

Installation and operation manual

SUPERVISORY SOFTWARE NMS ACCESS CONTROL





Version 3.0.XX Update: 06-07-2020



www.aat.pl

What is it for and for whom this manual is intended.

This manual is intended for installers and individuals who want to familiarize themselves with the process of installing NMS ACCESS CONTROL, programming the system and verifying the correctness of its operation in terms of communication and utility. Therefore, it describes the next steps to follow to accomplish this. The manual is limited in its content to the most important steps needed to do this. The following steps are described in the recommended order of execution. This should make it much easier for people who need to perform only basic tasks related to the configuration of the devices included in the system, the addition of cards and users, together with privileges in terms of access to premises, checking the system status and generating basic reports.

A full description of all the options in the program is included in the *NMS ACCESS CONTROL Program description*.

The development of the NMS ACCESS CONTROL program is planned with new advanced access control functions and further functionalities related to video surveillance system (VSS), which will be successively appearing in next versions.

TABLE OF CONTENTS

Section 1. Introduction	(
1.1 Basic information	C
1.2 System functions and parameters	(
1.3 System block diagram	(
Section 2. Software installation and running	(
2.1 PC minimal requirements	(
2.2 Maximal system capacity (after adding extension licenses)	(
2.3 Software installation	(
2.4 Software starting	1
2.5 Operator screen and navigation in the program window	1
Section 3. System configuration	2
3.1 Devices - Access Control - Controllers	2
3.2 Devices - Access Control - Controller - Doors	2
3.3 Devices - Access Control - Controller - Door - Readers	2
3.4 Devices - Access Control - Controller - Inputs	2
3.5 Devices - Access Control - Controller - Outputs	2
3.6 Devices - Access Control - Elevator controllers	3
3.7 Devices - Access Control - Elevator controller - Elevator	3
3.8 Devices - Access Control - Elevator controller - Elevator - Reader	3
3.9 Devices - Access Control - Elevator controller - Elevator - Floors	3
3.10 Devices - Video Surveillance System	3
3.11 Devices - Operations	3
3.12 Devices - Information	3
3.13 Devices - Groups	3
Section 4. Cards, users and privileges	3
4.1 Schedules	3
4.2 Access levels	3
4.3 Cards	3
4.4 Users	2
Section 5. Templates	4
5.1 Video views	4
Section 6. Panels	2

Section 7. Events and reports	47
7.1 List of events	47
7.2 Automatic reports	48
Section 7. System settings	50
7.1 Groups and operators	50
7.2 Client settings (operator workstation)	52
7.3 Licensing	53
7.4 System backup	58
License agreement	61

Section 1. Introduction

1.1 Basic information

The NMS ACCESS CONTROL supervisor software is a new software that is designed for small and medium-sized access control systems. It works with the KDH-KS3012-IP, KDH-KS3024-IP and KDH-KS2000-IP-ELV standard controllers. Due to the client-server structure, it is possible to operate the system from multiple workstations (2 stations under a free license, additional after the purchase of expansion licenses). The system is simple to install and has an operator friendly graphical interface. In the current version, it is a program designed primarily to support access control systems, but it contains some elements of VSS and an extensive visualization of system elements state.

The operator interface allows:

- defining system parameters (permissions for operators, licenses, backup)
- configuration of parameters of physical system components (controllers, doors, readers)
- defining logical elements (schedules, access levels, cards)
- define scenarios that automatically react to events in the system
- monitoring the status of the "on-line" system using the icons of system elements located on the site maps (with hierarchical structure), on the synoptic array and through the messages displayed on the event stack
- displaying user pictures after using the card
- displaying of cameras located in controlled passages automatically after an event or by clicking on the icon
- access control to floors through the reader located in the elevator cabin (with the option to unlock all or selected floors by the operator or schedule; * option available soon)
- access control to locker cabinets up to 69 with one set of controller, modules and reader
- generating filtered event reports (automatically or on demand) and save in CSV or HTML format (with print to PDF option)

The NMS ACCESS CONTROL software also offers a number of features described in detail further that allow to meet the requirements often posed by the system administrator, such as: access after using 2, 3 or 4 cards, the first unlock of the controlled passage using the so-called "first card" with special privileges, access after operator confirmation, man trap and anti-passback within the controller. The program will be gradually expanded with new features.

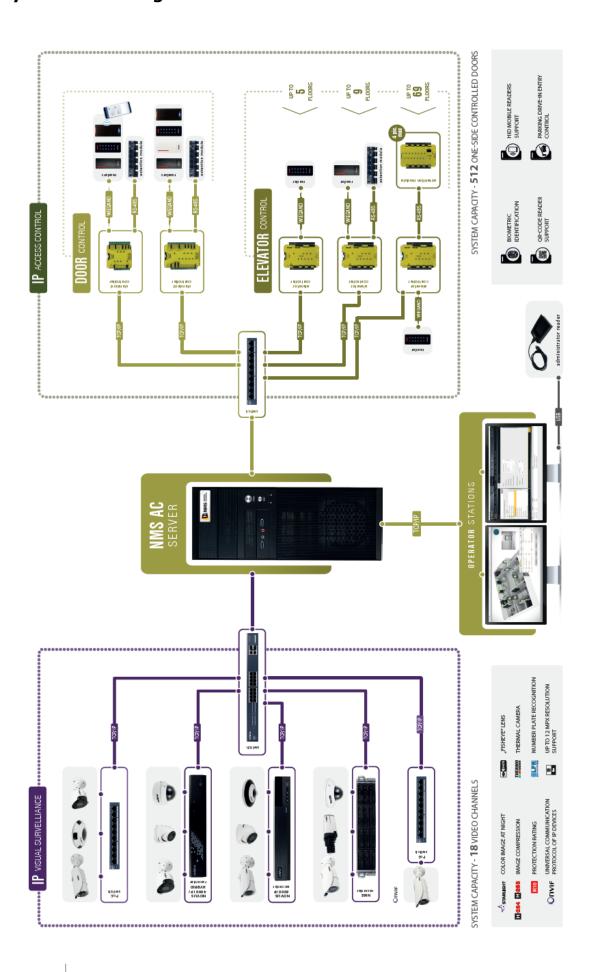
The list of key functions and parameters of the system is presented in the attached table and the structure of the system is shown in the enclosed scheme. Controllers with IP ports communicate with the server service over Ethernet. In the current version of the program, the system can support up to 128 controllers (8 under the free license, additional after the purchase of expansion licenses), so with 4-door controllers - 512 single-sided controlled doors or 256 double-sided. The capacity of card users is 20 000 cards.

The basic license version is available free of charge for download from the website www.nmsac.aat.pl in the download section or you can obtain it by contacting the AC Department and the description of the licenses tab is located in 'System settings' chapter of this manual. Paid licenses extending the capacity of the system can be found in the price list in the NMS ACCESS CONTROL section.

1.2 NMS ACCESS CONTROL functions and parameters

Parameter or function name	Parameter or function value		
PC operating system	Windows 10 Pro		
Database	Microsoft SQL		
'On-line' monitoring	YES		
NOVUS NVR and IP cameras integration	YES		
Elevator control (up to 69 floors)	YES		
Panels with system elements icons	YES		
User photos displaying	YES		
Access related functions			
- user identification mode	Card, PIN, card or PIN, card + PIN		
- local anti-passback	YES		
- global anti-passback	YES		
- "first opening card"	YES		
- supervisor mode	YES		
- multiple access (2 - 4)	YES		
- latch mode	YES		
- schedule based with first opening card or automatic unlocking	YES		
Alarm functions			
- threaten code	YES		
Users import from file	YES		
Controllers	KDH-KS3012-IP, KDH-KS3024-IP.		
	KDH-KS3000-IP-ELV		
KaDe controller's memory capacity			
- card memory	20 000		
- event memory	50 000		
Communication			
Built in IP ports	- Ethernet network		
Readers and cards			
- card format	26-40 bit Wiegand format compatible		
- card type	any reader compatible technology		
Access related parameters	any reader companies technology		
	200		
- access levels quantity			
- schedules quantity	200		
- holidays quantity	80 (32 days)		
Reports	Filtered, save in CSV, HTML (PDF) format		

1.3 System block diagram



Section 2. Software installation and running

This chapter will discuss the installation, first run, and components of the NMS ACCESS CONTROL window.

2.1 PC minimal requirements

The minimum requirements listed below should be considered as absolute minimum and intended for small systems. It is not possible to specify exactly what parameters the computer should have for a given number of devices. Therefore, the given parameters in terms of processors or RAM should be treated as indicative.

- Operating system: Windows 10 Pro,
- Intel Pentium Gold G5400 processor, 8GB RAM, PCI Express 16x graphic card with 1 GB memory and DirectX 9.0 support
- Network card 10/100 MB, HDD 500 MB (for system without video devices)

The .NET Framework V 4.7 and MS SQL Server installation is required for the correct operation of the system. If they are not in the system, they will be automatically installed before the installation of the application because they are in the installation file.

ATTENTION! Controllers should be connected to separated physical network (switch, network card etc.) or separated VLAN.

For larger systems that include devices for the access control system and the video surveillance system in quantities close to the maximum capacity of the system we recommend the computer station from our offer. It has sufficient parameters to handle the size of the system.

2.2 Maximal system capacity (after adding extension licenses)

* Due to limited functionality of integrated VSS in current version of NMS ACCESS CONTROL we do not offer paid extension options for video. They will be available in succeeding versions.

Licenses	Free	Max.	
Client stations licenses	2	10	
Controllers licenses	8	128	
Number of controlled doors:			
- Single-sided (KS-3024)	32	512	
- Double-sided (KS-3024)	16	256	
NOVUS video channels licenses	16		
ONVIF video channels licenses	1		
RTSP video channels licenses	1	*	
Video channels summary license		64	
Panels licenses	4	64	
Scenarios licenses	4	64	

Paid	licenses
Client	stations licenses
NMS	ACCESS CONTROL KL1
Contr	ollers licenses
NMS	ACCESS CONTROL KT4
NMS	ACCESS CONTROL KT8
NMS	ACCESS CONTROL KT16
NMS	ACCESS CONTROL KT32
Pane	Is licenses
NMS	ACCESS CONTROL PN4
NMS	ACCESS CONTROL PN8
NMS	ACCESS CONTROL PN16
NMS	ACCESS CONTROL PN32
Scena	arios licenses
NMS	ACCESS CONTROL SC4
NMS	ACCESS CONTROL SC8
NMS	ACCESS CONTROL SC16
NMS	ACCESS CONTROL SC32

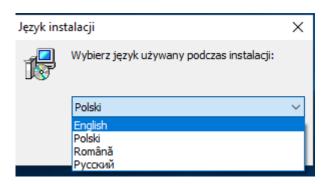
2.3 Software installation

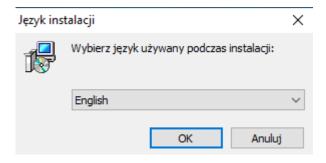
To start the installation process, click on the NMS AC_full_X. X. XX.exe file or *Run* command from the context menu. You can download the installation file containing the free license from **nmsac.aat.pl** website or by contacting Access Control Department of AAT Holding S.A.

Additional licenses that increase the capacity of the system are available in the price list and can be purchased in commercial departments and then added to the system according to the procedure described later in this manual (*System* tab).

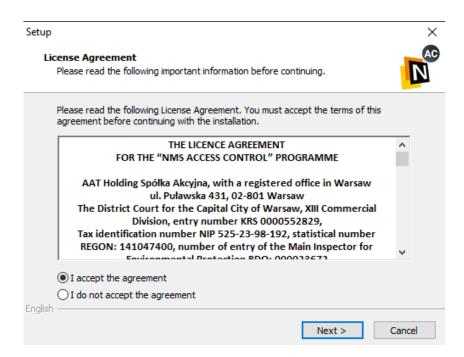
Upgrade files to higher versions of the program will be named: NMS AC_update_X. X. XX.exe.

When you run the NMS ACCESS CONTROL installer, the window shown below appears on the screen. Select the installer language from the drop-down list and confirm with **OK**.

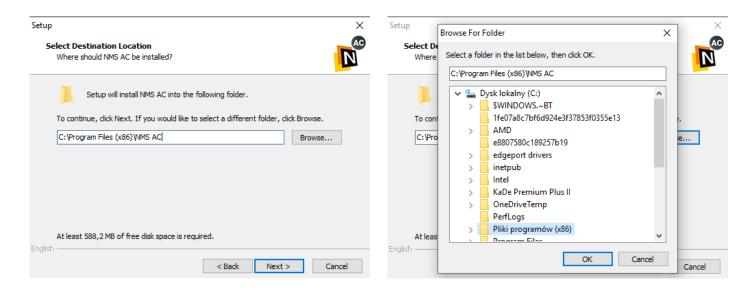




User License will be displayed, which need confirmation after reading to pass to the next installation step. After checking *I accept the agreement* checkbox click *Next*.



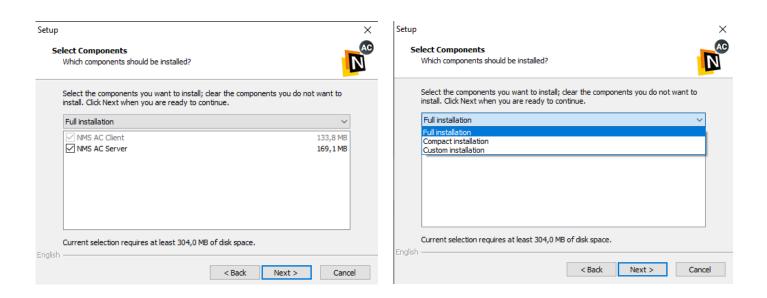
In the following windows, select the installation path of the program. You can edit the default path in the text box or select from the directory tree when you click **Browse...** and confirm with **OK**. After selecting NMS ACCESS CONTROL installation path, click the **Next** to proceed to the next installation step.



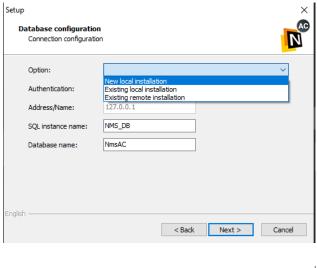
At this stage of the software installation, select its range. There are three options available in the drop-down list:

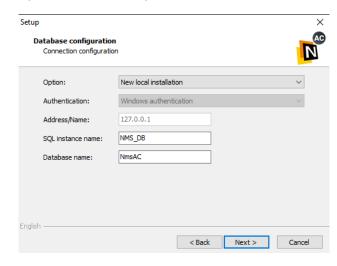
- Full installation installs both NMS ACCESS CONTROL server and the client application
- Basic installation installs only the client application which must be connected to the NMS ACCESS CON-TROL server on another computer
- *User installation* installs the components selected by the user by checking the appropriate check-boxes

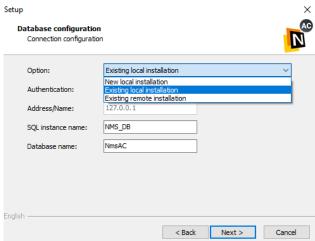
 After selecting the installation range, click *Next*.

