Access Manager Module Settings and Operation Guide

ACFA PSIM 1.1

Last update 02/27/2024

Table of Contents

1 List of terms used in the Access Manager Module Settings and Operation Guide

User – a person whose data are processing by the Access Manager module. The Access Manager module allows processing data of visitors, vehicles and other types of users. Configuring and working of the module with different types of users are the same. In case of configuring and working with specific functions it will be additionally specified.

Operator – a person who configures and operates with the *Access Manager* module.

APB (*Antipassback*) – a control over access order. Function allows protecting from repeated use of identifier to pass in one direction.

Holiday – a non-working day. Specifying of holydays list in the system allows eliminating of defined days from time zones.

Access point – a point where access control is performed. An access point may be a door, a turnstile, a gate, or a boom barrier equipped with a reader, an electromechanical lock, or other access control devices.

Access level – right of user to access through the access point (points) depending on the time schedule. Also defines rule of arming and disarming access point. Access level can be general for all users from department and separate for one, several or all users.

Control reader – a reader which is used for card input to system.

2 Access Manager Module Settings and Operation Guide. Introduction

On the page:

2.1 Purpose of the document

The *Access Manager Module Settings and Operation Guide* is a reference manual designed for *Access Manager* module configuration technicians and operators. This module is a part of *ACFA PSIM*.

This Guide presents the following materials:

1. General information about the *Access Manager* module.
2. The *Access Manager* module settings.
3. Working with the *Access Manager* module.

2.2 General information about the Access Manager module

The *Access Manager* software module is a component of *ACFA PSIM* and supports the following actions:

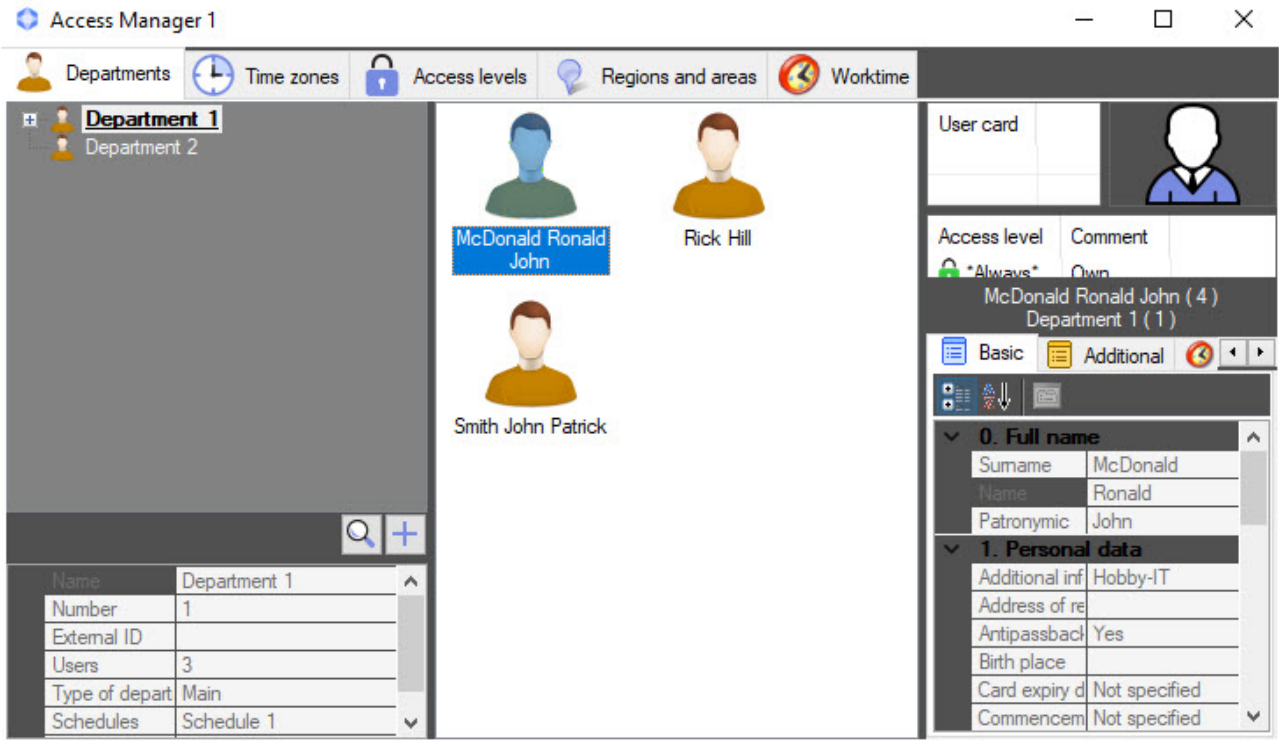
1. Configure the access mode of users and visitors to a facility with automated access control systems.
2. Configure the movement rules of users and visitors within a facility according to access levels.
3. Configure operator rights to create, edit, delete and view departments.
4. Configure operator rights to create, edit and delete access levels and users.
5. Create and configure access levels for each user and for all department.
6. Create, configure and delete accounts of users and departments.
7. Create, configure and delete time schedules and access levels.
8. Print electronic security passes for users.
9. View the personnel structure of an organization by departments and get information on each employee.
10. Create schedules and work schemes with different periods and assign them individually to each employee or a whole department.
11. Keep records of employees' exculpatory and overtime documents.
12. Calculate the total work hours by each employee of the department and present the results as a table.
13. Make a report on the total work hours by employees.

3 Licensing policy for Access Manager

If you acquire 1 license for this module, it will allow you to use any number of the **Access Manager** objects on any number of computers (Servers/RAWs and Clients). The same license also opens the **Access Manager reports** object under the **Web Report System** object so that you could use corresponding reports after *Axxon PSIM WEB Report System* installation (for more information, see WEB Report System PSIM. User Guide). In addition, the license allows the use of all integrated control readers (see Control Readers Settings Guide).

4 Access Manager module interface

General view of the **Access Manager** interface window is shown in the figure.



Note

- If fix position of the window on the screen is specified, the name of the **Access Manager** window won't be displayed—see the Configuring the position of the Access manager window on the screen.
- To add the **Worktime** tab to the **Access Manager** interface window, first you need to connect this subsystem: create the **Worktime support** object on the basis of the **Access Manager** object on the **Interfaces** tab of the **System settings** dialog window (see Configuring the Worktime subsystem).

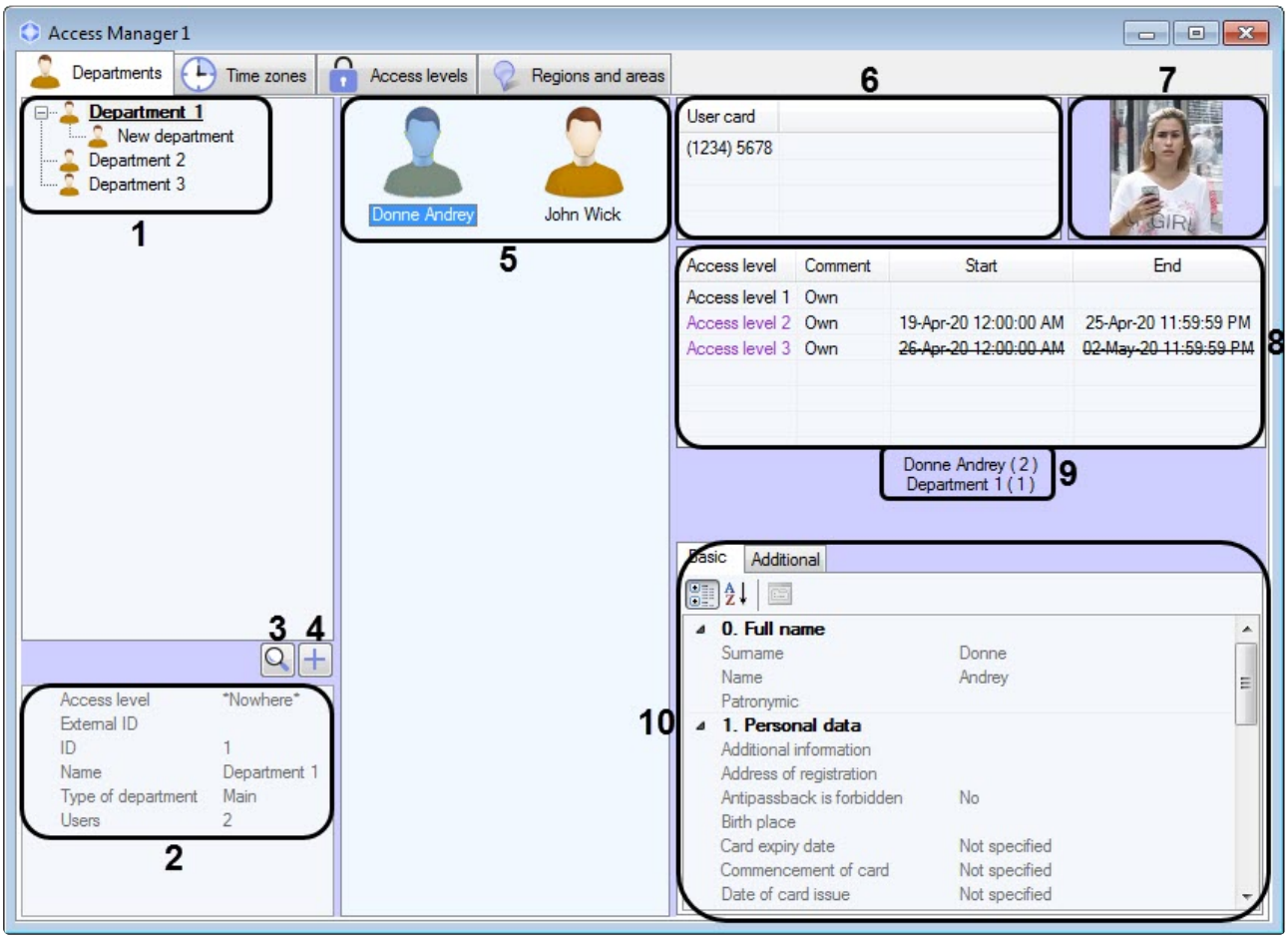
The **Access Manager** window contains the following tabs:

1. **Departments** tab.
2. **Time zones** tab.
3. **Access levels** tab.
4. **Regions and areas** tab.
5. **Worktime** tab.

The description of each tab is below.

4.1 Departments tab

Working with departments and users is performed on the **Departments** tab.



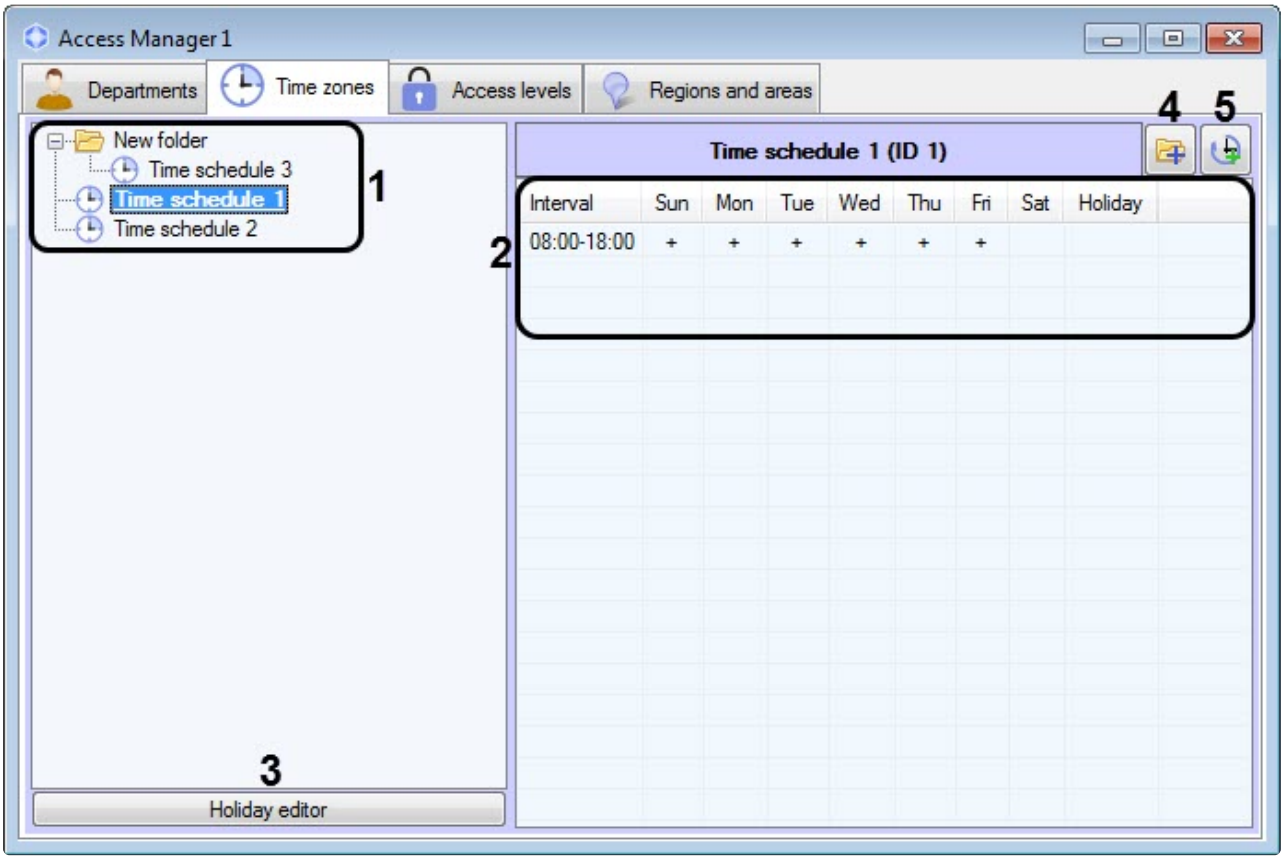
Description of **Departments** tab elements is given in the table.

№	Element	Description
1	Departments tree	Hierarchy structure of created departments available for viewing relying on operator rights and/or settings of the Access Manager object – see the Rights for accessing the departments in the Access Manager section.
2	Department parameters	Parameters of department: ID, External ID, Name, Number of users, Type of department, Access levels. Setting and editing of department parameters is given in the Working with departments in the Access Manager software module section.
3	Search for department	Department search button – see the Department search section.

4	Add department	Button of adding a department –see the Adding a department section.
5	List of department users	List of users from the selected department.
6	List of user access cards	Displaying of the list of access cards assigned to user. See also the Assigning an access card to a user section. This list can be hidden or is not available depending on the **Access card** settings in operator rights and/or on the **Access manager** object (see the Configuring fields displaying in user accounts section)
7	User photo	Displaying of photo assigned to user. See also the Assigning a photograph to a user section.
8	List of user access levels	List of access levels assigned to user. Temporary access levels are highlighted in color, and the date and time of validity of the temporary access level will be displayed in the **Start** and **End** columns next to them. The crossed out date and time of the temporary access level validity indicate that this temporary access level is not valid at the moment. See also the Assigning access levels to a user section. This list can be hidden or is not available depending on the **Access levels** settings in operator rights and/or on the **Access Manager** object (see the Configuring fields displaying in user accounts section)
9	User full name	Displaying of user surname, name, patronymic and its ID (in brackets).
10	User parameters	Displaying of user information. Description of fields is given in the Setting user parameters section.

4.2 Time zones tab

Working with time zones and holidays is performed on the **Time zones** tab.

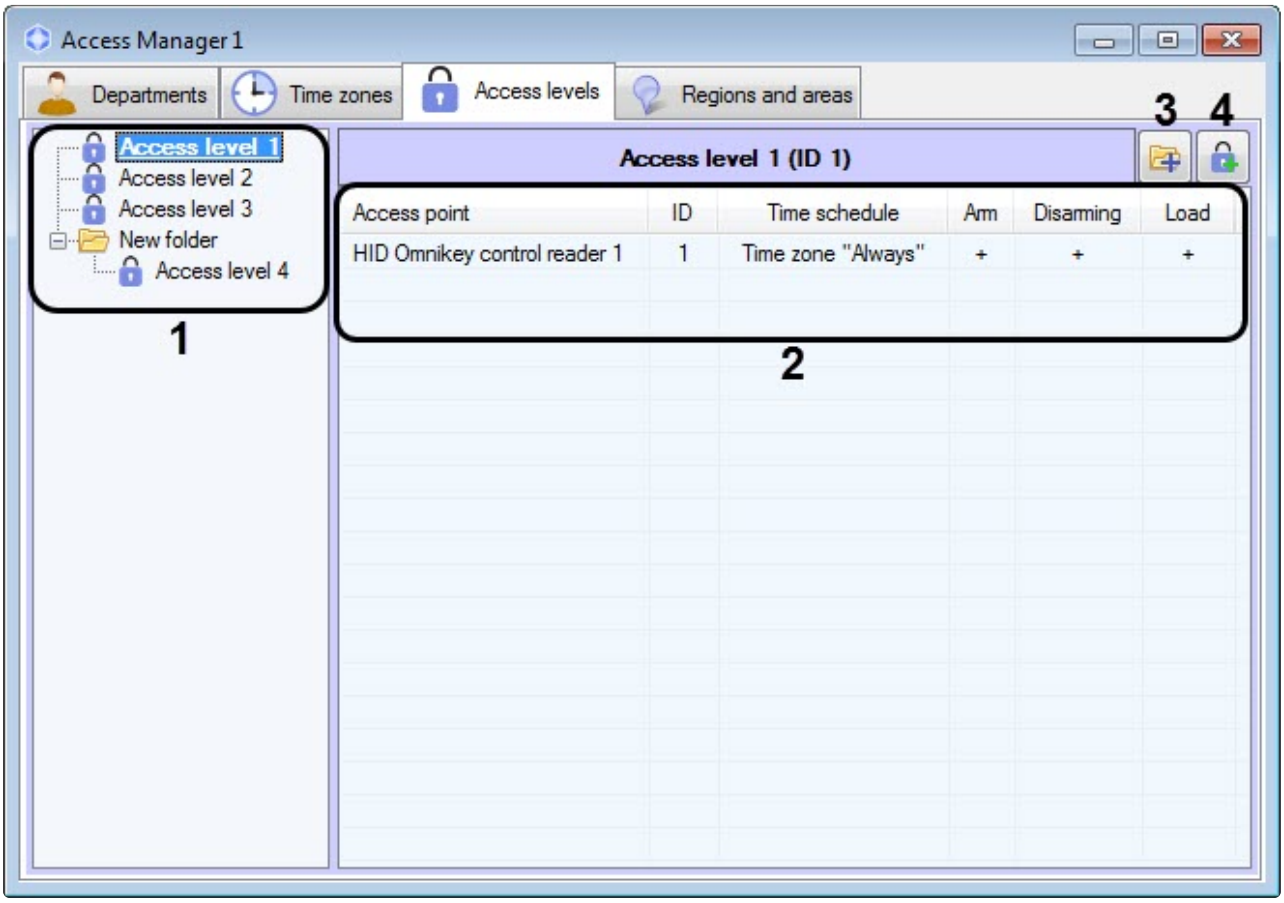


Description of **Time zones** tab elements is given in the table.

№	Element	Description
1	List of time zones and folders	Names of time zones and folders created in the system. The following ways of displaying time zones list are available: **List**, **Table**, **Large icons**. The **Table** view is used on default. See also the Selecting a view of displaying objects list in the Access Manager section.
2	Time zone intervals	List of intervals incoming to the time zone.
3	Holiday editor	Button opening a window of holiday editing – see the Editing holidays section.
4	Create a folder in root	Button opening a window for creating a folder in the root - see the Managing the list of time zones section.
5	Create a time zone in root	Button opening a window for creating a time zone in the root - see the Creation of a time zone in the Access Manager software module section.

4.3 Access levels tab

Working with user access levels is performed on the **Access levels** tab.



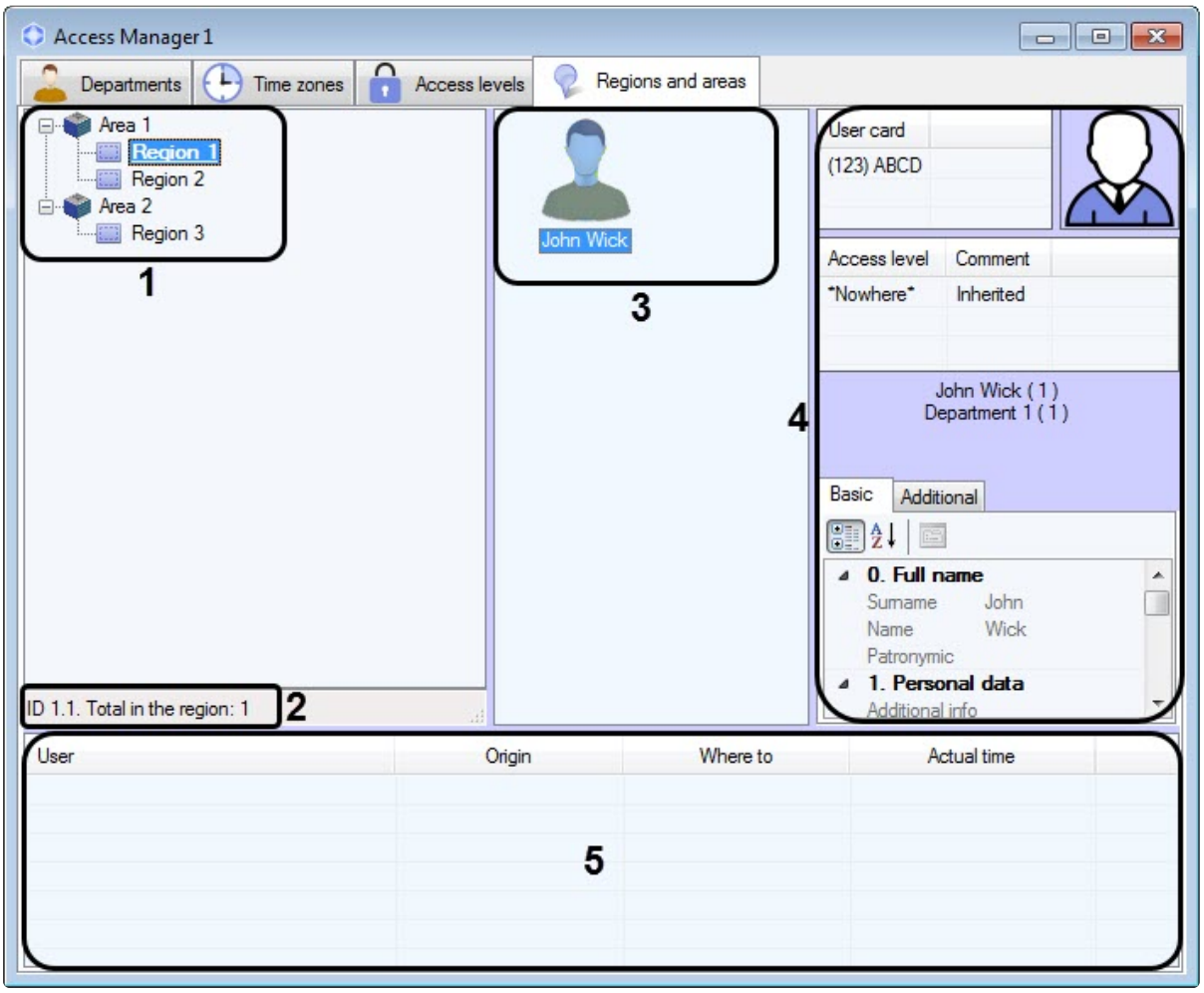
Description of **Access levels** tab elements is given in the table.

№	Elements	Description
1	List of access levels	List of access levels created in the system. The **List** view is used on default. See also Selecting a view of displaying objects list in the Access Manager
2	Access level parameters	Description of selected access level: list of access points with identification numbers and time zones, parameters of access point arming and disarming, sending access cards to controller after presenting access card by user. The **Table** view is used by default
4	Create a folder in root	Button opening a window for creating a folder in the root — see Managing the list of time zones

5	Create a time zone in root	Button opening a window for creating a time zone in the root — see Creation of a time zone in the Access Manager software module

4.4 Regions and areas tab

The **Regions and areas** tab allows to perform Emergency Monitoring.



