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# 1. General information

IFTER EQU is a software designed for integration and visualization of the following systems:

- I&HAS – Intruder and Hold Up Alarm Systems
- BMS – Building Management Systems
- FAS – Fire Alarm Systems
- ACS – Access Control Systems
- CCTV – Closed Circuit Television
- Control-measuring systems

For the current list of supported systems please refer to our website: [www.ifter.eu](http://www.ifter.eu)

## 1.1 Database

IFTER EQU is based on Oracle SQL database. Normally free version is implemented – Oracle 10G, which includes up to 4 GB of data and up to 4 computers connected to the database. In case of bigger objects, you can implement a commercial version, which is Oracle 12C. Thanks to this solution it is possible to obtain multi-station system, in which each computer can both record and readout the database.

System works in a client-server technology. It allows to implement a flexible and stable solution with multiple computers working at the same time. The database server is installed on a main computer, while the other computers are connected to it.

Database is a type of storage for configuration and events. Every time any change is made, it is introduced on all computers. This way you are able to work online. Both database and software can be installed on the same computer.

Integration server connects with supported devices and registers all events in the database.

## 1.2 IFTER EQU - Modes

With IFTER EQU you can choose between two modes:

- visualization: allows to present your data in the form of events lists and graphic icons placed on architectural plans. It contains both configuration and communication modules which allow it to interact with devices. Visualization is a standard version of IFTER EQU;
- server: works in a background without interface. It contains both configuration and communication modules which allow you it to interact with devices. Working this

mode, you cannot configure graphics. Server mode is implemented on data distribution servers or as a gateway for other BMS systems.

### 1.2.1. Visualization

IFTER EQU allows you to define your interface, which makes the program easy to operate. You use Graphics editor to do so.

We put active elements on graphic background. The elements are:

- buttons,
- boxes,
- icons,
- functional modules,
- events list.

The administrator can put access restrictions on each component (view and steering options).

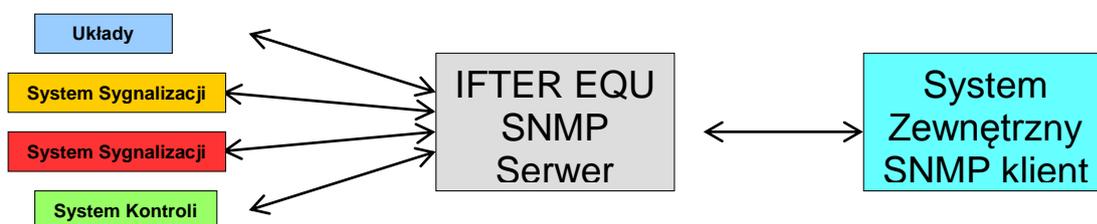
Defined graphics can be used on other computers as well, you just need to copy them on a local disc

### 1.2.2. SNMP Server

Simple Network Management Protocol (SNMP) is a standard protocol for device management within IP network. SNMP is popular among network management systems and allows to monitor network devices. This protocol forms a part of Protocol Suite (IPS), defined by the Internet Engineering Task Force (IETF). It consists of a standard package for network management, that includes application layer, data scheme and data object set.

SNMP devices share data in form of variables and Traps, allowing supervising systems to fully control them.

Thanks to SNMP server mode, you are able to share the data downloaded from integrated systems with external SNMP clients. Using SNMP server, IFTER EQU can transfer data downloaded from the control units and control-measuring devices. Thanks to SNMP Server, external systems without a direct device support can download all data regarding the control unit. Moreover – if it's technically possible – it can steer that device.



### 1.2.3. OPC Server

OPC (OLE for process control) is an open communication standard, implemented in building automation. OPC interconnects Windows-based applications with measuring systems, building automation, security systems and other devices.

When you work in OPC server mode, you are able to share the data downloaded from integrated systems with external OPC clients. Using OPC server, IFTER EQU can transfer data downloaded from the control units and control-measuring devices. Thanks to SNMP Server, external systems without a direct device support can download all data regarding the control unit. Moreover – if it's technically possible – it can steer that device.

## 2. Start

Before installing the software, you need to make sure you have got:

- USB hardware key,
- license code

they are necessary to perform proper installation.

You don't need Internet connection to activate the product. Installation consists of two steps:

- license key definition (you need to establish the computer to which you connect USB key;
- adding license codes.

If you don't have any of these, there are a few options:

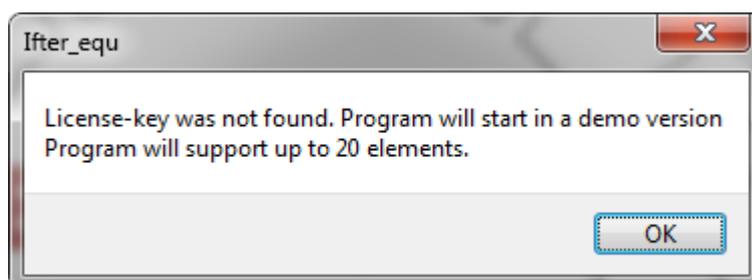
- DEMO mode: you can work with 20 elements maximum;
- TEST mode: program works for 30 minutes you cannot connect to the devices. After 30 minutes, restart the program to continue configuration;
- TRIAL mode: program will work for a specified period of time. You are able to connect to the devices.

Technical requirements:

- Windows 7 or 8;
- PC computer, 8 GB RAM, Windows Experience Index: equal or higher than 5,5.
- Computer screen: 24"

### 2.1 Start the program without USB key and a license code

Without a key and a license, you will see that window after starting the program.

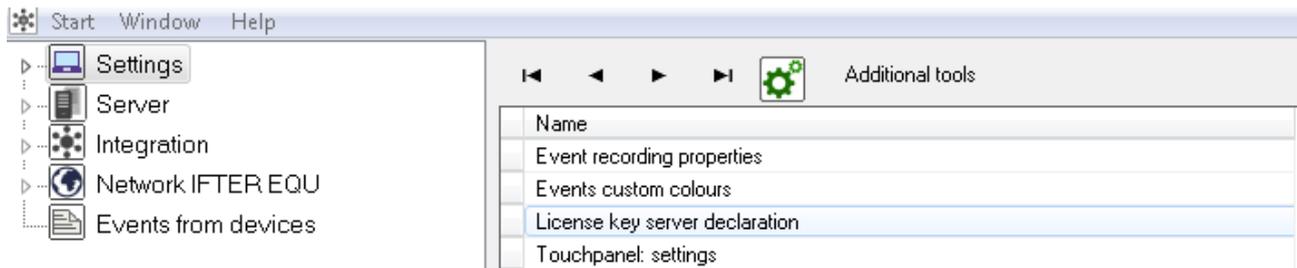


Click OK to start DEMO version (up to 20 elements). After superpassing that number the program will start in TEST version. Trial version does not require USB key, but you do need an activation code with an “expiration date”.

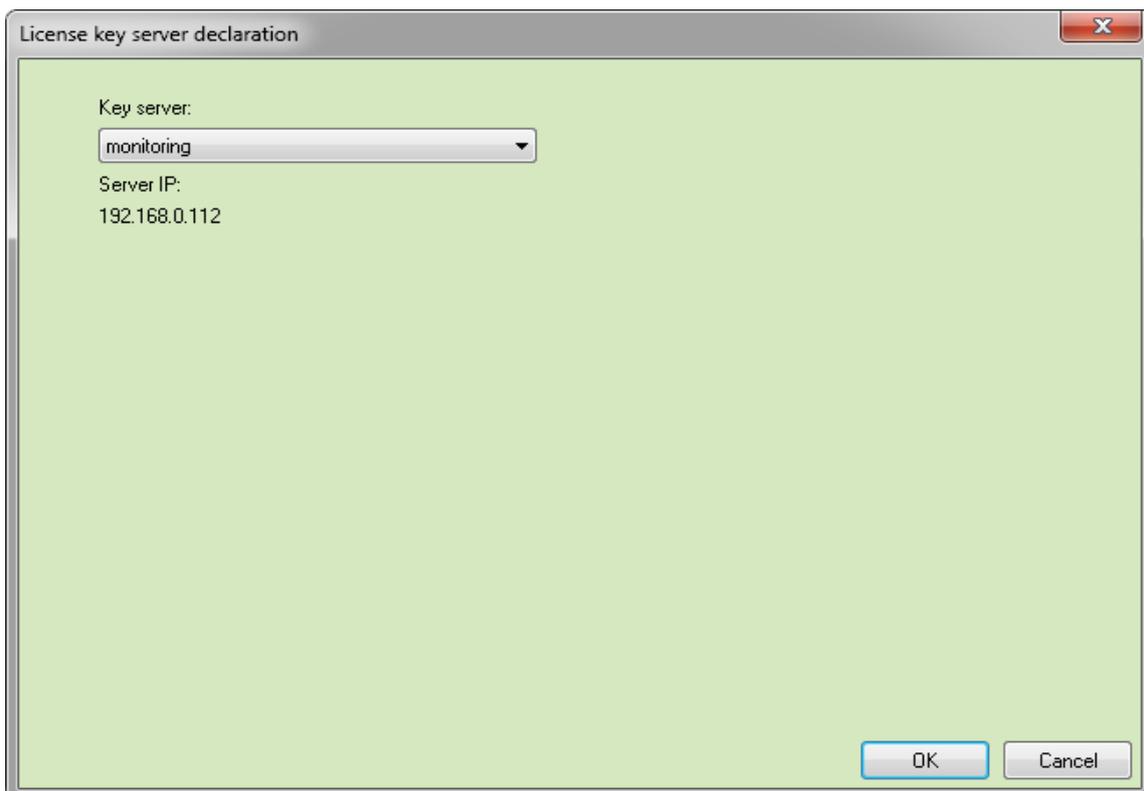
## 2.2 License key server declaration

You need one USB key for one object. You need to insert the key in the computer that will be a key server. Other computers must have a direct network connection with a key server. The number of codes is equal to the number of licenses.

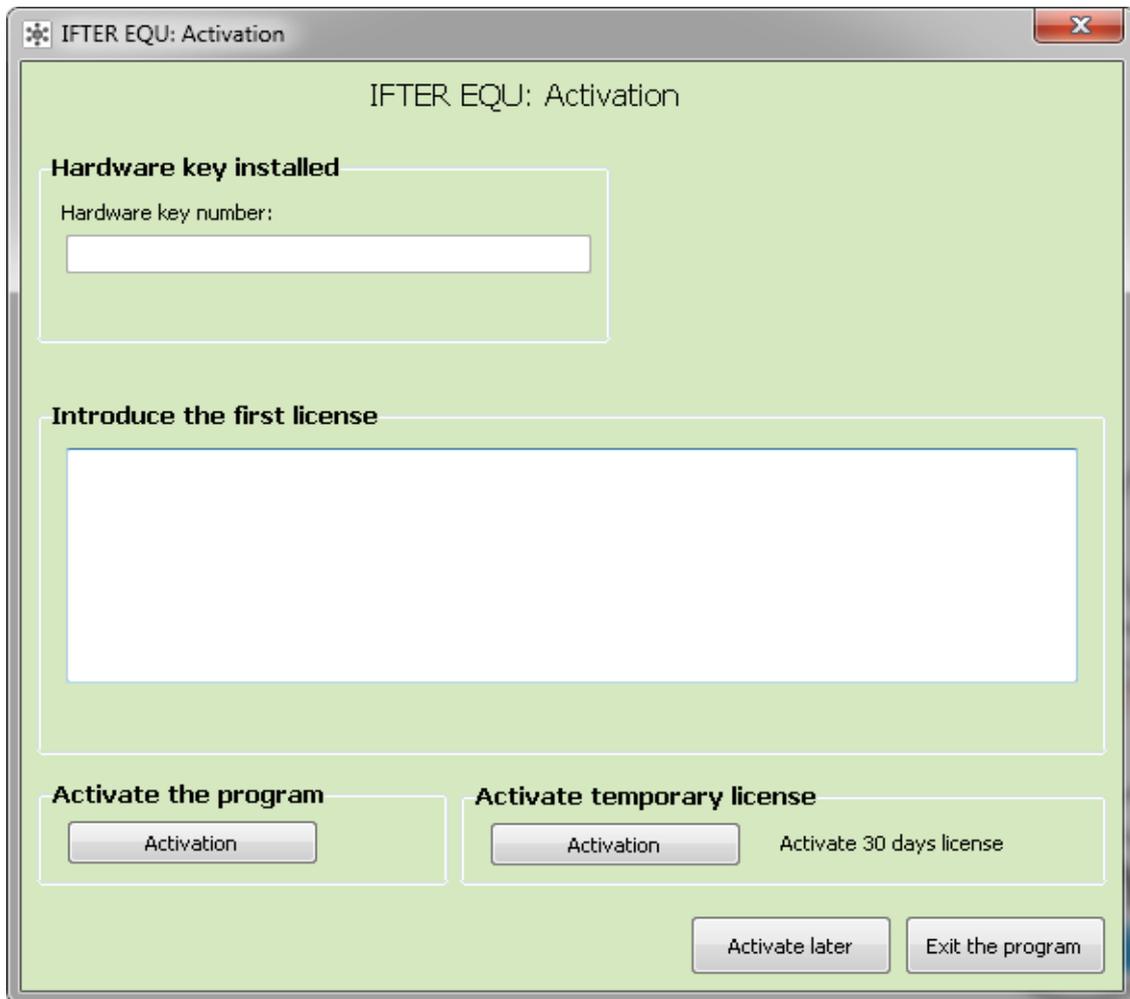
License codes are assigned to one hardware key. After starting a program, go to Settings (Explorer tree) and select **License key server declaration**.



In the following window, you need to select a server station, where you will insert USB key.



After you choose a workstation, you will see an additional caption: Server IP. Click **OK**.



Click OK to move forward. You will see the next window:

- you will see the number of a license key and a box where you should insert license code. Next, click on **Activation** on the left side.
- If you have a time limited license (trial), insert license code and click on **Activation** on the right side. IFTER EQU will work accordingly to the license (standard trial lasts 30 days).

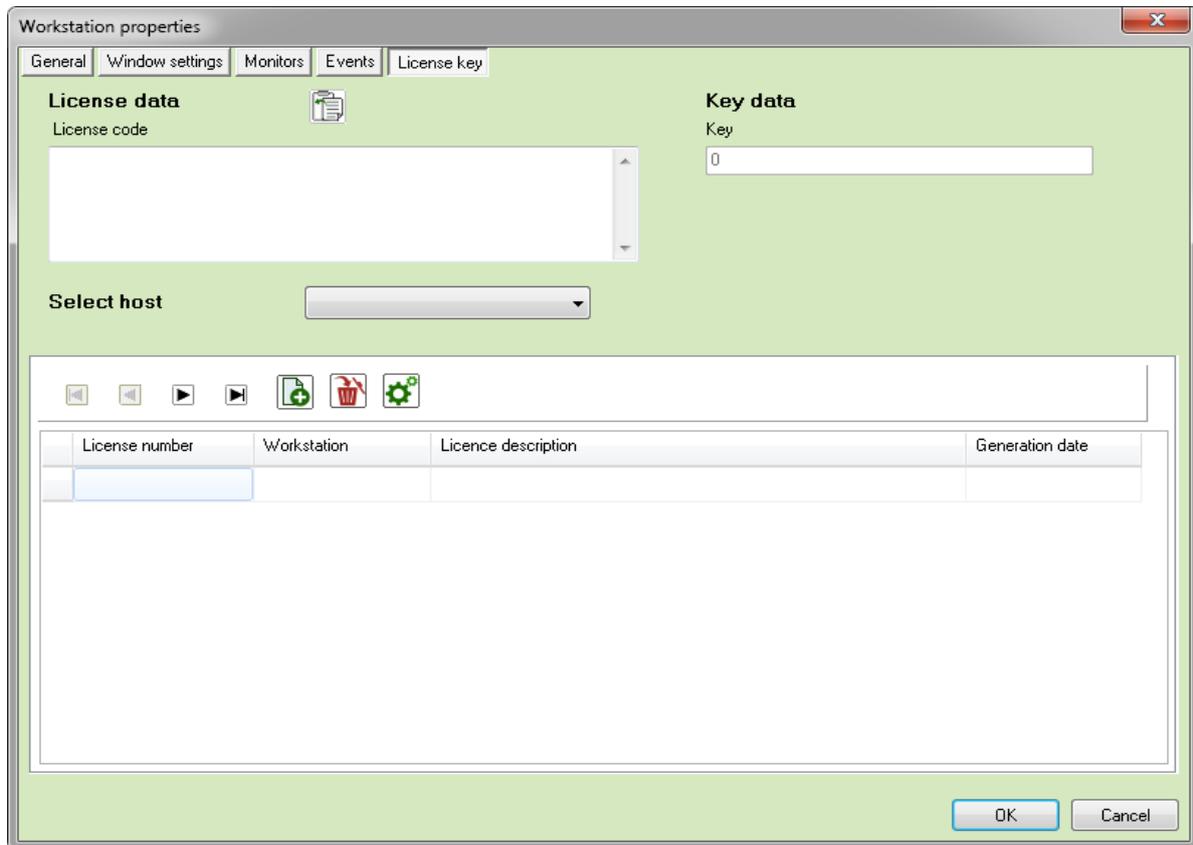
**Activate later** – starts in DEMO mode.

**Exit the program** – closes IFTER EQU.

After introducing license code to the system, restart the program.

## 2.3 License key

Server workstation will show extra tab – **License key**. Here you can see all declared licenses. Also, you can add new licenses here for key server and other workstations. License codes are assigned to one USB key.



**License data** – contains your license code. Paste your license code in the window above, select host and then click **Add** button to implement your license.

**Key data** – key serial number

**Select host** – select workstation for this license.

In this window you can see the list of all your licenses. Use the corresponding button to add another license. If your hardware key is removed from the workstation, you can select a new workstation from the list.

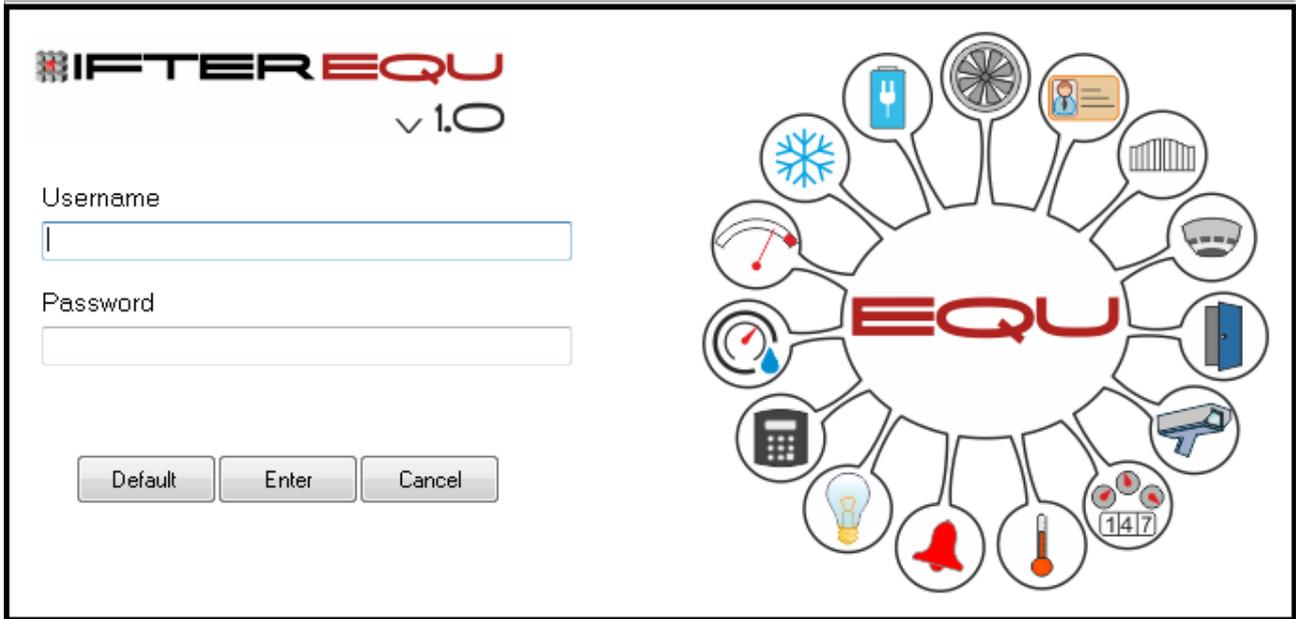
**Properties** – contains all info about the license.

## 2.4 Login

If you start the program for the first time, you will see the window to enter login and password. After IFTER EQU is installed, **ifter** is default user, with full administrator authorization.

**User:** ifter  
**Password:** ifter

After you log in for the first time, you should change default password. Don't delete default user, because he has full access to the system and can define the scope of access control for other users.



You can choose from the following options

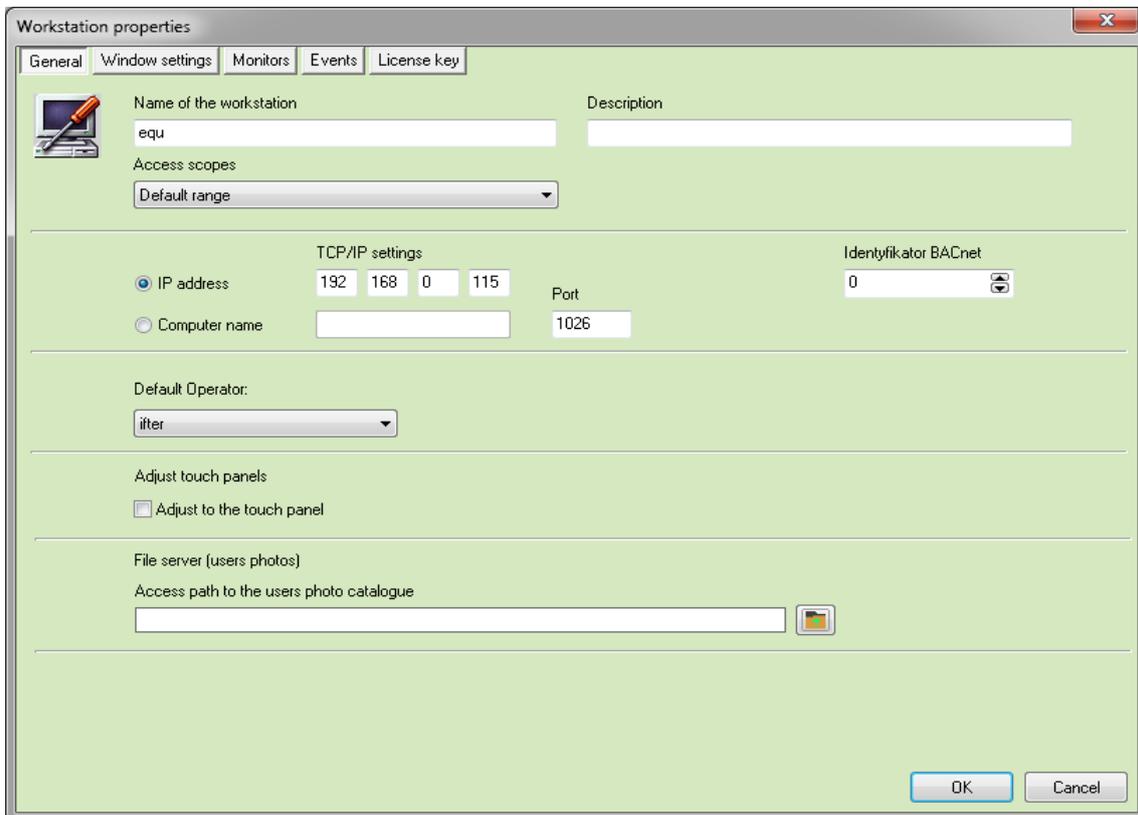
- Start,
  - Window,
  - Help.
- 
- Menu Start:
  - Log in / log out default User – log in as default user, defined in workstation properties;
  - Log out – quit IFTER EQU and go to log-in window.
  - Explorer – start system manager
  - Close – quit the system
  - Click on **Window** to change your setup:
  - Cascade
  - Set horizontally
  - Set vertically
  - Refresh

Go to Help menu to see the Information about the system, such as name, version and the latest update.



## 2.5 Default user

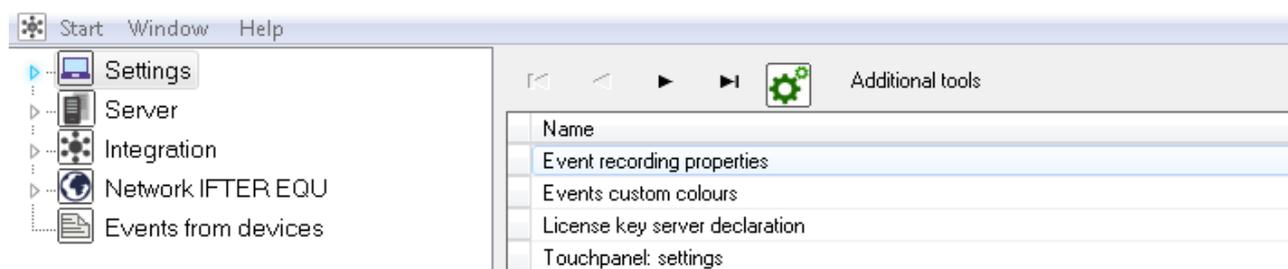
You can set a default user on each station. He will be logged automatically each time you start the program. You can configure a different default user for each workstation.



You can always add a new operator using the tools in Explorer.  
 After logging out, you can log in as default user, without any password.

### 3.0 Explorer

Explorer is a main tool for administrating IFTER EQU. Here you can add, edit and delete configuration elements.



Explorer divides into two main parts: tree on your left and a list on your right. Select an element on a tree to see the list.  
 Above the list you can see special buttons designed to easily manage the list.

	Add	Click on it to open the Wizard where you can create new element.
	Delete	Click on it to delete an element. This action often requires confirmation.
	Settings	Open a new window where you can see and edit numerous setting regarding selected element.
	Copy	Create new element, based on the existing one. You will need to enter the name. Make sure to enter a unique name each time, so that every element can be easily identified.
	Edit	This button is applicable only in case of graphics. Click on it to edit any settings of a graphic element.
	Show	This button is applicable only in case of graphics and reports. Choose it to see a preview of selected graphic or a report printout.

The list of available icons depends on the access level of the operator, as well as selected elements.

On the list of elements, you can see their name and descriptions. Tree of elements consists of 5 basic parts.



**Settings** – general system settings

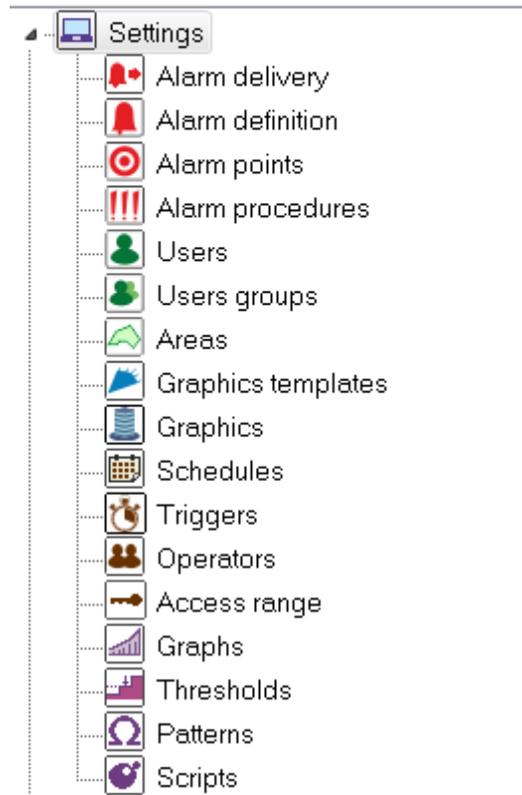
**Server** – define your server for data distribution between IFTER EQU and external systems via OPC or SNMP.

**Integration** – configure devices supported by IFTER EQU.

**Network IFTER EQU** – define your workstations in IFTER EQU.

**Events from devices** – global system events. You can restrict access with appropriate settings in Access range.

### 3.1. Settings



In this column you can find:

- Alarm delivery,
- Alarm definition,
- Alarm points,
- Alarm procedures
- Users,
- Users groups,
- Areas,
- Graphics templates
- Graphics,
- Schedules,
- Triggers,
- Operators,
- Access Range,
- Graphs,
- Thresholds,
- Patterns,
- Scripts.

Click **Properties** to see the list of available options:

- Event recording properties
- Events custom colors
- License key server declaration
- Touch panel settings

### 3.1.1 Event recording properties

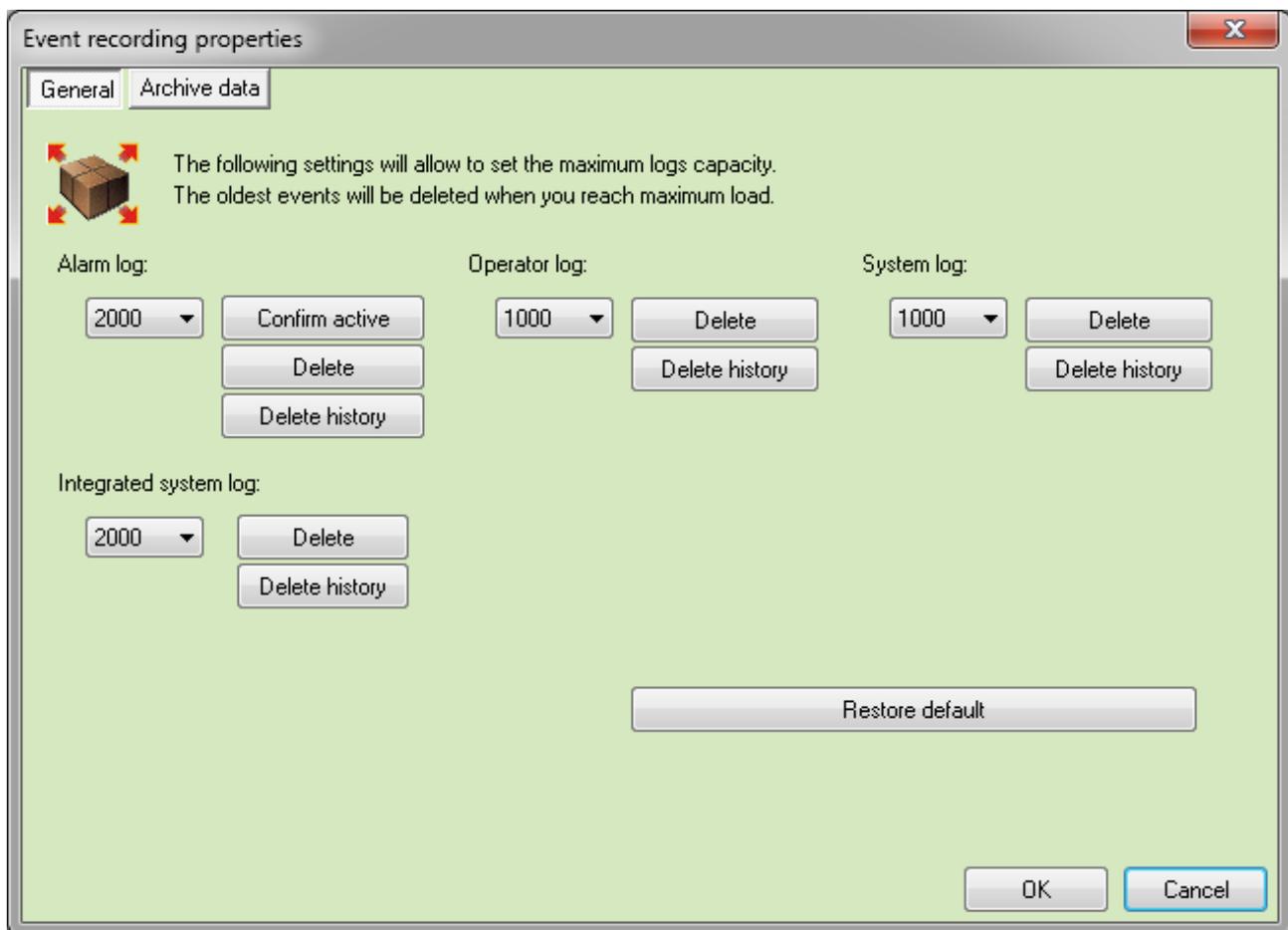
IFTER EQU events are registered in two separate databases simultaneously. In the first database you store events along with global system configuration. After exceeding logs capacity, the oldest events are deleted.

Second database was designed for archive. You can see older events, using Archiw.exe. If you use Oracle 10G database, your oldest events will be deleted, when the event load approaches 4GB total. This mechanism prevents the system from blockade as a result of exceeded maximum capacity. Click on Settings to open a new window with two tabs:

- General
- Archive data

#### General

Here you can configure your events logs and their capacity. Events are displayed automatically without any action from the operator. If you also implement access range, some of the events might be left out.



Here you can set the following parameters:

- Alarm log: registered separately for each workstation. Limited for alarms, both confirmed and not confirmed;
- Integrated system log: global system logs;
- Operator log: registered actions of IFTER EQU Operator. Logs are submitted for each workstation separately;
- System log – start/finish of system activity, modules upload, etc. Logs are submitted

for each workstation separately.

You can introduce the following commands:

**Confirm active** – confirm active alarms on all stations.

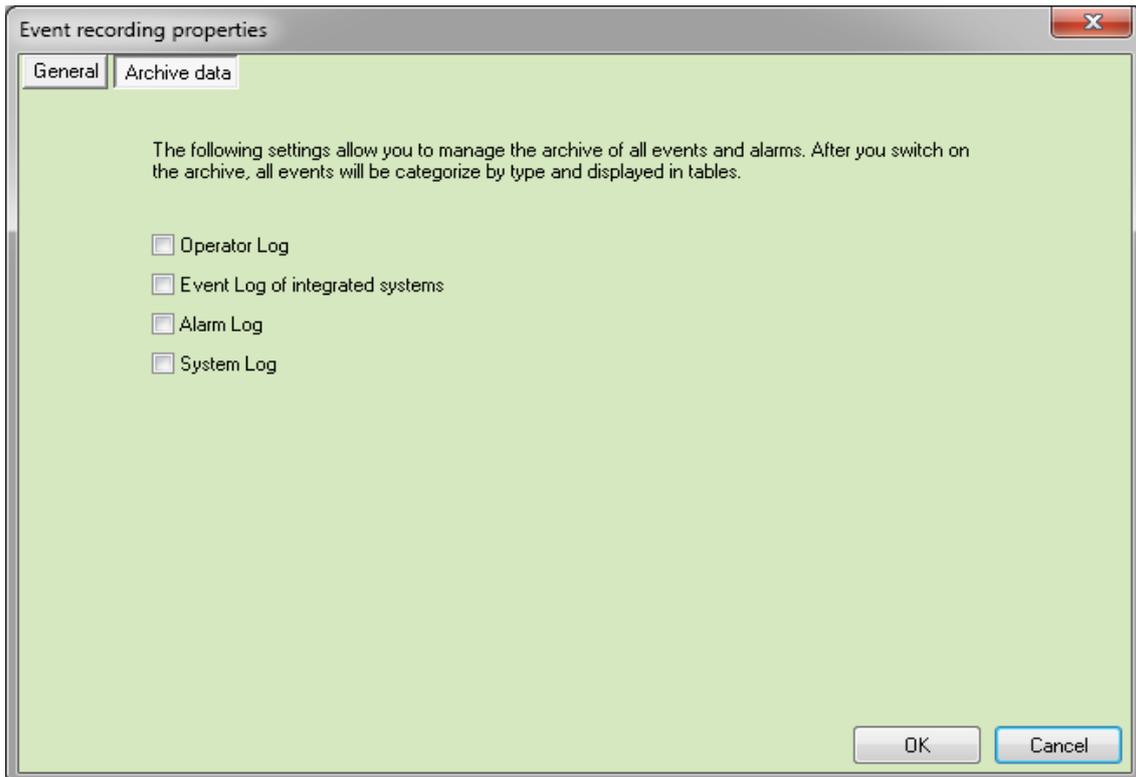
**Delete** – delete log entries on all workstations.

**Delete history** – delete archive entries on all workstations.

Enter the maximum event load. Once it's exceeded, the oldest events will be deleted.

