areashell

Areashell

Administrator's guide

Deployment, Configuration, and Administration of Areashell Software

Version 1.7

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Contents

1 Work in the Management Console

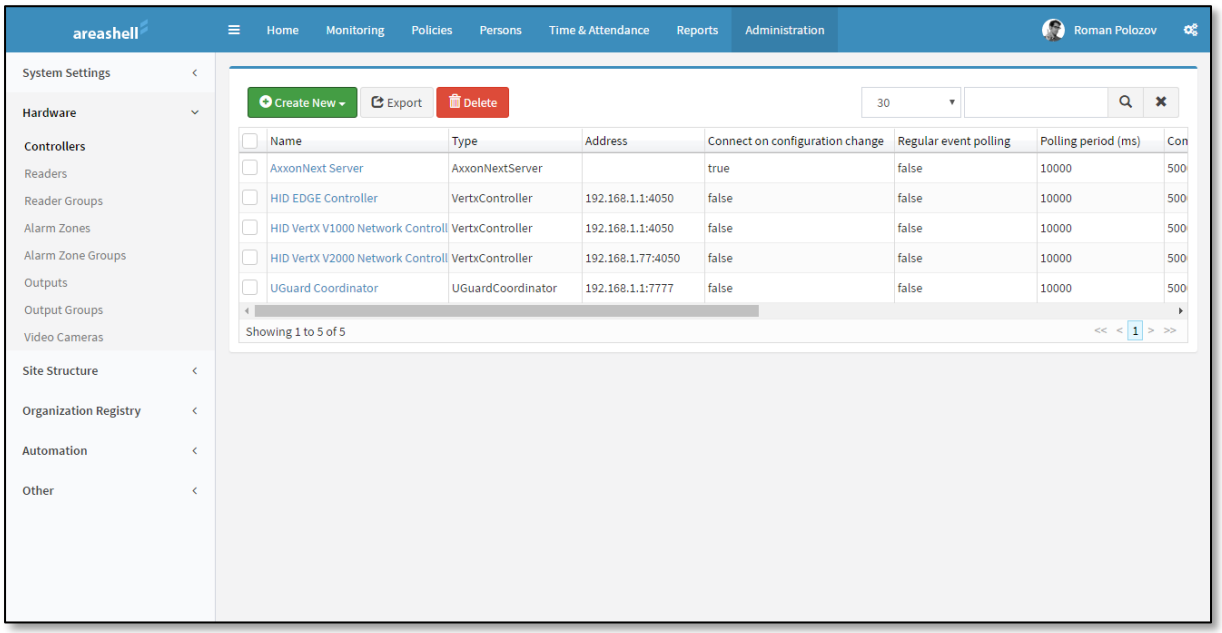
All system control elements in the management console are grouped in the sections:

- Monitoring – monitoring the current situation in the system, monitoring events occurring in the system, controlling the hardware;
- Policies – setting and administration of user access policies in areas, to areas controlled territory and the system functions;
- Persons – registration and user administration, accounts, cards and other identifiers;
- Reports – View and manage reports based on the information stored in the system;
- Administration - the administration of all aspects of the functioning of the system, including hardware, graphical plans, the internal parameters of the system, and others.

1.1 Work with the list of objects in the system configuration

The entire system configuration is stored in the form of configuration objects. All configuration objects in the management console to administer sections are grouped by type and destination in the Forums.

To view the list of existing objects in the system configuration, select the appropriate section in the main (upper) Management Console menu, and then – one of the subsections of the selected partition. A panel opens with a list of objects of the appropriate type.

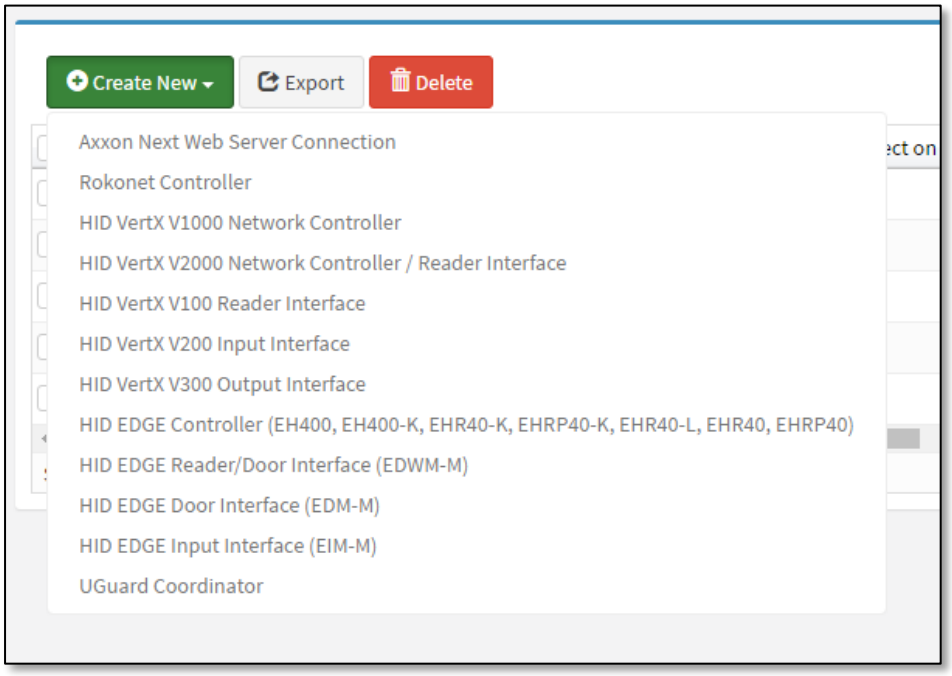


To sort out the table with objects, click on the needed title. In the case of a large number of objects that do not fit on one page, you can navigate between pages by using the links

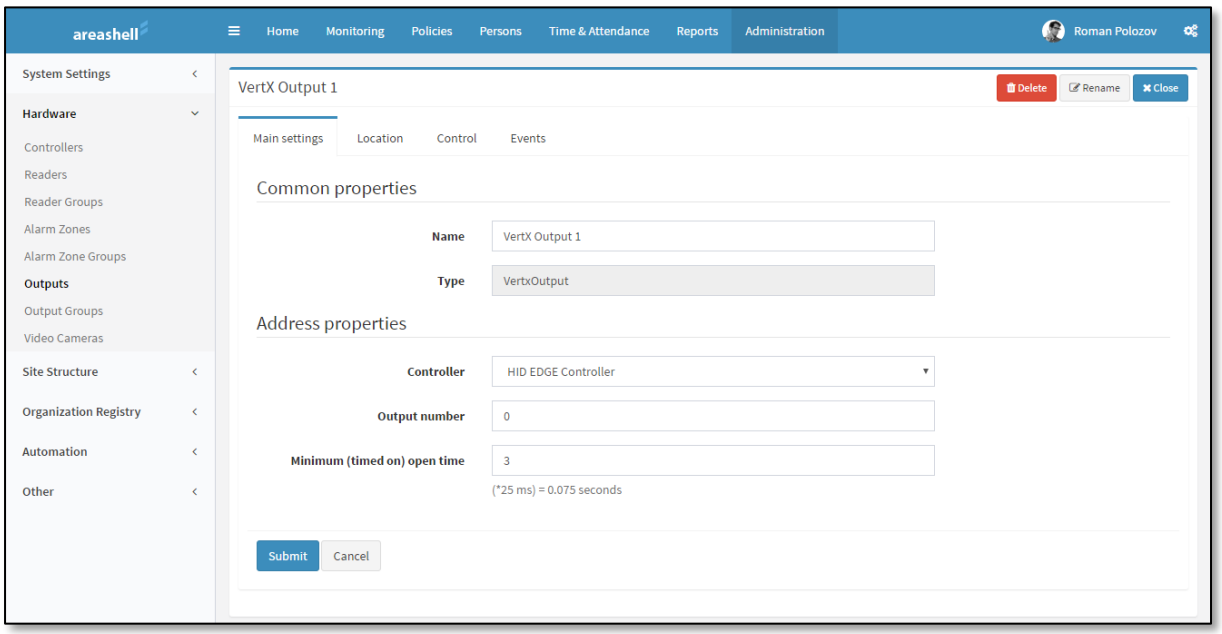
at the bottom of the panel. Use the controls in the toolbar to change the number of lines displayed on one page, filter objects by name, export a table in external file.

1.2 Creation of configuration objects

To create new configuration objects press the button *Create* and select the type of the object in the drop-down menu.



The properties window of the newly created object of a selected type with the default settings will open. Enter or change the necessary parameters for the created object and then click Save.

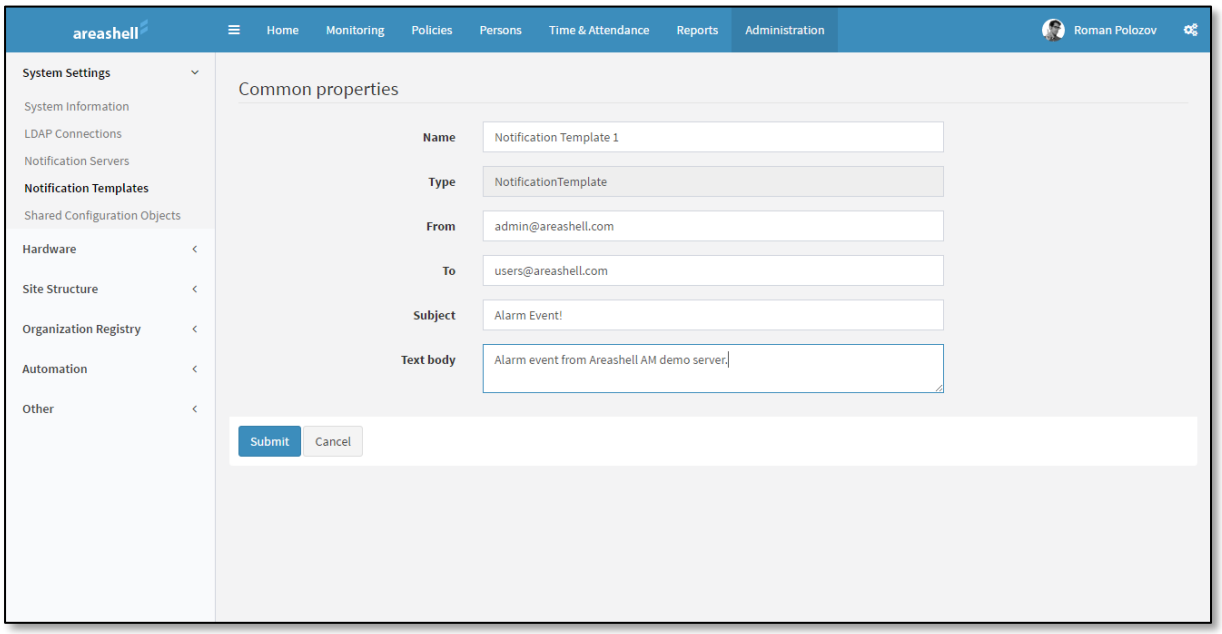


After saving or without saving the new object, a table of objects of the appropriate type displays.

1.3 Viewing and editing the configuration parameters of objects

To view and edit the configuration of a particular object select it in the table.

The table panel with a list of properties for the selected object opens instead of the table.



Typically, the object parameters window contains several tabs.

In case of object settings changes on any of the tabs, press the Save button to save the changes to the database or Cancel - to cancel the changes.

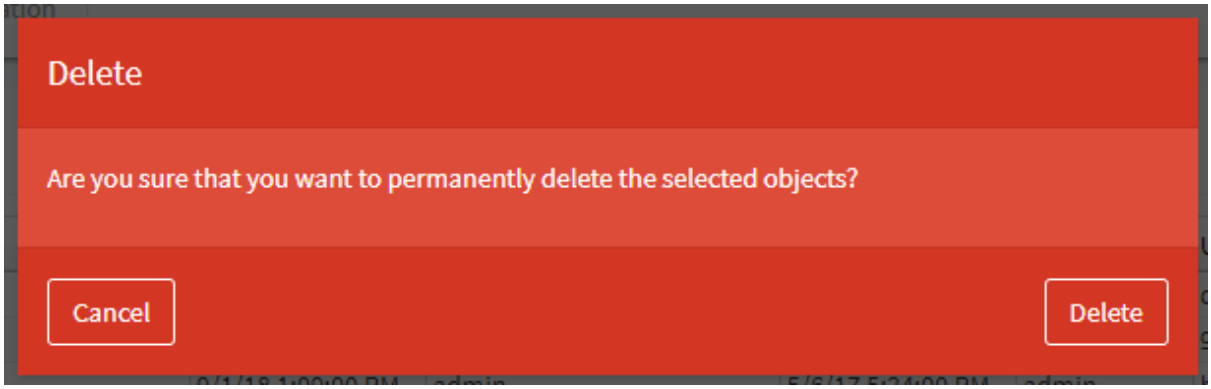
To change the name of an object, press RENAME. Usually in the list of object bookmarks there is a tab Properties with a field NAME. It is also possible to rename the object by changing the value of this field and pressing the Save button.

To go back to the table with objects, press the Close button in the toolbar.

To delete the selected object and return to the table with objects, click the Delete button in the toolbar and confirm the deletion in the pop-up window.

1.4 Deleting configuration objects

To delete any configuration system objects in the table, mark these objects in the left column, click Delete and confirm the deletion in the pop-up window.



When trying to delete some of the configuration objects, an error message on the console may appear. Usually this means that the object is used by other system objects and can not be deleted without first deleting references to it.

2 Configuring the system

2.1 License registration

Select Administration / Settings / System Information to view the information about the registered Areashell AM license, register or renew the license. In this section, information on the registered license, end user, distributor, the available and used at the current time memory on the server displays. To register a new license:

- Click Select file;
- Select the needed license file window and click Open;
- Click Upload a file;
- Information about a new license displays in the management console;
- Check the license parameters and click Save.

2.2 Directory service integration

Areashell AM supports integration with LDAP directory services and Microsoft Active Directory to implement two functions:

- Authenticate Areashell AM users using directory services;
- Import data from a directory service users in Areashell AM system.

Areashell AM User Authentication Setting using a directory service is described in the installation manual Areashell AM.

This section describes how to configure the user data import functions from a directory service in Areashell AM system.

To connect Areashell AM to directory service, create an LDAP entity type compound, and set the settings for a directory service in its settings.

2.2.1 Connection settings to the Active Directory directory service

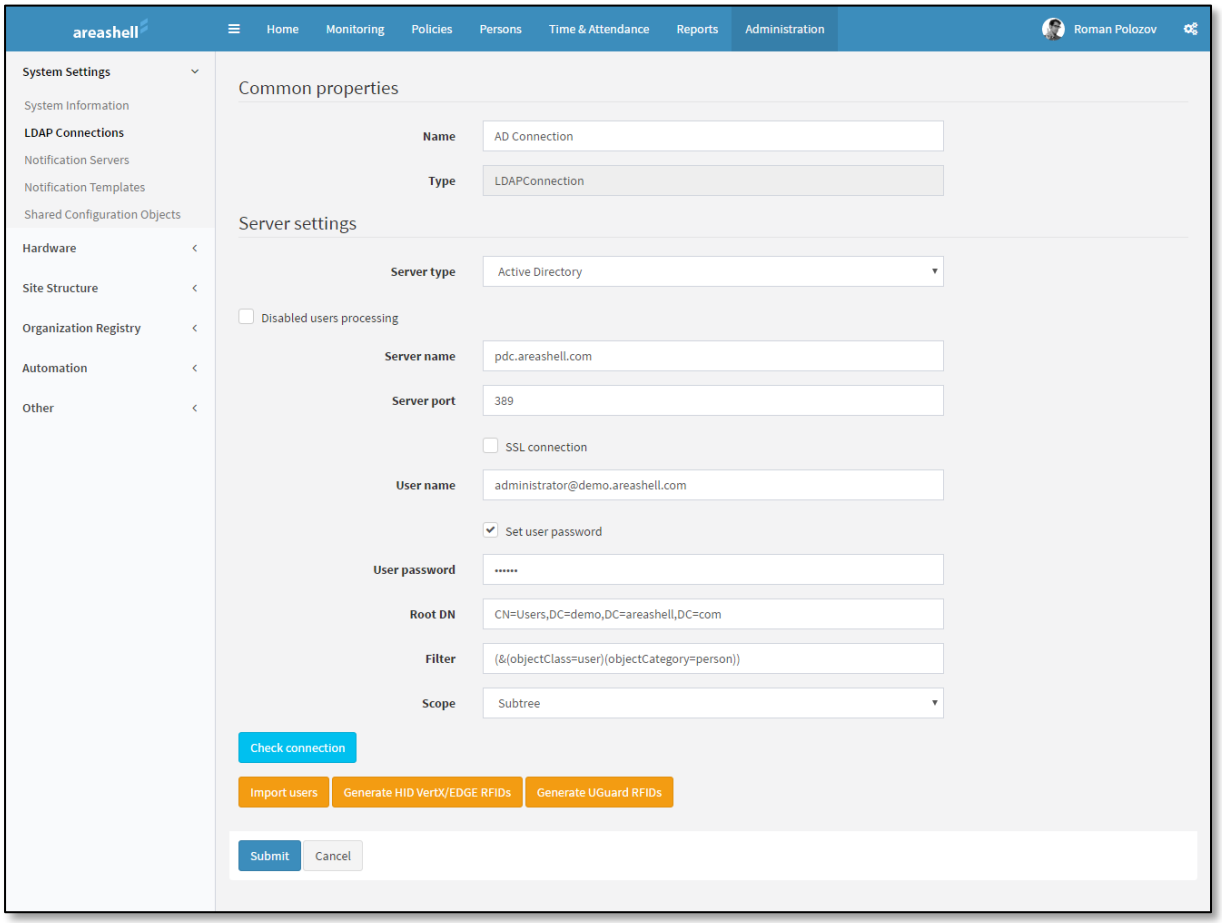
To connect to the Active Directory server, the following set of parameters can be used:

- Server Type: Active Directory
- Server name: <network name or IP-address of the Active Directory server>
- Server Port: 389
- User name: administrator@domainname.com
- Root DN: CN = Users, DC = domainname, DC = com
- Filter: (& (objectClass = user) (objectCategory = person))
- Processing Boundaries: Subtree

To connect to a server on the Active Directory Global Catalog mode the following set of parameters can be used:

- Server Type: Active Directory
- Server name: <network name or IP-address of the Active Directory server>
- Server Port: 3268

- User name: administrator@domainname.com
- Root DN: <empty>
- Filter: (& (objectClass = user) (objectCategory = person))
- Processing Boundaries: Subtree



2.2.2 Connection Settings LDAP directory service

To connect to the LDAP server, the following set of parameters may be used:

- Server Type: LDAP
- Server name: <network name or IP-address of the LDAP server>
- Server port: 389
- User name: administrator@domainname.com
- Root DN: DC = domainname, DC = com
- filter: (& (objectClass = user) (objectCategory = person))
- Processing Boundaries: Subtree

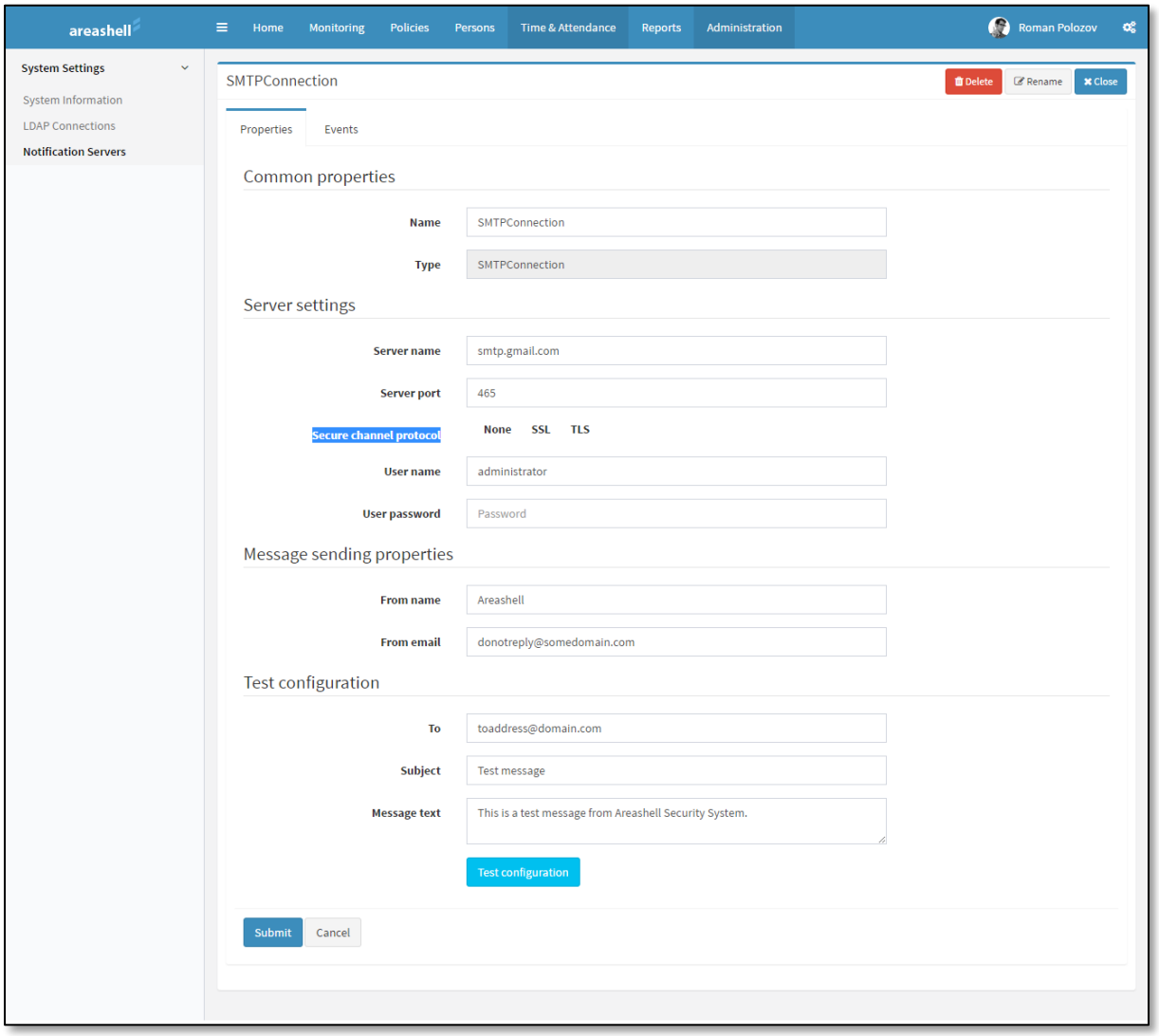
2.3 Email system integration

Areashell AM supports integration with e-mail systems, supporting SMTP to send e-mail notifications.

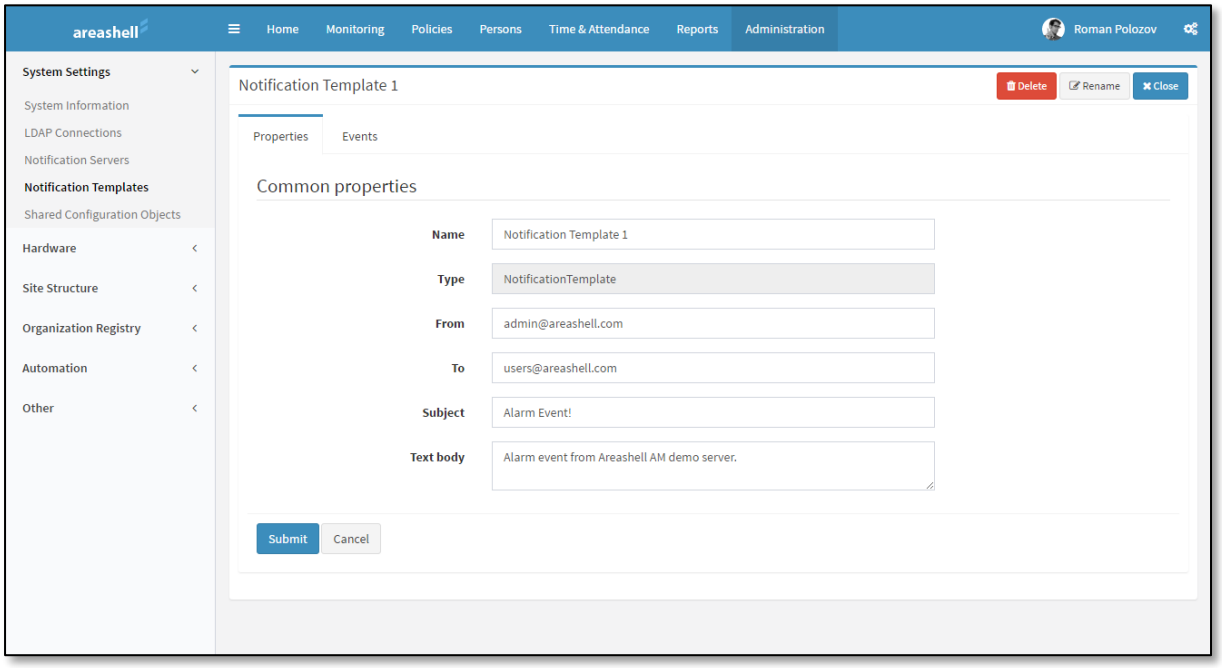
To configure sending e-mail notifications when certain events occur (for example, breaking doors and other alarms) follow the steps:

- Register your SMTP-server under Servers notifications;
- Create a template with text notification e-mail message;
- Create a macro with the command Send the notice, specifying the created notification server, the notification template and postal address of the recipient;
- Create a trigger message indicating the created macro command and setting the filter parameters for the events.

To connect Areashell AM to the e-mail server, create SMTP-server object or alike in Administration / Settings / Notification Servers and specify in its settings connection parameters to your email server.



To send e-mail notifications by using the registered server, create notification templates (emails). Templates are created in Administration / Settings / Notification templates.



When creating an e-mail notification template in the fields Subject and Message, use variables that will be replaced by the values of the event that initiated notification.

The variable name begins with '$ {' and ends with '}' (without the quotes).

Currently supported variables are described in the table:

Variable	Comment
${event.alarmLevel}	Event alarm level
${event.priority}	Event priority
${event.eventCode}	Event code
${event.timeLocal}	Local time of occurrence of the event (in the case of an event message received from the hardware controller – its local time)
${event.timeGlobal}	UTC time when the event occurred
${event.regTime}	Time of event registration in system server (may differ from local time if an event occurs in offline mode, while the controller has no connection to a server)
${event.timeZone}	Time zone in which the event occurred
${event.source.id}	System object ID, on which the event occurred (reader, zone controller, etc.).

${event.source.name}	Name of the object on which the event occurred (reader, zone controller, etc.).
${event.cardNumber}	Card number if the event is an access event
${event.credential.id}	System ID of the identifier (card), if the event is an access event, and the identifier (card) is registered in the system
${event.credential.name}	Name of the identifier (card) in the system, if the event is an access event, and the identifier (card) is registered in the system
${event.subject.id}	System ID card holder, if the event is associated with the presenting of ID (access event), and the owner is registered in the system
${event.subject.name}	The full name of the card holder, if the event is associated with the provision of ID (access event), and the owner is registered in the system

2.4 Configuring HID VertX / EDGE access control controllers

To configure the hardware HID VertX / EDGE you need to configure the following configuration objects in the system:

1. Configure one or more objects Vertx Card Format
2. Configure one or more objects VertX Card Set
3. Configure VertX keypad translations
4. Configure HID VertX / EDGE hardware controllers
5. Configure HID VertX / EDGE readers
6. Configure HID VertX / EDGE reader groups for later use in user roles (optional)
7. Configure HID VertX / EDGE inputs
8. Configure HID VertX / EDGE outputs
9. Configure HID VertX / EDGE output groups

After configuring the hardware HID VertX / EDGE, you can place objects HID VertX / EDGE on graphical plans, assign them to the areas used in the automation device, configure access policies to assign permissions to users (cardholders).

The following sections show how to configure objects HID VertX / EDGE.

2.4.1 Configuring HID VertX / EDGE card formats

Configuration card formats for HID VertX / EDGE controllers is under Console Administration / System Settings / Shared Configuration Objects.

All registered HID VertX / EDGE card formats will be uploaded to all registered in the system HID VertX / EDGE controllers.

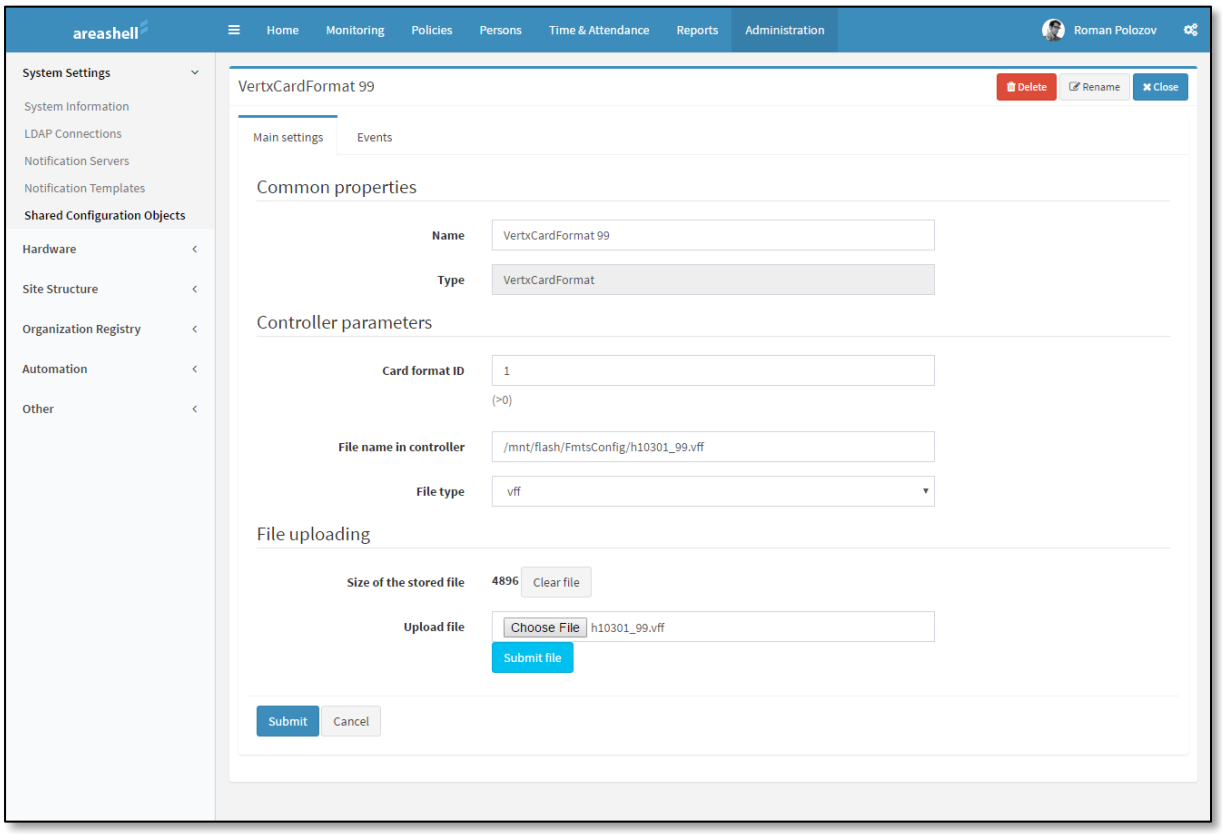
To configure the card format you need:

- Create an object of card format VertX type
- Create an object of set of cards VertX type

When creating an object of VertX card format, specify the following parameters:

- Card format ID (any number greater than 0, not used in other card formats)
- The path and file name in the controller, on which the card format of the file will be loaded
- File format (eff or vff)

In addition to these parameters a file that describes the card format should be uploaded. Card format files can be obtained from your system vendor.