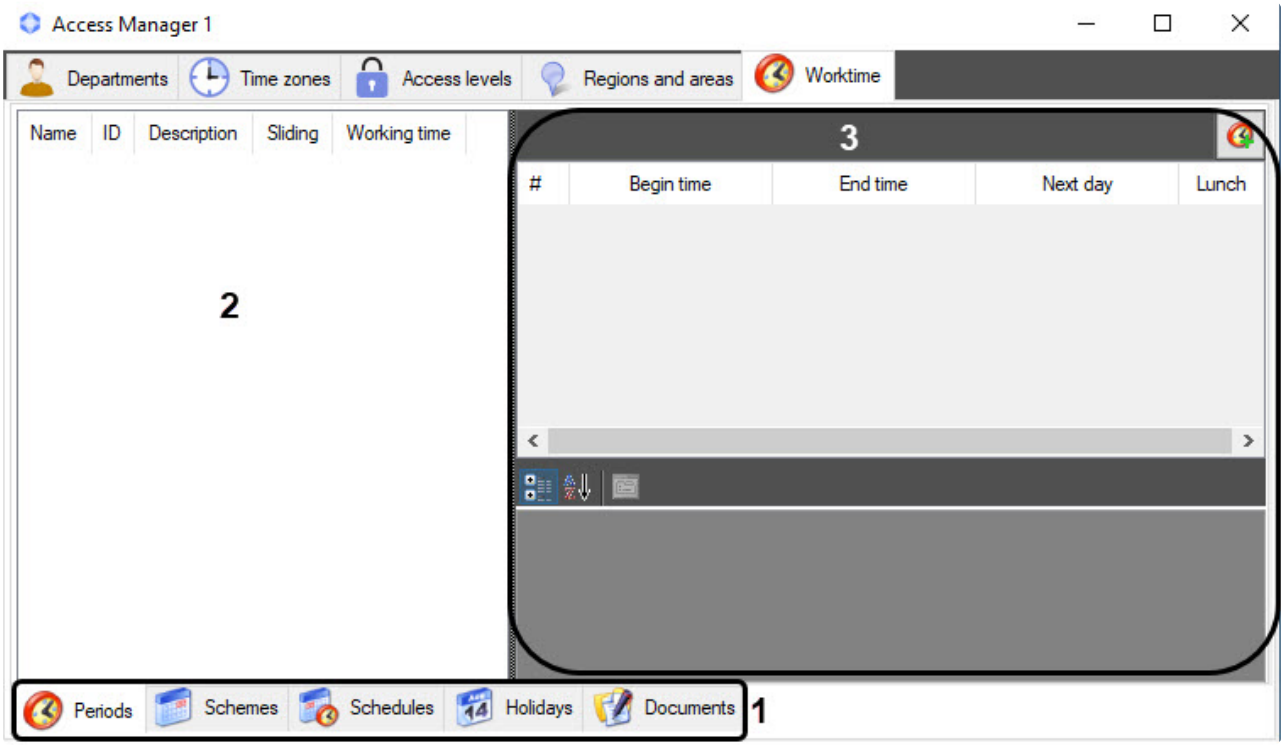
Description of **Regions and areas** tab elements is given in the table.

No.	Element	Description
1	Areas and regions tree	Hierarchy structure of created areas and regions in the system – see Creating, editing and deleting Area and Region objects
2	Information on the selected area or region	ID of the area/region and the current number of people in it.

3	The list of users in the region	The list of users who are currently located in the region.
4	User parameters	See the Departments tab section.
5	Passes log	Displaying information on users' passages in real time.

4.5 Worktime tab

On the **Worktime** tab, you can view the information about the personnel structure of an organization by department and by each employee, create and assign work schedules and work schemes with different work periods to employees and departments, keep record of employees' exculpatory and overtime documents, calculate the total working time of each employee and present the results as a table, generate reports on the total working time of employees.



The navigation bar (**1**) is used to switch between the menu items of the *Time and Attendance* subsystem.

The information field (**2**) displays information on the objects existing in the system of the *Time and Attendance* subsystem.

The properties panel (**3**) displays the parameters of the objects from the area (**2**).

For more information about the interface elements of the **Worktime** tab, see The main elements of the Worktime tab.

5 Configuration of the Access Manager module

5.1 Procedure of configuring the Access Manager module

The *Access Manager* module is configured on the settings panel of the **Access manager** object and on settings panels of the **Operators' permissions in AM** and **Type of department** sub-objects.

The *Access Manager* module is configured in the following order:

1. Procedure of configuring the Access Manager module.
2. Rights for configuring and accessing objects in Access Manager.
3. Configuring access cards.
4. Configuring control readers in the Access Manager.
5. Configuring the prohibition of new user parameter duplicates in Access Manager.
6. Configuring the interaction with the FACE PSIM Face recognition server.
7. Configuring fields displaying in user accounts.

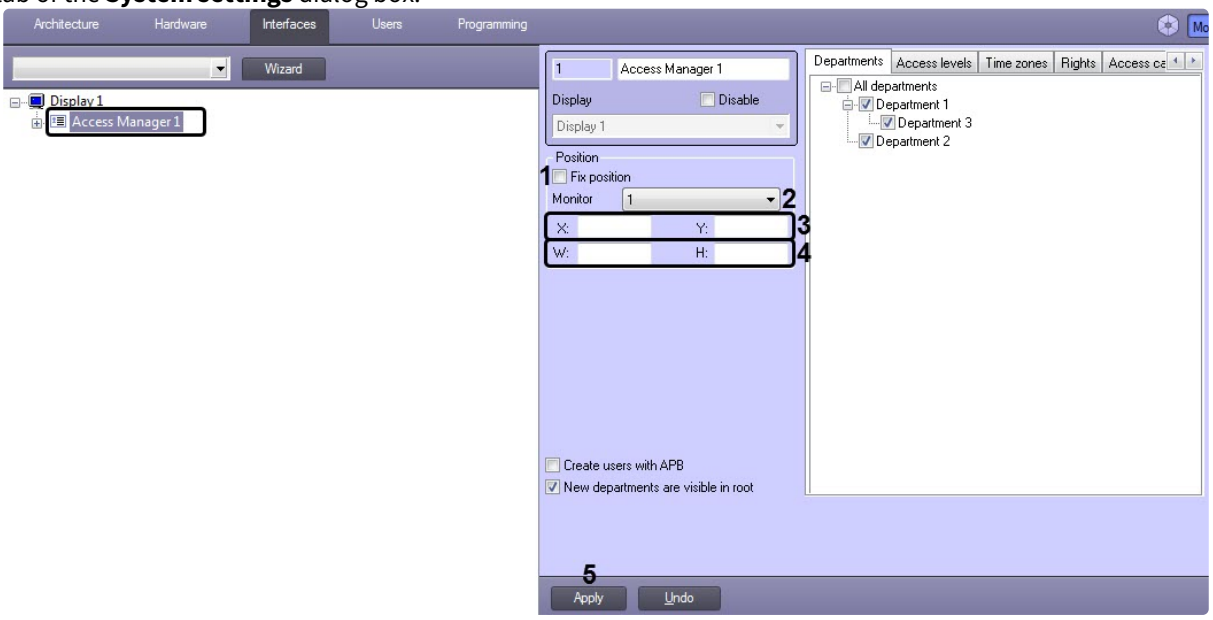
5.2 Configuring the position of the Access manager window on the screen

By default, the position of the **Access manager** window is not fixed on the screen and it can be changed. When setting up the system, you can specify the position of the **Access manager** window on the screen and eliminate the possibility to change it.

> **Note.**
>
> If you specify the fixed position of the **Access manager** window on the screen, the caption bar won't display which increases the displaying area of the **Access manager** window content.

To configure the position of the **Access manager** window on the screen, do the following:

1. Go to the settings panel of the **Access manager** object created under the **Display** object on the **Interfaces** tab of the **System settings** dialog box.



2. Set the **Fix position** checkbox (**1**).
3. From the **Monitor** drop-down list select a system monitor on which the **Access Manager** window is to be displayed (**2**).
4. Set coordinates of the **Access Manager** window's upper left corner in the **X:** and **Y:** fields as percentage of width and height of the screen correspondingly (**3**).
5. Set width and height of the **Access Manager** window in the **W:** and **H:** fields as percentage of width and height of the screen correspondingly (**4**).
6. Click the **Apply** button (**5**).

Specifying fixed position of the **Access Manager** window on the screen is completed.

5.3 Rights for configuring and accessing objects in Access Manager

5.3.1 General information about rights for objects configuring and accessing in Access Manager

Specifying rights for objects configuring and accessing allows you to restrict actions available for operator of the *Access Manager* module while departments configuring, users, access levels, time zones, areas, and partitions. Rights for objects configuring definitely correspond to user rights in the *ACFA PSIM* software package.

Rights for objects configuring in the *Access Manager* include permission or forbidding to perform the following operations with access levels, users and departments from the **Access Manager** window:

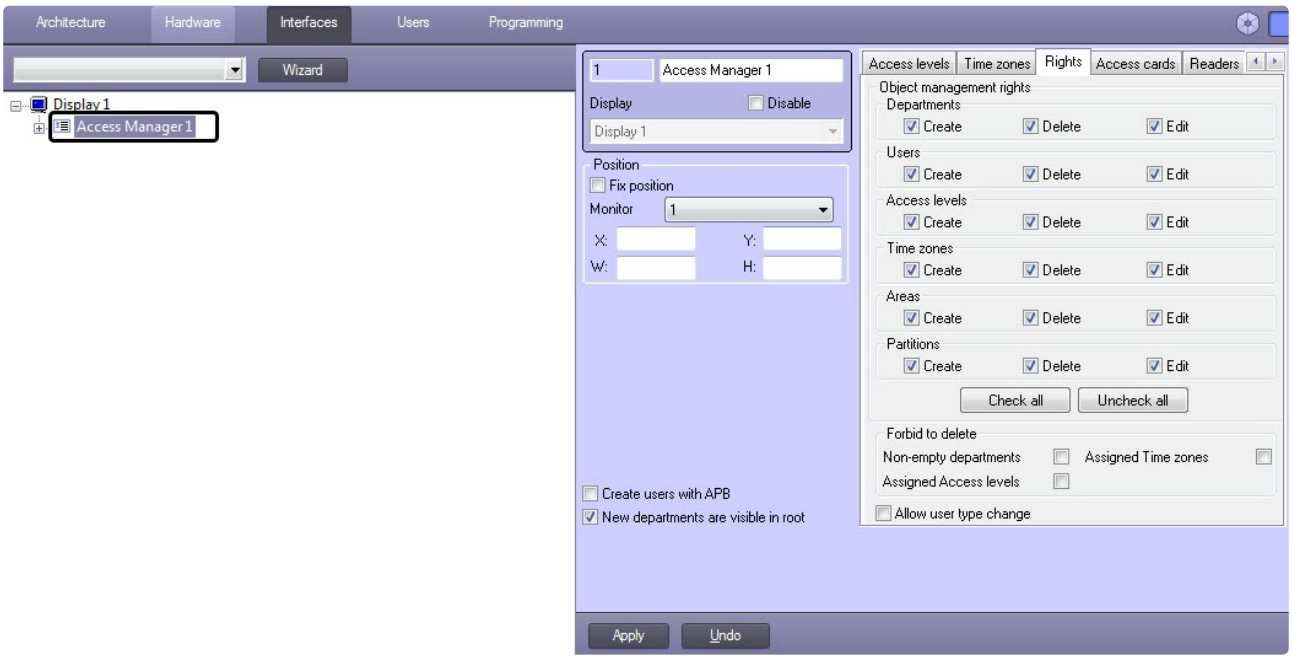
1. Create.
2. Edit.
3. Delete.

For departments, access levels and time zones, the permission to access these objects is additionally configured in the *Access Manager* module interface.

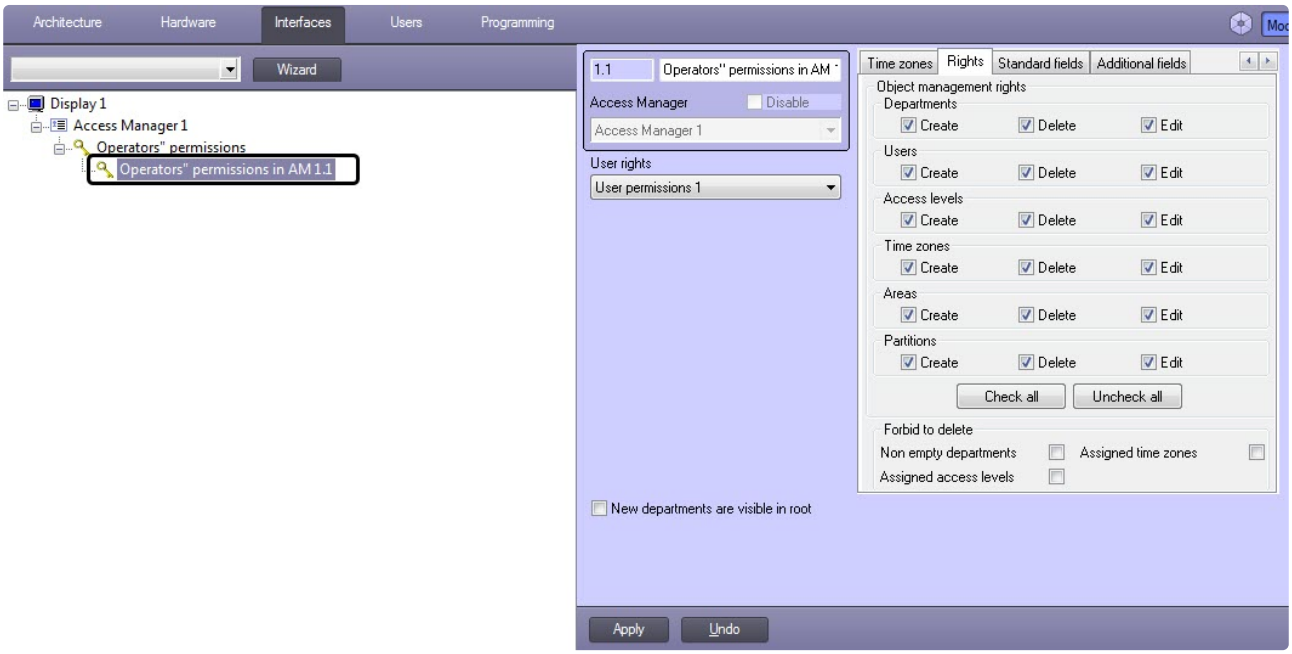
The *Access manager* software module allows you to set common and individual rights for objects configuring. By default, all of the above operations are prohibited in the *Access Manager* module.

Common rights for objects configuring have priority over individual rights. So if performing of some operation is forbidden by common rights for objects configuring, than it will be forbidden for all operators, even if it will be permitted by some individual rights.

Common rights for objects configuration are specified on the **Rights** tab of the **Access Manager** object settings panel, which is created under the **Display** object on the **Interfaces** tab of the **System settings** dialog box.



Individual rights for objects configuring are specified on the **Rights** tab of the **Operators' permissions in AM** object settings panel, which is created on the basis of the **Access Manager** object.



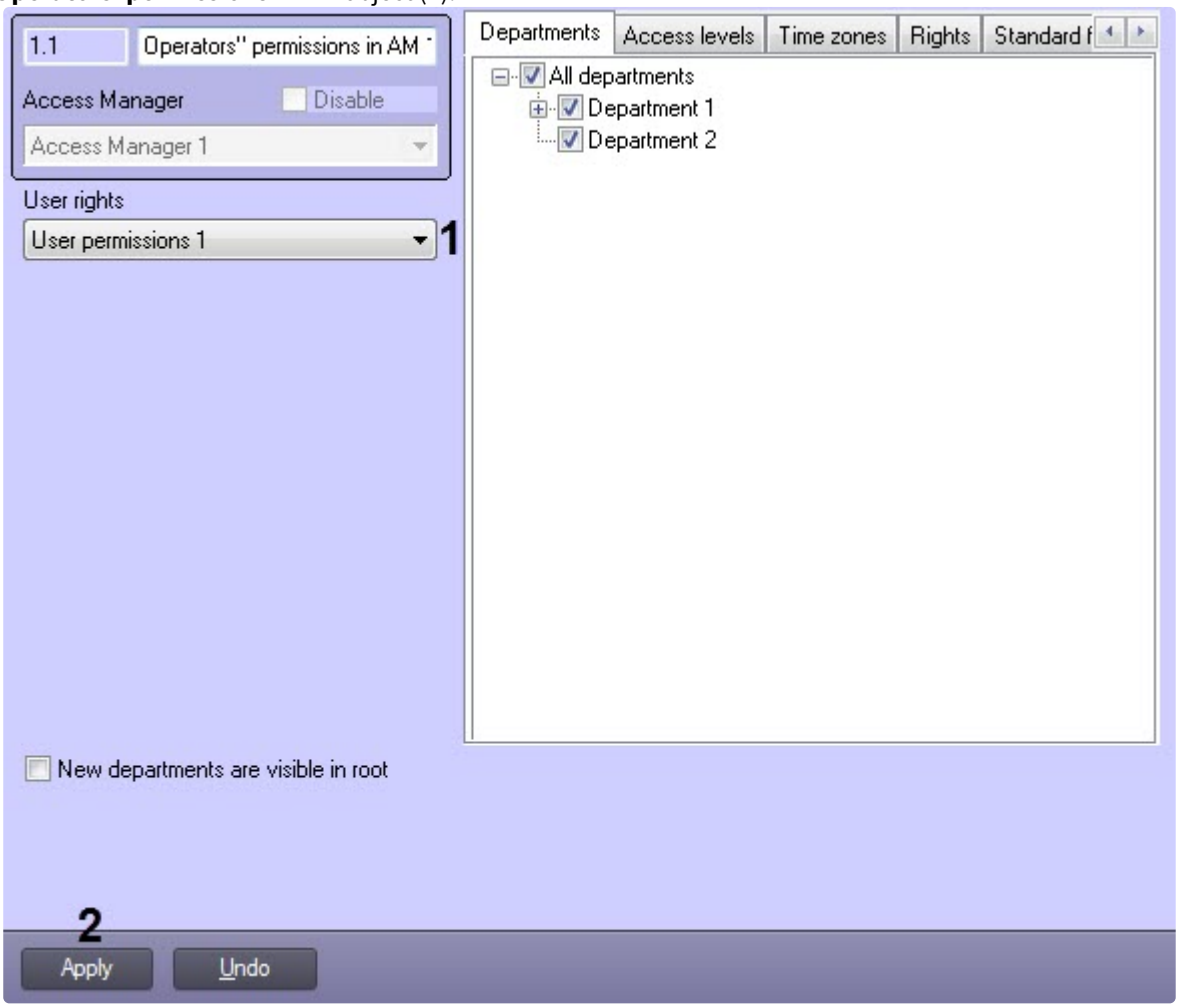
5.3.2 Configuring the correspondence of operator permissions in Access Manager and in Axxon PSIM

Individual rights for objects configuring in the *Access Manager* definitely correspond to user rights in the *ACFA PSIM* software package. So only one **Operators' permissions in AM** object can correspond to one **User permissions** object and vice versa.

> **Note**
>
> If similar operator rights in the *Access Manager* should correspond to user rights in the *ACFA PSIM* software package, use the **Save** function from context menu of interface object, see The Save function section of the *Axxon PSIM* software package. Administrator's Guide.

To specify correspondence of operator rights in the *Access Manager* and in the *ACFA PSIM* software package, do the following:

1. Go to the settings panel of the **Operators' permissions in AM** object.
2. From the **User rights** drop-down list select the **User permissions** object which is required to match to the **Operators' permissions in AM** object (**1**).



> **Note**
>
> **User permissions** objects are created on the **Programming** tab of the **System settings** dialog window. Creating and configuring of these objects is described in the Rights administration section of the *Axxon PSIM* software package. Administrator's Guide. The current version of this document is available in the documentation repository.

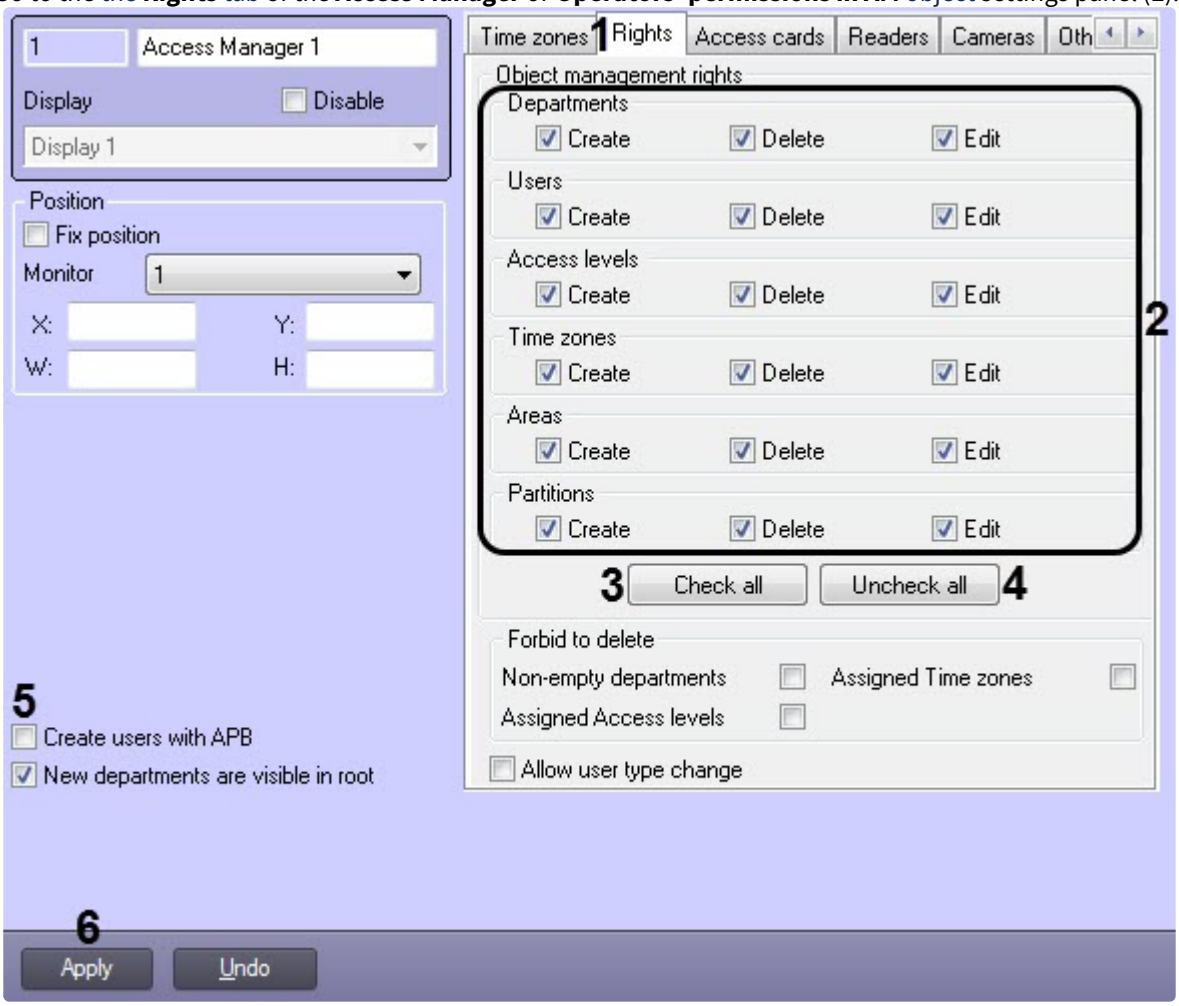
3. Click the **Apply** button (**2**).

Specifying correspondence of operator rights in the *Access manager* and in the *ACFA PSIM* software package is completed.

5.3.3 Configuring the object management rights

Configure common or individual rights for managing objects as follows:

1. Go to the the **Rights** tab of the **Access Manager** or **Operators' permissions in AM** object settings panel (**1**).



2. In the **Departments**, **Users**, **Access levels**, **Time zones**, **Areas** and **Partitions** groups:
   a. Set the **Create** checkbox to allow the operators to create the corresponding objects in the **Access Manager** interface window.
   b. Set the **Delete** checkbox to allow the operators to delete the corresponding objects in the **Access Manager** interface window.
   c. Set the **Edit** checkbox to allow the operators to edit the corresponding objects in the **Access Manager** interface window.
3. Click the **Check all** button (**3**) to check all the boxes in the **Object management rights** group (**2**).
4. Click the **Uncheck all** button (**4**) to uncheck all the boxes in the **Object management rights** group (**2**).
5. If it is required to allow operators to create users with antipassback enabled, set the **Create users with APB** checkbox (**5**).