### Archive data

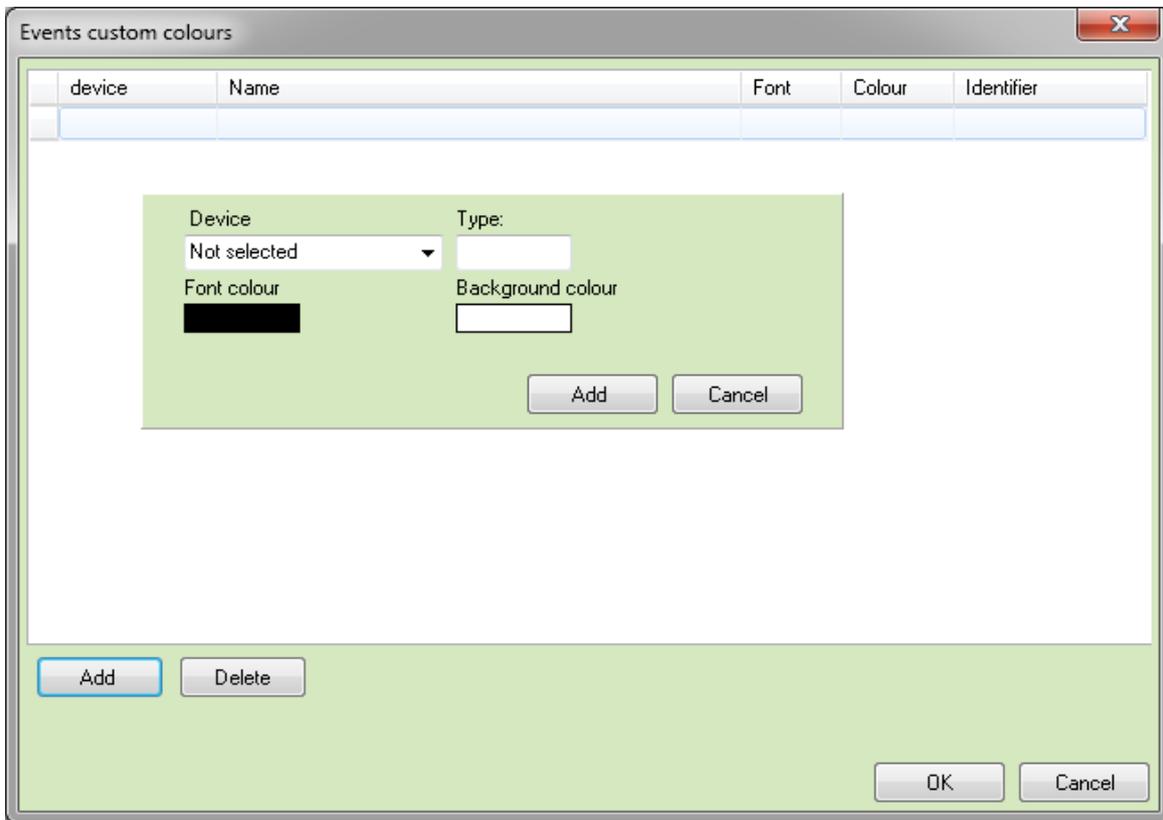
Switch on archive to save logs from a proper log. Log tables are located in a separate database scheme.



Select the element you want to archive in the log. Event tables are saved in a separate database scheme, so that the increased event load won't impact the speed and stability of IFTER EQU. With Oracle 10G database you are limited to 4GB of data.

#### 3.1.2 Event custom colors

If you want to distinguish your events really easily, you can assign a different color to each type of event. Click Add to open a new window that includes: Device, Name, Font, Color, Device, Type and Background color.



**Device** – select from the list

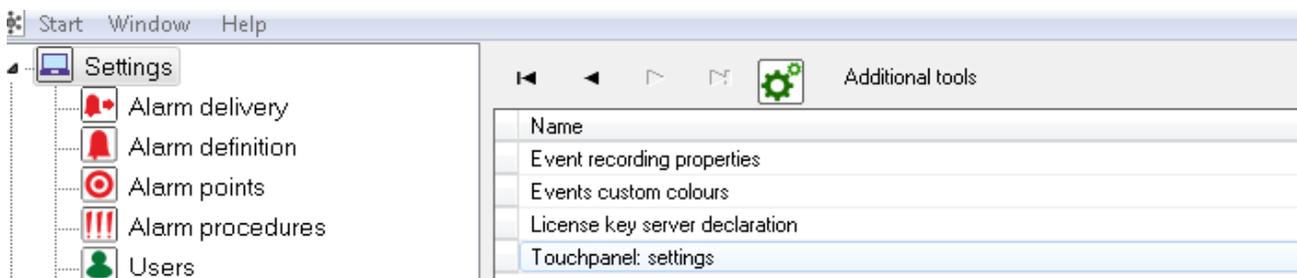
**Type** – enter the number of event for a particular integration. You can find a number in events log (ID number).

**Font color, Background color** – you can choose from number of colours. Click Add or Cancel to proceed.

### 3.1.3 License key server declaration

Select a computer where you installed an USB hardware key. Click on Properties to choose workstation and see the IP address.

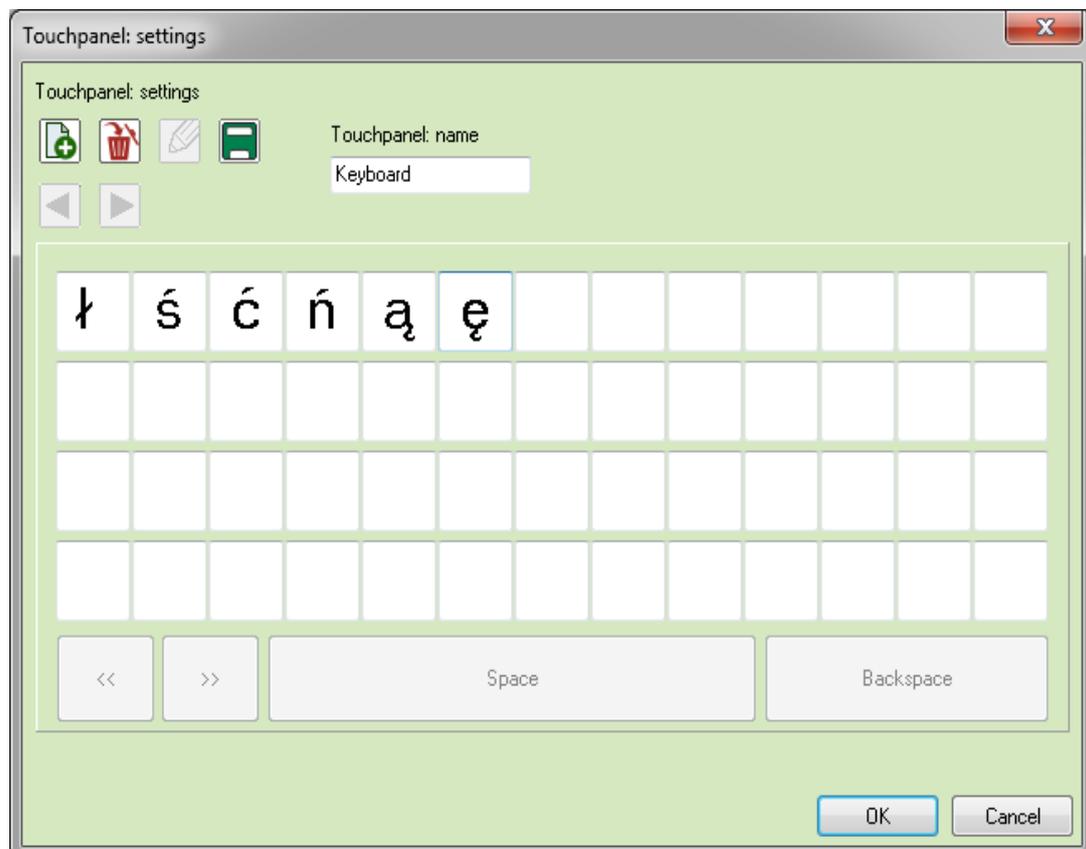
### 3.1.4 Touch panel: Settings



You are free to adjust a touch panel for your specific needs. You can define various keyboards and characters specific for any language. You can also set a number of different keyboards and use them every time you need. Select appropriate buttons (Add, Delete, Edit) to configure your keyboard.



Click Add to create a new keyboard. Next, you need to **Edit**. You will see a new window with editable keyboard. Fill it with the characters of your selection and choose a name. When your keyboard is ready, click **Save**. If you have more than one keyboard, you can use arrows to choose one of them.

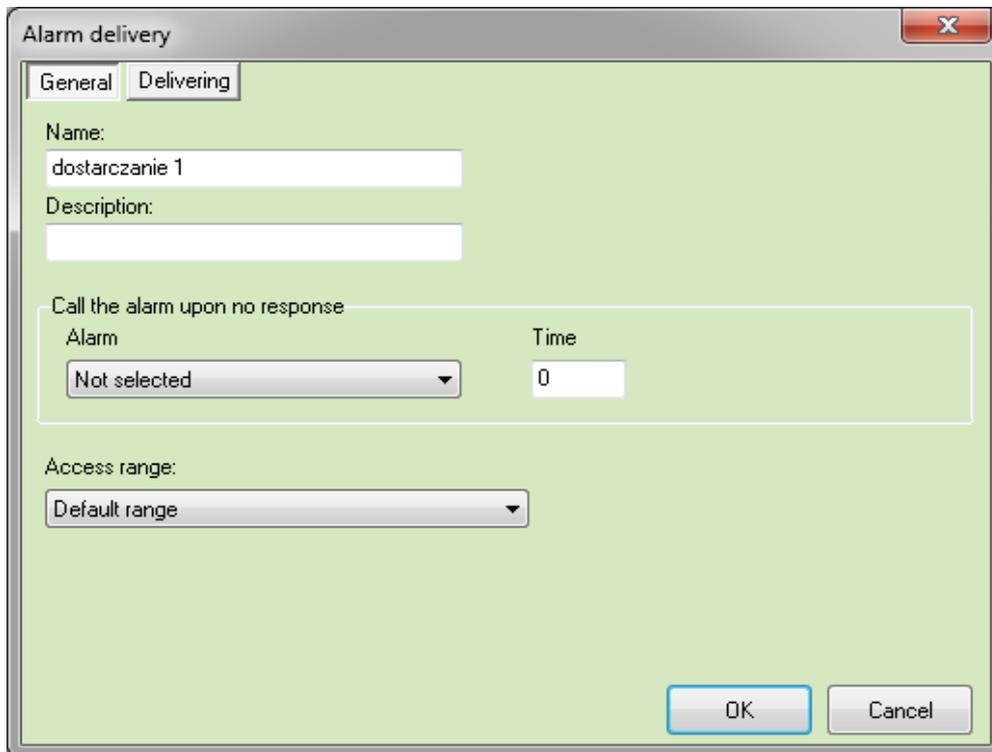


## 3.2 Alarm delivery

Here you can decide, when to set off the alarm and how and where to deliver it. You can see two tabs: General and Delivering.

### 3.2.1 General

Define basic parameters of alarm delivery.



The screenshot shows a dialog box titled "Alarm delivery" with a close button (X) in the top right corner. It has two tabs: "General" (selected) and "Delivering". The "General" tab contains the following fields:

- Name:** A text input field containing "dostarczanie 1".
- Description:** An empty text input field.
- Call the alarm upon no response:** A section containing two sub-fields:
  - Alarm:** A dropdown menu currently showing "Not selected".
  - Time:** A text input field containing "0".
- Access range:** A dropdown menu currently showing "Default range".

At the bottom right of the dialog box are two buttons: "OK" and "Cancel".

**Name** – up to 31 characters, all included, with space.

**Description** – additional text by the system or the administrator, up to 63 characters, all included, with space.

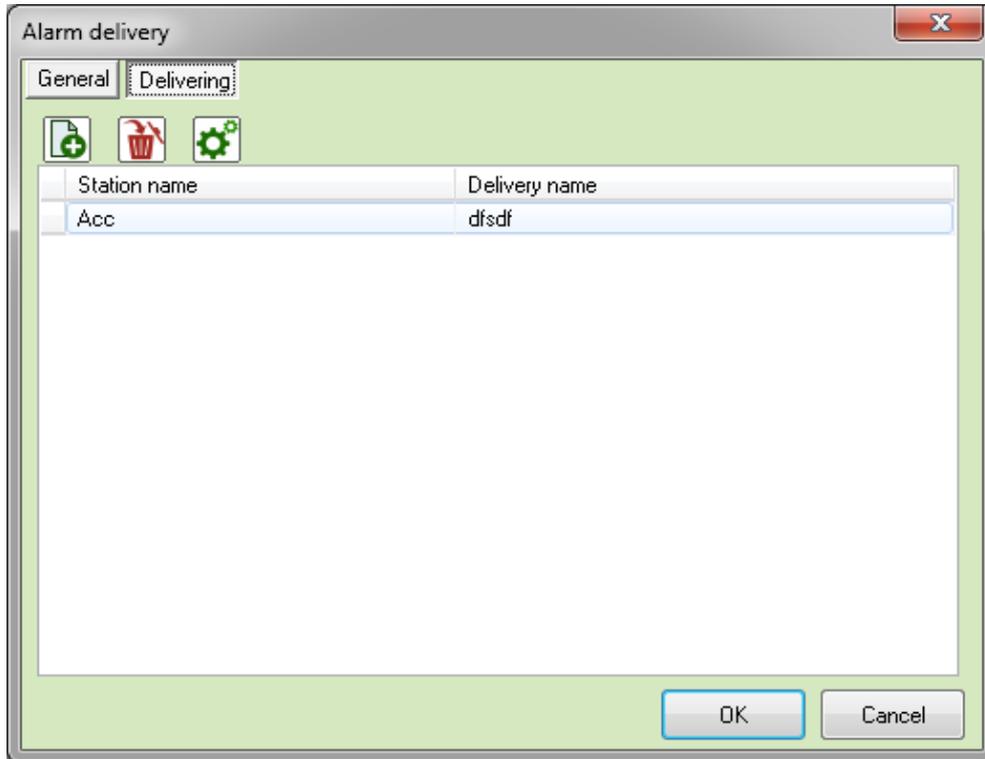
**Access range** – access to alarm delivery. Without proper access, operator will not be able to see this delivery.

**Call the alarm upon no response** – decide where to set off the alarm.

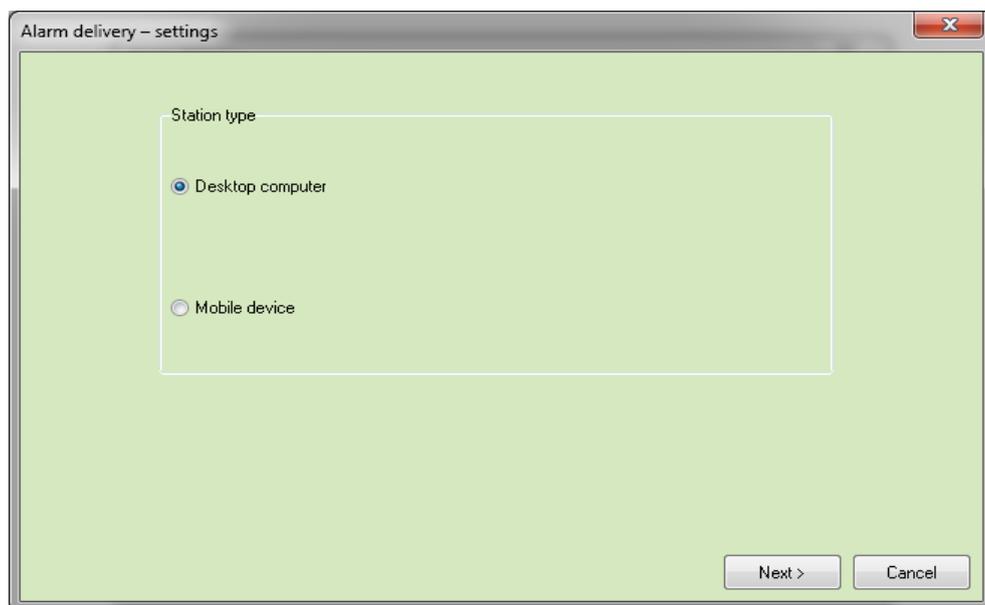
**Time** – time (minutes) for reaction; operator must take action to confirm the alarm. If the defined time passes without any reaction, the alarm will be set off. It can be activated from another computer. It will inform about lack of reaction.

### 3.2.2 Delivering

Here you can add, delete and edit settings. You can define multiple deliveries for one workstation, with different settings for each of them.

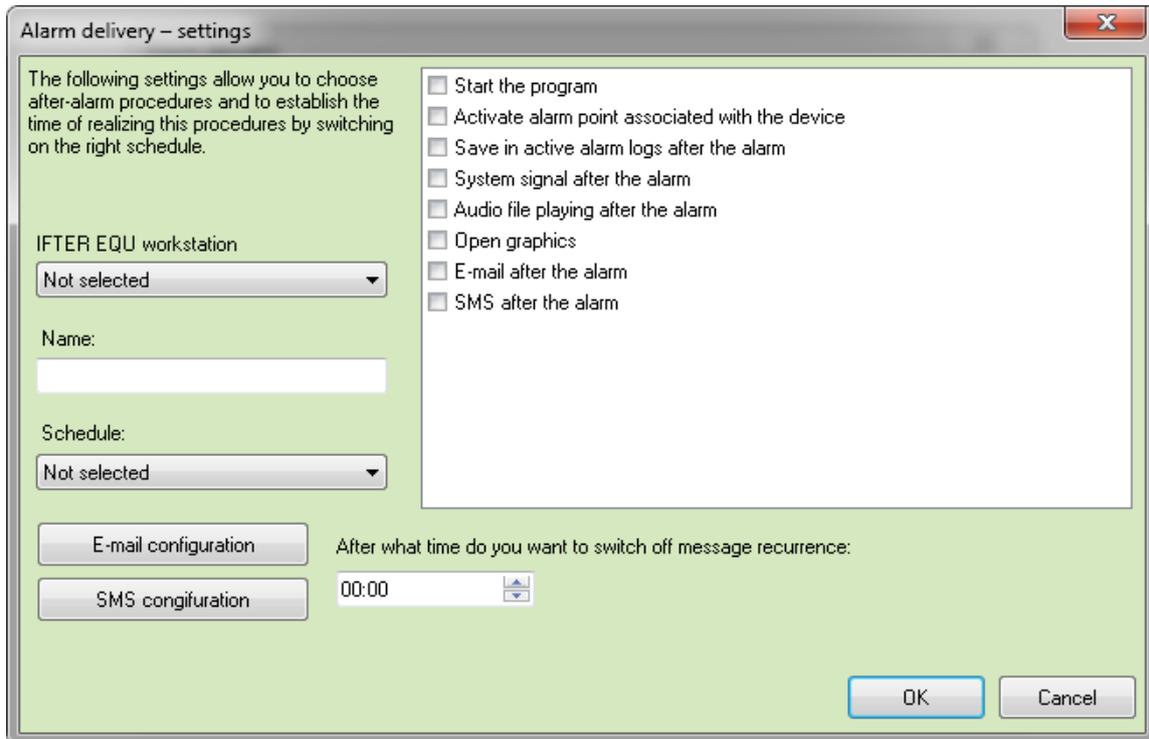


Click Add to see the following window.



### 3.2.2.1 Desktop computer

Click **Next** to move on to this step.



Here you can define the following settings:

**IFTER EQU workstation** – where to set off the alarm;

**Name** – we recommend a unique name for each delivery, for easy identification;

**Schedule** – delivery will take place within time range associated with a schedule;

**Switch off message recurrence** – regarding e-mail and SMS configuration. The first alarm will initiate the countdown. During that countdown another alarm delivery will not send another e-mail or SMS. After countdown is complete, an e-mail/SMS will be sent upon the alarm and the countdown will start over.

## E-mail configuration

E-mail configuration

Server configuration

Mail server:

Sender address:

Sender name:

25 Port: (default 587)

No encryption Connection security

Authentication

Login for authentication

Password to e-mail account

Messages settings

Sending address

Subject

Message

Run a test OK Cancel

Enter the following data:

**Server configuration** – server and sender data;

**Connection security** – select one option: no encryption, Start TLS, SSL/TLS;

**Authentication** – select this option and then proceed with login and password;

**Messages settings** – enter an address, subject and message;

**Run a test** – check for any errors in message configuration.

You can configure your message with macros with a symbol % on the front. See the following pattern:

%k – name of the controller, control unit;

%w – name of the alarm line, reader, fire line or the element on a fire line;

%s – name of the area, subsystem, group;

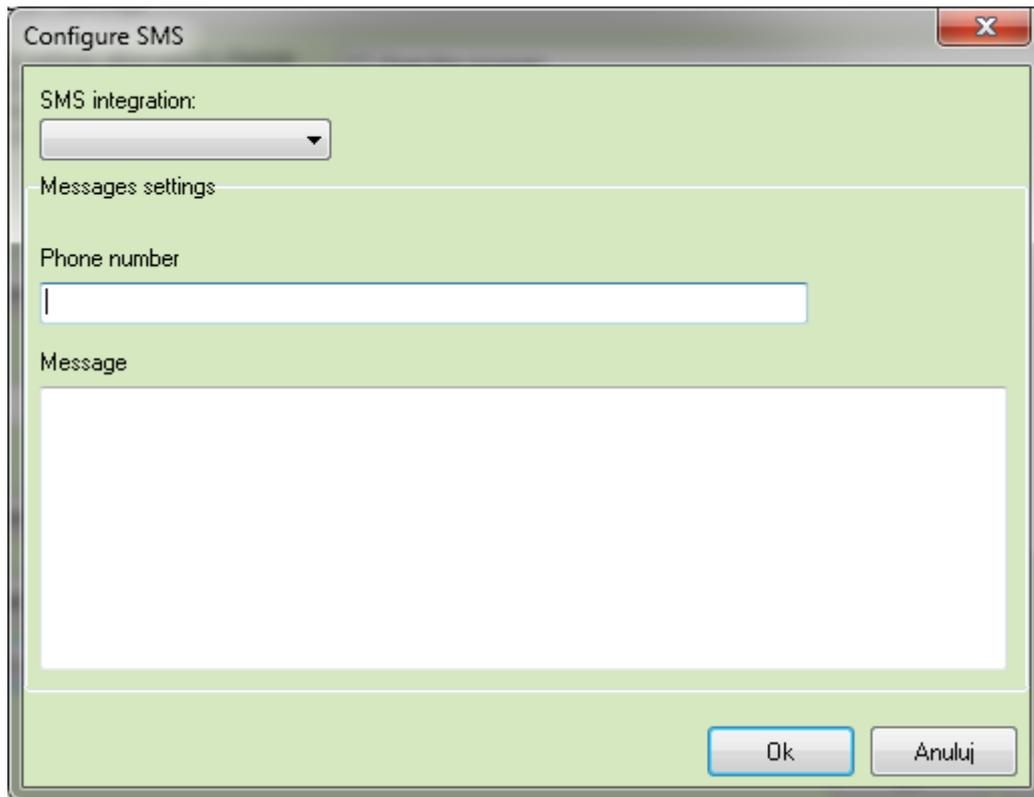
%d – date and time when the alarm occurred;

%o – alarm description, downloaded from integrated system;

%u – name of the user who set off the alarm

## Configure SMS

Alarm notification can be sent by SMS.



**SMS Integration** – choose GSM modem (configuration in Integrations on explorer tree).

**Message settings** – telephone number and message.

### Options

**Start the program** – when the alarm is set off, the system will start a program associated with an output from which the alarm came. You can find available programs on the explorer tree (IFTER EQU workstation).

**Activate alarm point associated with the device** – alarm point defined for particular alarm;

**Save in active alarm logs after the alarm** – save the event in alarm logs;

**System signal after the alarm** – After the alarm there will be an audio signal from the system. If you select an option to play audio file after the alarm, the system will bypass this step and will only play an audio file.

**Play audio file after the alarm** – WAV. file you can configure in Alarm definition (General tab).

**Open graphics** – when the alarm is set off, the system will open a graphic which you can choose on Association tab on the alarm device.

**E-mail after the alarm / SMS after the alarm** – textual notification about the alarm.

You can configure your message with macros with a symbol % on the front. See the following pattern:

%k – name of the controller, control unit;

%w – name of the alarm line, reader, fire line or the element on a fire line;

%s – name of the area, subsystem, group;

%d – date and time when the alarm occurred;

%o – alarm description, downloaded from integrated system;  
%u – name of the user who set off the alarm.

### 3.2.2.2 Mobile device

Select mobile device to see the following window:

Alarm delivery – settings

The following settings allow you to choose after-alarm procedures and to establish the time of realizing this procedures by switching on the right schedule.

IFTER EQU mobile device:  
Not selected

Name:  
[Empty text field]

Schedule:  
Not selected

System signal after the alarm  
 Open graphics

OK Cancel

Enter the following information:

**Name** – unique name which will help you identify specific setup;

**Schedule** – delivery will take place within scheduled time range;

**System signal after the alarm** – signalize the alarm;

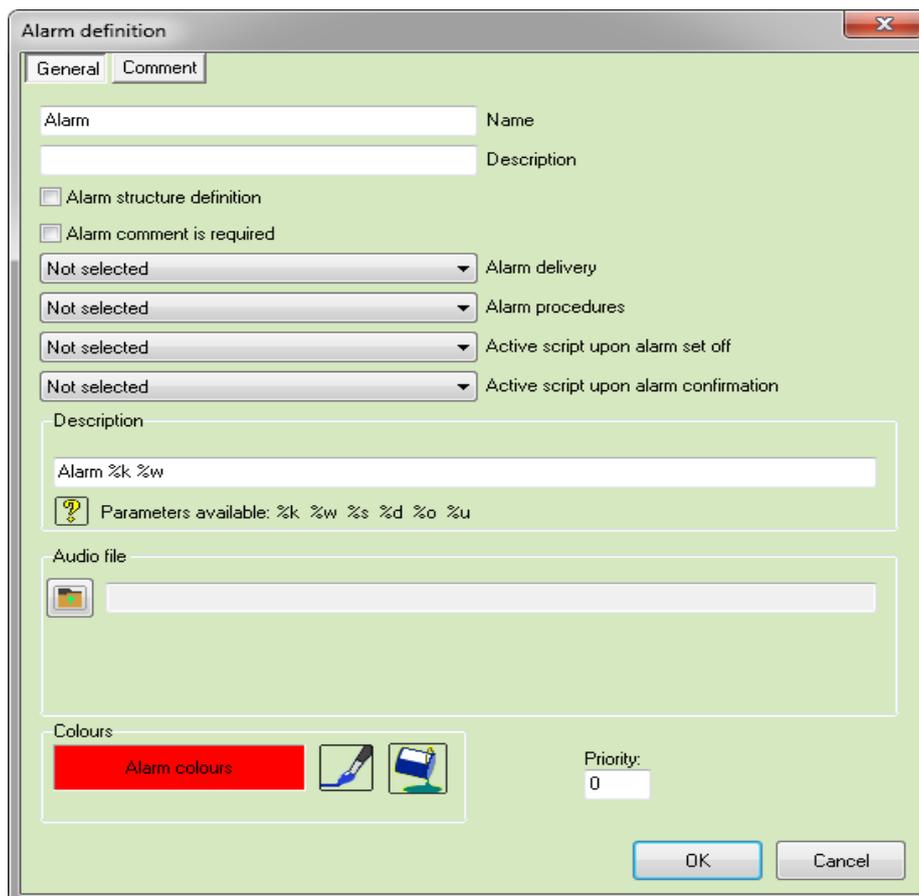
**Open graphics** – when the alarm is set off, the system will open a graphic associated with this alarm.

### 3.3 Alarm definition

With alarm definition you can establish how to present an alarm to the user. There are two types of alarm definition:

- standard: associated with the device (there are two tabs in this case: General and Comment);
- structure definition: allows you to identify alarms on multiple levels (for example: room, floor, building, object); there is only one tab here (General).

#### 3.3.1 Standard definition: General



The screenshot shows the 'Alarm definition' dialog box with the 'General' tab selected. The dialog has a title bar with a close button (X). Inside, there are two tabs: 'General' and 'Comment'. The 'General' tab contains the following fields and controls:

- Name:** A text input field labeled 'Alarm'.
- Description:** A text input field.
- Alarm structure definition
- Alarm comment is required
- Alarm delivery:** A dropdown menu currently showing 'Not selected'.
- Alarm procedures:** A dropdown menu currently showing 'Not selected'.
- Active script upon alarm set off:** A dropdown menu currently showing 'Not selected'.
- Active script upon alarm confirmation:** A dropdown menu currently showing 'Not selected'.
- Description:** A text input field containing the template 'Alarm %k %w'. Below it, a help icon (?) and the text 'Parameters available: %k %w %s %d %o %u'.
- Audio file:** A file selection button (with a folder icon) and an empty text input field.
- Colours:** A red button labeled 'Alarm colours', a blue pen icon, and a blue printer icon.
- Priority:** A text input field containing the value '0'.

At the bottom right, there are 'OK' and 'Cancel' buttons.

Here you need to set the following parameters:

**Name** – name can contain up to 31 characters – you can introduce any character and spaces between words

**Description**- additional text – originated from system or user – can contain up to 63 characters. You can introduce any character and spaces between words.

**Alarm delivery** – alarm delivery

**Alarm procedures** – select alarm procedures

**Description** – text displayed upon alarm and after restore to the normal operation. You can add your own description and use the template with % at the beginning. Follow this pattern:

%k - name of the controller, control unit

%w – name of the alarm line, reader, fire line or the element on a fire line

%s – name of the area, subsystem, group

%d – date and time when the alarm occurred

%o – alarm description, downloaded from integrated system

%u – name of the user who set off the alarm

**Audio files**- choose WAV file which you want to hear upon the alarm. To switch on audio file, you need to select a corresponding option in Alarm delivery properties.

**Colors** – define the color of the font and background of the active alarm.

**Priority** – a number from 0 to 255 which will define the alarm priority on the “active alarm” list. 0 (zero) is the highest priority. The highest priority will be at the top of the list, even if there will be more alarms coming after them. If all the alarms have the same priority, they will be sorted according to the time of arrival (when the alarm start).

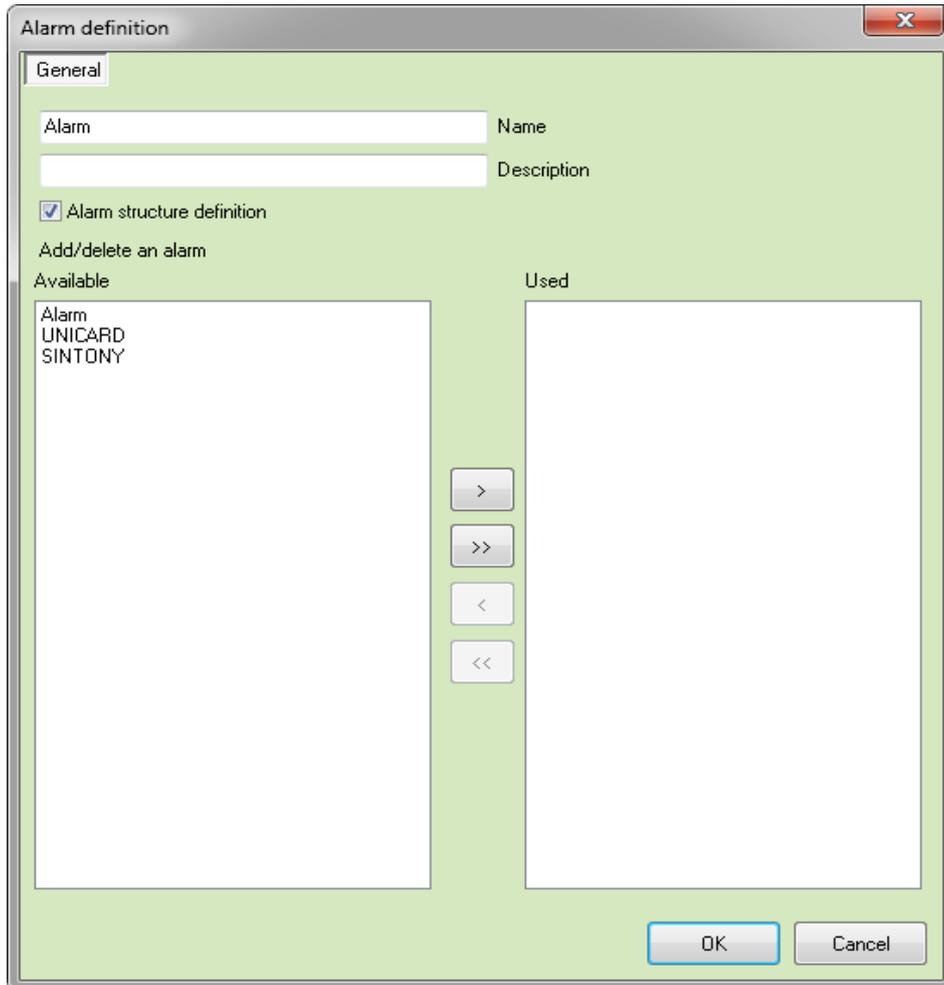
### 3.3.2 Standard definition: Comment

The screenshot shows a dialog box titled "Alarm definition" with a close button (X) in the top right corner. It has two tabs: "General" and "Comment". The "Comment" tab is active, showing a list of 16 numbered text input fields. The first field contains the text "Default alarm comment displayed for Operator". The other fields are empty. At the bottom right of the dialog, there are "OK" and "Cancel" buttons.

In this tab you can define up to 16 comment templates which will be suggested after the alarm occurs. Each comment can consist of 63 characters. Operator can later introduce his own comment or select one from the list. Comments are saved in alarm logs.

### 3.3.3 Alarm structure definition - General

Thanks to alarm structure definition you can define alarms of multiple layers, representing system structure on the object.



On this tab you can see the name and description of alarm structure. To build a structure you need to create the alarms in alarm definition. They might relate, for example, to particular floors of the building. Next you need to create building alarm and select the following option: **Alarm structure definition**.

Assign defined alarms to the chosen structure. Confirm the structure to put it on the main list in the Explorer.

### Properties

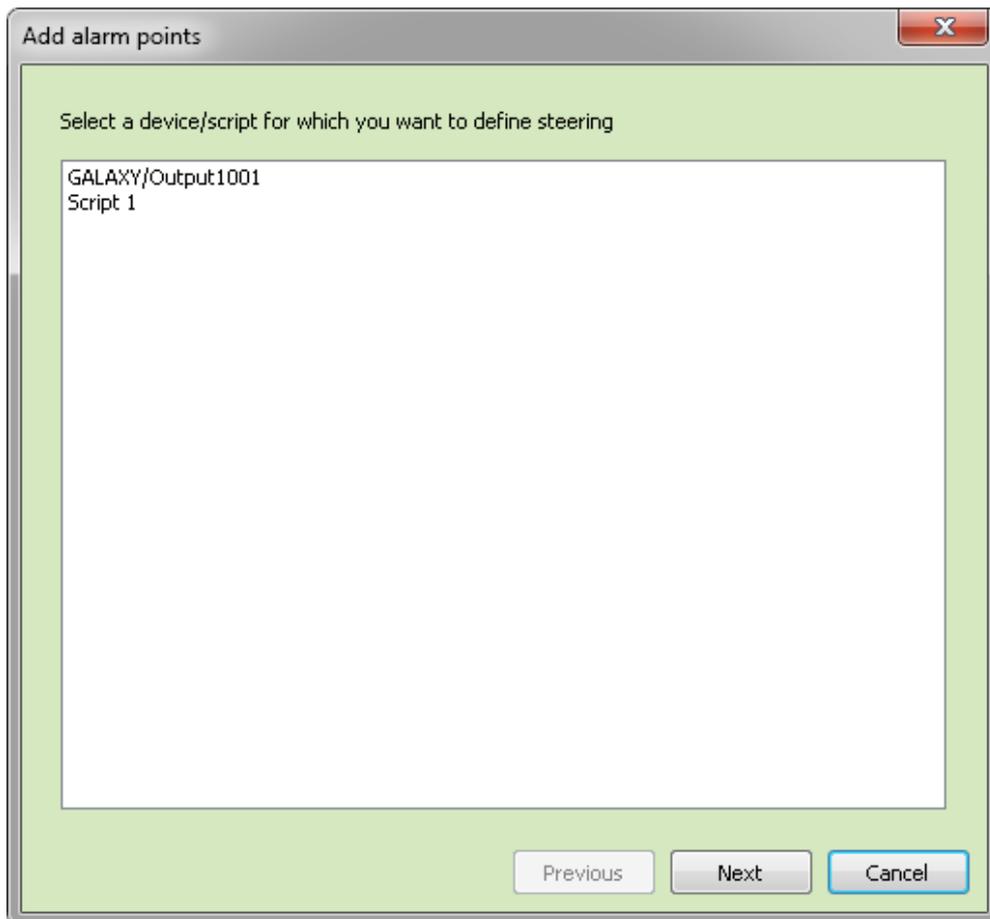
Click on **Properties** to see and change any settings regarding alarm definition.