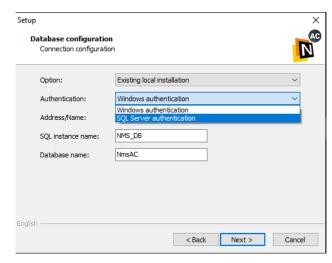


At the stage of the database configuration select one of three options from the drop-down list as below.





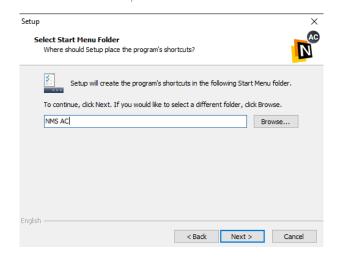


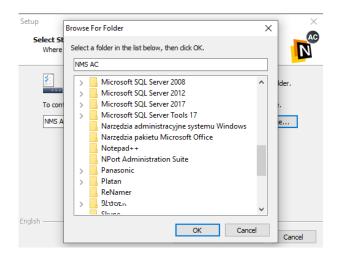


The new local installation - installs the SQL Server on the computer, creates a new SQL instance and database with the names specified in the text boxes.

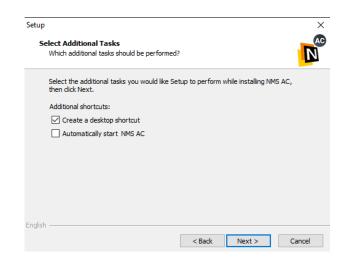
Existing local installation - this option can be selected if SQL Server is already installed on the computer; creates a new SQL instance and database with the names specified in the text boxes; if you choose to authenticate through SQL server, you must provide the login information used to confirm access to the SQL server.

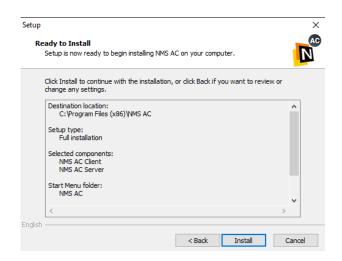
Existing remote installation - allows you to connect NMS ACCESS CONTROL server to the SQL Server installed on another computer on the network; creates a new SQL instance and database with the name specified in the text boxes on the SQL Server with specified in *Address/name* field IP address; for the applicable SQL Server authentication you must provide the login information used to confirm access to the remote SQL Server





After you have configured the database, click **OK** to move to the next step where you should decide on the name of the shortcut folder on the Start menu, and when you click **Next**, decide to create NMS ACCESS CONTROL application shortcut and automatic startup when the system is started by selecting or clearing the appropriate check boxes.

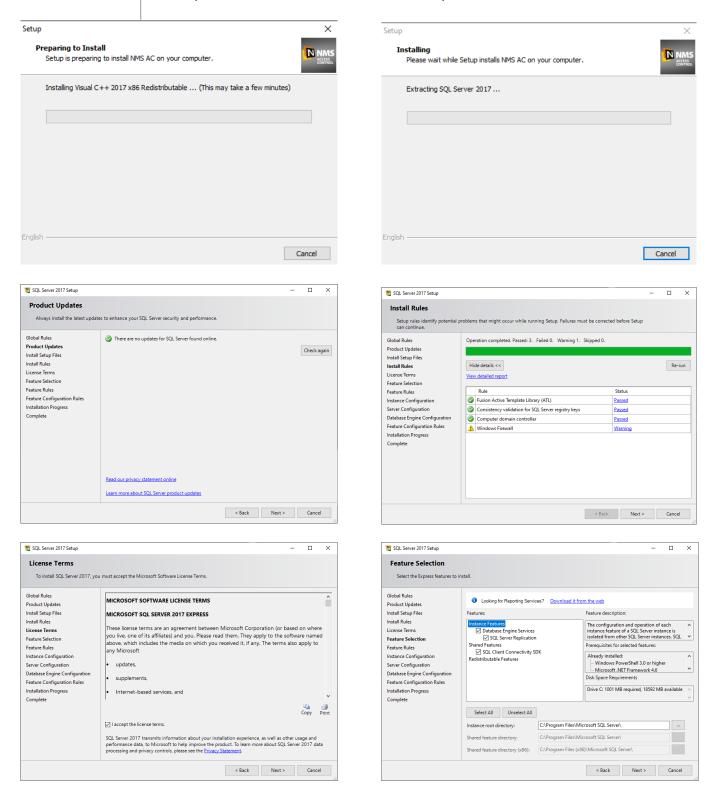




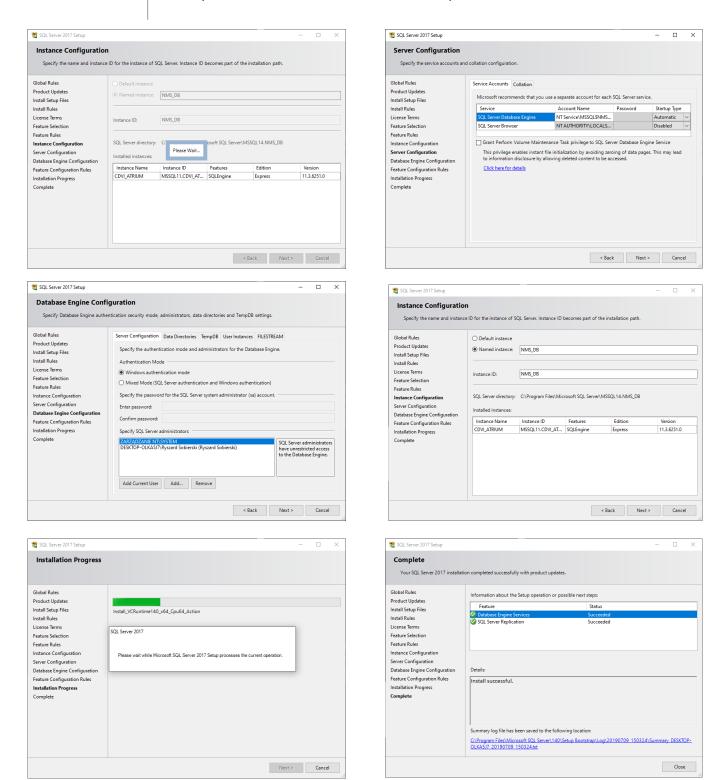
After pressing **Next** button, you will see the installation summary window with previously selected settings. Until this step you can go back to the previous steps of configuring the installation using **Back** button. If the summary settings are correct, click **Install**.

At this point, after selecting the location and names, the proper software installation process begins.

At the beginning, the SQL database will be installed according to the option you chose, and then the NMS AC application. If your computer is not connected to the Internet, you may be prompted to check for available updates during the installation of the SQL database, and then you must ignore it and click *Next*.



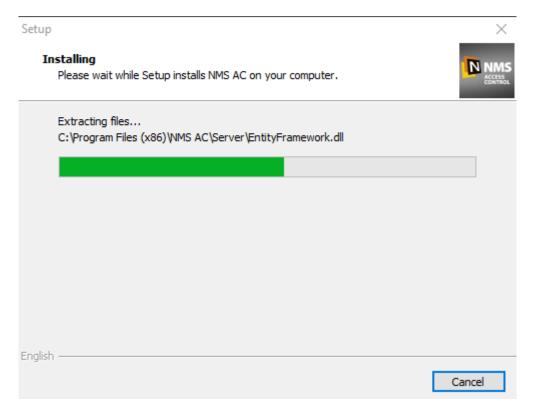
At this point, click **Next** in the following windows and select **I accept the license terms** box in the **License Terms** window.



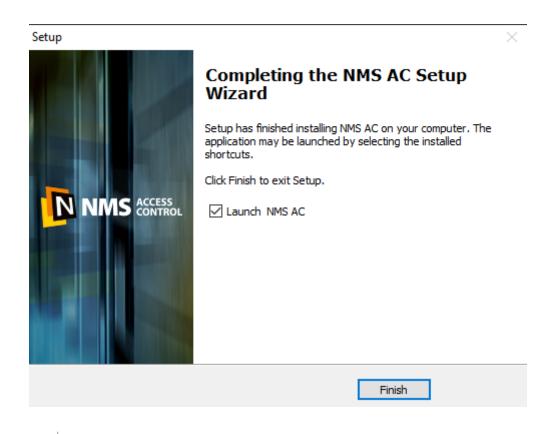
In the next steps of the installation, actions according to the list on the left side of the window are performed.

Upon successful installation of the SQL database, the *Complete* window will display information about successful completion of this part of the installation. Then click *Close*.

The installer will then perform the installation process of the relevant NMS ACCESS CONTROL system components, which takes a few moments.



After the application is installed, the information window appears as below. You can start NMS ACCESS CONTROL software immediately by clicking the *Finish* button while the *Start NMS AC application* check-box is selected . Uncheck this box and click the button to exit the installer without starting the application.



2.4 Software starting

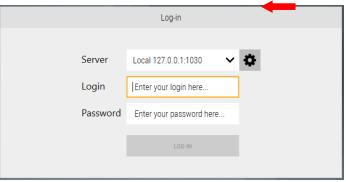
After NMS AC installation icon shown below appears on the desktop by default and NMS ACCESS CONTROL group is crated in Windows start menu. You can run the software using them.



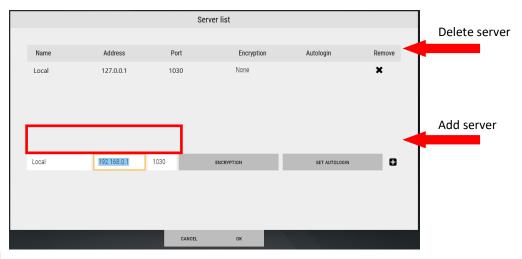
Starting the program results in the logon screen. There is a login window in its central part . In the *Server* section , you can select NMS ACCESS CONTROL server that you want to connect to. The installed NMS AC client application allows you to connect to one any server. The server application runs as a service and starts by default when Windows starts. This allows you to connect to and log in from any client station within the network. The server service connects to the system SQL database. The icon next to the check box selected in the following drawing opens the *server list*. Enter the operator's login details in the *login* and *password* fields . The default operator's Login is *root*, but the password is *pass*. To prevent unauthorized access to the system, we recommend that you change this password during setup. This step will be described later in this manual. The *exit* button in the bottom right corner closes the program.

ATTENTION! Controllers should be connected to separated physical network (switch, network card etc.) or separated VLAN.



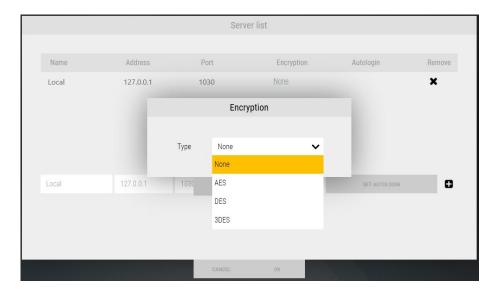


The server list window allows you to add, remove and configure NMS ACCESS CONTROL servers which you can connect an operator station to. The server settings that can be performed in this window are: name, IP address, port, type of communication encryption, autologin and alarms and messages sounds.

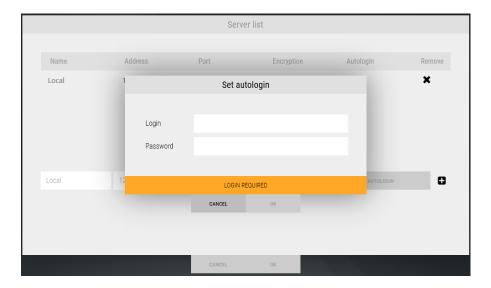


When you select a server on the list, its network parameters are configured in the fields marked in the previous drawing.

When you click the *Encryption* button in the dialog box that appears, you can select from a list of several available encryption types between server and client applications. *None* means that there will be no encryption.



After clicking on the *Autologin* button there is possibility to set automatic operator login directly after software start.

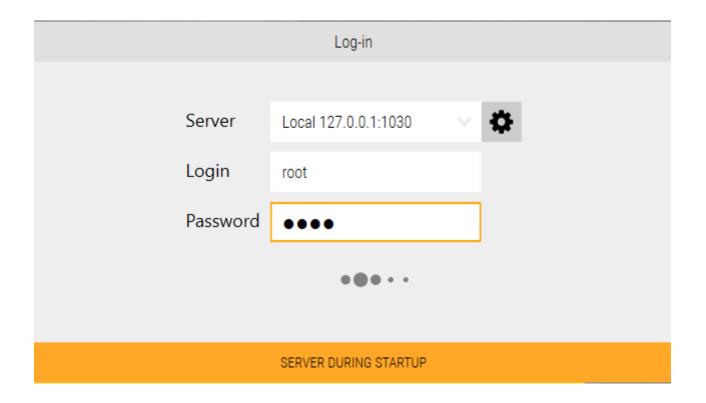


From *Alert sound* and *Message sound* drop-down lists event sound can be selected .

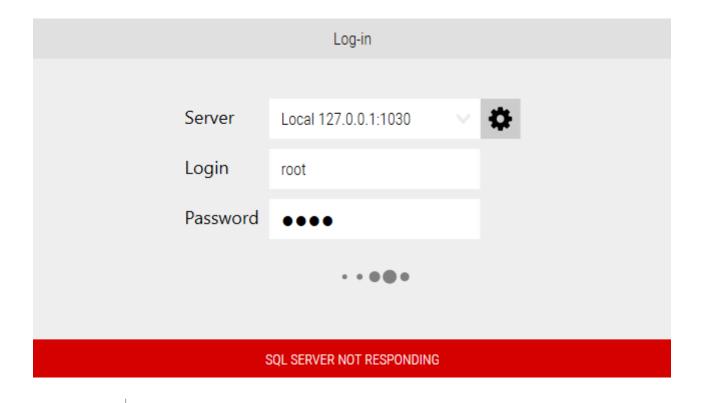
You must approve any of the options you have entered or selected by clicking *OK*. Clicking *Cancel* discards changes to the settings.

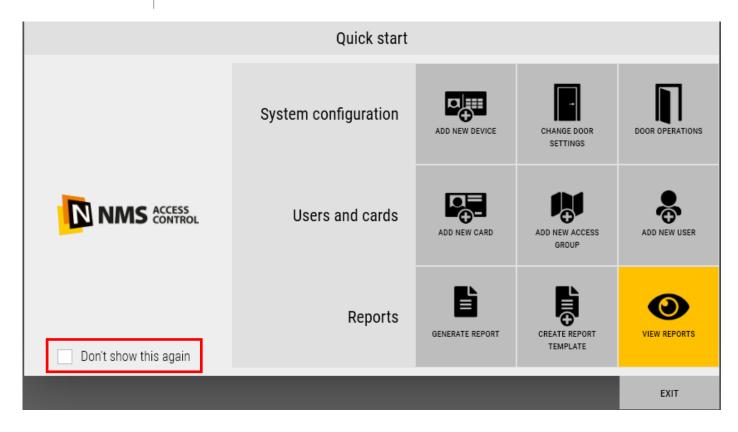
After you enter the correct login information, the *Quick Start* window appears as in the drawing on the next page.

After you type the login and password and click *Log-in* button, *Server starting* information may appear at the bottom of the window. This means that you must wait because the server service starts (for example, after reboot).



In the same situation, the lower part of the window may display a message that the *Server is not responding*. This means that the service was stopped for some reason. You must then run the service manually using the Task/Service Manager window in Windows.