> **Note**

> The **Create users with APB** checkbox is available only on the **Access Manager** settings panel.

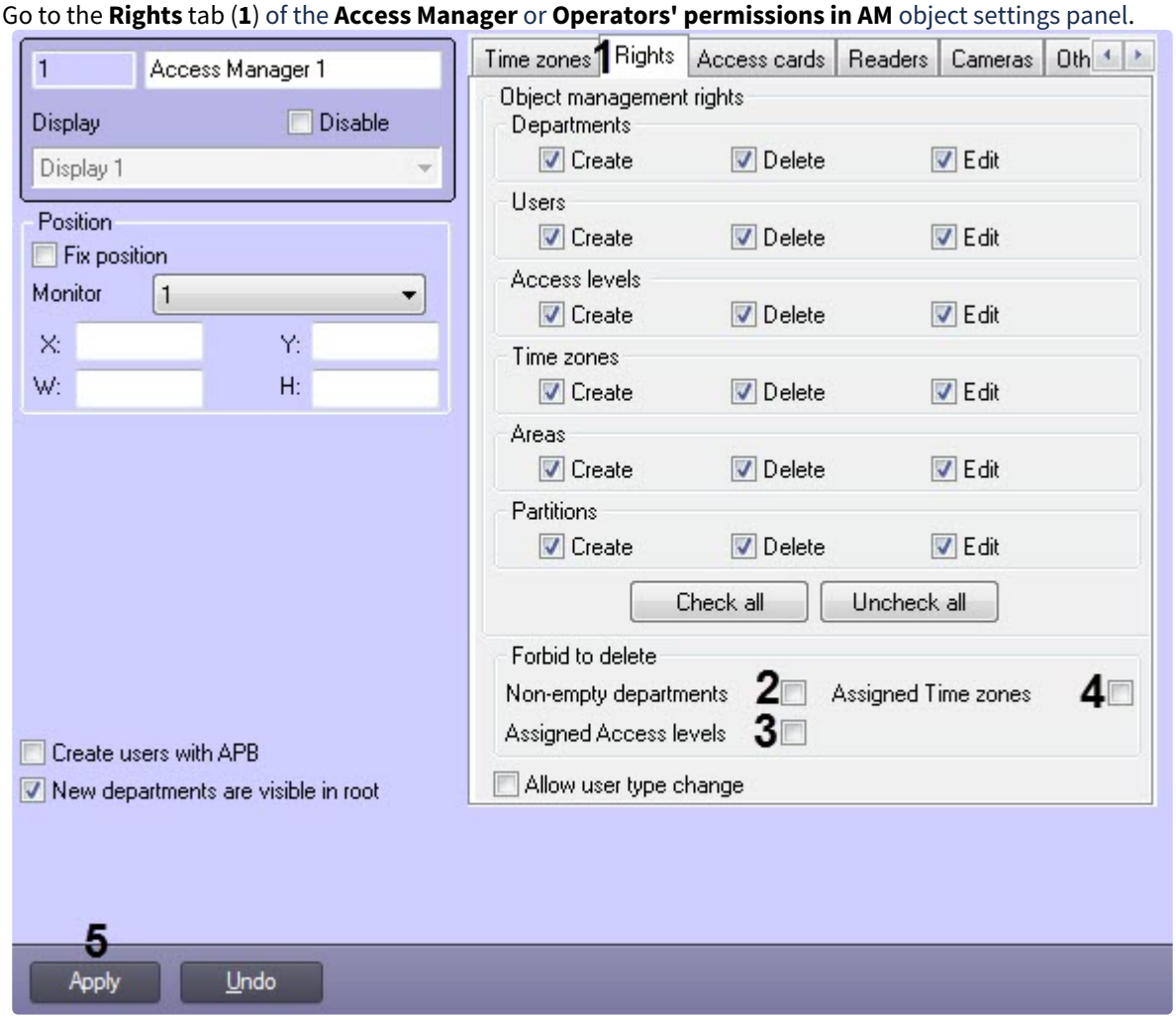
6. Click the **Apply** button (**6**) to save the changes.

The common or individual rights for managing objects are now configured.

5.3.4 Setting the prohibition of deleting non-empty departments, assigned ALs and TZs

Set the prohibition of deleting non-empty departments, assigned access levels (ALs) and time zones (TZs) as follows:

1. Go to the **Rights** tab (**1**) of the **Access Manager** or **Operators' permissions in AM** object settings panel.



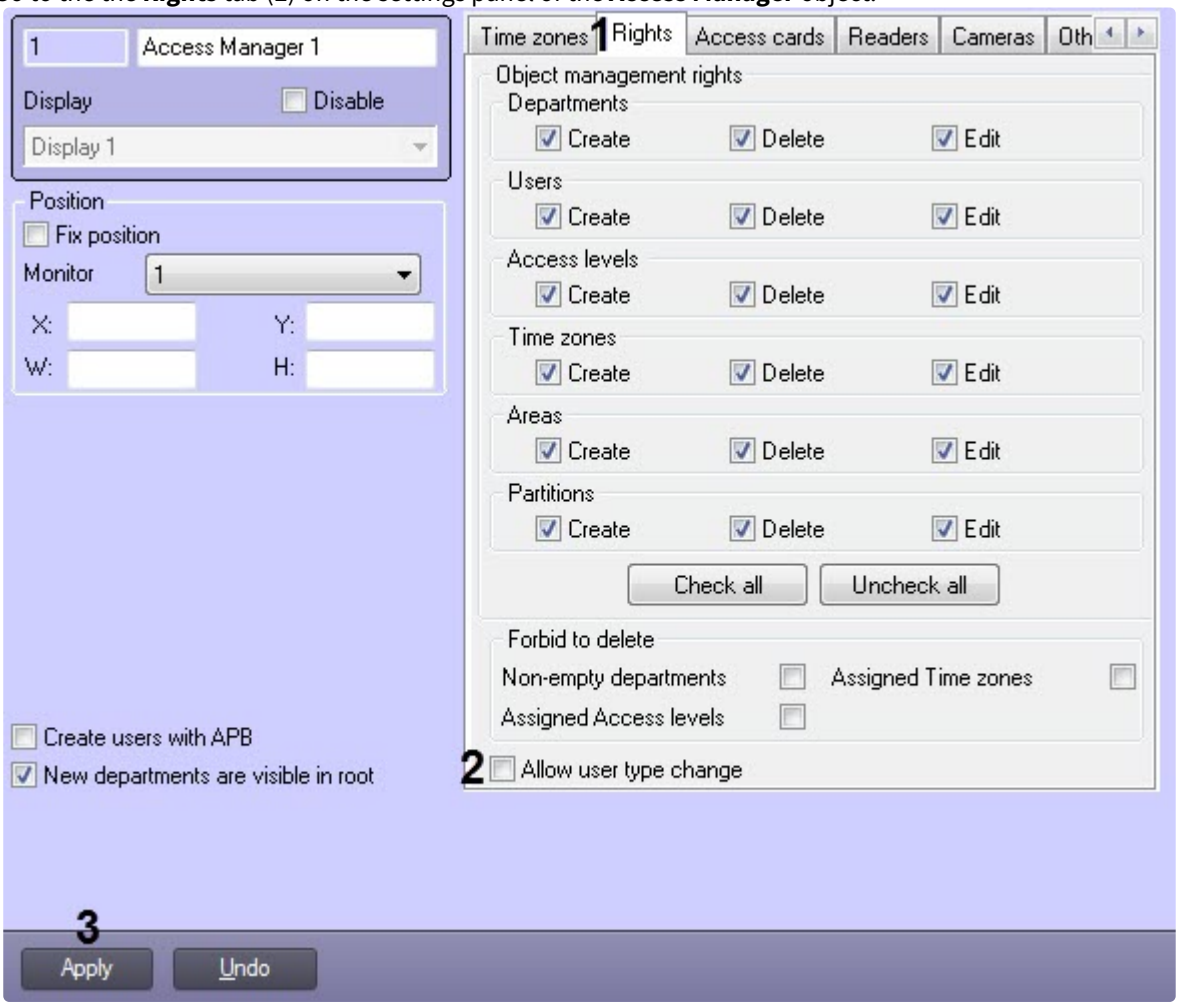
2. Set the **Non-empty departments** checkbox to forbid deletion of the departments in which there are users (**2**).
3. Set the **Assigned Access levels** checkbox to forbid deletion of the access levels assigned to departments or users (**3**).
4. Set the **Assigned Time zones** checkbox to forbid deletion of time zones used in access levels (**4**).
5. Click **Apply** to save settings (**5**).

Setting the prohibition of deleting non-empty departments, assigned ALs and TZs is completed.

5.3.5 Configuring the permission to change user type

The permission to change the user type is configured as follows:

1. Go to the the **Rights** tab (**1**) on the settings panel of the **Access Manager** object.



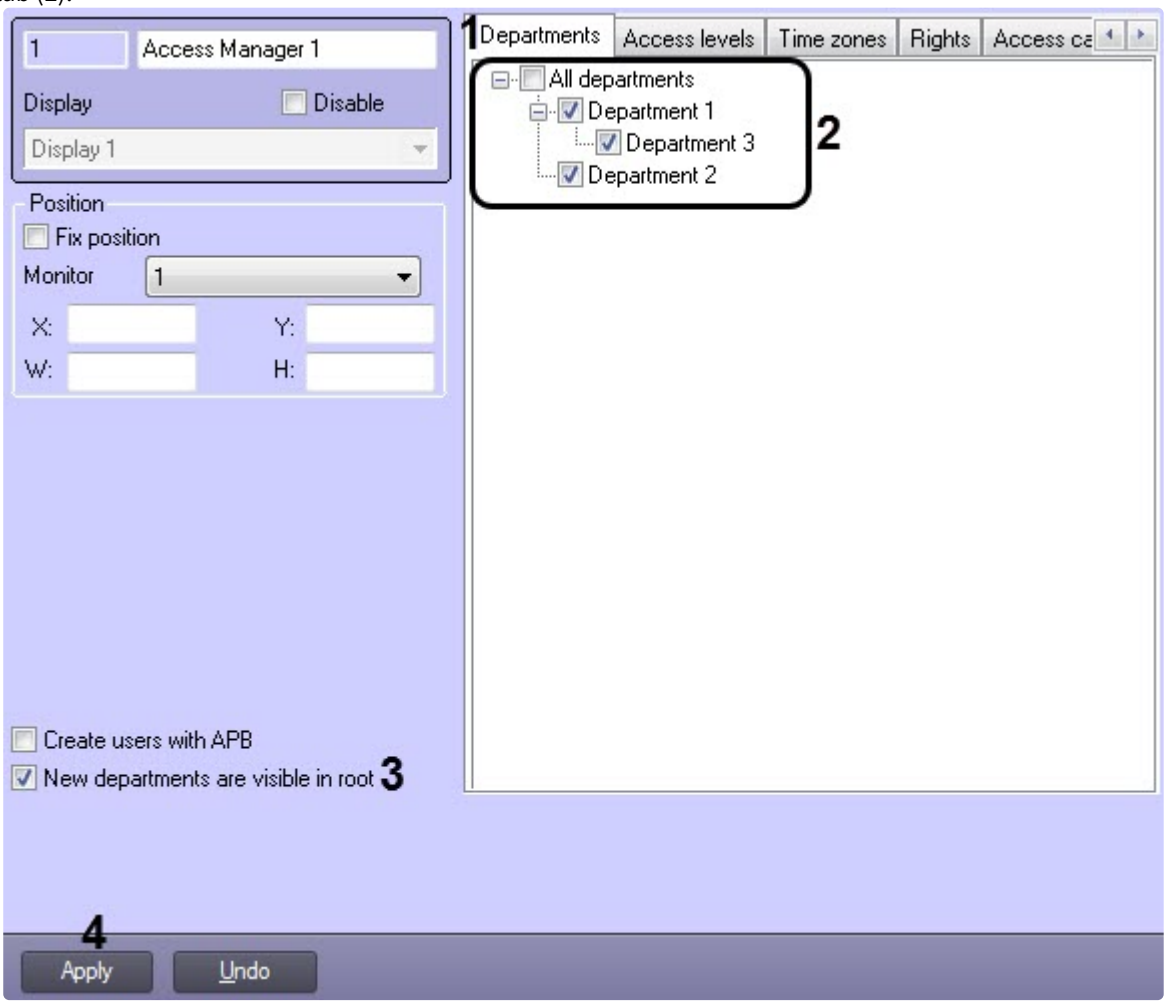
2. Set the **Allow user type change** checkbox (**2**) to enable the ability to change the user type (see Changing a user type).
3. Click the **Apply** button (**3**) to save the settings.

The permission to change user type is now configured.

5.3.6 Rights for accessing the departments in the Access Manager

To specify common or individual rights for accessing the departments, do the following:

1. Go to the settings panel of the **Access manager** or **Operators'' permissions in AM** object, the **Departments** tab (**1**).



2. Set checkboxes for the departments which should be available in the *Access Manager* interface module (**2**).
3. By default, new departments located in the root of departments hierarchy and departments transferred to the root of hierarchy regardless of their visibility before transferring are available in the *Access Manager* interface window - the **New departments are visible in root** checkbox is set (**3**). If new departments and departments transferred to the root of hierarchy should be invisible in the *Access Manager* window, deselect the checkbox.

> **Attention!**
>
> If the **New departments are visible in root** checkbox is deselected, creation of new departments in the root of departments hierarchy will be forbidden even if the **Create** checkbox is set.

4. To save changes click the **Apply** button (**4**).

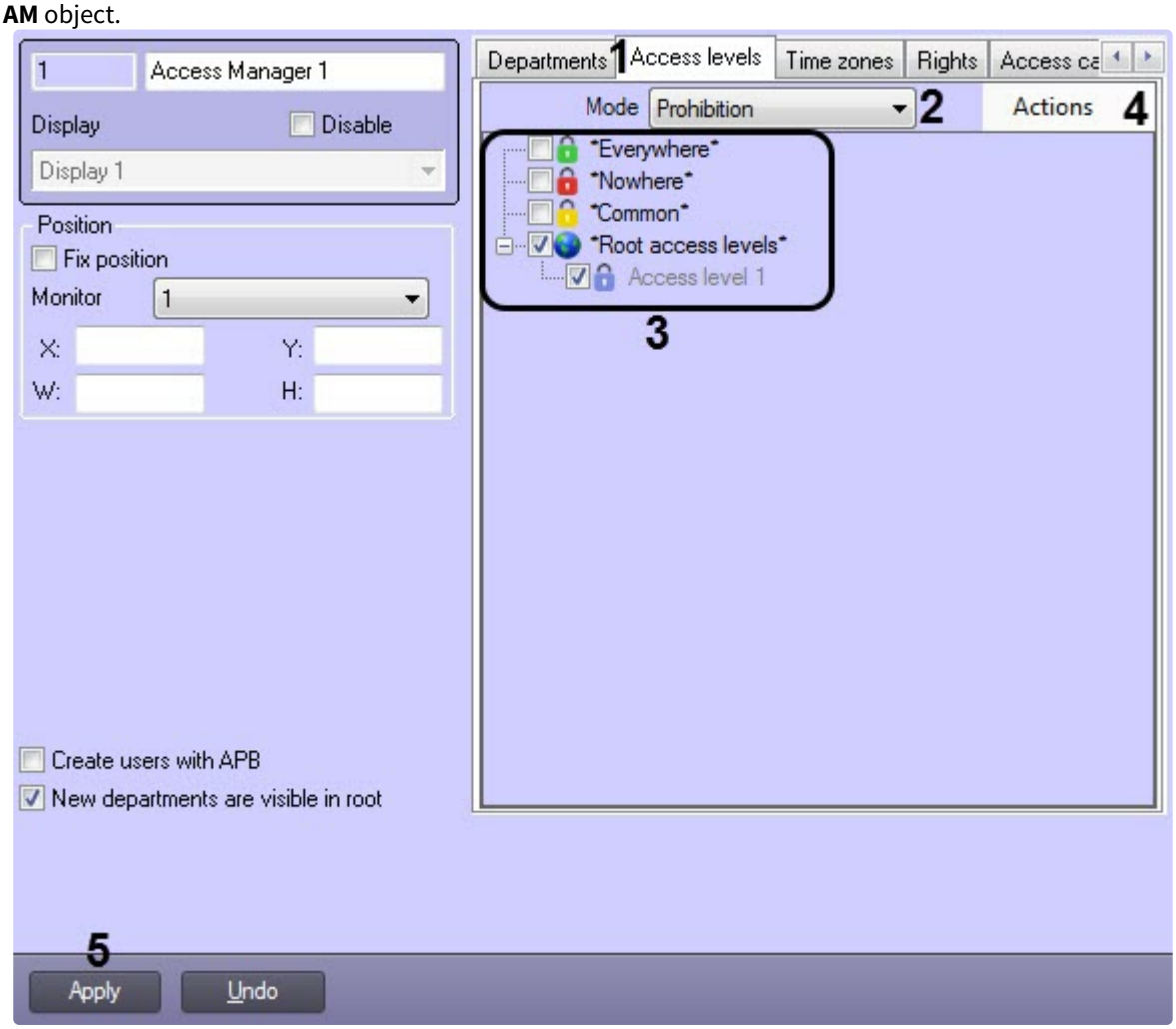
> **Note**
>
> New departments created via the *Access Manager* module on the basis of visible departments will be visible on default.

Specifying of common and individual rights for accessing the departments is completed.

5.3.7 Rights for accessing the access levels in Access Manager

To specify common or individual rights for accessing the access levels, do the following::

1. Go to the **Access levels** tab (**1**) on the settings panel of the **Access Manager** or **Operators' permissions in AM** object.



2. In the **Mode** drop-down list (**2**) select the required mode:
   - **Prohibition** - restrict the access
   - **Permission** - allow the access
3. Set the checkboxes (**3**) next to the required values:
   - **"Everywhere"** - access to the predefined access level "Everywhere".
   - **"Nowhere"** - access to the predefined access level "Nowhere".
   - **"Common"** - access inherited from the department access level.
   - **"Root access levels"** - set the checkbox to select all access levels in *Axxon PSIM* or expand the list and set the checkboxes only for the required access levels.

   > **Note**
   >
   > Use the **Actions** button (**4**) to select and deselect all items, minimize and expand all drop-down lists, and search for access levels or folders.

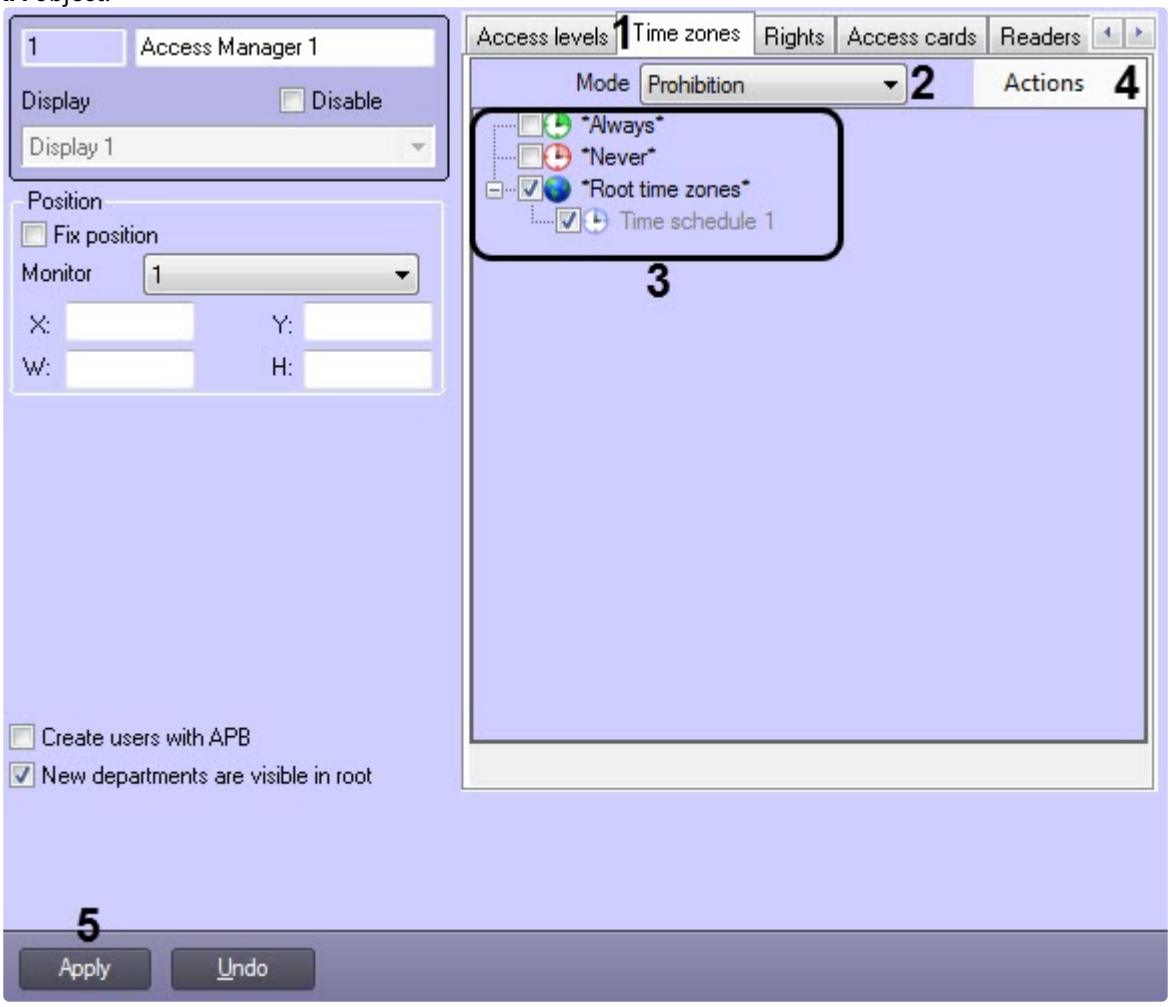
4. Click **Apply** to save settings (**5**).

Specifying common and individual rights for accessing the access levels is completed.

5.3.8 Rights for accessing the time zones in Access Manager

To specify common and individual rights for accessing the time zones, do the following:

1. Go to the **Time zones** tab (**1**) on the settings panel of the **Access Manager** or **Operators'' permissions in AM** object.



2. In the **Mode** drop-down list (**2**) select the required mode:
   - **Prohibition** - restrict the access.
   - **Permission** - allow the access.
3. Set the checkboxes (**3**) next to the required values:
   - **"Always"** - access to the predefined time zone "Always".
   - **"Never"** - access to the predefined time zone "Never".
   - **"Root time zones"** - set the checkbox to select all time zones in *Axxon PSIM* or expand the list and set the checkboxes only for the required time zones.

   > **Note**
   >
   > Use the **Actions** button (**4**) to select and deselect all items, minimize and expand all drop-down lists, and search for time zones or folders.