### 3.4. Alarm points

Alarm point is the integration element of IFTER EQU. It is activated during the alarm and sends steering command to other devices (also via internet). Alarm point supports multiple kinds of steering. It can send commands both textual and numerical.

#### 3.4.1 Add alarm point

Click **Add** to see the list of alarm points. Go to Properties to declare which outputs you want to include on that list: commands or scripts.



Select a device and click **Next**.

**Add alarm points**

Name of the alarm point  
GALAXY/Output1001

Name  
GALAXY/Output1001

State

OFF

ON

Previous OK Cancel

Enter the name and the state of the alarm point. Operator can define a script as an alarm point. Therefore, by selecting that point, you will see the following window:

**Add alarm points**

Name of the alarm point  
Script 1

Name  
Script 1

Type  
Enumerative

State  
0

Previous OK Cancel

Define Type (enumerative, analogue, text) and state (0 – disabled, 1 – activated).

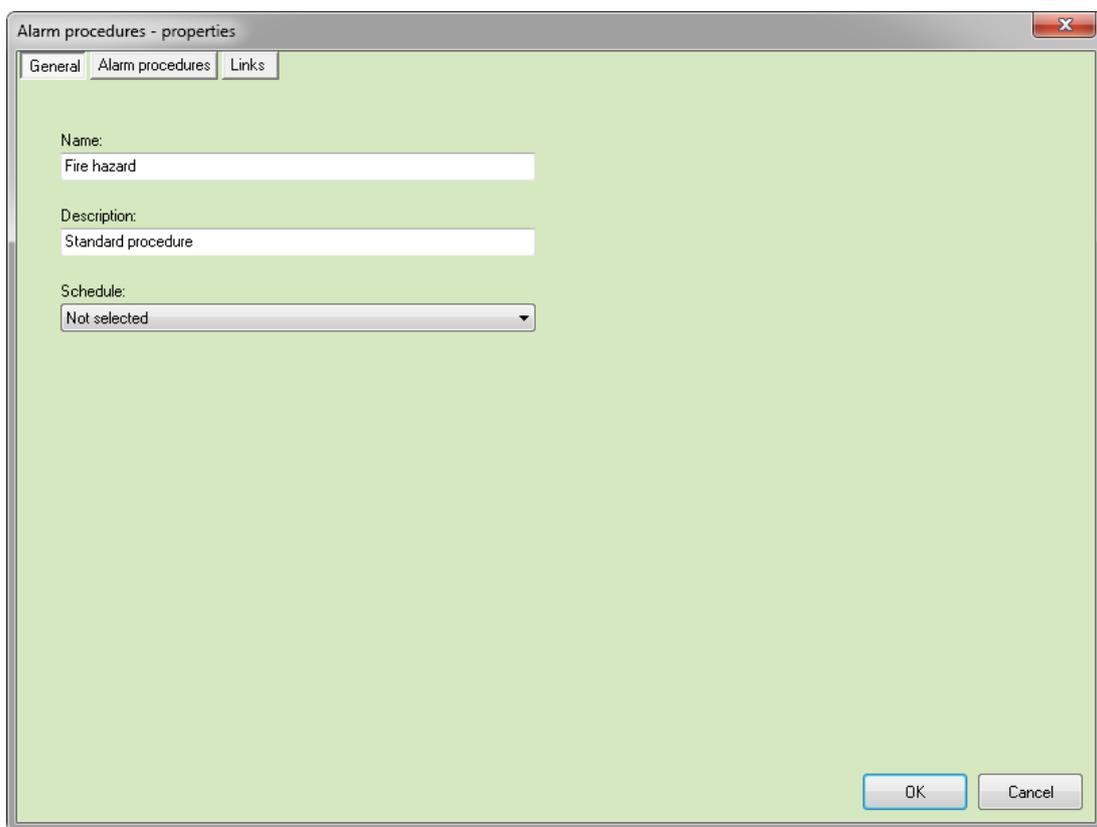
### 3.5 Alarm procedures

Alarm procedures form a part of alarm structure. It's a support mechanism that forces certain steps to be taken upon the alarm. Thanks to pre-established procedures, the operator is provided with quick and clear instructions that he can follow in a stressful situation. User cannot confirm the alarm unless all the procedures are finished.

#### 3.5.1 Add alarm procedures

In this window you work on three tabs: General, Alarm procedures,

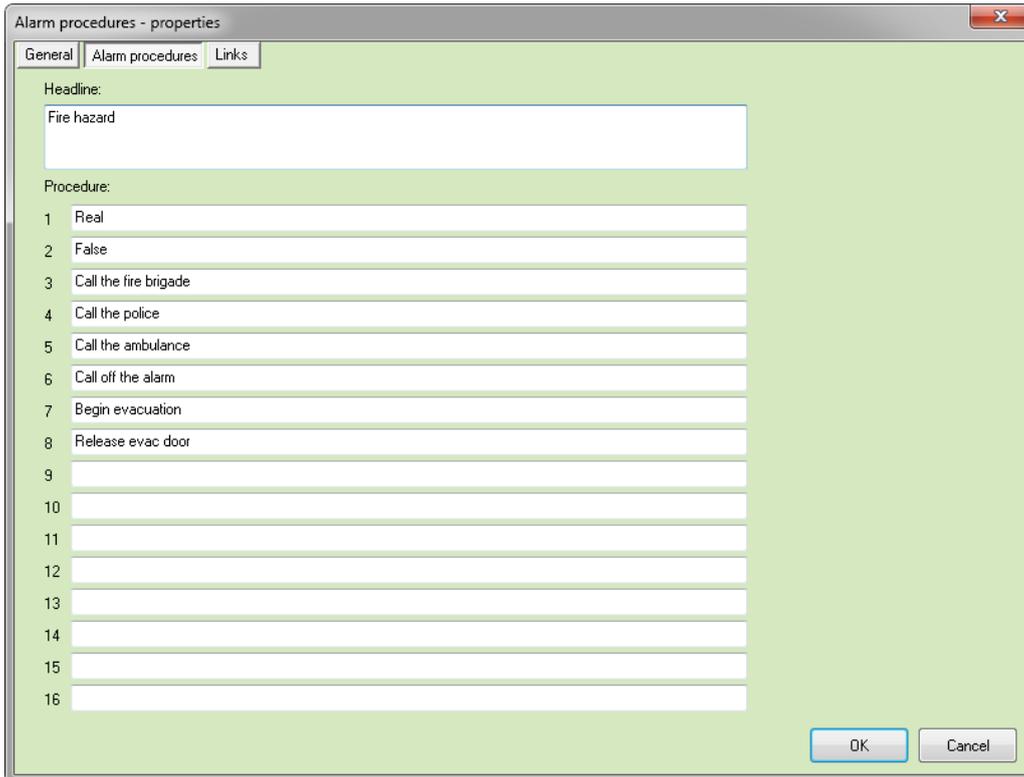
##### 3.5.1.1 General



The image shows a screenshot of a software dialog box titled "Alarm procedures - properties". The dialog has three tabs: "General", "Alarm procedures", and "Links". The "General" tab is currently selected. Inside the dialog, there are three input fields: "Name:" with the text "Fire hazard", "Description:" with the text "Standard procedure", and "Schedule:" with a dropdown menu showing "Not selected". At the bottom right of the dialog, there are two buttons: "OK" and "Cancel".

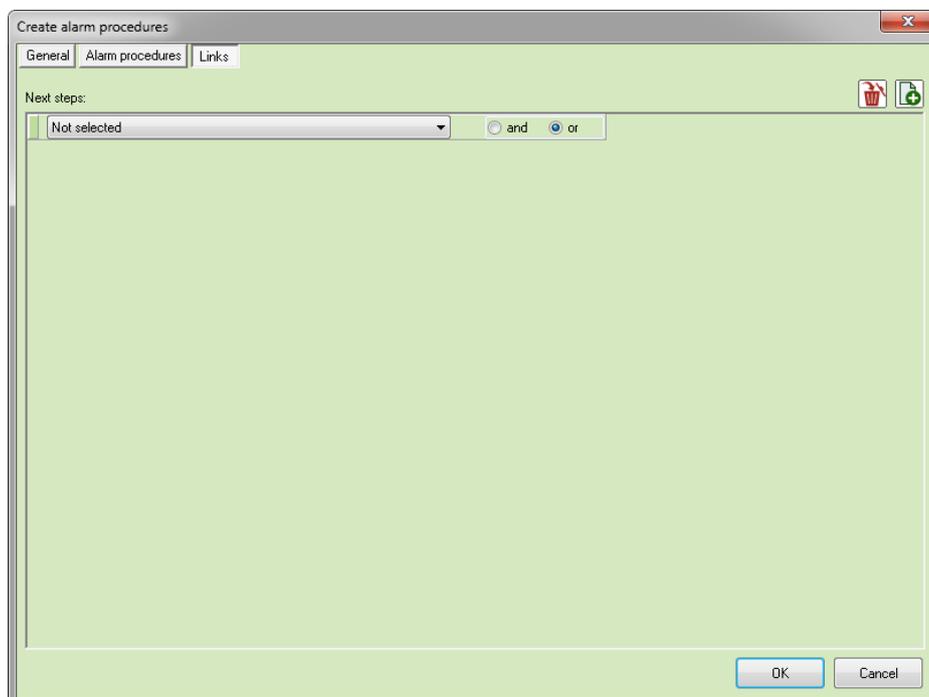
Set the basic parameters of the alarm procedure: name, description and defined schedule.

### 3.5.1.2 Alarm procedures

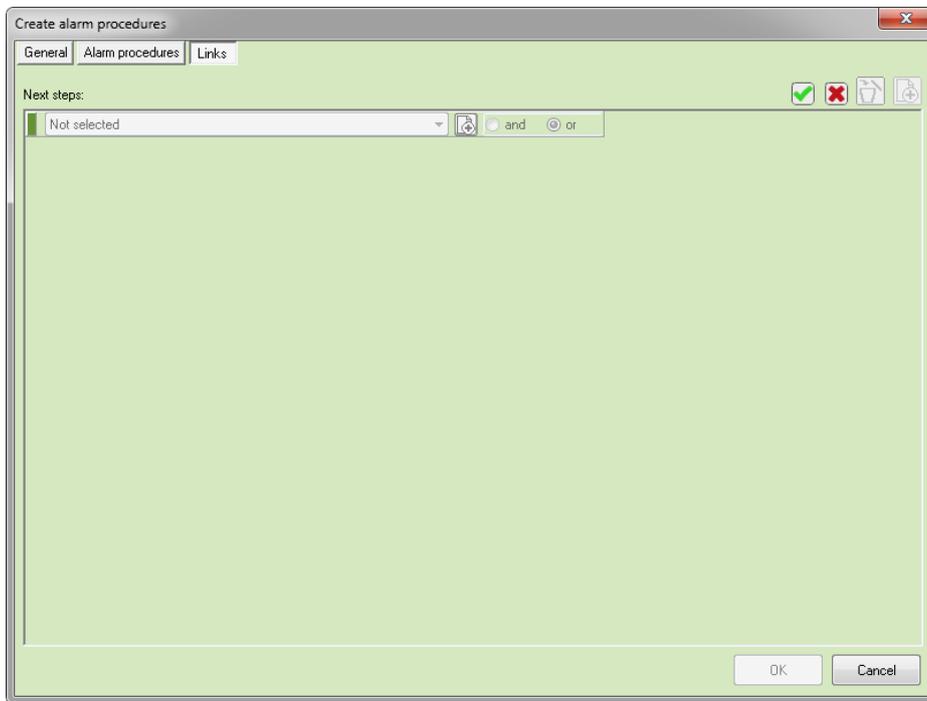


Create short descriptions of procedures. Those procedures will need to be completed before confirming the alarm (the alarm can be mute, but not confirmed before that). You can define up to 16 procedures and create special links in the next tab.

## Links

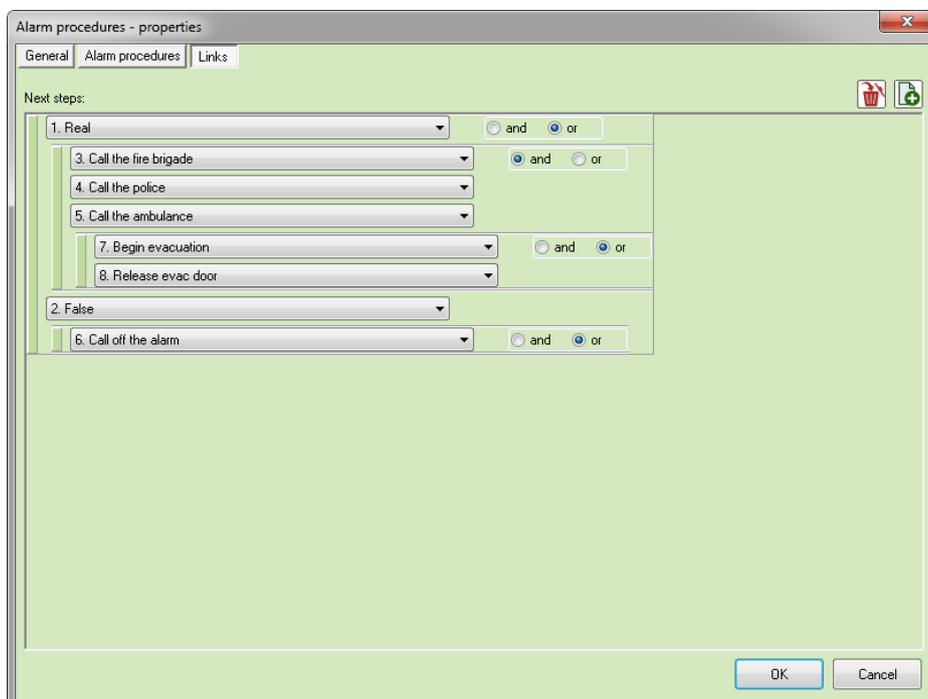


By creating precise links between procedures you can establish protocol useful in dangerous and stressful situations. To edit procedures, click **Add** button on the right side of the window. The window will slightly change:



The smaller **Add** button (on the right) allows you to add steps. Green box button on the left allows you to add procedures. Procedure forms a part of the step. For example: when fire alarm occurs, the first thing for operator is to check whether the alarm is true or false. In this case, “False” and “True” parts are “the procedure” and selecting one of those options is a step.

In order to change relation (“and” / “or”) or set a procedure, you need to exit edition mode. After your procedure tree is created, assign defined procedures you entered on the previous tab. See the example below:



To delete a procedure, use **Delete** button.

### 3.6 Users

With IFTER EQU you can manage users in a simple and effective way. Users are persons introduced to the security systems. Use a creator to add a user.

#### 3.6.1 Add a user

The screenshot shows a dialog box titled "User creator" with a close button (X) in the top right corner. The main area has a light green background and is titled "Enter basic information about this user". It contains the following fields:

- Surname: Locke
- Personal ID number: 1234
- Name: John
- Year of birth: 1980
- Sex:  Woman  Man

At the bottom, there is a text prompt: "To continue, click Next." and two buttons: "Dalej >" (highlighted in blue) and "Anuluj".

To start the creator, click **Add**. In the first window you must enter basic information, such as: name, surname, sex, etc.

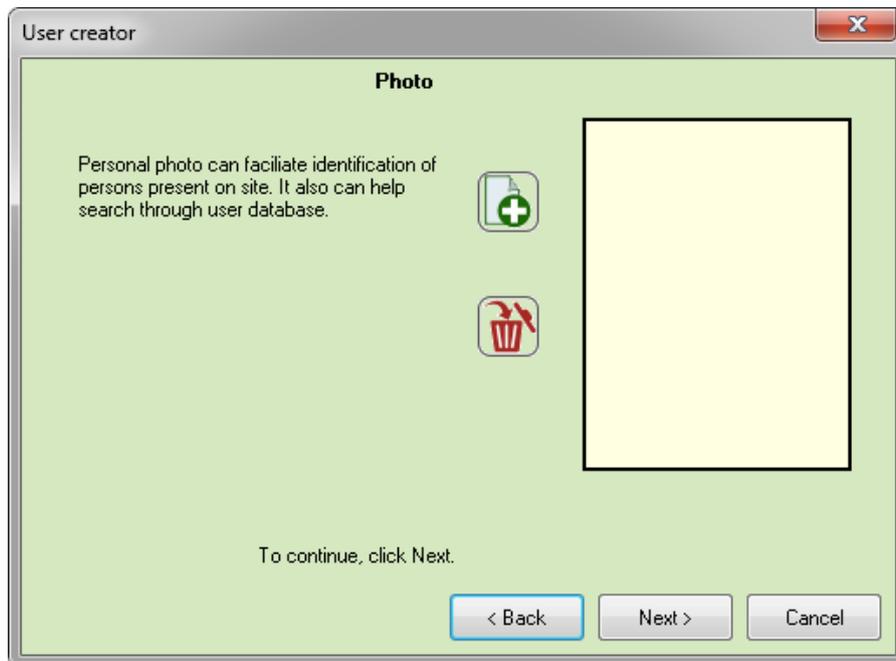
Click **Next** to fill additional information regarding this employee.

The screenshot shows the same "User creator" dialog box, now on the "Additional info" step. The main area has a light green background and is titled "Additional info". It contains the following fields:

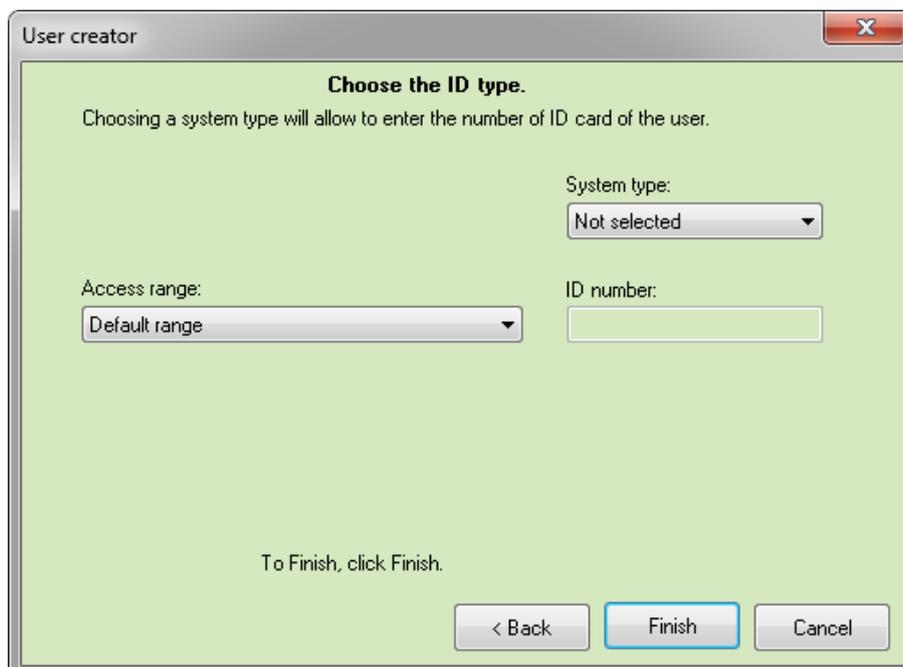
- Position: Office staff
- Phone number - work: 111111
- Department: IT
- Phone number - home: 222222
- Group: First floor (dropdown menu)

At the bottom, there is a text prompt: "To continue, click Next." and three buttons: "< Back", "Next >" (highlighted in blue), and "Cancel".

Next, you can add a photo for easier identification. Click Add in order to search photo catalogue defined as a server. You can only select a file from this catalogue. It must be a .bmp file.



Click Next to open another window and choose ID type. The administrator can create empty Ids without any data and use them later for visitors.



**System type:** which integration will support this ID (Galaxy, Satel, etc.).

**ID number:** unique number for user identification, saved in the system.

**Access range:** select access range for this user.

### 3.6.2 User properties

In this window you can edit personal data of defined users. Here you have two tabs: General and Access Control.

#### 3.6.2.1 General

Here you can change personal data saved in the system.

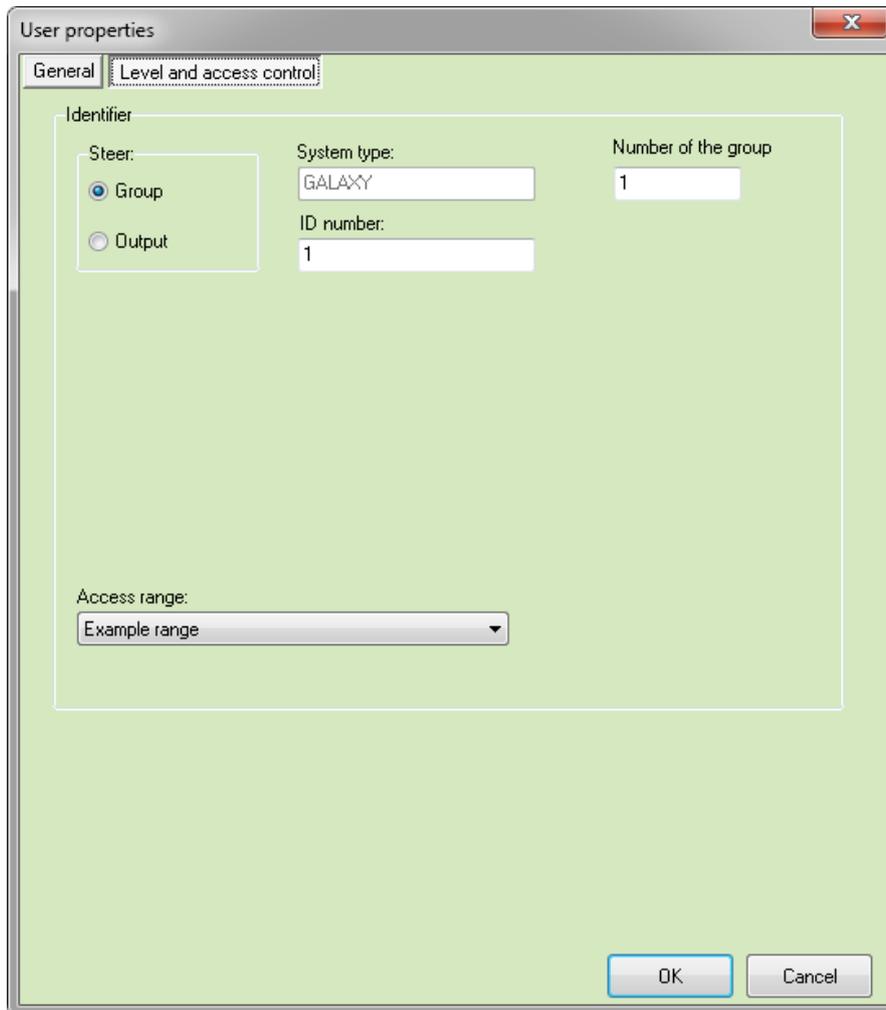
The screenshot shows a 'User properties' dialog box with two tabs: 'General' (selected) and 'Level and access control'. The 'General' tab contains the following fields and controls:

- Surname: Locke
- Name: John
- Personal ID number: 1234
- Year of birth: 1980
- Gender:  Woman,  Man
- Position: Office staff
- Department: IT
- Group: First floor (dropdown menu)
- Reference number: (empty text box)
- Additional information: (empty text area)

On the right side of the dialog, there is a placeholder for a profile picture, represented by a yellow rectangle with the text '180 x 240'. Below this placeholder are two icons: a green plus sign in a circle (add) and a red trash can (delete). At the bottom of the dialog are 'OK' and 'Cancel' buttons.

### 3.6.2.2 Level and access control

It's a two-step arming mechanism for Galaxy alarm groups. For more information, please refer to Galaxy manual.



### 3.7 Users groups

IFTER EQU Explorer allows you to create groups (departments) and assign users.

**Add a new department**

**Enter the name of the department**

The name of the department must be unique, because it will be used to identify and distinguish groups.

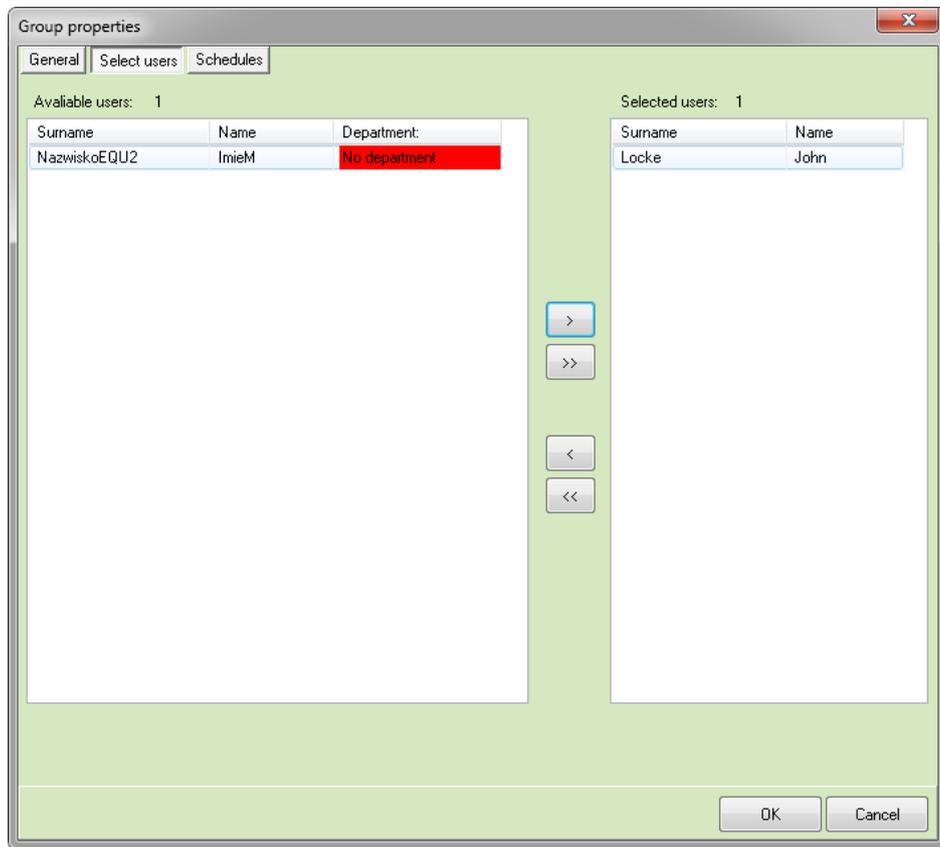
In the description you can include the information to help the IFTER EQU Operator distinguish the departments

Name:

Description:

Next > Cancel

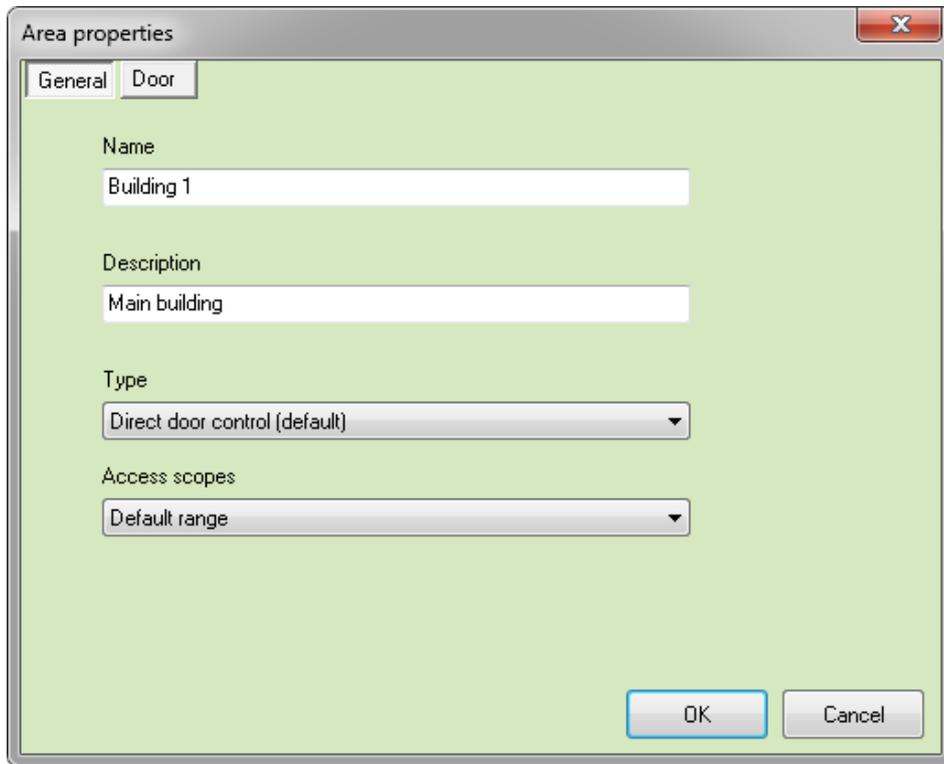
Click **Next** to form the group of selected users. You can choose from the list of users introduced to the system. You can assign one person to one group. If you assign one person to the second group, he/she will be deleted from the first group.



In the Properties you can edit group and see basic information defined earlier in the system.

## 3.8 Areas

Isolated parts of the object based on the integrated access control system. Thanks to areas you are able to quickly locate defined users and visitors. Special counting mechanisms allow you to keep track of number of people present in the area.



The image shows a screenshot of a software dialog box titled "Area properties". The dialog has two tabs: "General" and "Door". The "Door" tab is currently selected. The dialog contains the following fields and controls:

- Name:** A text input field containing "Building 1".
- Description:** A text input field containing "Main building".
- Type:** A dropdown menu with "Direct door control (default)" selected.
- Access scopes:** A dropdown menu with "Default range" selected.
- Buttons:** "OK" and "Cancel" buttons are located at the bottom right of the dialog.

### 3.8.1 Add area

In a General tab you can edit a name, add a description and decide, whether or not the area will support access control system or area structure control.

#### **Doors**

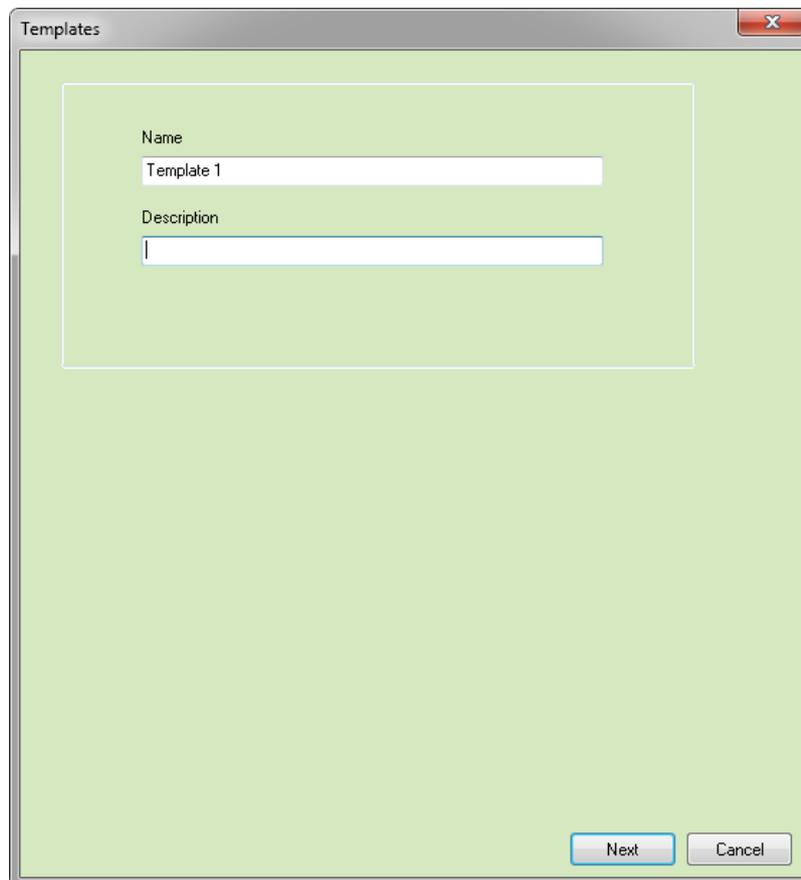
You can see this tab only after you select an option of Direct door control. To assign the door to the area, you need to go to properties of the proper reader.

### 3.9 Graphics templates

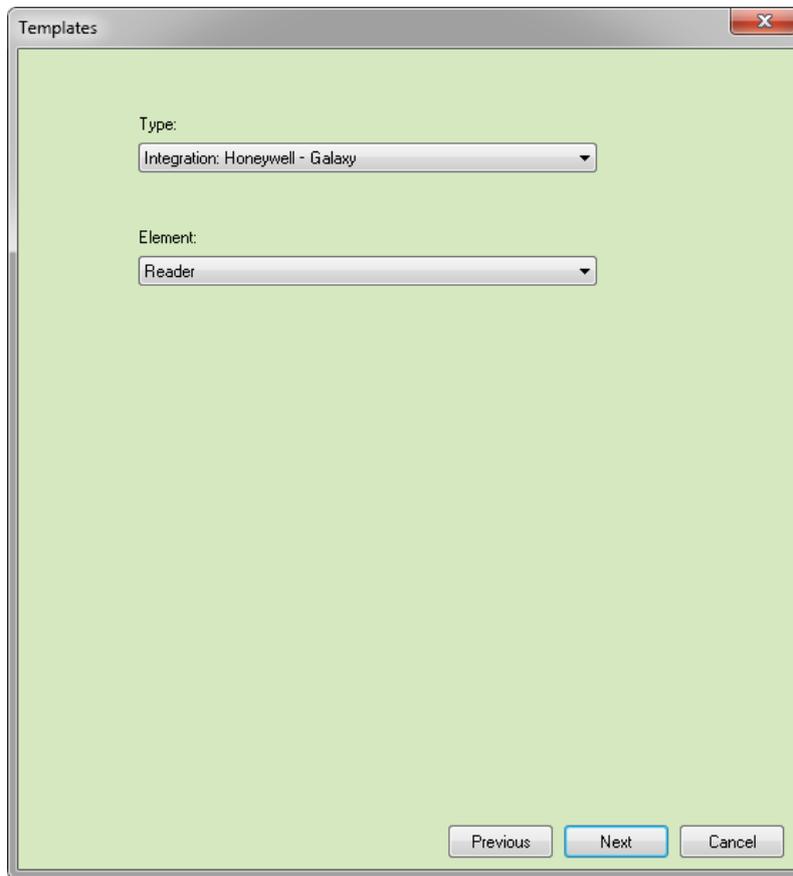
Here you can define how to graphically symbolize any state of a given component.

#### 3.9.1 Add a template

Select Graphics templates in the Explorer and click **Add** button.



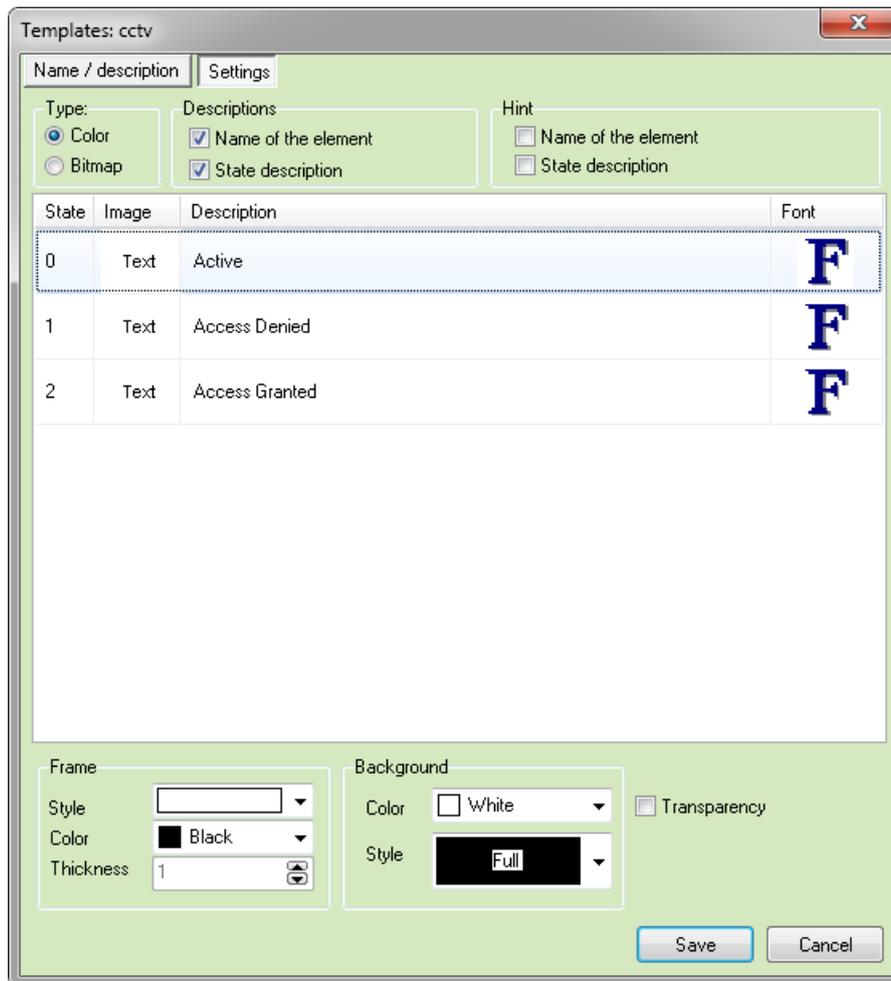
The image shows a software dialog box titled "Templates". It has a standard window title bar with a close button (X) in the top right corner. The main content area has a light green background. Inside this area, there is a white-bordered rectangular box containing two text input fields. The first field is labeled "Name" and contains the text "Template 1". The second field is labeled "Description" and is currently empty. At the bottom right of the dialog, there are two buttons: "Next" and "Cancel".