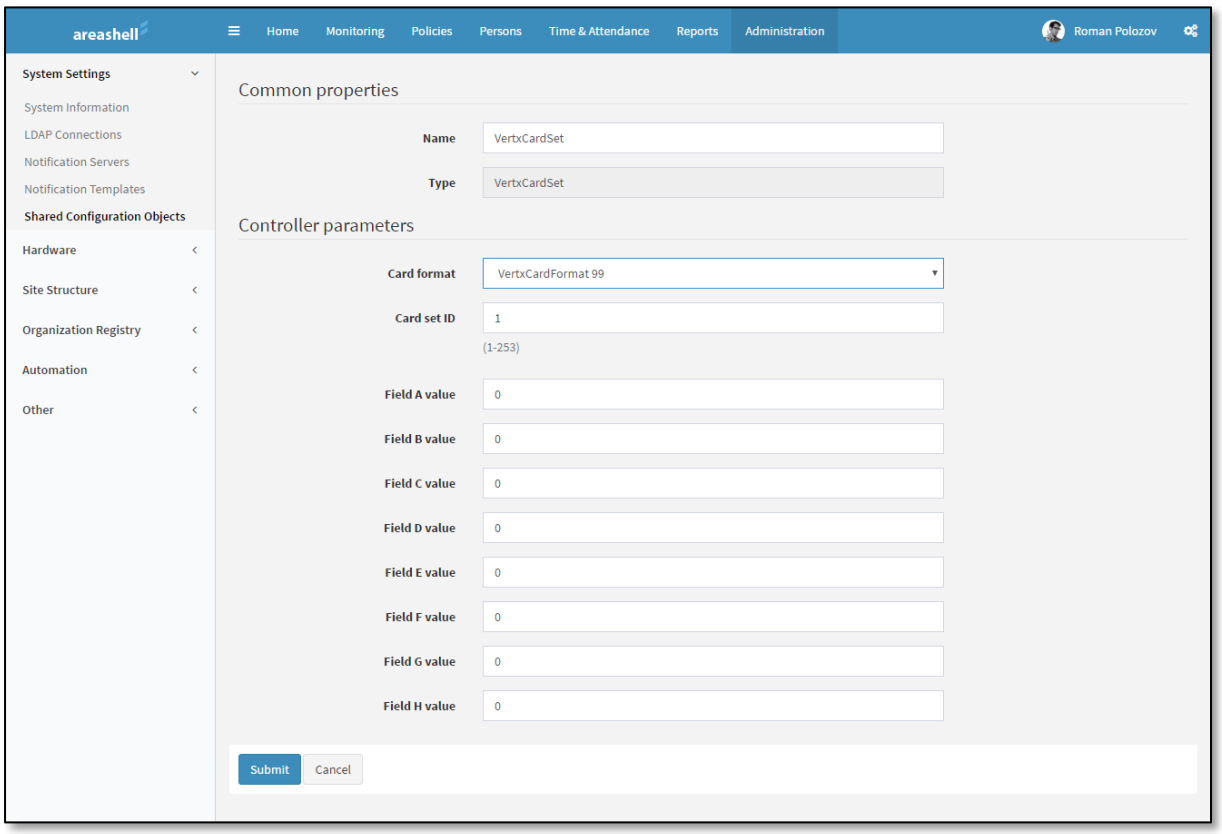


2.4.2 Configuring HID VertX / EDGE card sets

After configuring the card format, create one or more VertX Card Sets.

When creating VertX / EDGE card set, specify the following parameters:

- Card format – select a previously created card format
- Cards set ID – any number greater than 0, not used in other card formats
- The path and file name in the controller, on which the card format of the file will be loaded
- File format (eff or vff)
- In a case of eff file format, specify the format of the parameters in the fields 'Field A value' – 'Field H value' (ask the required settings from your system vendor).

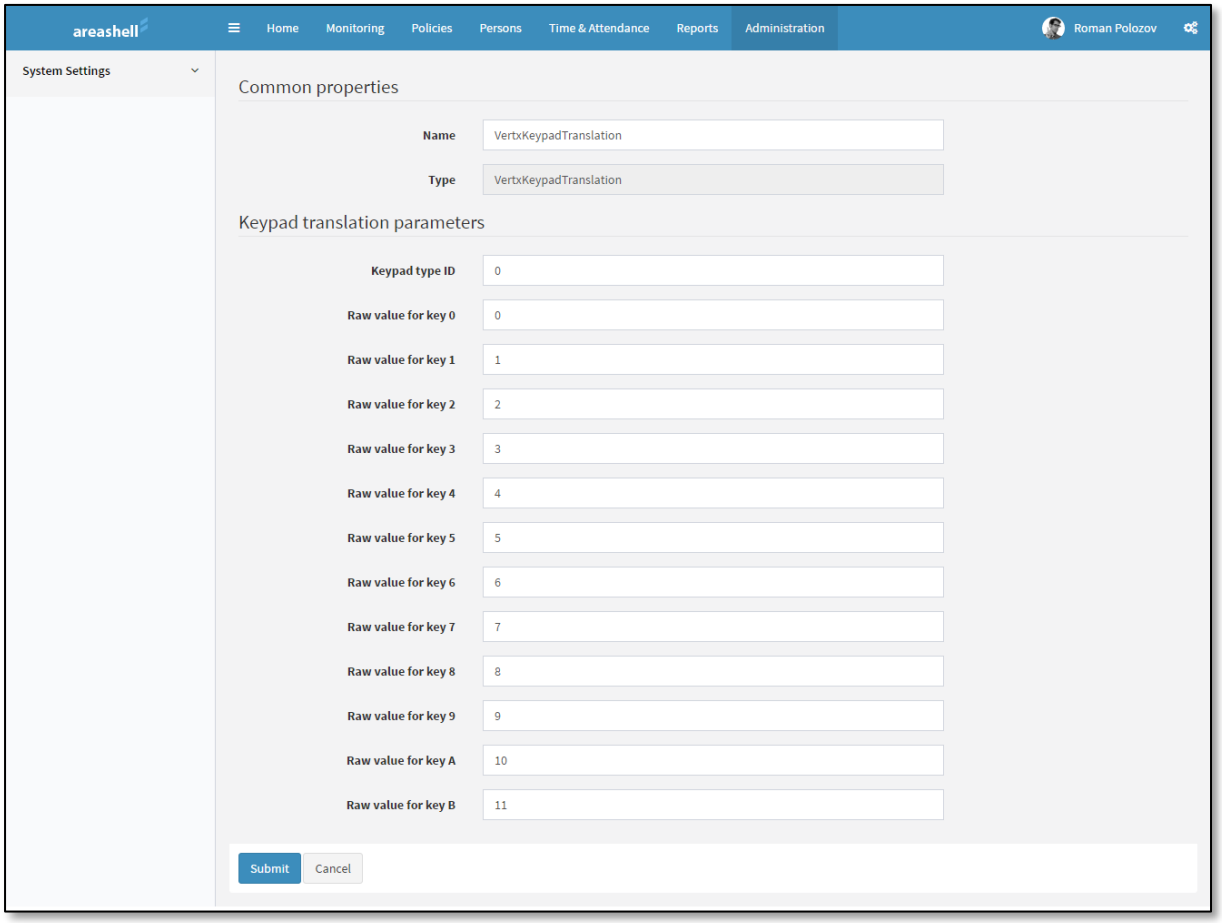


2.4.3 Configuring HID VertX / EDGE keypad translations

To use the readers with a keyboard, you must first create at least one object VertX Keypad Translation, after which it can be used in reader preferences.

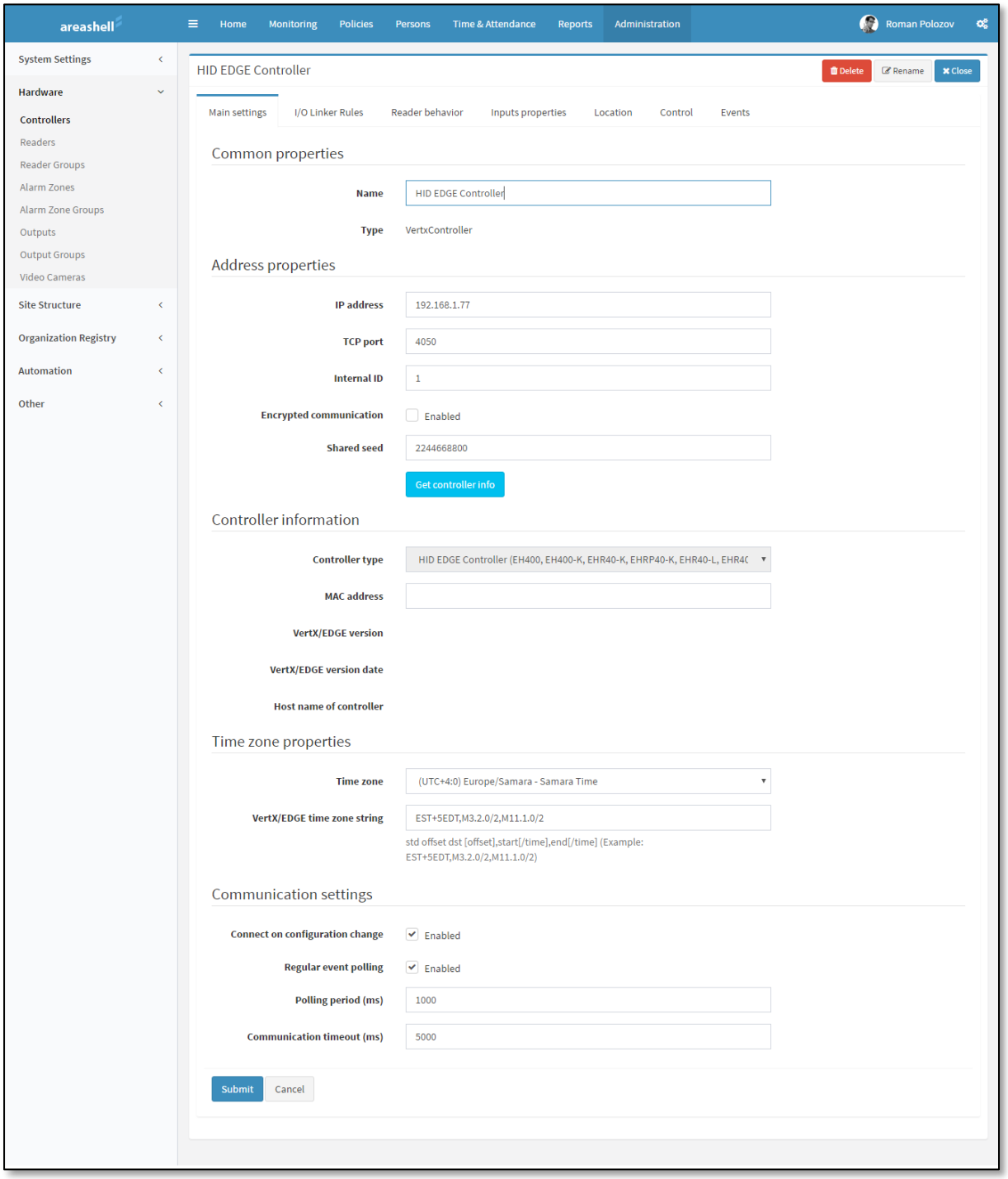
All registered HID VertX / EDGE keypad translations will be uploaded to all registered in the system HID VertX / EDGE controllers.

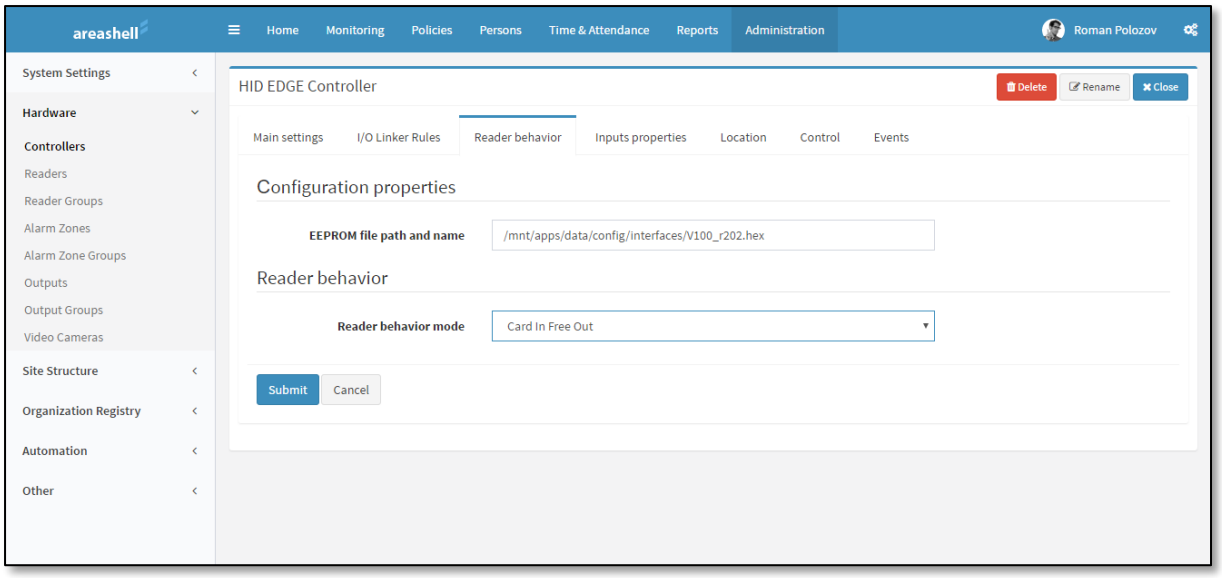
Configuring HID VertX / EDGE keypad translations can be done in the console section Administration / Settings / Shared Configuration Objects.

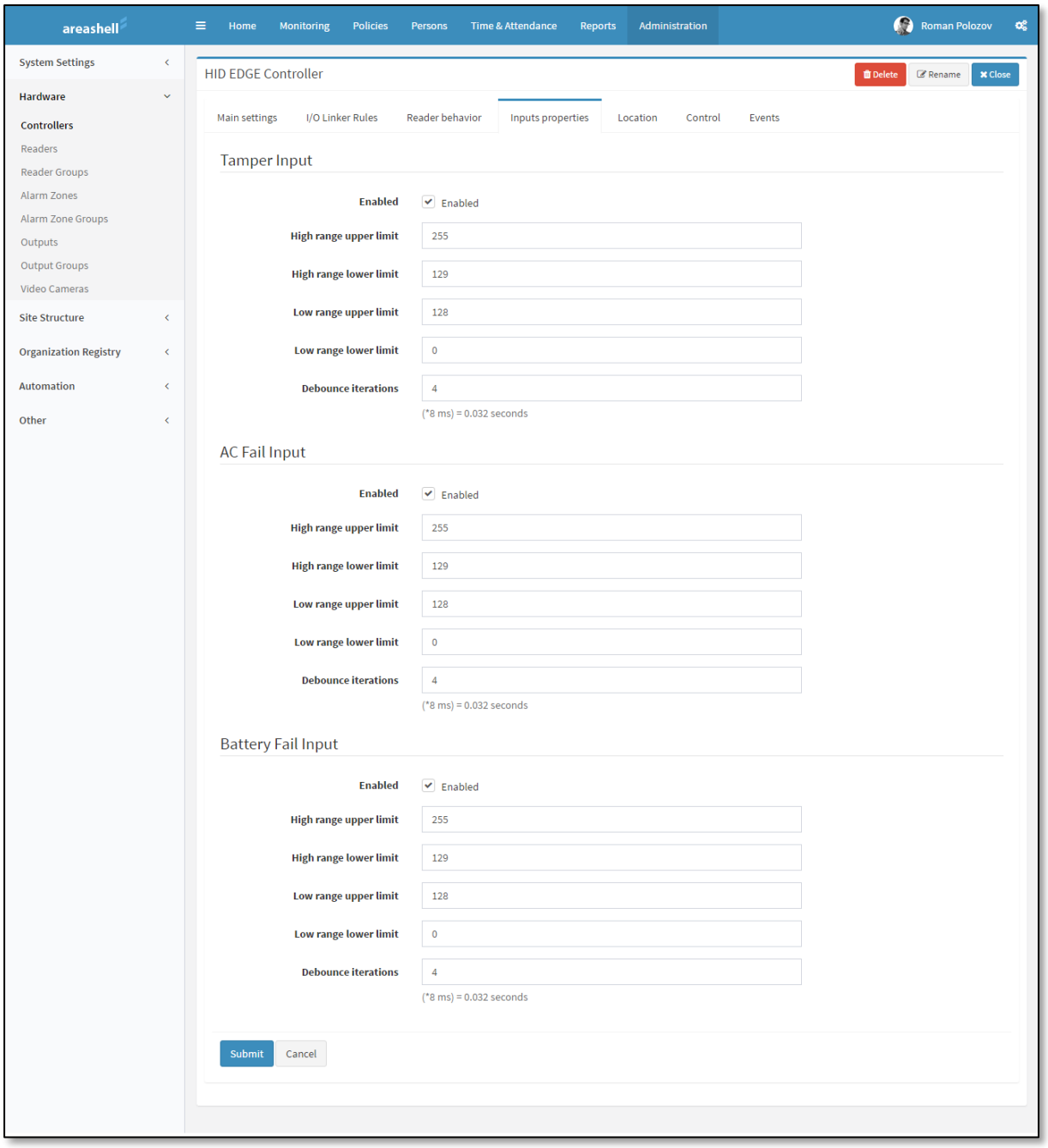


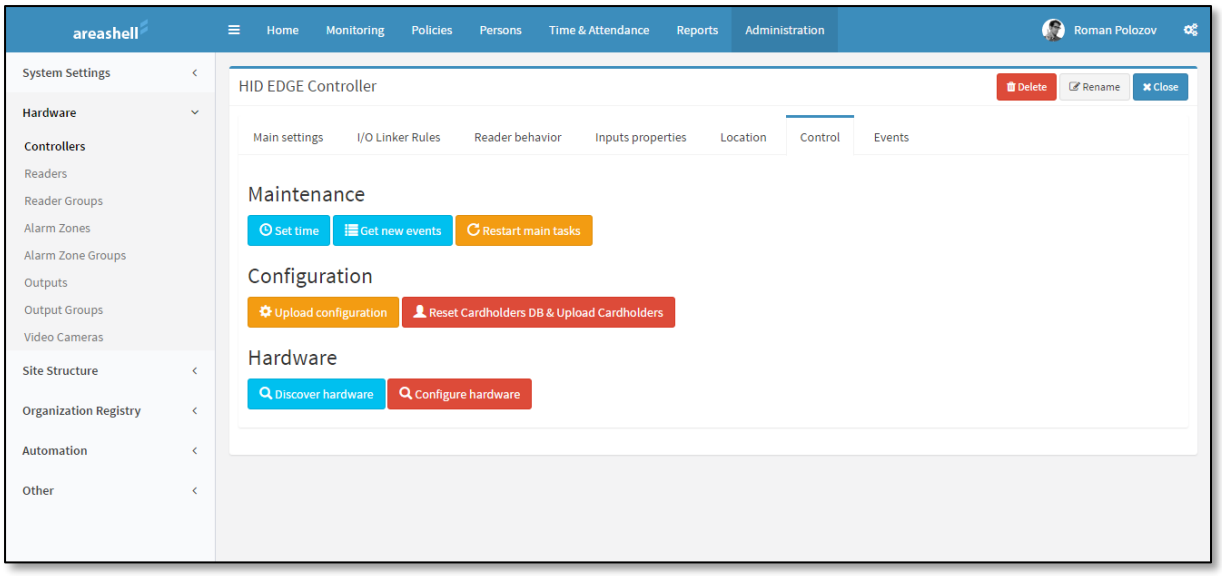
2.4.4 Configuring HID VertX / EDGE controllers

Configuring HID VertX / EDGE controllers is made in the console section Administration / Hardware / Controllers.



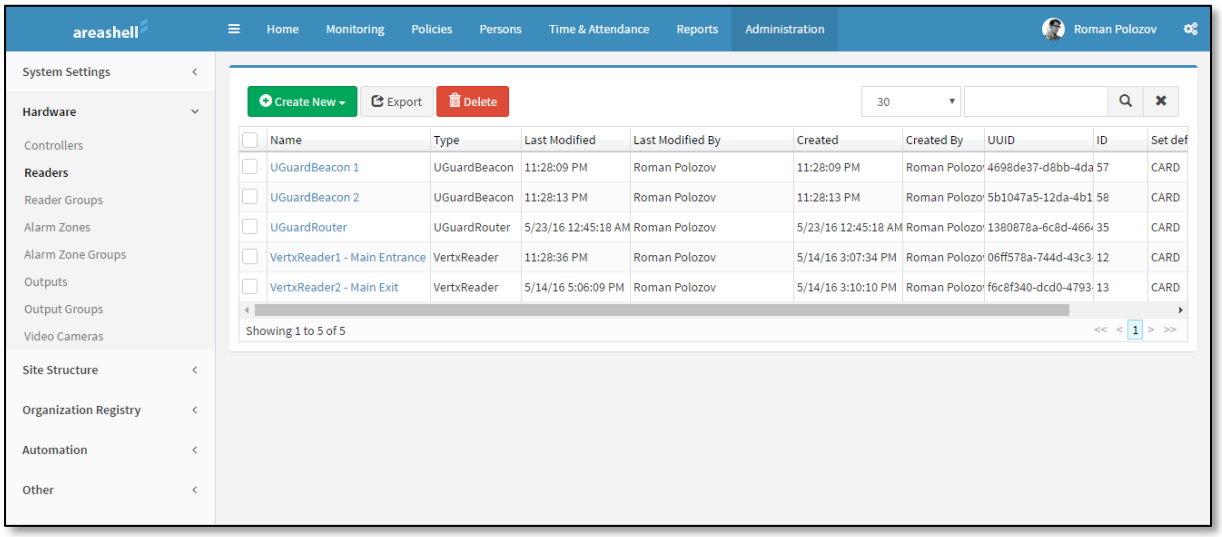






2.4.5 Configuring HID VertX / EDGE readers

Configuring Reader HID VertX / EDGE is made in the console section Administration / Hardware / Readers.



areashell | Home | Monitoring | Policies | Persons | Time & Attendance | Reports | Administration | Roman Polozov

System Settings
Hardware
Site Structure
Areas
Maps
Checkpoint Settings
Organization Registry
Automation
Other

VertxReader1 - Main Entrance | Delete | Rename | Close

Main settings | Inputs properties | Location | Control | Events

Common properties

Name: VertxReader1 - Main Entrance
Type: VertxReader

Address properties

Controller: HID VertX V2000 Network Controller
Port: 0

Mode settings

Reader type: Wiegand
Set default mode: Card only
Host lookup type: No lookup

Time settings

Normal grant access time: 250
(*25 ms) = 6.2500000 seconds

Ext grant access time: 750
(*25 ms) = 18.7500000 seconds

Minimum open time: 0
(*25 ms) = 0.0000000 seconds

Direct relay minimum time: 250
(*25 ms) = 6.2500000 seconds

Door held time: 1500
(*25 ms) = 37.5000000 seconds

REX open time: 250
(*25 ms) = 6.2500000 seconds

Keypad settings

Keypad reader: Enabled
Keypad type:
PIN entering time limit: 60
Max PIN attempts: 10
PIN lockout time: 0
PIN suppress schedule:
Max PIN size: 15
End PIN code: 11
Clear PIN code: 10
PIN commands: Enabled

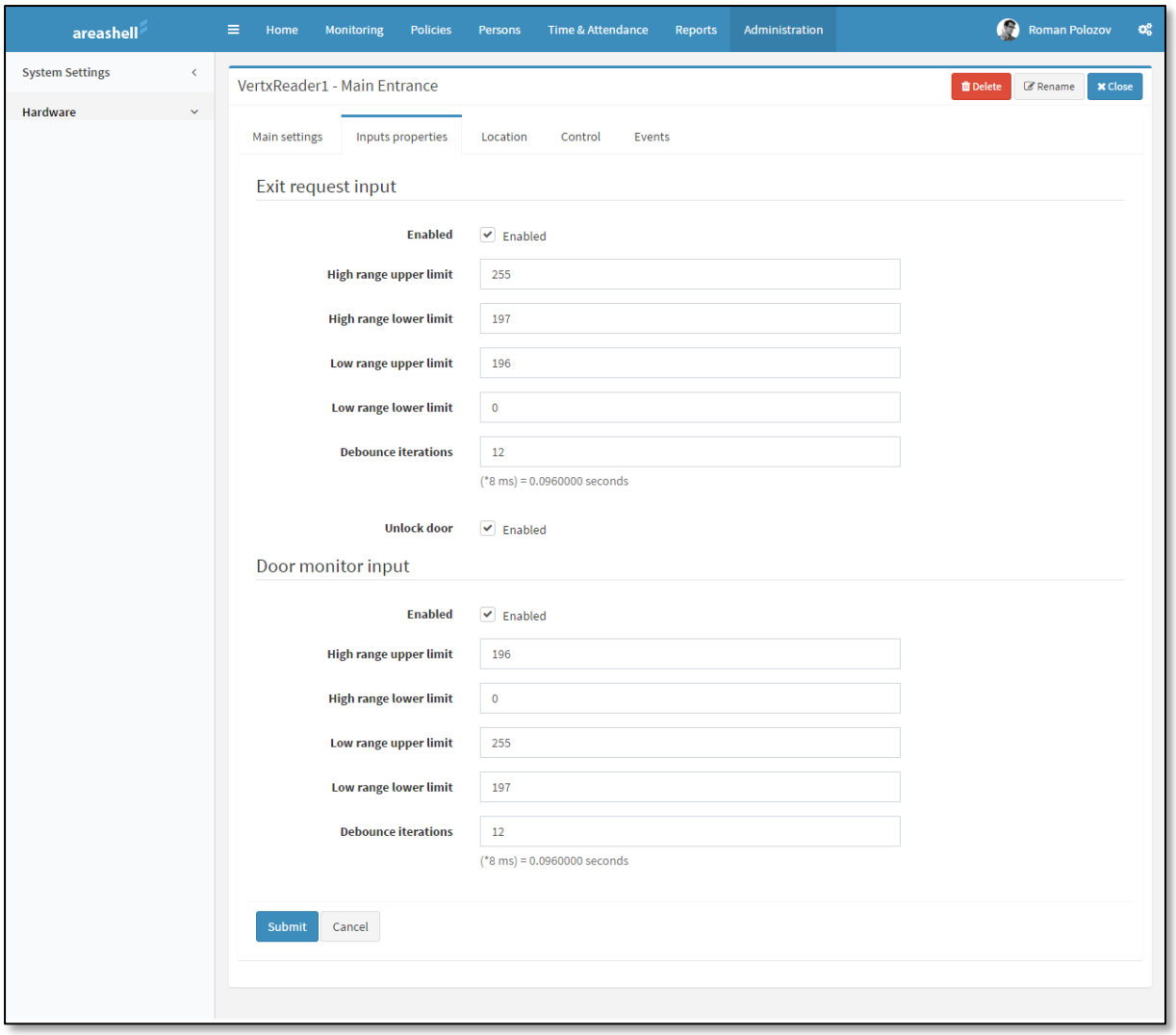
Anti-pass-back settings

APB Type: Real APB
Timed APB timeout: 60
APB violation action: Log violation only
Area out of which the door leads: HQ Security Room
Area into which the door leads: Headquarters

Elevator settings

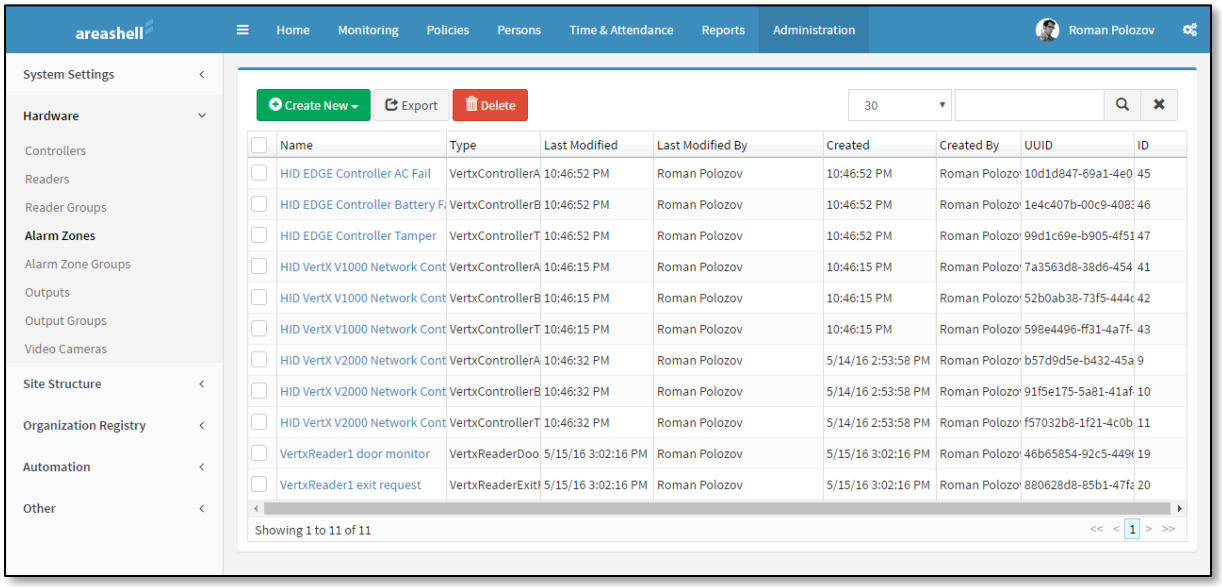
Elevator reader: Enabled
Time the relay is on, in seconds: 10
Type of output: Relay output
The state of the elevator control: Relay output
Poll delay, in milliseconds: 10
Elevator relay controller:

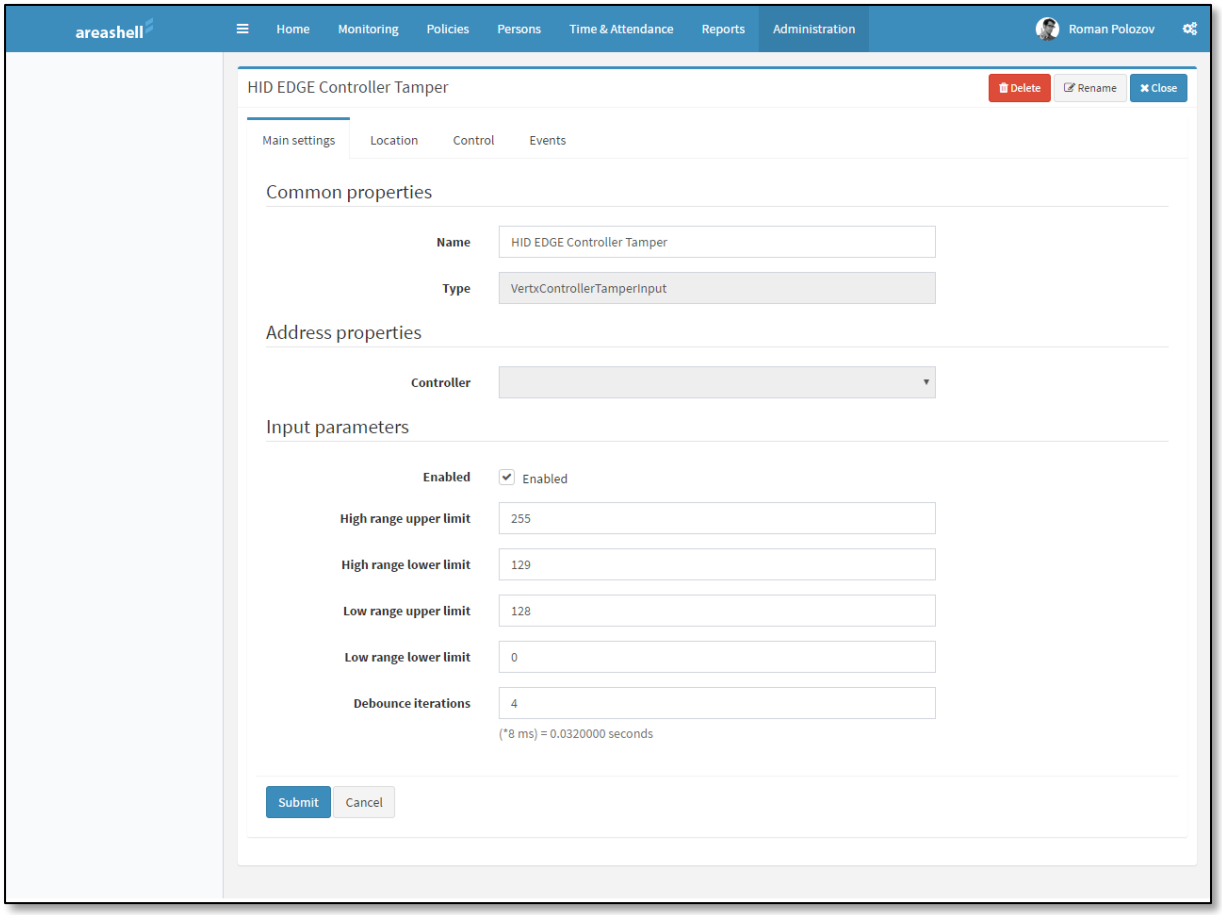
Submit | Cancel



2.4.6 Configuring HID VertX / EDGE inputs

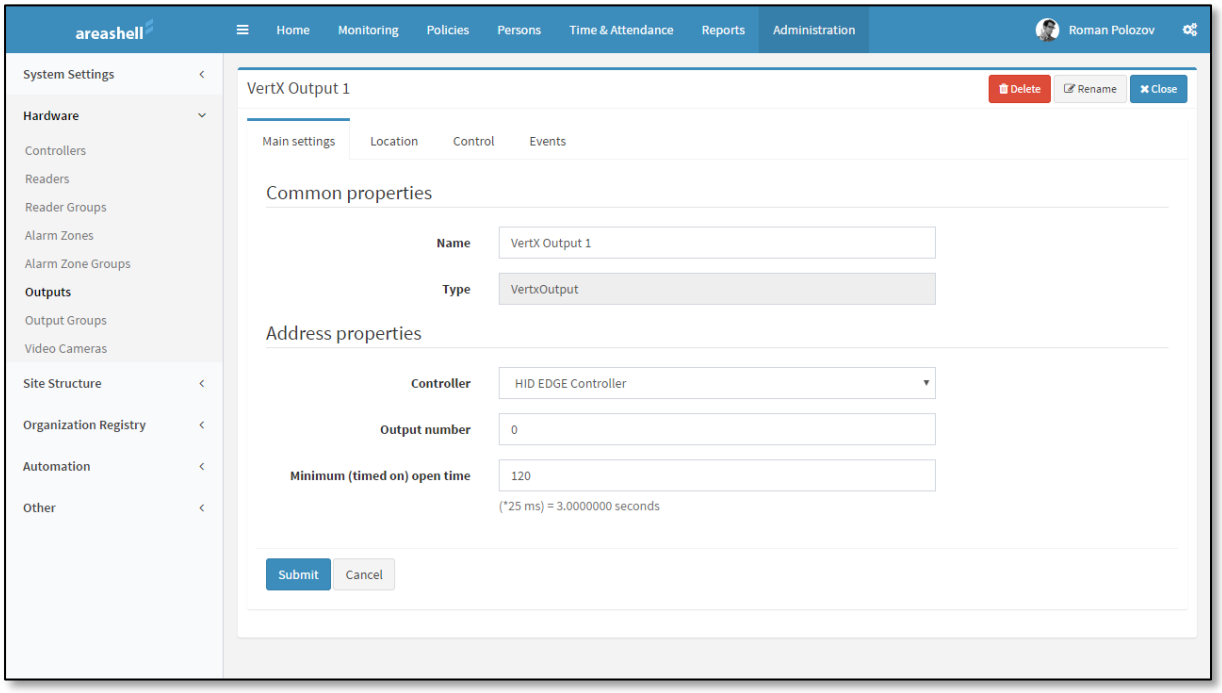
Configuring HID VertX / EDGE inputs is made in the console section Administration / Hardware / Alarm Zones.





2.4.7 Configuring HID VertX / EDGE outputs

Configuring HID VertX / EDGE outputs is made in the console section Administration / Hardware / Outputs.



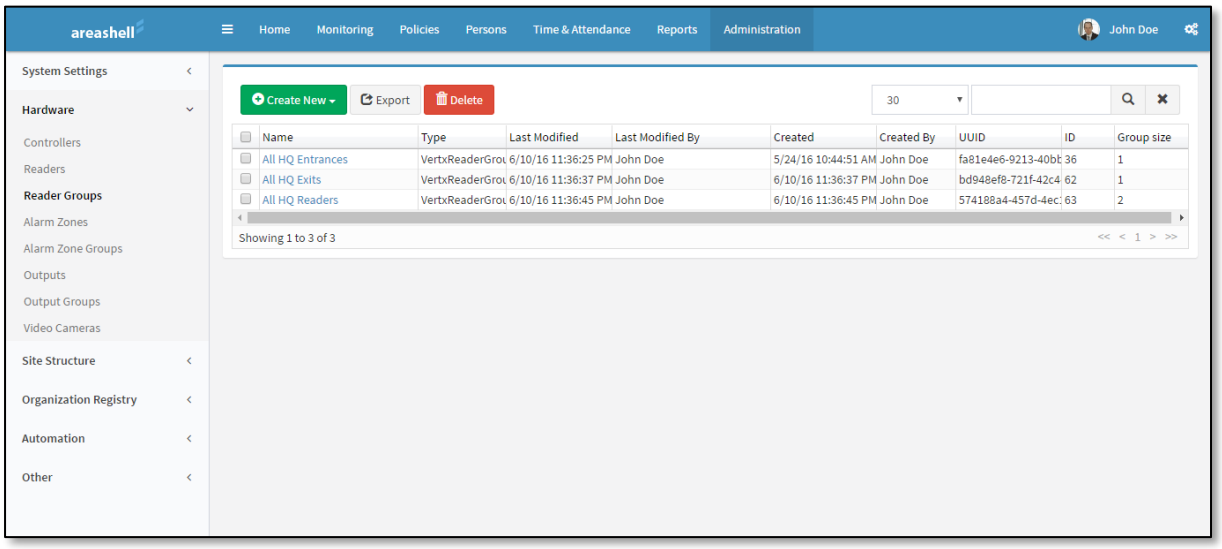
2.4.8 Configuring HID VertX / EDGE output groups

Configuring HID VertX / EDGE output groups is made in the console section Administration / Hardware / Output Groups.

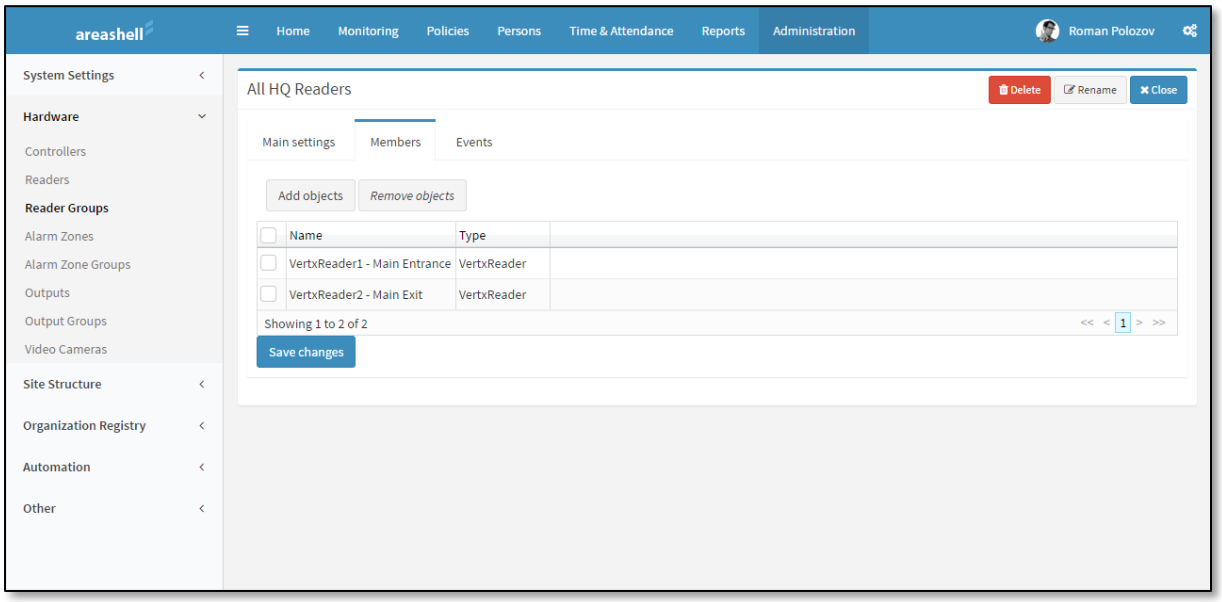
2.4.9 Configuring reader groups

Reader groups are used when assigning user access rights in the room and on the controlled areas of the territory. The groups include readers.

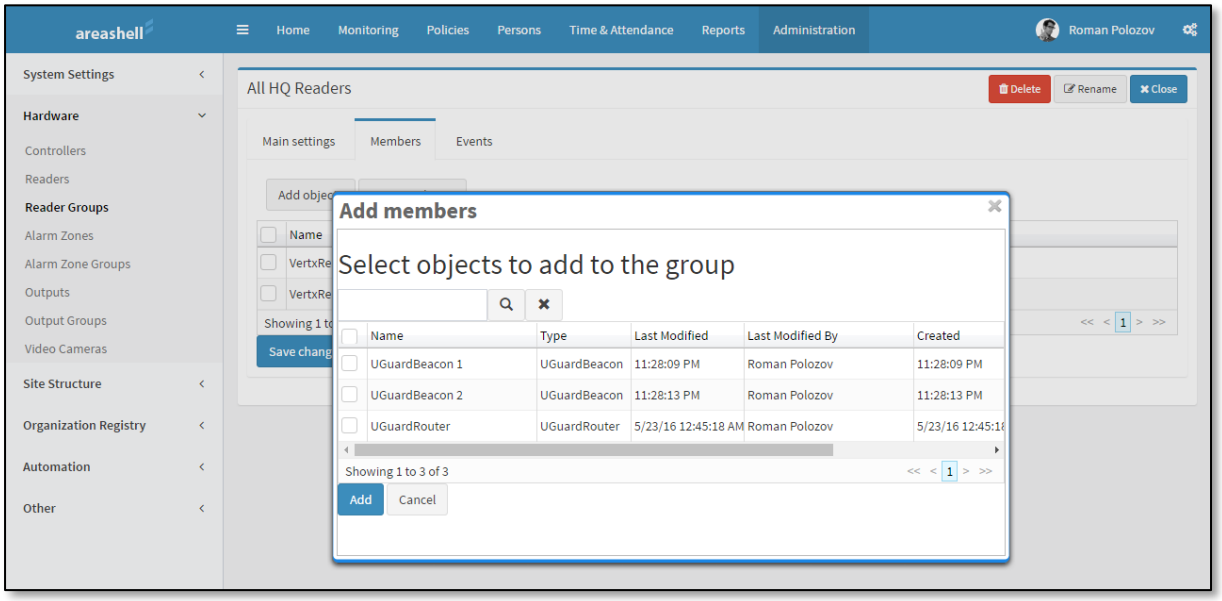
Administration of reader groups is made in the console section Administration / Hardware / Readers Group.



Adding and removing of reader to / from the group can be made on Members tab.



To add readers to the group click Add objects, select the readers in the dialog box and click Add.



Attention: The readers connected to different controllers can be added to one group.
The group will be uploaded into all controllers whose readers are included in it.

To remove the reader from the group select it in the box and click Remove objects.

Click Save Changes to save the new configuration in the database.

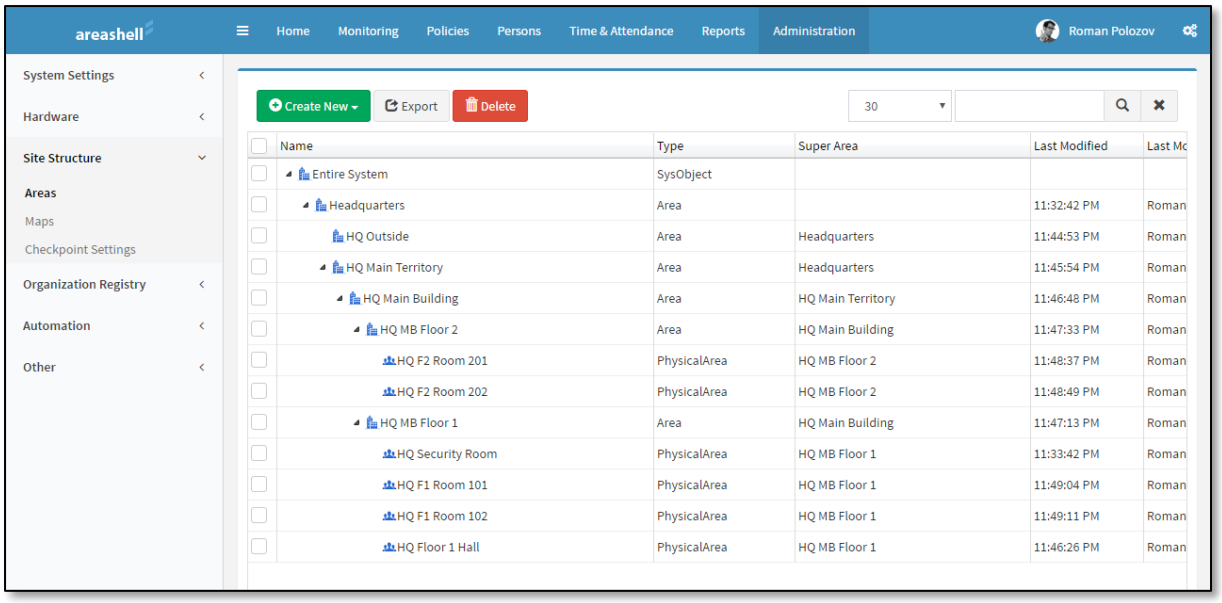
2.5 Configuring areas

Configuring of areas is made in the console section Administration / Site structure / Areas.

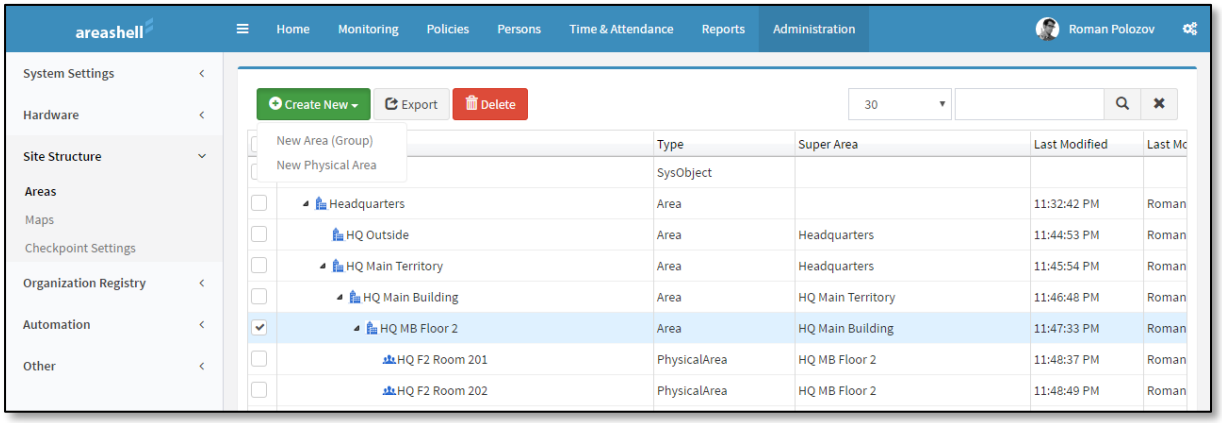
Areas can be of two types:

- Area;
- Physical area.

Areas may not contain physical objects, but may include other areas or physical areas. Physical region may contain physical objects (readers, controllers, zone and chamber etc.), but can not contain any other fields. Thus, the areas can be arranged in a hierarchy with Areas on the all levels except of the lower one and with Physical Areas on the lowest levels.



To create a new internal group of areas or a physical area within the outer group of areas, first select the outer area by checking it in the left column in the table area, and then click Create New / New Area (Group) or Create New / New Physical Area.



The new area will be created as a child area of the selected area group, and selected area group will be set for the new area as a super area.

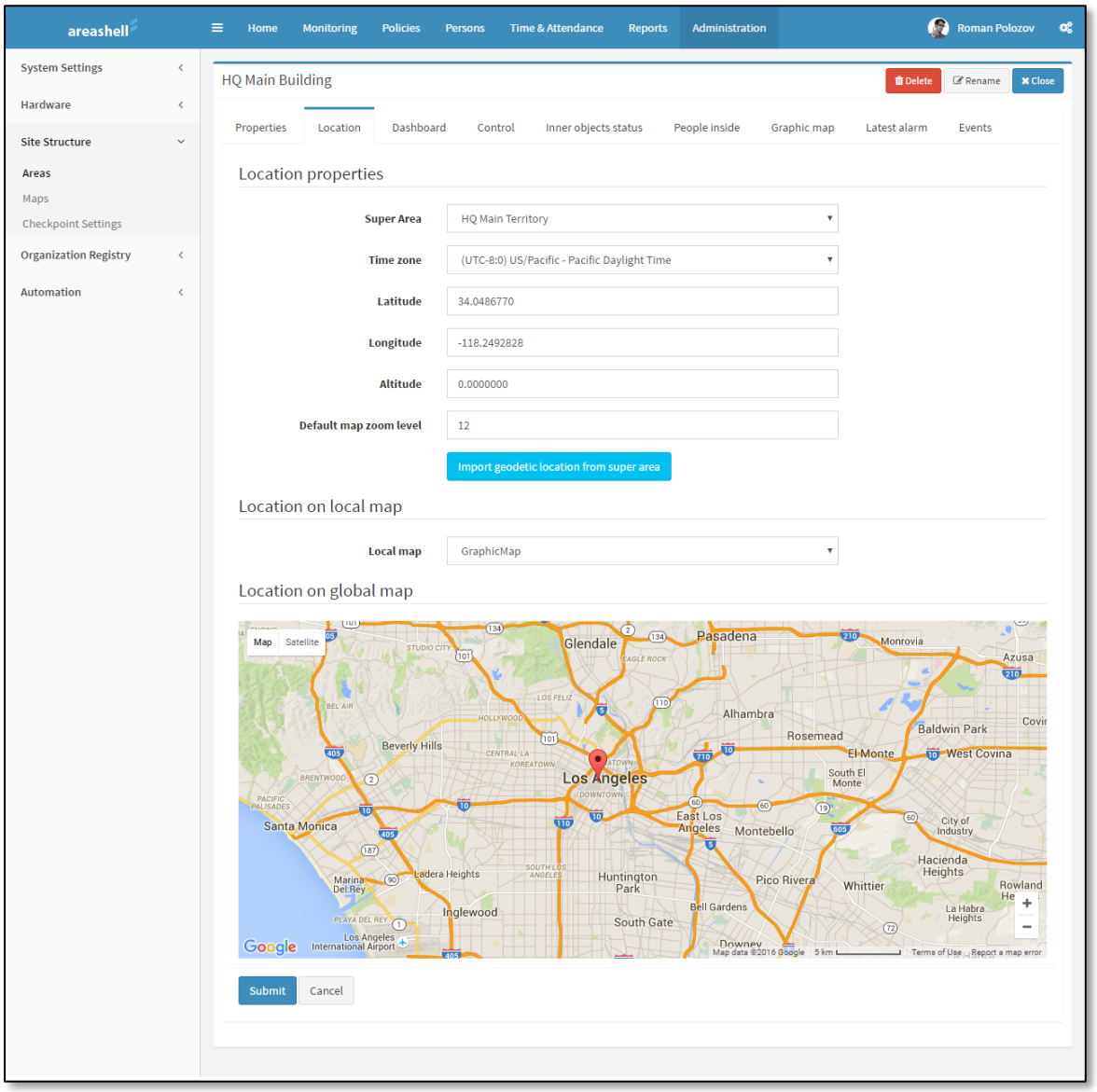
The area can be moved from one area group to another by changing the parameter Super Area on Location tab in settings of the area.

To configure an area on Location tab set the following parameters:

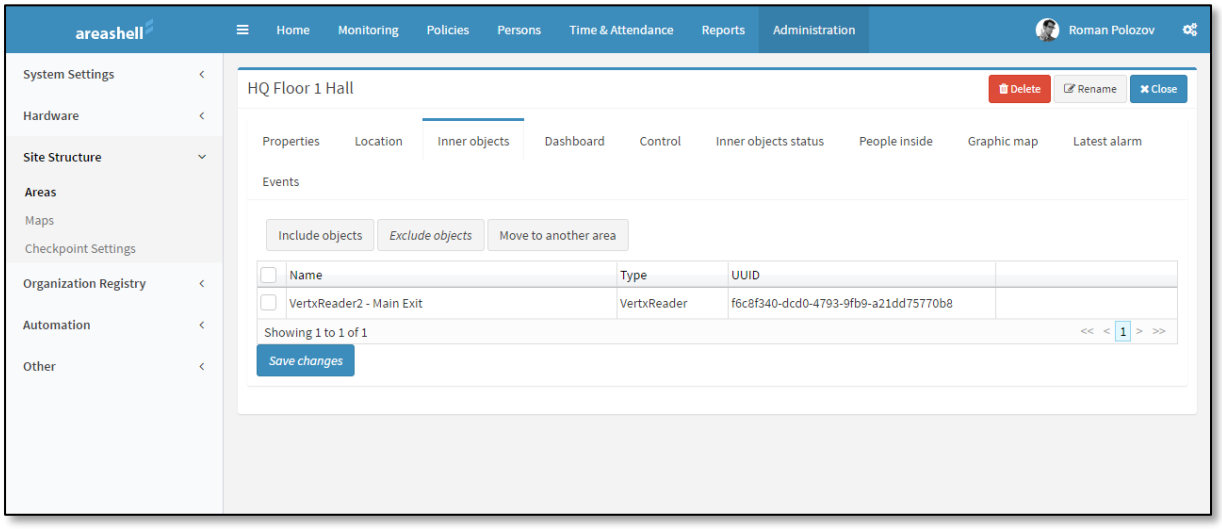
- Super area is a group of areas in which given area is located.
- Time zone is the time zone in which the given area is located. The parameter affects the processing of event messages from physical objects in this area. The physical area must always be in the same time zone.
  Group areas may include internal regions that are in different time zones. In this case, the outer band areas can be set to any of them.
- Latitude and longitude affect the display of the areas on geographical plans. The point with these coordinates of the marker area is displayed on the global map.

These parameters may be quickly changed by moving a marker on the map at the bottom of the panel.

- Default map zoom level affects the display of the area on geographical maps (1 – the whole world; 5 – a country; 10 – a big city; 13 – a small town, 17 – houses, 21 – the maximum zoom level).
- Local map is a local graphic plan in Areashell system configuration (see section “Configuring graphic maps”).
  If a local map is set for the area, then two display modes *Global map* and *Local map* will be available for this area on the tab Graphical Map in monitoring mode.



The list of physical objects that are in the physical area can be configured on the tab Inner objects.



To include objects into the area:

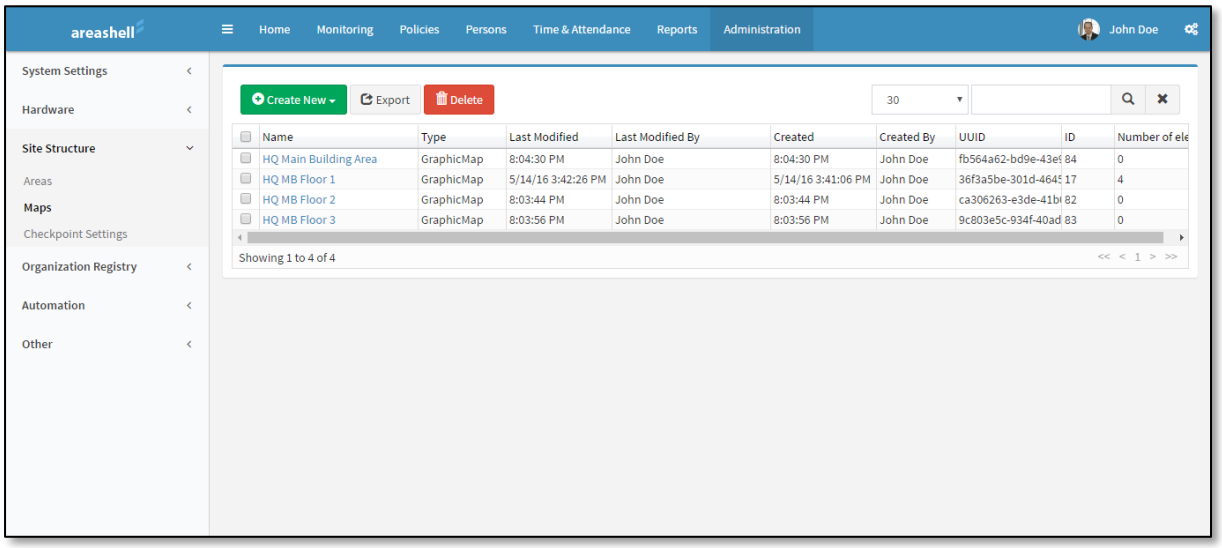
- Click Include objects
- Select (check in the left column) the needed objects in the window that appears (sorting by different columns and searching can be used)
- Click Add in the window,
- Click Save Changes on the panel.

Attention: If the zone is controlled by any reader (by presenting a card at this reader this zone can be reached), then the reader is usually not in this area but in the adjacent one. That is, it should be included in the adjacent area as an internal object.
In the setting of the reader there is a separate option 'Area into which the door leads', where the physical area the reader leads to is set.
When the reader is included in the area, this area is seen in the parameter 'Area out of which the door leads' of the reader. When this setting is changed, the reader also appears in the list of internal objects of the new area.

Tha tabs Dashboard, Inner objects status, People inside, Graphics map, and Events are for monitoring and controlling the area. They do not allow to change the parameters of the area.

2.6 Configuring graphics maps

Configuring the graphics maps is made in the sonsole section Administration / Site Structure / Maps



When creating a new plan on the tab New Graphic Map it is necessary to:

- set the name in Name field,
- click ‘Choose File’ in 'Upload the background image' and choose the image with the background image of the map,
- click Submit at the bottom of the panel to save your changes.

After selecting a plan the downloaded background image of the plan can be viewed on the tab Properties.

Placing the system objects on the map is made on Map editor tab.

To place a new object on the plan:

- Click on the background image of the plan at the point where you want to place the object system (a new element of the blue color will be seen at a given point on the plan);
- In the toolbar in the section 'System object' select the system object, which will be associated with this element of the map;
- Press Ok button in the toolbar (element of the map will turn darker and an icon will appear in it).

To change it, select the plan element by clicking it (the selected item will turn darker). The selected element can be moved, or the system object associated with it can be changed.

To change the position of the selected map element drag and drop it by mouse.

To change associated with the selected element of the site plan, choose a new object in the parameter 'System object' in the toolbar.

After changes to the object settings are made, click the Ok button in the toolbar (map element will turn lighter).

Attention: After adding, removing, or changing elements of the plan, click 'Save Plan' in the toolbar to save the changes to the database. Otherwise, after closing the map editor (for example, after switching to a different console page) the changes will be lost.

2.7 Configuring the automation subsystem

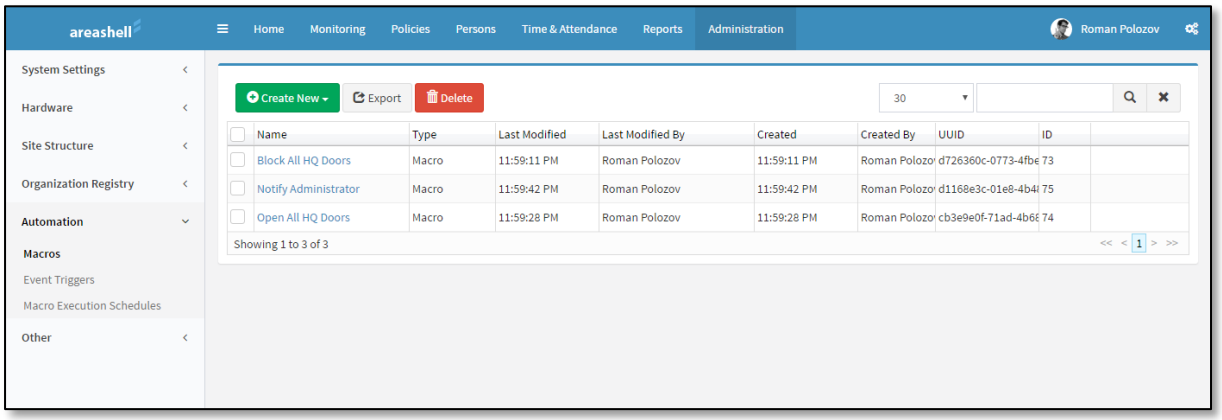
Areashell system automation subsystem uses the following configuration objects:

- Macro. It contains a sequence of instructions executed;
- Event trigger. It runs macro command specified in its settings when an event described in its settings occurs
- Macro execution schedule. It runs macro specified in its settings, in accordance with the specified schedule settings.

Physical system objects (for management), the notification server and notification templates (for sending event notification via e-mail) and other objects are used in the settings of the configuration objects of the automation subsystem.

2.7.1 Configuring macros

Configuring the macros is made in the console section Administration / Automation / Macros.