4. Click **Apply** to save settings (**5**).

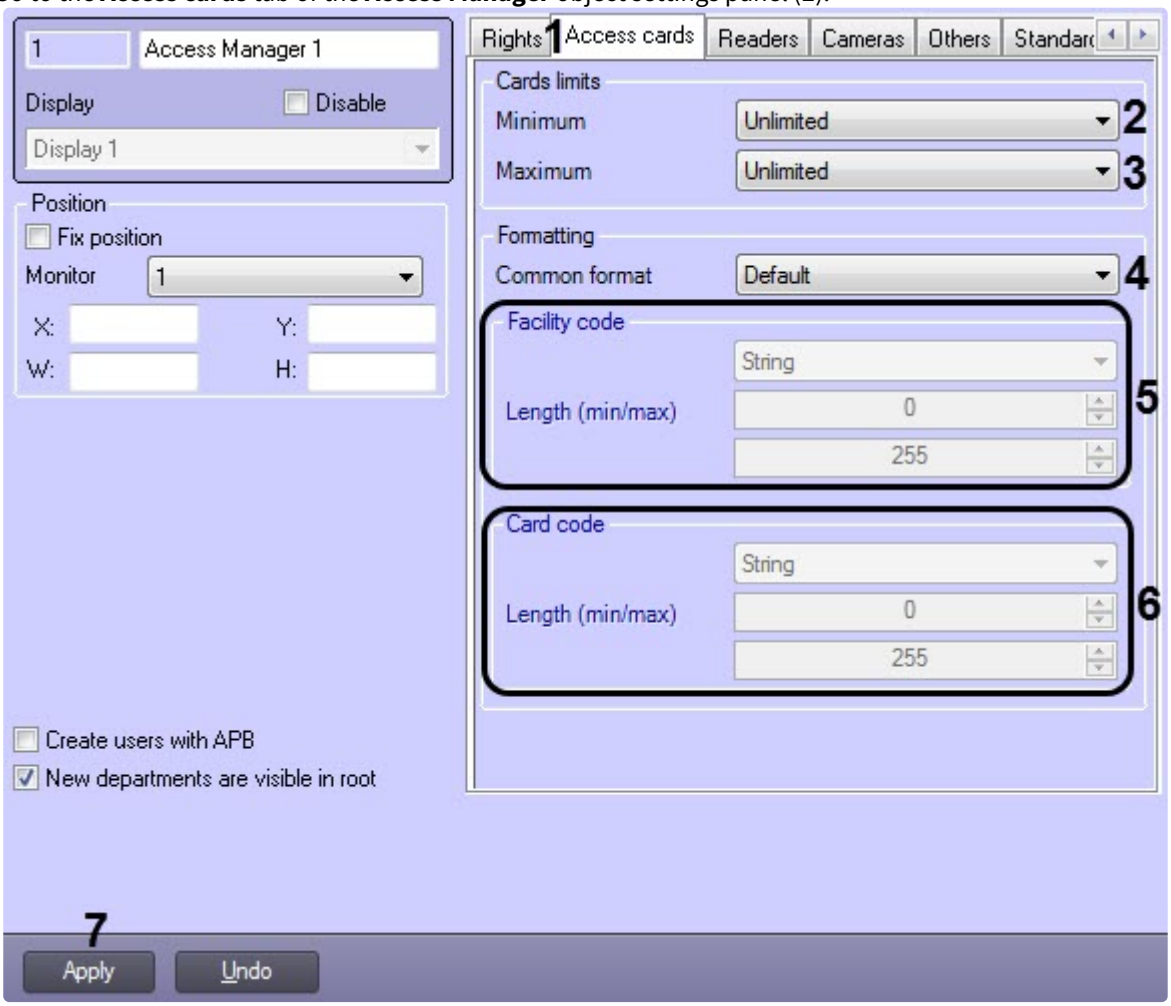
Specifying common and individual rights for accessing the time zones is completed.

5.4 Configuring access cards

Configuring access cards allows you to set the required number and format of user access cards (see Assigning an access card to a user).

Access cards are configured as follows:

1. Go to the **Access cards** tab of the **Access Manager** object settings panel (**1**).



2. In the **Cards limits** group from the **Minimum** drop-down list (**2**), select the minimum number of access cards that should be assigned to the user.
   - from **1** to **5** - if the specified number of access cards is not assigned to the user, then this user cannot be saved in the **Access Manager** interface object.
   - **Unlimited** - an unlimited number of access cards can be assigned to the user.
   - **Prohibited** - the user cannot be assigned access cards. Buttons and functional menu for assigning access cards will be inactive in the **Access Manager** interface object.
3. In the **Cards limits** group from the **Maximum** drop-down list (**3**), select the maximum number of access cards that should be assigned to the user.
   - from **1** to **5** - if the user is assigned more than the specified number of access cards, then this user cannot be saved in the **Access Manager** interface object.
   - **Unlimited** - an unlimited number of access cards can be assigned to the user.

- **Prohibited** - the user cannot be assigned access cards. Buttons and functional menu for assigning access cards will be inactive in the **Access Manager** interface object.

> **Note**
>
> If at least one **Minimum** or **Maximum** parameter has the **Prohibited** value, the buttons and the functional menu for assigning access cards in the **Access Manager** interface object will be inactive.

4. In the **Formatting** group from the **Common format** drop-down list (**4**) select the access cards format:

> **Attention!**
>
> If the following access cards restrictions are violated, the user cannot be saved in the **Access Manager** interface object.

- **Default** - allows setting an arbitrary value for the facility code and card code. Any letters, numbers and symbols are allowed except: <| >.
- **Wiegand26** - allows entering a 1-byte facility code (from 0 to 255), and a 2-byte card code (from 0 to 65535).
- **Wiegand32** - allows entering a 2-byte facility code (from 0 to 65535), and a 2-byte card code (from 0 to 65535).
- **Wiegand26** (code only) - the facility code cannot be set, only a 3-byte card code is set (from 0 to 16777215).
- **Wiegand32** (code only) - the facility code cannot be set, only a 4-byte card code is set (from 0 to 4294967295).
- **TouchMemory** - the facility code cannot be set, only the 8-byte card code is set. The format is hexadecimal, characters A, B, C, D, E, F are allowed. The code should be 8 characters or longer. If the entered card code is less than 8 characters long, the the higher order digits are filled with zeros.
- **Hikvision** - the *Hikvision* ACS format. It always has a fixed H character in the facility code. The card code is specified by a string with a maximum length of 32 characters.
- **Configurable** - allows setting the parameters of the facility code (**5**) and card code (**6**).
  - **Fixed character** - the specified single character will always be hard-coded, which cannot be changed in the **Access Manager** interface object.
  - **String** - allows entering a string of 0 to 255 characters.
  - **Numeric** - allows entering only numbers from 0 to 4294967295.
  - **Hexadecimal** - allows entering numbers in HEX format (numbers and symbols A, B, C, D, E, F) from 0 to 8 bytes long.
  - **Fixed number** - similar to **Fixed character**, but instead of a character, a number between 0 and 4294967295 is used.
  - **Regular template** - allows defining an access card template with specified restrictions, lengths and value ranges.

> **Note**
>
> An example of some service characters for regular expressions:
> - **^** is the beginning of the regular expression. A line opening.
> - **$** is the end of the regular expression. A line closing.
> - **.** is any single character.
>
> On the site https://regex101.com you can find a complete list of service characters for regular expressions, as well as to check the accuracy of a regular expression.

Example 1:
For the facility code, it is necessary to limit the range of entered numbers from 1 to 3. The amount of numbers should be not more than 4. Other characters and numbers are not

allowed.
Template:

```
^[1-3]{4}$
```

Example 2:
For a card code, it is necessary to limit the code length to 8 characters, at least 1 character for input. In this case, it is allowed to enter uppercase Latin letters A, B, C, D, E, F.
Template:

```
^[(A-F),(0-9)]{1,8}$
```

5. Click the **Apply** button (**7**) to save the settings.

Configuring access cards is complete.

5.5 Configuring control readers in the Access Manager

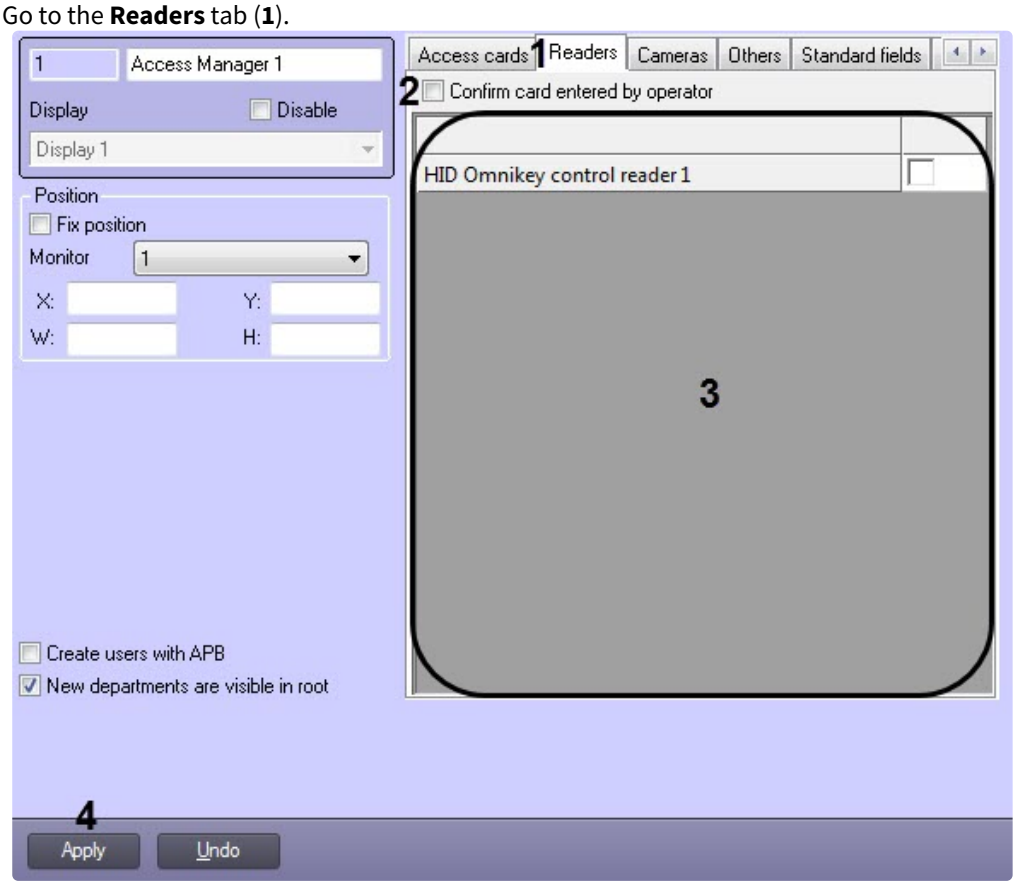
It is possible to specify the list of control readers used for assigning access cards or adding biometric parameters to users in the **Access Manager** interface window while configuring the *Access Manager* program module.

> **Note**
>
> Any reader from the ACS integration modules (see ACS integration modules), FSA/ACS (see ACFA Systems integration modules) can act as a control reader, as well as the control readers themselves from the control reader integration modules (see Control Readers Settings Guide).

To select control readers, do the following:

1. Go to the settings panel of the **Access Manager** object.

2. Go to the **Readers** tab (**1**).



3. Set the **Confirm card entered by operator** checkbox (**2**) if it's required that operator confirms assigning of access cards to user.
4. Set checkboxes for those readers which should be available in the **Access Manager** window while access cards or biometric data input (**3**).
5. To save changes click the **Apply** button (**4**).

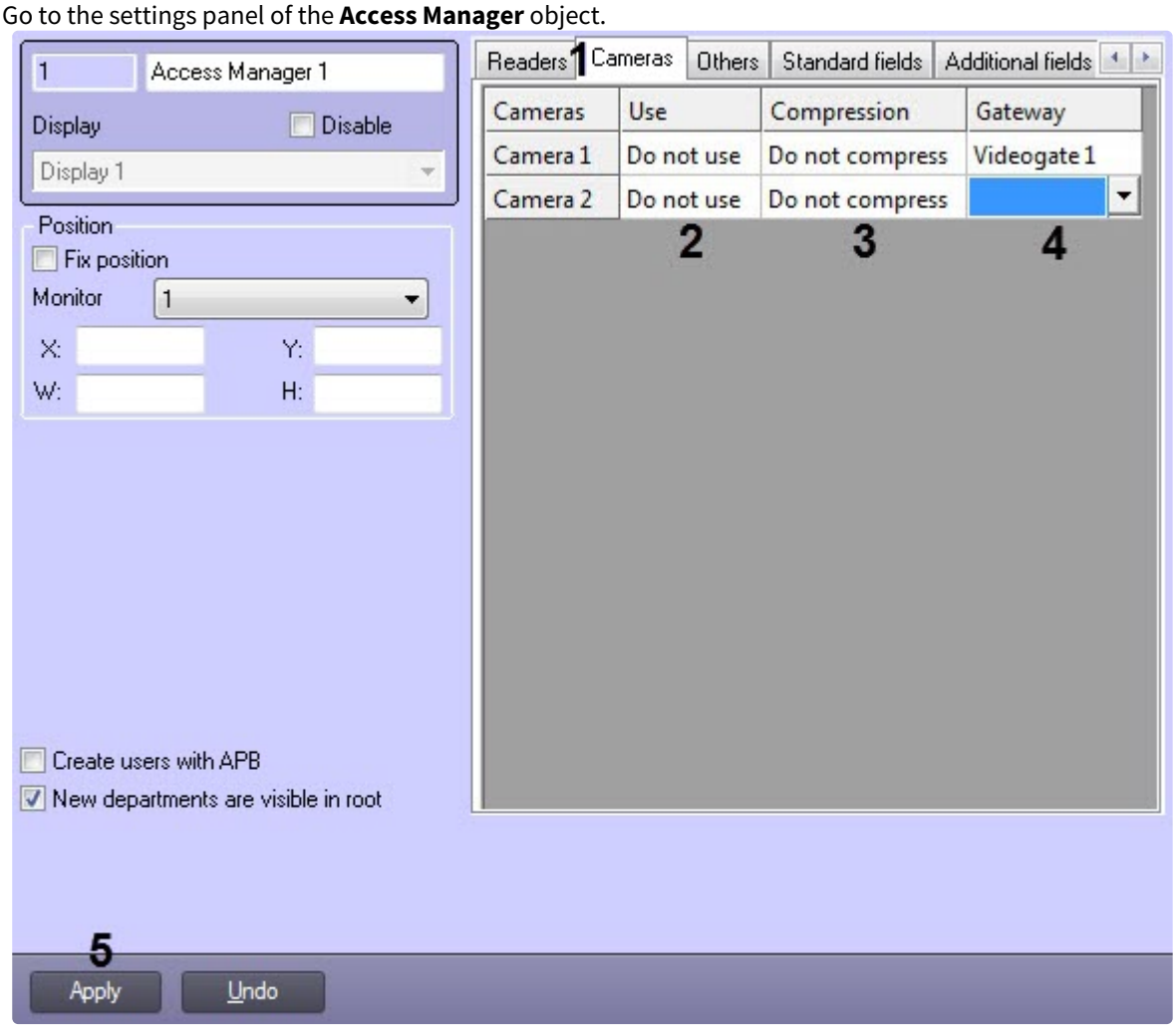
Configuring a control readers in the *Access Manager* is completed.

5.6 Selecting available cameras in the Access Manager

The *Access Manager* program module allows specifying cameras which will be available in the **Access Manager** window for setting photos to users.

To select available cameras, do the following:

1. Go to the settings panel of the **Access Manager** object.



2. Go to the **Cameras** tab (**1**).
3. In the **Use** column, from the drop-down list, select the camera stream (**2**).

> **Note**
>
> **Camera** objects are created on the **Hardware** tab of the **System settings** dialog window. Creating and configuring **Camera** is described in the *Axxon PSIM software package. Installing and Configuring Security System Components Guide* document. Current version of this document is available in the documentation repository.

4. In the **Compression** column, from the drop-down list, select the video stream compression level (**3**).
5. If video from camera is to be received using videogate, select the required **Videogate** object from the drop-down list in the **Gateway** column (**4**).

> **Note**
>
> The corresponding **Videogate** object should be configured for data transferring with this camera. Configuring the **Videogate** object is described in the *Axxon PSIM software package. Administrator's guide* document. Current version of this document is available in the documentation repository.

6. To save changes click the **Apply** button (**5**).

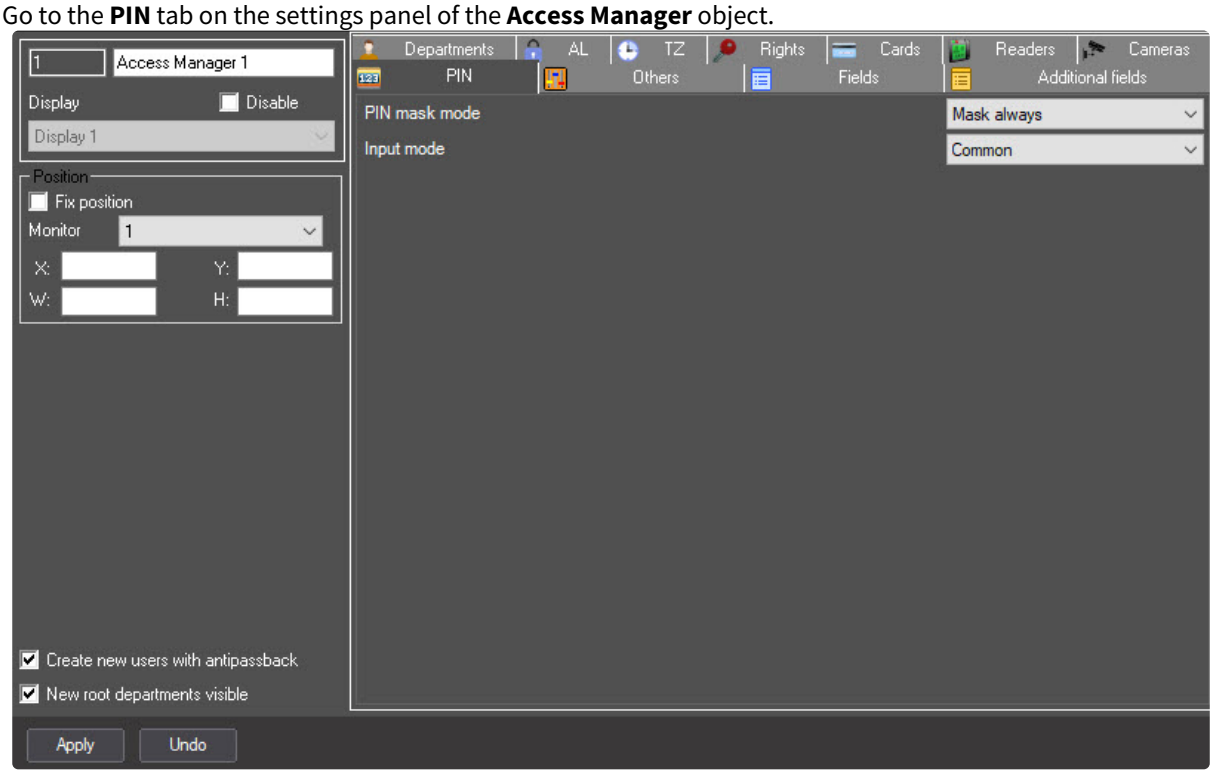
Selecting of available cameras is completed.

5.7 Configuring the user PIN code

Configuring the user PIN code allows you to set its format and perform the necessary checks to increase the reliability and security of access.

To configure the user PIN code, do the following:

1. Go to the **PIN** tab on the settings panel of the **Access Manager** object.

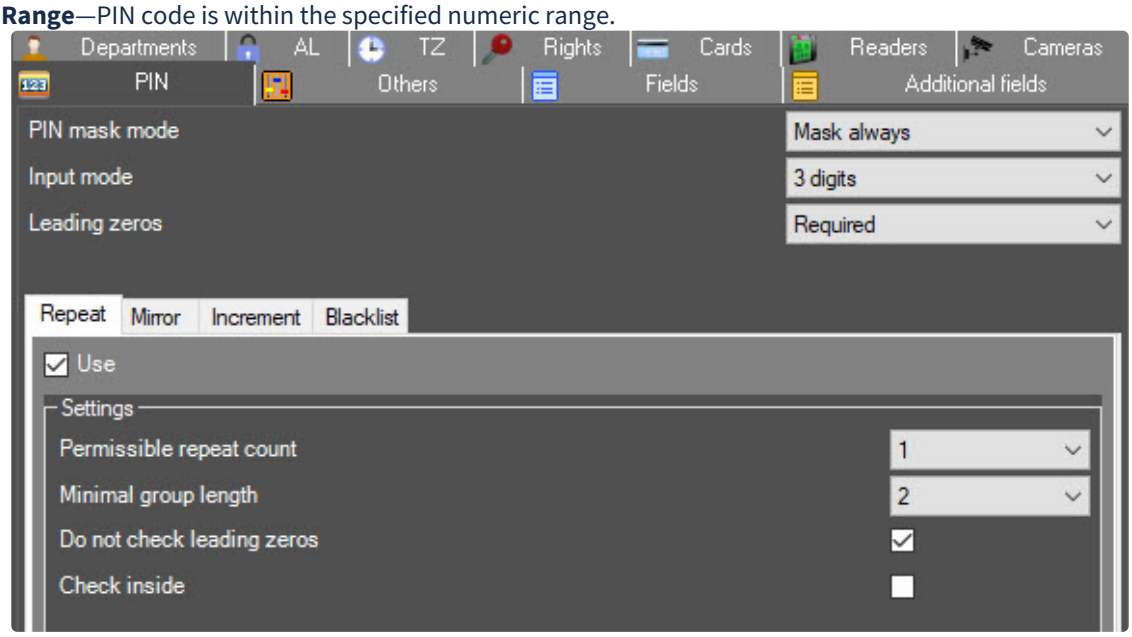


2. From the **PIN mask mode** drop-down list, select the mask mode of the user PIN code:
   - **Do not mask**—PIN code isn't masked with dots;
   - **Mask view**—PIN code is masked with dots when reading user data;
   - **Mask always**—PIN code is always masked with dots.
3. From the **Input mode** drop-down list, select the input mode of the user PIN code, further settings depend on it:
   a. **Common**—any variant of the PIN code is allowed. It is allowed to enter symbols, letters and numbers. If you select this mode, you can go to step 10 to apply the settings.

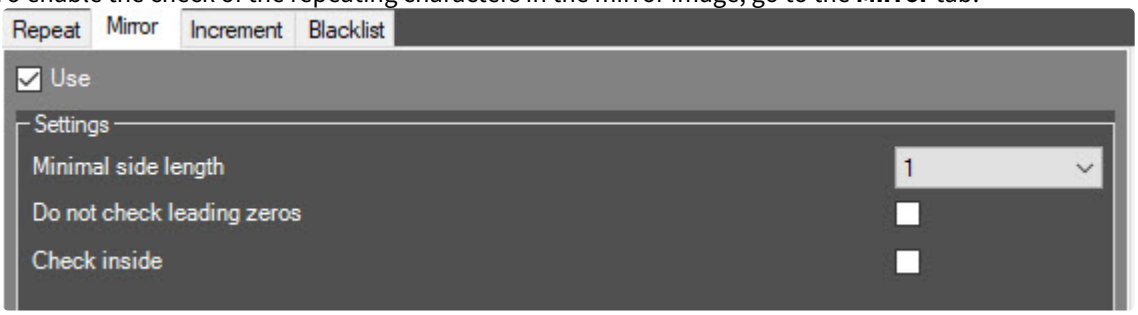
      > **Note**
      >
      > All further settings are made for all modes except for the **Common** mode.

   b. **3 digits**—PIN code must contain three digits.
   c. ...
   d. **9 digits**—PIN code must contain nine digits.

e. **Range**—PIN code is within the specified numeric range.



4. From the **Leading zeros** drop-down list, select the mode of setting zeros at the beginning of the PIN code:
   a. **Ignore**—leading zeros aren't considered as characters.
   b. **Required**—leading zeros are considered as characters.
   c. **Auto**—leading zeros are entered automatically, completing the PIN code to the required number of characters.
5. To enable the required PIN checks, go to the corresponding **Repeat**, **Mirror**, **Increment**, **Blacklist** tab and set the **Use** checkbox.
6. To enable the check of the repeating characters, go to the **Repeat** tab.
   a. From the **Permissible repeat count** drop-down list, select the maximum number of allowed character repetitions in the PIN code. The range of values depends on the input mode selected in step 3.
   b. From the **Minimal group length** drop-down list, select the number of characters in the group to search for repetitions. The range of values depends on the input mode selected in step 3.
   c. Set the **Do not check leading zeros** checkbox to disregard leading zeros when searching for repetitions. By default, the checkbox is clear.
   d. Set the **Check inside** checkbox to search for repetitions in the entire PIN code. By default, the checkbox is clear.
7. To enable the check of the repeating characters in the mirror image, go to the **Mirror** tab.