Follow instructions in the window. Enter the name and additional description. Next, you need to select a type (integration) and an element (for example, a controller). Click Next to define more advanced parameters of your template.

## Color

You can change color and description for each state.



## Description

**Name of the element** – select this option to include name of the element in the template.

**State description** – select this option to include the state in the template.

## Hints:

**Name of the element** – hove over the element to see a hint with a name.

**State description** – hover over the element to see the description of the current state of the element.

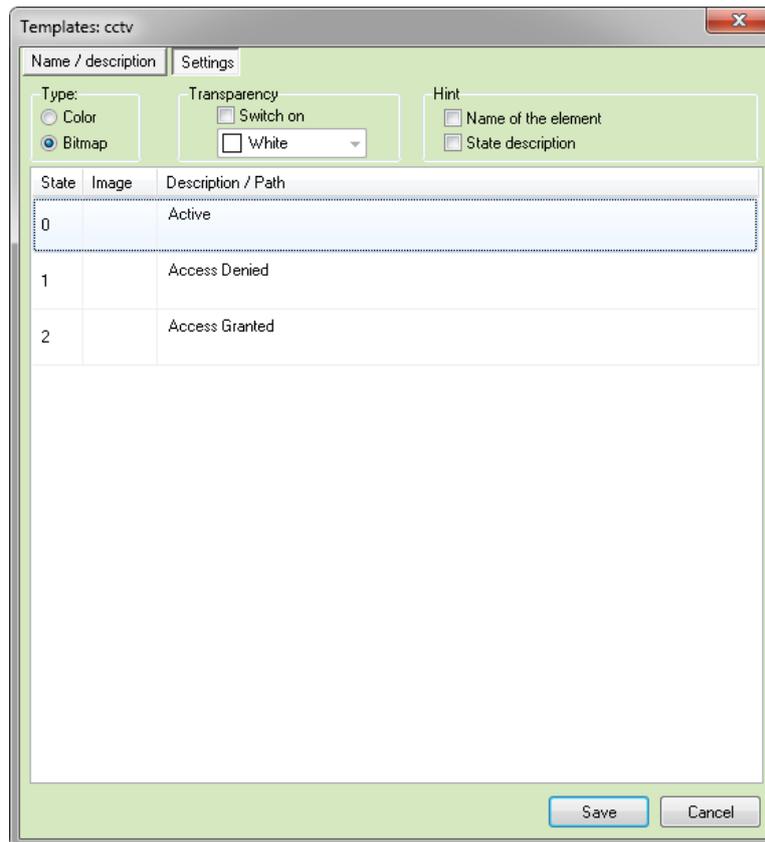
**Font** – select a style, size, color.

**Frame** – if you want to frame your template, choose a color and thickness.

**Background** – choose a color for each state.

**Transparency** – select a color you want to be transparent.

## Bitmap



**Transparency** – select a color you want to be transparent on your bitmap.

Hints

**Name of the element** – hove over the element to see a hint with a name.

**State description** – hover over the element to see the description of the current state of the element.

### 3.10 Graphics

Graphics were designed for integrated systems visualization. Operator defines size and look of graphic boxes. IFTER EQU offers an editor where you can set all the necessary parameters of your graphics. After you place components, your graphics becomes dynamic – shows current state. Select **Graphics** in the Explorer to see the list, add, delete and edit graphics.

#### Functional buttons

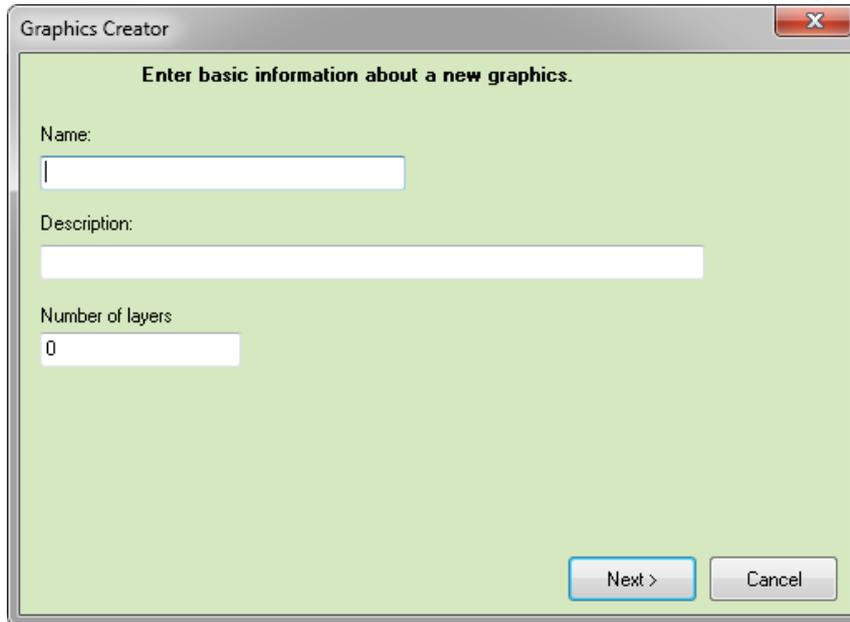
	Add	Open graphics creator
	Copy	Create a new graphics, identical to the old one. You need to assign a unique name.
	Delete	You won't be able to recover deleted graphics. All the components will be erased as well.
	Properties	Here you can change defined parameters of the graphics.
	Edit	Open component manager of the selected graphics. You can add, delete and change existing components.
	Show	Graphics preview. Your graphics is dynamic, which means you can see the state of devices located on the graphics as components.

#### Functional buttons in the Editor

	Close	Close graphics editor and go to the Explorer.
	Save	Save graphics properties.
	Cancel insert	Hit this button to block new components. With hand tool you are able to manage existing components.
	Insert component	Place components on the selected graphics.
	Show	Display component properties: size, access range, etc.
	Hide	Hide component properties.
	Shapes	You can create alarm area of any shape. Click <b>Shape</b> button. Next, click <b>Start</b> and draw a desired shape. Click <b>Stop</b> to finish drawing. This button is available only for <b>Alarms</b> .
	<b>Start</b>	Use it to start creating a shape.
	<b>Stop</b>	Use it to stop creating a shape.

### 3.10.1 Add Graphics

Use a **Creator** to add a new graphics.



The dialog box is titled "Graphics Creator" and contains the following fields and buttons:

- Title: Enter basic information about a new graphics.
- Name: A text input field.
- Description: A larger text input field.
- Number of layers: A text input field with the value "0".
- Buttons: "Next >" and "Cancel".

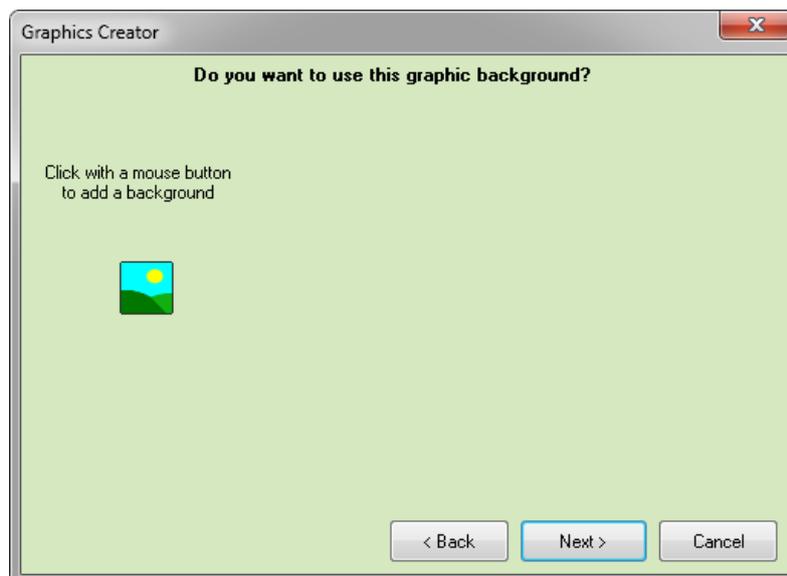
Please enter the following information:

**Name** – name can include small and capital letters, as well as numbers;

**Description** – add any description that will help to identify the graphics;

**Number of layers** – define how many layers will be included in your graphics.

In the next window, choose your graphic background.



The dialog box is titled "Graphics Creator" and contains the following elements:

- Title: Do you want to use this graphic background?
- Text: Click with a mouse button to add a background.
- Image: A small preview image of a landscape with a sun and green hills.
- Buttons: "< Back", "Next >", and "Cancel".

The file has to be .bmp extension.

Before you choose your background you will see a preview.

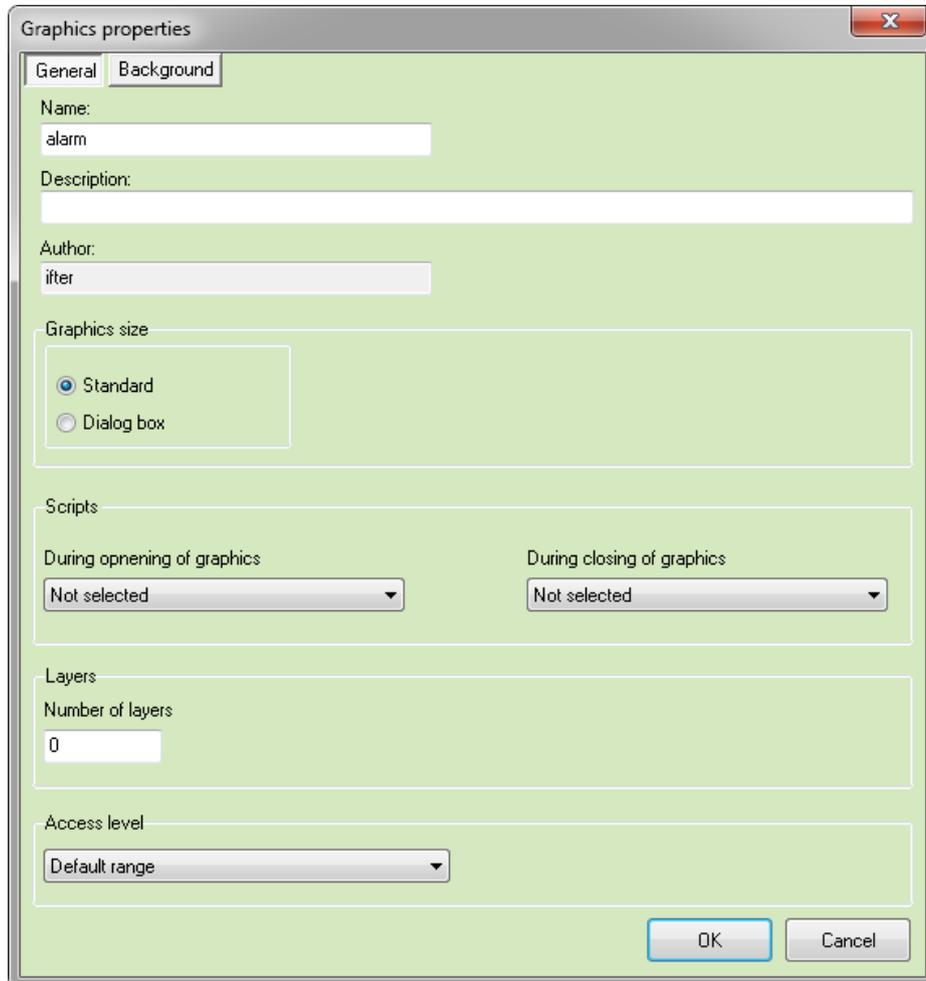
If you don't want to choose any background, click **Next** to select a color.

Click **Finish** to save the background.

### 3.10.2 Graphic properties

In order to make changes in the graphics, open Properties. Here you can find two tabs: General and Background.

#### 3.10.2.1 General



The screenshot shows a dialog box titled "Graphics properties" with a close button (X) in the top right corner. It has two tabs: "General" (selected) and "Background". The "General" tab contains the following fields:

- Name:** A text input field containing "alarm".
- Description:** An empty text input field.
- Author:** A text input field containing "ifter".
- Graphics size:** A section with two radio buttons: "Standard" (selected) and "Dialog box".
- Scripts:** Two dropdown menus. The first is labeled "During opening of graphics" and the second is "During closing of graphics". Both are currently set to "Not selected".
- Layers:** A section with a label "Number of layers" and a text input field containing "0".
- Access level:** A dropdown menu currently set to "Default range".

At the bottom right of the dialog box are two buttons: "OK" and "Cancel".

**Name:** unique identification name of the graphics.

**Description:** additional information.

**Author:** operator who created this graphics.

**Graphics size:**

**Standard:** define maximum window size (depending on resolution).

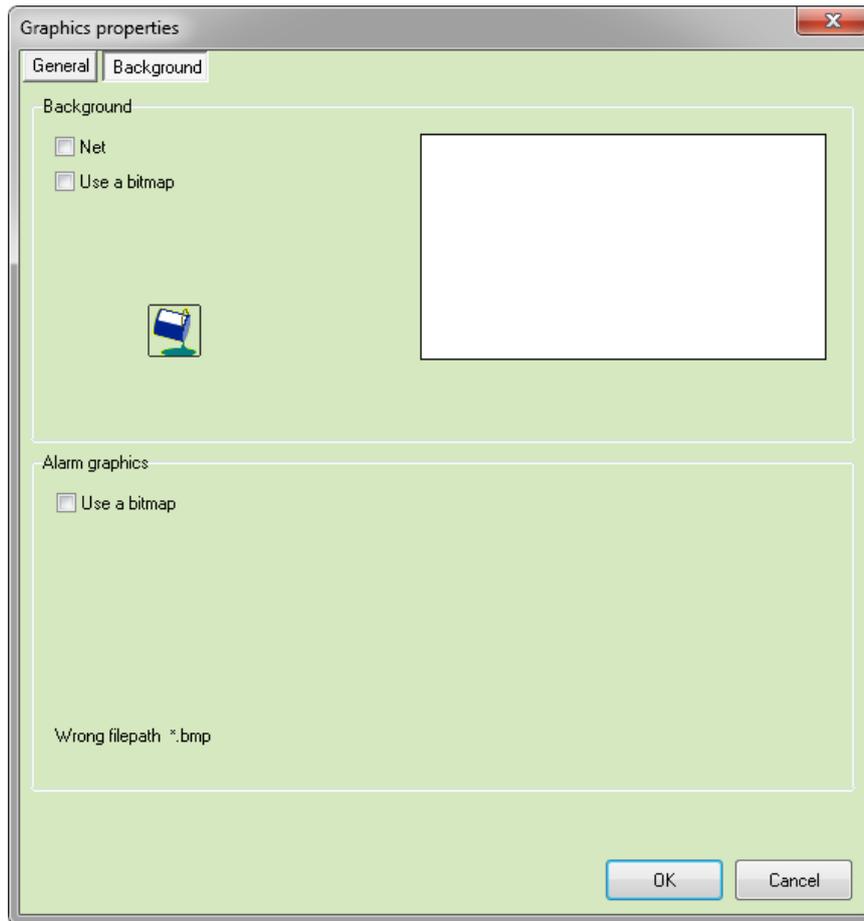
**Dialog box:** define graphics size: height and width. We **do not recommend** you open dialog box in a cascade.

**Scripts:** here you need to decide if you want to activate any scripts while you open or close the graphics.

**Layer:** you can change number of layers defined before in the creator.

**Access level:** define access level an operator must have to open or edit the graphics.

### 3.10.2.2. Background



Here you can manage graphic parameters (bitmap or color). If you select **Net** you should define density as well. The net will be visible in graphics editor.

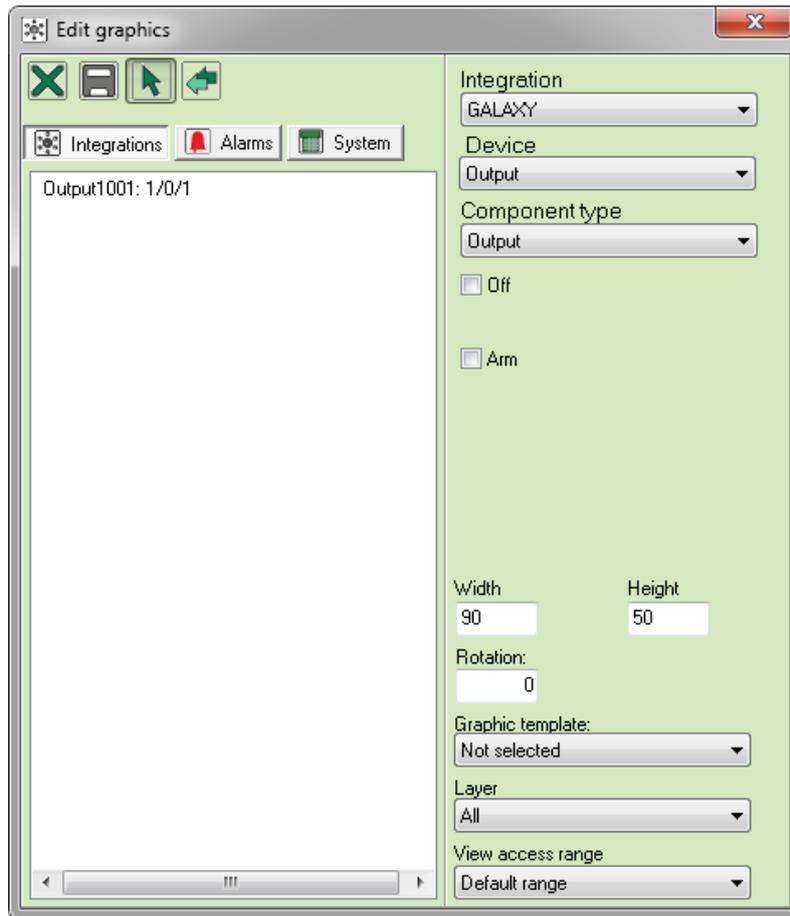
### Alarm graphics

A background for alarm graphics is used only for printouts. In this case graphics filled with components will be printed. It includes components in alarm and active alarm events.

### 3.10.3 Graphics editor

To go to graphics editor, select a graphics from the list and click **Edit**. You will open a new window with three tabs: Integrations, Alarms and System. With this tool you are able to define your interface and functionality.

### 3.10.3.1 Integrations



Here you can find the list of devices and components that belong to each integration.

**Integration** – select a system integrated by IFTER EQU, according to your license.

**Device** – list of devices changes, depending on integration. The list of available devices will be displayed in the left column.

**Component type** – this option is available after you define more than one component. If it's possible to steer the device (for example, send a command to bypass, activate, arm, etc.), you will have to additionally establish appropriate functions. You can also define access range for steering.

**Height, Width** – set the size of the component.

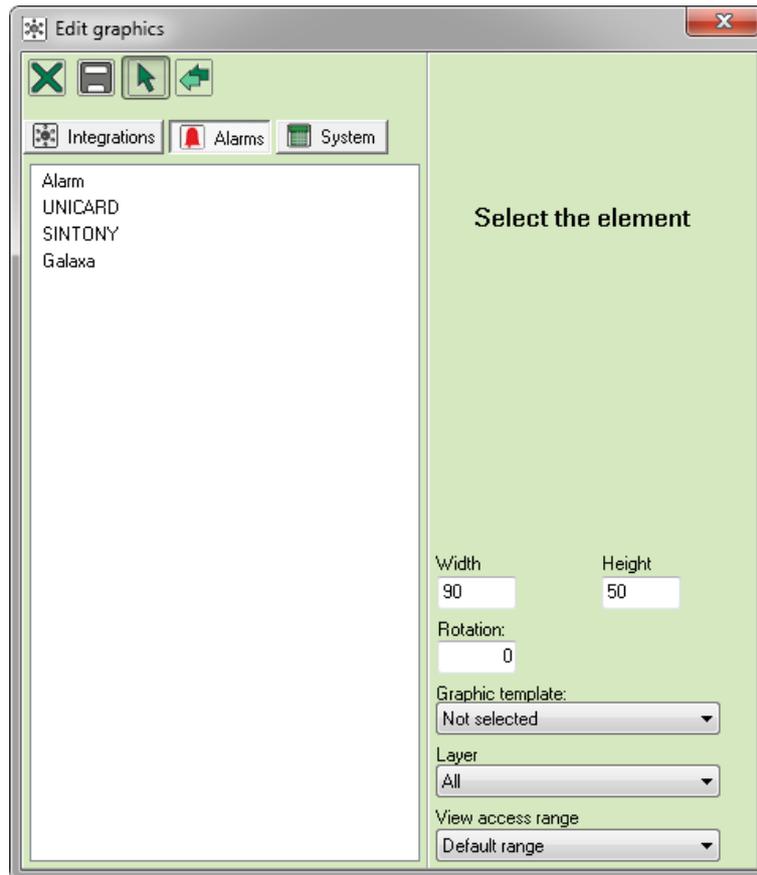
**Rotation** – rotation range of the component.

**Graphic template** – select defined template.

**Layer** – if you created more than one layer, assign your component to one or all of them.

**View access range** – any operator below this access level will not be able to see the component.

### 3.10.3.2 Alarms



Here you can place components which will represent the state of alarms established in Alarm definition. In the left column you can see the list of alarm definition. Select one to see available options in the right column.

**Realized function** – select a function from the list. Depending on a function, you have some extra options available.

**Blinking** – when the alarm goes off, the component will blink.

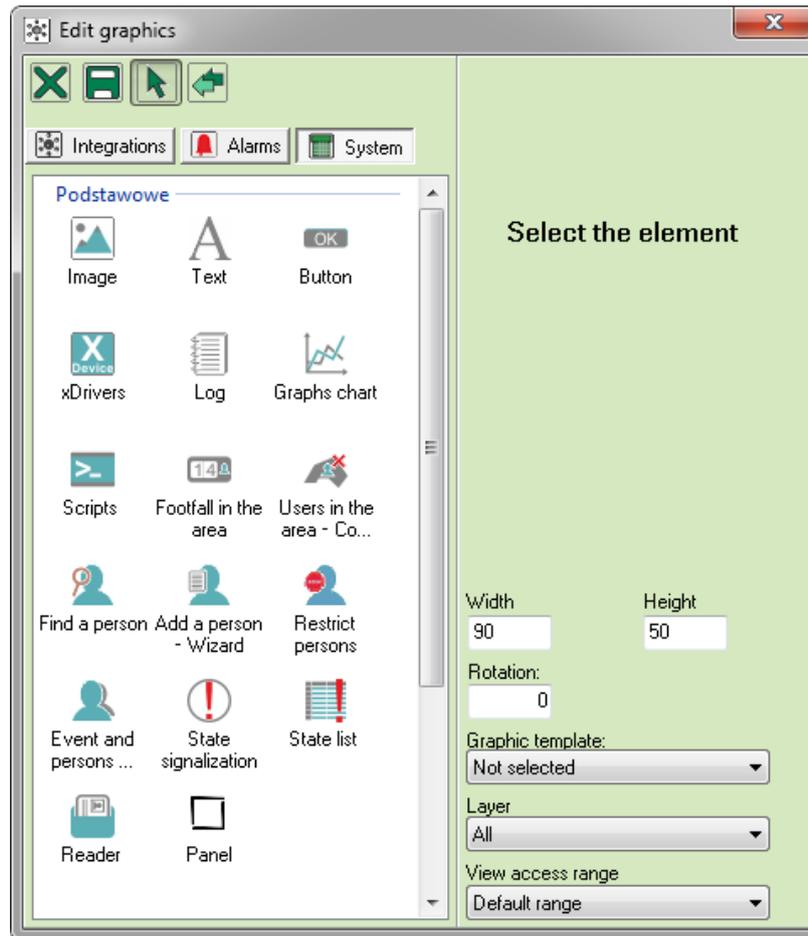
**Support when it's not active** – when the alarm is not active, system will conduct defined functionality.

**Graphic template** – select defined template.

**Layer** – if you created more than one layer, assign your component to one or all of them.

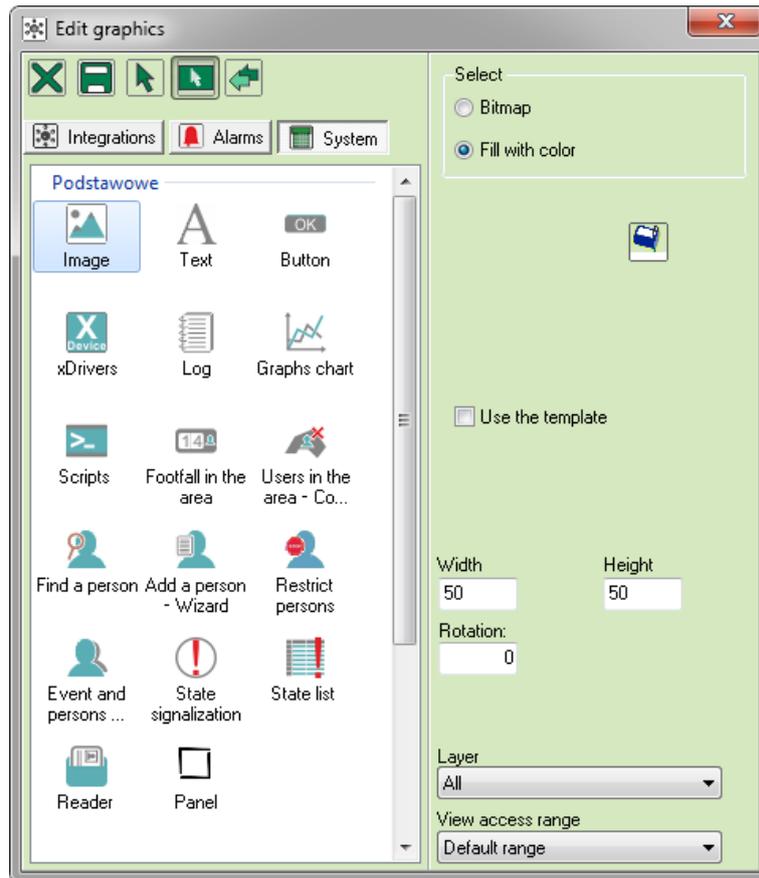
**View access range** – any operator below this access level will not be able to see the component.

### 3.10.3.3 System



This tab allows you to manage all available components. Operator place them on a graphic template in a form of a rectangle. To make them fully functional, you need to save and display your graphics (**Show** button).

### 3.10.3.3.1 Component: Image



This component allows you to manage bitmaps and color background.

#### **Bitmap:**

**Bitmap** – component.

**Transparency on** – choose a color you want to be transparent on your background.

**Height, Width** – set the size of the component.

**Rotation** – rotation range of the component.

**Graphic template** – select defined template.

**Layer** – if you created more than one layer, assign your component to one or all of them.

**View access range** – any operator below this access level will not be able to see the component.

#### **Fill with color**

**Color** – select a color.

**Height, Width** – set the size of the component.

**Rotation** – rotation range of the component.

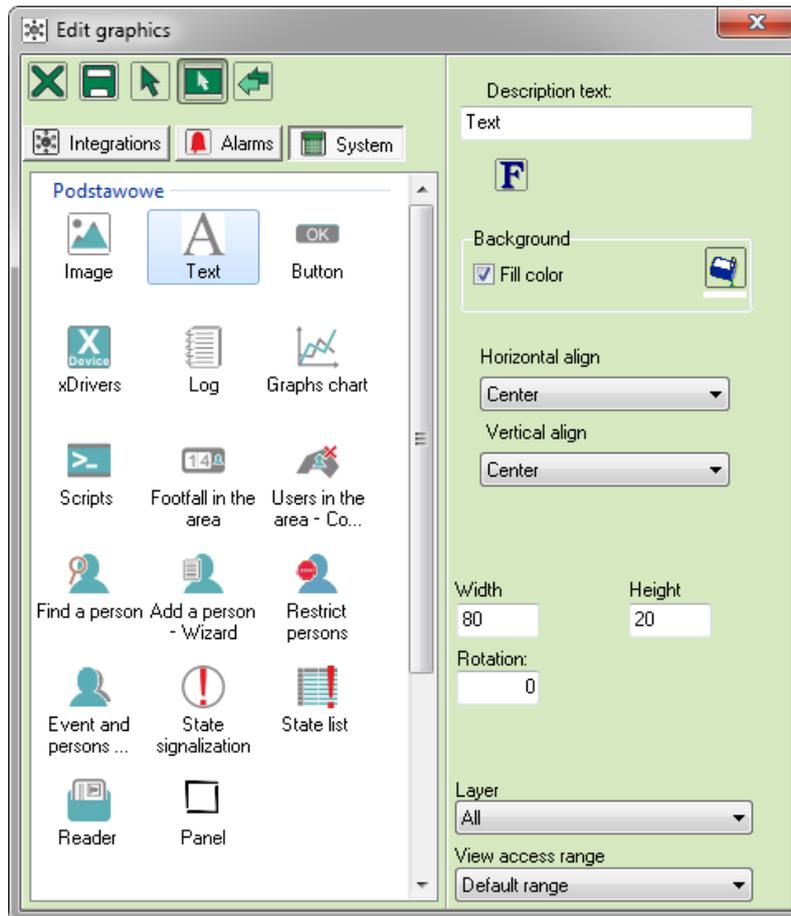
**Graphic template** – select defined template.

**Layer** – if you created more than one layer, assign your component to one or all of them.

**View access range** – any operator below this access level will not be able to see the component.

Select **Use the template** to open a window where you can choose your template.

### 3.10.3.3.2 Text



Fill your graphics with text.

**Description text** – enter a proper text.

**F** – font size and style.

**Color** – select a color.

**Fill color** – select a color.

**Horizontal / Vertical align:** set the text.

**Height, Width** – set the size of the component.

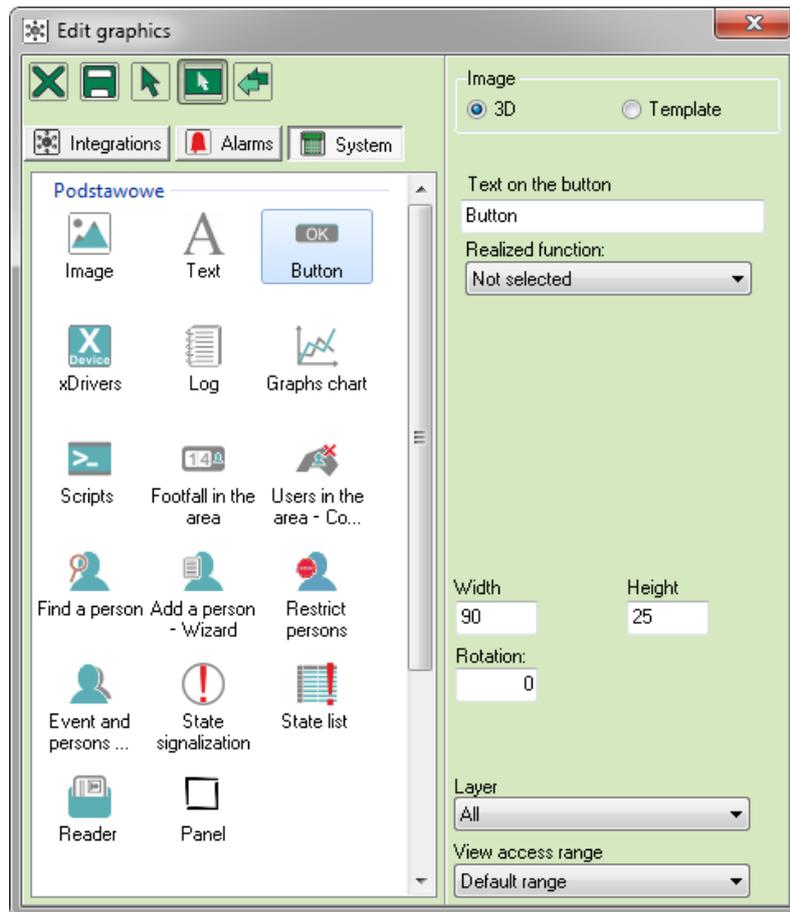
**Rotation** – rotation range of the component.

**Graphic template** – select defined template.

**Layer** – if you created more than one layer, assign your component to one or all of them.

**View access range** – any operator below this access level will not be able to see the component.

### 3.10.3.3.3 Button



This tool allows you to create 3D button or a template button.

Description text – enter a proper text.

**Funkcja realizowana** – wybranie funkcji jaką będzie realizował przycisk.

**Height, Width** – set the size of the component.

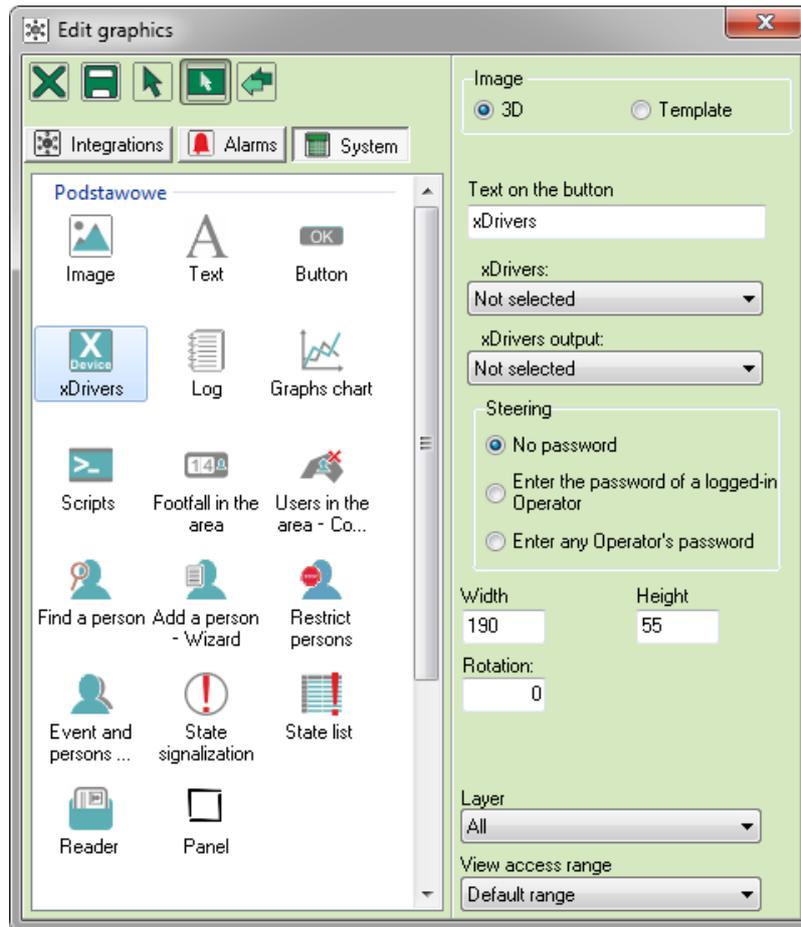
**Rotation** – rotation range of the component.

**Graphic template** – select defined template.

**Layer** – if you created more than one layer, assign your component to one or all of them.

**View access range** – any operator below this access level will not be able to see the component.

You can also select **Template** button and assign a proper **Realized function**.



This component allows you to steer external devices via xDrivers module.

**xDrivers** – name of the steered device.

**xDrivers output** – a command which is to be sent to an external device.

**Steering** – select one of available options: No password, Enter the password of logged-in Operator, Enter any Operator's password.