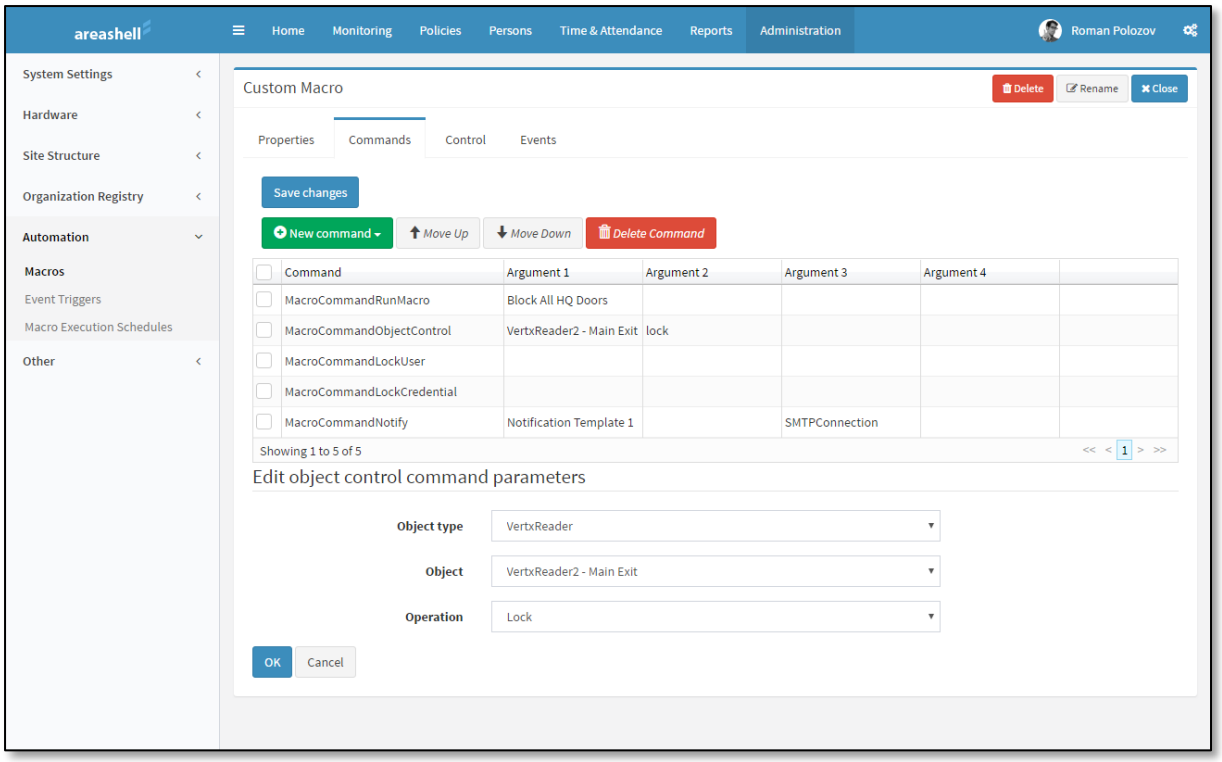


To create a new macro, click Create New / New Macro, specify a name and click Submit.

The sequence of instructions executed by a macro is set on the settings tab Commands.

To add a new command in the sequence, click New command and select the type of the command. The new command will appear in the list, and the form of the command parameters will appear under the list. The list of command parameters depends on its type. Set command parameters on the form and then click 'Apply' to apply the settings to the selected command.

The settings of any macro command can be changed by selecting it in the list.



To change the sequence of instruction execution, choose one or more commands in the list and click Move Up or Move Down in the toolbar.

Attention: After adding, deleting, modifying the parameters or the sequence of commands, click 'Save Changes' in the tool bar to save the changes to the database. Otherwise, when the edit panel of macro command is closed (for example, switching to a different console page), the changes will be lost.

2.7.2 Configuring event triggers

Event triggers can be configured in the console section Administration / Automation / Event Triggers.

To create a new trigger, click the toolbar Create New / New Event Trigger, set the trigger name, and then click Submit. A new trigger will appear in the table.

To adjust the trigger settings, select it in the table.

Set the following options when configuring the trigger:

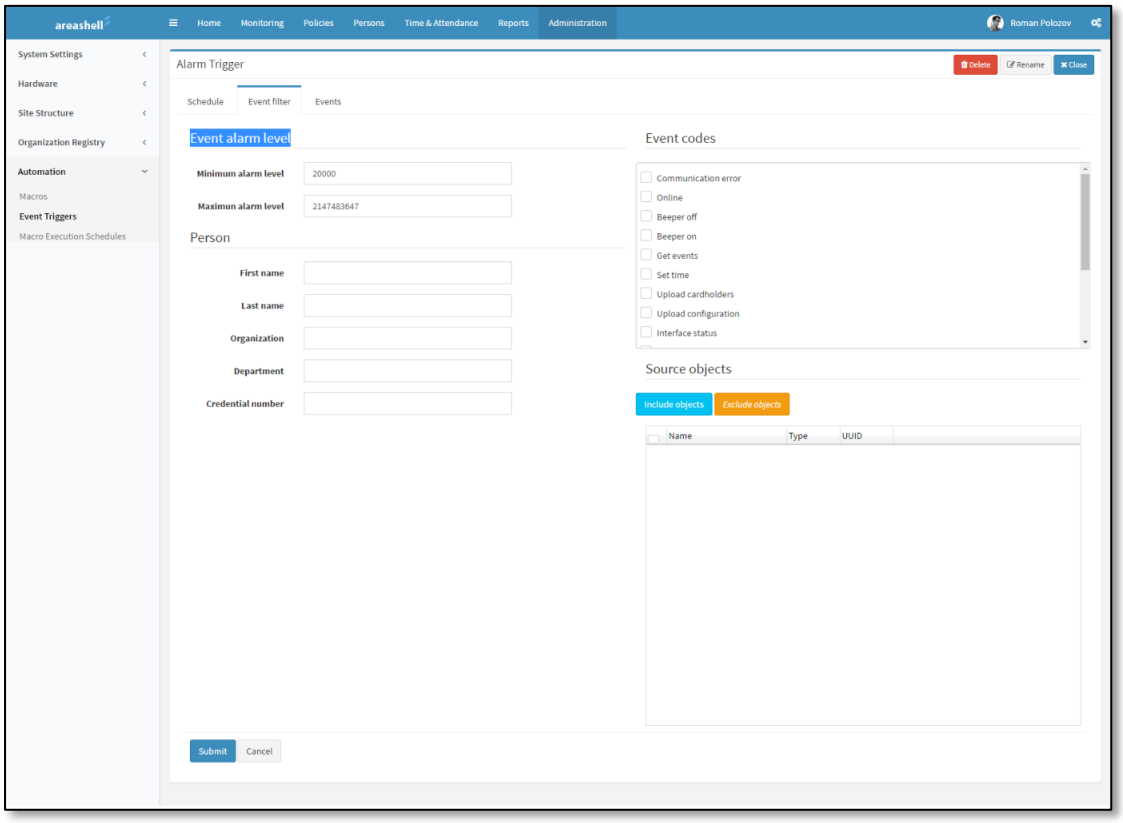
The following parameters can be specified on the Schedule tab:

- Enabled – trigger starts the macro only if this option is checked.
- Activation date - trigger does not run the macro before the date in this parameter.
- Deactivation date – trigger does not run a macro after the date in this parameter.
- Time schedule – trigger starts the macro only in the time periods of the time schedule specified in this parameter.

- React on offline events – if the parameter is not checked , trigger launches the command only if the message about the event occurrence is delivered in the online mode. An event is considered online if the time period between the occurrence of the event (by internal controller clock) and the time of its registration in the system (by the server clock) is less than 10 seconds.
- Macro to run – a macro that will be started by this trigger when it receive a message about an event.

The following parameters can be specified on the tab 'Event filter':

- Minimum alarm level – the trigger starts the macro only if event alarm level is greater than the value set in this parameter.
- Maximum alarm level – the trigger starts the macro only if event alarm level is less than the value set in this parameter.
- Source objects – if the list is empty, the trigger starts the macro when receiving an event from any object; if the list is not empty, then the trigger launches the macro only when receiving an event from any object selected in this list.
- First name, Last name, Organization, Department, Credential number – if the values are not set (all these fields are empty), the trigger starts the macro when receiving an event about any user or in case of the absence of a user (for example, alarm in a zone). If any value is set (at least one of these fields is not empty), then the trigger launches the macro only when an event is received about the user, whose first, or last name, or other data field contains the specified string (events without a user do not initiate launch of the macro).



2.7.3 Configuring macro execution schedules

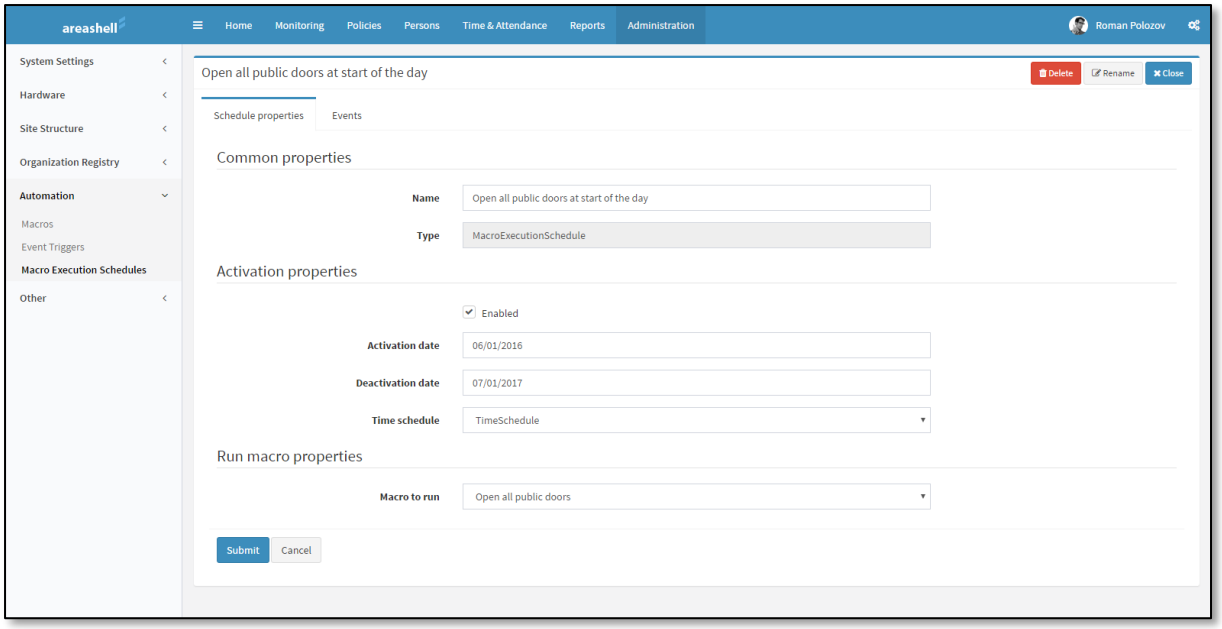
Configuring macro execution schedules is made in the console section Administration / Automation / Macro Execution Schedules.

To create a new macro execution schedule, click Create New / New Macro Execution Schedule, enter the name of the schedule and click Submit. The new schedule will appear in the table.

To configure the schedule settings, select it in the table.

When configuring the schedule, set the following parameters:

- Enabled – schedule launches a macro only if this option is checked.
- Activation date – the schedule does not start the macro before the date specified in the parameter.
- Deactivation date – the schedule does not run a macro after the date specified in the parameter.
- Time schedule – the schedule starts the macro at the beginning of the time periods of the time schedule are starting.
- Macro to run – a macro that will run by this schedule.



3 Administering access policies

3.1 General principles of administrative access policies

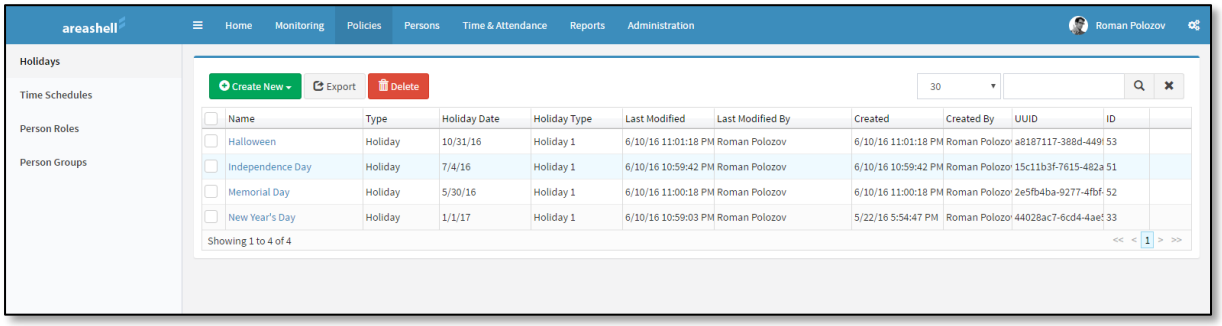
The main objects of administrative access policies are:

- Holidays
- Access Schedule
- User Roles
- Users' Groups

Holidays are used to change the user access mode (card holders and other identifiers) pass through the point. The system supports a single list of holidays, which is loaded into all hardware controllers registered in the system. Pass mode during the holiday is determined by the check specified in the settings of the temporary access scheduling intervals (see the section Time schedules).

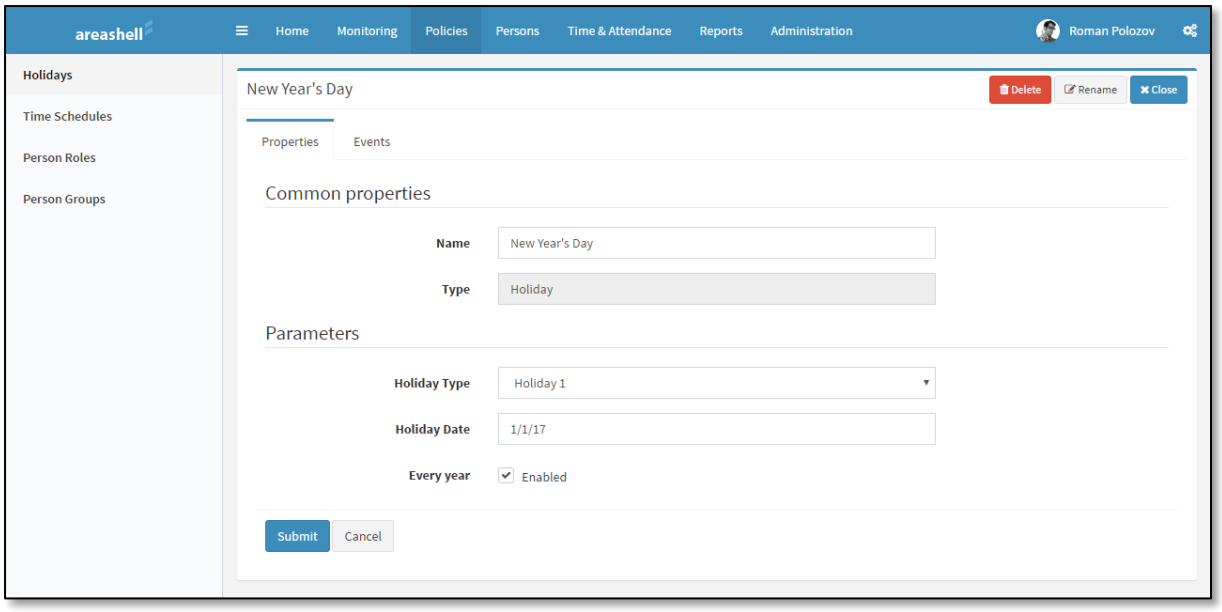
3.2 Holidays

Configuring the holidays is performed in the console section Policies / Holidays.



When configuring a holiday, specify the following options:

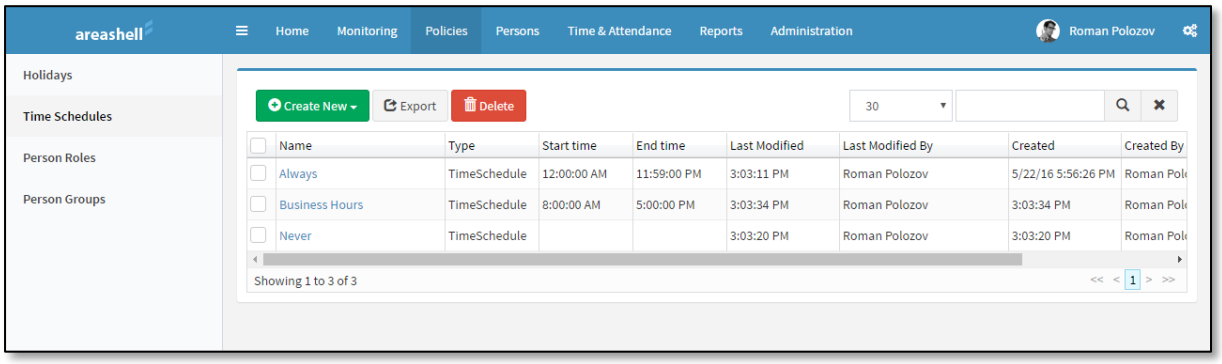
- Holiday type – a parameter that allows to group holidays by type. Holidays types are equivalent, but the permissions settings in the access schedule can be set separately for different types of holidays.
- Holiday date – sets the date of the holiday in the particular year.
- Every year – should the date be automatically transferred to the next year.

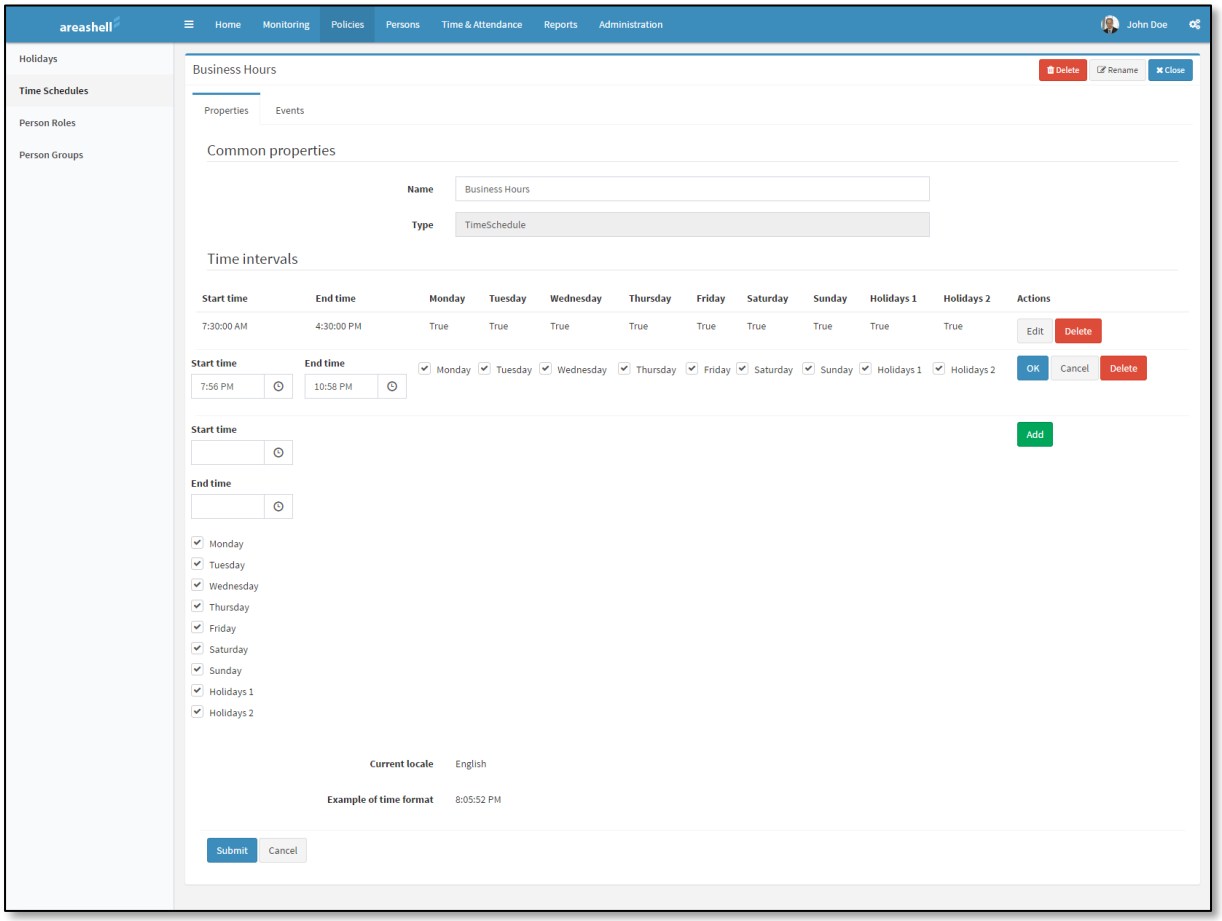


Comment: All holidays will be uploaded into all hardware controllers.

3.3 Time schedules

Configuring the time schedule is made in the console section Policies / Time Schedules.





Comment. All time schedules are loaded into all hardware controllers.

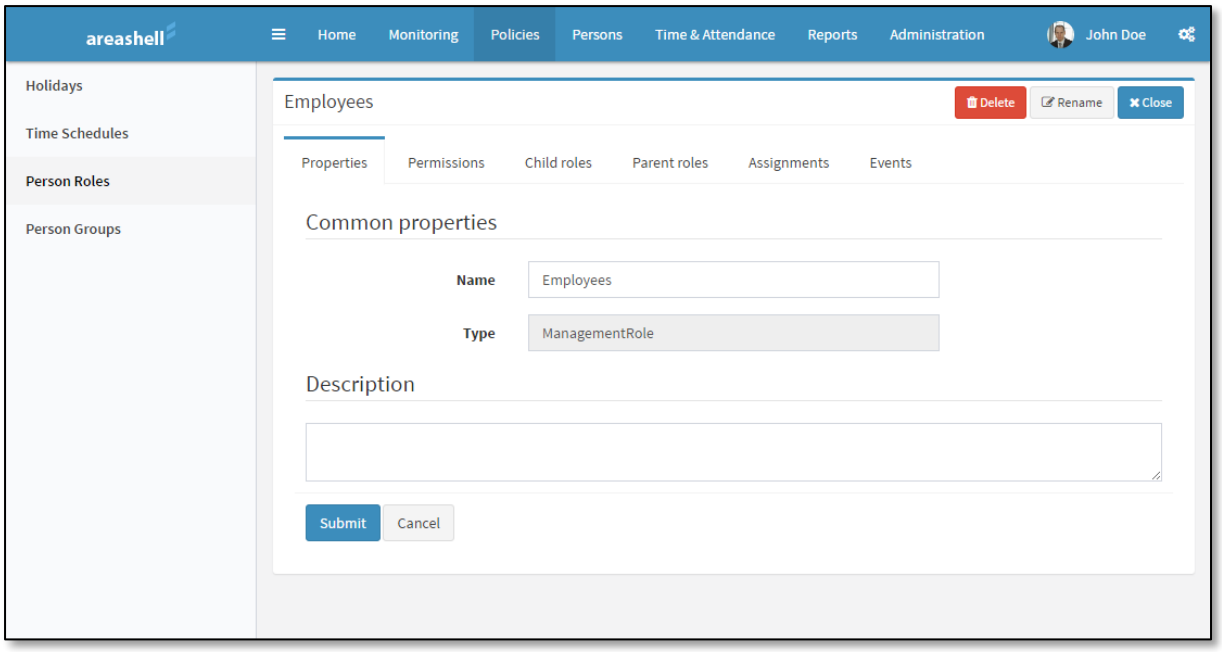
3.4 User Roles

A role is the basic mechanism of administrating user access to physical facilities and logical access to the system resources.

The role contains a list of resources to which access is permitted for users who are assigned this role.

Configuring user roles is performed in the console Policies / User Roles.

It is possible to specify the role name and enter a comment describing its purpose and its usage cases. The system only displays the comment and it does not affect the loading of configuration to the controllers or users' rights.



3.4.1 Role permissions

A list of objects and system resources, access to which is provided by this role, is on the tab “Rights”

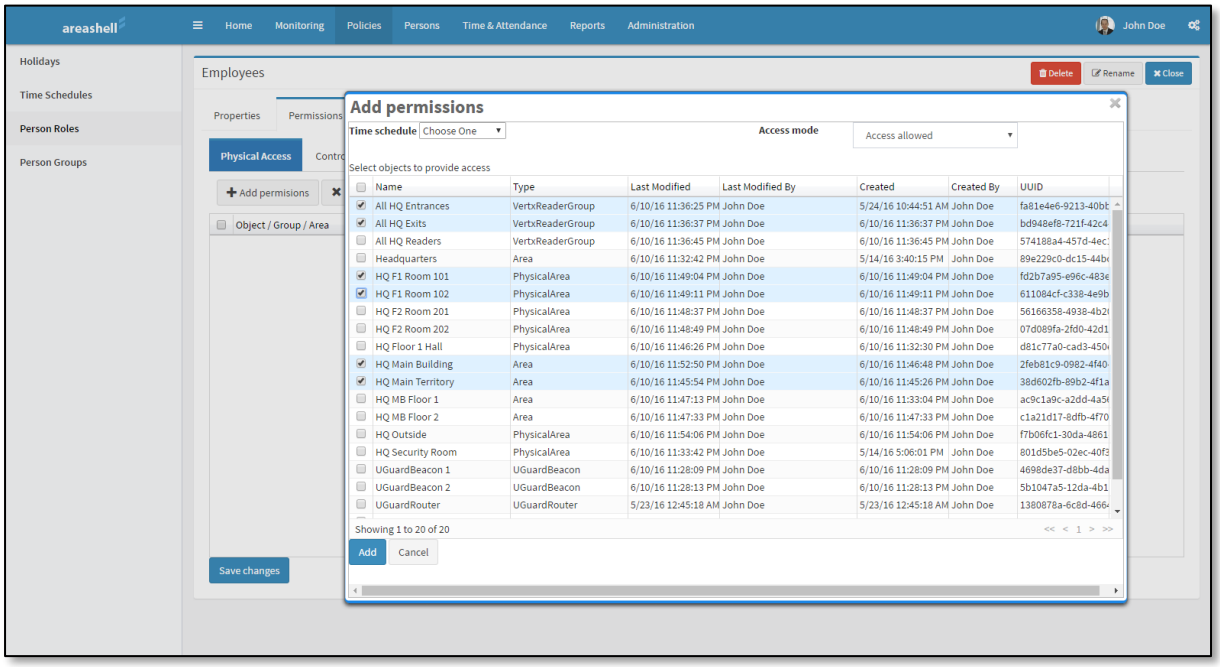
For easier administration, the resource list falls into groups:

- Physical access - the right to physical access to the area and premises
- Management - property management rights system through Areashell system web-based management interface
- Logical access - access rights to system functions (windows and panels Areashell web interface of the system)

The role can simultaneously contain access rights to all of these groups.

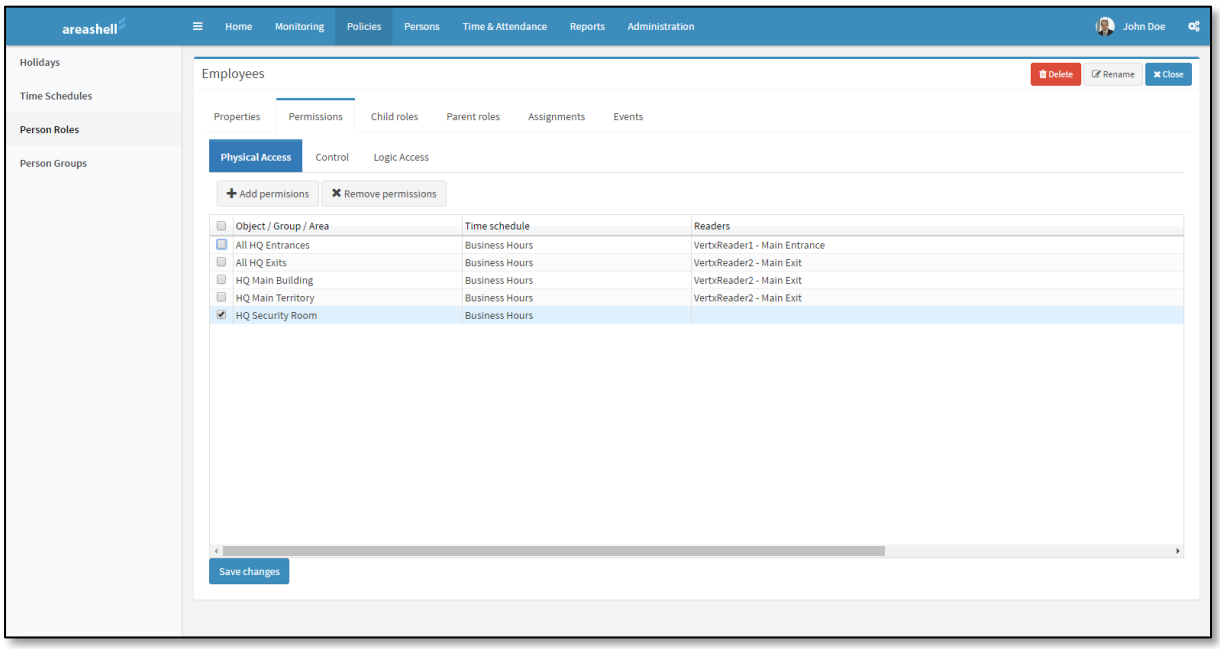
3.4.1.1 Administrating physical access rights

To add the role of physical access rights in the premises, click 'Add rights' on tab 'Physical Access', select needed readers, a group of readers or field, enter the access schedule in the 'Schedule', click 'Add', click 'Save Changes' .



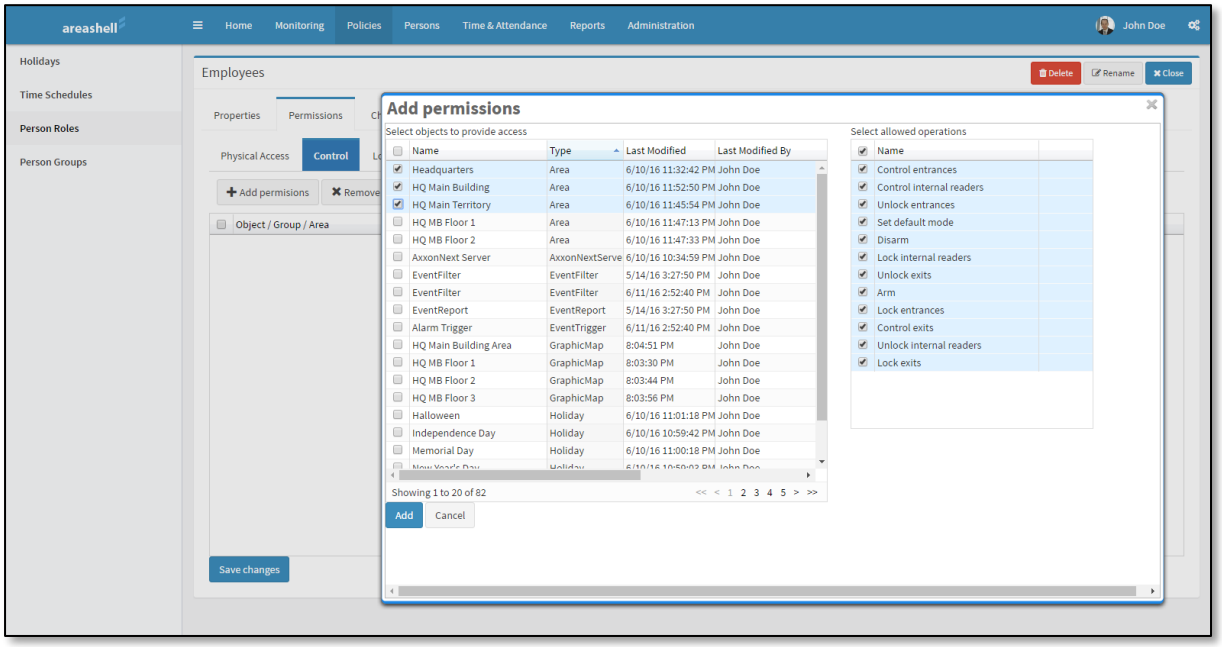
When setting the role of access rights to any area, the owners of this role (direct or indirect) have an access not only to this region, but also to all areas included in it (its daughter's domains).