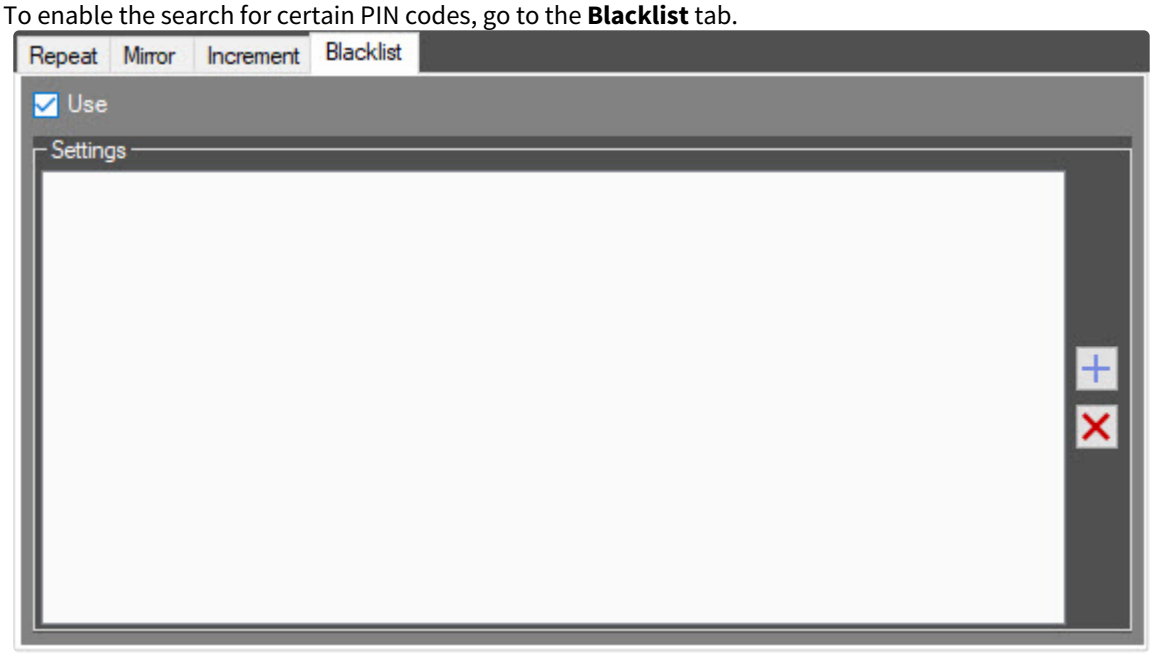
   a. From the **Minimal side length** drop-down list, select the number of characters in the group to search for repetitions in the mirror image. The range of values depends on the input mode selected in step 3.
   b. Set the **Do not check leading zeros** checkbox to disregard leading zeros when searching for repetitions in the mirror image. By default, the checkbox is clear.

c. Set the **Check inside** checkbox to search for repetitions in the entire PIN code in the mirror image. By default, the checkbox is clear.

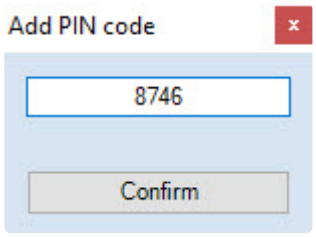
8. To enable the check of increasing and decreasing character sequences in the PIN code, go to the **Increment** tab.

a. From the **Permissible 'stair' length** drop-down list, select the number of characters in increasing/decreasing order from which the search will be performed. The range of values depends on the input mode selected in step 3.
b. From the **Checking mode** drop-down list, select the type of check:
   i. **Both**—sequences of characters are checked in increasing (increment) and decreasing (decrement) order.
   ii. **Increment**—sequences of characters are checked in increasing order.
   iii. **Decrement**—sequences of characters are checked in decreasing order.
c. Set the **Do not check leading zeros** checkbox to disregard leading zeros when searching for sequences of characters in increasing and decreasing order. By default, the checkbox is clear.
d. Set the **Check inside** checkbox to search for sequences of characters in increasing and decreasing order in the entire PIN code. By default, the checkbox is clear.

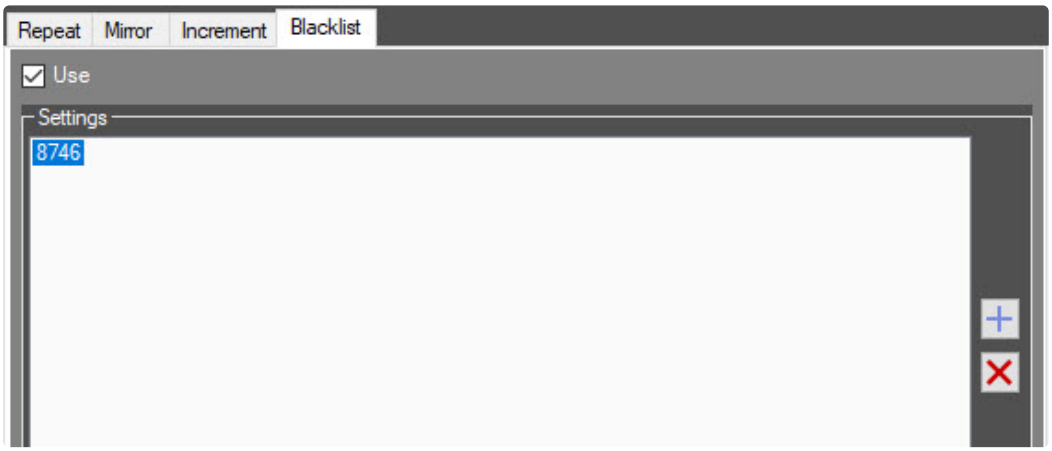
9. To enable the search for certain PIN codes, go to the **Blacklist** tab.



a. To add a PIN code to the blacklist, click the button. The **Add PIN code** window will open.



i. Enter the required PIN code in the blank field.
ii. Click the **Confirm** button. As a result, the specified PIN code will be added to the list of prohibited PIN codes.



> **Note**
>
> To remove the PIN code from the blacklist, click the button.

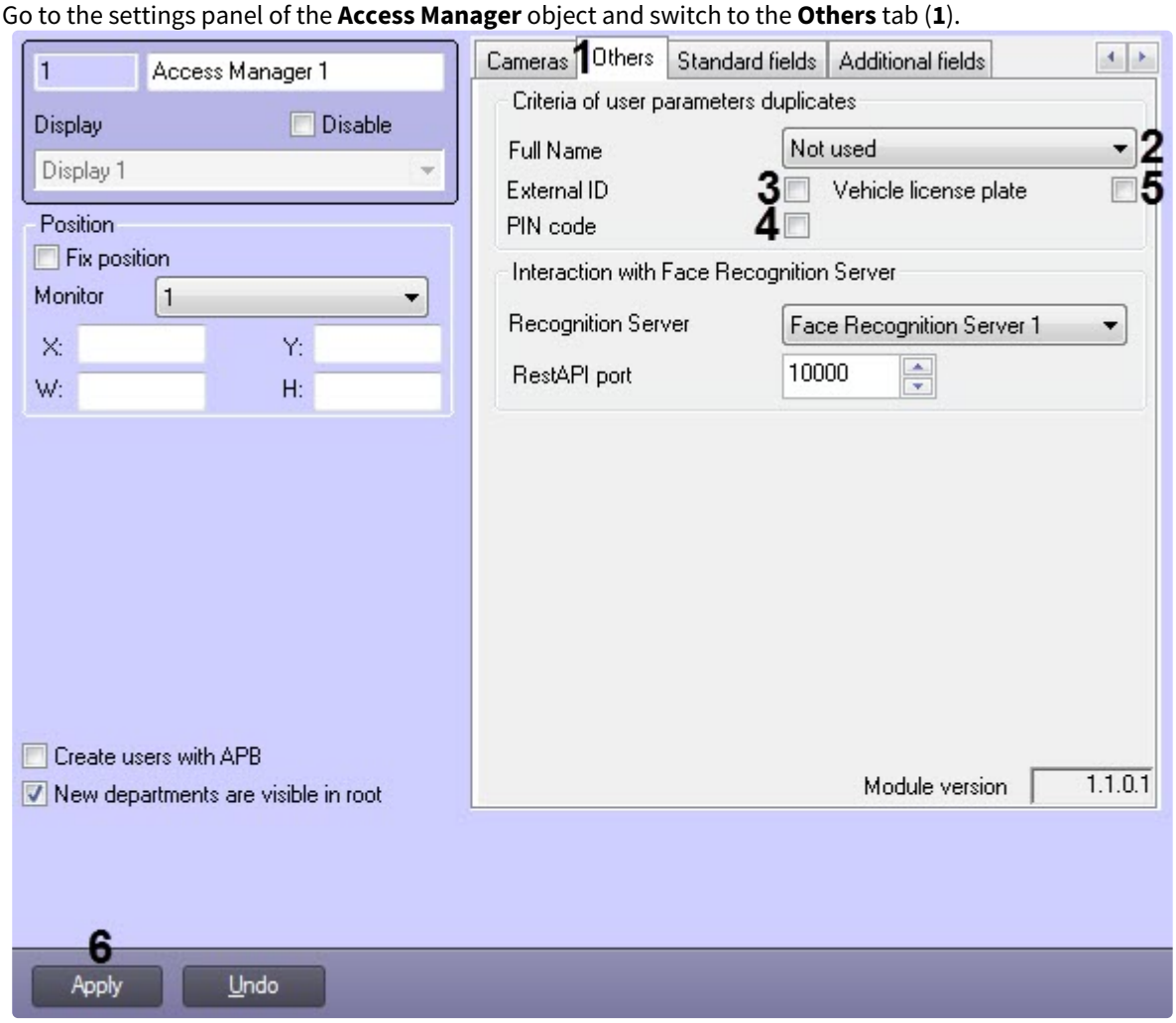
10. Click the **Apply** button to save the settings.

Configuring the user PIN code is complete.

5.8 Configuring the prohibition of new user parameter duplicates in Access Manager

Configure the prohibition of duplicate parameters for new users as follows:

1. Go to the settings panel of the **Access Manager** object and switch to the **Others** tab (**1**).



2. From the **Full Name** drop-down list (2) select a method for identifying duplicate user records:
   a. **Not used** – it's accepted to add users with equal full name.
   b. **Surname, name** – it's forbidden to add users with equal name and surname even if patronymic is differed.
   c. **Surname, name, patronymic** – it's forbidden to create users with equal full name.
3. Set the **External ID** checkbox if you want to forbid creating users with the same external identifiers (**3**).
4. Set the **PIN code** checkbox if you want to forbid creating users with the same PIN codes (**4**).
5. Set the **Vehicle license plate** checkbox if you want to forbid creating users with the same vehicle plate numbers (**5**).
6. To save changes click the **Apply** button (**6**).

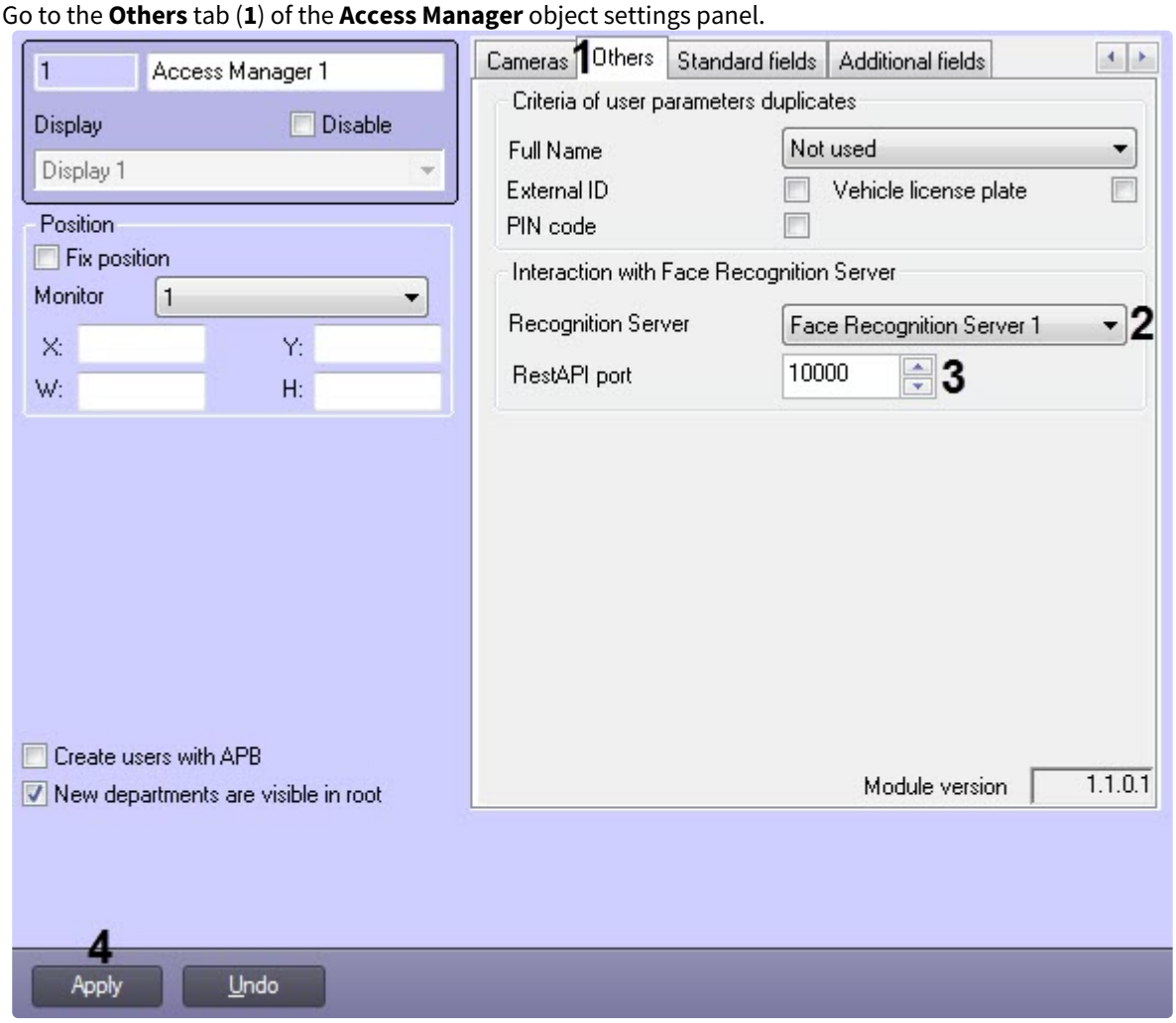
Configuring the prohibition of duplicate parameters for new users is completed.

5.9 Configuring the interaction with the Face PSIM Face recognition server

Configuring the interaction with the *Face PSIM* Face recognition server allows to check the quality of a recognized face before assigning it to the user.

The interaction with the Face recognition server is configured as follows:

1. Go to the **Others** tab (**1**) of the **Access Manager** object settings panel.



2. From the **Recognition Server** drop-down list (**2**), select the Face Recognition Server (for details, see *Face PSIM*. Administrator's Guide), which will check the quality of photos that are being added.
3. In the **RestAPI port** field (**3**), specify the port used for connecting to the Face Recognition Server. The default value is **10000**.
4. Click the **Apply** button (**4**) to save the settings.

The interaction with the *Face PSIM* Face recognition server is now configured.

5.10 Configuring fields displaying in user accounts

5.10.1 Configuring Main department type

The **Main** department type defines fields of the user profile available in **Access Manager** for view and edit by default.

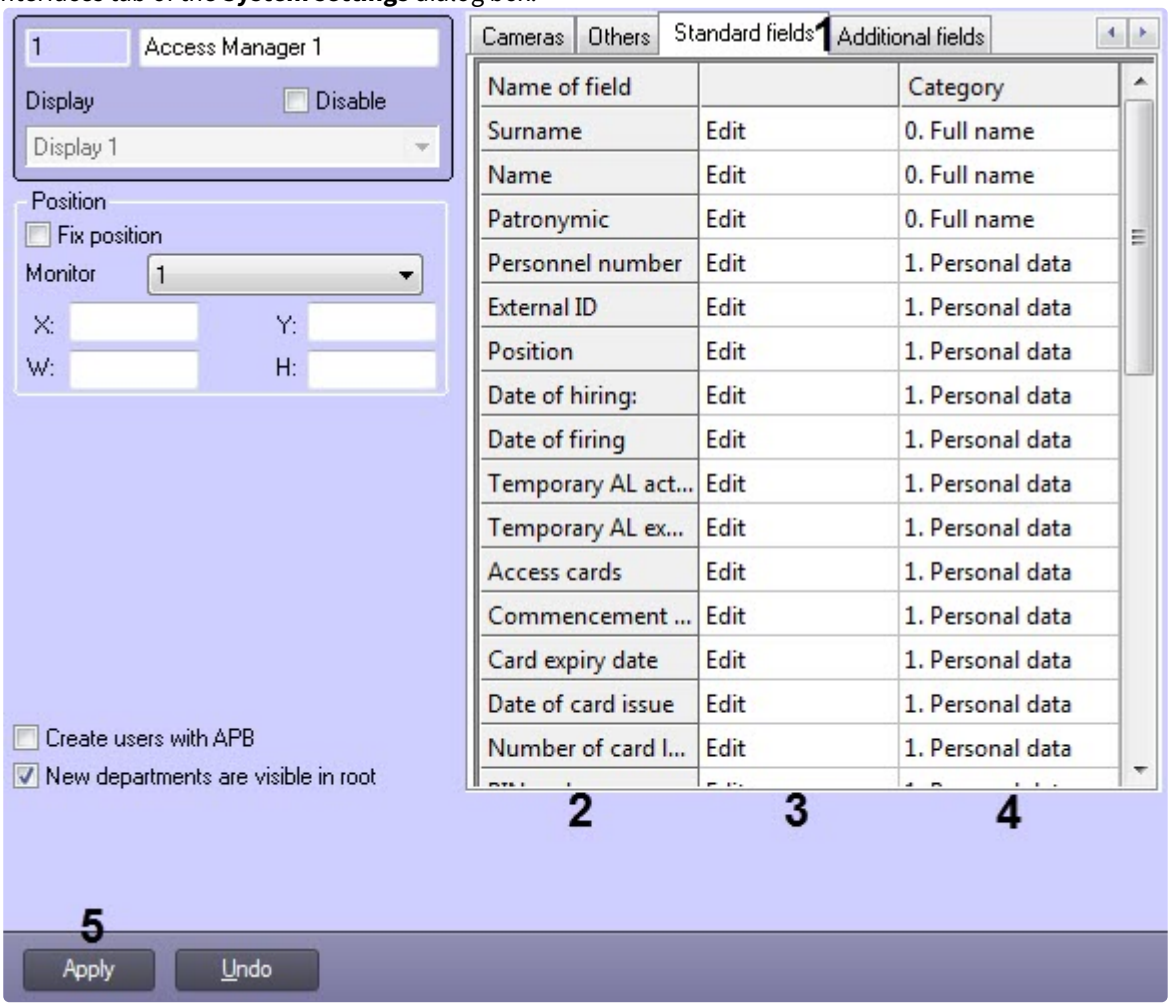
> **Note.**
>
> Fields visibility can also be restricted by **Type of department** and/or **Operators' permissions in AM** objects – see Configuring a type of department in the Access Manager and Configuring availability of fields depending on operator rights in the Access Manager.

Note.

Fields visibility configured in the **Main** type of department is applied if **Main** type is selected for the department while editing in the **Access Manager** (see Editing a department).

Configure the Main department type as follows:

1. Go to the **Access manager** object settings panel. The object is created under the **Display** object on the Interfaces tab of the **System settings** dialog box.



2. Go to the **Standard fields** or **Additional fields** tab (**1**).
3. Available fields are shown in the **Name of field** column (**2**).

Note.

See Setting user parameters for details on the fields.

4. Set visibility and editability of each field as necessary. For that:
   a. Select one of the following values in the (**3**) column:

Value	Description
Hidden	The field is not displayed in the list while editing or viewing user
Read only	The field is displayed in the list while editing or viewing user but is not editable
Edit	The field is displayed in the list while editing or viewing user band is editable. *Note. The **Card issued by** and **Access level assigned by** fields are always not editable as so as these fields are automatically filled with the name of the Operator assigning/ changing card or access level.*

b. Enter name of the group to display the field in the list of user's parameters in the **Access Manager** interface window in the **Category** column (**4**). Category name is arbitrary. If it is not specified, the parameter is shown in **Other** group.

> **Note.**
>
> Categories are sorted alphabetically. Use number prefixes in the name to set strict order of sorting.

5. Click **Apply** to save settings (**5**).

Configuring the **Main** department type is completed.

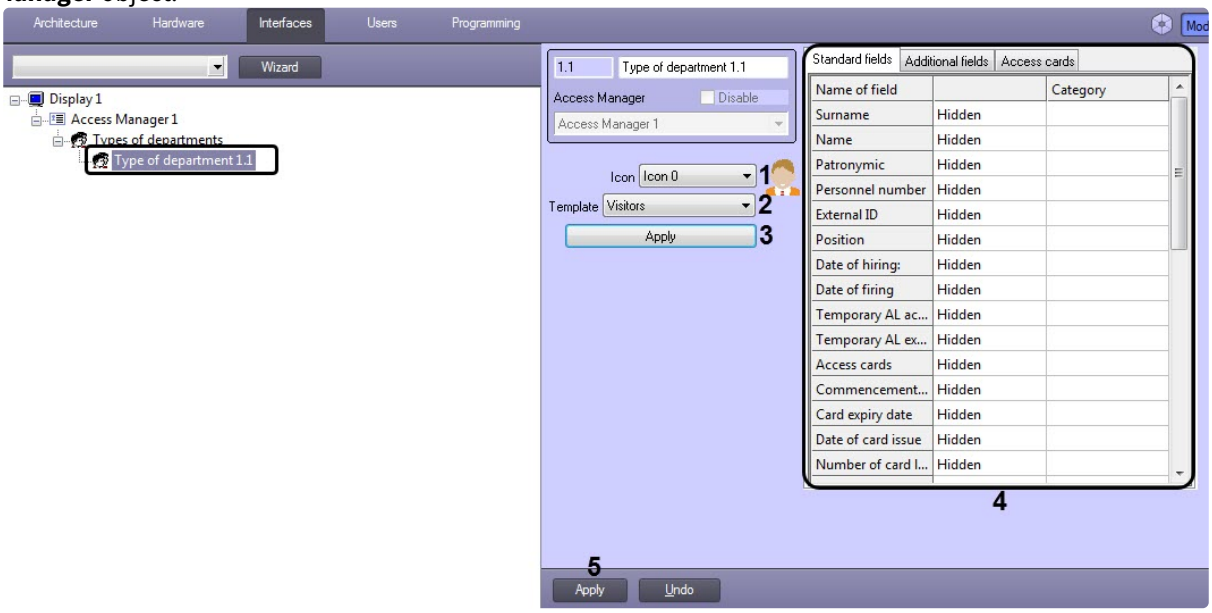
5.10.2 Configuring a type of department in the Access Manager

Type of department defines fields of users available to view and edit in the **Access Manager** interface window.

> **Note**
>
> Visibility of fields is defined by operator rights – see the Configuring availability of fields depending on operator rights in the Access Manager section.

To configure type of department, do the following:

1. Go to the settings panel of the **Type of department** object which is created on the basis of the **Access Manager** object.



2. From the **Icon** drop-down list (**1**) select the icon for displaying of department in the **Access Manager** window.
3. It is possible to select template types of departments in the *Access manager* module for convenience and availability of general fields settings. To perform it, do the following:
    a. From the **Template** drop-down list (**2**) select the required template of department type (**3**). Templates of following department types are available: **Employees, Visitors, Vehicle**.
    b. Click the **Apply** button to apply the template (**3**). As a result values in correspondence with the selected template will be displayed in the **Standard fields** and **Additional fields** tabs.

> **Attention!**
>
> Settings of the **Type of department** object won't be saved while clicking the **Apply** button. This button only changes values of fields to the specified values in the template. To save these settings click the **Apply** button when all settings will be completed.

4. If it's required to set visibility and availability for required fields editing manually, do the following:
    a. In the column (**4**) from the drop-down list select one of the following values:

Value	Description
Hidden	The field is not displayed in the list of user parameters while viewing and editing
Read only	The field is displayed in the list of user parameters while viewing and editing but is not available for editing

Edit	The field is displayed in the list of user parameters while viewing and editing and is available for editing. Note. It is not available to edit **Card issued by** and **Access level assigned by** fields because these fields are filled in automatically by the operator data while changing/assigning access level or access card.

> **Note**
>
> See also the description of fields in the Setting user parameters section.

b. In the **Category** column enter the name of group in which the field will be displayed in the list of users parameters in the **Access Manager** window while editing and viewing. Category name can be optional. If category is not specified, the field will be displayed in the **Other** category of the list of parameters.

> **Note**
>
> Categories in the list are sorted by alphabet. If it's required to strictly define the order of categories, use numeral prefix as for categories used in templates.