The *Quick Start* window contains nine shortcut icons for the most commonly used system options from three thematic groups:

1. System Configuration

- Add new device opens the Add AC or VSS device window
- Change door settings quickly opens the Door Settings Details tab in the controllers added to the system
- **Door Operations** quickly opens operations that can be performed on the doors added to the system tab

2. Users and Cards

- Add new Card opens the window for adding cards to the system
- Add new Access group quickly opens the Access Group tab and adds a new access group
- Add new User quickly opens the Users tab and adds a new user

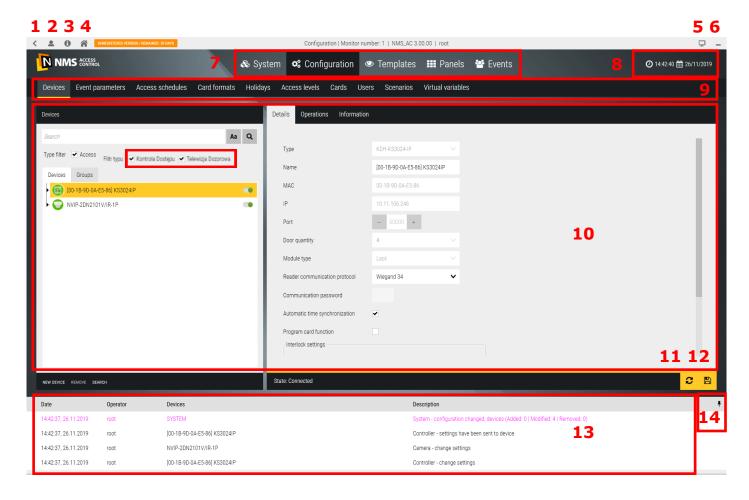
3. Reports

- Generate report opens a window for generating an automatic report
- Create a report template opens the List of events tab in the Events section
- View reports opens Files on server tab in the Events section

If you select **Don't show this again** checkbox shown in the image above, the **Quick Start** window is not automatically displayed when you run NMS AC. The **Exit** button closes the **Quick Start** window.

2.5 Operator screen and navigation in the program window

Operator screen is graphic user interface allowing interaction with NMS AC system. Its view is shown in the picture below.



- 1. Back button revers to the previously visited screen.
- 2. *Logout* button logs out the current operator and opens the login screen.
- 3. About application button opens information window about the installed software version.
- 4. Quick Start button opens the Quick Start window.
- 5. Monitor selection button on which you want to display the operator screen.
- 6. Minimize button minimizes the NMS AC window.
- 7. Section selection bar click on the corresponding section allows you to configure or preview the options.
- 8. Current server time and date.
- 9. Tabs bar allows you to navigate through the tabs of the selected section.
- 10. Workspace.
- 11. Refresh button refreshes the displayed data.
- 12. Save button saves changes made in the system configuration.
- 13. System Log window this window displays logs about changes in system configuration and other events in the system.
- 14. *Pin* button allows you to change the display of the log window. It can be permanently visible in the screen area or as a collapsible beam at the bottom, thus increasing the Work field 10. When you click on this button you can collapse the beam. To expand it, click on:



The beam is displayed automatically when new events are appearing in this window, and collapses when clicked in area 10.

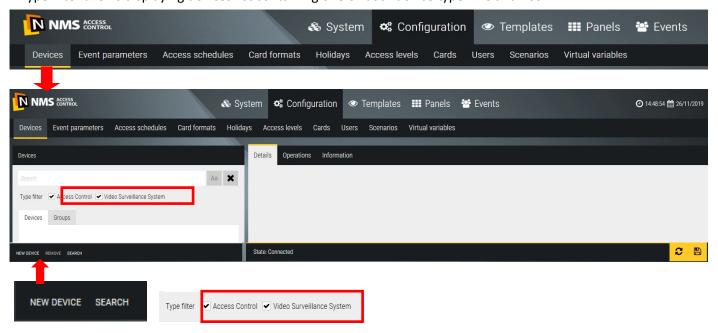
Section 3 System configuration

This chapter will discuss the subject of NMS ACCESS CONTROL system configuration . These are the actions performed by the system installer. *Configuration* tab is used to do this. It includes a number of windows to add devices to your system, schedules, access levels, cards and users. You can also use this tab to define scenarios and virtual variables.

3.1 Devices - Access Control - Controllers

The configuration process begins with the *Device* tab.

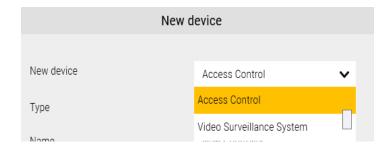
Type filter allows displaying devices list containing one or both device type - AC and VSS.



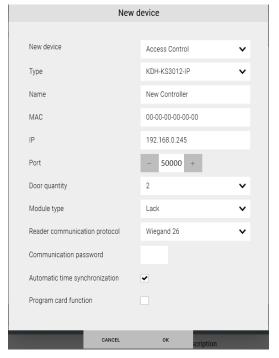
The system can be set up in off-line mode before connecting to the system on the facility, but much faster the configuration process goes in on-line mode when the devices are already installed, connected to power and Ethernet network. We can then use the search engine, which will display a list of available devices and address parameters after searching the network. This procedure will be described in the next step.

New device

This option allows you to add a new device in off-line mode, when you can not use the search engine. When you click on this button you will see a window like one below where you can select the type of device you want to add:



After selecting access control system device, a window will be displayed as below:



Type - the controller model can be selected from the drop-down list:

- KDH-KS3012-IP
- KDH-KS3024-IP
- KDH-KS2000-IP-ELV (in the next version will be replaced by KDH-KS3000-IP-ELV with new f/w)

Name - editable field to type the name of the controller

MAC - editable field to enter the MAC address of the controller (it is on the sticker on the device).

If you do not know this address at this stage, please leave the default.

After communicating with the device with the IP address as below, this field will be updated.

<u>IP</u> - editable field to type the static IP address of the controller

(Default 192.168.0.245 - should be changed to target)

Port - editable field to enter port number (it is recommended to leave the default value)

Number of doors - from the drop down list you can select 1, 2 or 4 doors depending on the controller model

Module type - from the drop-down list type can be selected depending on the controller model:

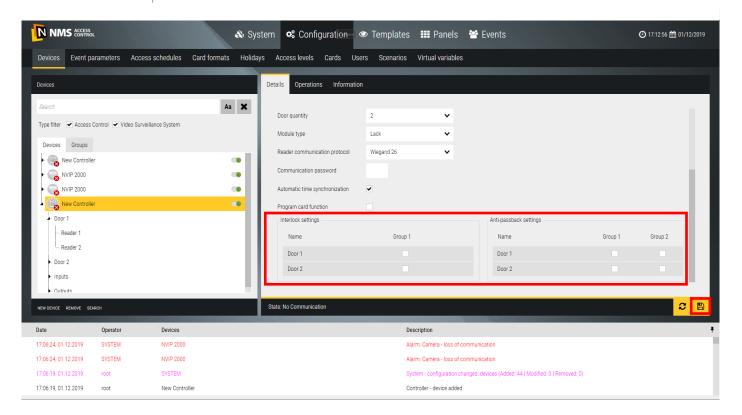
- KDH-MOD2000INOUT (for KDH-KS30XX-IP controllers)
- KDH-MOD2000-ELV (for KDH-KS2000-IP-ELV controller)
- KDH-MOD2016-ELV (for KDH-KS2000-ELV controller) 1 to 4 modules

<u>Wiegand format</u> - from the drop-down list format can be selected depending on the reader and card model: 26, 32, 34, 37, 39 or custom

Communication Password - editable field for typing 4-digit communication password (0000-9999)

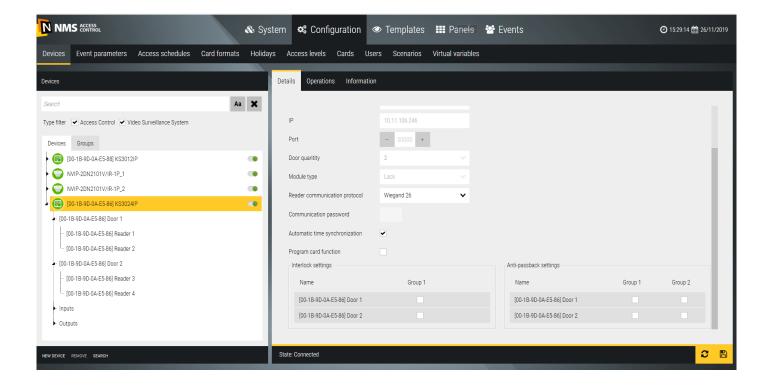
<u>Program card function</u> - option to select, allows to enable adding cards to the controller without communicating with the program (the description is in the instructions to the controller)

After you have made the settings, click **OK**. The program will return to the main configuration window and the added device appears in the list in the left window.



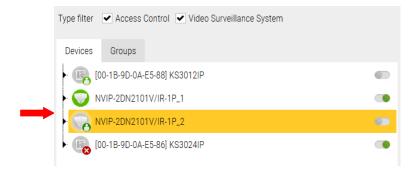
For KDH-KS3012/24-IP controllers, additional fields appear in the lower right window to add controller doors and readers to one or two groups. This applies independently of the man-trap function (the reciprocal control of the state of the door leaf) and the anti-passback (control the order of reading the card on the entry and exit readers). These fields do not exist for the elevator controller.

Once all settings have been made, save them by clicking on the floppy disk icon in the bottom right corner. A series of messages about this operation appears in the System Log window, and the controller icons change to

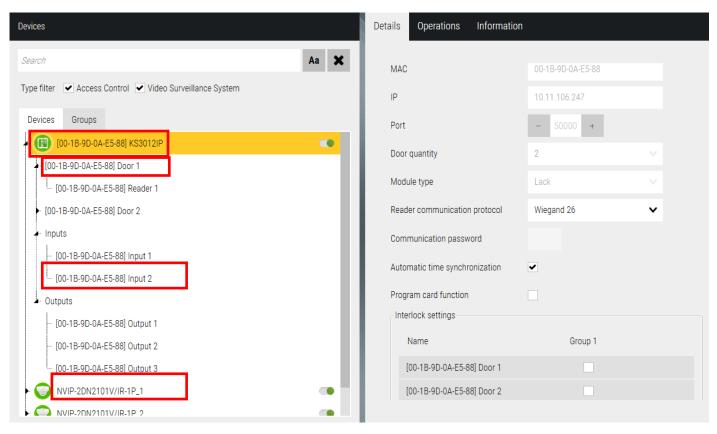


When you save the settings, the icon status can show one of three situations:

- No communication with the device gray icon with red box (check address settings or network connection and power supply)
- Device disconnected by operator grey icon with green box (disable monitoring by moving left slider to the right to edit settings or perform maintenance operations)
- Correct Communication green icon



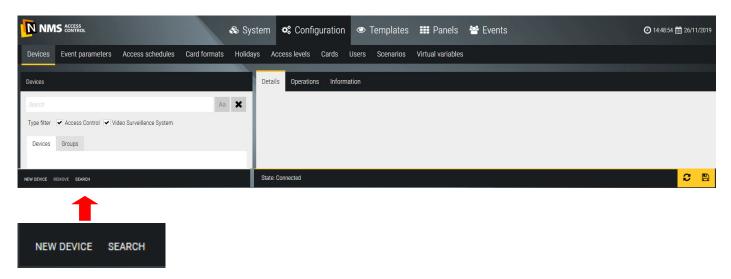
You can expand controller icon by clicking the black triangle on the main tree line and display linked elements. You can edit element's settings by selecting it on the list.



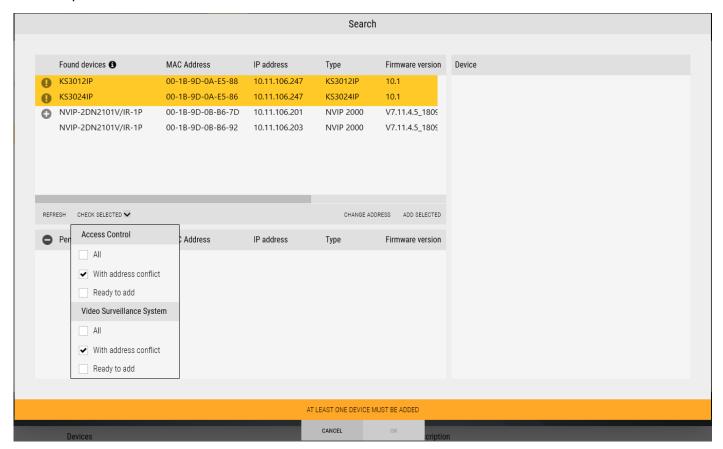
This includes components such as doors, readers, inputs and control outputs. When you select an item, the right window displays its settings, which you can edit. The selected item is highlighted in yellow. After changing the settings, save them by clicking on the floppy disk in the lower right corner of the configuration window. To edit the controller settings, disconnect it by sliding the green slider to the left. When you are finished editing, move the slider to the right again and click on the *Save* icon.

The defined controller can be edited or deleted by selecting it on the list and clicking the **Delete** button in the lower left corner of the window. All system-wide components are deleted with the controller.

Search



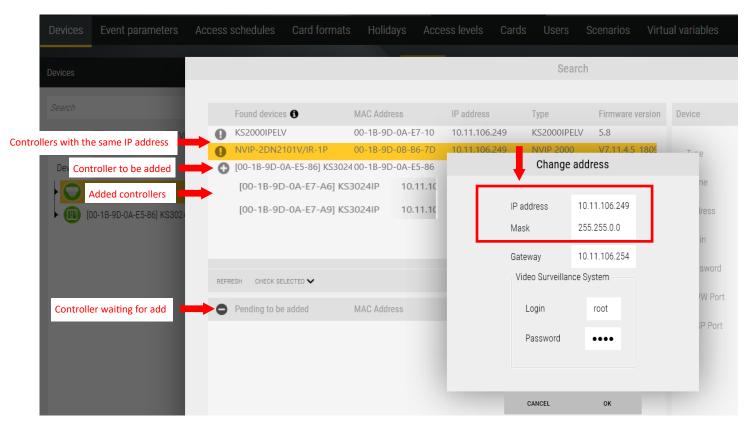
When controllers and VSS devices are installed in facility, connected to Ethernet and power, it is recommended to use the search engine to add them to your system base. This greatly accelerates this process. To run the search engine you need to click on the *Search* button at the bottom of the window as above. The program displays a window in which you will see a list of controllers vand VSS devices searched in the network.



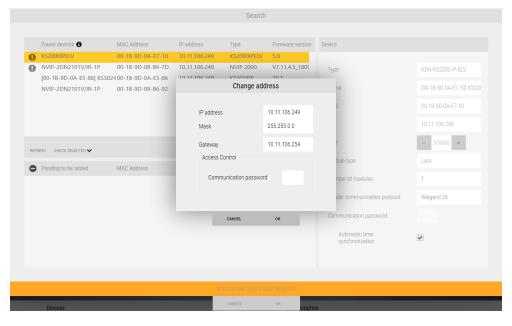
Controllers searched in the network are displayed in upper left side of the window with status icons:

- controllers with the same IP address displayed on the top of the list
- controllers possible to add to the system
- controllers transferred from upper window, waiting to add; you can transfer back to upper list
 - controllers searched, already added to the system no status icon

Each new controller has the same default IP address - 192.168.0.245. This group of controllers is displayed at the beginning of the list with 10 icon - you can select them all (using *Check selected* list) and group change their IP to addresses according to the target administrator assigned pool by clicking on the *Change Address* button. After entering the starting address, the end address of the scope will be generated automatically depending on the number of selected controllers with the same IP address. The icons will 10 change to and controllers can then be added to the bottom window by clicking on the icon.