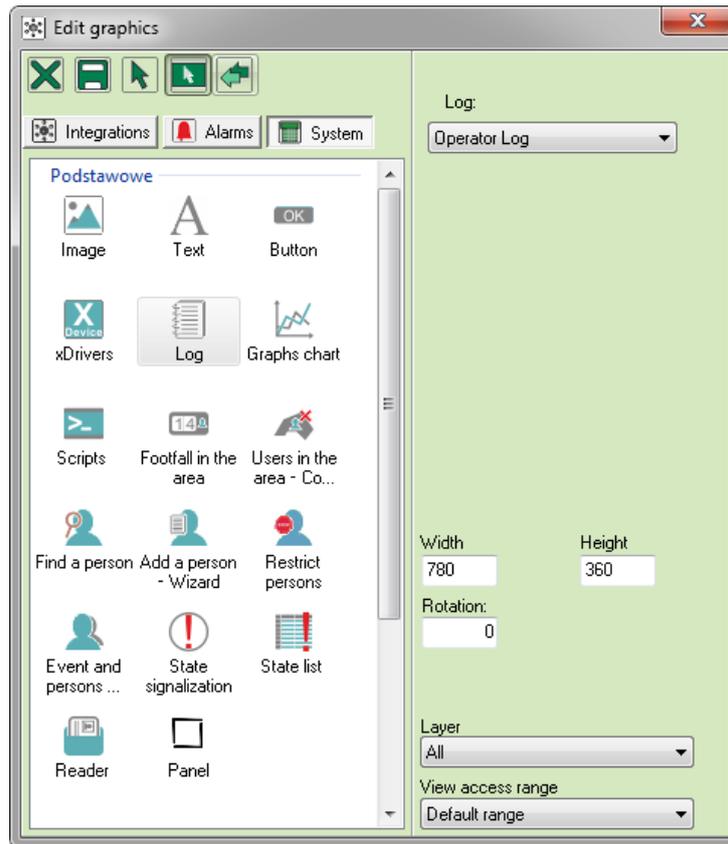
**Height, Width** – set the size of the component.

**Rotation** – rotation range of the component.

**Layer** – if you created more than one layer, assign your component to one or all of them.

**View access range** – any operator below this access level will not be able to see the component.

### 3.10.3.3.5 Log



**Log** – select one type from the list.

**Height, Width** – set the size of the component.

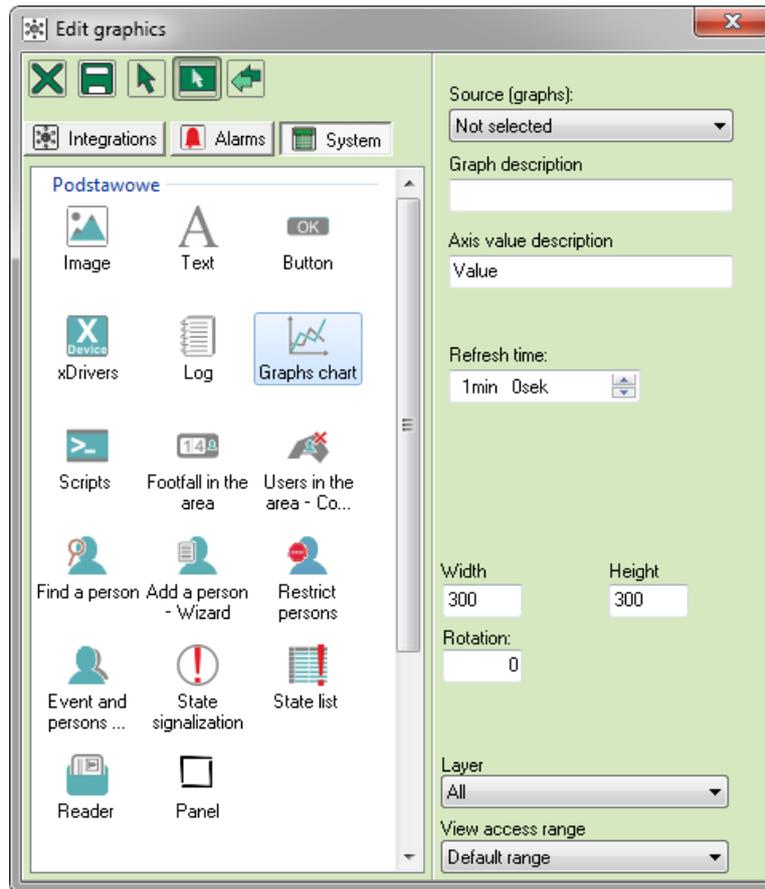
**Rotation** – rotation range of the component.

**Layer** – if you created more than one layer, assign your component to one or all of them.

**View access range** – any operator below this access level will not be able to see the component.

Save the component to see the log on graphics.

### 3.10.3.3.6 Graphs chart



This component represents value changes from outputs and inputs of integrated devices.

**Source (graphs)** – select a trend which will be displayed.

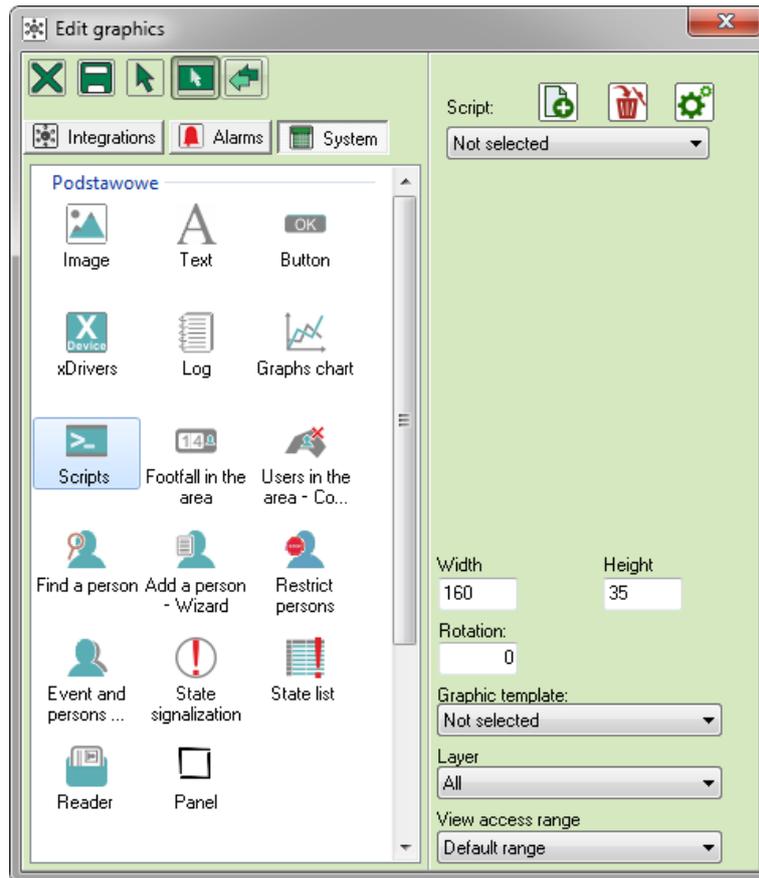
**Graph description** – enter any description.

**Axis value description** – axis Y.

**Refresh time** – how often a graph value will be registered. **Height, Width** – set the size of the component. **Layer** – if you created more than one layer, assign your component to one or all of them.

**View access range** – any operator below this access level will not be

### 3.10.3.3.7 Scripts



This component represents the list of tasks executed by IFTER EQU.

**Script** – select a script.

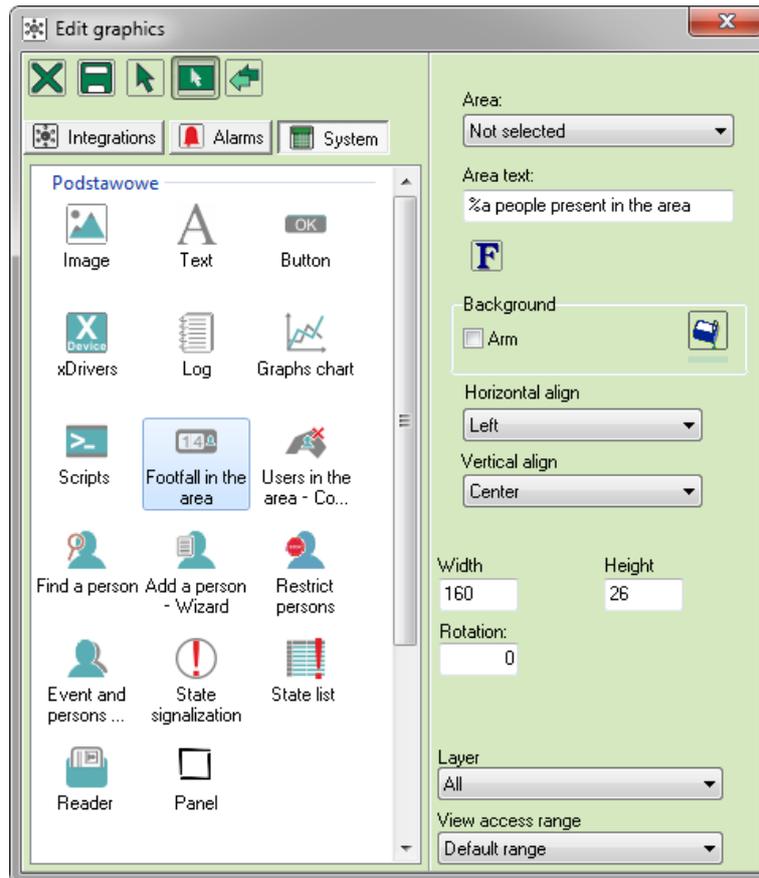
**Height, Width** – set the size of the component.

**Rotation** – rotation range of the component.

**Layer** – if you created more than one layer, assign your component to one or all of them.

**View access range** – any operator below this access level will not be able to see the component.

### 3.10.3.3.8 Footfall in the area



This component allows you to estimate a number of people present in the particular area.

**Area** – select an area for footfall count

**Text** – enter the text that will be displayed on this component.

**F** – font size and style.

**Color** – select a color.

**Fill color** – select a color.

**Horizontal / Vertical align:** set the text.

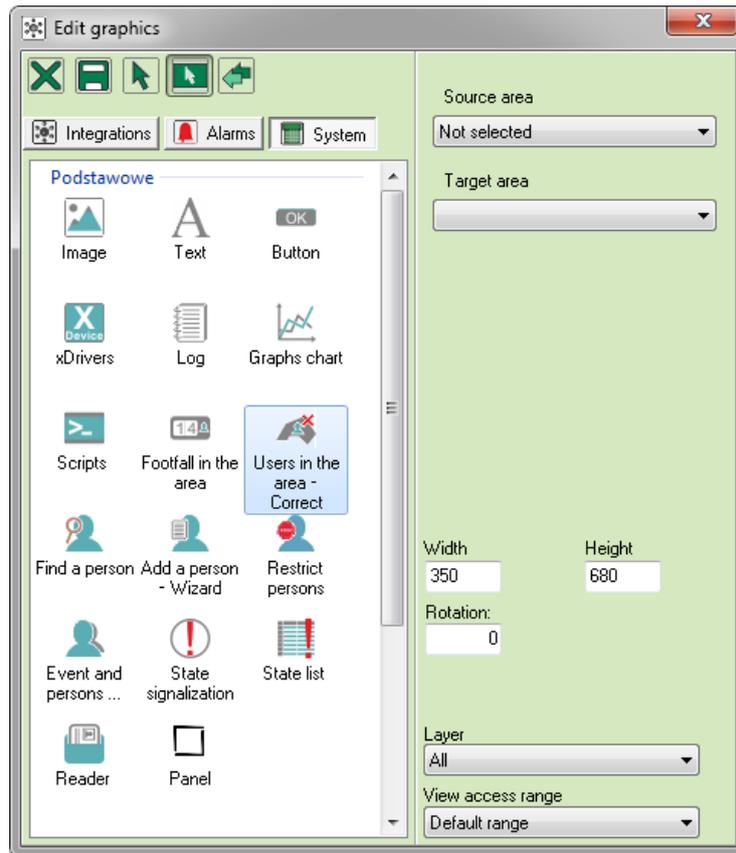
**Height, Width** – set the size of the component.

**Rotation** – rotation range of the component.

**Layer** – if you created more than one layer, assign your component to one or all of them.

**View access range** – any operator below this access level will not be able to see the component.

### 3.10.3.3.9 Users in the area – Correct



You can update the list of persons present in the particular area.

**Source area** – select.

**Target area** – select an area where deleted persons will be assigned.

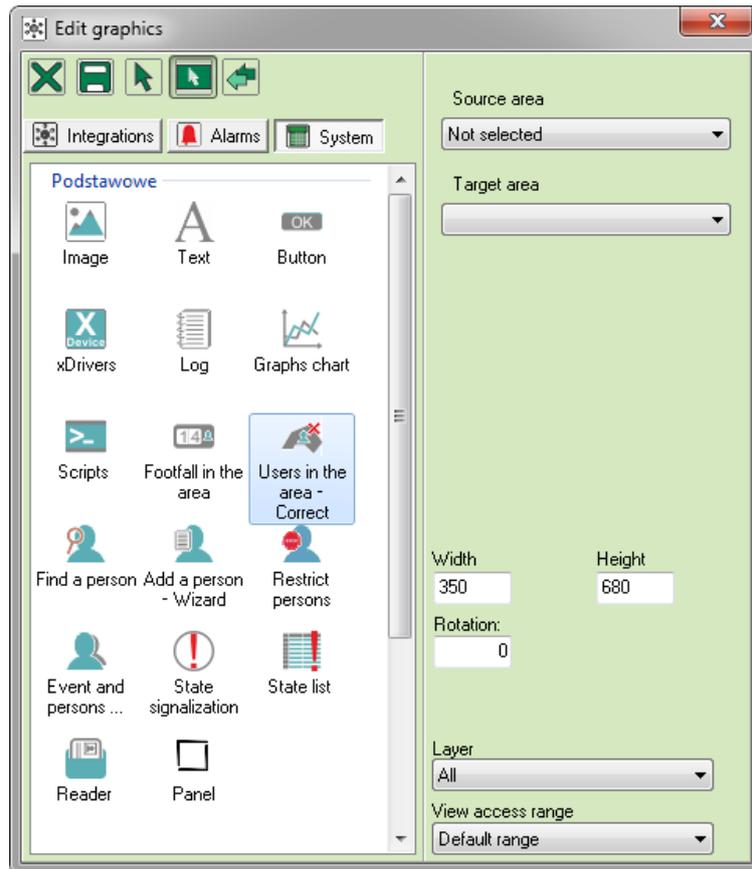
**Height, Width** – set the size of the component.

**Rotation** – rotation range of the component.

**Layer** – if you created more than one layer, assign your component to one or all of them.

**View access range** – any operator below this access level will not be able to see the component.

### 3.10.3.3.10 Find a person



You can look for a particular person present in the area.

**Height, Width** – set the size of the component.

**Rotation** – rotation range of the component.

**Layer** – if you created more than one layer, assign your component to one or all of them.

**View access range** – any operator below this access level will not be able to see the component.

With this component you can search through personnel database and quickly locate person you are looking for. You can search by name, surname, age, sex, status (employee, visitor, VIP), area, department and position.

**Find a person**

Enter the surname:

Or/and the name:

[Searching options >>](#)

Searching options allow to search people also by other criteria, not only by name or surname

Surname	Name	Department:
Locke	John	IT
NazwiskoEQU2	ImieM	

Position:

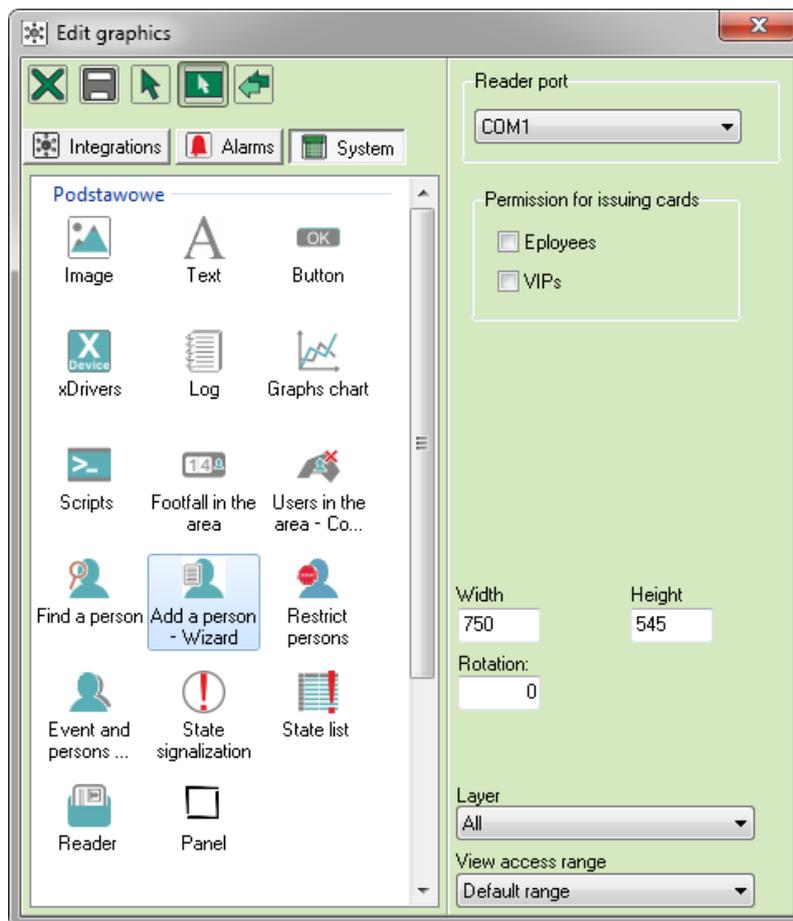
The person was last seen at...

Phone number - work:

Phone number - home:

### 3.10.3.3.11 Add a person - Wizard

This component is available in COMPAS integration.



**Reader port** – select from the list.

**Permission for issuing cards** – check a proper box.

**Height, Width** – set the size of the component.

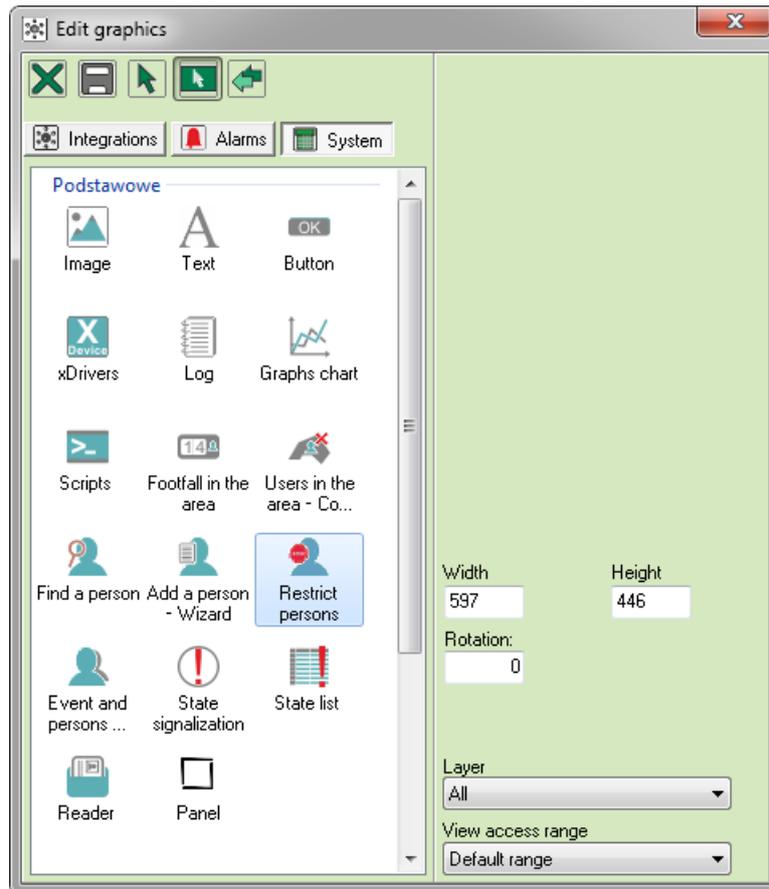
**Rotation** – rotation range of the component.

**Layer** – if you created more than one layer, assign your component to one or all of them.

**View access range** – any operator below this access level will not be able to see the

component.

### 3.10.3.3.12 Restrict persons



**Height, Width** – set the size of the component.

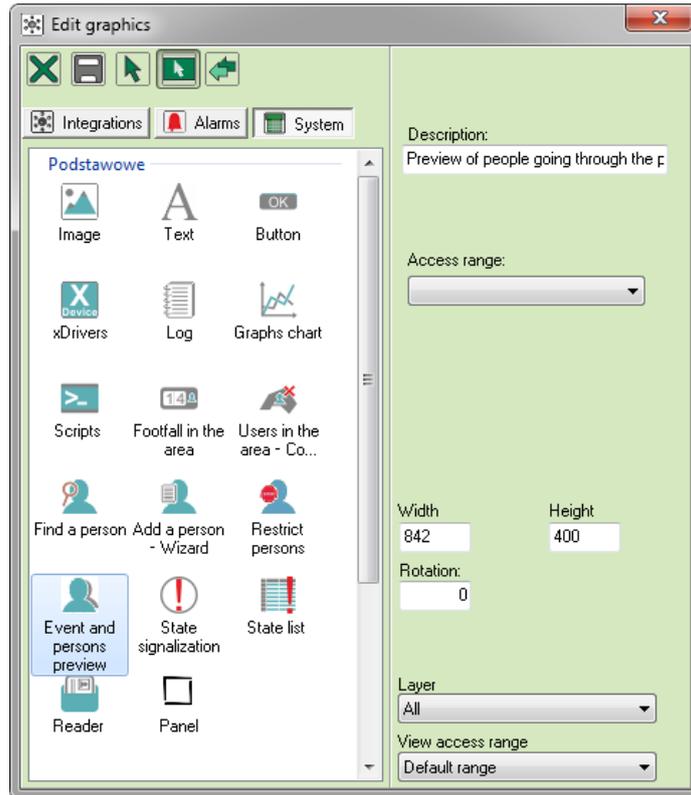
**Rotation** – rotation range of the component.

**Layer** – if you created more than one layer, assign your component to one or all of them.

**View access range** – any operator below this access level will not be able to see the component.

Restriction is a useful tool for reception employees. EQU user can quickly and effectively manage access control on the object. User can check for necessary information, such as specific location where the visitor is allowed to go, whether this person is banned from the premises, etc.

### 3.10.3.3.13 Event and persons preview



**Description** – enter any description.

**Access range** – concerns a controller used for events registration.

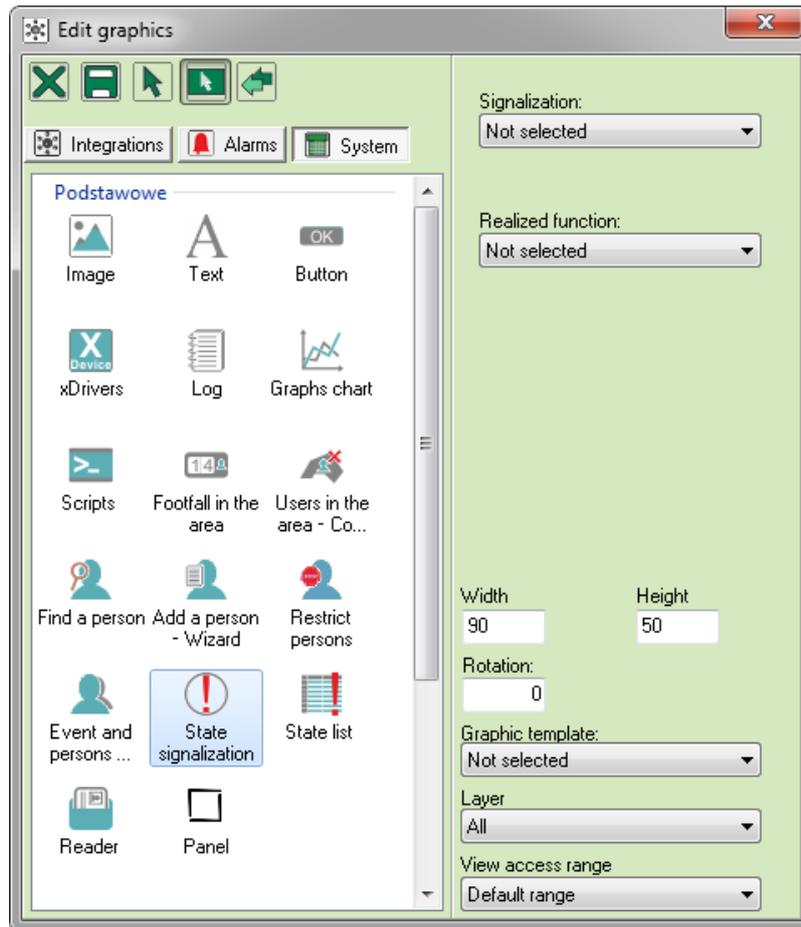
**Height, Width** – set the size of the component.

**Rotation** – rotation range of the component.

**Layer** – if you created more than one layer, assign your component to one or all of them.

**View access range** – any operator below this access level will not be able to see the component.





Thanks to this component you can work with module which will inform you if certain element is blocked or bypassed.

**Signalization** - select: Bypass, Alarms, Faults.

**Realized function** – select: Close graphics and open another one, Open another graphics.

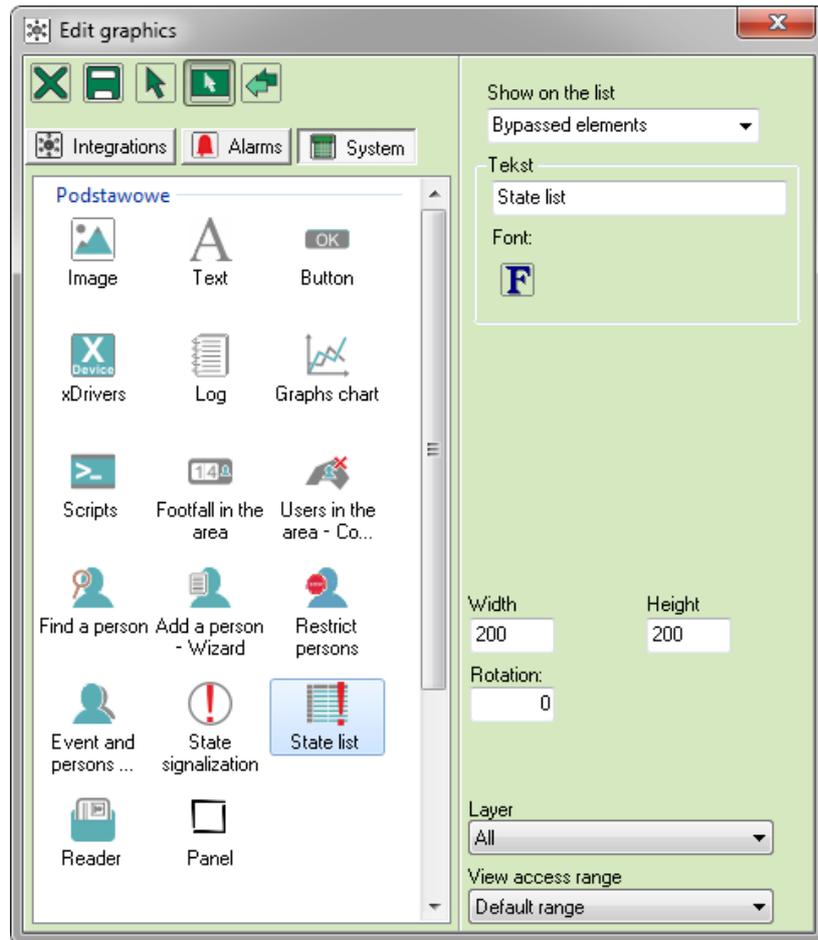
**Height, Width** – set the size of the component.

**Rotation** – rotation range of the component.

**Layer** – if you created more than one layer, assign your component to one or all of them.

**View access range** – any operator below this access level will not be able to see the component.

### 3.10.3.3.15 State list



This is a tool to present a list of elements that meet certain criteria. Click on the device to display a proper graphics with this device.

**Show on the list** – select: Bypassed elements, Damaged elements, Elements in alarm.

**Text** – device description.

**F** – font size and style.

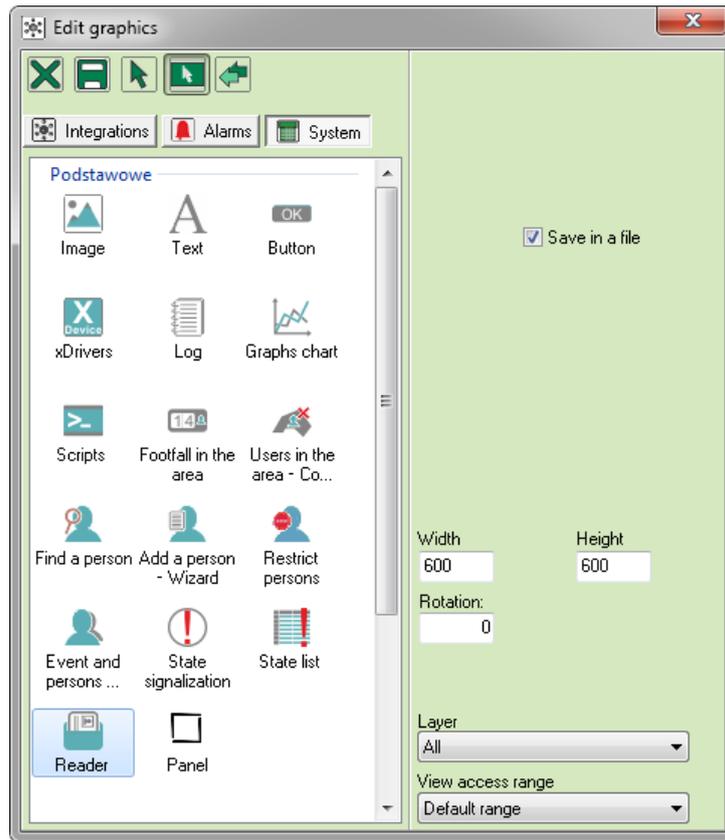
**Height, Width** – set the size of the component.

**Rotation** – rotation range of the component.

**Layer** – if you created more than one layer, assign your component to one or all of them.

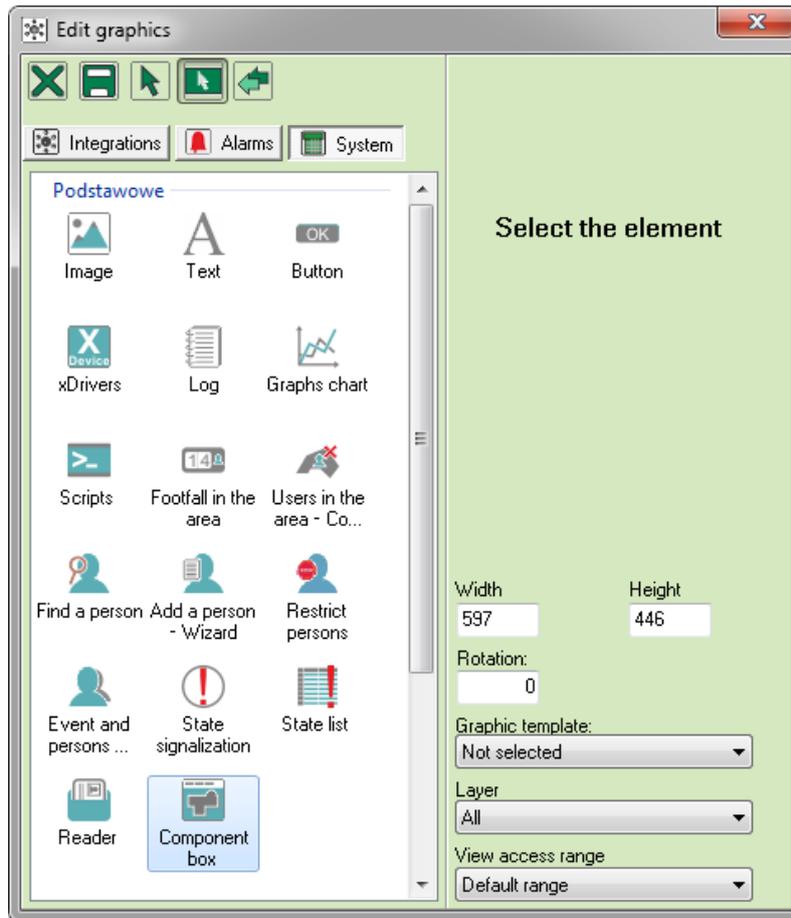
**View access range** – any operator below this access level will not be able to see the component.

### 3.10.3.3.16 Reader



This component is designed to support Combo Scan device, which scans ID papers and extracts data such as name, surname, parents' names and photo.

### 3.10.3.3.17 Component box



Component box is an additional window on which you can put other components to see them on one background instead of multiple backgrounds. Create components and place them in the component box, you will obtain a whole preview.

### 3.10.4 Place components of graphics

Select a component and click on a graphic background. Each click makes another component. You can edit active components (with little squares in the corners). Click **Insert Stop** to finish.

### 3.10.5 Delete components

Click the right mouse button and choose **Delete**. You can also use a keyboard – Delete.

### 3.10.6 Copy and paste components

Click the right mouse button and choose **Copy**. You can also use a keyboard – CTRL + C. Selected component will be duplicated with all its parameters.

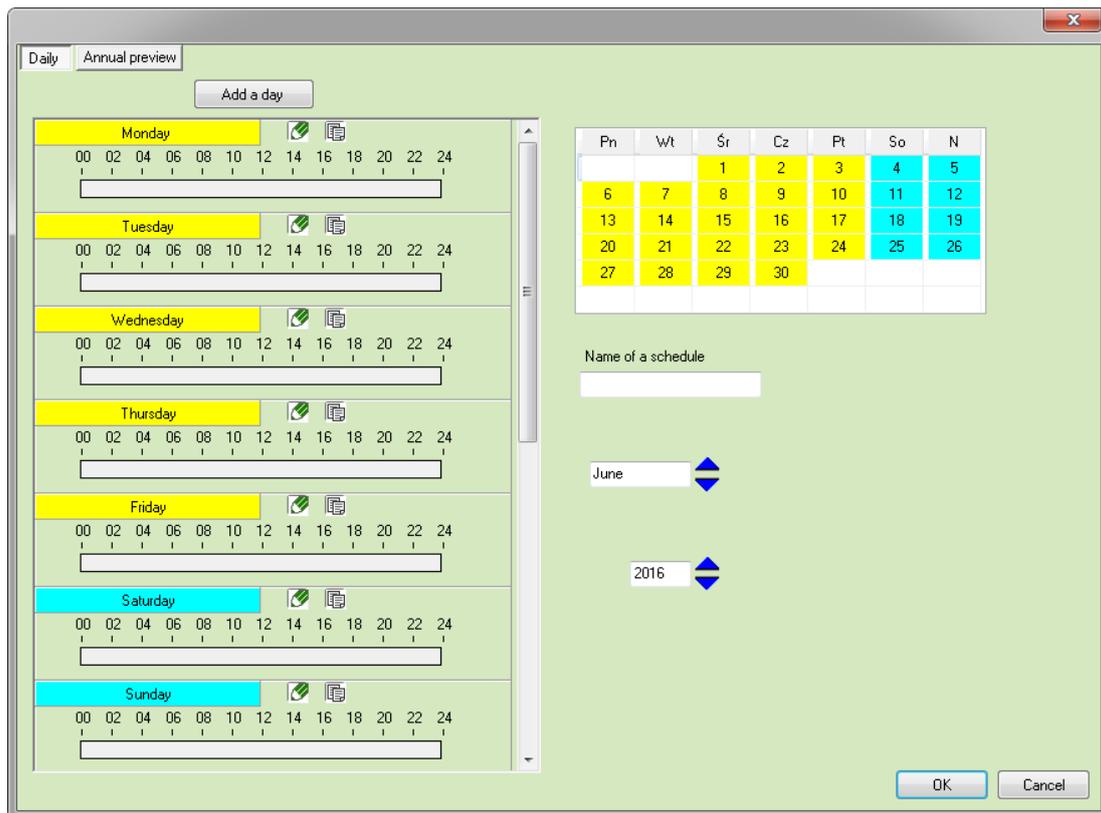
To put duplicated component on your graphics, click the right mouse button and choose **Paste**. You can also use a keyboard – CTRL+V.

### 3.10.7 Settings

Click the right mouse button and choose **Settings**. You can also use a keyboard – F4. Window with component properties is different, depending on a component.