To remove a previously assigned role of physical access rights, select it in the list, click 'Delete right', click 'Save Changes'.



3.4.1.2 Administrating object management rights

To add the role of object management rights through the system's web interface, click 'Add rights' on tab 'management', select the required system objects in the left side of the window, enter the allowed operations on selected objects in the list on the right side of the window, click 'Add' , click 'Save changes'.



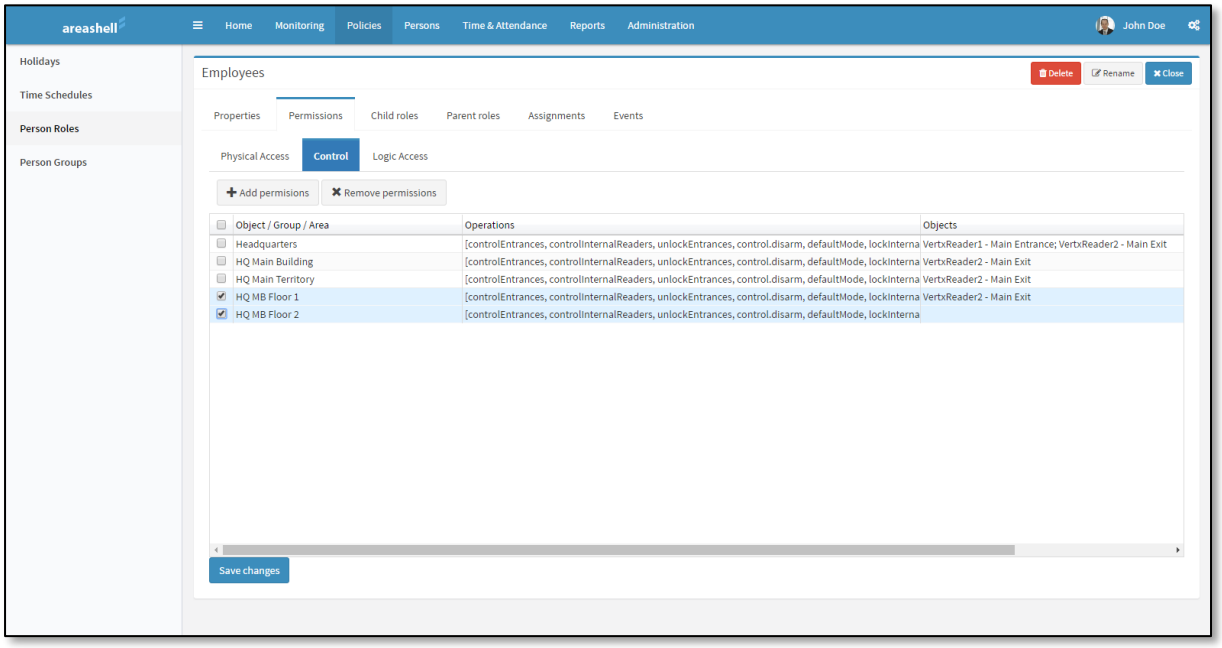
When setting the role of access to any area, the owners of this role have access to all the objects included in this area.

When setting the role of access rights to any area, the owners of this role (direct or indirect) have access not only to this area, but also to all areas included in it (its daughter's domains).

When setting the role of access rights to a group of security zones, owners of this role (direct or indirect) are allowed to manage all protection zones included in this group.

When setting the role of access rights to a group of outputs, the owners of this role (direct or indirect) are able to control all outputs included in this group.

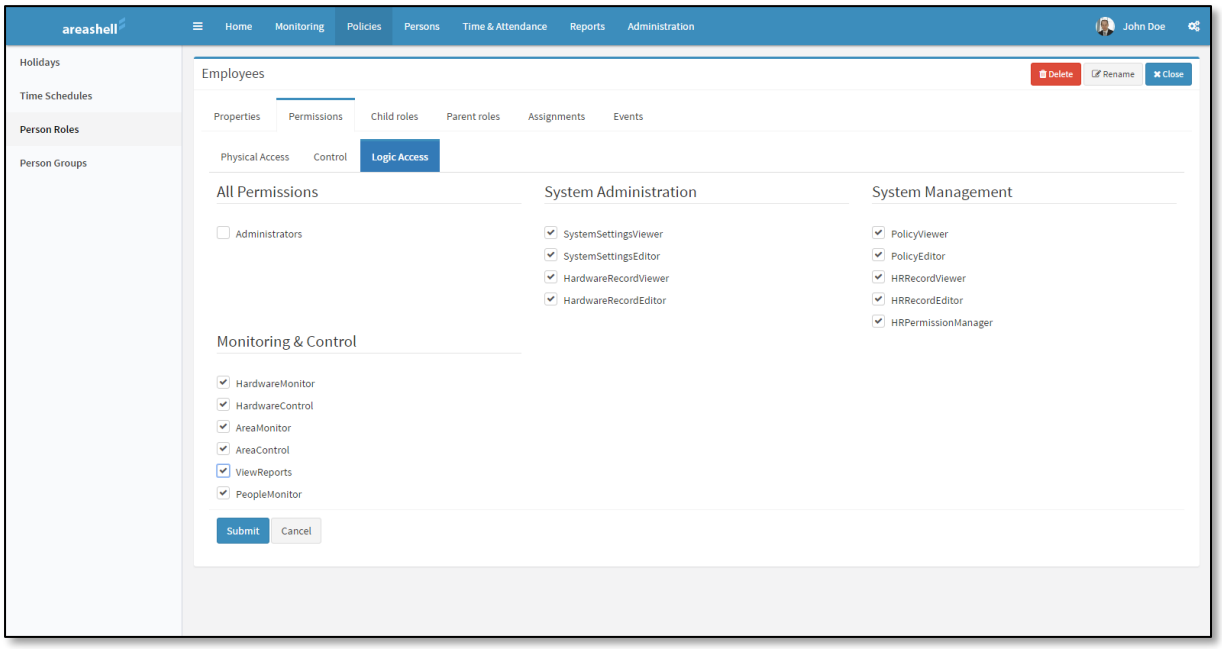
To remove previously assigned roles of facility management rights, select them in the list, click 'Delete rights', click 'Save Changes'.



3.4.1.3 *Administrating system functions access rights*

To set access rights to system functions through its web interface (Areashell web interface windows and panels) go to the tab 'logical access', specify operations permitted for this role in the operation system and click 'Apply'.

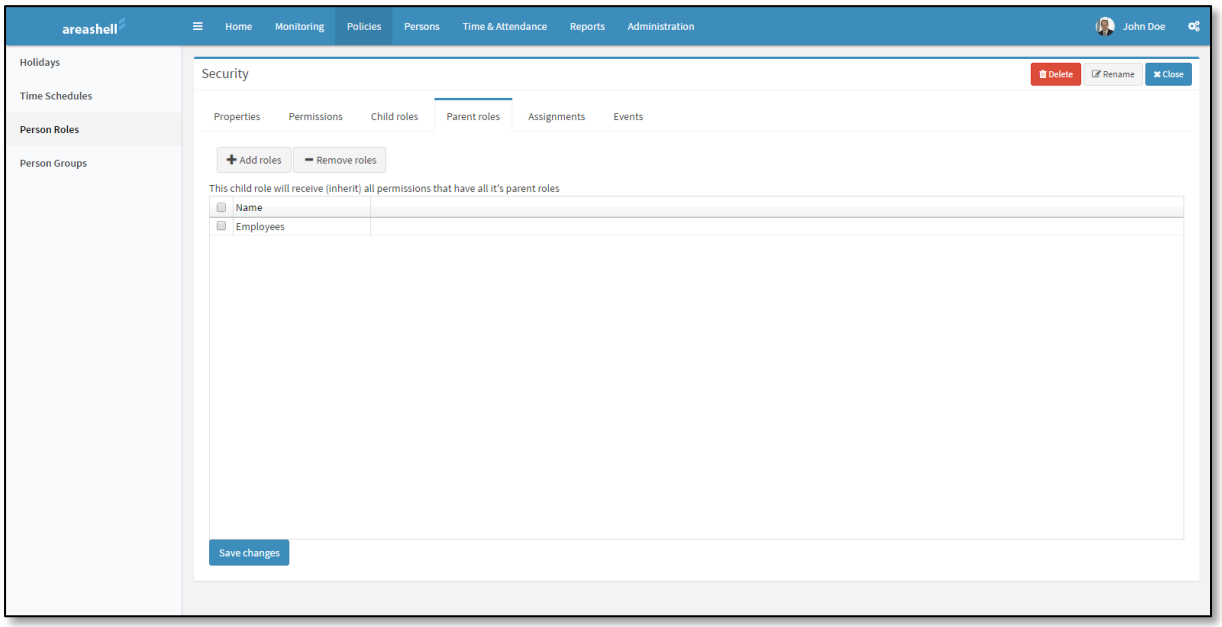
Comment. If "the Administrators" in the section 'All right' is checked, then all transactions in the system, regardless of the presence or absence of checks in other operations, are allowed for this role.



3.4.2 Role permission inheritance

Roles can be arranged in a hierarchy. One or more parent (basic) roles, as well as one or more daughter's roles, can be set for any role. Daughter's roles get all the permissions assigned to the parent (basic) roles.

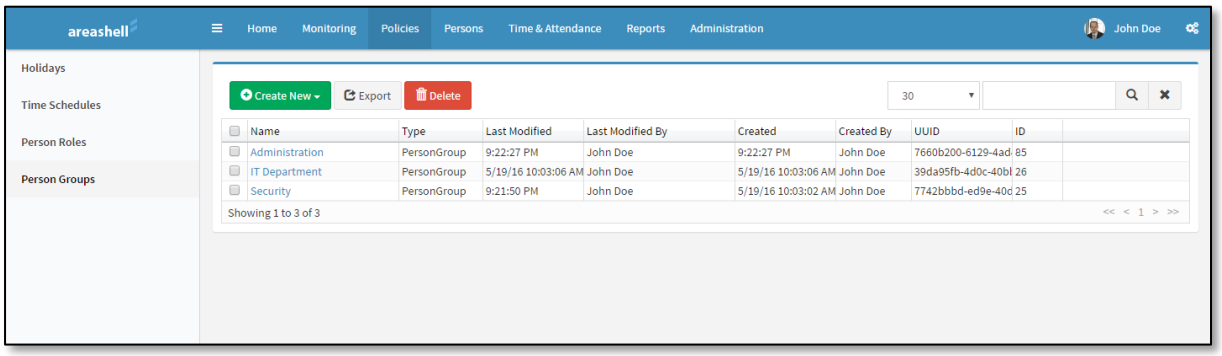
It is recommended first to configure the basic roles that contain common settings of access rights templates. Later they will become parental roles; for example, the role of the "Employee"). Then it is recommended to configure daughter's roles that inherit rights from the base, parental roles, and will be assigned to users and user groups (for example, the role of "Head of department" or "Security Officer").



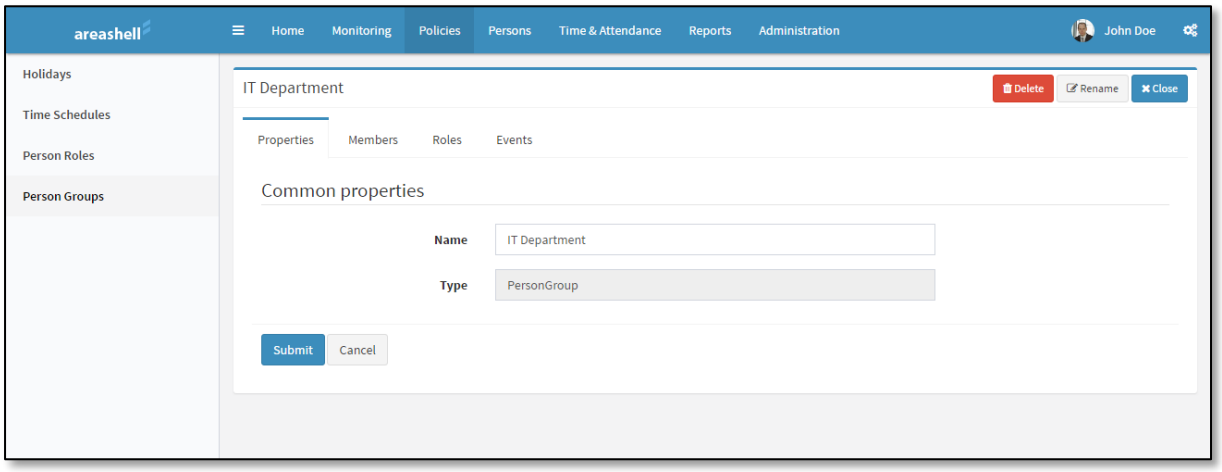
3.5 User groups

Users' groups can be used to simplify the user role administration. Roles can be assigned to users' groups as well as to individual users. All group users included in the group have the rights set for these roles.

Configuring users' groups is made in the console Policies / User Groups.



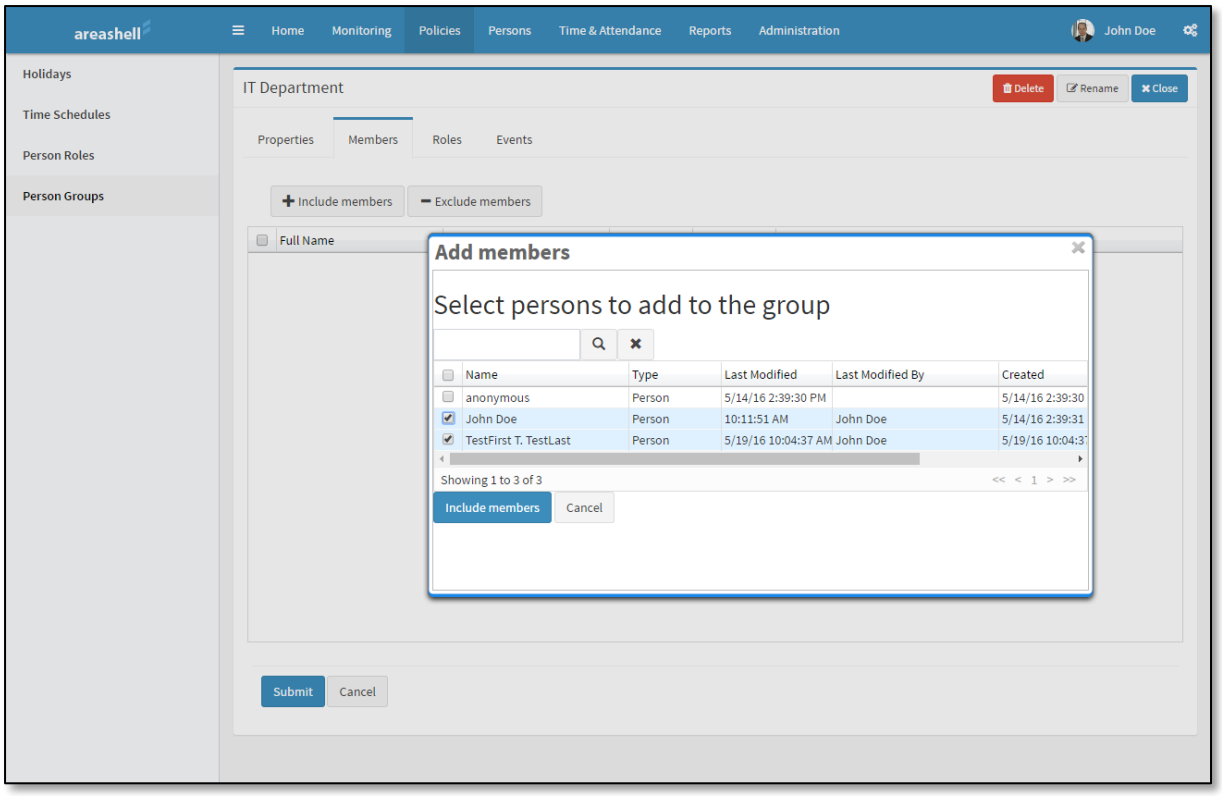
The group name that will be in the system list can be set on the tab "Properties"



To view a list of users who are included in the group, include and exclude users from the group is possible in the tab 'Included users'.

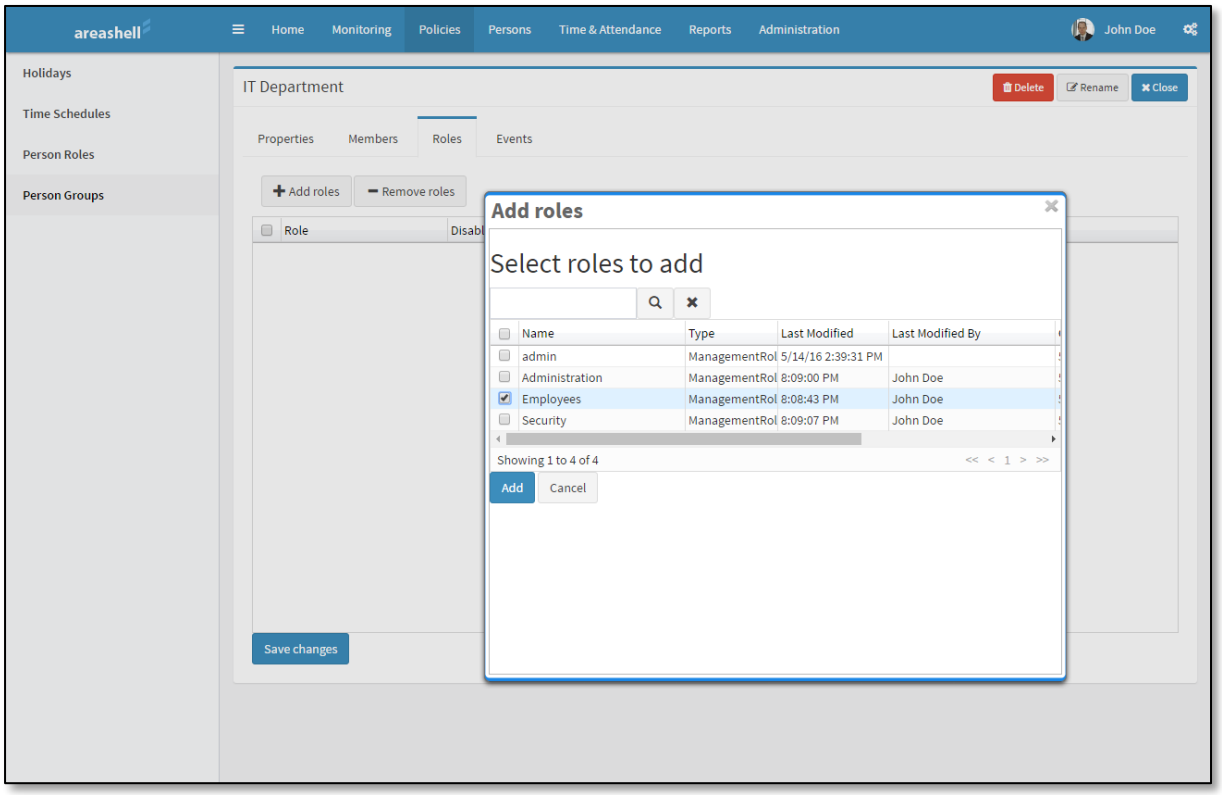
To include users to the group, click 'Switch User', select the user in the window, click 'Include members', then click 'Apply'.

Comment. To simplify the search for a particular user, use the search field at the top of the window. Type a few symbols of a last name or user name, press Enter or click the magnifying glass. To clear the search field and obtain a complete list of users, clear the search field, or click the cross.

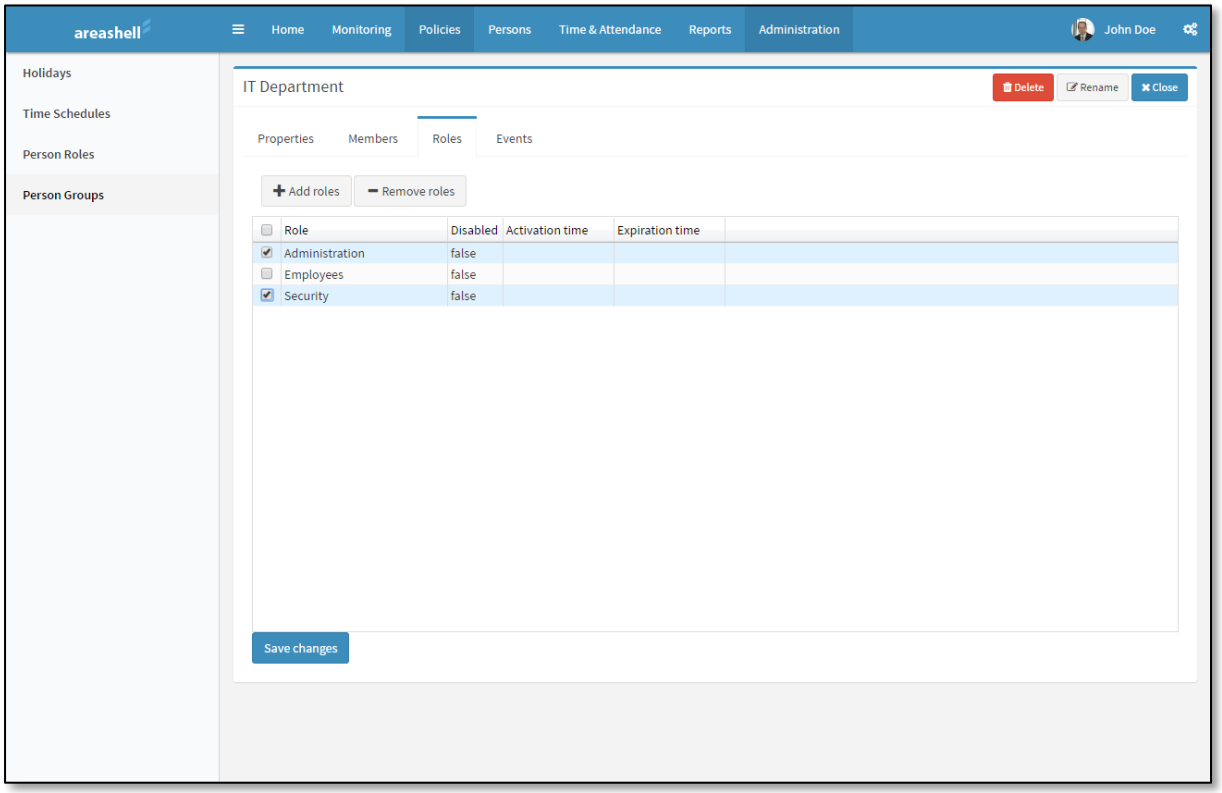


View or edit the list of roles assigned to the users group in the tab “Roles”

To assign a user group a new role, click 'Add', select required roles in the pop-up window, click 'Add', click 'Save Changes'.



To remove previously assigned roles to group members, select them in the list, click 'Delete role', click 'Save Changes'.



4 User Administration

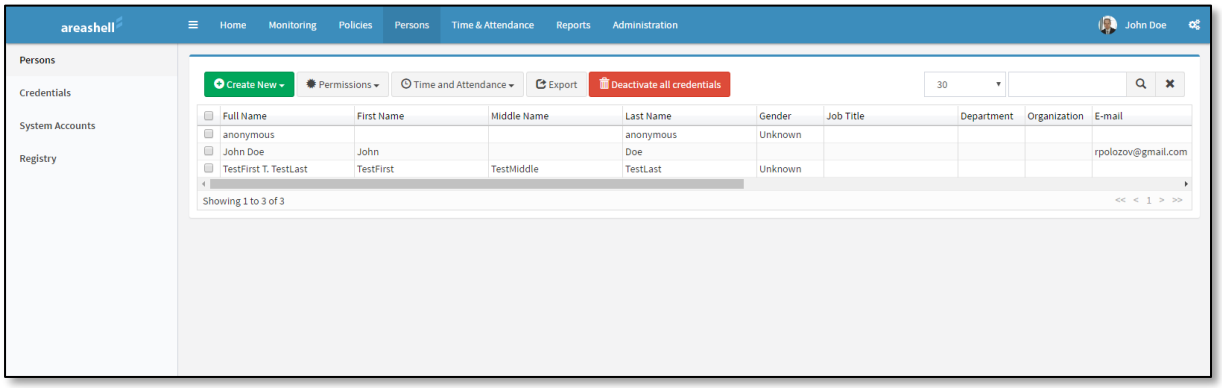
Data users, their access rights to premises and areas of the territory, their access rights to the system functions, user IDs are registered in Areashell database.

Different entities such as a remote card reader (proximity card), RFID-tags, personal identification numbers, a combination of user name and password, digital certificates, and others can be used as user IDs.

Each user can register multiple identities for different purposes. For example, to provide access to the system console, register the ID of the user name and password, and for physical access to the premises - a proximity card and PIN.

Comment. By default in the system there is one auto-generated system user: admin. The user admin has all the rights in the system and has a login account with the name 'admin' and the password 'admin'. For safety reasons, the admin user password must be changed after the installation of the system on the account settings panel of the user.

Working with the user registry is done in the Users section of the console.

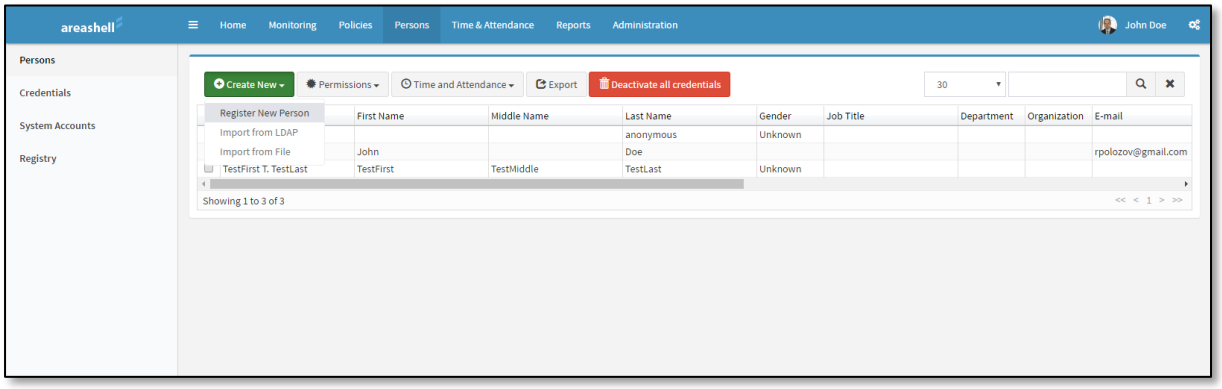


4.1 User registration

Users can be registered manually by entering user credentials in the form, or import the data from the corporate service LDAP / Active Directory directory or a file.

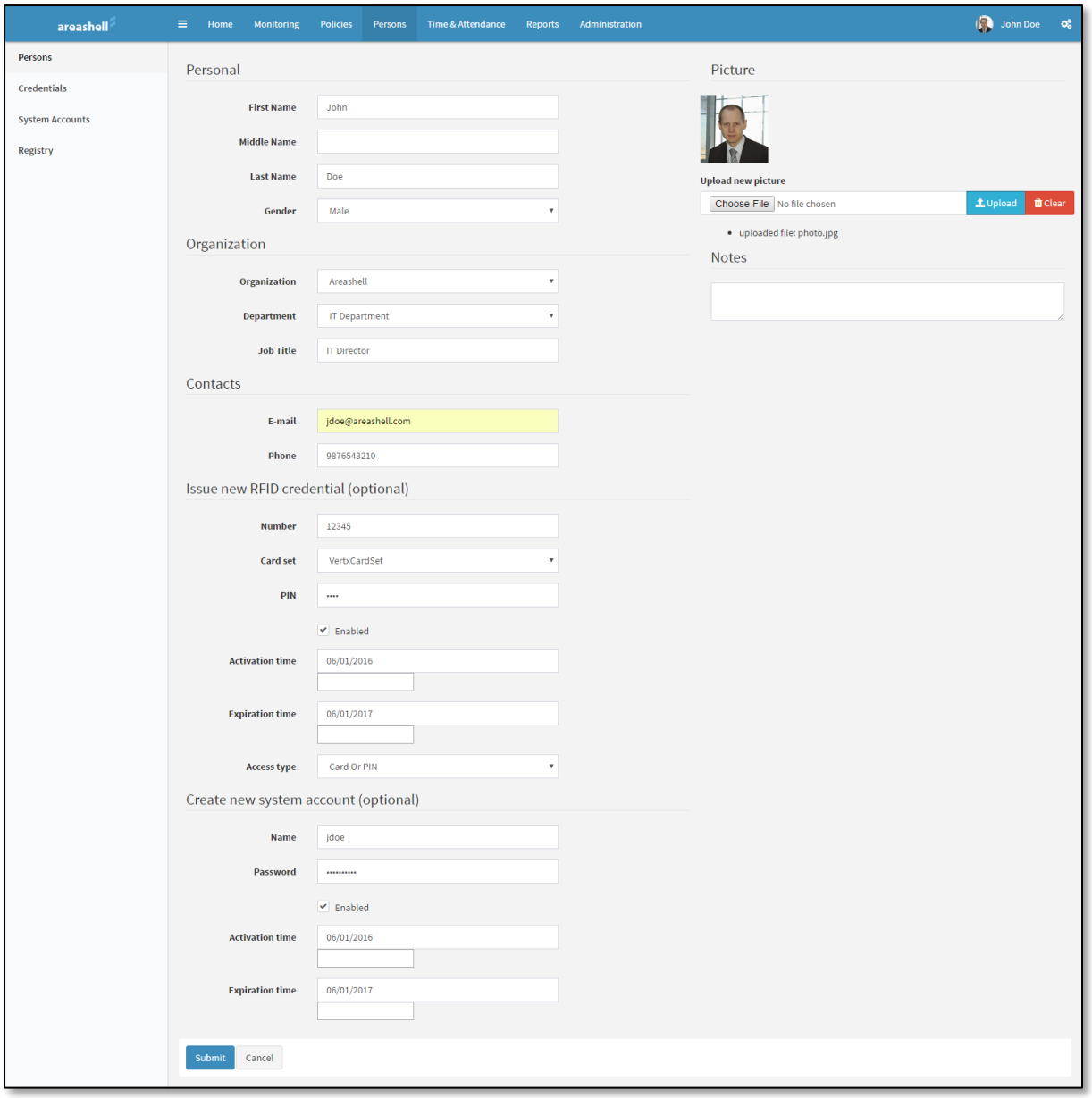
4.1.1 Registering users manually

To register a new user manually, select "Create / Register new user' from the toolbar.