5. If it is necessary for this type of department to have its own parameters of access cards, make the appropriate settings on the **Access cards** tab (**4**) (for details, see Configuring access cards).
6. To save changes, click the **Apply** button (**5**).

Configuring of department type is completed.

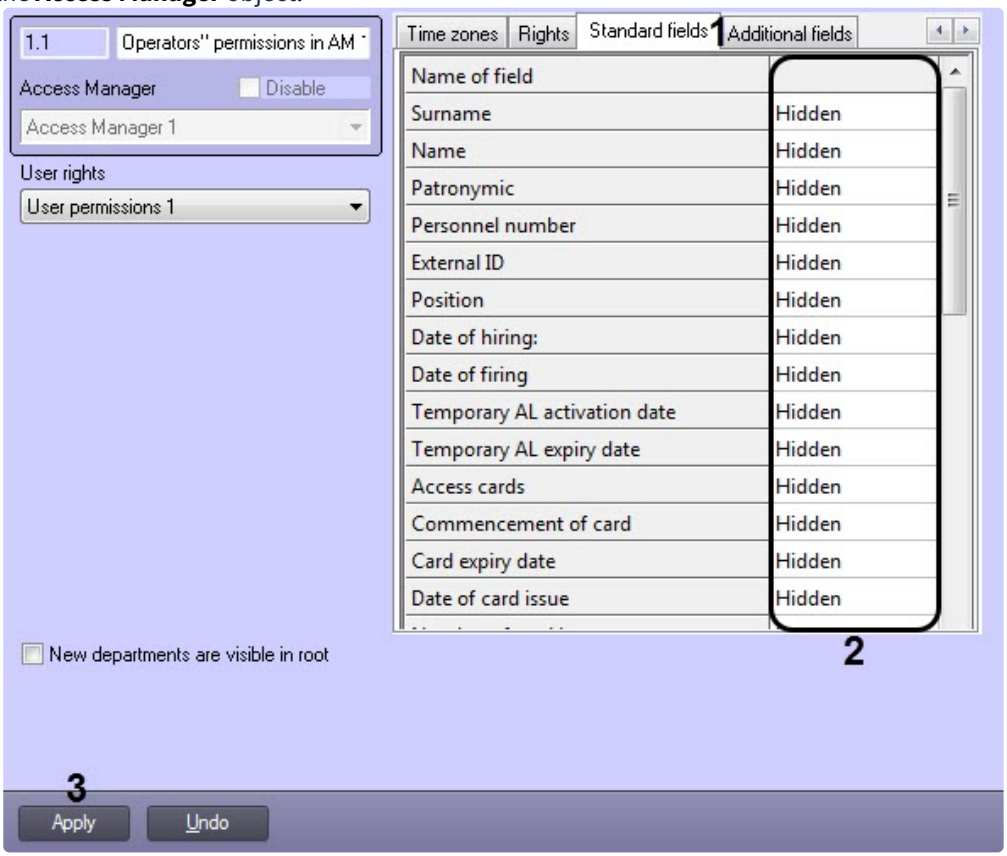
5.10.3 Configuring availability of fields depending on operator rights in the Access Manager

The Access Manager program module allows restricting of visibility and availability for editing user fields depending on operator rights in the *Access Manager*. Prohibition on performing operation with field in operator rights has priority over availability of field for viewing and editing specified while configuring the type of department. For example, if some field is available for editing in accordance to settings of department type, but its review is forbidden by rights of some operator, than this field won't be visible to this operator. Conversely, if editing of field is allowed by operator rights in the Access manager but the field is available only for reading, than the field will be available for reading for all operators.

> **Note**
>
> User reregistration in the *ACFA PSIM* software is required to apply changes when rights of the current operator are changed.

To configure availability of fields depending on operator rights, do the following:

1. Go to the settings panel of the **Operators'' permissions in AM** object, which is created on the basis of the **Access Manager** object.



2. Select the required tab: **Standard fields** or **Additional fields** (**1**). By default, all user fields are hidden.

> **Note**
>
> See also description of fields in the Setting user parameters section.

3. In the column (**2**) from the drop-down list select one of the following values:

Value	Description
Hidden	The field is not displayed in the list of user parameters while viewing and editing
Read only	The field is displayed in the list of user parameters while viewing and editing but is not available for editing
Edit	The field is displayed in the list of user parameters while viewing and editing and is available for editing. Note. It is not available to edit **Card issued by** and **Access level assigned by** fields because these fields are filled in automatically by the operator data while changing/assigning access level or access card.

4. To save changes click the **Apply** button (**3**).

Configuring of availability fields depending on operator rights is completed.

5.11 Configuring the ABBYY PassportReader SDK module

On the page:

5.11.1 General information about the ABBYY PassportReader SDK module

The *ABBYY PassportReader SDK* module is used to fill out the users parameters in the *Access Manager* module automatically after the images of the identification documents are recognized (passport, driver's license, passport for traveling abroad, birth certificate, etc.), including the images of the identification documents of some CIS countries (Azerbaijan, Belarus, Kazakhstan, Kyrgyzstan, Tajikistan, Uzbekistan) and foreign passports of any country (MRZ analyzed) from the scanner or hard disk.

Manufacturer:	ABBYY www.ABBYY.com
SDK version:	1.5.2

5.11.2 Configuration procedure

To configure the *ABBYY PassportReader SDK* module, do the following:

1. Create and configure the *Access Manager* module.
   After the first start of the *Access Manager* module, the account_manager.run.config file will be created in the *<Axxon PSIM installation directory>Modules* folder.
2. Open this configuration file for editing.
3. Set the value of the **AbbyyAPIEnabled** key to **True.** The default value is **False**.

```
        </setting>
        <setting name="AbbyyAPIEnabled" serializeAs="String">
            <value>True</value>
        </setting>
        <setting name="MainBackColor" serializeAs="String">
```

4. Save the changes in the edited **account_manager.run.config** file.
5. Install a hardware protection dongle for the operation of the *ABBYY PassportReader SDK* module.
6. Restart *ACFA PSIM.*
7. As a result, the button for accessing the *ABBYY PassportReader SDK* module will become active in the *Access Manager* module (see Filling out the user parameters using the ABBYY PassportReader SDK module).

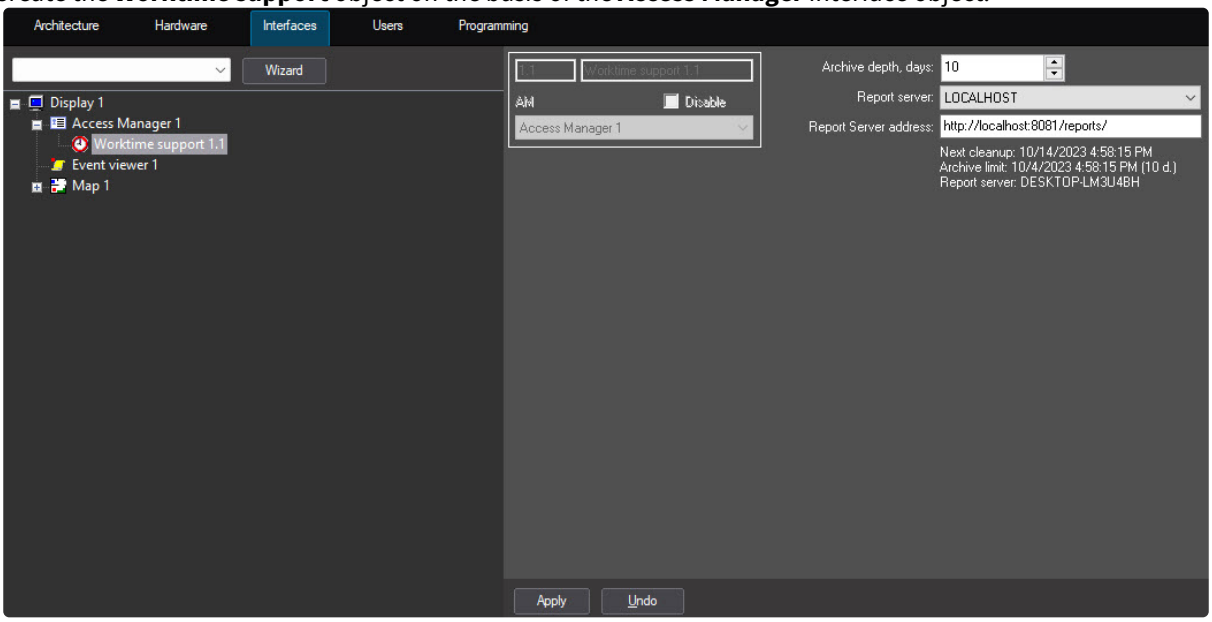
Configuring the *ABBYY PassportReader SDK* module is complete.

> **Attention!**
>
> You cannot activate AbbyyAPI and ScanifyAPI simultaneously.

5.12 Configuring the Worktime subsystem

For the correct operation of the *Worktime* subsystem, do the following in the specified order and in full:

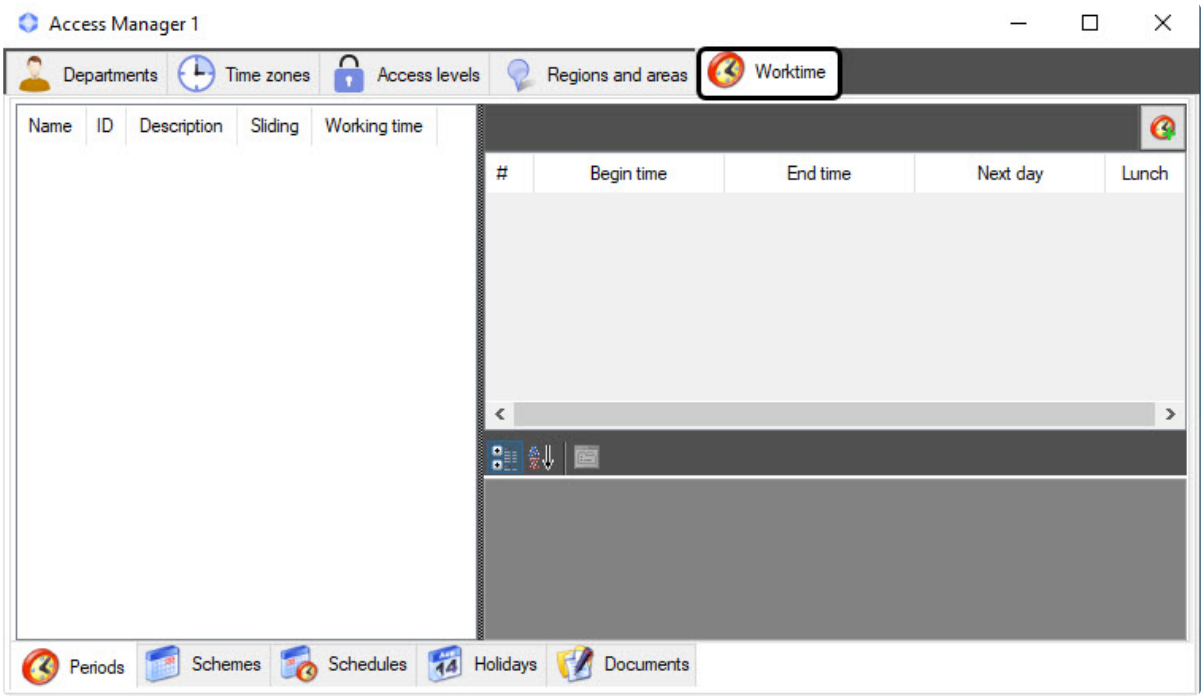
1. Create the **Worktime support** object on the basis of the **Access Manager** interface object.



2. Go to the settings panel of the **Worktime support** object.
3. In the **Archive depth, days** field, specify the time of storing the events archive in days, after which the event is deleted from the archive. If you leave 0 (the default value), the archive won't be automatically cleared.
4. From the **Report server** drop-down list, select the computer on which you created the **Time and Attendance reports** object (part of the *WEB Report System PSIM*) and whose database contains all information about access.
5. In the **Report Server address** field, specify the server address of the *WEB Report System PSIM.* For the information about configuring and working with the system, see WEB Report System PSIM. User Guide.

   > **Note**
   >
   > If the server of the *WEB Report System PSIM* has a static ip, and you plan to generate reports from another subnetwork, you must explicitly specify the IP address of the server of the *WEB Report System PSIM.*

6. Click the **Apply** button to save the changes.
7. Restart *ACFA PSIM*.
   After that, the **Worktime** tab will appear in the **Access Manager** interface window.



8. Update the database using the UpdateDB Utility.
9. Configure the regions for the ACS Readers (see Appendix 1. Configuring Regions for the ACS Readers to work with the Time and Attendance subsystem).
10. Create and configure:

> **Note**
>
> We recommend that you read The Worktime tab of the Access Manager interface window.

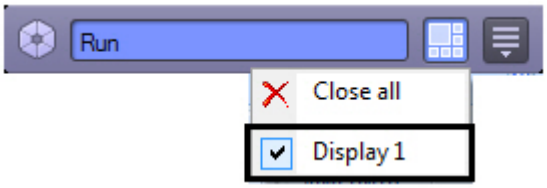
    a. Create work periods (see Work periods).
    b. Create work schemes (see Work schemes).
    c. Create work schedules (see Work schedules).
    d. If necessary, configure holidays (see Holidays).
    e. If necessary, create and configure documents (see Documents).
11. Assign work schedules to departments (see Assigning a work schedule to a department).
12. Assign work schedules to employees (see Assigning a work schedule to a user).
13. Assign documents to employees (see Assigning documents to a user).
14. Configure the WEB *Report System PSIM* (see Working with the reports).
15. To account for employee passes made before configuring the *Worktime* subsystem, use the UpdateDB Utility and re-account the databases (see Starting and working with the UpdateDB Utility).

6 Working with the Access Manager software module

6.1 Starting and stopping the Access Manager module

The **Access manager** window is a standard interface window of the *ACFA PSIM* software window. Starting and closing of this window is performed using the **Display** menu of the main control panel.

> **Note**
>
> The **Access Manager** object is to be created on the basis of the corresponding display on the **Interface** tab to run the **Access Manager** software module**.**



To display the **Access Manager** interface window select the **Display** object on the basis of which the corresponding **Access manager** object is created. To hide the **Access Manager** window select the **Close all**.

General view of the Access Manager window see in the Access Manager module interface section.

To close the **Access Manager** window use the  button. So for repeat opening of this window double click the icon in the Windows system tray. Pointing to this icon  , the name of the **Access Manager** object corresponding to the **Access Manager** interface window will display.

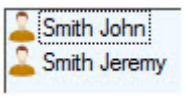
> **Note**
>
> The module icon is displayed in the Windows system tray depending of the value of the *DebugLevel* setting in the *HKLM->Software->Wow6432Node->AxxonSoft->PSIM->Debug* branch of the Windows Registry. If this parameter is set to 0, empty or missing, the icon will not be displayed. If the parameter has a non-zero value, the icon will be displayed.

6.2 General operations with the Access Manager interface elements

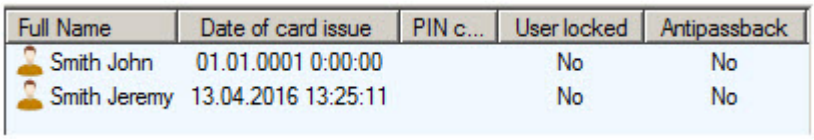
6.2.1 Selecting a view of displaying objects list in the Access Manager

In the *Access manager* software module it's possible to configure the view of user lists, time zones and access levels. The following displaying types are available:

1. List.



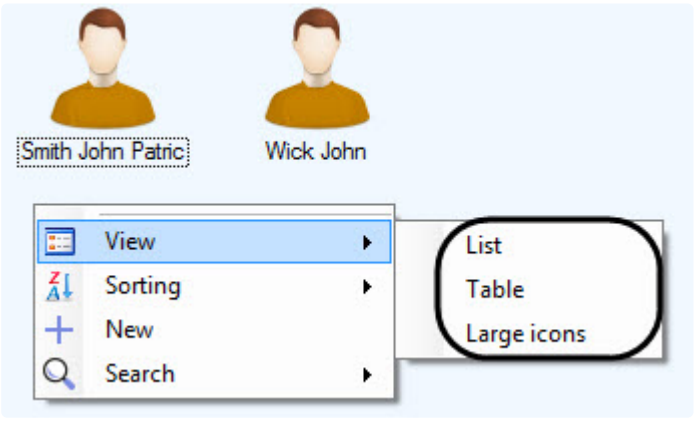
2. Table.



3. Large icons.

> **Note**
>
> The **Large icons** view is used on default for user list, times and zones and regions and areas list; **Table** and **List** views are used for access levels. The latter can not be changed.

To select the view of displaying use functional menu opened by right mouse click in free space of objects list or any user.

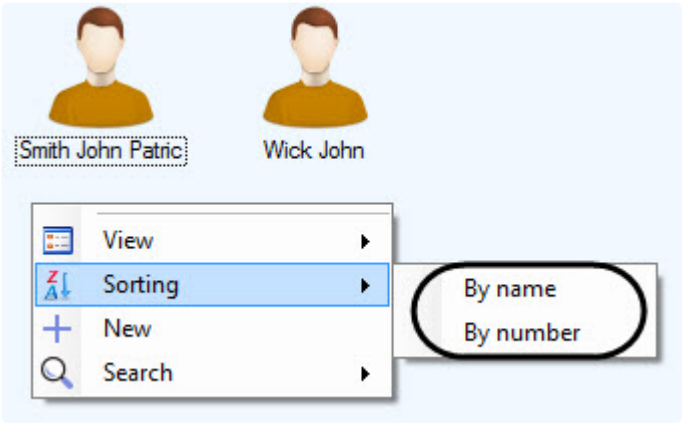


6.2.2 Selecting a way of sorting objects in the list

In the *Access Manager* software module it's possible to select the following ways of sorting user lists, time zones and access levels if the **List** or **Large icons** view is selected:

1. By name.
2. By number.

To select the way of sorting use functional menu opened by right mouse click in free space of objects list or any user.

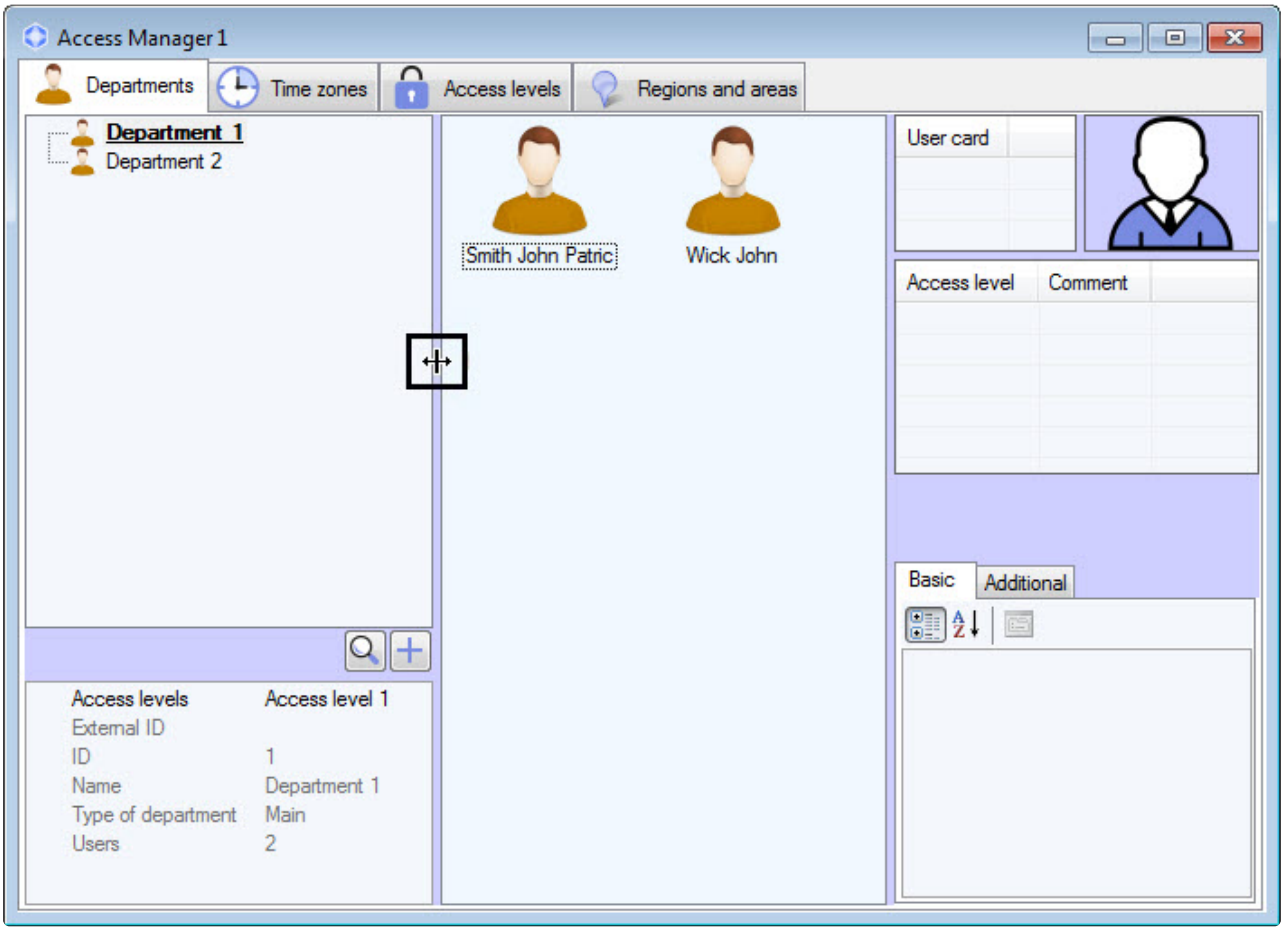


To sort values in the list by some field if the **Table** view is selected, click the left mouse button on the title of column with field name.

Full Name	Date of card issue	PIN code	User locked	Antipassback	Card expiry date
Smith Jeremy	13.04.2016 13:25:11		No	No	01.01.0001 0:00:00
Smith John	01.01.0001 0:00:00		No	No	01.01.0001 0:00:00

6.2.3 Change elements sizes of the Access Manager window interface

It's possible to change elements sizes of the **Access Manager** window interface using mouse. Pointing to border between interface elements of the **Access Manager** window, the cursor will be as follows.



It's possible to move the border between interface elements holding the left mouse button.

6.2.4 Keyboard shortcuts for working with interface elements

Use keyboard shortcuts described in the following table while working with lists of users, time zones and access levels.

To use the keyboard shortcut, the list of objects should be active. So before using the keyboard shortcut, left-click in the area of the objects list.

Keyboard shortcut	**Description**
Ctrl+F	Search for object
Ctrl+N	Create new object
Ctrl+Del Ctrl+Backspace	Delete an object. To use this shortcut, select an object in the list

Ctrl+Shift+M	Show/hide the user control panel in the **Departments** tab (see Viewing a list of users)
Ctrl+A	Select all users in the department / in search results / in the region
Ctrl+left mouse button	Select multiple objects one by one. To use this shortcut, press the Ctrl key and, without releasing it, select each required object by clicking the left mouse button
Shift+left mouse button	Select a group of objects. To use this shortcut, press the SHIFT key and, without releasing it, select the first and last object of the group by clicking the left mouse button. All objects in between will be selected automatically

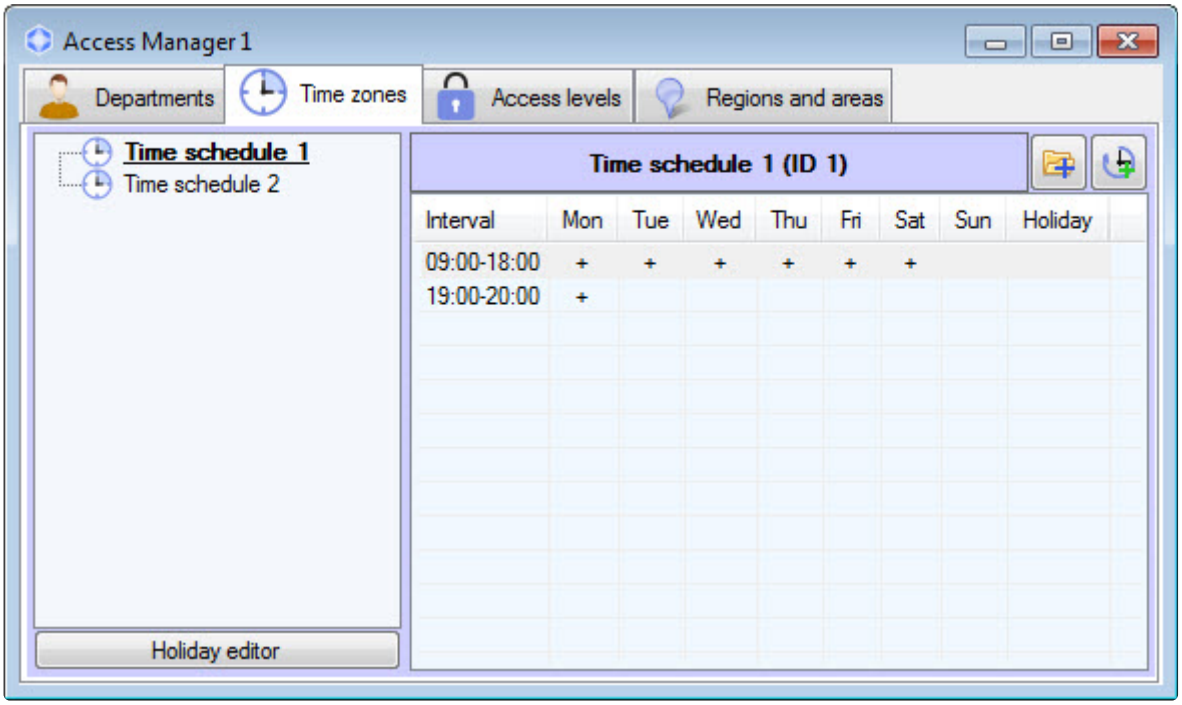
Modal windows, with a few exceptions, are closed by pressing the Esc key.