### 3.11 Schedules

Schedules were designed to plan, steer and manage alarms and events. Also, it allows to steer integrated devices and define access level for other operators. You can create schedules years ahead. One schedule can include an infinite number of operators and alarm templates.



#### 3.11.1 Add schedule

Click **Add** to create a new schedule. You will see the following window.

You can manage schedules with the following buttons.

	<b>Add</b>	New schedule.
	<b>Copy</b>	Copy saved schedule with all parameters. Select from the following options: - to the existing day: select a day; - create a new day using the settings you copied: enter the name of the day where you want to copy your parameters.

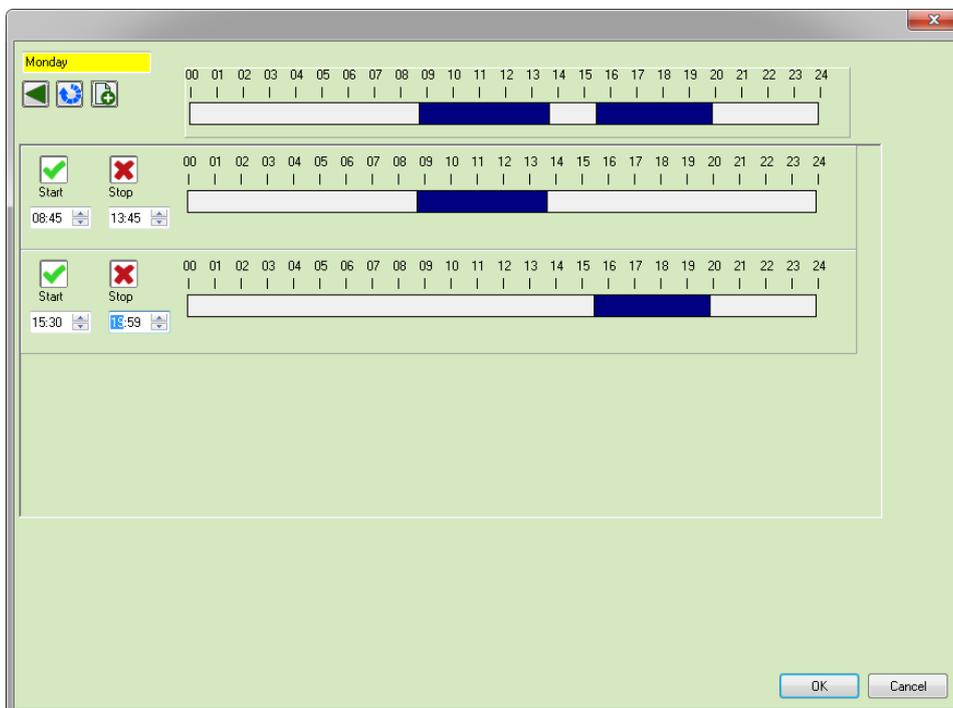
	<b>Delete</b>	Delete schedule.
	<b>Refresh</b>	Update.
	<b>Back</b>	Get to the previous window.
	<b>Set</b>	Confirm the schedule.
	<b>Edit</b>	Open and change settings.

### 3.11.1.1 Daily

You can change particular days regardless of annual schedule. If you change one day of the week, it will apply to the whole year. If you don't design an annual schedule, it will be realized according to daily schedule. Special days are an exception and you have to define them individually for each date.

In order to create a new schedule, follow the instructions below:

1. Enter the name for the new schedule;
2. Use arrows to set month and year;
3. Edit chosen day of the week;
4. Set time range of a schedule (Start, Stop).
5. Hit **Set** – defined time range will apply to daily schedule;
6. To set more than one schedule, click **Add**.



If one two schedules are partly simultaneous, the system will combine them into one time range which starts with the first schedule and ends with another.

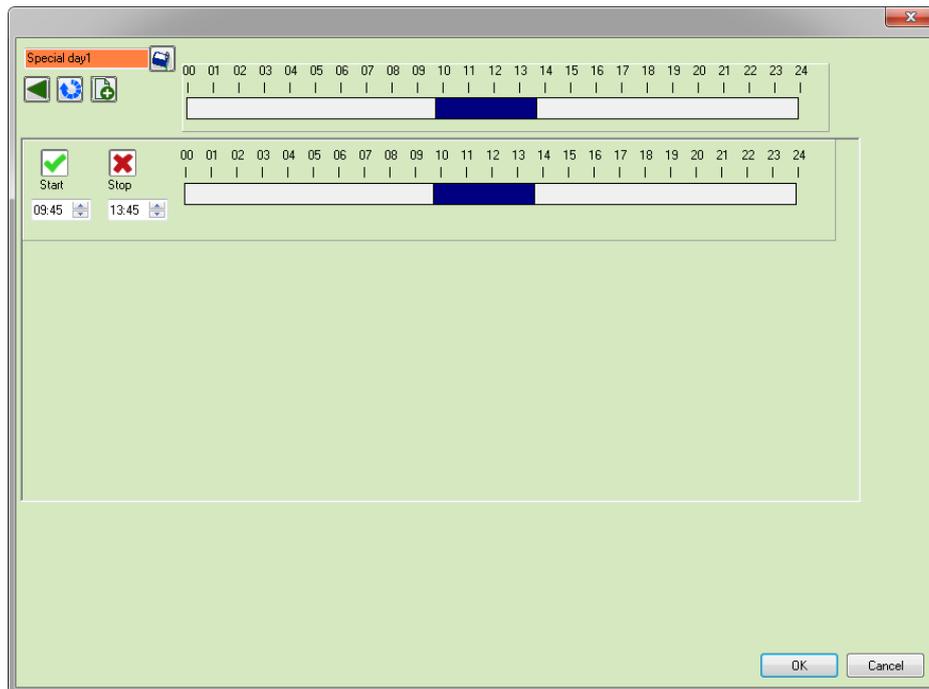


## Set the schedule for two days

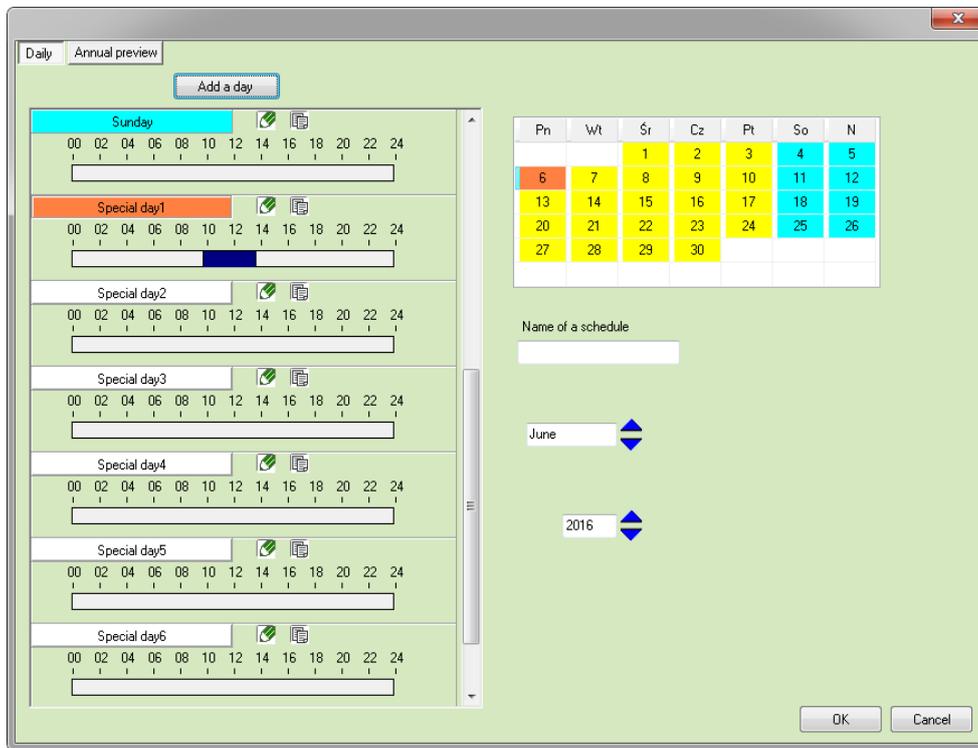
If you want your schedule to include two consecutive days, set the time range for those two days. For example: you want to create a schedule from 17 on Tuesday till 10 on Wednesday, you should take two steps: create a schedule for Tuesday from 17 to 23:59 and for Wednesday from 00:00 to 10. This one-minute window will not disturb the whole two-day schedule.

### 3.11.1.2 Special days

Special days are exceptions from a regular schedule. It is useful in case of bank holidays, etc. You can assign a name and a color for each special day.

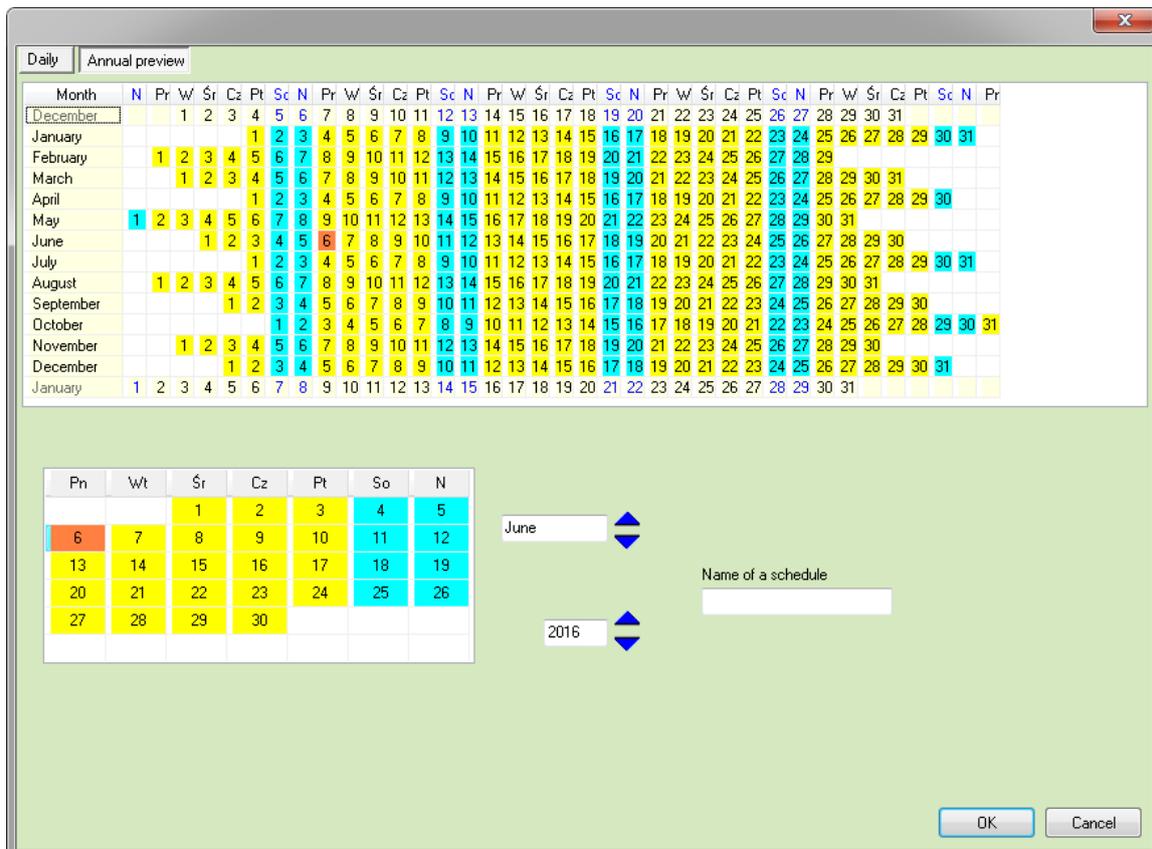


If you want to add a special day, click **Start**. To remove it, click **Stop**. You can define a special day for any day of the month – just hit the name with preferred special day and next click on a proper date on a calendar on the right. Special days will be visible in the annual preview, including the color.

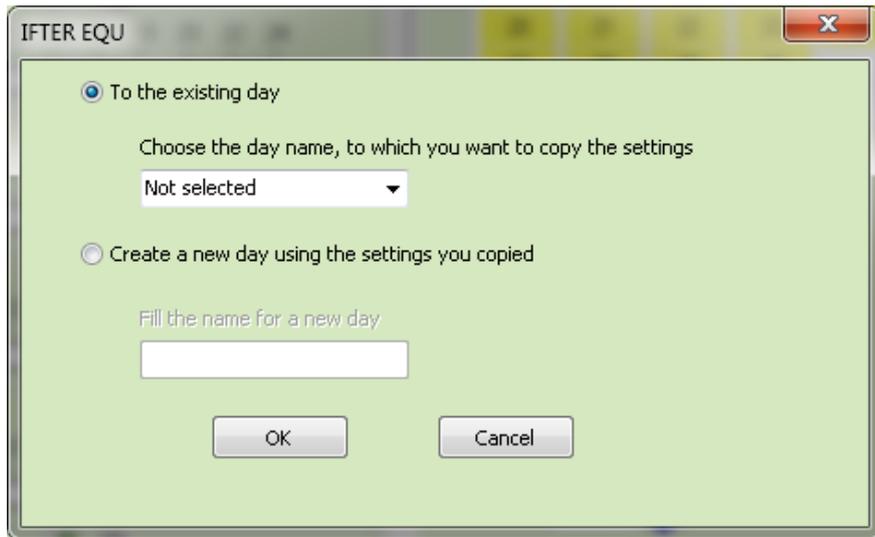


### 3.11.1.3 Annual preview

On the annual preview you can see all the special days throughout, as well as particular months. You can create schedules for years ahead.



### 3.11.2 Copy a schedule



You can duplicate any schedule. You can choose the existing day or create a new day for the schedule. New day will appear on the list automatically after you click OK.

### 3.12 Operators

Operator is a person with authorization to log in and operate IFTER EQU workstation. The administrator adds operator into the system. For each Operator you have to define the following parameters:

**Name:** unique identification, it can include big and small letters and numbers. It can include 4-15 characters. Username is used to log in to the system.

**Password:** security measure against unauthorized access. Each password should be unique (small and big letters and numbers). It should include 4-15 characters. The password is hidden while entering. Furthermore, it's encrypted with mathematic algorithm. Pay attention to small and big letters, both in the login and the password.

**Name and surname:** can include up to 64 characters.

#### Access level:

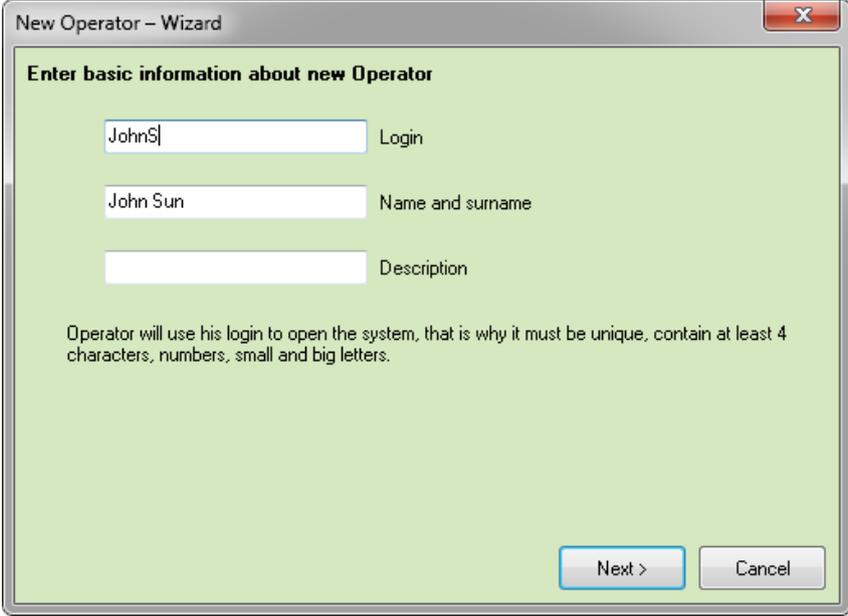
There are 8 access levels described below:

- |                |   |
|----------------|---|
| <b>Level 1</b> | This is bottom, most restricted level access. On this level user can open and close graphics, mute alarms, manage windows and change his own password.  |
| <b>Level 2</b> | This level is for users that should not make any changes in the system. Here the user has level 1 authorization plus he has an access to event logs, location of a graphic on which the alarm occurred. User can also print reports.  |
| <b>Level 3</b> | This level was designed for users which should be able to confirm the alarm. It's access level 2 plus alarm confirmation and closing the system.  |
| <b>Level 4</b> | Here the user has all level 3 authorizations. Additionally, he can edit properties. This level was designed for operators of automation which is not available in this version.   |
| <b>Level 5</b> | This level was designed for operators supporting administrator in setting up and managing workstations. It's access level 4 extended by the possibility to fully control the process of writing and configuring the reports, graphics, alarms, colors. User also has access to workstation lists, controllers and inputs. |
| <b>Level 6</b> | This level was designed for operators supporting administrator in personnel managing. It's access level 5 with little modifications: user cannot manage alarms, graphics, workstation lists, controllers and inputs. Instead he has extended access to personnel and user schedule manager.                               |
| <b>Level 7</b> | This level was designed for operators who install and configure the system. This is the administrator access level, but without the possibility to create users, confirm alarms and locate alarms.  |

**Level 8 Administrator** Administrator has access to the whole system. For security purposes it is recommended that the administrator has two accounts: one as an admin and one for everyday activities.

### 3.12.1 Add an Operator

Hit **Add** to open a new window:



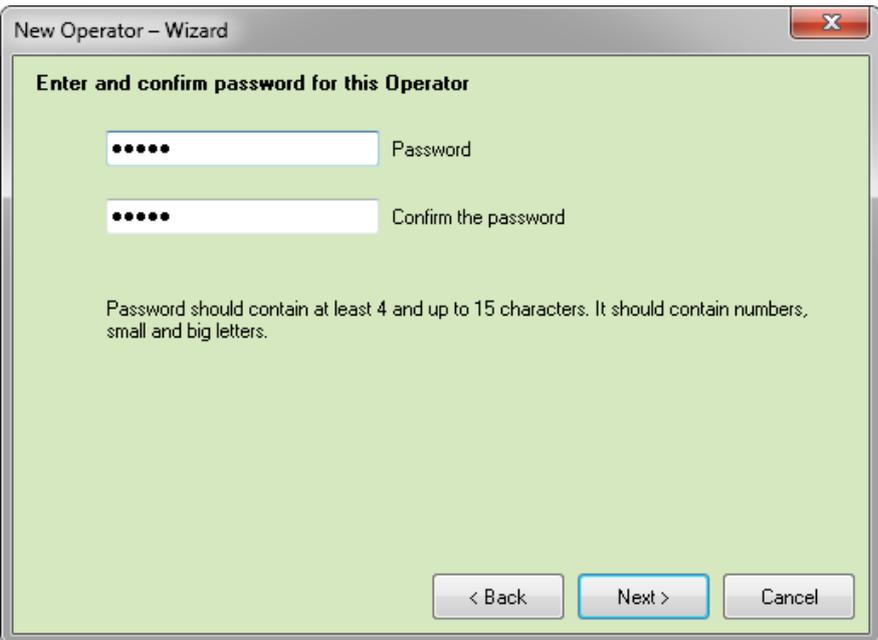
The screenshot shows a dialog box titled "New Operator - Wizard" with a close button (X) in the top right corner. The main area has a light green background and is titled "Enter basic information about new Operator". It contains three input fields: "Login" with the text "JohnS", "Name and surname" with the text "John Sun", and "Description" which is empty. Below the fields is a note: "Operator will use his login to open the system, that is why it must be unique, contain at least 4 characters, numbers, small and big letters." At the bottom right, there are two buttons: "Next >" and "Cancel".

**Login:** small and big letters and numbers, up to 4-15 characters.

**Name and surname:** up to 64 characters.

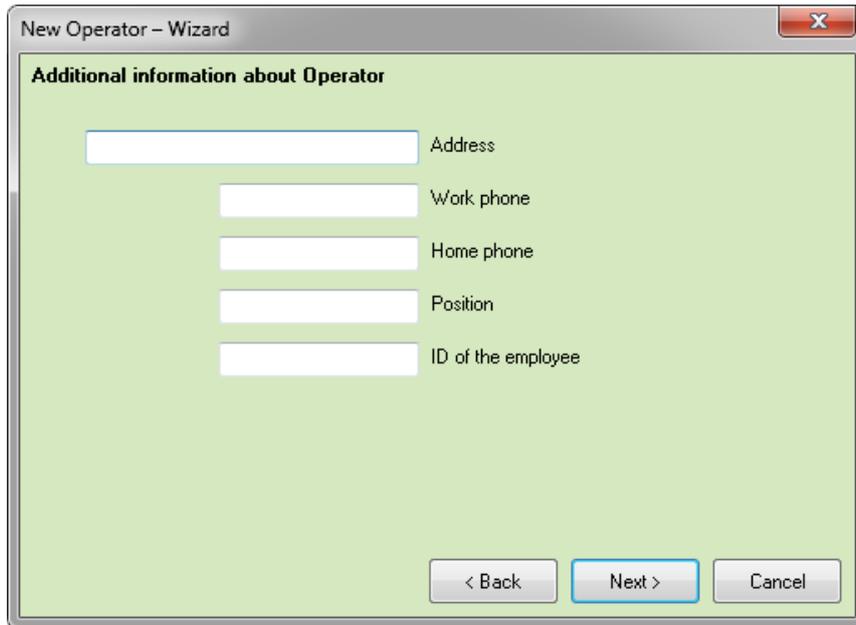
**Description:** up to 250 characters.

Click Next to see the following window:



The screenshot shows the same dialog box titled "New Operator - Wizard" with a close button (X) in the top right corner. The main area has a light green background and is titled "Enter and confirm password for this Operator". It contains two input fields: "Password" and "Confirm the password", both filled with six dots. Below the fields is a note: "Password should contain at least 4 and up to 15 characters. It should contain numbers, small and big letters." At the bottom, there are three buttons: "< Back", "Next >", and "Cancel".

Numbers and letters are hidden for security purpose.



The screenshot shows a dialog box titled "New Operator - Wizard" with a close button (X) in the top right corner. The main area is titled "Additional information about Operator" and contains five text input fields stacked vertically. The labels for these fields are: "Address", "Work phone", "Home phone", "Position", and "ID of the employee". At the bottom of the dialog, there are three buttons: "< Back", "Next >" (highlighted in blue), and "Cancel".

**Address** – can include up to 255 characters.

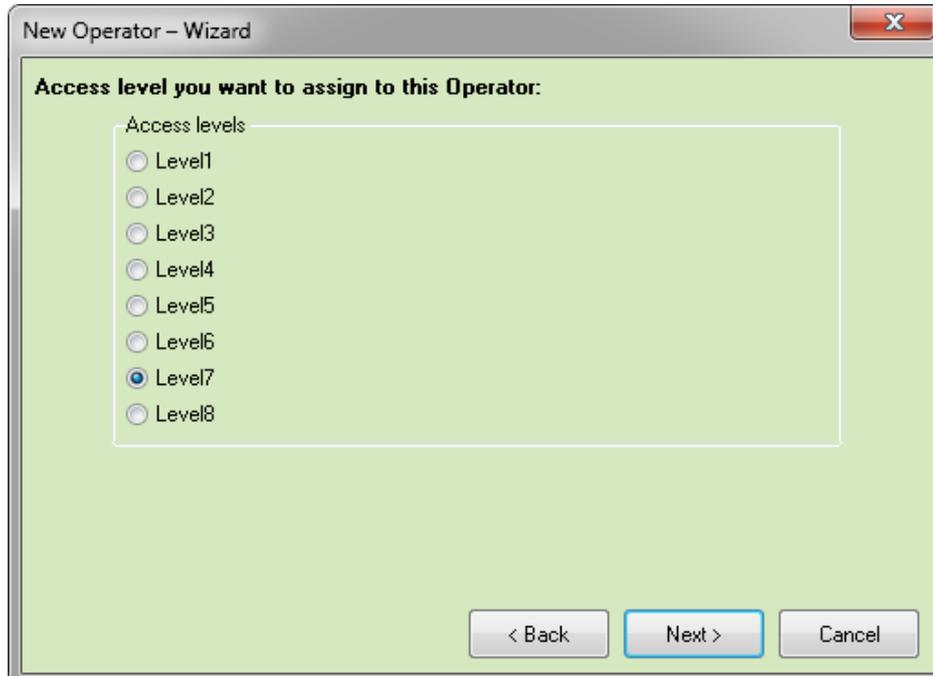
**Work phone** – can include up to 48 characters.

**Home phone** – can include up to 48 characters.

**Position** – can include up to 32 characters.

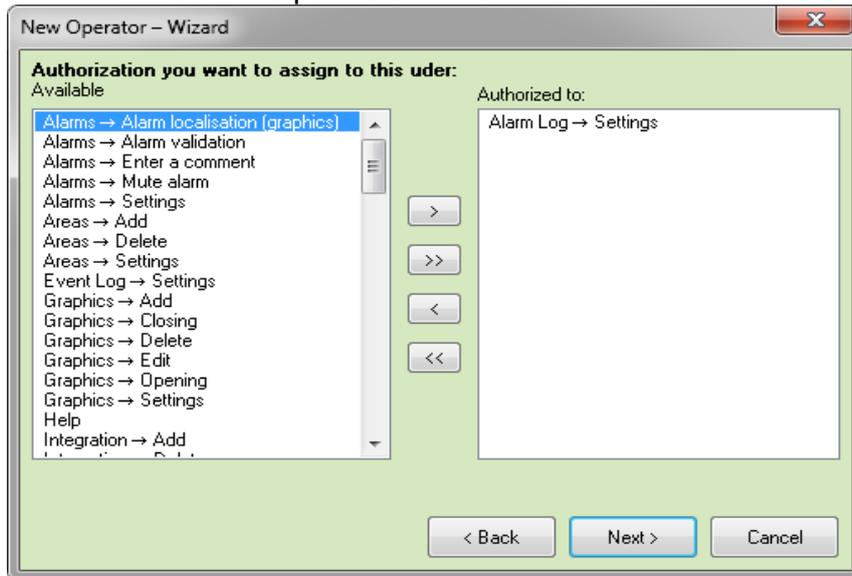
**ID number of the employee** - can include up to 32 characters.

Next, you need to assign a proper access level.

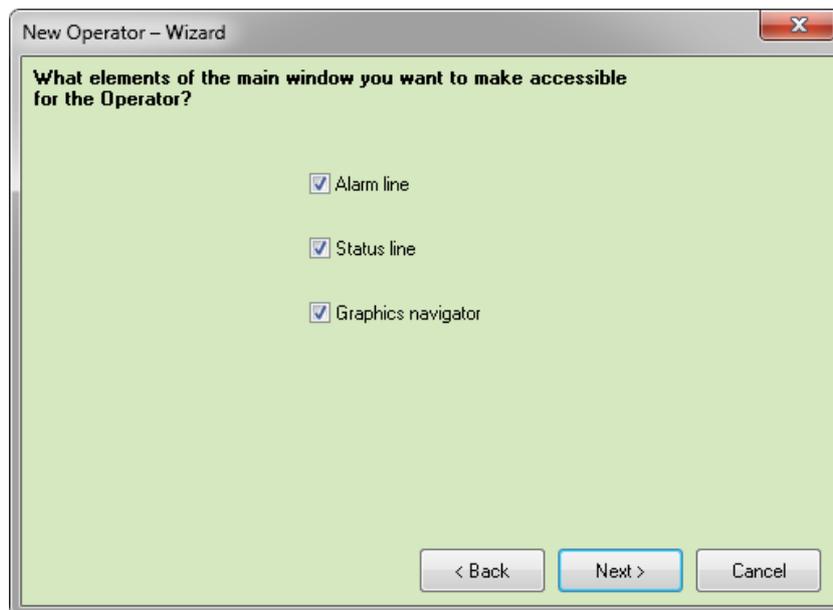


The screenshot shows a dialog box titled "New Operator - Wizard" with a close button (X) in the top right corner. The main area is titled "Access level you want to assign to this Operator:". Below this title is a list of radio buttons labeled "Access levels" with options: "Level1", "Level2", "Level3", "Level4", "Level5", "Level6", "Level7" (which is selected with a blue dot), and "Level8". At the bottom of the dialog, there are three buttons: "< Back", "Next >" (highlighted in blue), and "Cancel".

Click **Next** to establish specific authorization points for each Operator. Use arrows to move selected points between two columns.



In the following window you can decide, what elements of the system will be visible for the Operator.

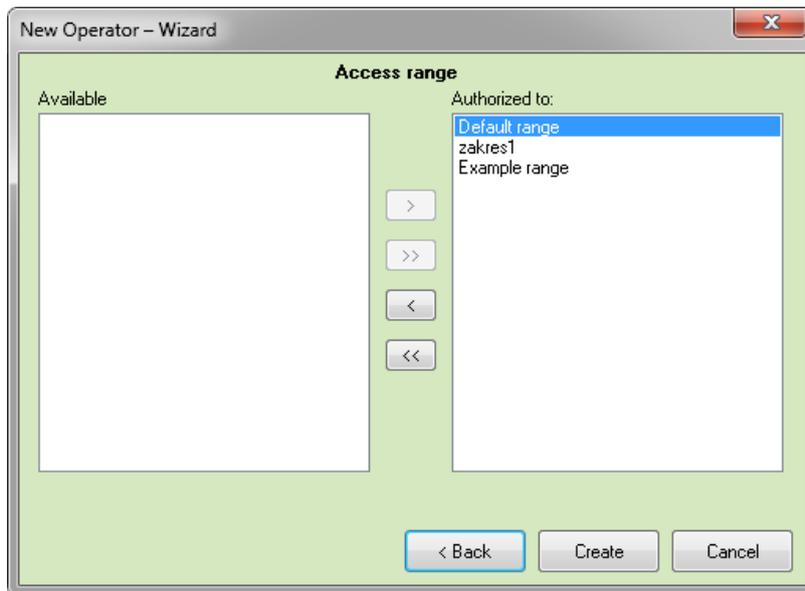


Alarm line – displayed at the bottom of a screen, informing about the alarms.

Status line – displayed at the bottom of a screen, with the following information: date and time, active alarm, number of elements, used elements, Operator.

Graphics navigator – helps to manage graphics. To use it, you need to check the option **Adjust to the touch panel** in the workstation properties.

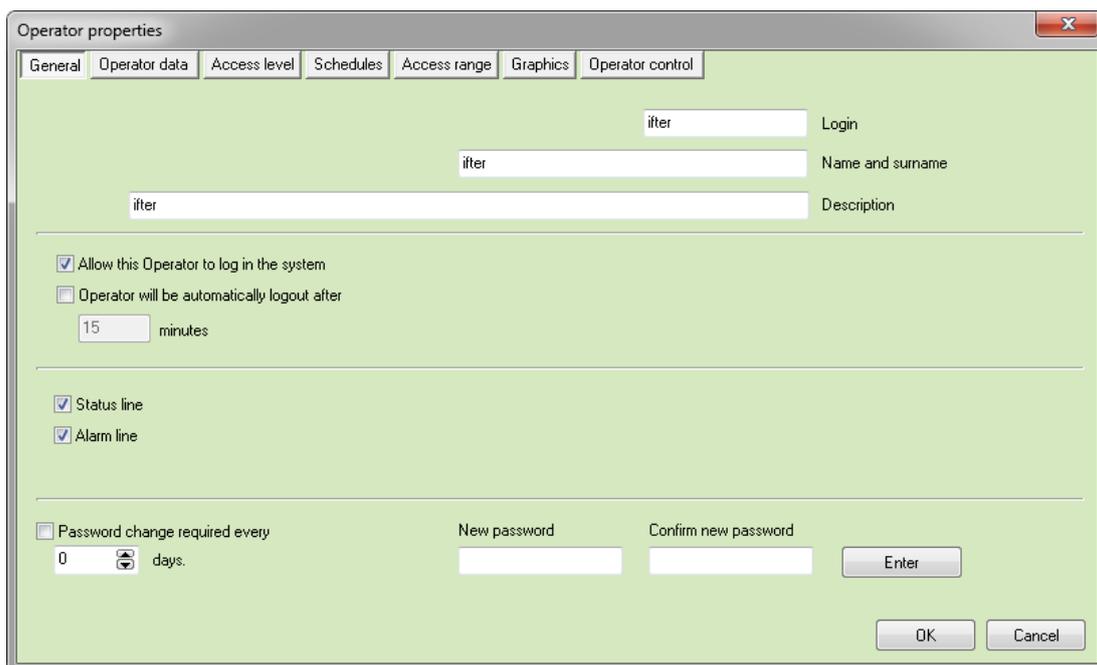
Next, you need to assign the Operator to a proper access range. It will apply automatically in the system.



### 3.12.2 Operator properties

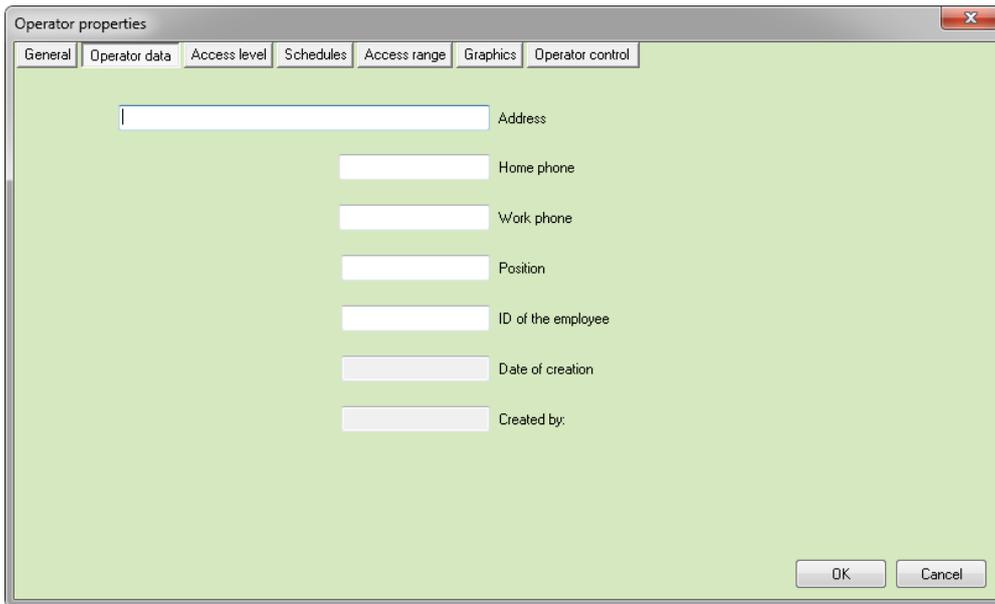
Enter Properties to edit any settings for the Operator selected from the list. One administrator cannot change properties of another maximum level user.

#### 3.12.2.1 General



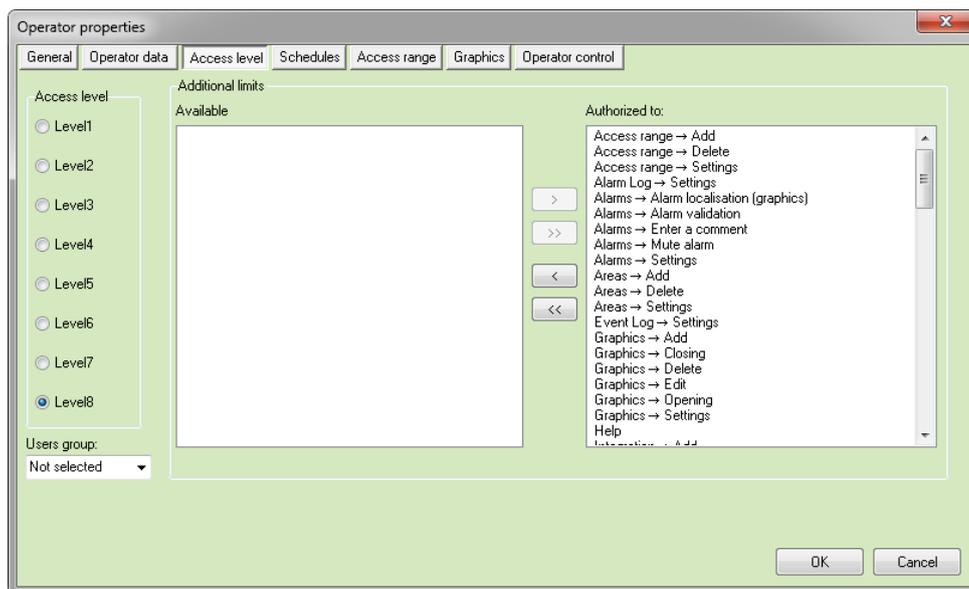
Basic information about the Operator and logging settings.