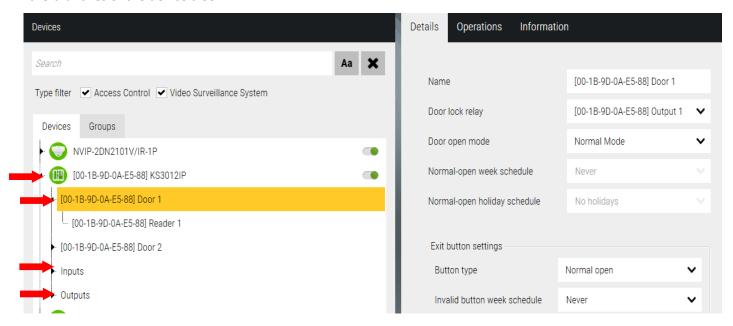
In case you want to change one controller address select it on the list in upper window and click *Change address* button.



After address settings and adding all controllers to the list in bottom window click **OK** button. Added controllers appear in *Devices* window.

3.2 Devices - Access Control - Controller - Doors

In the process of adding controllers, the program automatically adds the cooperating elements in quantities dependent on the controller type. This includes doors, inputs, control outputs and expansion modules. These elements appear under each of the added controllers and can be viewed by clicking on the black triangles in each of the branches of the device tree.



Door settings

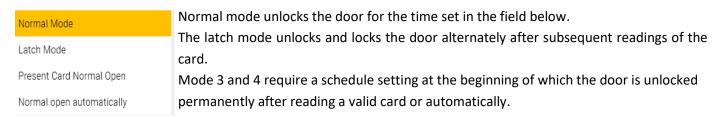
Name - editable field to type the name of the door instead of the default name.

Door lock relay - from the drop-down list you can select the control output (relay), which will control the lock,

1-2 relays or 1-4 are assigned by default and relay 3 or 5 is the relay to connect

the alarm beacon.

Door Unlocking Mode - one of four modes to choose from:



<u>Normal-open week schedule</u> - from the drop-down list you can select a schedule defined earlier, according to which the door will be unlocked permanently after reading a valid card or automatically depending on the option chosen above.

<u>Normal-open holiday schedule</u> - refers to the holidays, is the parent of normal-open week schedule and blocks its operation. If there is a holiday during the week, door will not be unlocked automatically.

Exit button settings

Button type - from the drop down list you can select NO or NC type - NC recommended.

<u>Invalid button week schedule</u> - from the drop-down list you can select a schedule defined earlier, during the period of its activity the door can not be unlocked by pressing the button.

Door-magnet settings

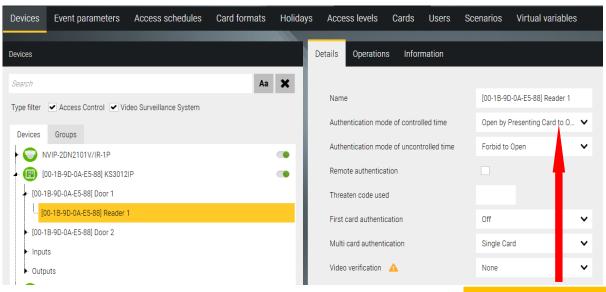


Door-magnet type - from the drop-down list you can select NO or NC type

<u>Door lock delay</u> - editable field to enter the time (s) of unlocking the lock after reading a valid card or pressing the exit button. You can also set the time by clicking the - or + buttons. Maximum value - 50 s.

<u>Door open timeout</u> - editable field to enter the time (s) for closing the door leaf. After the time that is the sum of the door lock delay and door open timeout *Door - door open too long* alarm will be generated - by default 8 s (3 + 5). You can also set the time by clicking the - or + buttons. Maximum value - 50 s.

3.3 Devices - Access Control - Controller - Door - Readers



Name - editable field to type the name of the reader in place of the default name.

Authentication mode of controlled time - from the drop-down list you can select:

Authentication mode of controlled time - you can select from the drop-down list:

(This mode applies to the off-hours period, weekends and public holidays)

Open by Presenting Card to Open
Open by Access Code
Open by Presenting Card or Access Code
Open by Presenting Card and Access Code

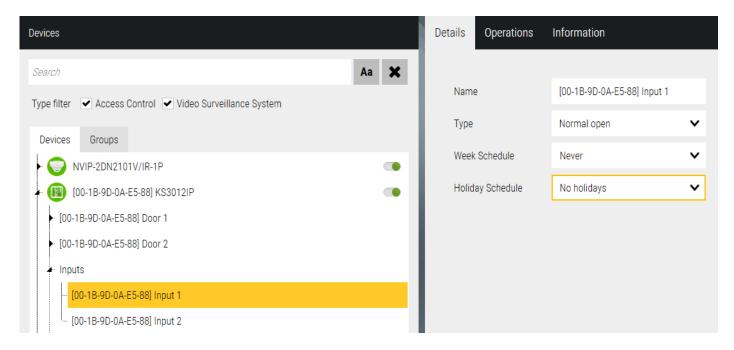
<u>Remote authentication</u> - when checked, access from this reader will require a valid card to be read and confirmation by the operator in a special pop-up window. Select this option only when the system is in online mode and the operator or security worker is present at the station.

<u>Threaten code used</u> - a field for entering the passcode to be used on the reader's keyboard in case of a forced entry. It generates a discrete alarm on the operator station.

<u>First card authentication</u> - access requires the use of a card in each day with the option set to Yes (this is the field in the users settings).

<u>Multi card authentication</u> - access requires the use of one to four valid cards to unlock. Special option for rooms requiring greater security (so-called "commission entry").

3.4 Devices - Access Control - Controller - Inputs



The input lines located on the controller allow you to connect and monitor various types of detectors.

To activate the monitoring mode, you need to set the week and holiday schedule. If monitoring is disabled, this input activation only results in a change in the state of the panel icon. Depending on the controller model, we have 2 or 4 input lines and 4 on the KDH-MOD2000INOUT expansion module.

Name - editable field to enter the name of the input line in place of the default name.

Type - from the drop-down list you can select NO or NC type - recommended NC.

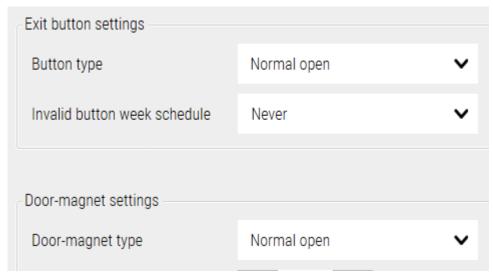
<u>Week schedule</u> - in the drop-down list you can select a predefined schedule according to which the input will be monitored and then the alarms will be generated.

<u>Holiday schedule</u> - refers to holidays, is the parent of a weekly schedule and changes its effect if there is a holiday day during the week in which the input should have a different monitoring schedule.

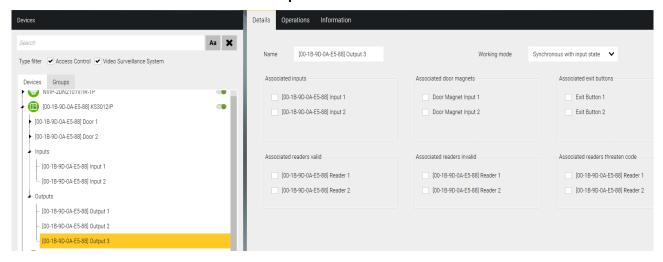
Input lines on the extension module look similarly if implemented.

The settings for the input lines for the door sensors and exit buttons status are available in the Door configuration

window.



3.5 Devices - Access Control - Controller - Outputs



Control outputs located on the controller allow you to connect and control various types of devices. In terms of functionality and settings, they are divided into two groups:

- Door outputs and control of the electric lock
- General purpose control outputs

The control outputs of the electric lock in the settings have only a name change and you can not put their icon on the panel because their state illustrates a padlock in the door icon.

The other outputs have settings as in the image above. You can assign them to the status of system items located on the same controller or selected events. Changing the status of the assigned item or occurrence of the selected event causes the relay switch.

Depending on the controller model, there are 3 or 5 control outputs and 4 on the KDH-MOD2000INOUT expansion module.

Name - editable field to enter the name of the control output in place of the default name.

Working mode - from the drop down list you can select the operating mode:

Synchronously with input state - switches when the assigned input line

enters or exits the alarm status

Temporary activation - switches to the time set in the field below

You have the choice of:

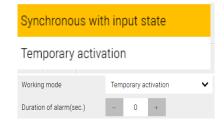
- states of three elements: input lines, door magnets and exit button
- events regarding to access granted, denied and threaten code

The sync assignment becomes active when you select checkbox.

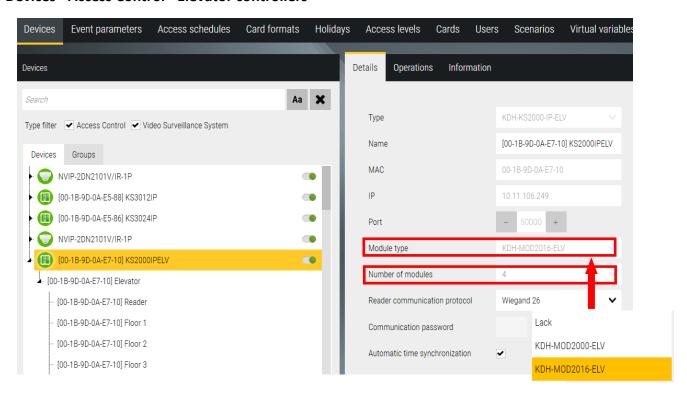
Sliders let you display the remaining check boxes.

- * Week Schedule from the drop-down list you can select an earlier defined schedule according to which output will be automatically switched.
- * Holiday Schedule refers to the holidays, is the parent of week schedule and blocks its operation. If there is a holiday during the week, output will not be switched automatically.
- (* will be implemented in the next version of the program)

Settings for control outputs on the expansion module are similar if implemented.



3.6 Devices - Access Control - Elevator controllers



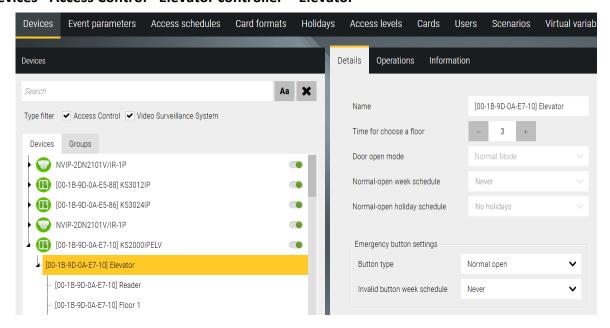
To KDH-KS2000-IP-ELV you can add expansion modules also. There are two types of modules. Depending on floors quantity operated by elevator there are some combinations as following.



After you have completed all the settings for each controller (analogical to adding controllers in off-line mode), click on the floppy disk icon in the lower right corner of the *Configuration* window to save to the database. During this process, a series of messages informing the successful completion of the data save will appear in the System Log window. The controller icons will change to green, which shows the correct communication:



3.7 Devices - Access Control - Elevator controller - Elevator

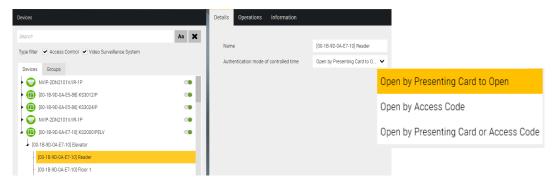


Name - editable field to type the name of the elevator in place of the default name.

<u>Time for choose a floor</u> - editable field to enter or set the time to select the floor after reading a valid card <u>Emergency button settings</u> - used to unlock all floors permanently, so it should be a two-state button. Recommended model KDH-EXIT1030-P - with push-in plastic plate (as for emergency door unlocking).

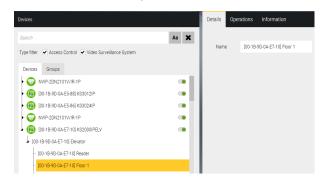
- Button type select NO or NC
- Invalid button week schedule select from the drop-down list. During the period when the schedule is active the button will not work.

3.8 Devices - Access Control - Elevator controller - Elevator - Reader



Name - editable field to type the name of the reader in place of the default name.

3.9 Devices - Access Control - Elevator controller - Elevator - Reader - Floor Name - editable field to type the name of the floor in place of the default name.

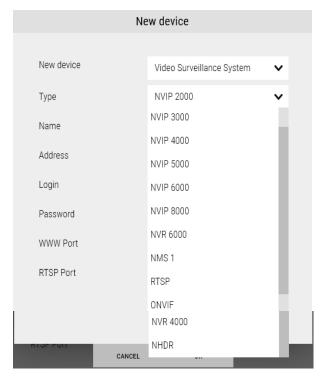


3.10 Devices - Video Surveillance System

In addition to the functions associated with access control, NMS ACCESS CONTROL also integrates the video surveil-lance system. At this stage, this functionality is limited to:

- displaying the live image from the selected camera by clicking on the icon on the panel
- automatic display of such an image after a specific event (e.g. door forced, card reading) as a result of the execution of a scenario

List of VSS devices that can be connected with NMS ACCESS CONTROL:



The main items in the list are NOVUS devices (DVR and IP Camera series), but it is also possible to integrate with RTSP and ONVIF compliant video stream devices. A free license allows you to connect:

NOVUS video channels	16
ONVIF video channels	1
RTSP video channels	1

In the current version of the software, you can only add VSS devices manually using the *New device - Video surveil-lance system* option. A window will be displayed as on the next page.

<u>Type</u> - first select the type of video device as on the list as above.

<u>Name</u> - editable field to type the name of the video device in place of the default name if you want. This field will be filled automatically when camera is connected.

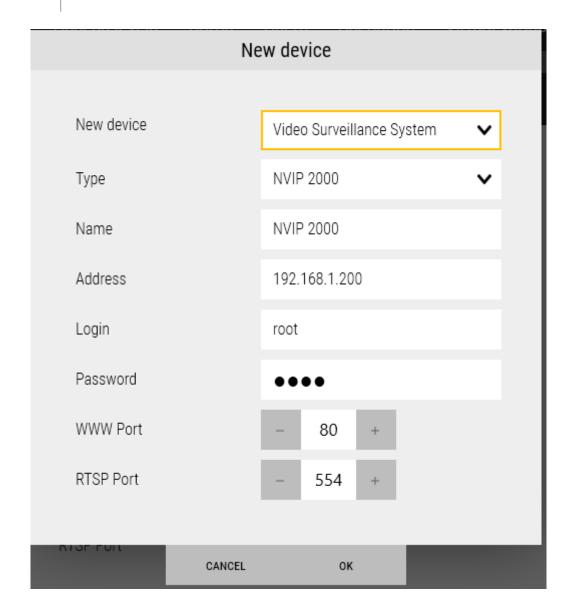
<u>Description</u> - editable field for description, e.g. location of the camera.