> **Note**
>
> For example, the Esc key cannot be used to close the user photo assignment window.

6.3 Working with time zones in the Access Manager software module

6.3.1 General information about time zones in the Access Manager software module

Working with time zones is performed on the **Time zones** tab of the **Access Manager** window.



The Access Manager software module allows you to create, edit, copy, view, and delete time zones. At the same time, the ability to create, edit and delete time zones may be prohibited when configuring the Access Manager software module - see Rights for accessing the time zones in Access Manager.

Time zone is used as working schedule in the Access Manager software module. It's possible to set intervals of two types:

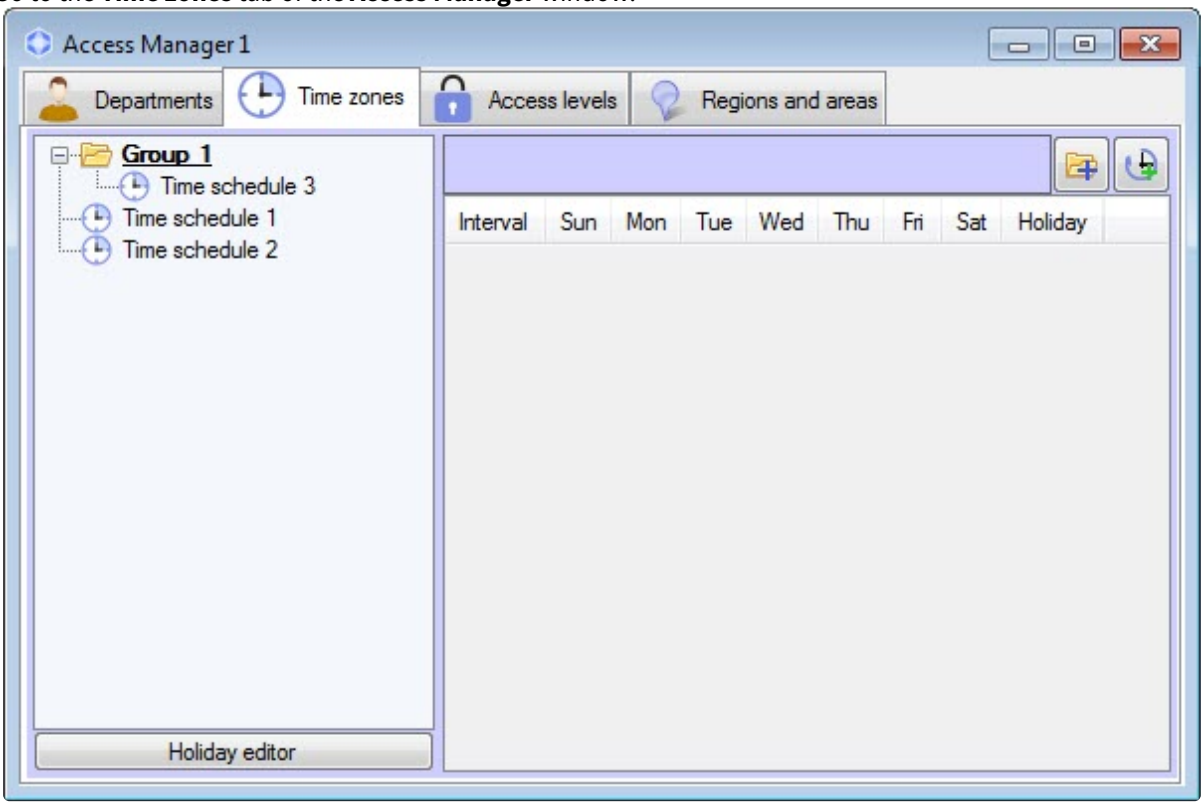
1. Week interval. Time interval is set for specified days of the week.
2. Intervals of shift schedule. Interval is repeated with specified period starting from the specified day.

> **Attention!**
>
> Few types of hardware support shift schedules in spite of their supporting in the *Access Manager* software module. At most, time zones with shift intervals will be ignored by ACS integration. Exception to this case applies if integration supports operation in the "Access request" mode when hardware request the integration on access through the specified access point.

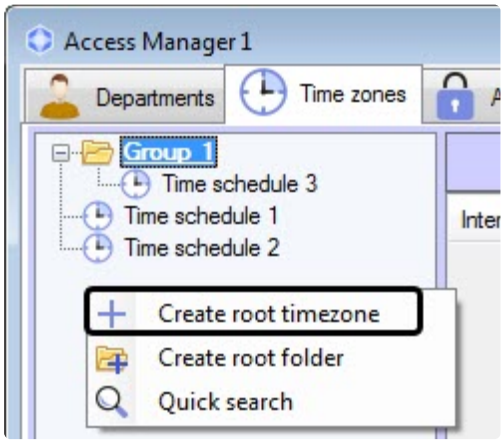
6.3.2 Creation of a time zone in the Access Manager software module

To create a time zone, do the following:

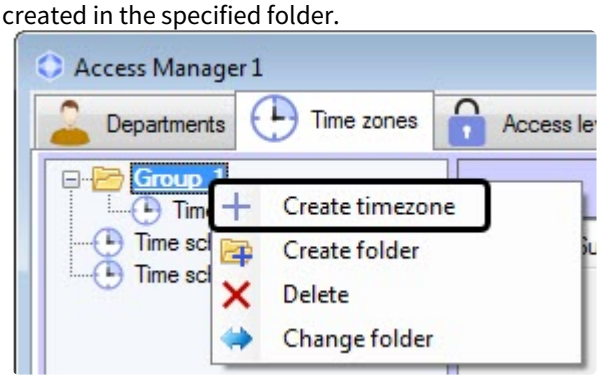
1. Go to the **Time zones** tab of the **Access Manager** window.



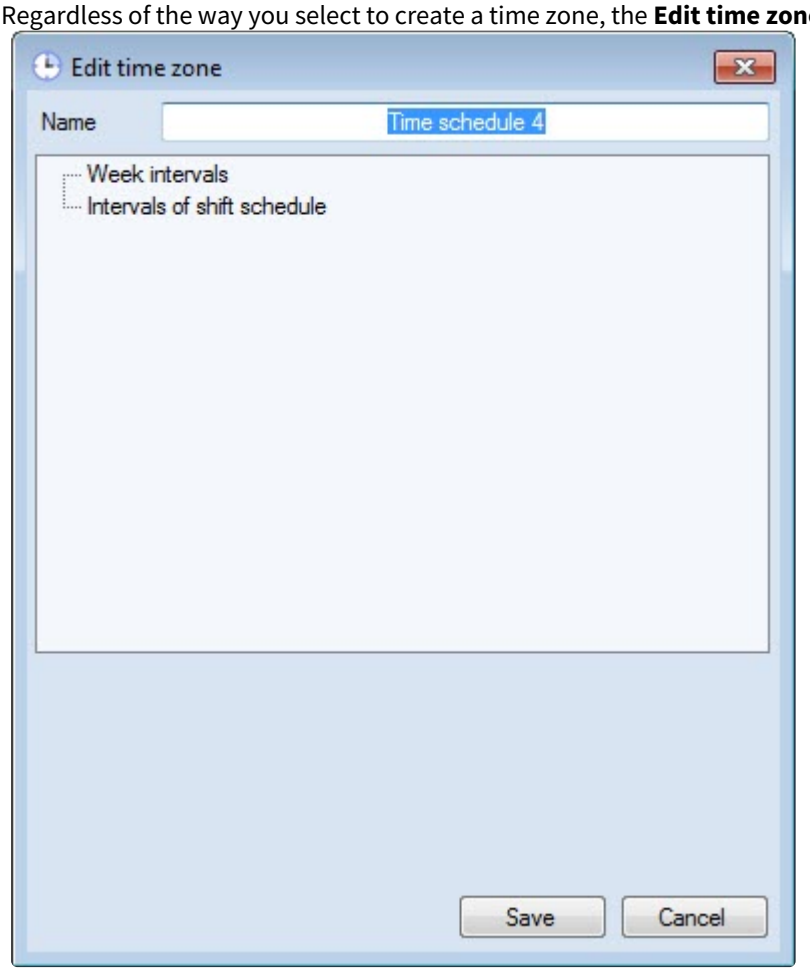
2. There are two ways to create a new time zone:
   a. Right-click in the free area of the list of time zones and select the **Create root time zone** item in the opened function menu (**1**). In this case, the time zone will be created in the common list of time zones.



b. Right-click on the folder and select the **Create timezone** item (**2**). In this case, the time zone will be created in the specified folder.



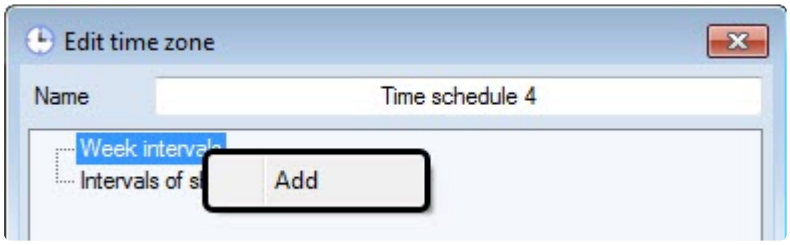
3. Regardless of the way you select to create a time zone, the **Edit time zone** window will open.



4. Enter the name of creating time zone in the **Name** field.

> **Note**
>
> The name should be unique. If a time zone with this name has already been created in the system, then while saving, a corresponding message will be displayed and the zone will not be saved. Also, the name should not contain the following characters: < | >.

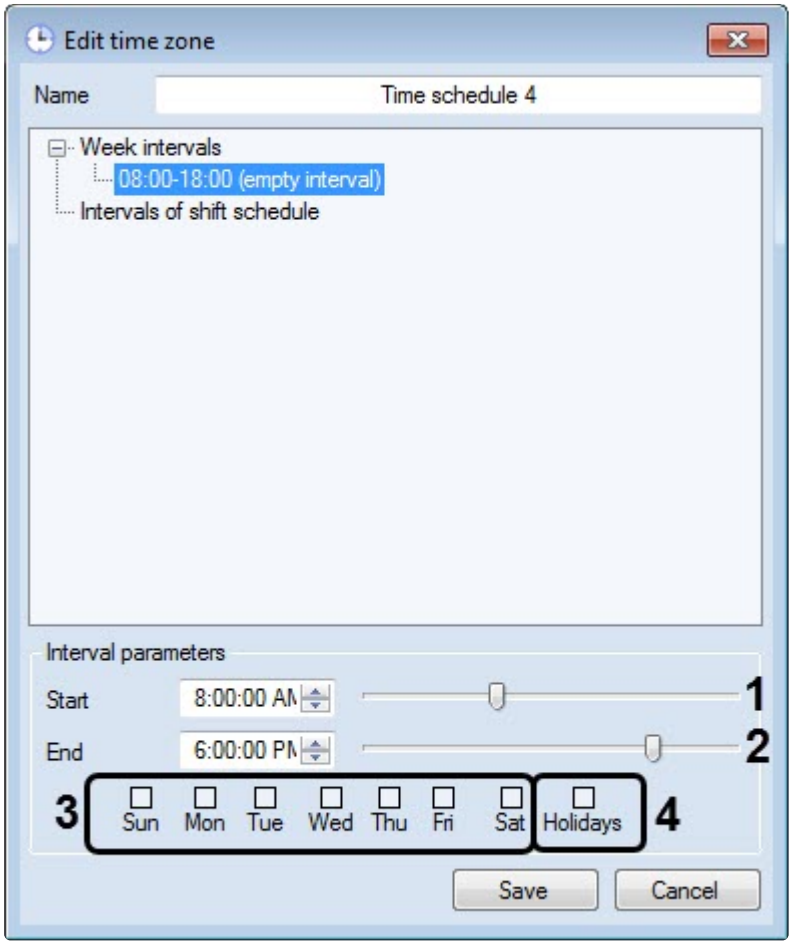
5. Add week intervals to the time zone if it's required:
   a. Click right mouse button on the **Week intervals** line and select the **Add** item in the opened functional menu.



   b. New interval will be created in the **Week intervals** group. Panel of interval configuring will display at the bottom of the **Edit time zone** window.

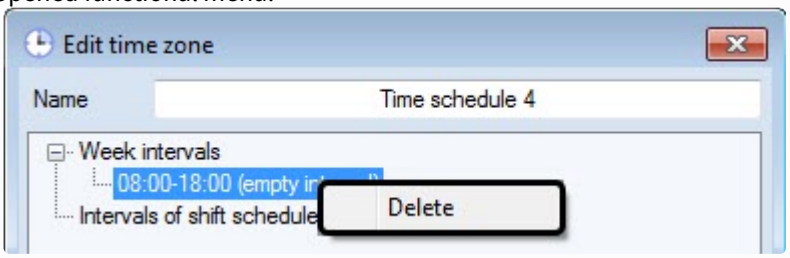
> **Note**
>
> Name of the interval is a time period and specifying days in which interval operates within brackets. Apart of week days separated by commas, the following values can be specified:
> 1. Empty interval.
> 2. Whole week.
> 3. Whole week and on holiday.
> 4. On workdays.
> 5. On workdays and on holiday.
> 6. On the weekend and on holiday.
> 7. On the weekend.
> 8. Only on holiday.

c. Enter or set using slider time of interval start in the **Start** field (**1**).



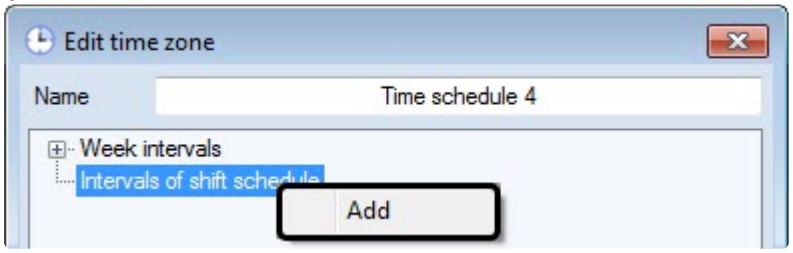
d. Enter or set using slider time of interval end in the **End** field (**2**).
e. Set checkboxes corresponding to days in which interval should operate (**3**).
f. If it's required to include holidays in the interval, set the **Holidays** checkbox (**4**).

> **Note**
>
> Working with holidays is described in the Edit holidays section.

> **Note**
>
> To delete interval, click right mouse button on the interval and select the **Delete** item in the opened functional menu.
>
> 
>

g. Repeat steps a-f for all required week intervals.

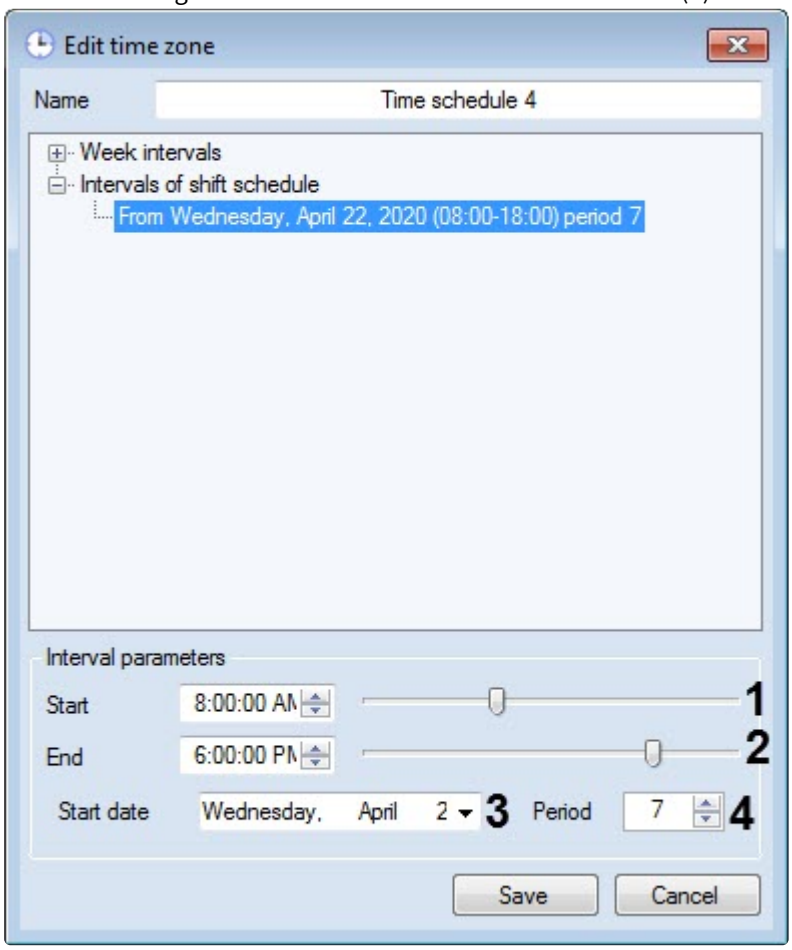
6. Add intervals of shift schedule to the time zone if it's required:
   a. Click right mouse button on the **Intervals of shift schedule** line and select the **Add** item in the opened functional menu.



   b. New interval will be created in the **Intervals of shift schedule** group. Panel of interval configuring will display at the bottom of the **Edit time zone** window.

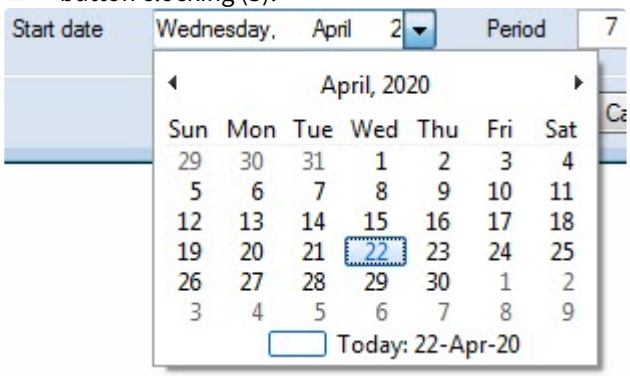
> **Note**
>
> Name of the interval is a date of interval start, time interval and period of interval repetition in days.

c. Enter or set using slider time of interval start in the **Start** field (**1**).



d. Enter or set using slider time of interval end in the **End** field (**2**).

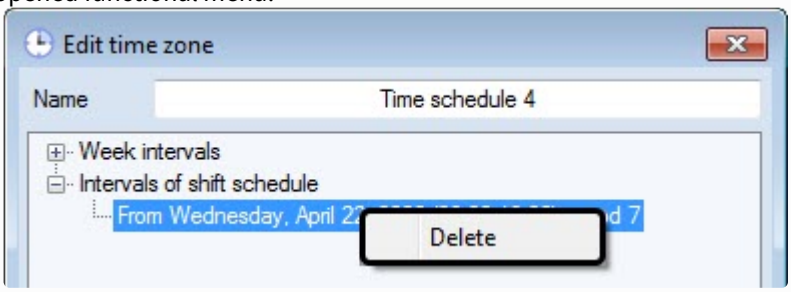
e. Enter the start day of shift schedule in the **Start date** field using keyboard or calendar opened by button clocking (**3**).



f. In the **Period** field using up-down buttons enter the number of days in which the interval of shift schedule will be repeated (**4**).

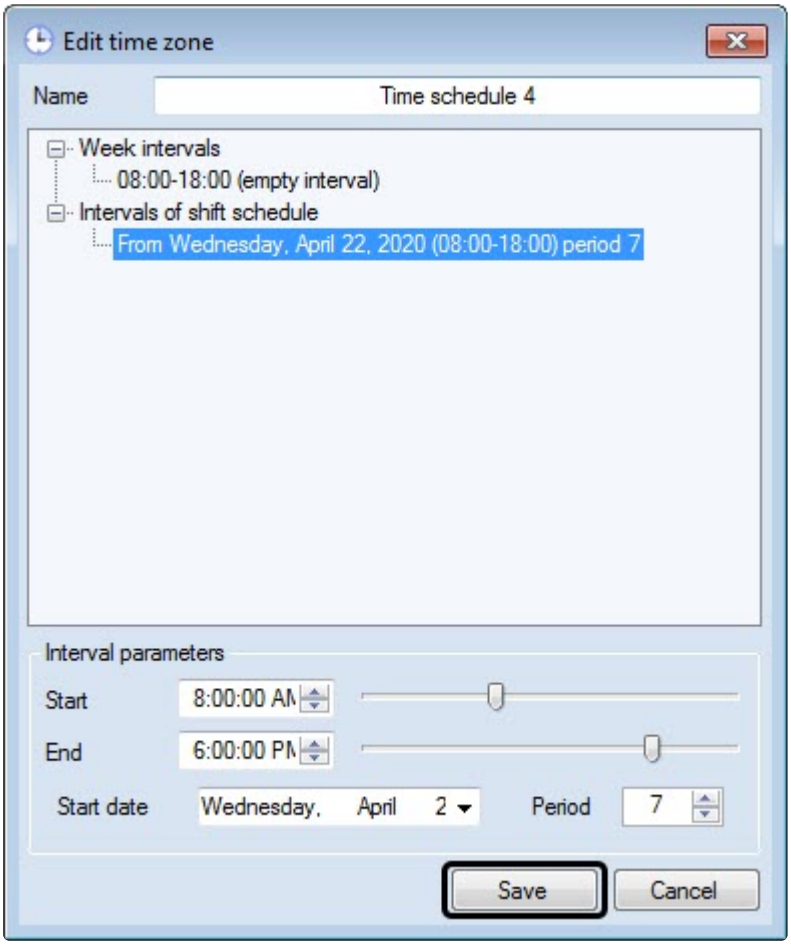
> **Note**

To delete interval, click right mouse button on the interval and select the **Delete** item in the opened functional menu.