### 3.12.2.2 Operator data



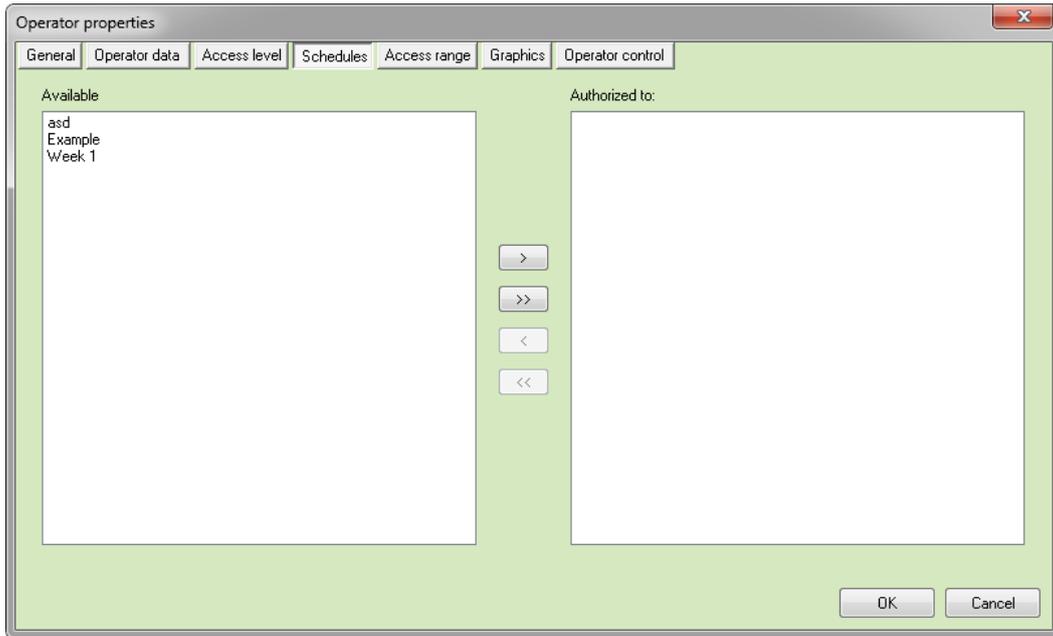
Contains personal identification data of the Operator.

### 3.12.2.3 Access level



Here you can see and change access level and specific settings for the Operator. Use arrows to move particular points between two columns.

### 3.12.2.4 Schedules

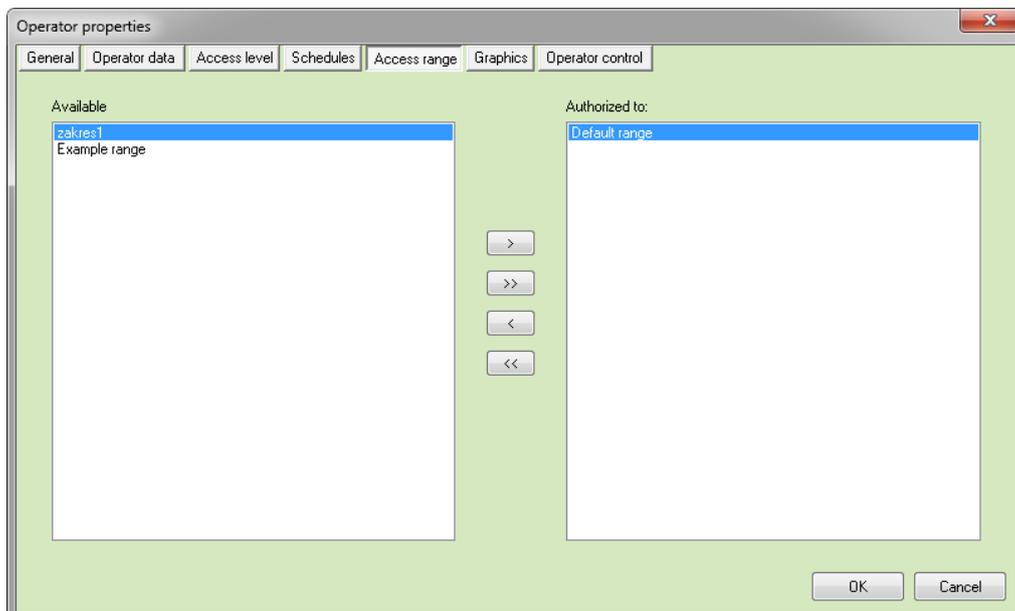


Assign schedule to the Operator. He will be able to use the system only within this time frame defined by the schedule.

**Available** – see all schedules created in the system.

**Authorized to** – schedules assigned to the Operator.

### 3.12.2.5 Access range



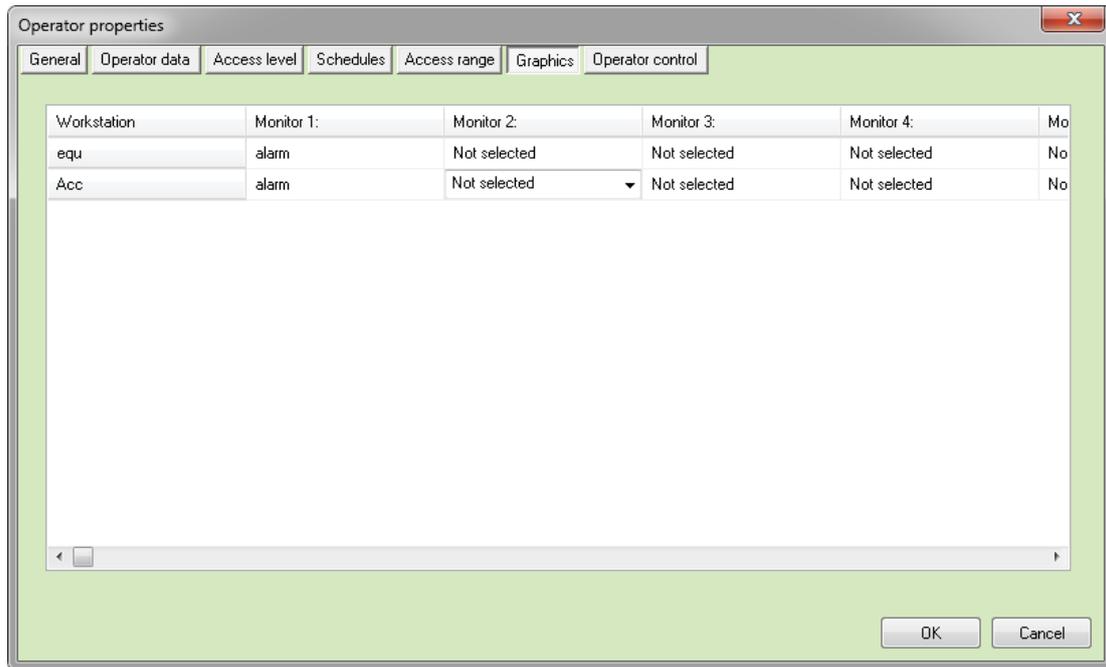
Assign access range to the Operator.

**Available** – see all ranges created in the system.

**Authorized to** – ranges assigned to the Operator

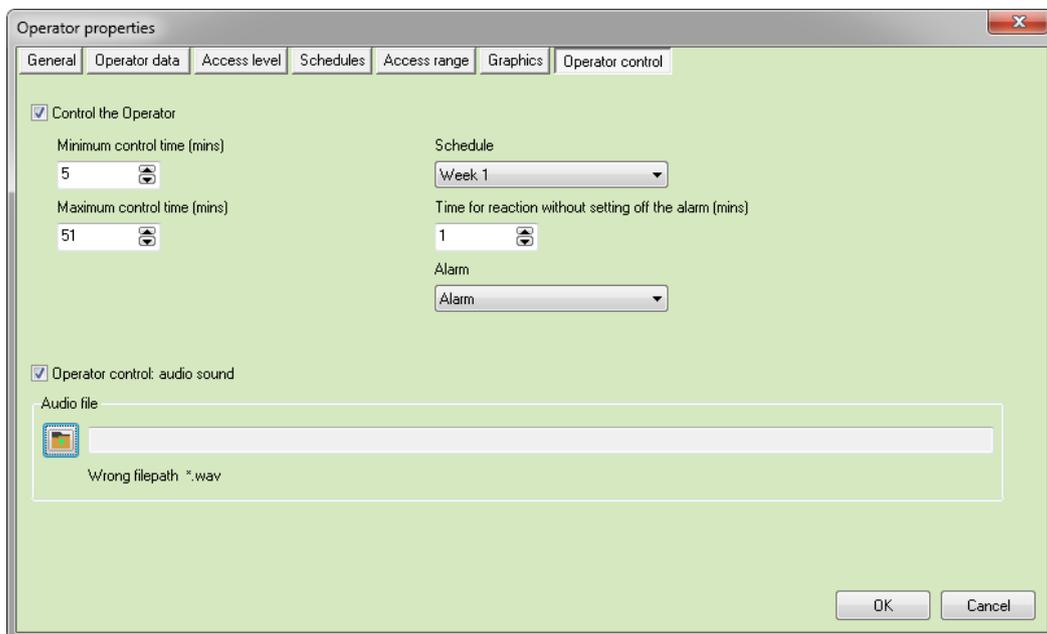
By setting access range, you define which functions the Operator will be able to use.

### 3.12.2.6 Graphics



Choose graphics that will be automatically available in the system. You can assign different graphics to each monitor.

### 3.12.2.7 Operator control



This mechanism allows you to test the Operator's vigilance during work hours.

**Minimum control time [mins]** – at least one minute.

**Maximum control time [mins]** – 1440 minutes maximum (24 hours).

The system will display a control message in a random time (within defined range) and place of the monitor. The system will start another countdown after message is confirmed by the Operator. Both the control message and confirmation will be logged in Operator's Log.



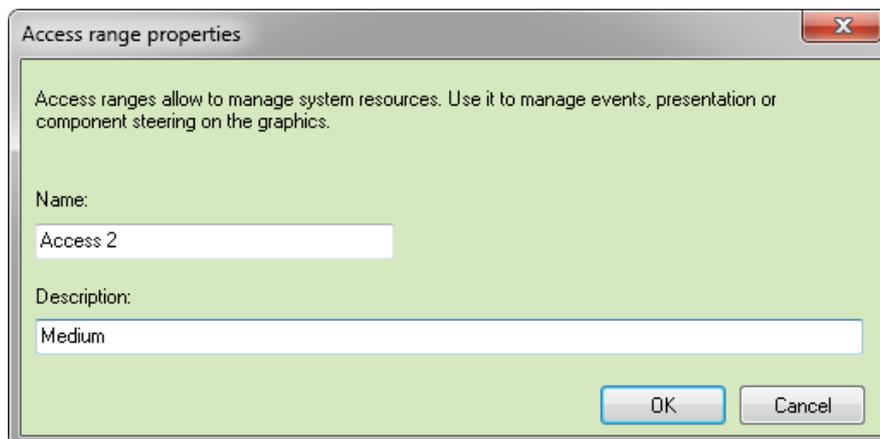
You can also establish how much time the Operator will have to confirm the control message. If the Operator fails to react in the given time, alarm will go off. Operator control can be adjusted and assigned to the schedule.

### 3.13 Access range

Access ranges allow to manage system resources. Use it to manage events, presentation or component steering on the graphics. Each Operator must have a proper access range to work on workstations, components, etc.

#### 3.13.1 Add

Click **Add** and enter basic parameters for access range – name and description.



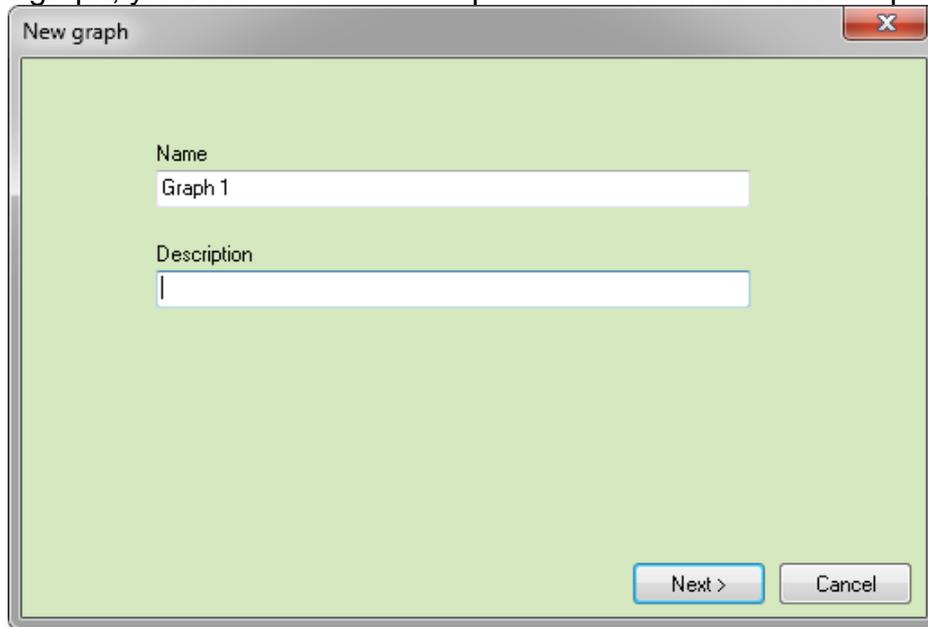
Go to Operator's Properties to assign an access range.

### 3.14 Graphs

Graphs are designed to present value changes regarding inputs and outputs of integrated devices.

#### 3.14.1 Add

To add a new graph, you need to enter basic parameters: name and description.



Click **Next** to move on to Settings.

#### **Save:**

**Every time interval** – with this option you need to set interval below

**Each day at the scheduled time** - set time of entry

**When changing value**– set Precision

enter an integer in the place of power in this formula:

$$\Delta = 1 \times E^{-1}$$

where: delta – incremental value

E – scientific notation

negative power - negative integer, for example -1

$$\Delta = 1 \times E^{-1} = 1 \times 10^{-1} = 0,1 \text{ we have value rounded to decimal place}$$

positive power – positive integer, for example 2

$$\Delta = 1 \times E^2 = 100 \text{ value before decimal point}$$

**Schedule limit** - select schedule

#### **Entry limit:**

Number of days – set the number of days p

Number of entries– set the number of entries

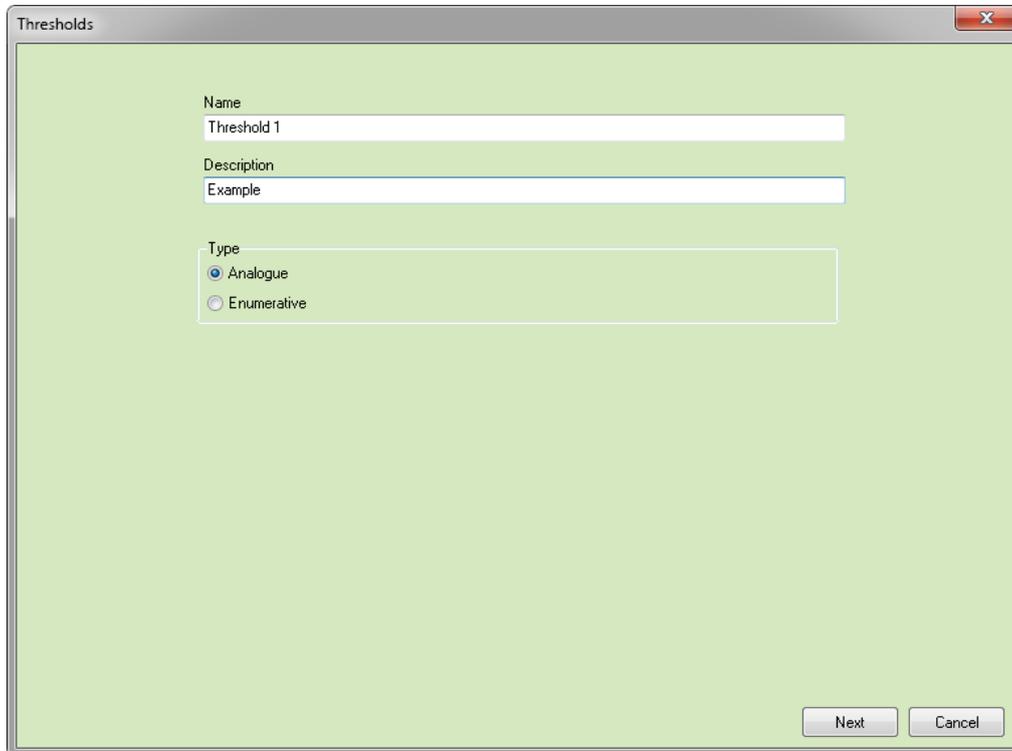
In **Properties** you can also change settings.

### 3.15 Thresholds

Thresholds are designed to control device parameters. After exceeding threshold value system will generate a warning or initiate activity. Threshold value can be analogue or enumerative.

### 3.15.1 Add

Click the corresponding button to **Add** a threshold. Enter name and description. Choose the type: Analogue or Enumerative.

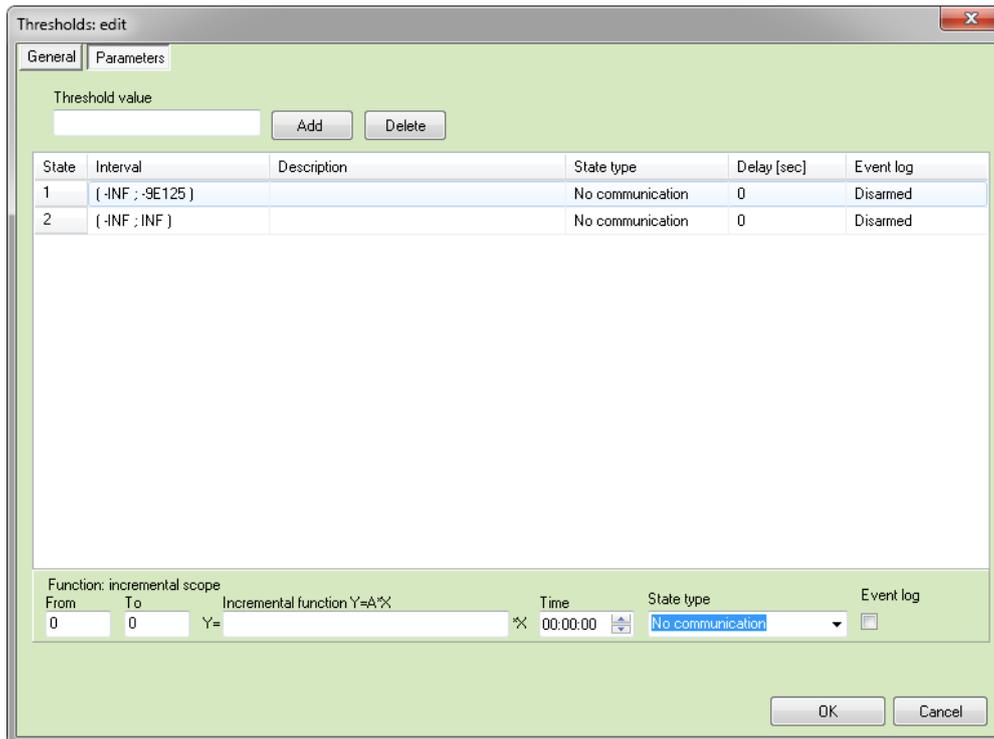


The image shows a software dialog box titled "Thresholds". It has a light green background and a grey border. At the top right, there is a close button with an "X" icon. The dialog contains three main sections:

- Name:** A text input field containing the text "Threshold 1".
- Description:** A text input field containing the text "Example".
- Type:** A section with two radio buttons. The "Analogue" radio button is selected (indicated by a blue dot), and the "Enumerative" radio button is unselected.

At the bottom right of the dialog, there are two buttons: "Next" and "Cancel".

### 3.15.1.1 Analogue parameter



**Threshold value** – enter a value and click **Add**. This value will be included within the interval.

**Description** – interval description

**State type** – choose from the list: No communication, Active, Warnings, Alarm, or numerical 5-25.

**Delay** – for how long the state must go on

**Event log** – Click to see a little box on the right. Check it to switch on / uncheck it to switch off.

**Incremental function** - set desired values “from-to”. If the value goes above or below, it will set off the alarm.

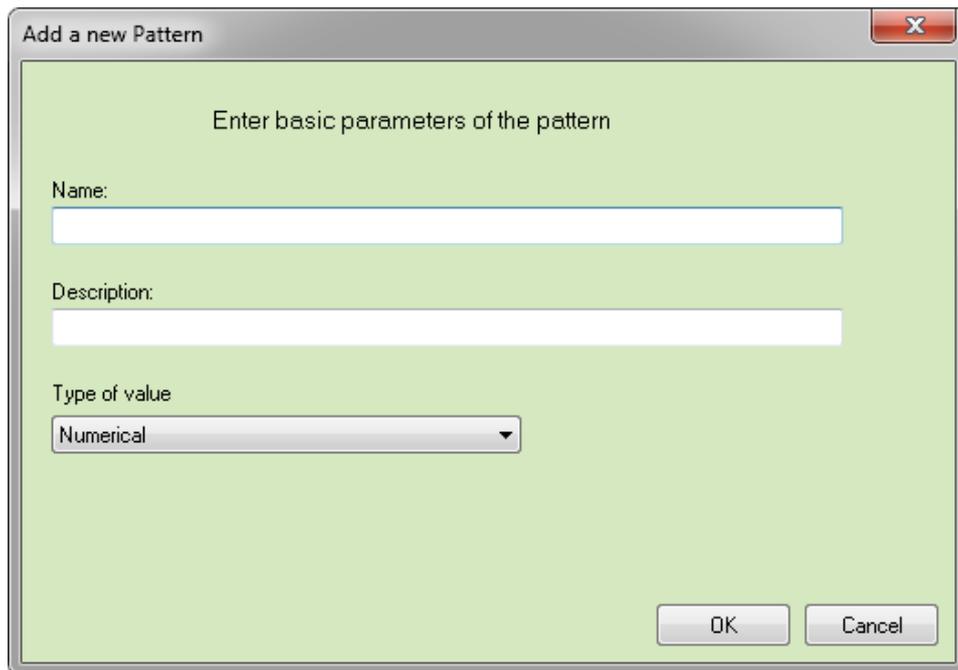
### 3.15.1.2 Enumerative parameter

Here you assign enumerative value taken from the Patterns.

## 3.16 Patterns

Patterns are designed to change the information format. For example, you can acquire textual description instead of numerical information. You can also establish a pattern for inputs and outputs regarding data display. Numerical patterns are designed for analogue inputs and outputs. Enumerative patterns are designed for binary inputs and outputs, as well as presentation of state of variables designated with specific nominal value.

### 3.16.1 Add



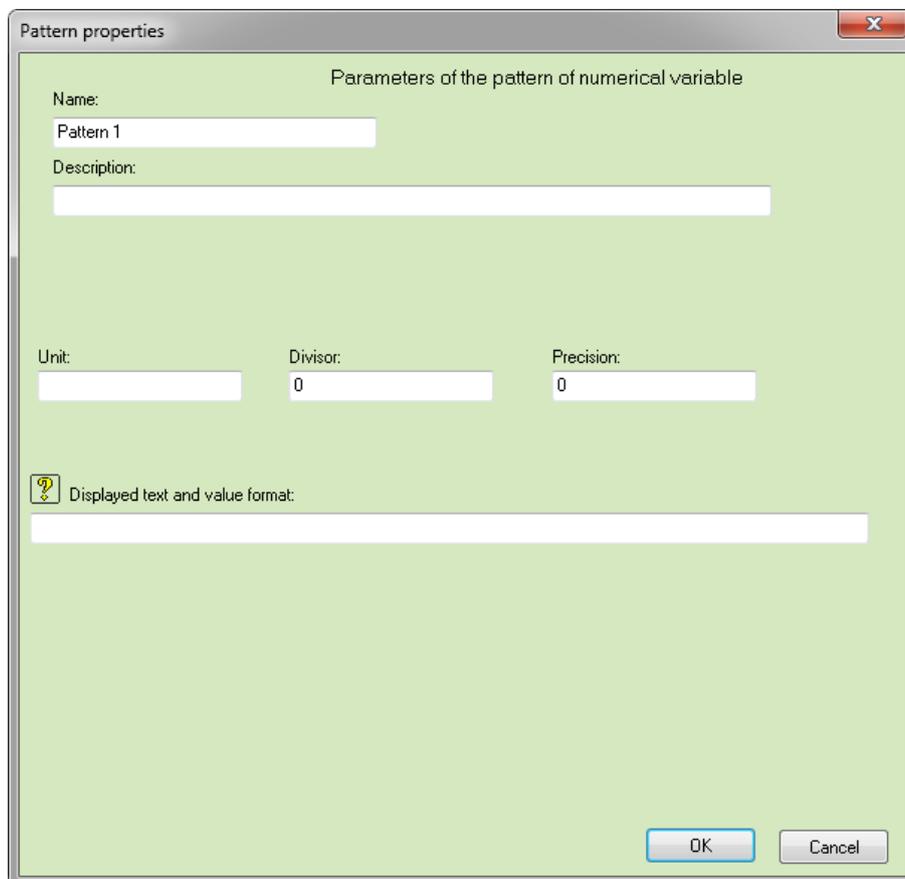
The dialog box is titled "Add a new Pattern" and contains the following fields:

- Name:** A text input field.
- Description:** A text input field.
- Type of value:** A dropdown menu with "Numerical" selected.

Buttons for "OK" and "Cancel" are located at the bottom right.

To **Add** a new pattern, click on a corresponding button and enter basic information: name, description, type.

### 3.16.2 Numerical variable: Properties



The dialog box is titled "Pattern properties" and contains the following fields:

- Name:** A text input field containing "Pattern 1".
- Description:** A text input field.
- Unit:** A text input field.
- Divisor:** A text input field containing "0".
- Precision:** A text input field containing "0".
- Displayed text and value format:** A text input field with a help icon (question mark) to its left.

Buttons for "OK" and "Cancel" are located at the bottom right.

**Unit** – unit of a parameter

**Multiplier** - multiplier value

**Precision** – number of decimal places

**Displayed text and value format**– click on “?” to obtain the following instructions

### 3.16.3 Enumerative variable: Properties

Pattern properties

Parameters of the pattern of enumerative variable

Name:  
Pattern 2

Description:

Value	Text
0	

Value:  
0

Displayed text and value format:

Add Replace Delete

Export values to thresholds

OK Cancel

**Value** – enter a number.

**Text** – enter text.

**Export values to thresholds** – you can use these variables in thresholds.

### 3.16.4 Temporal variable: Properties

Pattern properties

Parameters of the pattern of time variable

Name:  
Pattern 3

Description:

Input unit  
Millisecond

Format:  
tt

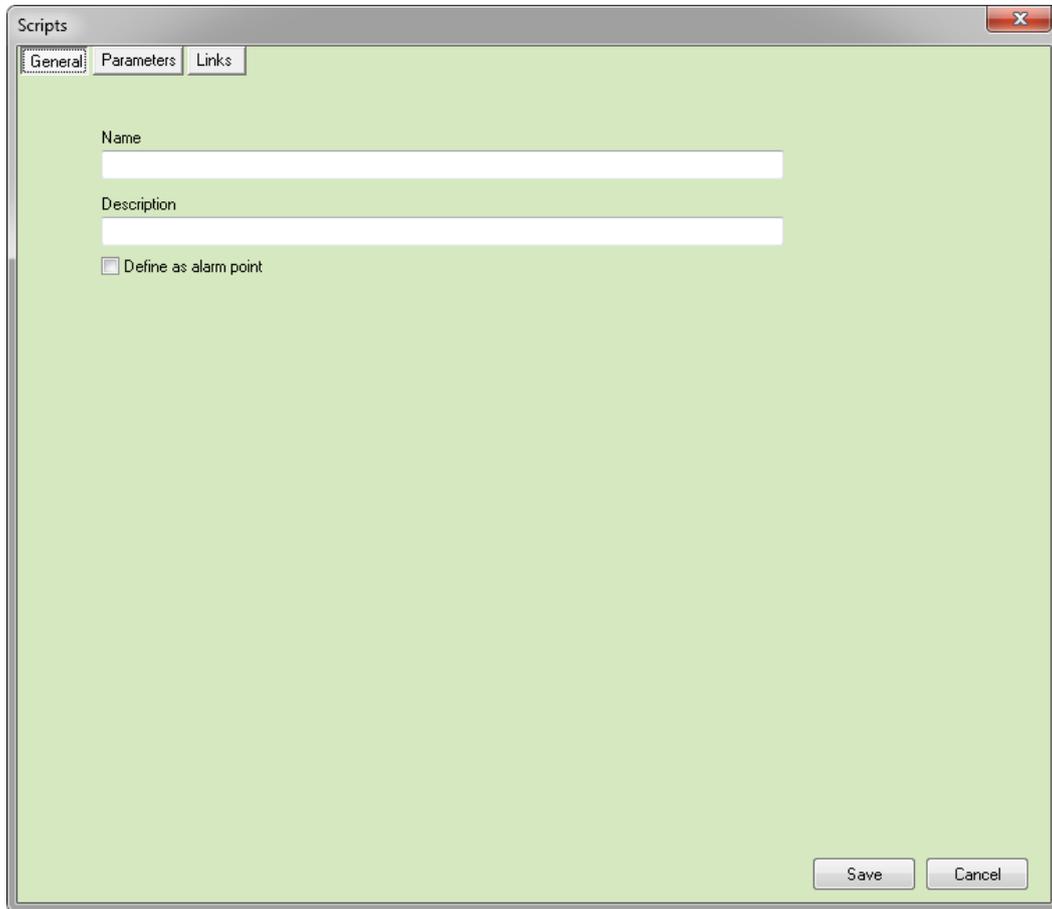
OK Cancel

Input unit can be a second or a portion of a second. Click Format to configure date.

### 3.17 Scripts

**Scripts** are tasks to be conducted by IFTER EQU with programming language. Defined script might control the device as an alarm point. Script might be called from schedule, button (if script is defined as alarm point). You can see the following tabs: **General, Parameters, Associations.**

#### 3.17.1 General



The image shows a software dialog box titled "Scripts". It has three tabs: "General", "Parameters", and "Links". The "General" tab is selected. Inside the dialog, there are two text input fields: "Name" and "Description". Below these fields is a checkbox labeled "Define as alarm point". At the bottom right of the dialog, there are two buttons: "Save" and "Cancel".

Enter basic information about the Script – name and description. If you want put the script on the list of alarm points, check **Define as alarm point**.

### 3.17.2 Parameters

```
Local zmienna, tekst, skryptWylacz = ...
tryby = {"Harmonogram", "Ręczny", "Wyłączony"}
tekst = tekst .. tekst .. " " .. " "

function onRefresh()
    State = (DB[zmienna]== ) and or1 2
    Text = tekst .. Tryby[DB[zmienna]]
end

function onClick()
    local wybor = ""
    for k,v in pairs(tryby) do
        wybor = wybor .. k .. " - " .. v .. ",\n"
    end
    ok, val = InputQuery("Zmiana nastawy", wybor, 1)
    if(ok) then
        DB[zmienna] = tonumber(val)
        if val== 1 then
            local zmNaSkrypt = {trybPracyWentylacji= , trybPracy
            local skryptId = zmNaSkrypt[zmienna:sub( , )] -2
            LoadScript(skryptId) -- uruchom harmonogram
        elseif val== 3 then
            load(skryptWylacz)()
        end
    end
end
```

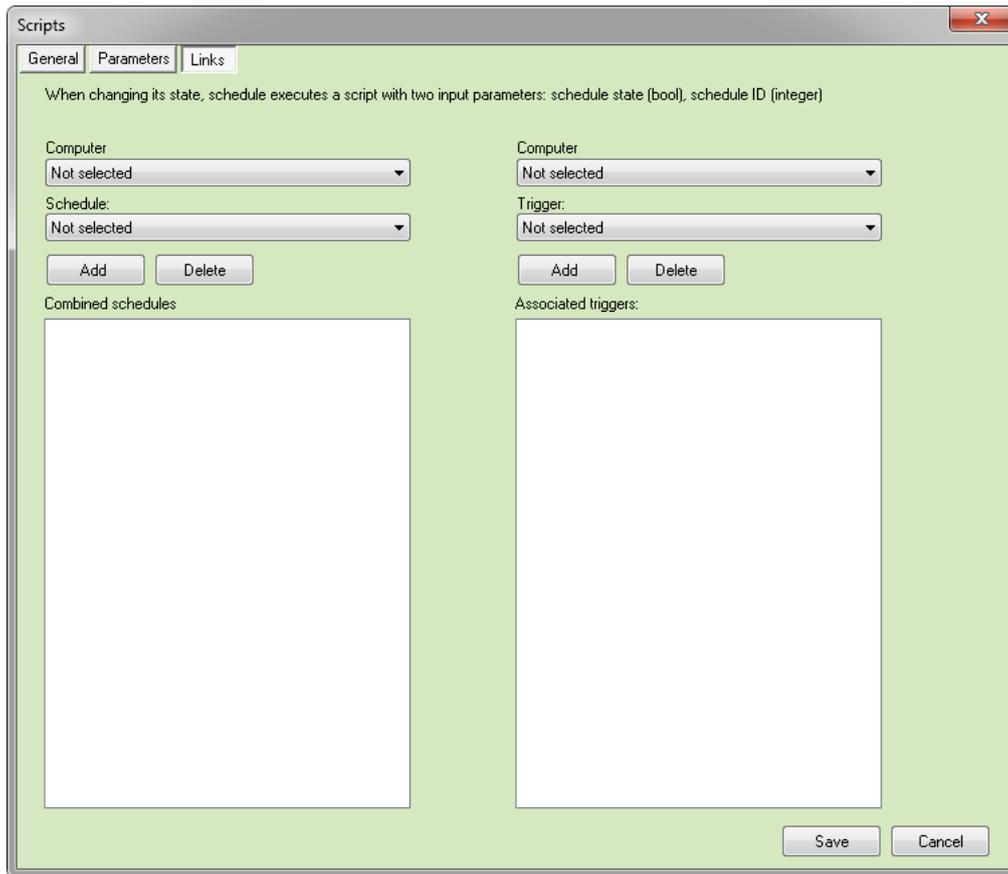
This tab allows you to create a script. Open a new window to find a device (**Find an element of the integration**). Select a device from the list. You can also use filter. Select one or more devices and hit **Insert**.

You can also search by Type.

**Check syntax** – check your script for errors.

**Start** – script activation.

### 3.17.3 Links



Here you can link your script with a schedule. Select a computer and schedule and click **Add**. In a column below you will see available combined schedules.

## 4. Server

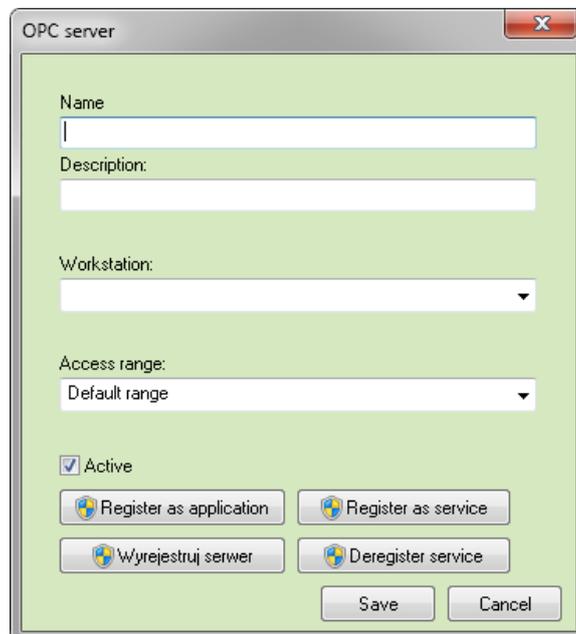
With servers you are able to transmit data to external systems, via OPC or SNMP.