IP Address - field for entering IP address that matches the settings of the camera

WWW Port - field for entering the port number that matches the settings of the camera

RTSP Port - field for entering the port number that matches the settings of the video device

<u>Data Port</u> - field to type the port number that matches the settings on the video device



<u>User</u> - editable field to type a user name that matches the settings of the video device. <u>Password</u> - editable field for typing a user password that matches the settings of the video device.

After setting the required parameters click on the *OK* button, and when returning to the *Device* window save by clicking on the floppy disk icon in the lower right corner of the configuration window. A series of messages informing you that the settings have been saved to the database will appear in the System Log window. Then, when connected to the device, the icon turns green.

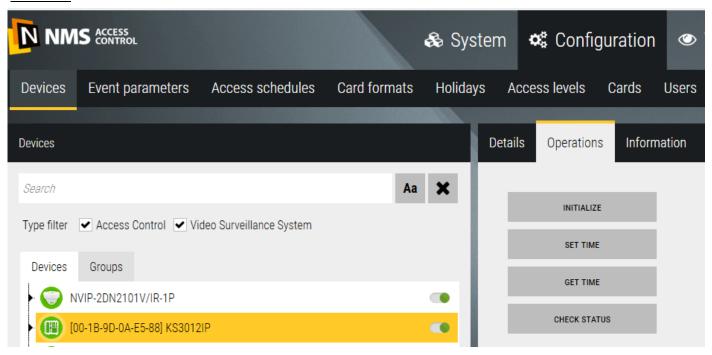
For panel operations, we use the Channel X position, which is displayed in the tree when expanded.



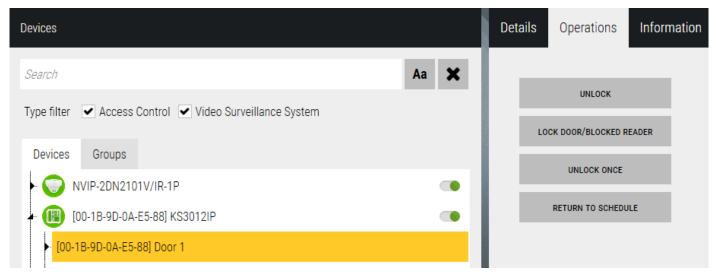
3.11 Devices - Operations

System items shown below have operators commands in Operations tab, which allow to perform certain operations as on the lists below.

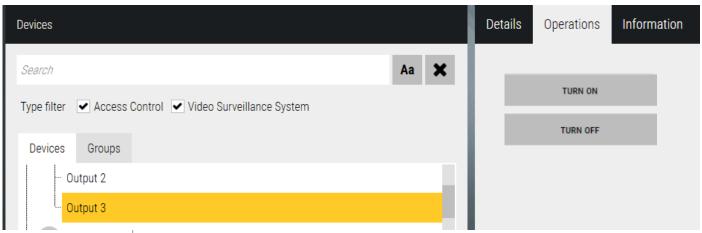
Controller



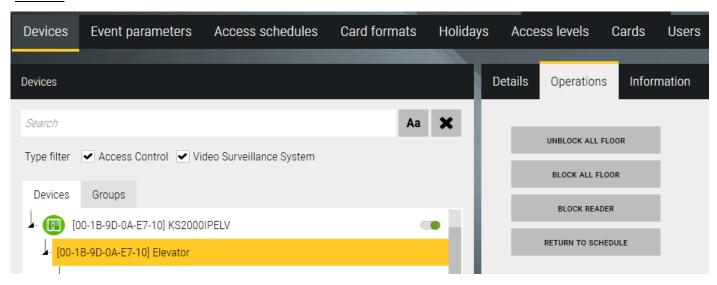
Door



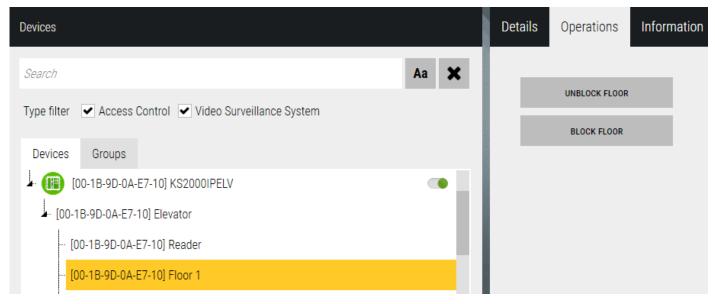
Output (not linked with lock only)



Elevator

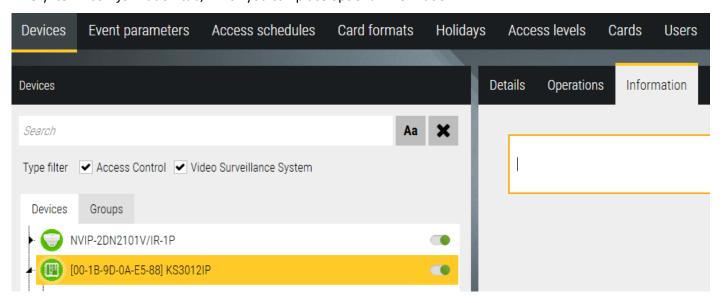


<u>Floor</u>



3.12 Devices - Information

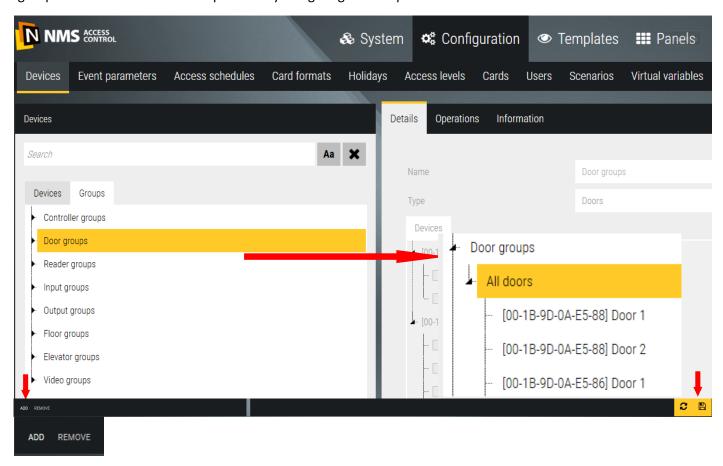
Every item has *Information* tab, which you can place optional information in.



3.13 Devices - Groups

Use the *Groups* tab to define groups of system elements. The list of default main groups is displayed in the left window. Each default group has a defined group that contains all the elements of that type (see *Door groups*) and is automatically updated when a new element of the type is added.

Groups are used to perform collective operations on elements of the system e.g. unlocking the door group, which greatly accelerates this process with a large number of doors. You can perform group operations from the black group icon context menu on the panel or by navigating to the *Operations* tab in this window.



In addition to the default groups that contain all elements of a given type, you can define subgroups that contain only selected elements of that type. To do this, select the default group of the type and click *Add* at the bottom of the window. A new subgroup appears in the group tree, and a list of all elements of the type is displayed in the right window. Select the items that you want to add to the new group.

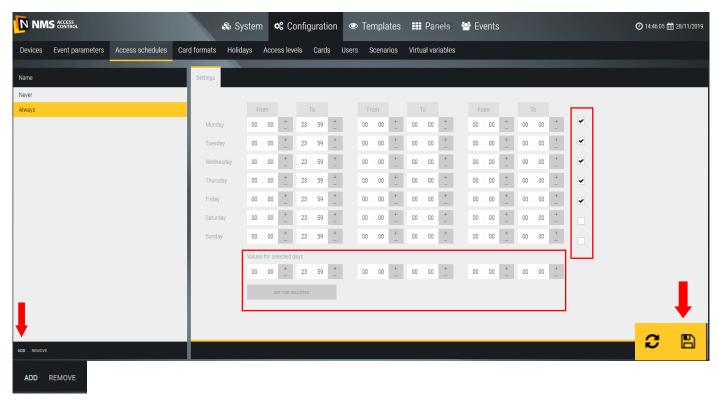
To add a new group in the main tree, no groups can be selected. If there is a selection (yellow bar) then click on it while holding down the CTRL button. A group added in the main tree can contain elements of different types. This can be used to create a system structure in multiple locations.

You can edit or delete a defined group by selecting it on the list and clicking the *Delete* button in the lower left corner of the window.

Section 4. Card users and privileges

4.1 Schedules

The *Schedule* tab allows you to define the schedules for access levels, automatic door unlocking, monitoring of the input lines at specified intervals and switching on the control outputs * (* option available soon).



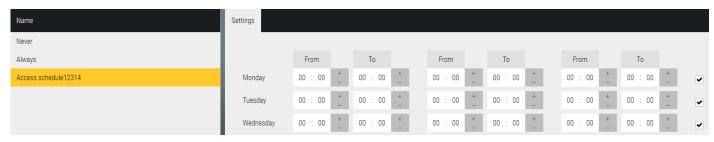
By default, two schedules are defined, Never and Always, which can not be deleted or edited.

To add a new schedule, click on the *Add* button in the lower left corner of the screen. You can change the default name on the yellow box to your own.

Then, type the start and end time of the schedule activity for each day of the week. Two additional time columns allow you to define a schedule consisting of two or three time intervals in a day or passing through the midnight e.g. from 22:00 to 6:00 (22:00-23:59, 00:00-06:00).

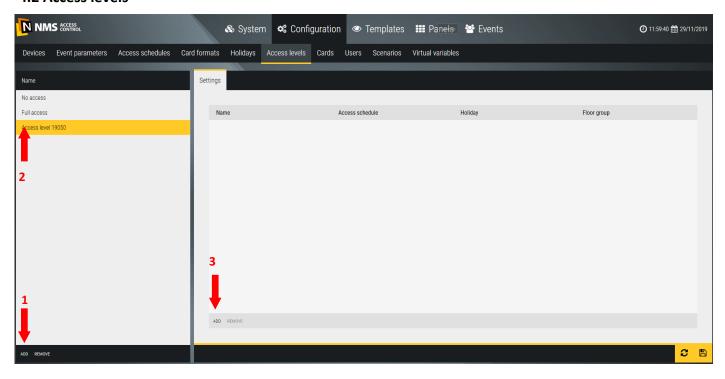
If the schedule activity hours repeat for several days (e.g. from Monday to Friday), you can select them in the right column and then enter the required settings in the bottom row. When you click the *Set for selected* button, the selected fields above in the selected rows are filled as the bottom row. This functionality greatly accelerates the definition of new schedules.

To edit the bottom row, select at least one day in the right column.



You can edit or delete a defined schedule by selecting it in the list and clicking the *Delete* button in the lower left corner of the window.

4.2 Access levels



Use the *Access levels* tab to define access levels for card users. The access level is a set of permissions that determines which transitions and how long a user will have access.

By default, two access levels are defined: No access and Full access that can not be deleted or edited.

To add a new access level click on the *Add* button in the lower left corner of the screen. You can change the default name on the yellow box to your own.

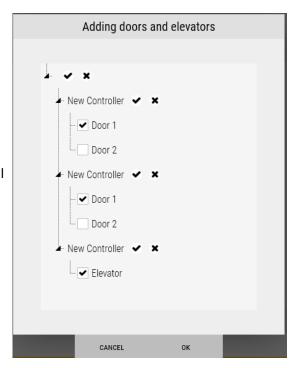
Then click on the Add button in the right window.

A window with a list of all previously added doors and elevators will be displayed.

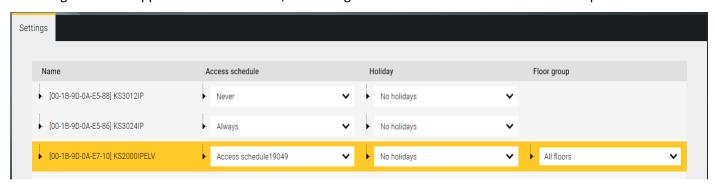
Select the doors and elevators (as readers in the cabin) to which the user will have access rights over a specified period of time and confirm with the OK button.



ChecCheckboxes as above allow you to quickly select and deselect all items.



In the right window appears a table as below, containing the selected doors and elevators in the previous window.



In the second column (*Access schedule*) in the drop down list, select the schedule according to the expected access permissions.

In the third column (*Holiday*) in the drop-down list, select the holiday schedule according to the expected access rights.

In the fourth column (*Group of floors*) in the drop down list, select a group of floors according to the expected access privileges.

Save the settings by clicking on the floppy disk icon in the lower right corner of the configuration window.

Access levels defined this way can be assigned to one or more users.

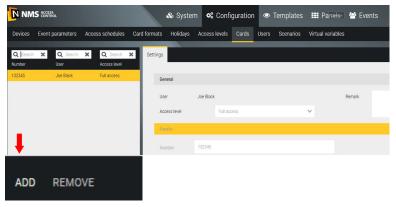
Delete button at the bottom of the left window is used to delete the entire access level, and in the right to erase

one row of selected door or elevator.

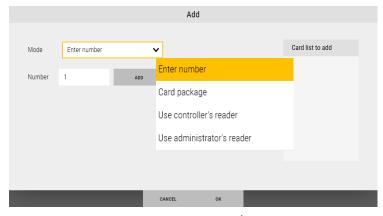
4.3 Cards

This tab allows you to create a list of cards with numbers for later and faster assignment to users.

ADD REMOVE



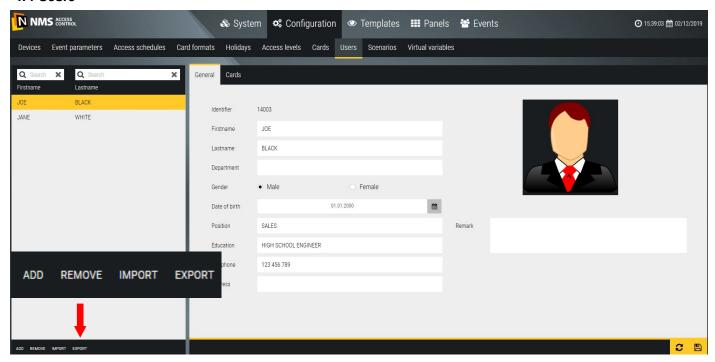
When you click on the Add button a window is displayed as below:



The procedure for adding cards is described in section 4.4 - Users/Cards.

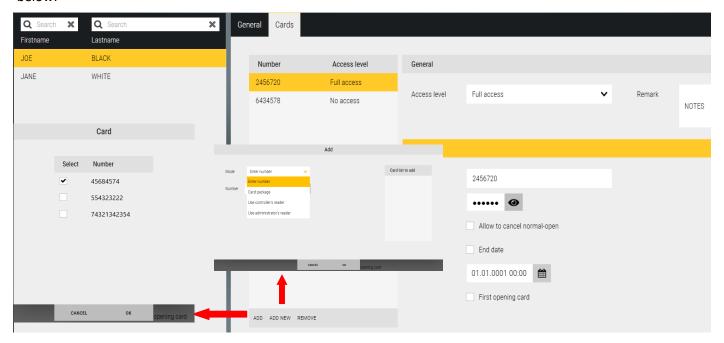
ADD REMOVE

4.4 Users



Users can be added manually or by importing data from a file. File **import procedure** significantly accelerates this process for a large quantity of cards. If the window is empty then click on the *Export* button. The exported file (*csv users*) contains two example rows. For new users, the ID column should be empty. The order of the columns in the imported file must be the same as the exported one. If after the first import we want to continue to work on such a file (i.e. change parameters of previously added users or add new ones), it is always necessary to export the current database first and work on such a file.