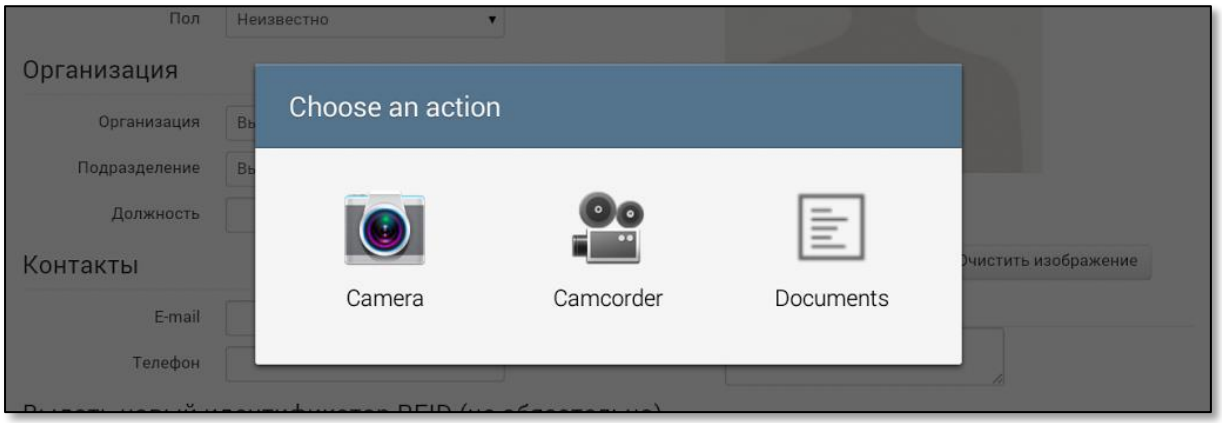
On the opened panel 'Changing the user data' the following settings can be set:

- User credentials;
- Data of access control system ID (in the section 'To issue a new ID RFID') to create it automatically;
- Data of Areashell system account (in the 'Create an account') for its automatic creation;
- Upload a photo (you need to click 'Upload', select the file in the window that appears, click 'Upload image');
- Specify the comment text in any form (comment only is reflected in the system and does not affect the process of loading of configuration to the controllers or user rights).



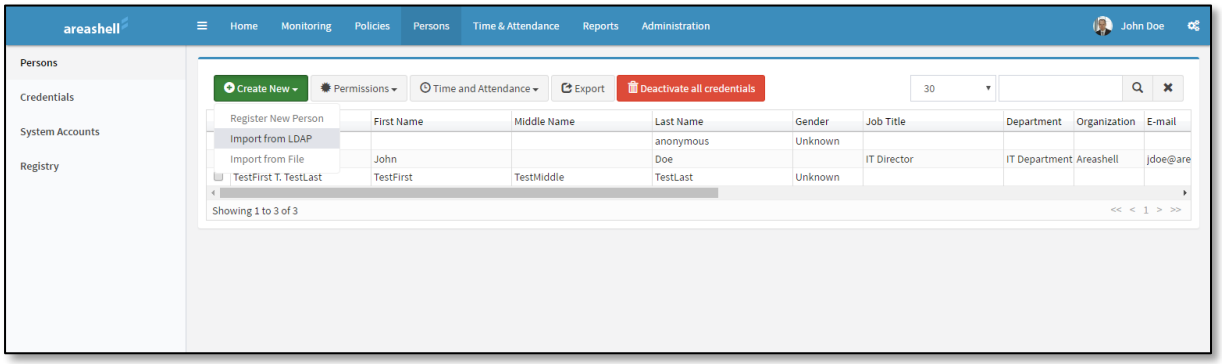
Comment. The picture loaded on the form, as well as other user data, is stored in the system database only after clicking 'Submit' at the bottom of the page.

Comment. When working on a mobile device in a mobile web browser that supports the proper function, there is an opportunity to upload a photo of the user directly photographing it by using the built-in camera device. In this case, after pressing the 'Upload' in the system window offering to select the device from which to import an image, select the built-in camera (Camera). After receiving the image in the camera, the saved file will automatically enter the field "Upload Image", where it is necessary to click 'Upload picture'. Save the properties by clicking the 'Submit' at the bottom of the page.



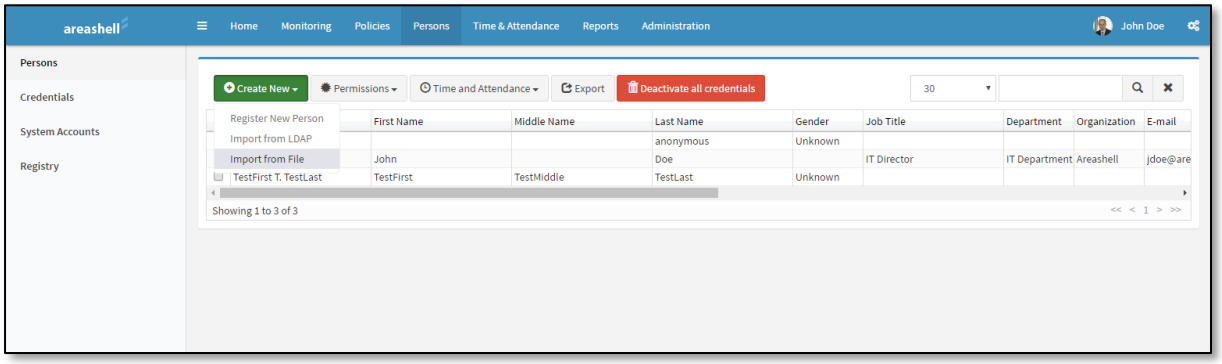
4.1.2 Registering users through importing data from directory services

To register new users by importing data from LDAP / Active Directory enterprise directory service, click on the toolbar "Create / Import from an LDAP directory."



4.1.3 Registering users by importing data from a file

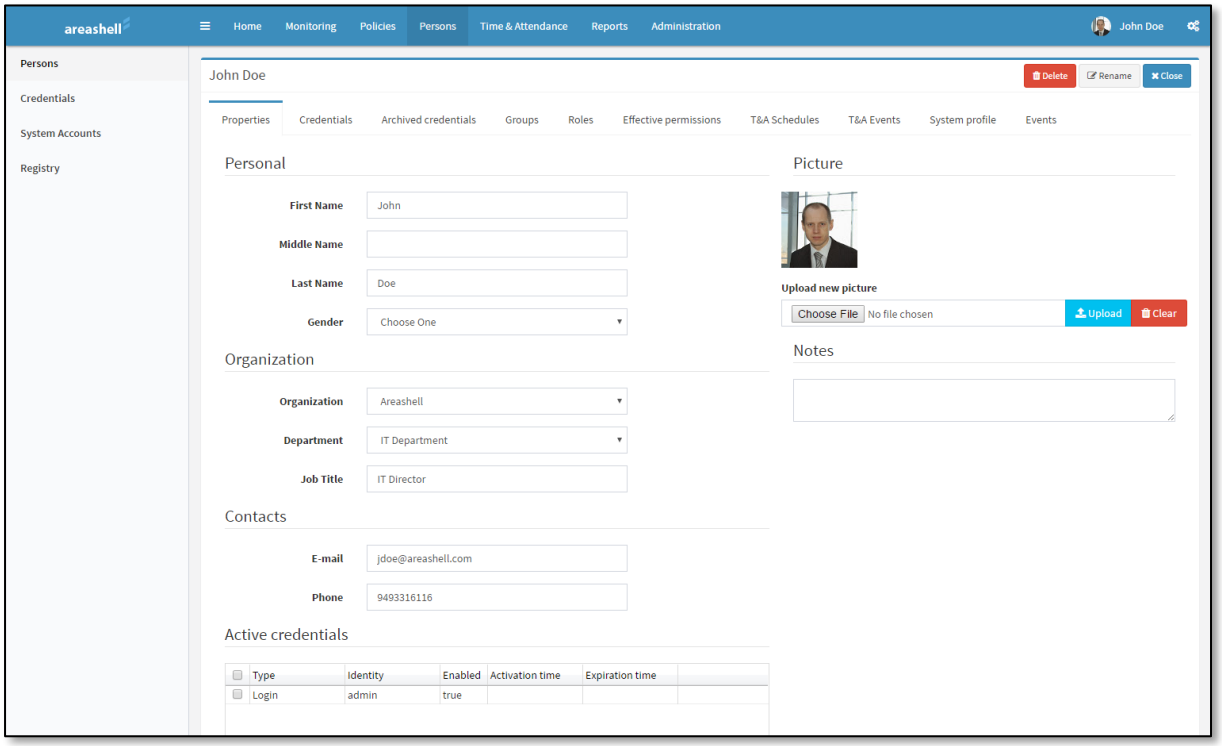
To register new users by importing data from a file, click on the toolbar "Create / Import from file'.



4.2 User data editing

To change the user data, the management of its rights' issue or withdrawal, identifiers need to select the user in the user table.

Editing of personal data or uploading of a new photo can be made on the tab Properties.



4.3 User Rights Management

To assign user rights to access to the premises and to the system functions, the roles are assigned to the user.

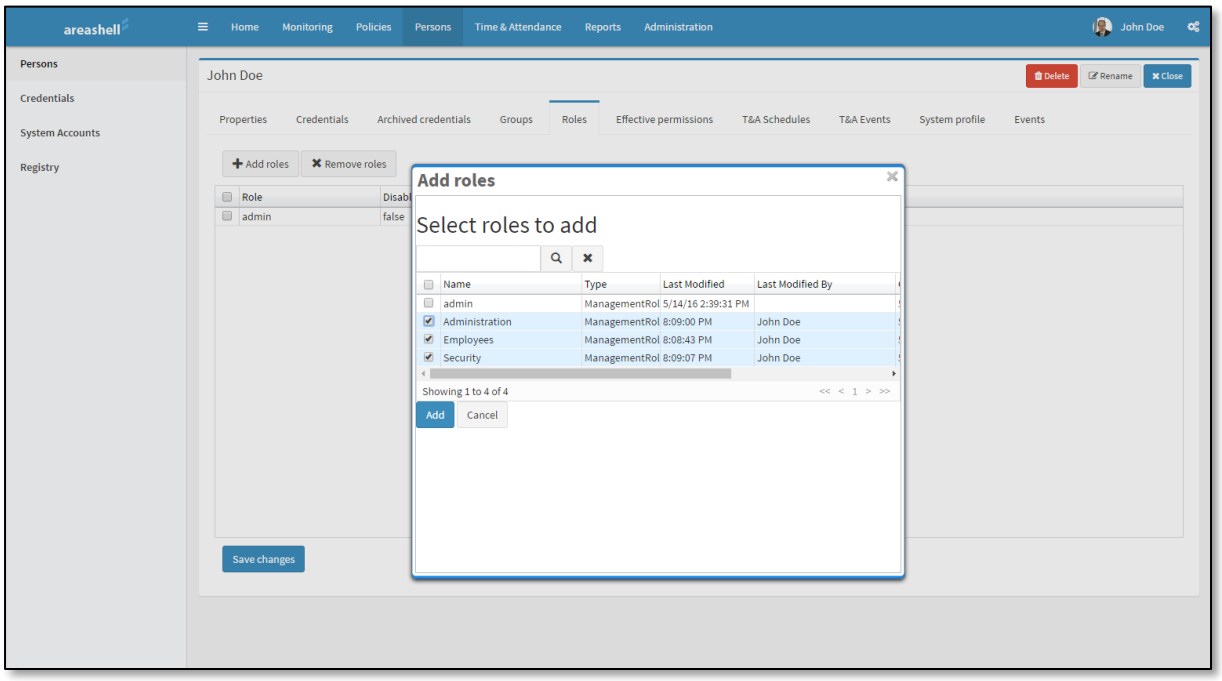
Roles can be assigned directly to users, by adding these roles in the control panel of user roles and indirectly through entering the user to the group.

A user can have several roles, and be included in multiple user groups. The user gets all the rights assigned to all his roles and all of its user groups.

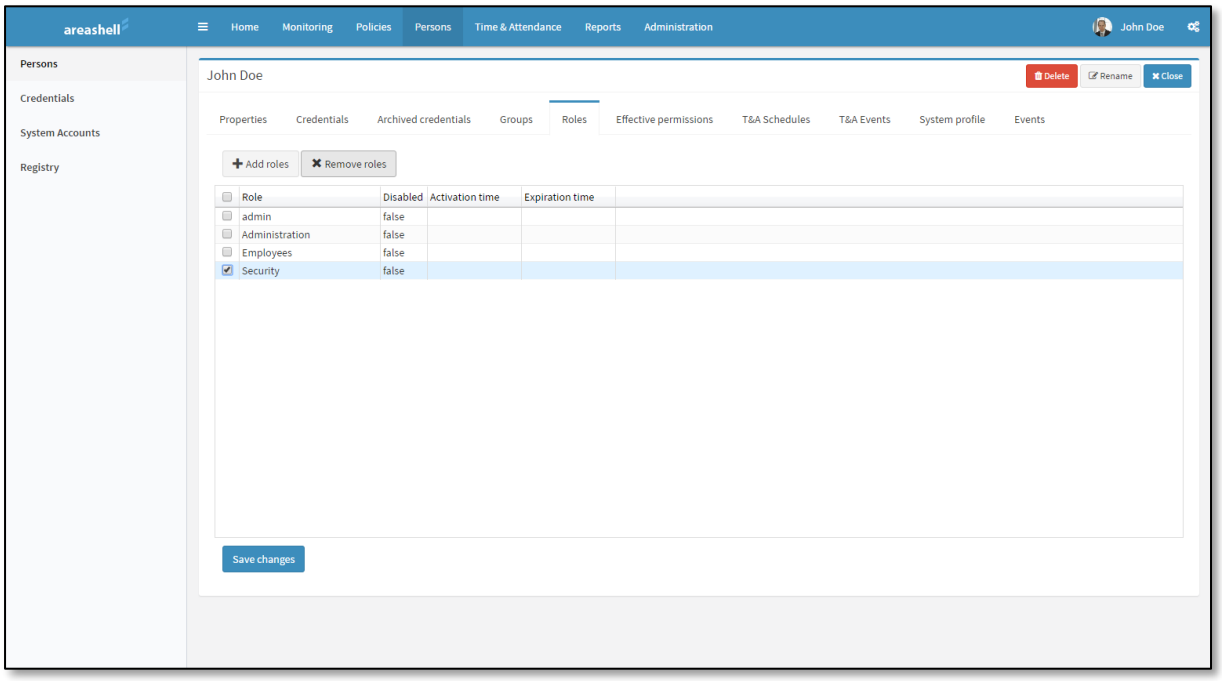
4.3.1.1.1 Direct role assigning to the user

Direct assigning of roles to the user is made on the 'Roles' tab.

To add a role, click "Add Roles", select the role in the window, click 'Add', click 'Save Changes'.



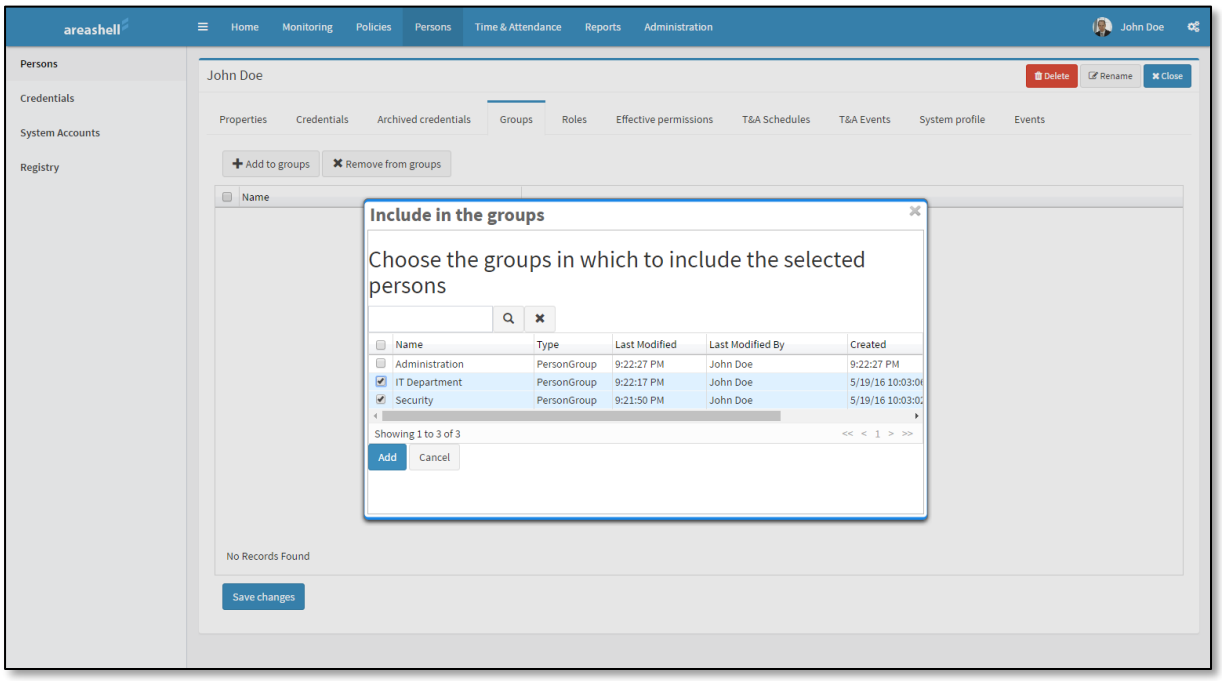
To remove previously assigned roles, select them in the list, click 'Delete role', click 'Save Changes'.



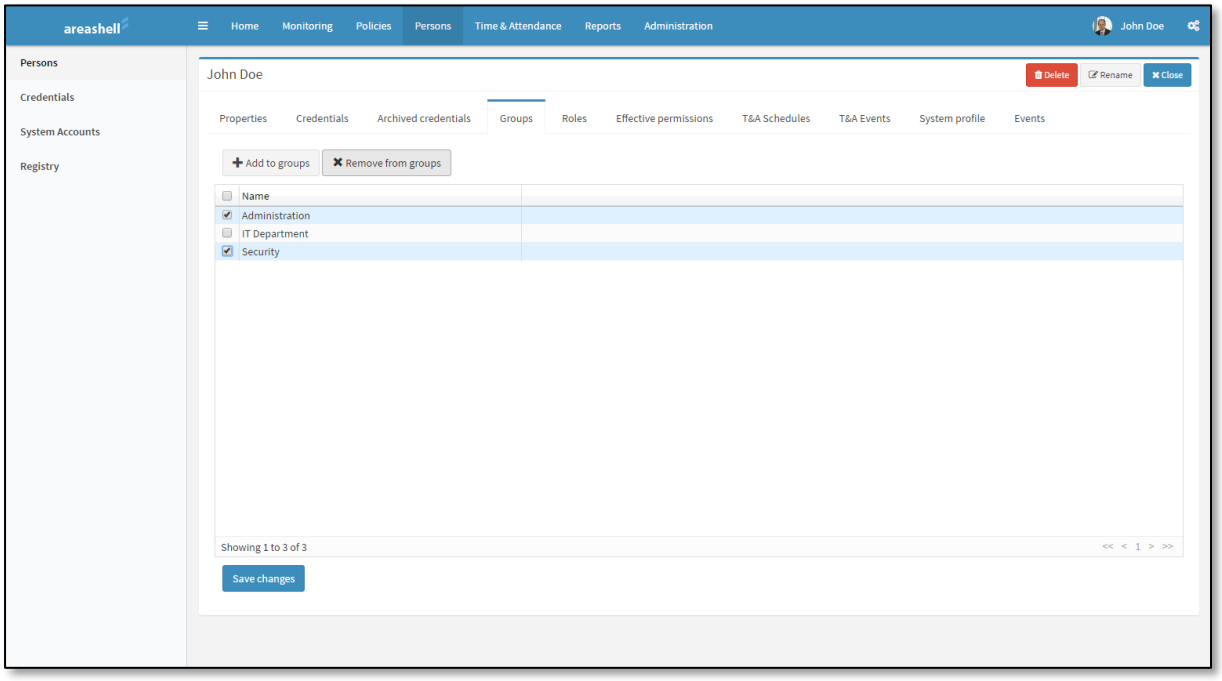
4.3.1.1.2 Including users to groups

Including users to groups is made on 'Groups' tab.

To add a user, click 'Add to Group' in the group, select the role in the window, click ‘Add’, click' Save Changes'.



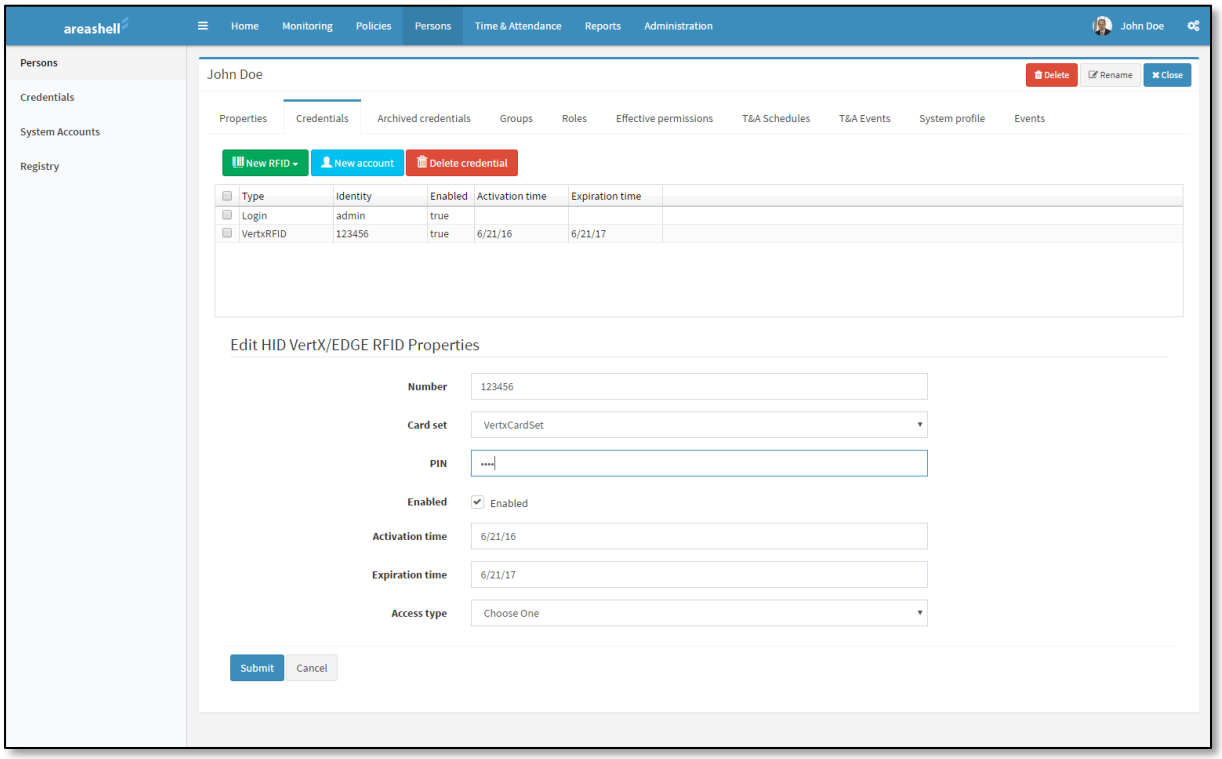
To exclude user from groups to which he/she was included previously, select it in the list, click 'Remove from group', click 'Save Changes'.



4.1 Administration of user credentials

Administering User IDs (cards, key fobs, RFID-tags, etc.) is made on the tab 'identifiers' of the user's card.

To register a new user ID in the access control system (physical access), click 'Create the RFID' tab 'identifiers', enter the ID parameters in the panel at the bottom of the page, click 'Apply'.

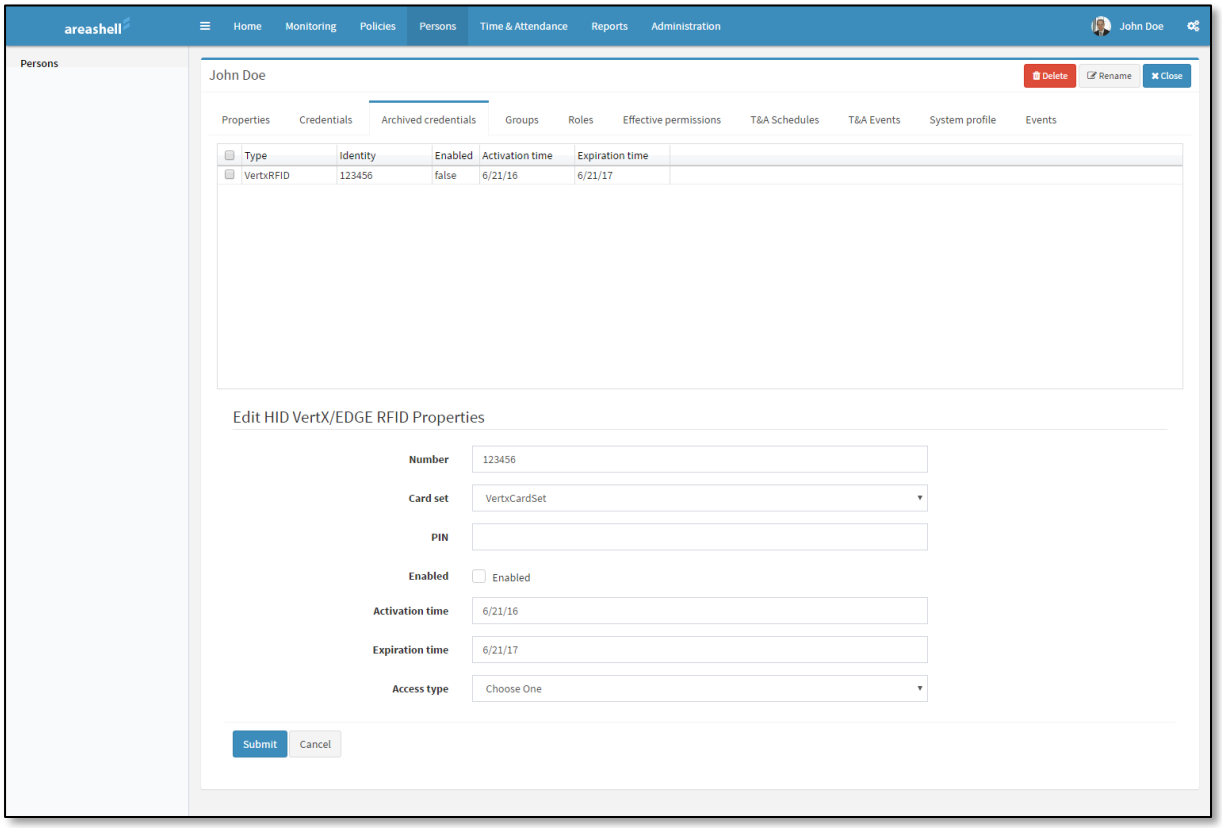


When selecting an identifier at the bottom of the page, the panel with the ID parameter is displayed. After correcting the ID settings, click Apply to save changes to the database system.

Specify the following options when configuring a holiday:

- Number – the identifier recorded on the recording medium (card, key fob, the RFID-tag, etc.), and read by the reader.
- Card Set – the system configuration object that describes the card format and its parameters (usually contains the organization code).
- If the card set is not specified, the conversion of the identifier read from the controller is not made, and it is necessary to set the original, complete ID number in the field Identificator's number.
  If the card set is specified, the controller converts the ID read from the media, and in the ID field it is necessary to set only a part of the individual identity without organization code, control bits and other identifier's fields.

- Activation time – the date and time from which the system allows the access to this identifier. Given a date has not yet arrived, then the access is denied and it will be denied till the date comes.
- Deactivation time – the date and time from which the system denies access to this identifier. If the date is set in the past, then the access will be denied to the ID.
- Access Type specifies the required for the presentation of the identifier (authentication factors). There are some options: Card Only, PIN Only, Card or PIN, Card and PIN.
- Enabled – this flag should be set for all identifiers that should have the access.



All active IDs immediately after the creation are loaded into all hardware controllers of the system, in the settings of which the 'Communicate with the configuration change' flag is set and to the readers of which the user has access.

Comment. Access permissions are not set for credentials. Access permissions are set for the user through assigning user's roles and including the user into user groups. These permissions are loaded into controllers for all active user credentials.

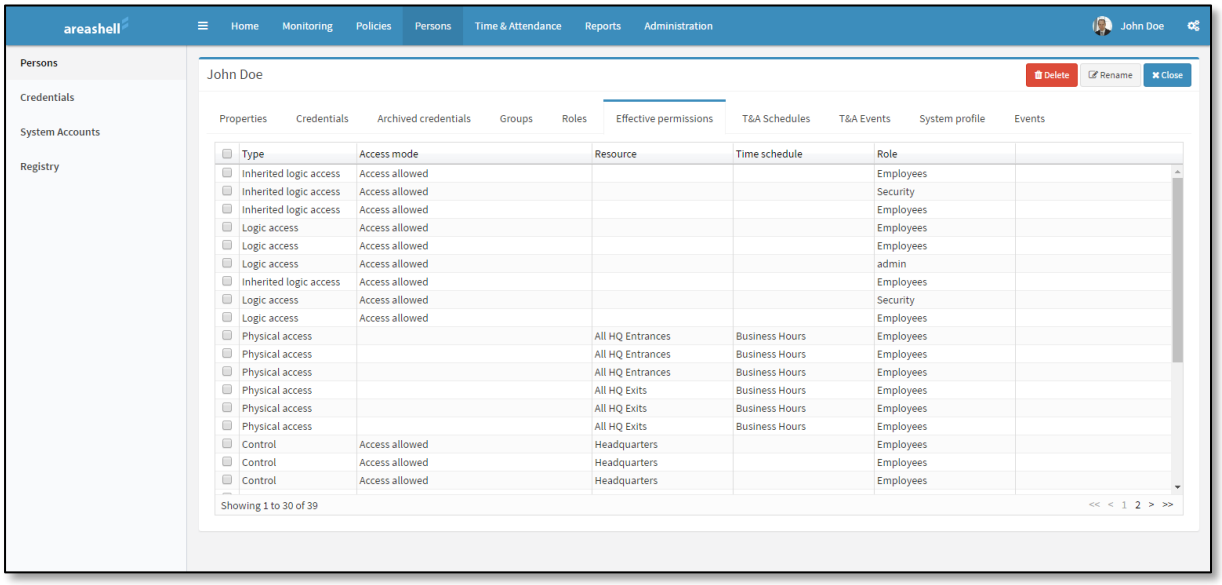
When unchecking the check box 'Activated' ID and saving the changes to the database a credential is removed from the control panels of the system, in settings of which the

check box 'communicate with a configuration change' is checked, a credential disappears from the list on the active IDs tab 'credentials' and appears on the inactive IDs tab' Archive credentials'.