### 4.1. Add



Click **Add** and select server type:

#### 4.1.1 OPC Server



**Name** – name of the server.

**Description** – for easier identification.

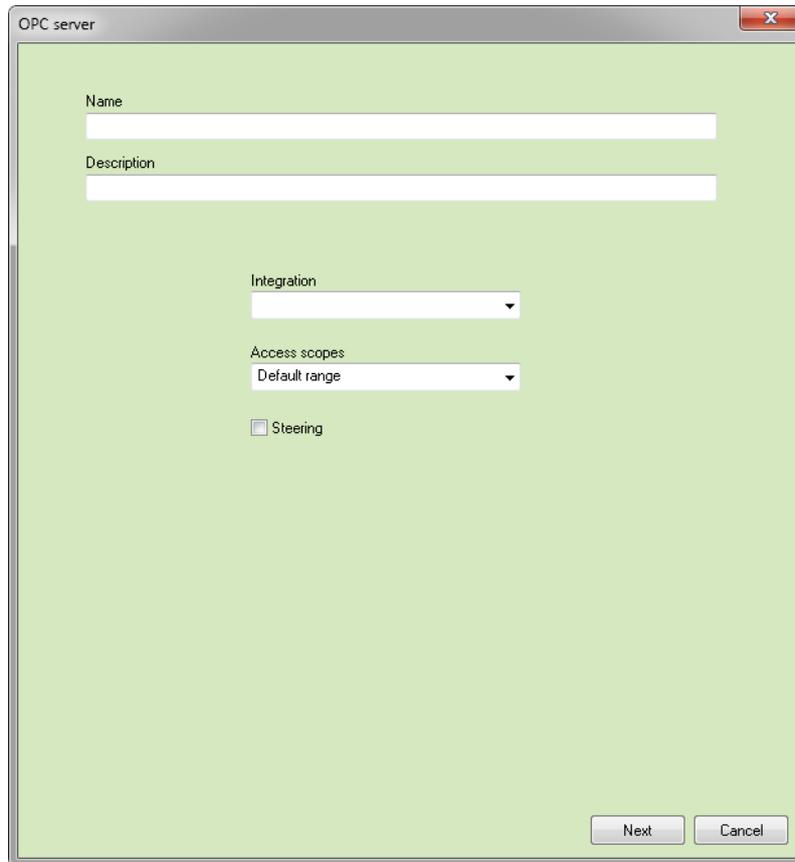
**Workstation** – select workstation which will support this server.

**Access range** – select station, on which this server will be visible.

**Active** – select this option to switch on the server.

## Add OPC definition

The client won't see the server until you add a definition. Select server from the Explorer tree and click **Add**.



The image shows a dialog box titled "OPC server" with a close button in the top right corner. The dialog has a light green background and contains the following fields and controls:

- Name:** A text input field.
- Description:** A text input field.
- Integration:** A dropdown menu.
- Access scopes:** A dropdown menu with "Default range" selected.
- Steering:** A checkbox that is currently unchecked.
- Next:** A button at the bottom right.
- Cancel:** A button at the bottom right.

Enter the following data:

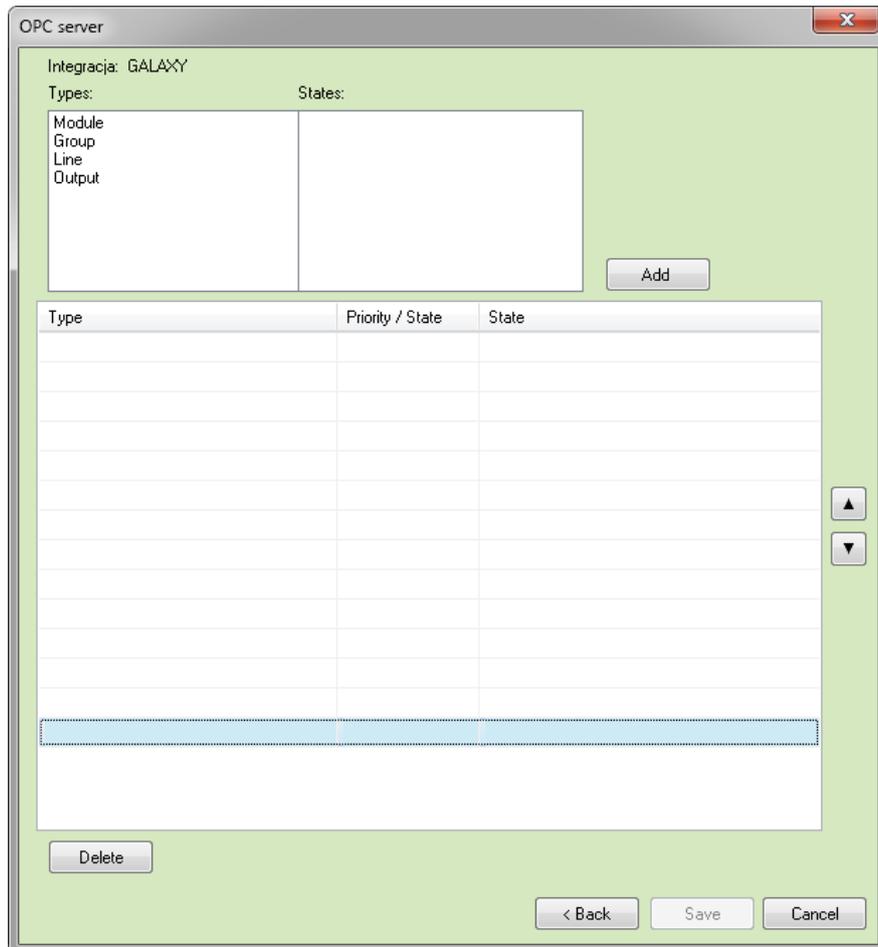
**Name** – enter any name. If you choose the name of an integration, it will upload automatically.

**Description** – for identification.

**Access range** – select workstation for the server.

**Steering** – OPC client can steer particular control units.

Click Next.



**Type** – integration elements.

**State** – element state.

**Add** – use it to move put elements on the list.

**Delete** – cancel elements from the list.

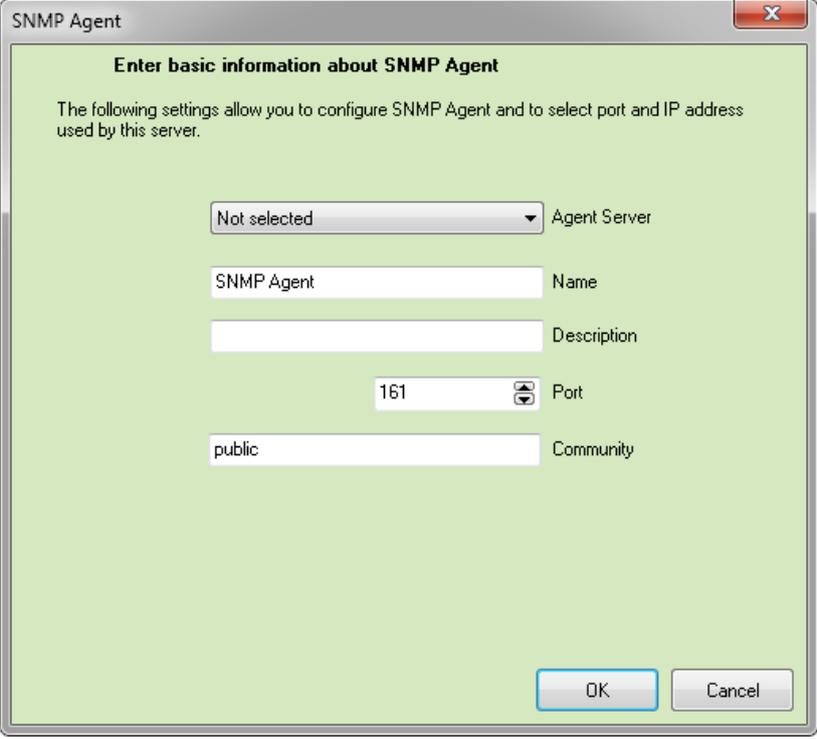
Use arrows to set priority list regarding state presentation for particular element's state.  
 OPC server events are logged in system log.

### OPC Server: Properties

Enter Properties to change any settings in server definition. You can use two tabs:

- General – basic information and description;
- Parameters, with included states, types, priority of elements.

## 4.1.2 SNMP Agent



The image shows a dialog box titled "SNMP Agent" with a close button (X) in the top right corner. The main area has a light green background and is titled "Enter basic information about SNMP Agent". Below the title, there is a short instruction: "The following settings allow you to configure SNMP Agent and to select port and IP address used by this server." The form contains five fields: "Agent Server" is a dropdown menu currently showing "Not selected"; "Name" is a text box containing "SNMP Agent"; "Description" is an empty text box; "Port" is a spin box currently set to "161"; and "Community" is a text box containing "public". At the bottom right, there are "OK" and "Cancel" buttons.

Select SNMP and enter the following information:

**Agent Server** – select a workstation for this server.

**Name** – name of the server.

**Description** – describe the server for easier identification.

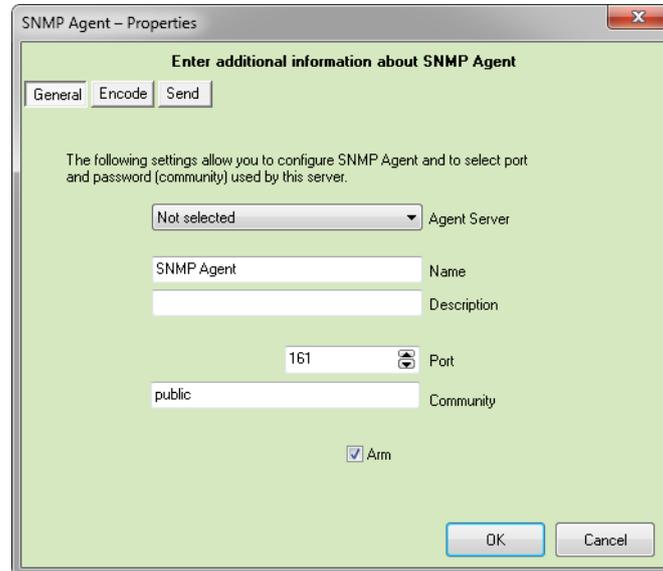
**Port** – server port number for selected workstation (default 161).

**Community** – password: an operator will need it to enter information located on this server.

## SNMP Agent: Properties

Enter Properties to establish additional information about SNMP Agent. This window contains three tabs: General, Encode, Send.

### General



The screenshot shows a dialog box titled "SNMP Agent - Properties" with a close button (X) in the top right corner. The main title is "Enter additional information about SNMP Agent". Below the title are three tabs: "General", "Encode", and "Send", with "General" selected. A paragraph of text reads: "The following settings allow you to configure SNMP Agent and to select port and password (community) used by this server." The settings are as follows:

- Agent Server:** A dropdown menu currently showing "Not selected".
- Name:** A text input field containing "SNMP Agent".
- Description:** An empty text input field.
- Port:** A text input field containing "161" with a small icon to its right.
- Community:** A text input field containing "public".
- Arm:** A checked checkbox.

At the bottom right of the dialog are "OK" and "Cancel" buttons.

**Agent Server** – select a workstation for this server.

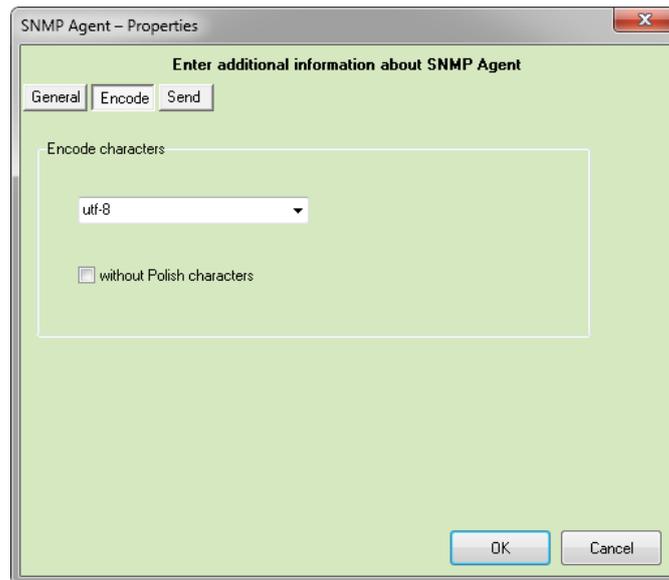
**Name** – name of the server.

**Description** – describe the server for easier identification.

**Port** – server port number for selected workstation (default 161).

**Community** – password: an operator will need it to enter information located on this server.

## Encode



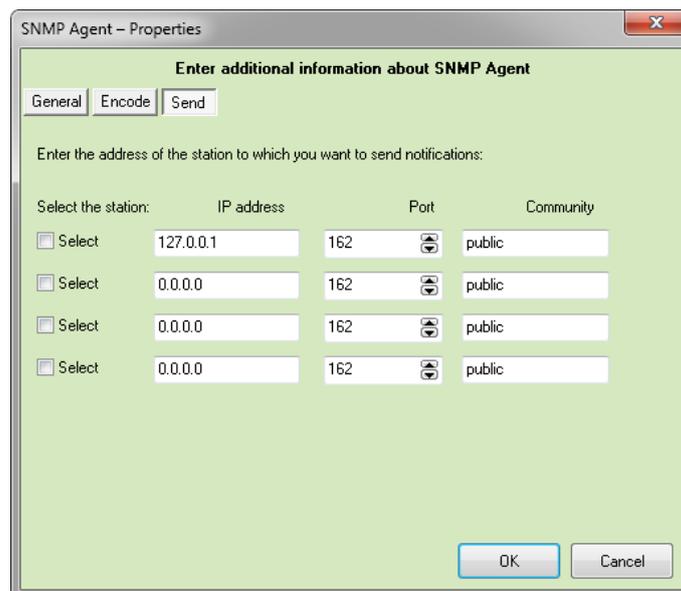
**ISO – 8859-2** – standard regarding Polish characters.

**Utf-8** – Unicode system.

**Cp 1250** – System used by Microsoft Windows.

You can switch off Polish characters.

## Send



Send server notifications (traps) to workstations.

**Select workstation** – recipient station for the server.

**IP Address** – workstation address.

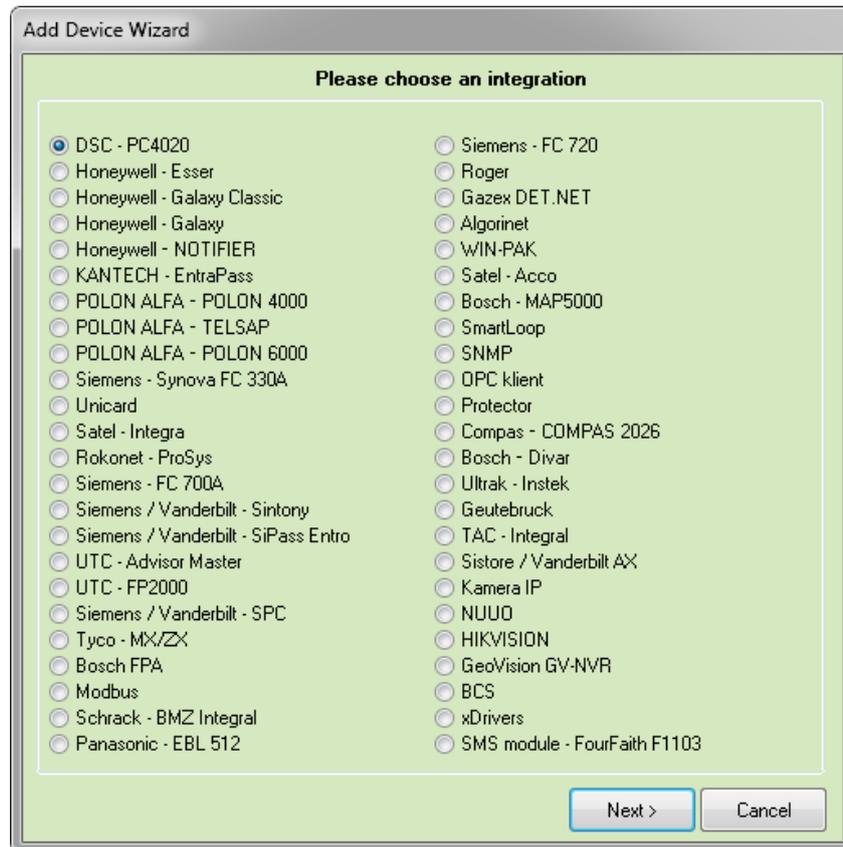
**Port** – server port number for selected workstation (default 161).

**Community** – password: an operator will need it to enter information located on this server.

## 5. Integration

Here you can find configuration settings of devices supported by IFTER EQU. Communication is conducted via RS232 or Ethernet. You can integrate all systems and define reactions between them.

### 5.1 Add



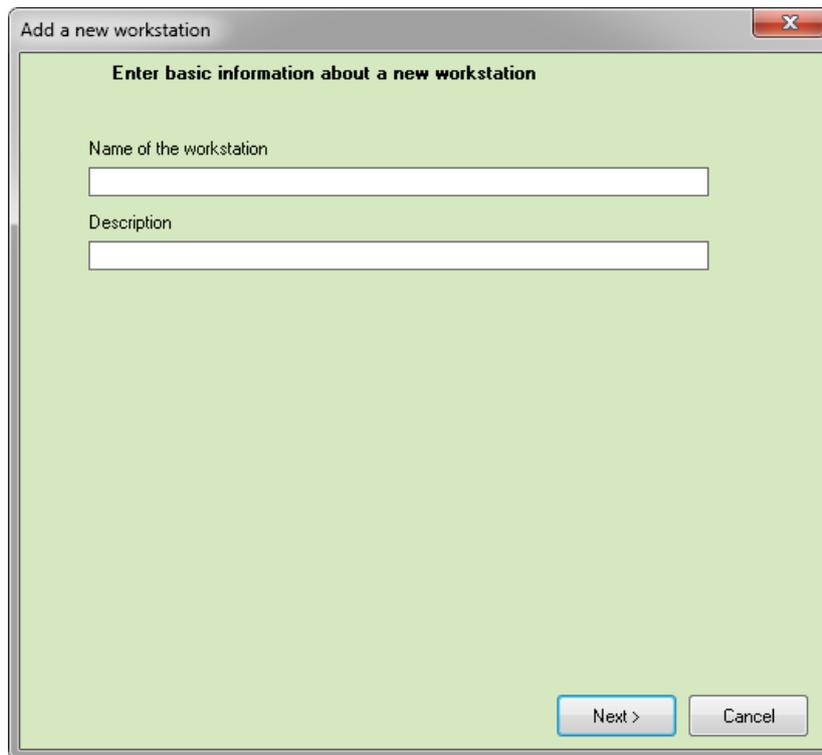
Click **Add** to see the list of integrations available for your license. Depending on integration, you will have to proceed with configuration.

For further information regarding integrations, please refer to specific documentation.

## 6. IFTER EQU Network

IFTER EQU network consists of workstations (computers) on which the software is installed.

### 6.1 Add workstation



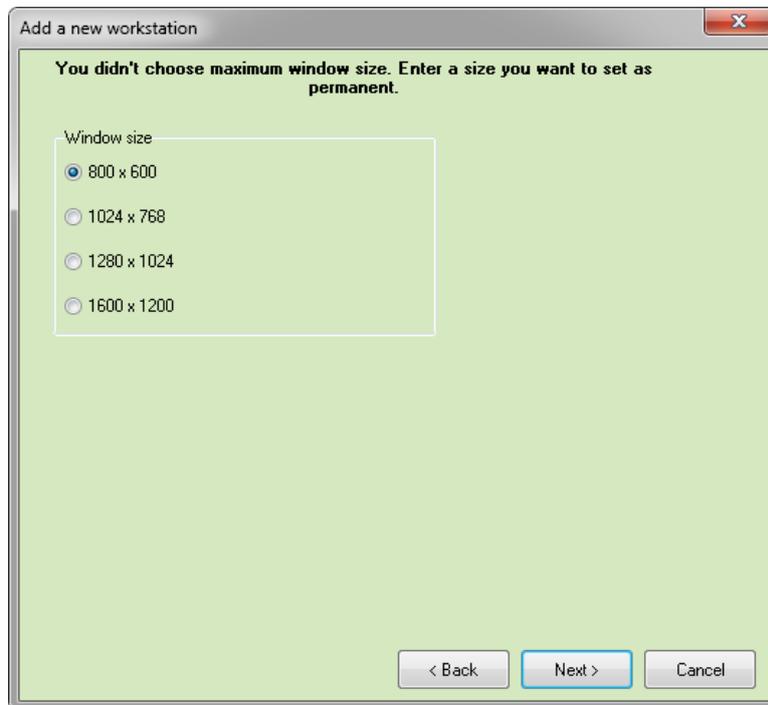
The image shows a software dialog box titled "Add a new workstation". The dialog has a light green background and a title bar with a close button. The main content area contains the text "Enter basic information about a new workstation". Below this text are two text input fields: "Name of the workstation" and "Description". At the bottom right of the dialog are two buttons: "Next >" and "Cancel".

To add a workstation, you need to enter **Network IFTER EQU** section and select **Add** button. Enter the name and optional description. Click **Next**.

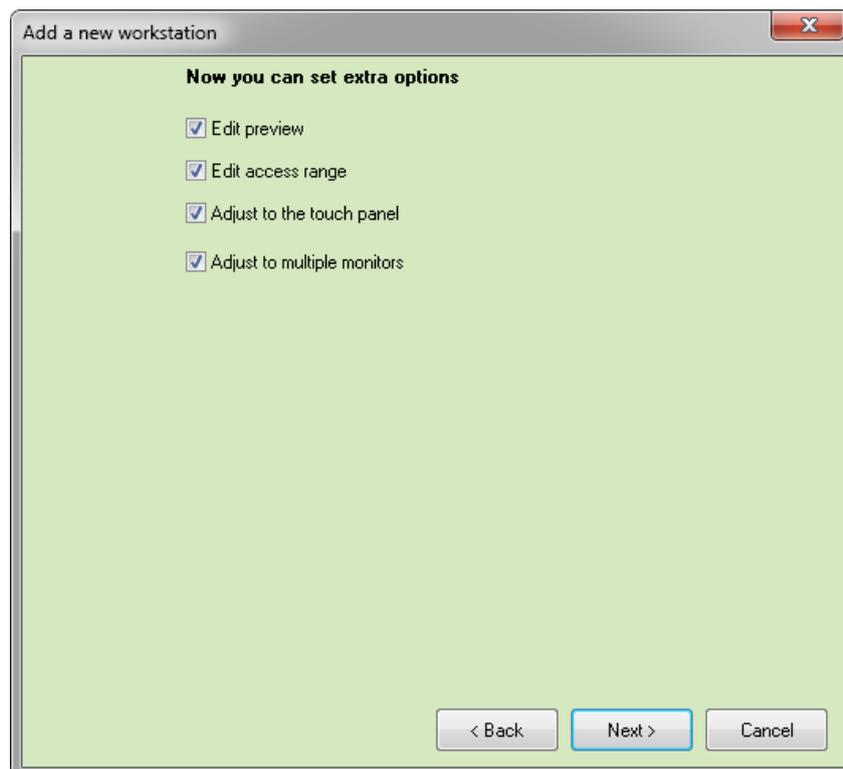
**IP Address** – address of the computer which serves as database. The workstation will connect with this computer.

**Port** – connection port for the workstation (default 1024). It will connect the workstation with the database.

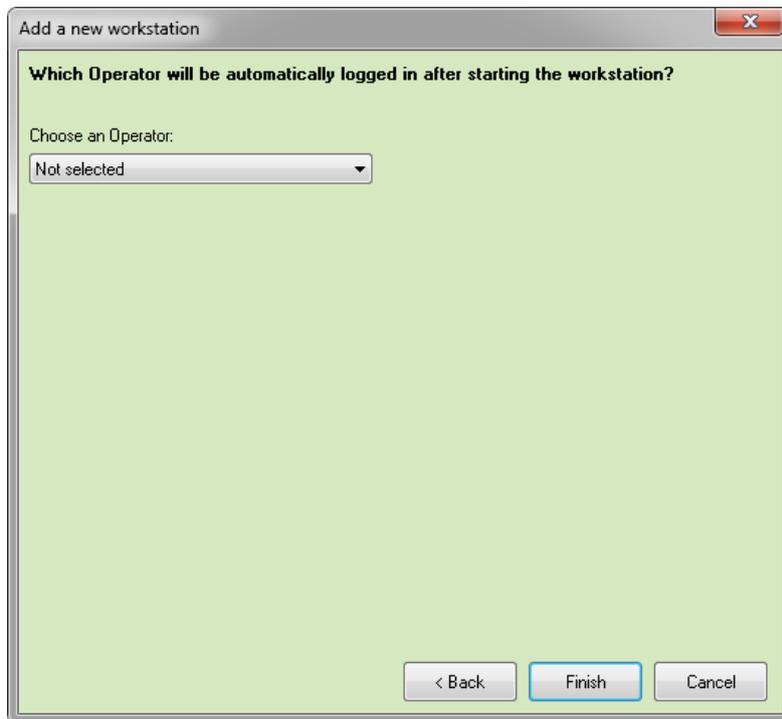
Next you move to window settings. Unless you check **Maximum window size**, you will see the following window:



You can set extra options: **Edit preview**, **Edit access range**, **Adjust to the touch panel**, **Adjust to multiple monitors**. Check **Adjust to multiple monitors** option to see the following window. You can include up to 8 monitors.



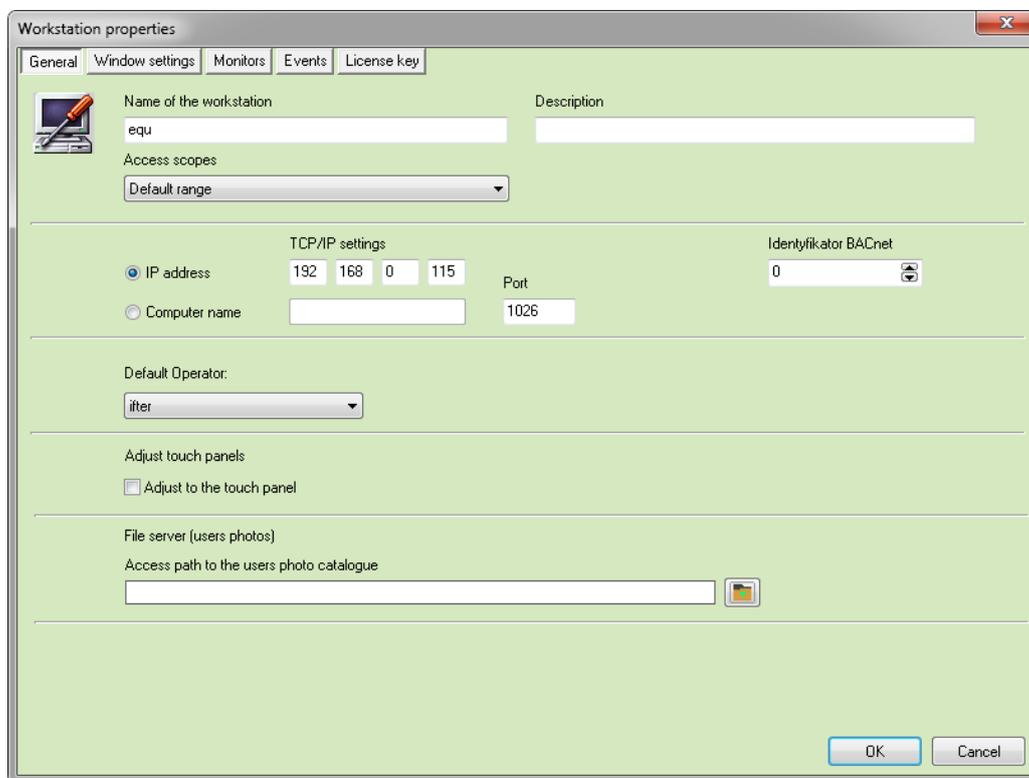
Click **Next** to set access path for users' photos. In the next window you need to choose a user which will be automatically logged in on the workstation.



Click **Finish**. New workstation will be added in **IFTER EQU**.

## 6.2 Workstation Properties

### 6.2.1 General

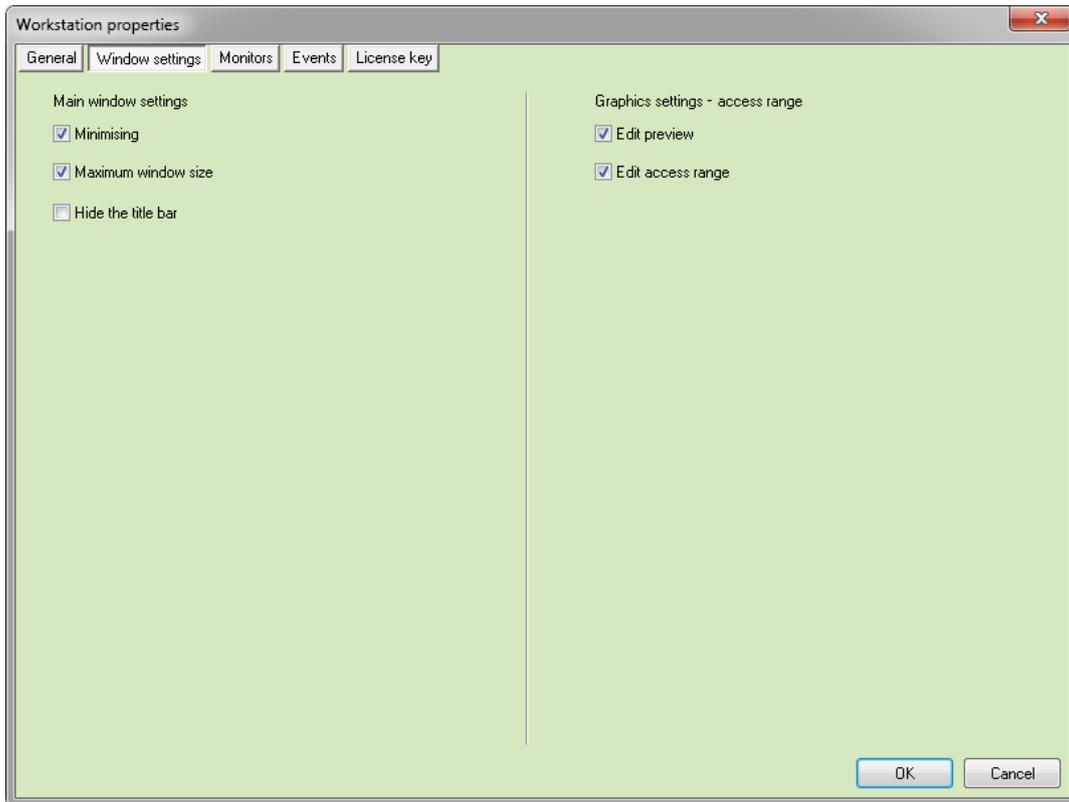


Here you can change the name, description and access scopes (ranges).

**TCP/IP settings:** you can change IP address of the workstation.

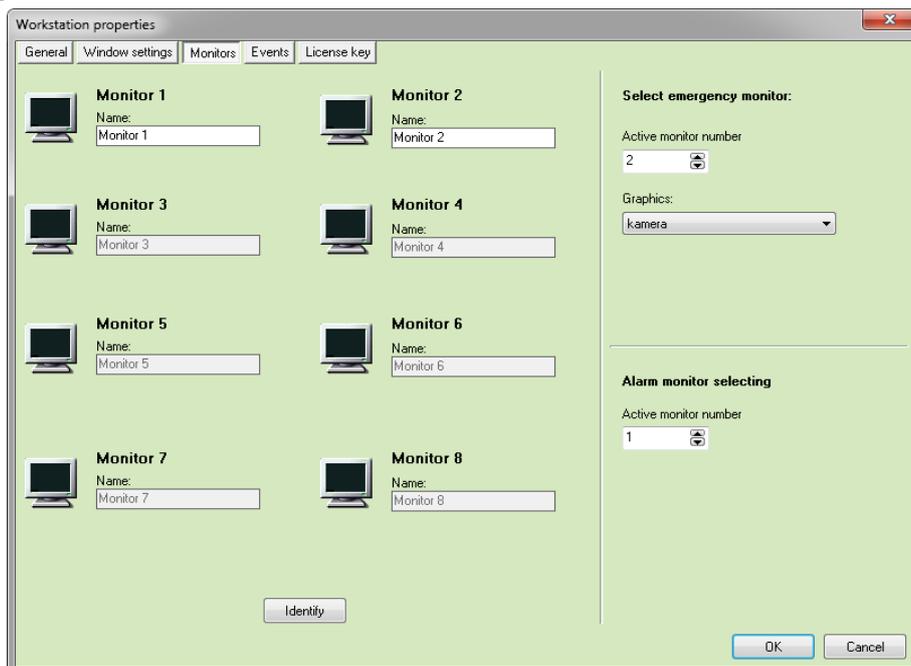
**Default Operator** you can choose an operator logged in the system automatically, without username or password. You can also start the program in **Demo mode**.

### 6.2.2 Window settings



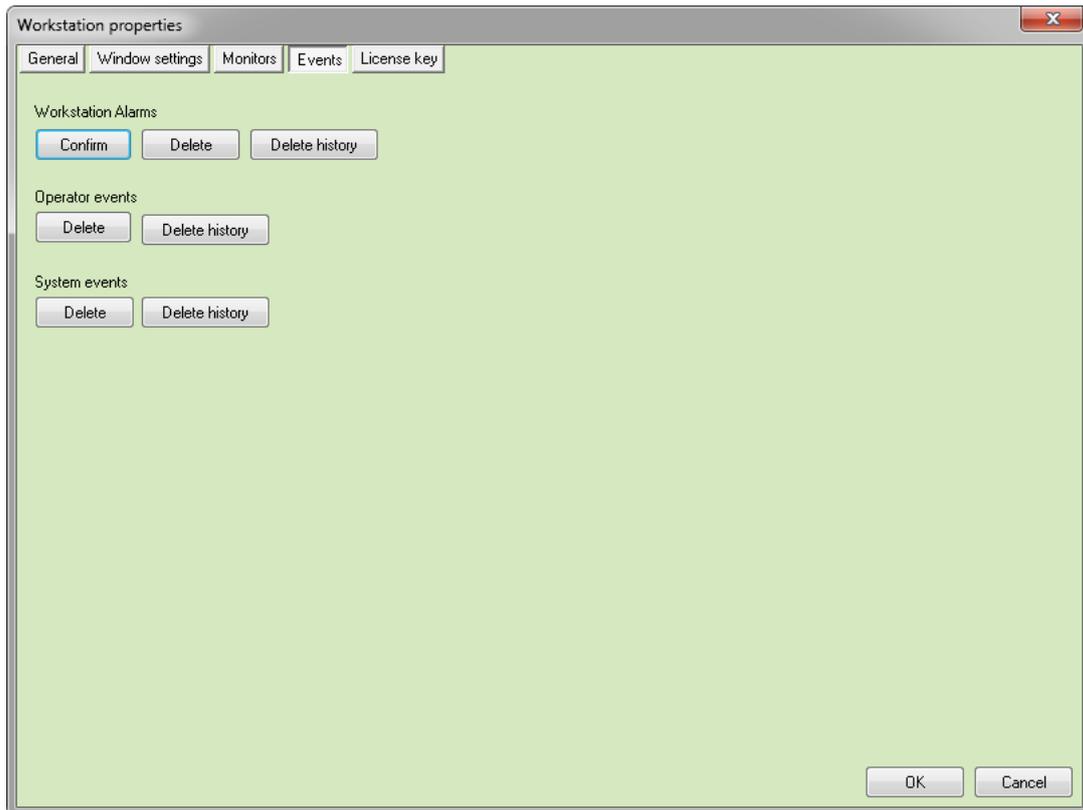
Here you can see Main window settings. You can minimize, maximize and hide a title bar. Graphics settings – access range. Here you can edit preview and access range.

### 6.2.3 Monitors



Choose how many monitors will be supported by IFTER EQU (8 monitors maximum).

## 6.2.4 Events



**Confirm**– confirm active alarms.

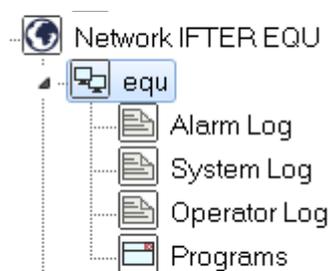
**Delete** – delete logs.

**Delete history** – delete archive logs.

## 6.2.5 Zakładka: klucz licencyjny

See: 1.3

## 6.3 Logs



Logs allow you to see all the events that occur in the system, as well as filter them properly.

**Alarm log:** see the list of faults that occurred in the system.

**System log:** see the events in the system.

**Operator log:** see actions of the logged Operator.

## Programs

IFTER EQU allows you to establish programs that will start automatically if the specified criteria are met (events, alarm, etc.). Also, the program can be started by the Operator on the Graphics level (3D button component). Thanks to this function you can facilitate day-to-day activities, for example, start a Notepad to make some side notes. All configured programs are easily accessible without searching through your computer.

## 7. Events from devices

Events from devices are saved in Event log of integrated systems.