To add a user manually click on the *Add* button in the lower left corner of the window (to delete, select and click *Delete*). Then fill in the form fields in the right window. Except the name and last name fields, the remaining fields are not obligatory. You can also add a user photo from a file by clicking on the black box. The left window displays a list of added users. To assign a card number to a user, go to the *Cards* tab. The program will display the window as below:

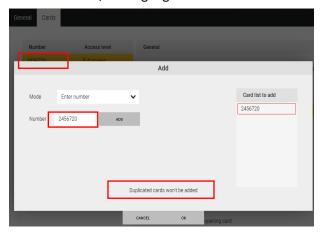


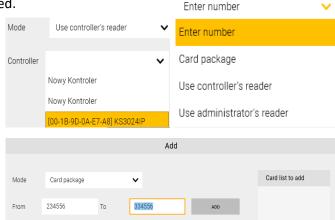
In the window on the previous page we have two ways to assign a new card to the user. User can have more than one card (max. 5).

After clicking on the *Add* button a window pops up as on the left side with a list of cards added earlier through the *Cards* tab. Select the card numbers that you want to assign to the user.

After clicking on the *Add new* button window pops up as on the right. In this window you can select one of four options to enter the card number into the list:

Manually enter a number in the editable field (when we know the card number)
 The number entered is subject to verification if it already exists in the database, it is highlighted in red and cannot be added.

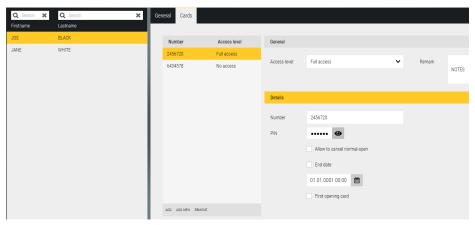




- Manually enter the first number from the card container (consecutive pack) and the final
- Reading the card on the controllers' reader
- By USB administrator reader



After adding the card numbers to the list, return to the *Users/Cards* tab, which now looks like the following.



Each card has a separate menu on the right side of the window that appears when you select a card in the list.

Deleting a card from this list does not remove it from the system. To remove it from, go to the Cards tab.

Access level - select from the drop-down list

PIN - editable field to enter the passcode associated with this card (6 digits)

<u>Allow to cancel normal-open</u> - option for the user to lock the door opened by schedule after double reading this card. Return the door to the schedule by single reading this card.

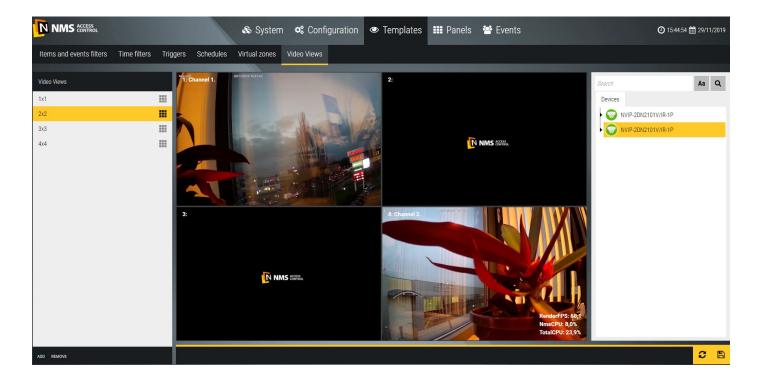
End Date - when selected, set the required date, enter or select from the calendar

<u>First opening card</u> - the option required for the user when it has to be able to unlock access for other users without this permission. Active on readers with this option enabled.

Section 5. Templates

5.1 Video views

In the Video views tab, you can define sets of video views that are used to visualize and monitor the state of the system and display video streams from the cameras placed in the object. The list of defined video views is displayed in the left window. By default, four panels with different division are defined. After clicking the *Add* button you can add a new view, rename, assign a division to it by clicking on the icon in the view name field and the video stream by dragging it with the mouse from the list on the right in the selected view window. The video view can be viewed by clicking on its name in the left window.



Default views can be edited and changed to suit your needs.

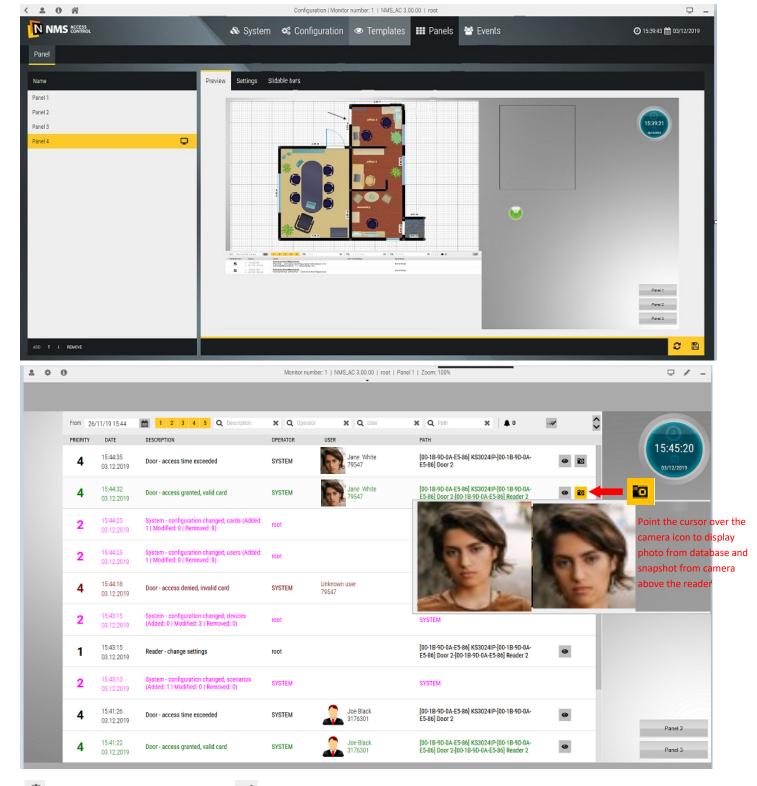
After you define the video views, click the *Save* button in the lower-right corner.

You can view defined video views on panels in video windows. Default Panel 3 includes this view window.

Section 6. Panels

In the *Panels* tab you can define the panels, which are used to visualize and monitor the status of various system elements and display events and other additional information. The list of defined panels is displayed in the left window and depends on your license. Under the free license, you can define four panels, two of which are the default. The panel can be displayed by clicking on its name in the left window.

The default Panel 1 includes: event stack, clock, and button with link to Panel 2.



Return to the *Configuration* tab, Enter the panel edit mode; below the alarm beam with the erase buttons. The *Event stack* displays events according to the default settings in the *Event Parameters* tab. You can filter them by typing a keyword in one of the fields with magnifier or by unchecking the selected yellow priority boxes.

The default Panel 2 contains a synoptic table, a clock, and a buttons with a link to other panels.



Panel 2 contains a synoptic array, which automatically adds additional controllers together with the cooperating elements (doors, input lines, control outputs, elevators, floors) and surveillance television devices as icons representing their current status. The status of the icons is updated in real time (when communication with devices is correct). Icons have a context menu (left mouse button).

There are two filters in the lower right corner of the synoptic array to display only selected items:

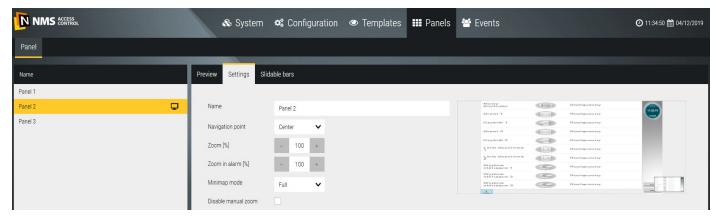
- Main filter defined in the tab Templates/Items and events filter
- Type filter allows to display elements of only one type from the currently available on the board.

To define a new panel, click on the Add button in the lower left corner of the Panels window.



The added panel appears in the list in the left window. A preview of the panel background is displayed in the right.

Settings tab



Name - editable field to type the name of the panel

<u>Navigation point</u> - point on the panel to which the process relates, default *Center*, other items will appear in this list after defining additional navigation points on the panel

Zoom [%] - sets the zoom value on the panel

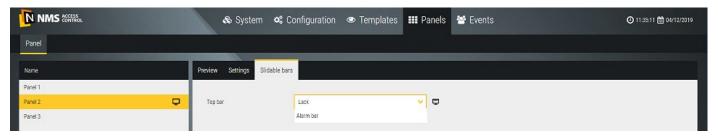
Zoom in alarm [%] - sets the zoom value for the alarm event on the panel

<u>Disable manual zoom</u> - allows you to turn off the zoom on the panel with the mouse wheel

<u>Minimap mode</u> - selectable from the drop-down list of map thumbnail display mode: full, background only, transparent or no minimap.

<u>Set background</u> - allows you to select the background of the panel from the specified folder from bmp, jpg, png file or default

Slidable bars tab



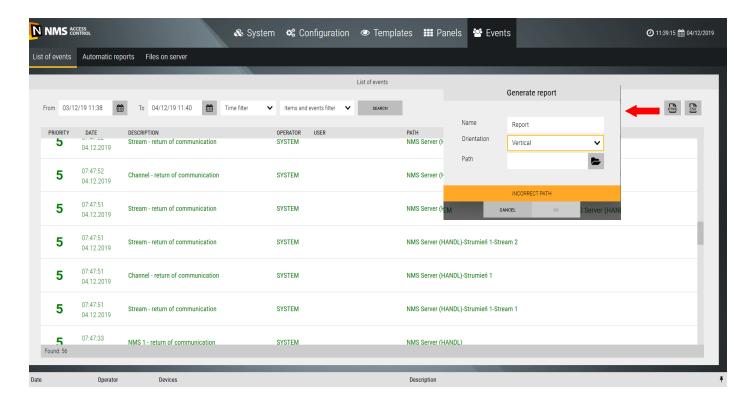
Top bar - selectable from the drop-down list: alarm bar or none

Once defined, save the settings for the new panel by clicking on the floppy disk icon in the bottom right corner.

By clicking on the panel name in the left window, you can enter the display mode and verify the settings.

Section 7. Events and reports

In the *Events* tab you can generate a filtered report. The generated report is displayed on the screen or can be saved as a file on disk (the buttons in the upper right corner of the window) in the format *. CSV or *. HTML (with PDF export capability).



Each report line contains a date and time, a description of the event and the association with the operator or card user and the physical element of the system affected by the event.

At the top of the window are the filter fields for date, time interval (default last 24 hours) and items and events. This makes it easier to analyze the events on the object.

After setting the filters, click on the Search button. A report appears in the window.

The lower-right corner of the window displays information about the number of events in the generated report. The maximal number of events is 10 000. If this value is exceeded by the filter settings, this information is displayed. You must change the filter settings.

7.2 Automatic reports

In the Automatic Reports tab you can set parameters of the new automatically generated report template according to the selected trigger. Generating automated reports is accomplished with scenarios. For ease a simple to use scenarios wizard has been implemented in this window. Similarly to manually generated reports, you have a set of filters here. Click *Add* and configure a new auto report template.

Name - editable field to type the name of the report template

<u>Time filter</u> - selectable from the drop-down list previously defined in the

Templates/Time Filters

<u>Items and events filters</u> - select from the drop-down list defined in the

Templates/Items and events filters

<u>Trigger</u> -selectable from the drop-down list previously defined in the

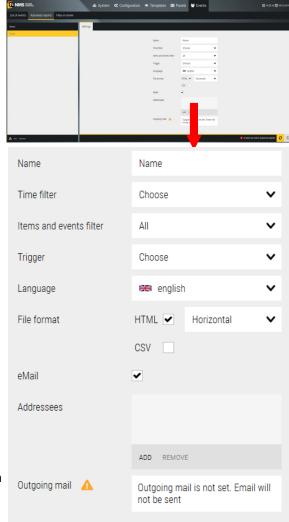
Templates/Triggers

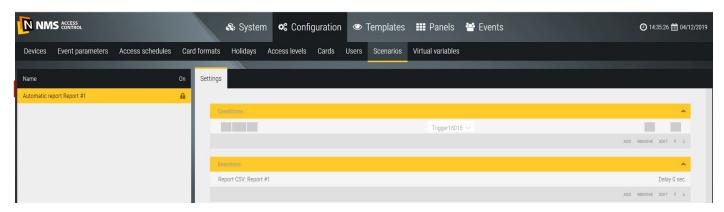
Report - select one of the file formats: CSV or HTML

<u>Orientation</u> - select the horizontal or vertical orientation of the page to preview or print. Recommended horizontal orientation due to the number of columns in the report and long descriptions.

<u>Language</u> - selectable from the drop-down list: Polish, English, Russian, Azerbaijani. The next languages during the translation.

<u>Email</u> - the field selected if the report must be sent as email. When selected, the following fields are displayed to enter the recipients and subject of the email. To add a recipient, click on the *Add* button at the bottom of the window and enter the email address in the field that appears.

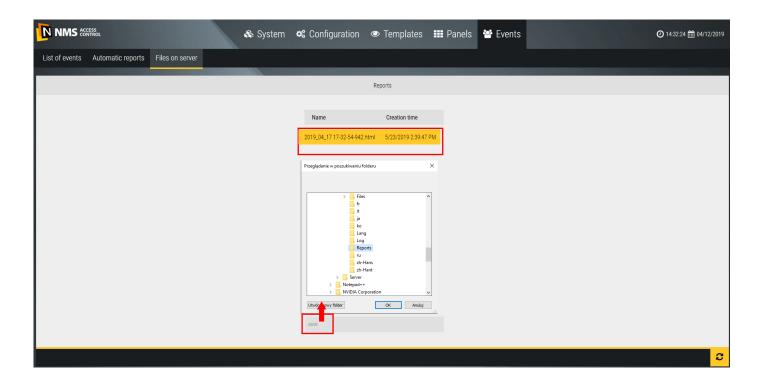




After making the settings and clicking *OK* you move to the *Configuration/Scenarios* window - in the left window is a list of defined templates of automatic reports.

7.3 Files on server

Reports generated automatically according to the template assigned trigger are saved in the report archive on the computer where the NMS AC Server service is installed. You can change this path in the *System* tab.

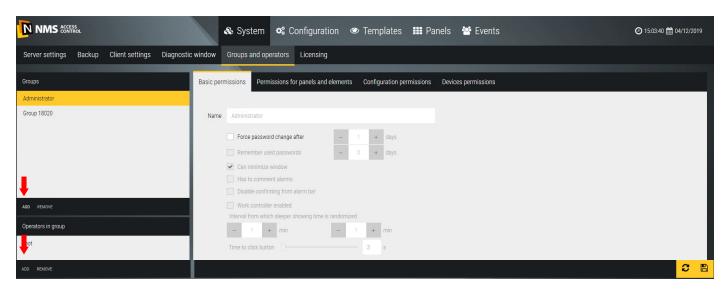


At the client station that is connected to the server you can see a list of automatically generated reports as in the window below (tab *Files on the server*). When you select a report in the list, you can copy it to the client station to the specified folder.

