ABC)       Time     Driver return time     10 + Minutes       Speed     Time when driver is in the zone     50 + seconds       Timer message     Driver siten on channel     0 +       Send notes auto     Enable driver siten	Dbject scale	Event: driver has not returned	E 000 000 (E 123 123)		
Time     Driver return time     10 \$ Minutes       Speed     Time when driver is in the zone     60 \$ seconds       Inver message     Driver siren on channel     0 \$ seconds       Enable driver siren     T	river history view ● None	Driver input event code	000 (ABC)		
Speed     Time when driver is in the zone     60 \$\$ seconds       briver message     Driver sien on channel     0 \$\$       Send notes auto     Enable driver sien     •	) Time	Driver return time	10 🗘 Minutes		
Send notes auto     Driver siren on channel     0 \$       Enable driver siren     •	) Speed	Time when driver is in the zone	60 🔹 seconds		
Enable driver siren	Send notes auto	Driver siren on channel	0		
		Enable driver siren			

Specify the event codes. Recommended event codes are shown in the table below. Codes are applied to all crews. Once crew returns to the deployment location an event with a comment including crew IMEI and/or its name is formed.

Event description	Event code	Note
Crew left the zone	E B05 000	
Crew returned to the zone	R B05 000	
Crew did not return in time	E BF3 000	
Event in Aplicom input		
upon activation	E BF4	
upon restoration	R BF4	
Note:		

*Object number is not used in the program.* 

# 9 Database backup and backup copy upload

Database stores data in relation to objects and event descriptions, received messages and *Monas MS server* port settings.

It will not be difficult to ensure fast program operation restoration in the event of a computer failure or when installing new equipment if automatic database copy schedule is created and copies are stored in a data logger. This section describes how to create a database copy manually and how to transfer available data into a new database.

## 9.1 Database backup

Database backup is performed using database creation/restoration program Database backup which can be found by following *Start Menu*  $\rightarrow$  *Programs*  $\rightarrow$  *Trikdis*  $\rightarrow$  *Monas MS server.* 

1. Once Database backup is running it can be chosen whether to create a database copy (*Backup*) or to restore the database from a copy (*Restore*).

🕄 Preparation	×
Please choose your language:	
English	•
Select what you want to do:	
C Restore	
Ok Cance	3

Select Backup or Restore and click **OK.** Put in MS SQL server login details.

🔀 SQL server login	×
Please provide SQL server login details.	
SQL Host:	
DELL-LATITUDE\SQLEXPRESS	
SQL Username:	
root	
SQL Password:	
****	
Ok Cancel	

2. Click **OK** and select location for the backup file.

🕄 Data Backup for MonasNet	
Backup	
Please select file for new backup:	
D:\Monas MS kopijos\	
	1
	Finish

3. Click *Finish* to create a database copy.

Backup progress is displayed in the new window.

🖏 Data Backup for MonasNet	
Backup	
Backup in progress. Please wait	
Compressing backup	
70%	
	Close

4. Once database backup is finished, file with an extension .mnr and name YYYYMMDD\_HH:mm:ss.mnr will be created. File will contain this data: all data in relation to objects and event descriptions received and processed messages, last month events and *Monas MS server* port settings.

## 9.2 Backup copy upload

5. Choose Restore and click **OK**. Select a data copy file to be uploaded. Only files (with extension .mnr) created using Database Backup program or *Monas MS server* database copy module may be selected.

#### Note:

Monas MS server and Monas MS client programs must be closed during the data upload.

🕄 Data Backup for MonasNet	
Restore	
Please select backup file:	
C:\Monas MS kopijos\20140315_163546.mnr	
	Next

6. Click *Next*. A message will pop up warning that the present data will overwrite existing *Monas MS* database. Click *Finish* to save.

🕄 Data Backup for MonasNet
Restore
Warning!           Attention!         All databases containing data will be replaced!           Select Finish to continue or Close the program.           Please make sure the server has been shut down as restore problems may accour.
Back Finish

## Note:

A message might appear during the upload warning that Monas MS server installation was not found and COM port settings will not be uploaded. Upload will continue upon clicking OK, however, COM port settings file will not be uploaded.



7. Upload progress is displayed in the new window.

🕄 Data Backup for MonasNet	
Restore	
Restore in progress. Please wait	
Restoring davp database	
35%	
	Close

8. Once data backup is finished click *Close*.