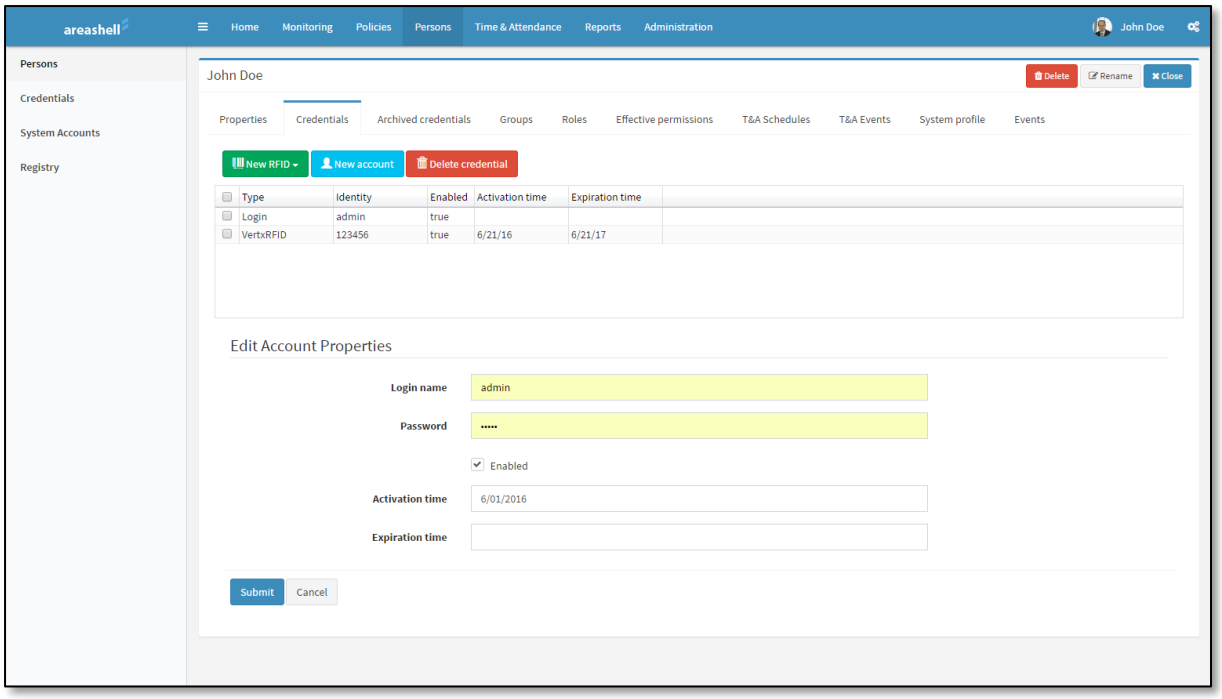
When checking an active credential in the list and pressing the button Delete, a credential is also deleted in the list of active credentials and moved to the list of inactive credentials.

In order to restore the activity of an inactive credential, select it from the list of inactive credentials (on the tab 'Archive IDs'), check 'Enabled', click 'Apply'. This ID will disappear from the list on the tab 'Archive credentials', appear on the tab 'credendials', and will be loaded into the control panels.

To control the list of rights obtained by the user through assigning roles and including in groups, use the tab 'Effective rights'.

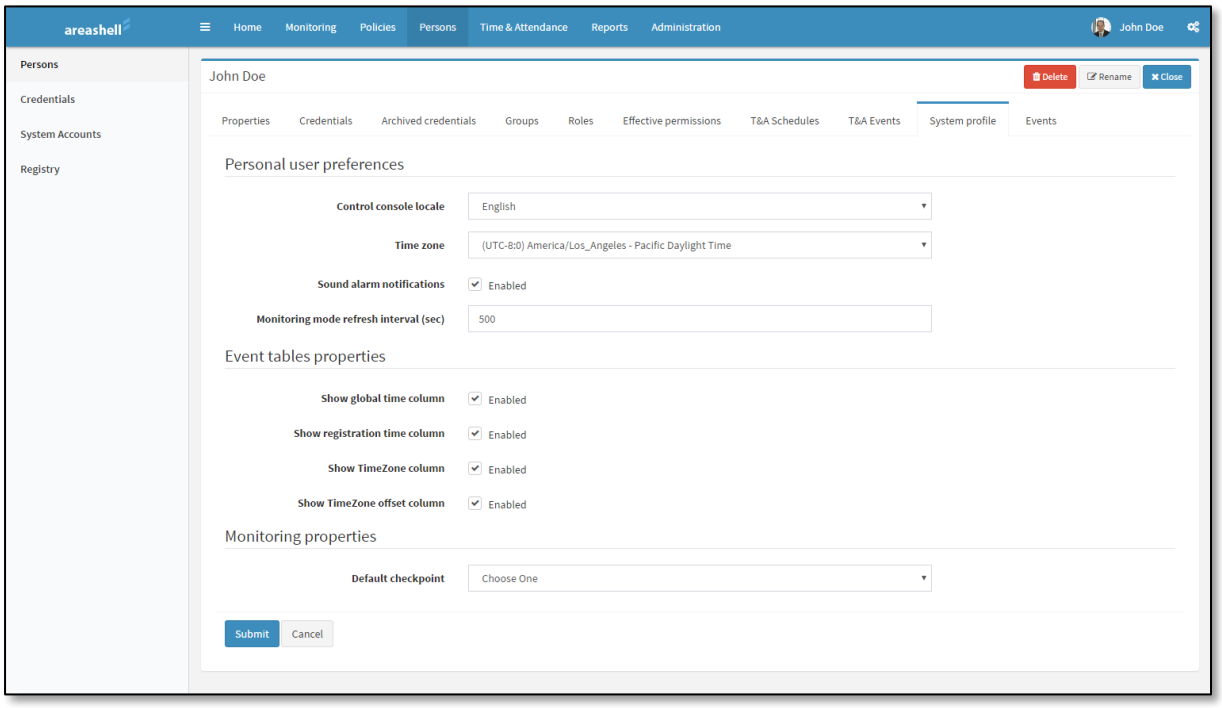


If such a credential as Account is created for the user in the list of credentials, then the user can log in to the web-based system management console.



Attention. The user account can be created automatically by the system if, when installing the system, the user authentication with the use of corporate directory service was configured and enabled, and the user entered into the system management console.

Parameters of the system work can be set for users who have an account in the system on the tab 'System Profile'.

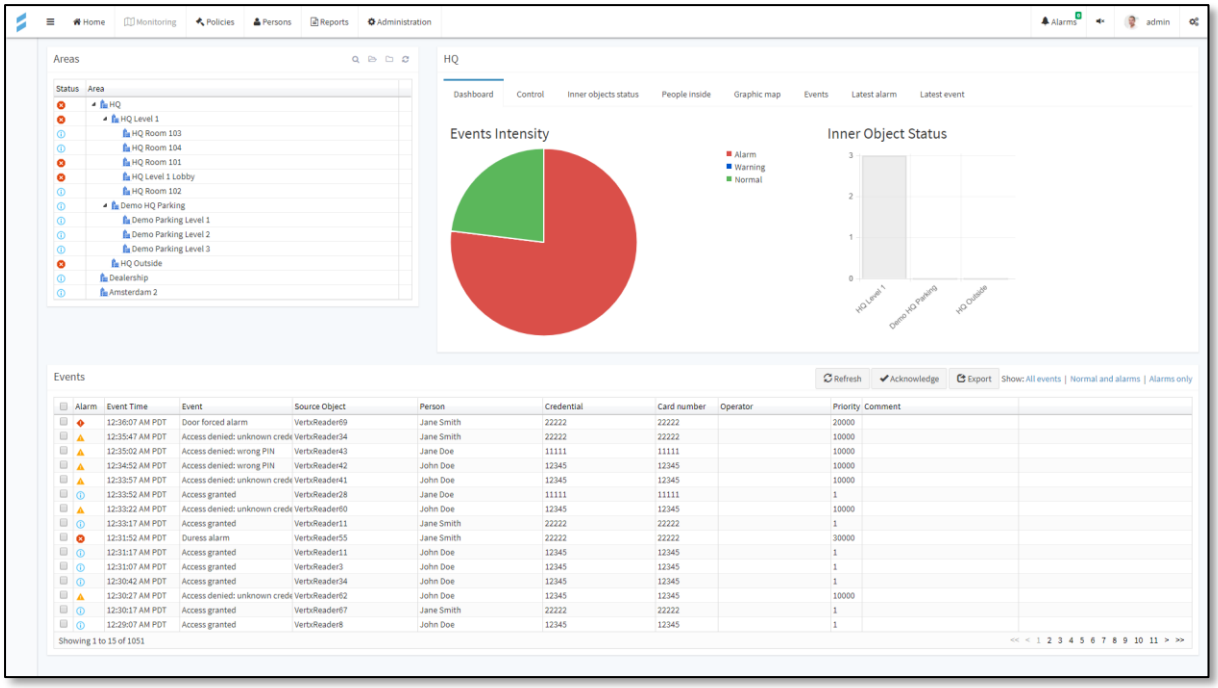


5 System monitoring and control

Tracking the current situation and the operational management of the system is carried out in the section Monitoring Console.

Several modes of operation are available in the section Monitoring.

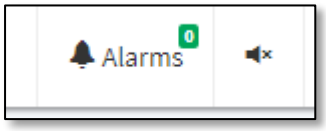
- Areas – monitoring the status of areas, tracking the user location in the areas, tracking and managing objects in the areas;
- Graphic Maps – monitoring system state objects status in the local graphic plans;
- Checkpoint – message monitoring on several specific readers in the form of cards;
- Object location – monitoring the current position of mobile objects in the global graphic plans;
- Only events – monitoring new events in the system in the form of a table.



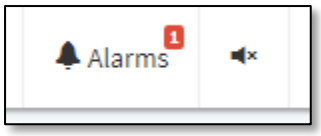
5.1 Alarm acknowledgment

The button Alarm in all modes of section Monitoring in the title bar shows the current number of recent unacknowledged alarms.

If there is no alarm, the button displays value 0.

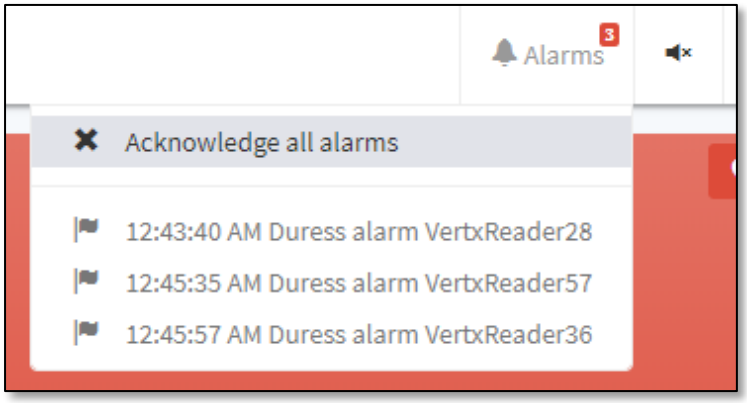


When the alarms happen, their numbers are displayed and there is an audio signal that attracts attention (the use of audio signals should be allowed in a web browser for this web site).



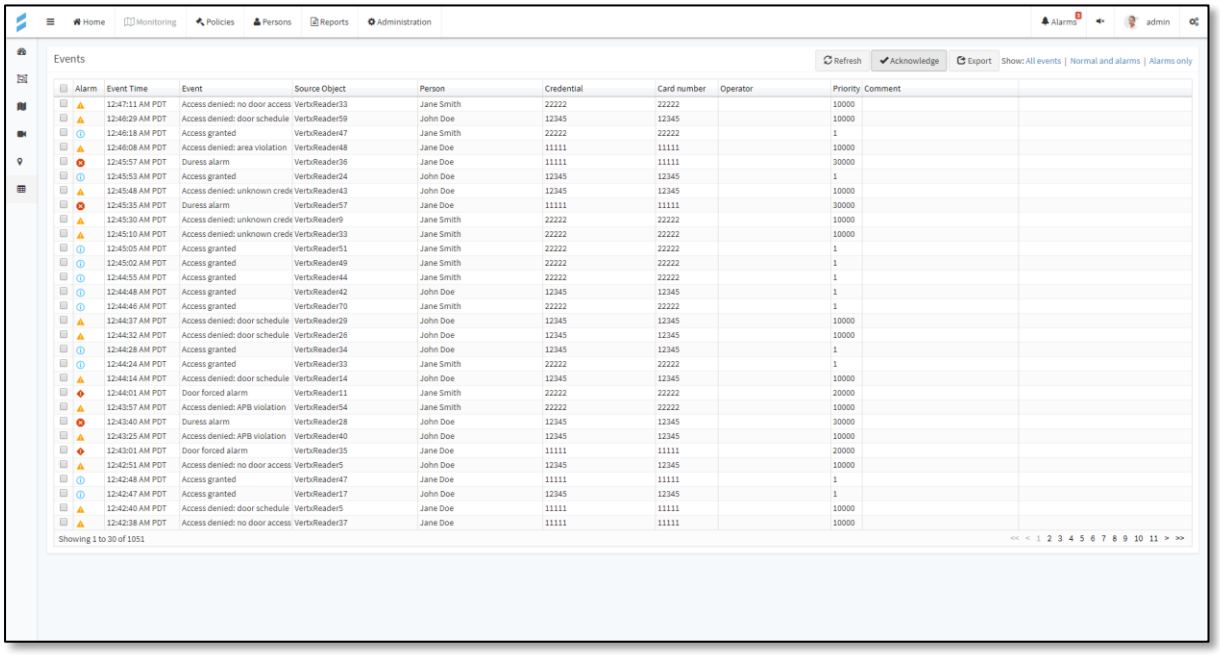
When pressing the alarm button the panel with a list of unacknowledged alarms opens. Any alarm can be acknowledged by selecting it in the list. All the alarms can be acknowledged by selecting 'Confirm all alarms'.

After confirmation, the alarm disappears from the list and, if there are no unacknowledged alarms, the alarm button displays 0 and the audio signal disappears.

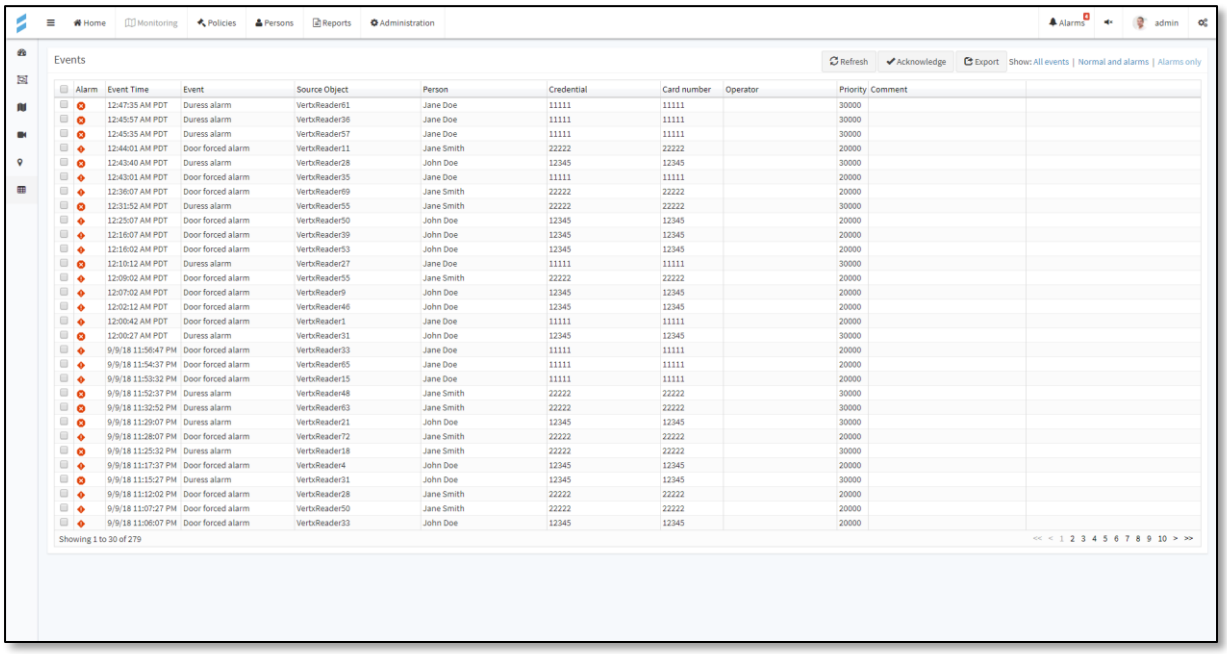


5.2 Event monitoring in table mode

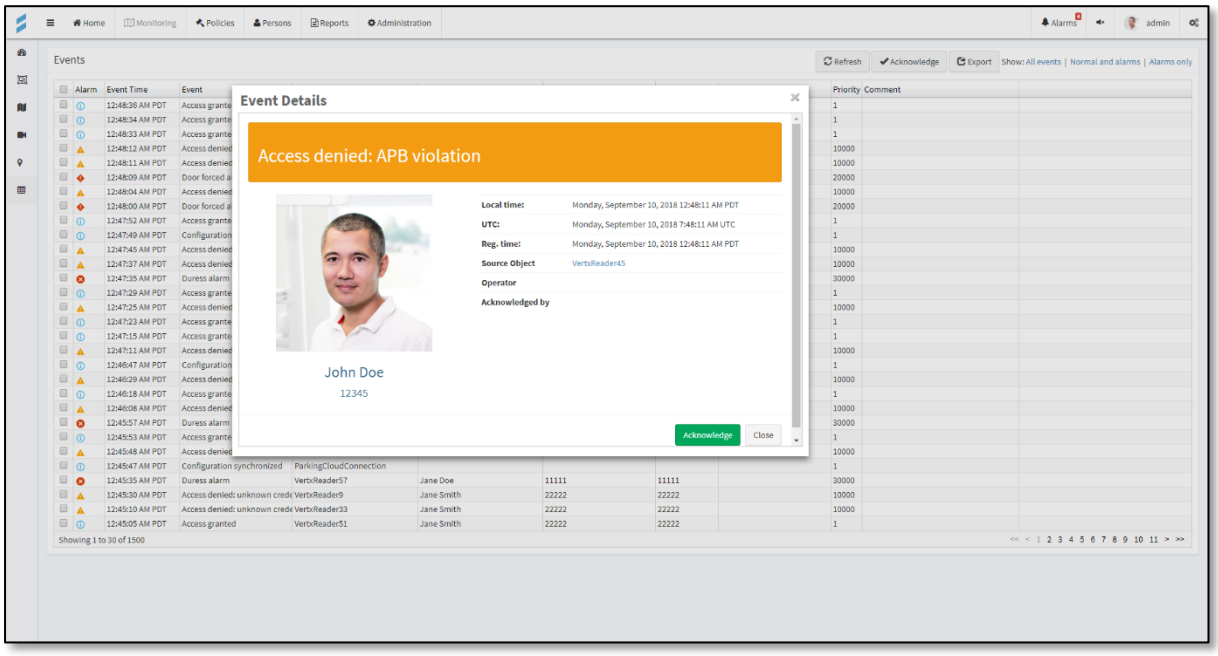
Monitoring new events appearing in the system in the form of a table is available in a special mode Only Messages in Monitoring section and in Areas, Graphic Maps, Location modes.



The events in the table can be filtered according to their alarm level. To view all events in the table, select the title 'All events'. Select Only Alarms to view alarm events only.



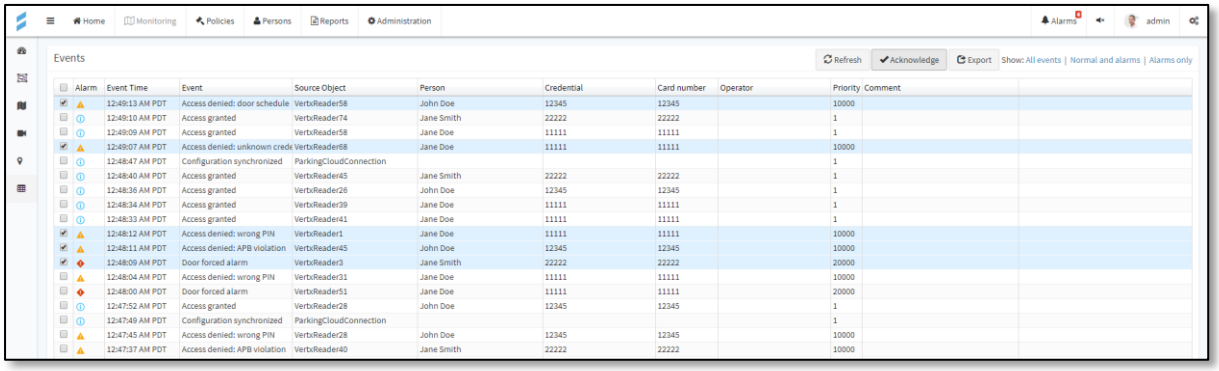
To view more detailed information about an event, click on it in the table.



To save in the database the confirmation that the original message of the event has been viewed by the operator click Acknowledge. A separate acknowledging message with information about the operator who acknowledged it and the exact time of acknowledgement is saved in the database. If the event has already been acknowledged, the acknowledgements field displays the names of the operators who have acknowledged it.

Click Close to return to the event table.

To acknowledge several messages, select them in the table, checking the checkboxes in the first column of the table (check the checkbox in the title of the first column to select all the rows in the current page) and click the Acknowledge button



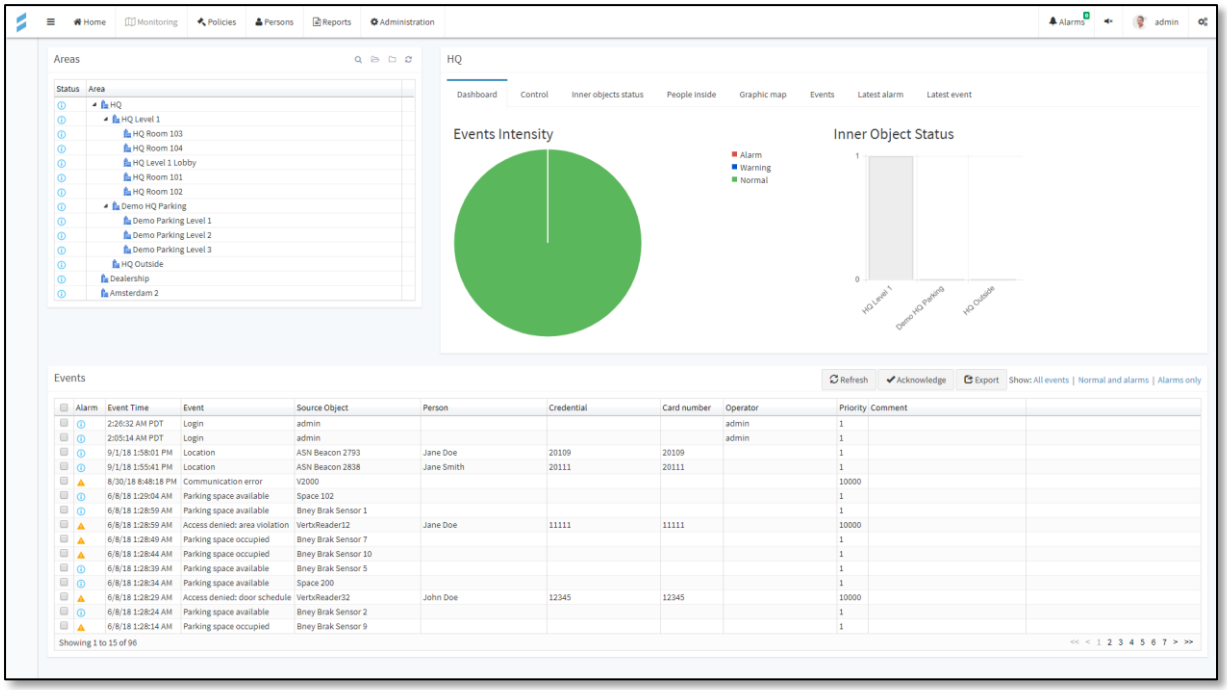
5.3 System monitoring in areas mode

The tree panel area (top left), the panel of the state and control of the selected area (top right), and the panel with the recent events table (below) are displayed in the page in the area mode.

The icon on the panel with an area tree in the column Status displays the status of each area. If any area has an alarming status, then all groups of areas in which it is included will have the alarm status too. For example, if the area Room is included in the group of areas Floor, which, in turn, is a part of the areas of Buildings, and if the alarm message comes from any object, located in the room, then the alarm status will be in all three areas: Building, Floor, Room.

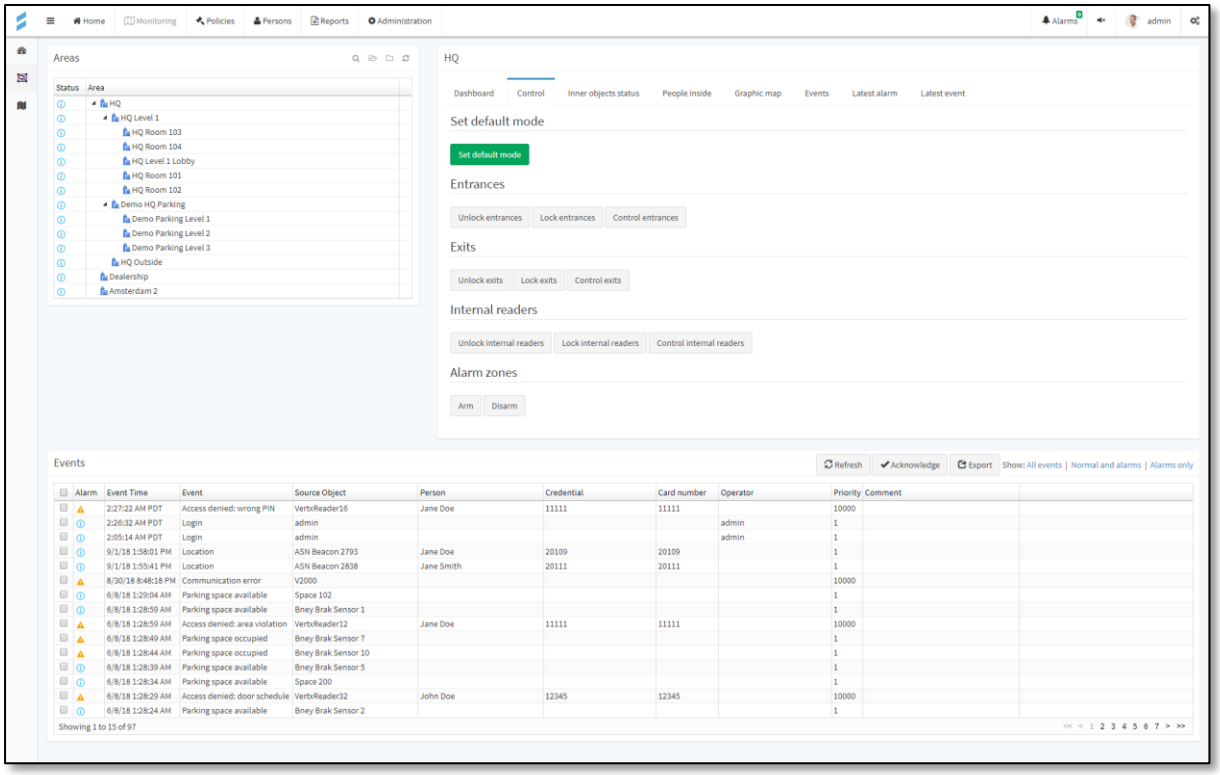
When selecting any area in the area tree in the panel to the right, there appears the panel with a set of bookmarks, which display detailed information and zone status of objects in the area that are included, users, the domain control panel and the objects located therein.

The tab Panel displays general information about the status of the selected area: the ratio between the current number of alarm and non-alarm messages, a chart showing the number of messages from the sub-areas of the selected area.

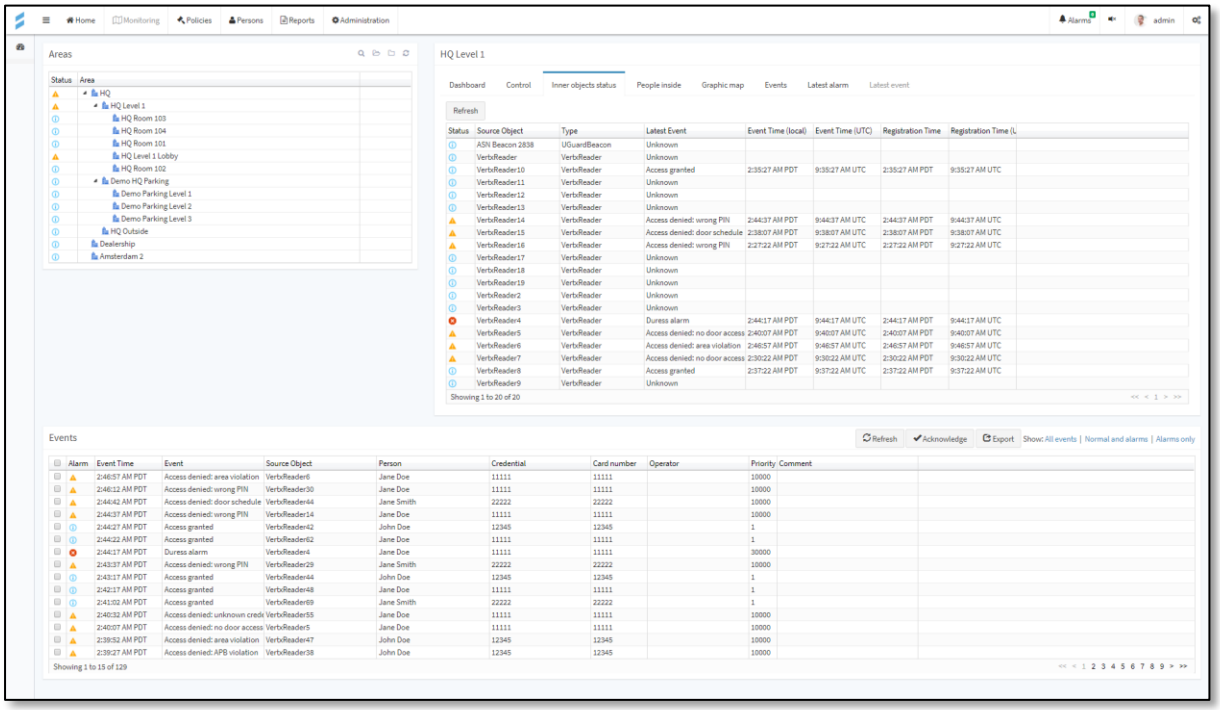


An area control command can be executed on the Control Panel: to move all of the objects in the default mode, lock or unlock the inputs or outputs, supply or disarm zones located in the area, etc.