Section 8. System settings

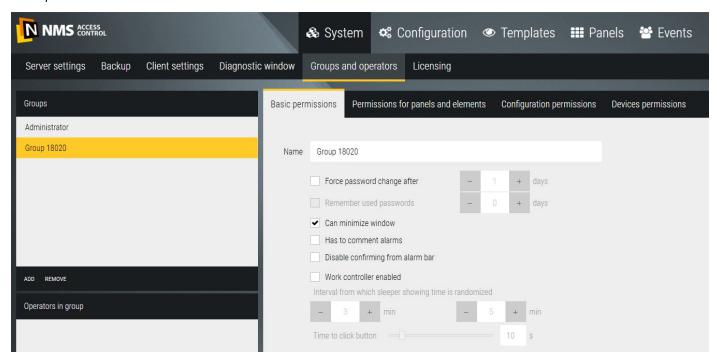
In the *System* tab, you can add new operators, including permissions for access to the program, set the language for the operator, make a copy of the system or restore it, and extend the licenses.

7.1 Groups and operators



By default, one group of operators named *Administrator* with full program and system permissions is defined. By clicking on the *Add* button in the upper left window, we can add additional groups with restricted permissions. When you select a group in the top window, you can add operators. By default, a single *root* operator with full privileges is defined in *Administrator* group. The permissions are defined for the group (not for individual operators), for a new group of operators set in subsequent tabs.

Basic permissions

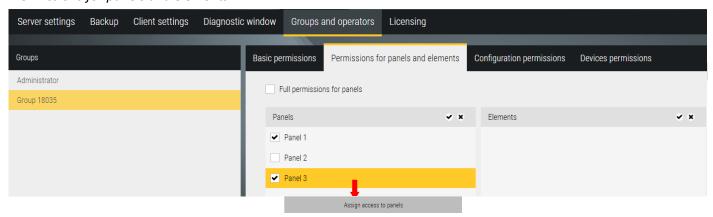


The Basic permissions tab contains a number of checkboxes that you must select to assign the selected options.

The <u>Work controller</u> function controls the security personnel of the facility monitoring the system at the operator stations at random intervals. When active it requires confirmation in the displayed window and it is logged.

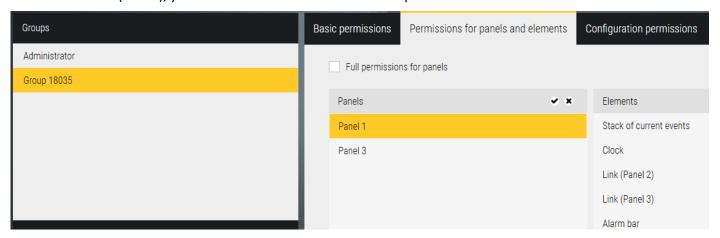
Supervisor software—Installation and operation manual

Permissions for panels and elements

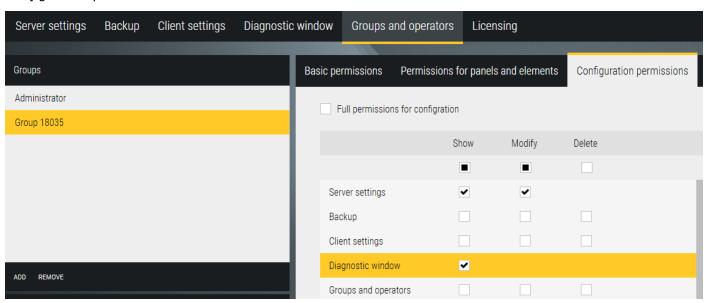


Clicking on the button at the bottom of the window in the first column displays a list of available panels - select those which operators in this group have access to and *OK*.

The second column (*elements*) displays a list of embedded items in the panel. When you select item in this list in the third column (*status*), you can choose to hide this item in the panel.

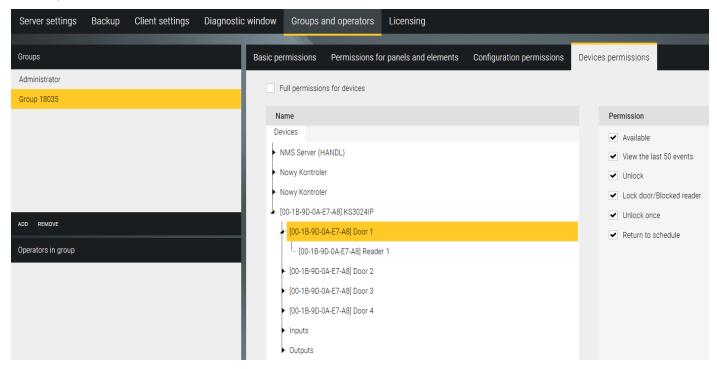


Configuration permissions



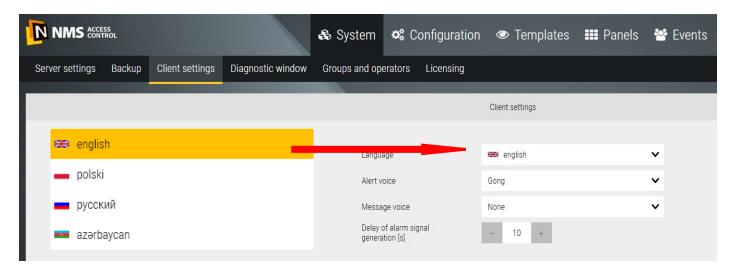
In this tab you need to set which items from the program menu will be accessed by operators in this group. The Administrator has full access in terms of read, modify, and delete. For the *Security* group, only the selected menu items with the *Read* attribute are usually chosen.

Device permissions



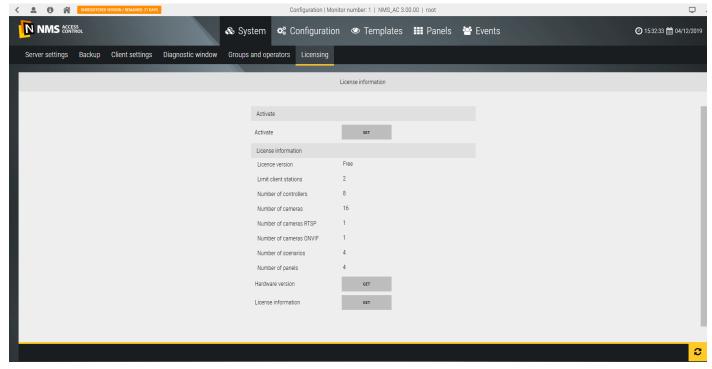
In this tab you need to set which system devices will be accessed by operators in this group in terms of performing specific operations on them. The Administrator has full access to all operations. For the *Security* group, only the selected items related to basic operations, e.g. *Unlocking/Locking the door* are left.

8.2 Client settings (operator station)



In this tab you can set the program menu language for the operator. Choose from one of four languages: English, Polish, Russian or Azerbaijani. The remaining options are used for alarm-related settings.

8.3 Licensing

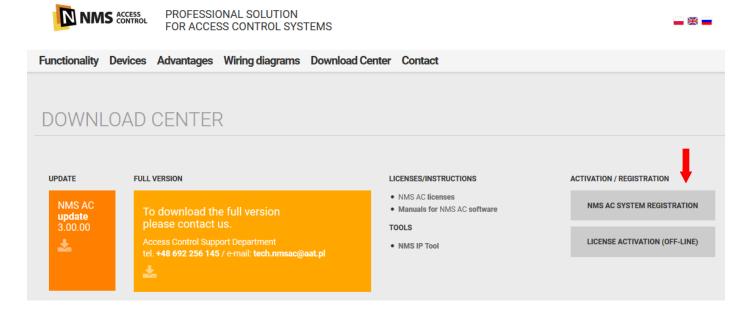


In this tab you can register a free license and activate new licenses to expand the capacity and functionality of the system. By default, the values for the free license are displayed. Purchased new licenses can be added online when the computer running NMS ACCESS CONTROL is connected to the Internet or off-line when there is no such connection. Licenses are based on strings and do not require hardware keys.

The NMS ACCESS CONTROL software installed works in a limited time period up to 30 days from the date of installation. This indicates the message displayed in the orange box in the upper left corner of the screen.

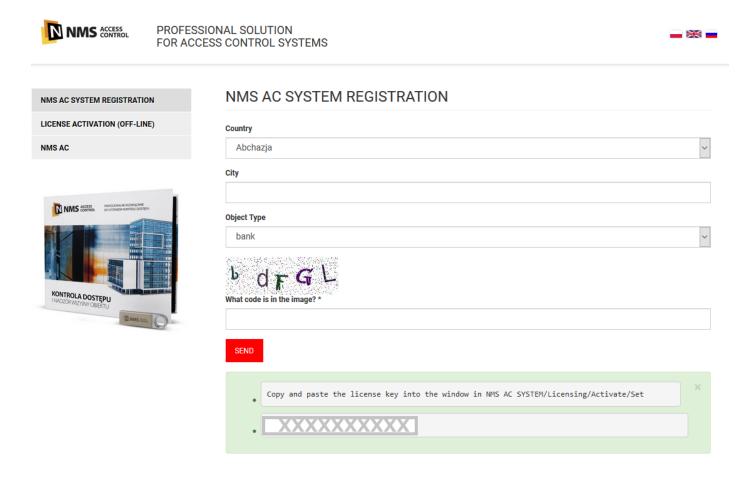


It is fully functional, but to work after 30 days it should be registered at this time on the site: www.nmsac.aat.pl in the *Download center/NMS AC System Registration*.

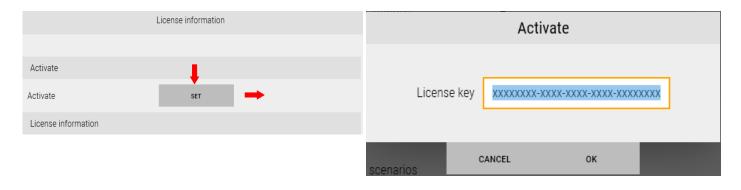


System registration in ON-LINE mode (NMS AC server is connected to the Internet)

Clicking on the REGISTER button will display a window as below:



Fill in the fields for the installation location of the system: country (from drop down list), city and object type. After entering the code from the image and clicking *OK* at the bottom the system registration code will be displayed, which should be copied and pasted into the box *SET* according to the info above: SYSTEM tab/Licensing/Activate/Set.



The program will reboot and after logging orange bar at the top of the window disappears. From that point on, the system will run indefinitely.

System registration in OFF-LINE mode (NMS AC server is not connected to the Internet)

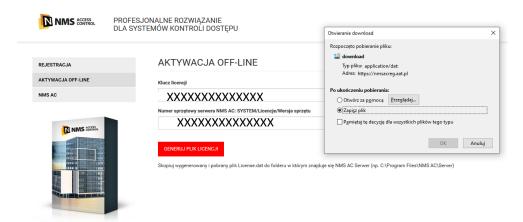
In this case, the system registration process must be performed on a separate computer with Internet access.

Open the page www.nmsac.aat.pl in the *Download Center/Registration*.

Clicking on the REGISTER button will display a window as below:



Fill in the fields for the installation location of the system: country (from drop down list), city and object type. After entering the code from the image and clicking OK at the bottom will display the system registration code, which should be copied and go to the window www.nmsac.aat.pl/Download Center/ACTIVATION OFF-LINE.



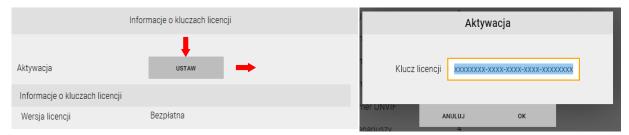
Paste the key copied from *REGISTRATION* window into first field and *Hardware version* from SYSTEM/ Licensing/Hardware version **on NMS AC server.**



After clicking *Generate license file* button a License.dat file will be downloaded to the disk.

You must copy License.dat file to *C:\Program Files (x86)\NMS AC\Server* directory **on NMS AC serwer**.

Paste license key copied from REGISTRATION window to *Activate* window on **NMS AC Server**.



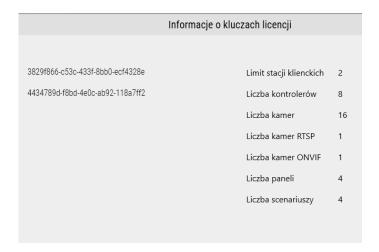
The program will reboot and after logging orange bar at the top of the window disappears. From that point on, the system will run indefinitely.

Paid licenses activation in ON-LINE mode (NMS AC server connected to the Internet)

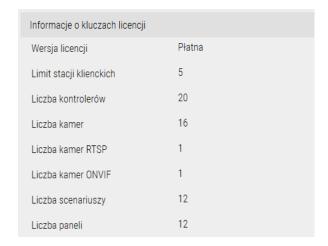
After obtaining paid license key you need to copy it and paste i *Set* field: SYSTEM tab/Licensing/Activate/Set on NMS AC Server.



Software will restart. In *Licenses* tab summary components quantity will be displayed which you can add to the system. After clicking on License GUID information - Get button you can verify owned licenses (after clicking on the key).



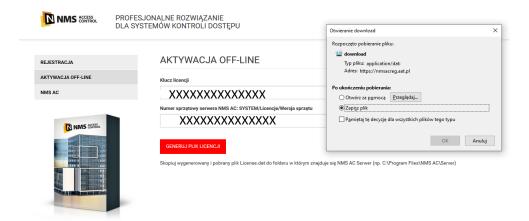
In main window of Licensing tab summary quantities are displayed.



Paid licenses activation in OFF-LINE mode (NMS AC server has no connection to the Internet)

In this case, the system registration process must be performed on a separate computer with Internet access.

Open the page www.nmsac.aat.pl in the *Download Center/OFF-LINE ACTIVATION*. Clicking on the *OFF-LINE ACTIVATION* button will display a window as below:



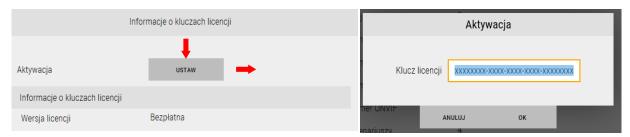
Paste or type purchased license into *License key* field, and *Hardware version* from SYSTEM/Licensing/ Hardware version **on NMS AC server** below.



After clicking *Generate license file* button a License.dat file will be downloaded to the disk.

You must copy License.dat file to *C:\Program Files (x86)\NMS AC\Server* directory **on NMS AC serwer**.

Paste or type purchased license key to *Activate* window on **NMS AC Server**.

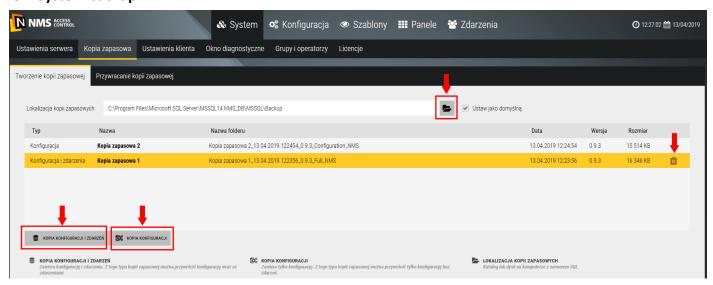


Software will restart. In Licenses tab summary components quantity will be displayed which you can add to the system. After clicking on License GUID information - Get button you can verify owned licenses (after clicking on the key). In main window of Licensing tab summary quantities are displayed.