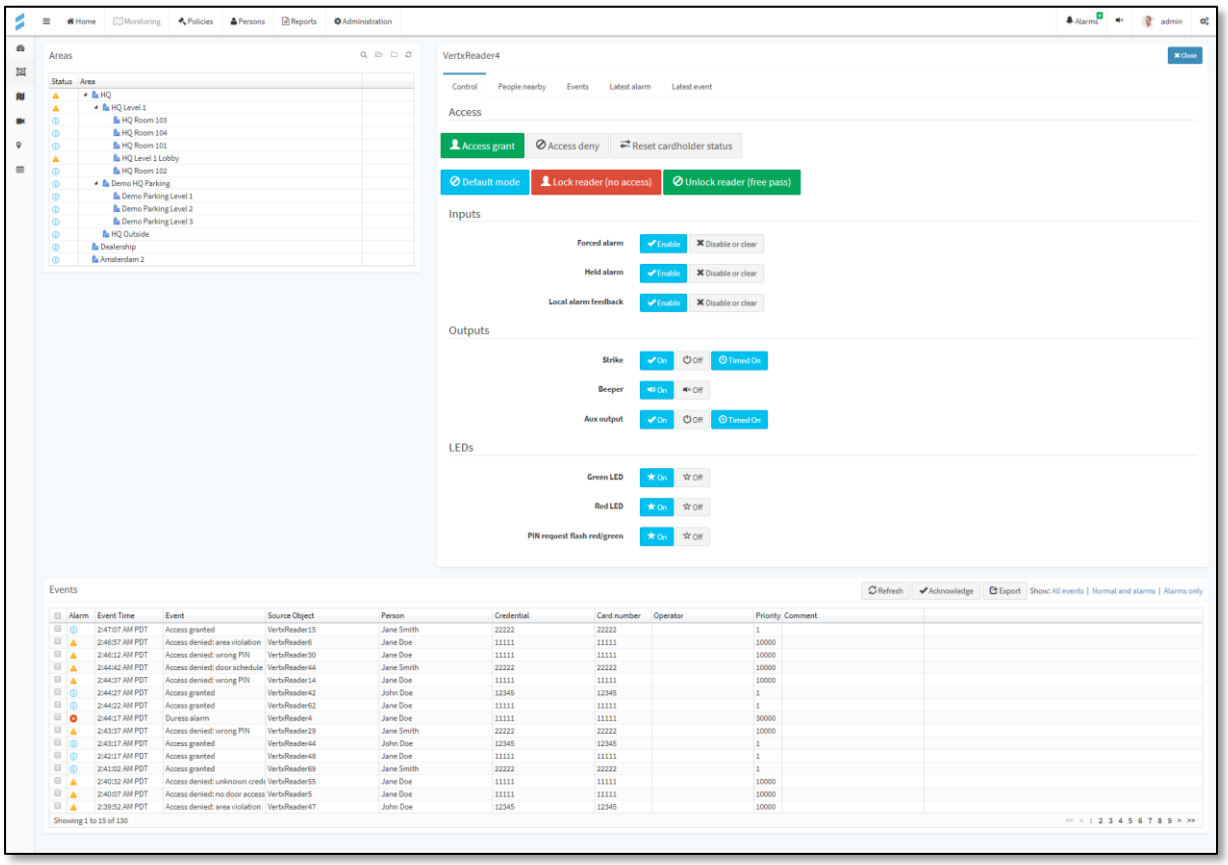
Attention: If the selected area contains enclosed areas, the command will be issued to all the objects in all enclosed areas. For example, if to issue the command 'Disarm' for the area Building, then all alarm zones in this building will be disarmed.



The tab Inner Object Status displays a list of all enclosed objects that are in the selected area. The column Status displays the alarm status of objects. The columns Latest Event, Event Time, Registration Time display the relevant information about the recent events on the mobile objects.



To open object control panel, select an object in the list (display panel depends on the type of object selected). After giving the control command of the chosen object, it is possible to return to the list of objects in the area, by clicking the Close button in the object control panel.

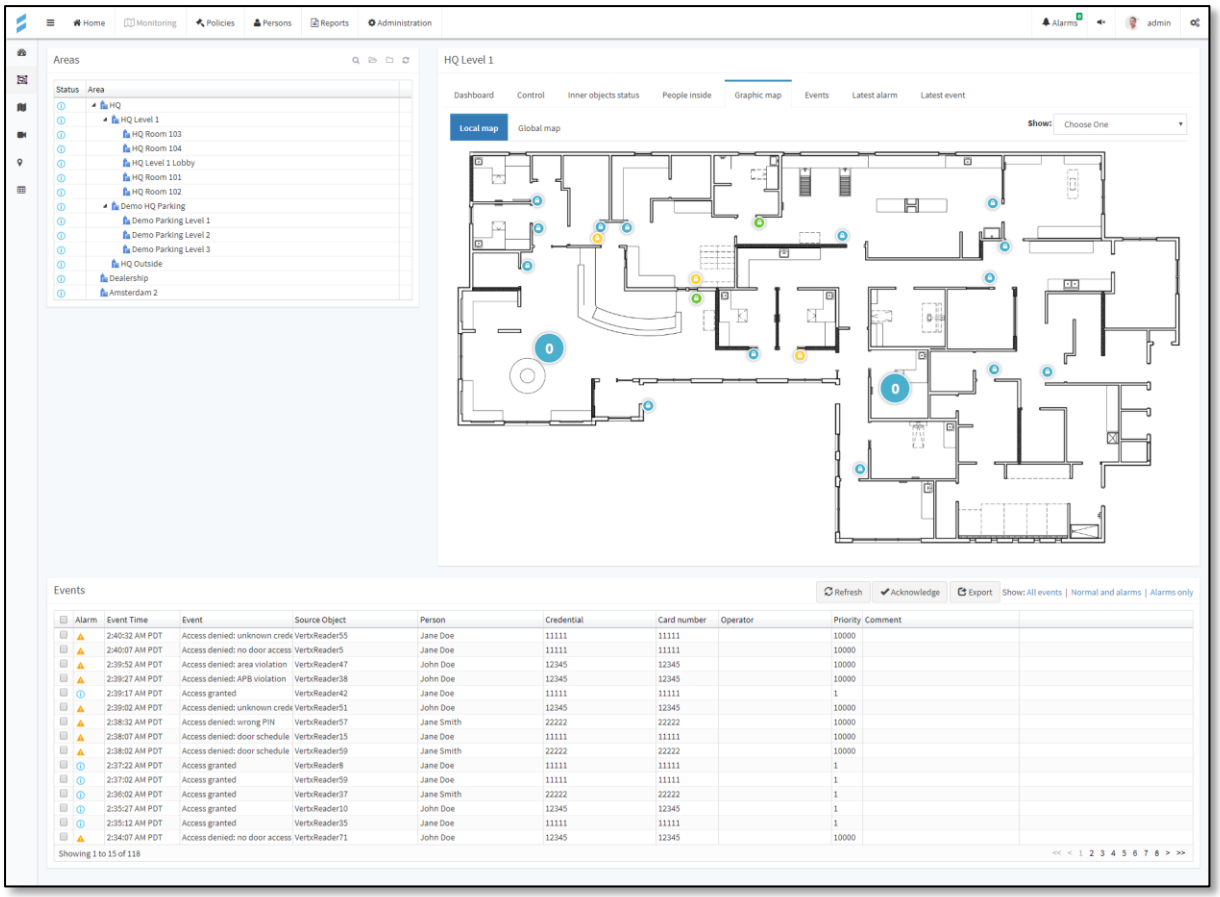


It is possible to view the list of people in the chosen area on the tab People Inside. When selecting a group of areas in the given list, a list of all users, who are in all the internal areas of the selected group, displays. That is, by choosing, for example, the area Floor, it is possible to get a list of all users who are on this floor, and by choosing area Building- all the people in the selected building.

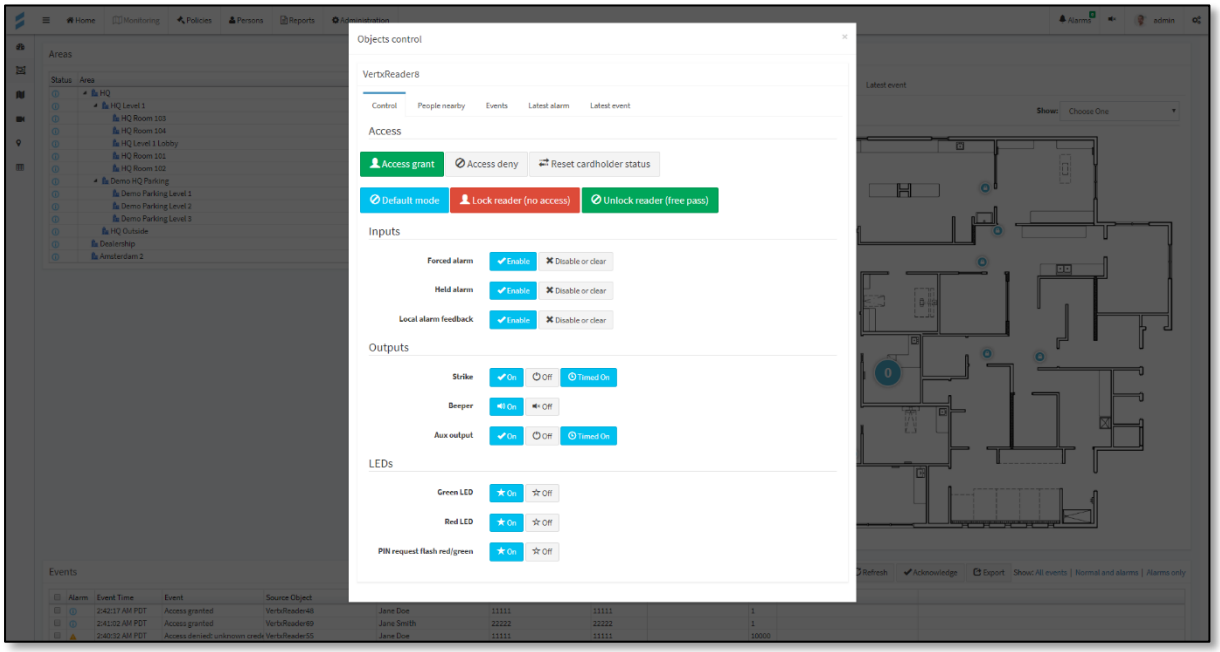
The tab Graphic Map shows a local graphic map of the area with the objects located in this area (if the local graphic map is specified in the area settings) or a global map of the area with all the objects located there.

If the area has both the geographical location and the local graphic map, switching between displaying local and global map can be done by pressing either the Global map or the Local map in the header of the panel.

The state of the objects located inside the area (or internal areas of the selected area) can be seen on the local graphic map in the Local Map mode.



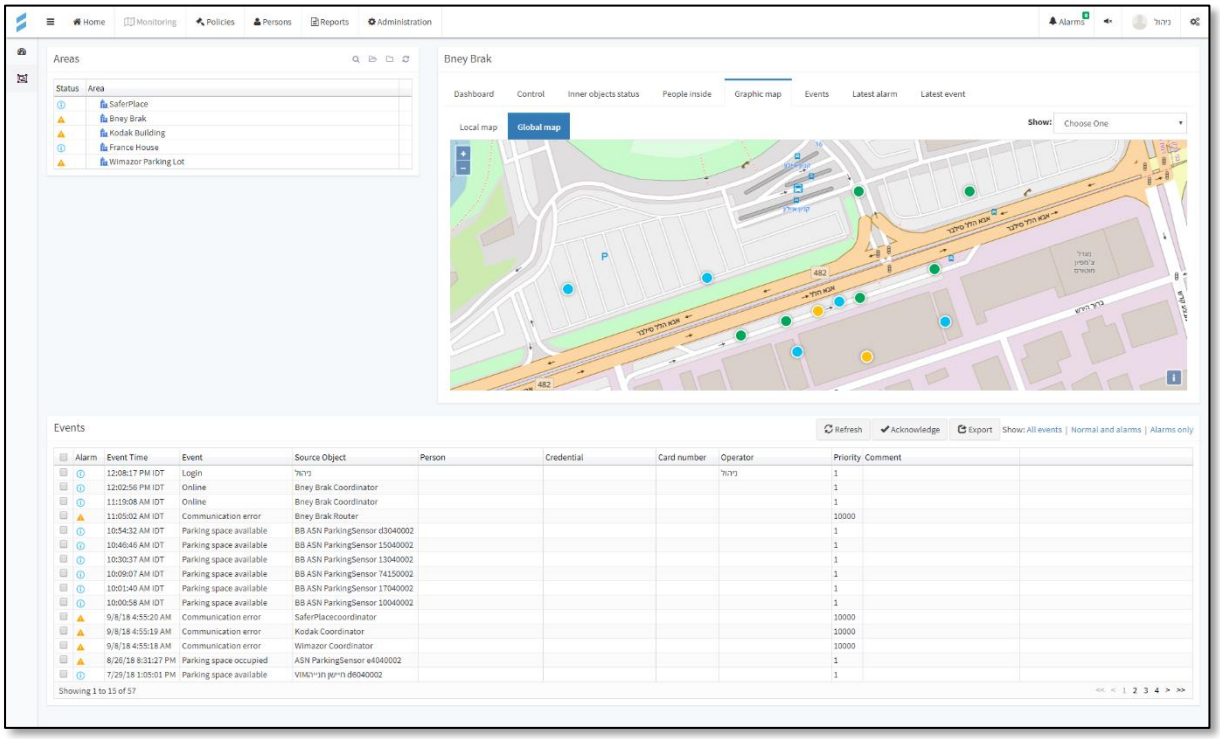
When selecting any object on the local graphic plan, the object control window opens. This window displays the list of recent posts on the subject. There it is also possible to give a control command (similar to Internal Objects Status tab).



The facility control window can be closed by checking the cross in the upper right corner.

The location and status of the objects or subareas,located inside the selected area, can be seen in the global map in Global Map Mode.

When selecting an object or subarea marker on the map, the object control window opens.



The work with events in the table is performed similarly to dealing with events in the mode Events Only.

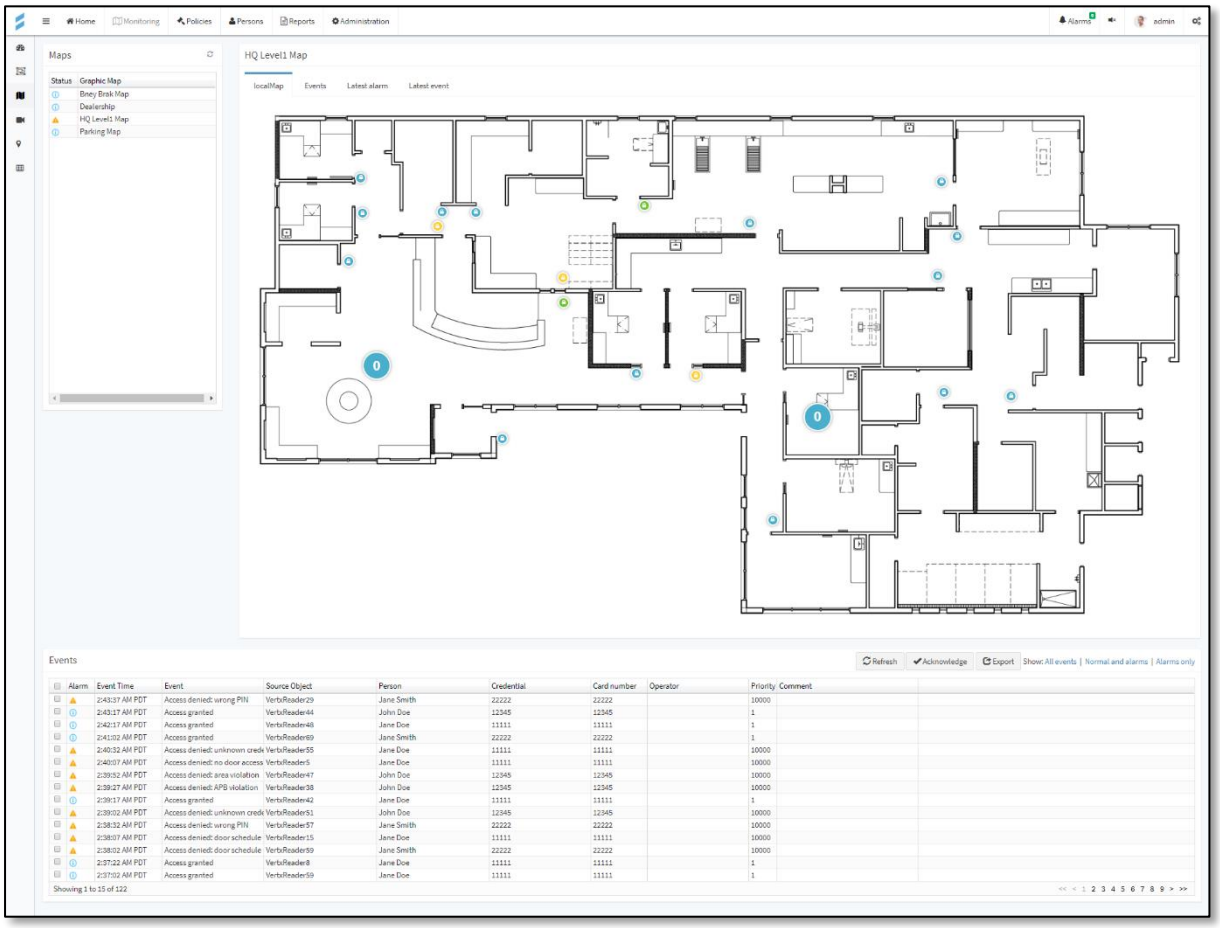
5.4 System monitoring in graphic map mode

The Maps page displays the list of graphic maps registered in the system (in the top left corner), the panel of the selected graphic map (in the top right corner) and the panel with the recent events table (at the bottom).

The column Status of the graphic maplist displays the status of each plan. If any object on the plan has an alarming status, then the map itself will have an alarming status too.

When choosing any map in the list, a panel appears in the right panel with this graphic map, where the icons displayed on the map are the objects of the system.

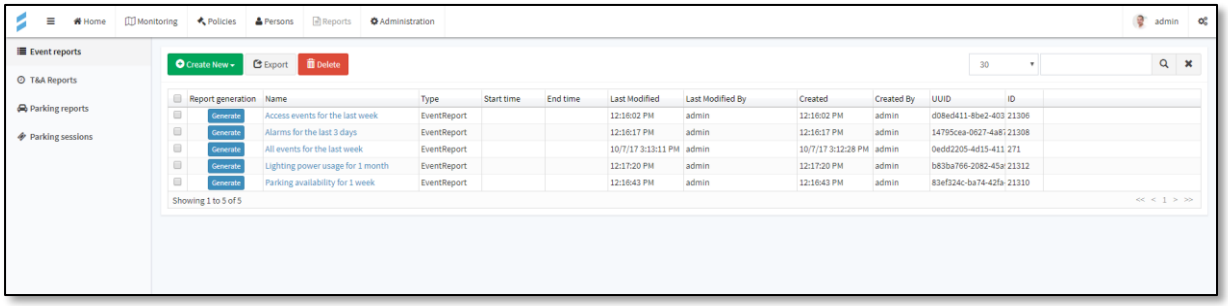
When selecting any object on the graphic map, the object control window opens. In this window, it is possible to view the list of recent events on the object or issue a control command (similar to the Inner Objects Status tab).



Working with events in the table is similar to working with events in the Events Only mode.

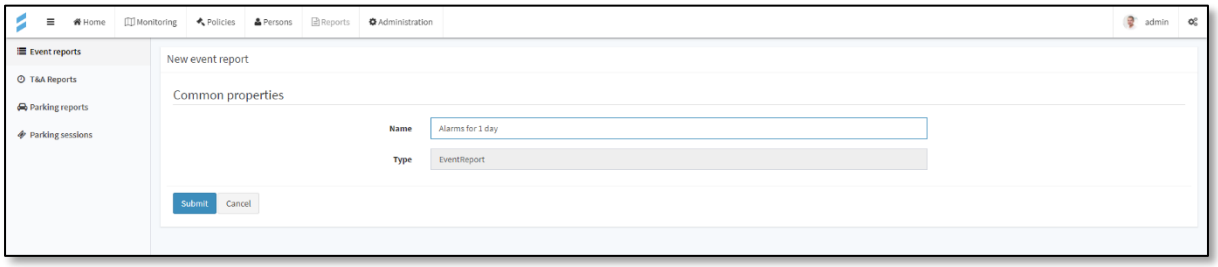
6 Reports

Reporting is made in Reports section of the console.

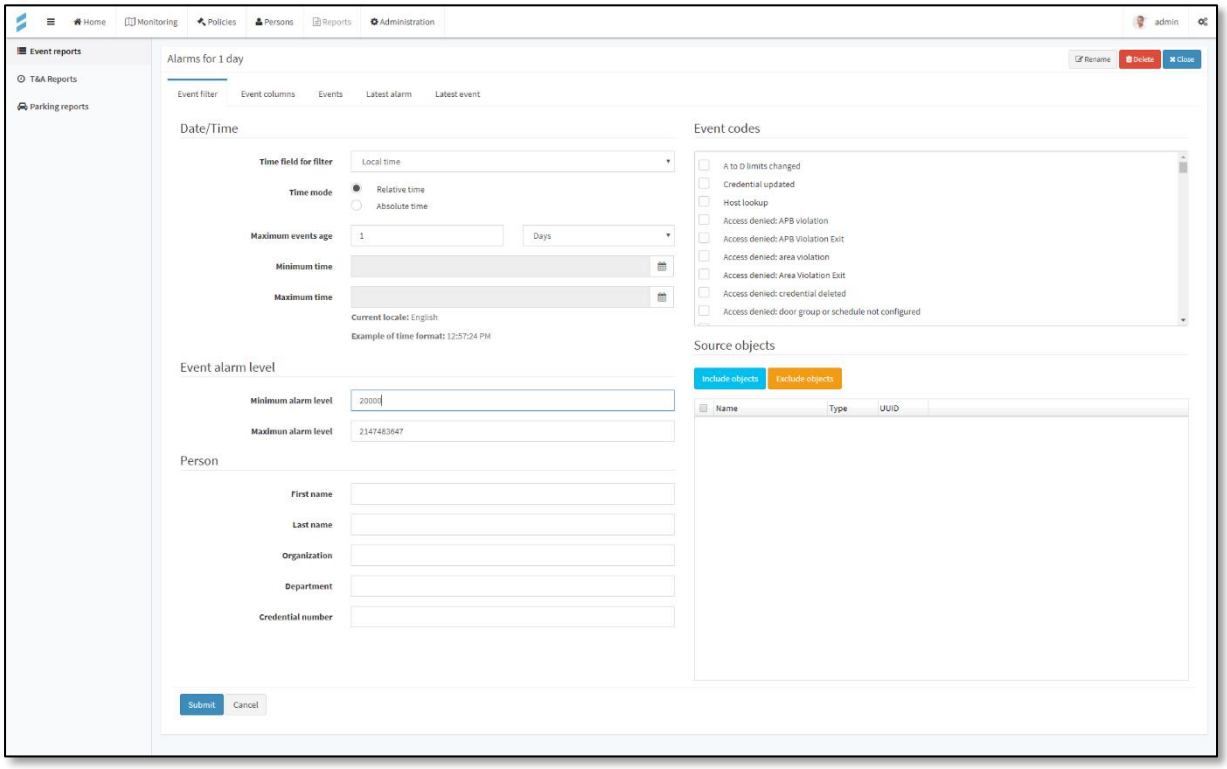


To create a report, first create its configuration by clicking Create / New event report.

In the panel ‘Create a new event report' enter the name of the new report, and then click 'Submit'.



Open the created report by selecting it in the table. The panel with the report configuration opens.



Specify the following settings when configuring the report:

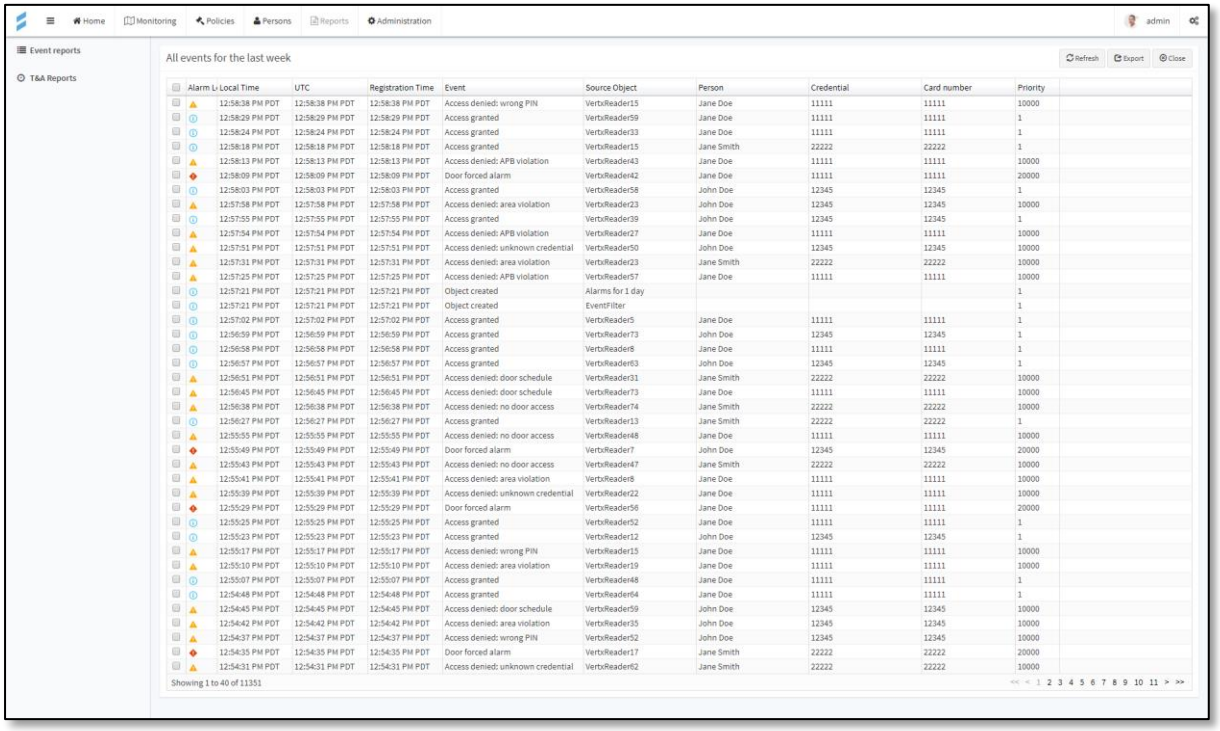
- Time field for filter – parameter that allows selecting the time field in which the events will be filtered;
    - Local time – time of event occurrence received from the controller (or the local time of the server for events generated by the system itself, and not derived from hardware controllers);
    - UTC – the time of the event occurrence received from the controller, but reduced to the time zone UTC;
    - Registratin time – the time of registration of events in the system database (may be different from the local time in the case the events took place in offline mode, ie when there is no communication between the controller and the server).
- Time selecting mode:
    - Relative time – the time in the report filter is relative to the time of its generation;
    - Absolute time – the time in the report filter clearly indicates the settings, regardless of the generation time of the report;
- Maximum age of the events – can be set only in the Relative time mode
- Minimum time and Maximum time – can be set only in Absolute time mode

- Minimum and maximum alarm levels allow filtering the events by the alarm levels
  The following event alarm levels are used:
  - Normal events – 1000;
  - Events that need attention – 10000;
  - Alarm events – 20000;
  - Alarm events, critical for the system as a whole - 30000.
- The list of objects, the events of which should be included in the report, can be specified in the list of events sources.
  If the list is empty, than the events are not filtered by this parameter, and the report will include the events from all system objects.
  To include objects in the list, click Include Objects button, check the needed objects in the window, and click' Include '.
  To exclude objects from the list, check them and click 'Exclude Objects.
- User / Fist Name or Last Name – enter the part of a first name or last name of the system user, whose events are to be included in the report. Events of other users will be excluded from the report. If the field is empty, the report will contain the events of all users and events, where the user is not specified (alarm messages, etc.)

Click Submit to save the report configuration in the system database and Close to return to the reports table.

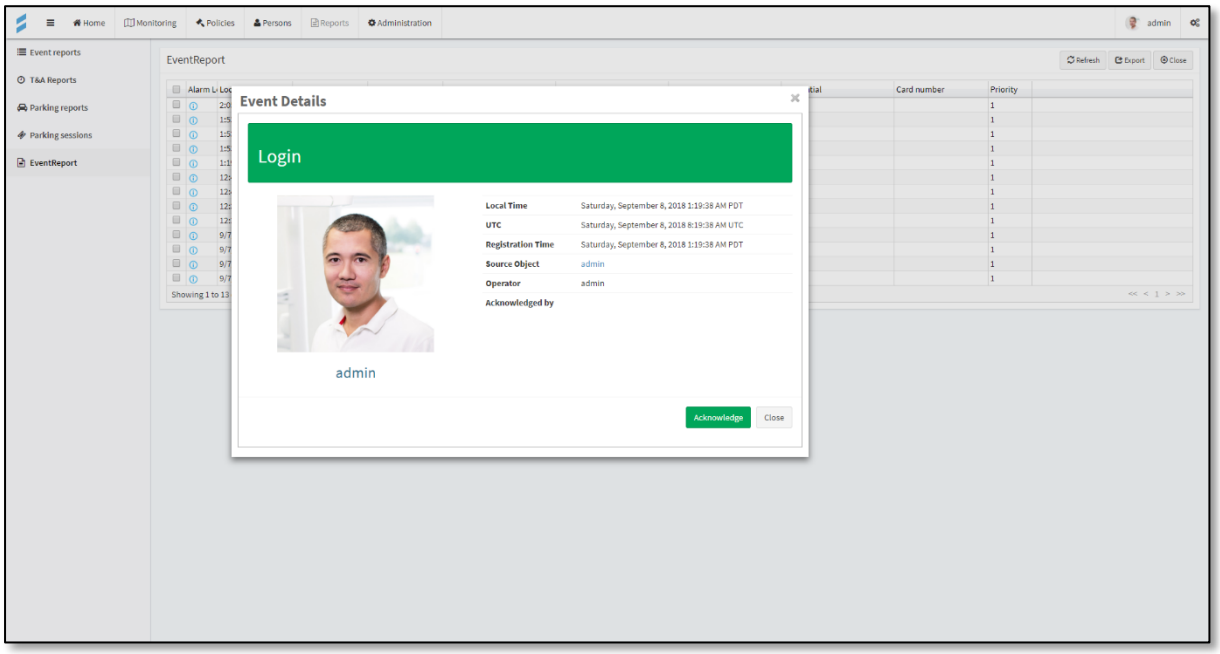
To generate the report, click Generate in the Report Generation column in the line of the required report in the report table. A new tab with the name of the generated report will be created in the side menu. This tab will be automatically selected, and the generated report will appear on the page.

The report is displayed on multiple pages, the navigation between them is carried out by using the links at the right bottom of the report table.



The generated report can be exported to a CSV file (comma separated values file) by clicking on the Export button.

To view more information about an event, select it in the table.



Multiple reports can be generated at the same time. It can be done by generating new reports on the Reports tab in the top secondary menu. A new tab in the side menu will be created for each new report. These tabs can be used for navigation between the generated reports. To close a tab, click on it and then click 'Close' in the title of the report table, then the tab will disappear from the side menu.

7 Technical support

If you have questions or comments on the operation of the system, please contact your system provider.

If you have access to the system console, the coordinates of your provider is available from the section Administration / System Information, panel License Information, lines Distributor, Distributor email, and Distributor phone).

Alternatively, you can contact Areashell technical support department by the following Email: support@areashell.com