Informacje o kluczach licencji	
Wersja licencji	Płatna
Limit stacji klienckich	5
Liczba kontrolerów	20
Liczba kamer	16
Liczba kamer RTSP	1
Liczba kamer ONVIF	1
Liczba scenariuszy	12
Liczba paneli	12

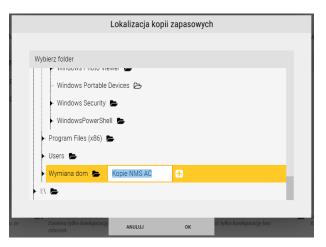
8.4 System backup



In this tab you can create or restore system backup.

Creating backup

On the top of the window backup localization is displayed. You can change default directory by clicking folder icon.



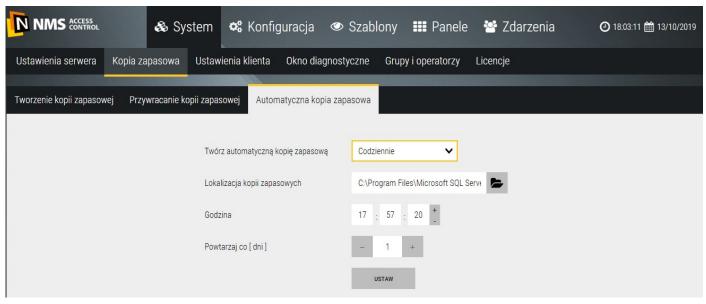
You can select directory on current hard drive, pendrive or other computer mapped disk and choose it as default localization. You can create events and configuration or configuration only backup clicking on one of buttons on the bottom of the window. The beginning of the name can be changed. Default backup name contains date and time of generation and type.



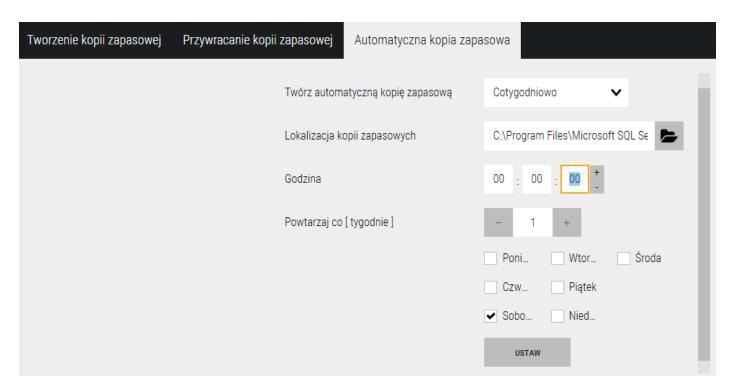
After backup it appears on the list. After moving the cursor over chosen backup Recycle bin icon appears on the right - clicking it deletes backup.

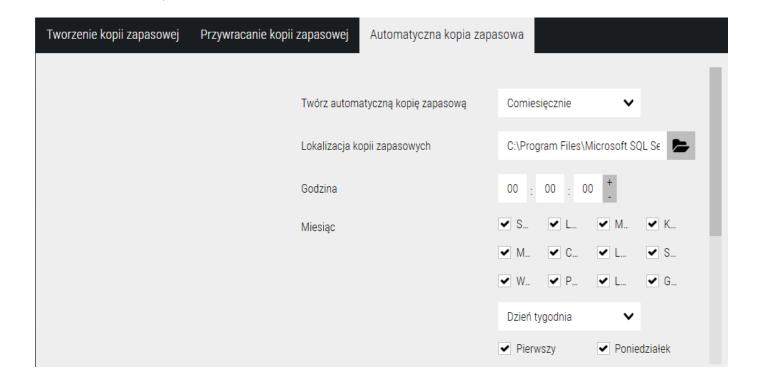
Automatic backup

A window in which you can set the parameters of automatic backup.



The automatic backup can be created and saved daily, weekly or monthly.

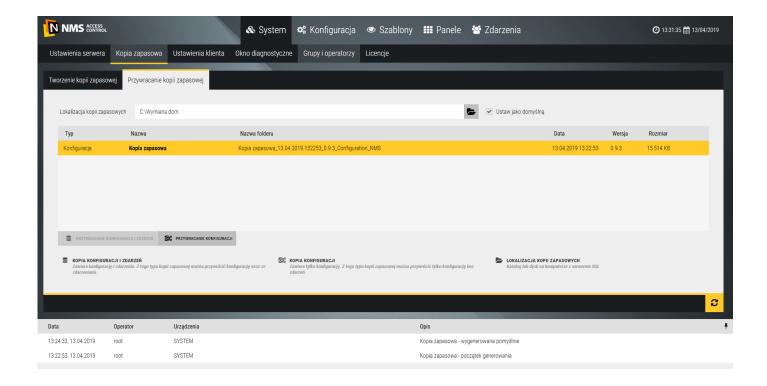




Restoring backup

Window which you can restore backup from is similar as create backup window.

To restore system backup you need to select the directory which contains backup, select backup and click *Restore configuration* button on the bottom of the window.



THE LICENCE AGREEMENT FOR THE "NMS ACCESS CONTROL" PROGRAMME

AAT SYSTEMY BEZPIECZEŃSTWA SPÓŁKA Z OGRANICZONĄ ODPOWIEDZIALNOŚCIĄ with a registered office in Warsaw ul. Puławska 431, 02-801 Warsaw

The District Court for the Capital City of Warsaw, XIII Commercial Division, entry number KRS 0000838329.

Tax identification number NIP 9512500868, statistical number REGON: 385953687, Value of the share capital: PLN 17 005,000.00 ("the Company")

This licence agreement is an agreement concluded between the user (hereinafter referred to as the User) and AAT SYSTEMY BEZPIECZEŃSTWA SPÓŁKA Z OGRANICZONĄ ODPOWIEDZIALNOŚCIĄ, with a registered office in Warsaw, ul. Puławska 431, 02-801 Warsaw, entered in the Register of Entrepreneurs kept by the District Court for the Capital City of Warsaw, Thirteenth Commercial Division of the National Court Register, number of entry KRS 0000838329, tax identification number NIP 9512500868, statistical number REGON: 385953687, value of the share capital: PLN 17 005,000.00 (hereinafter referred to as the Producer) for the use of the NMS ACCESS CONTROL programme, subject to the terms and conditions specified below. The User acknowledges that the Agreement concerns all the possibilities of using the Programme, regardless of the place or method of its installation.

1. Definitions

- 1.1. "Copyrights and Related Rights" each and all copyrights and related rights, including, in particular, copyrights, rights to patents, trademarks, as well as know-how and business secrets forming a part of incorporated in the Programme, constituting the property of the Producer. Copyrights and neighbouring rights are protected, in particular, by the Act of 4 February 1994 on Copyrights and Neighbouring Rights (Journal of Laws of 1994, no. 24, item 83, as amended). This Agreement shall not transfer any copyrights and neighbouring rights to the User and shall not grant him such rights. The User shall only have a possibility of using the Programme within the scope specified in the Agreement.
- 1.2. "Installer" a third party performing in particular sales/deliveries and installation of the Programme at the User's. The installer shall be only granted the right to resell the Programme and install it at the User's, the Installer shall have no other rights indicated in the Agreement and concerning the User.
- 1.3. "Key" distributed along with the Programme sequence of signs enabling activation of the Programme's licence, intended for use in the server where the Programme is installed. The key prevents, among others, free license transfer. Key loss or damage makes it impossible for the Programme to operate.
- 1.2. "The Agreement" this licence agreement which the User concludes with the Producer for the purpose of obtaining a possibility of using the Programme.
- 1.3. "NMS ACCESS CONTROL" or "the Programme" a computer programme developed by the Producer dedicated only for some devices, enabling, among others, integration to a limited extent of Access Control Systems (KD) CCTV systems (VSS), along with the function of receiving technical and alarm signals.

2. Licence and limitations

- 2.1. The Producer hereby grants a licence to the User, solely for the User's use, on a non-exclusive basis, without a right of transfer or sublicencing thereof to third parties, for downloading, installation and use of the Programme on a PC or a laptop, also using mobile devices and the Internet..
- 2.2. The Installer may mediate in sales of the Programme and perform its installation at the User's,

which shall not be regarded as breach of the terms hereof.

- 2.3. The Agreement covers one server post and customer post of the User, and the number of devices connected and customers connected is limited by the efficiency of hardware used by the User and the kind of Key and/or Programme version.
- 2.4. Installation of the programme on the User server and customer posts on computers placed in facilities of the User is made by the Installer after the Producer or Installer gives the carriers with the Programme and the Key. Transferring the carriers does not mean the User acquiring proprietary copyrights to the Programme.
- 2.5. In order to enable implementation of the Agreement the Producer shall assign to the User ownership to carriers of the Programme as well the Key upon issuing them to the User.
- 2.6. The User has the right to make one back-up copy of the Programme.
- 2.7. The User may not, in any way, transfer for use, resell, transfer, distribute or in any way make the Programme or any part thereof available to third parties, and breach any rights referring to the Programme or any parts thereof.
- 2.8. The User shall not be authorized and undertakes not to undertake, not to cause and not to grant consent or authorization to any third party to conduct modification, create derivative elements, translations, de-compilations, disassembly or breaking the code of the Programme or any parts thereof or the Key.
- 2.9. The Producer reserves the exclusive right to modify, extend, update, translate, as well as repair the Programme at his own discretion.
- 2.10. The Producer is not obliged to inform the User about any modifications, extensions, updates, translations or next versions of the Programme.
- 2.11. The Producer is not obliged to provide the User with the next versions of the Programme, its extensions, updates and translations.
- 2.12. The User, supported by the Installer, may collect and install the modifications, extensions or Programme's updates made available by the Producer on their website or directly transferred to the User or the Installer.

3. Term of the Agreement

- 3.1. The Agreement shall be conclude by the acceptance of the terms and conditions hereof by the User during the Programme installation.
- 3.2. The Agreement is concluded for an unspecified period of time.
- 3.3 The Agreement shall be unrestricted territorially, the User has the right to use the Programme on the territory of Poland and any other country.
- 3.4. Either Party shall have the right to terminate the Agreement with due observance of the period of notice of one month, with legal effect for the Party as of the last day of the next calendar month. Expiration or termination of the Agreement shall have no effect on the responsibilities of the Parties resulting from Copyright and Related Rights and shall not waive the prohibition to breach in any way the integrity of the Programme, including its modification, creating derivative elements, translation, decompilation, disassembly, or breaking the Programme's code or its part or the Key.
- 3.5. The Producer shall have the right to terminate the Agreement without notice in the event of significant breach of its provisions by the User. A significant breach of the provisions of the Agreement is especially proprietary breach of copyright to the Programme granted to the Producer.
- 3.6. The User may, at any moment, terminate the Agreement without a notice period by uninstalling the Programme and removing it from memories of all PCs and portable computers, mobile devices, destroying backup copies.
- 3.7. Upon termination of the Agreement, all the User's rights to the Programme transferred hereunder shall expire. Then the User shall be obliged to stop using the Programme and delete the Programme and the backup copy thereof from all media and devices.
- 3.8. The Producer shall not bear liability for any damages incurred in connection with termination

of the Agreement.

4. Guarantees and liability of the Producer

- 4.1. The Producer guarantees that he has the legal capacity to conclude and perform the Agreement.
- 4.2. The Producer shall deliver the Programme as is, with no guarantees and shall not bear any liability for the consequences of using the Programme in the cases of improper operation of the computer system caused defects of the hardware, improper installation or configuration of the software and hardware, and in the events of occurrence of improper operation of the Programme.
- 4.4. The Producer shall not bear liability under any warranty or guarantee for the Programme. In the event that the aforementioned limitation of liability is not possible, such liability shall be limited to the greatest possible extent.
- 4.5. The Producer shall not bear liability for the method of use of the Programme by the User, and in particular for the use of the Programme in contradiction with the Agreement or instruction manual accompanying the Programme, e.g. at a computer station other than the one designated for that purpose, and for any damages connected therewith.

5. User's risk

- 5.1. The User guarantees that he has the legal capacity to conclude and perform the Agreement.
- 5.2. The User acknowledges and agrees that all the risk connected with the use of the Programme in the manner specified in the Agreement and in the instruction manual accompanying the Programme shall be borne by the User, to the greatest extent permitted by the provisions of law. Moreover, in the event that circumstances arise which prevent the operation of the Programme unless a direct cause of such circumstances are the reasons attributable to the Programme the User should immediately notify the Producer thereof, under the pain of exclusion of any liability of the Producer thereunder. The User acknowledges that installation of the Programme should be made by the Installer.
- 5.3. The Producer may control the manner of using the Programme by the User in terms of its compliance with the provisions of the Agreement and intended use of the Programme.
- 5.4. The Producer may additionally control whether there were any attempts to remove or evade technical protections of the Programme. Should the inspection disclose that the User has a computer programme used solely for removing protections, the Producer may claim destroying such a Programme.
- 5.5. If the Producer has legal interest in obtaining the User's statement that they use the Programme on the basis of the Agreement, they may request from the User to issue such a statement.
- 5.6. The name and logo of the Programme are subject to legal protection on the basis of relevant regulations. The User without prior written consent of the Producer is not entitled to record, multiply or distribute intangible goods referred to in the previous sentence, either in full or in part, by any means and in any form.

6. Settlement of disputes

- 6.1. The Parties undertake to settle any disputes which may arise in connection with the performance of the Agreement in an amicable manner.
- 6.2. In the event that the Parties are unable to settle a dispute resulting from the Agreement in an amicable manner, the Parties shall subject themselves to the Polish law as the law governing the settlement of any disputes, which shall be referred by them for settlement to a court having jurisdiction over the registered office of the Producer.

7. Copyrights and Neighbouring Rights

A breach of Copyrights and Neighbouring Rights of the Producer may entail civil and penal liability of the entity breaching such rights.

8. Remuneration

- 8.1. Under the Producer granting to the User license in accordance with the Agreement, the User has made one-time lump-sum license fee when purchasing the license to the Software.
- 8.2. The amount of remuneration indicated in passage 1 above includes also remuneration for transfer of ownership of the Programme carrier/carriers and the Key.

9. Final provisions

- 9.1. The Producer may transfer his rights to the Programme or its part to any third parties of his choice, without an obligation to notify the User thereof.
- 9.2. The User may not transfer his rights granted hereunder to any third parties without the consent of the Producer.
- 9.3. Any amendments to this Agreement shall require a written form, under a pain of nullity.
- 9.4. The Parties declare that they have read the text of the Agreement, that they understand it and that they are aware of the scope of their rights and obligations.

10. Partial Invalidity

If any provision of the Agreement is illegal or its purpose is the circumvention of law, it shall be invalid. The remaining provisions of the Agreement shall remain in full force and effect unless it follows from the circumstances that without those invalid provisions, the Agreement would not have been entered into. In such situation, the Parties agree to enter into negotiations in order to replace invalid provisions by provisions fulfilling possibly the most similar economic goal.