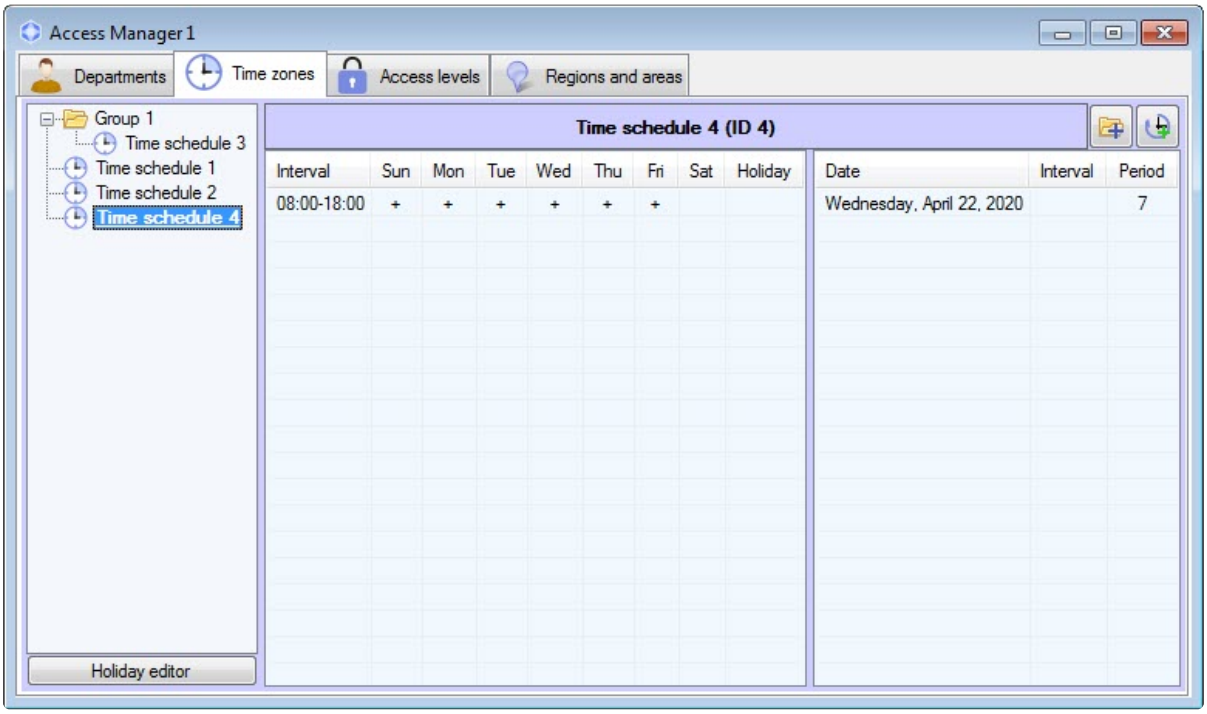


g. Repeat steps a-f for all required week intervals.

7. Click the **Save** button.



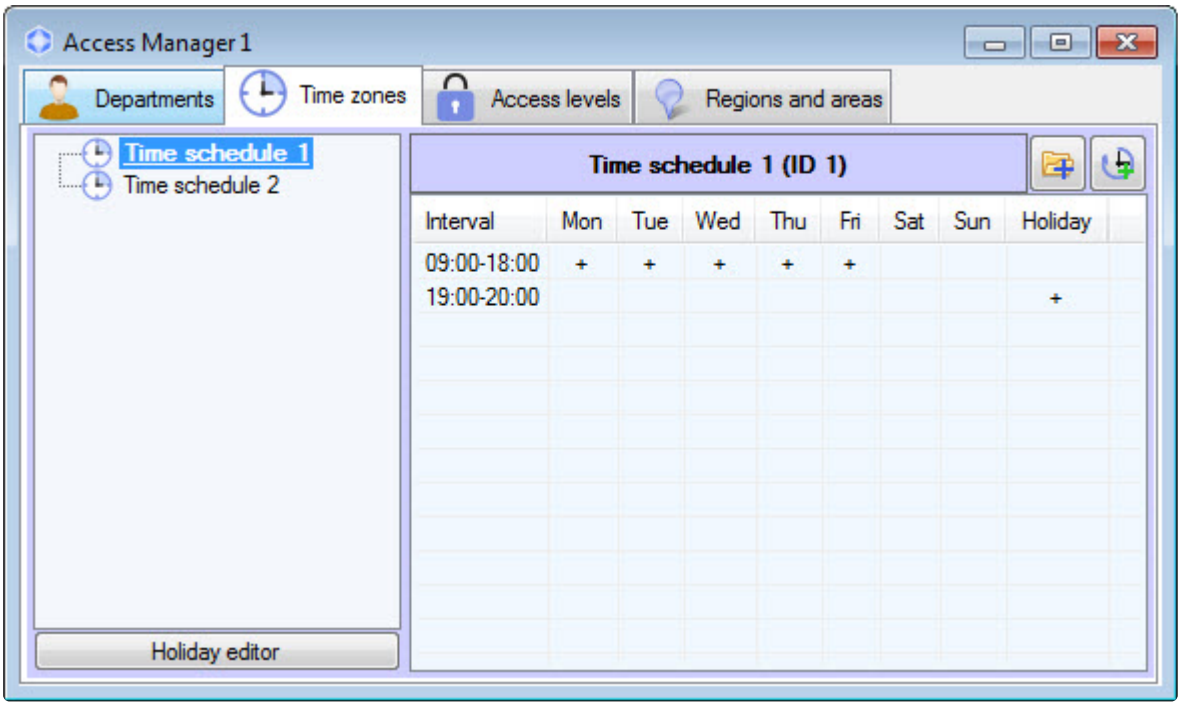
As a result, the created time zone will be displayed in the time zone list.



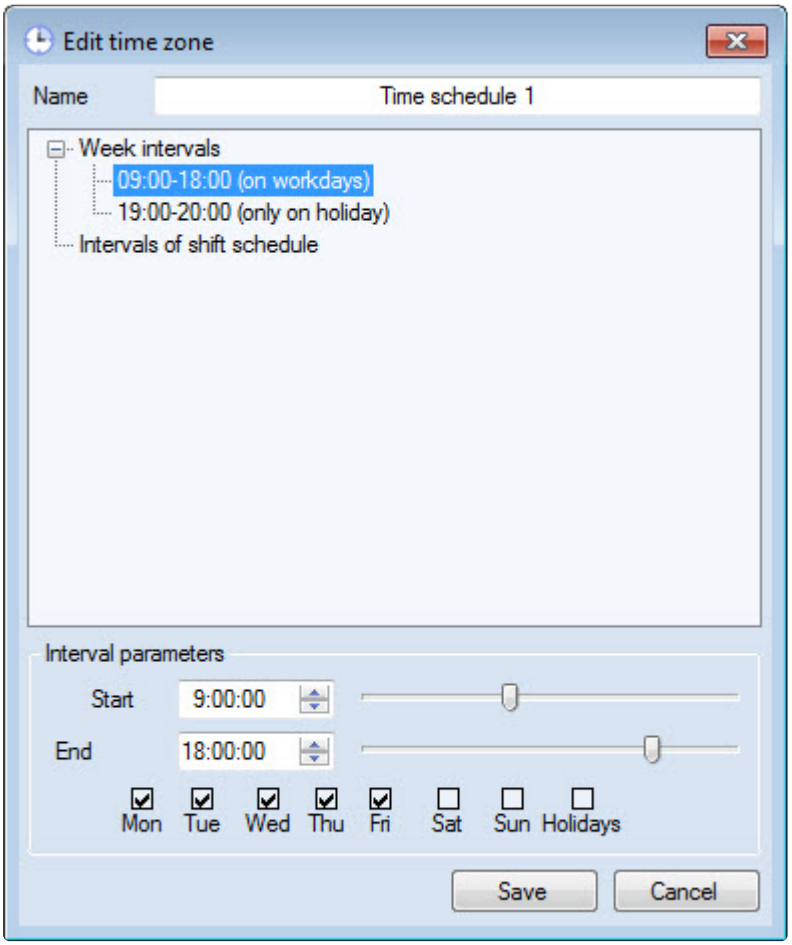
6.3.3 Editing a time zone in the Access Manager software module

Editing of time zone involves adding and deleting intervals from time zone and changing configured intervals. To start editing of time zone double click the required time zone in the list on the **Time zones** tab. As a result, the **Edit time zone** window will open.

Also this window can be opened by double click of left mouse button on interval in the list of selected time zone.



The clicked interval will be selected in the opened window. Working with this window is the same as while creating time zone - see Create time zone section.

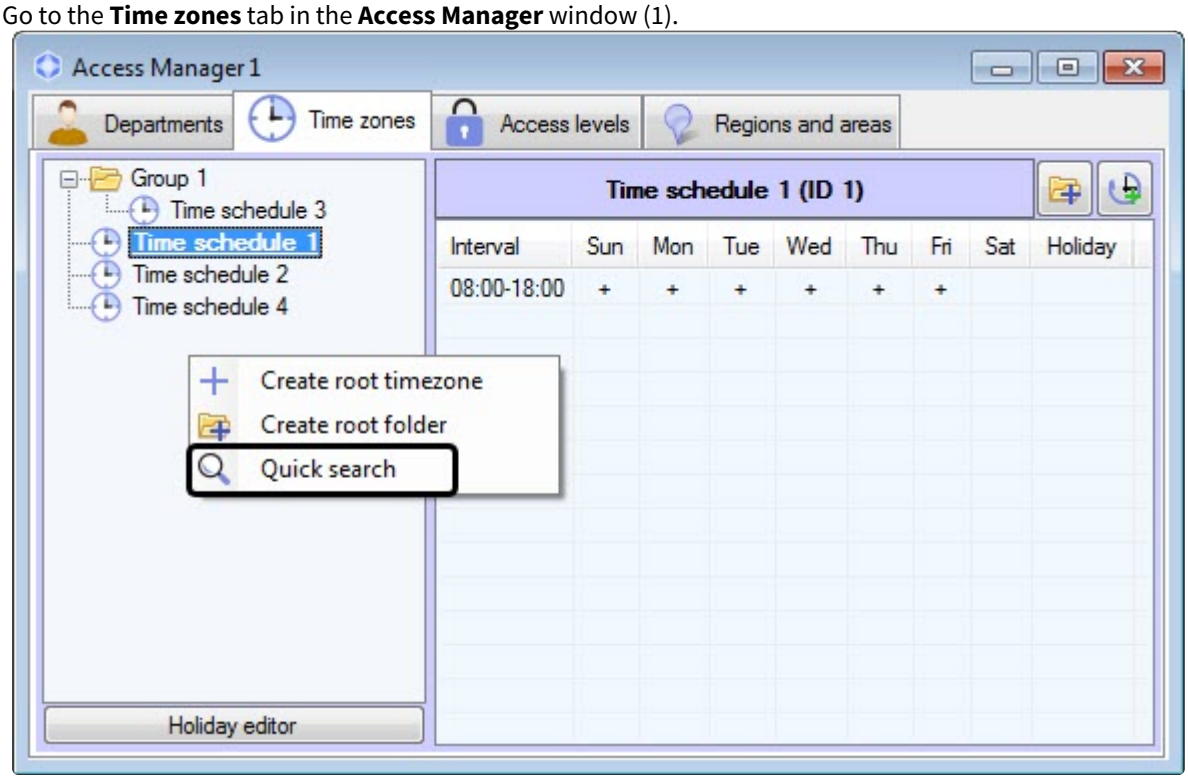


6.3.4 Search for time zone

Going to search for time zone

In the *Access Manager* software module it's possible to search for time zone by name and ID. To search for time zone, do the following:

1. Go to the **Time zones** tab in the **Access Manager** window (1).



2. Click the right mouse button in free area of time zone list.
3. In the opened functional menu select the **Quick search** item. The **Search for time zone** window will open.

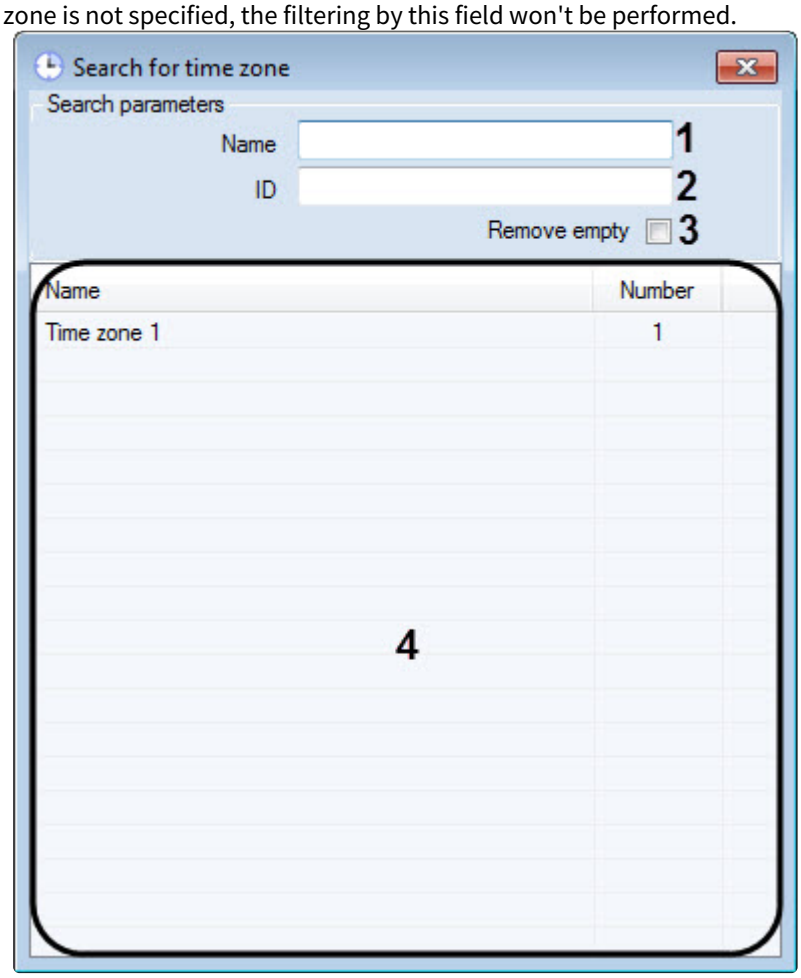
Going to search for time zone is completed. Working with the **Search for time zone** window is described in the Working with the Search for time zone window section.

Working with the Search for time zone window

The **Search for time zone** window is opened while searching for time zone (see the Going to search for time zone) or while configuring access level (see Creation of an access level section).

Working with the **Search for time zone** window is performed as follows:

1. If it's required to filter time zones by name, enter the name or its part in the **Name** field (1). If name of time zone is not specified, the filtering by this field won't be performed.



2. If it's required to filter time zones by ID, enter identical number of required time zone in the **ID** field (2). If ID is not specified the filtering by this field won't be performed.
3. If time zones without intervals are not required in search result, set the **Remove empty** checkbox (3).
4. Click the **Enter** button on the keyboard.
5. Time zones satisfying to search terms will be displayed in the table of search results (4). Search is case-insensitive. All objects corresponding fields of which contain specified values will be found.

To sort search results click the left mouse button on title of corresponding column.

While double click on time zone, the **Search for time zone** window will be closed and corresponding time zone will be selected in the list in the **Time zones** tab or will be added to configured access level.

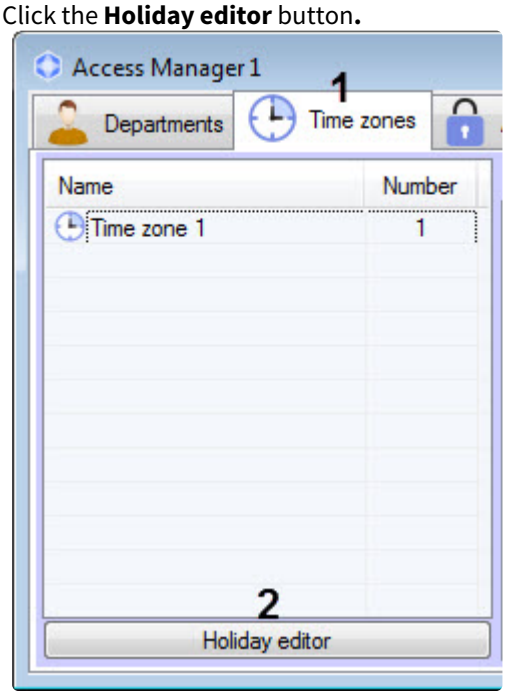
Search for time zone is completed.

6.3.5 Editing holidays

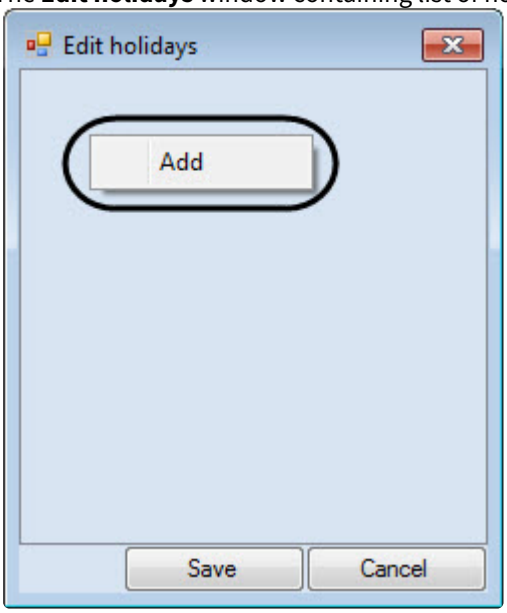
To edit holidays, do the following:

1. Go to the **Time zones** tab of the **Access manager** window.

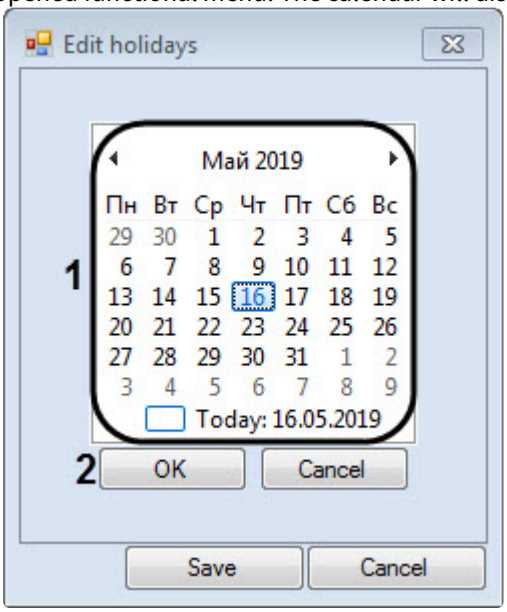
2. Click the **Holiday editor** button**.**



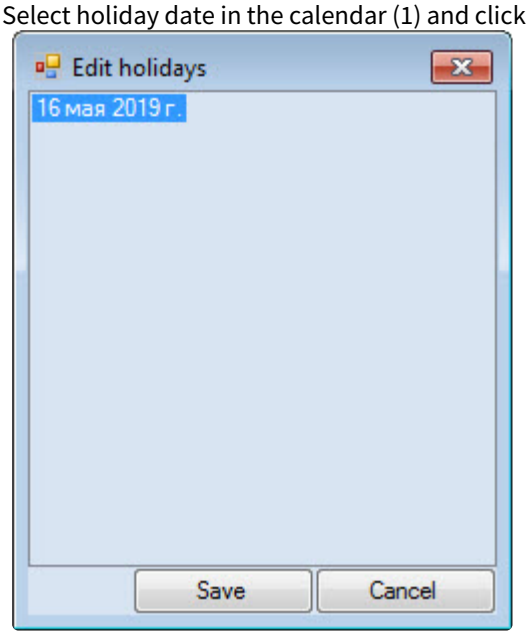
3. The **Edit holidays** window containing list of holidays will be opened.



4. To add holiday click the right mouse button in free area of holidays list and select the **Add** item in the opened functional menu. The calendar will display.

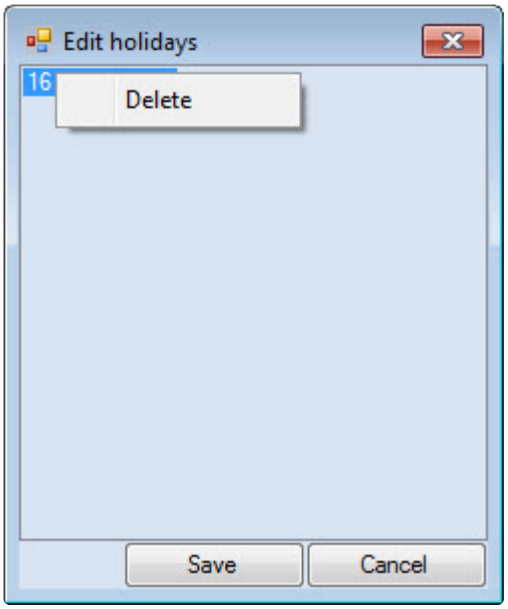


5. Select holiday date in the calendar (1) and click the **OK** button (2). The holiday will be added to the list.

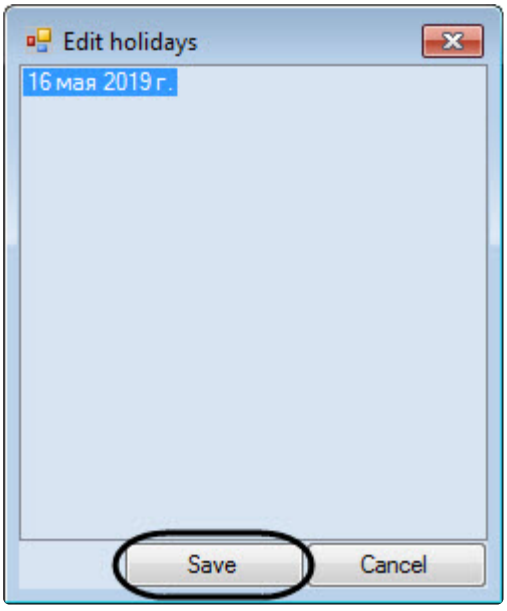


6. Repeat steps 4-5 for all required holidays.

> **Note**
>
> To delete holiday click the right mouse button on it and select the **Delete** item in the opened functional menu.



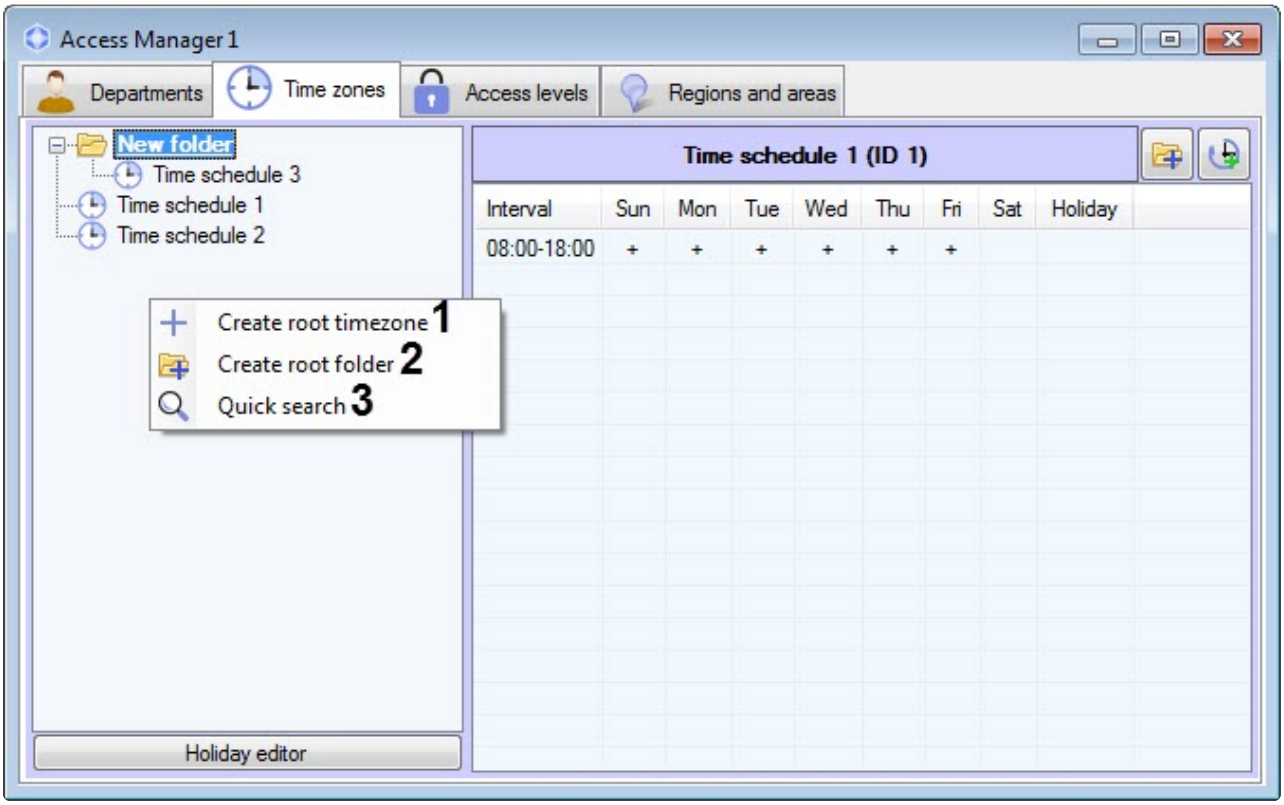
7. Click the **Save** button.



Editing of holidays is completed.

6.3.6 Managing the list of time zones

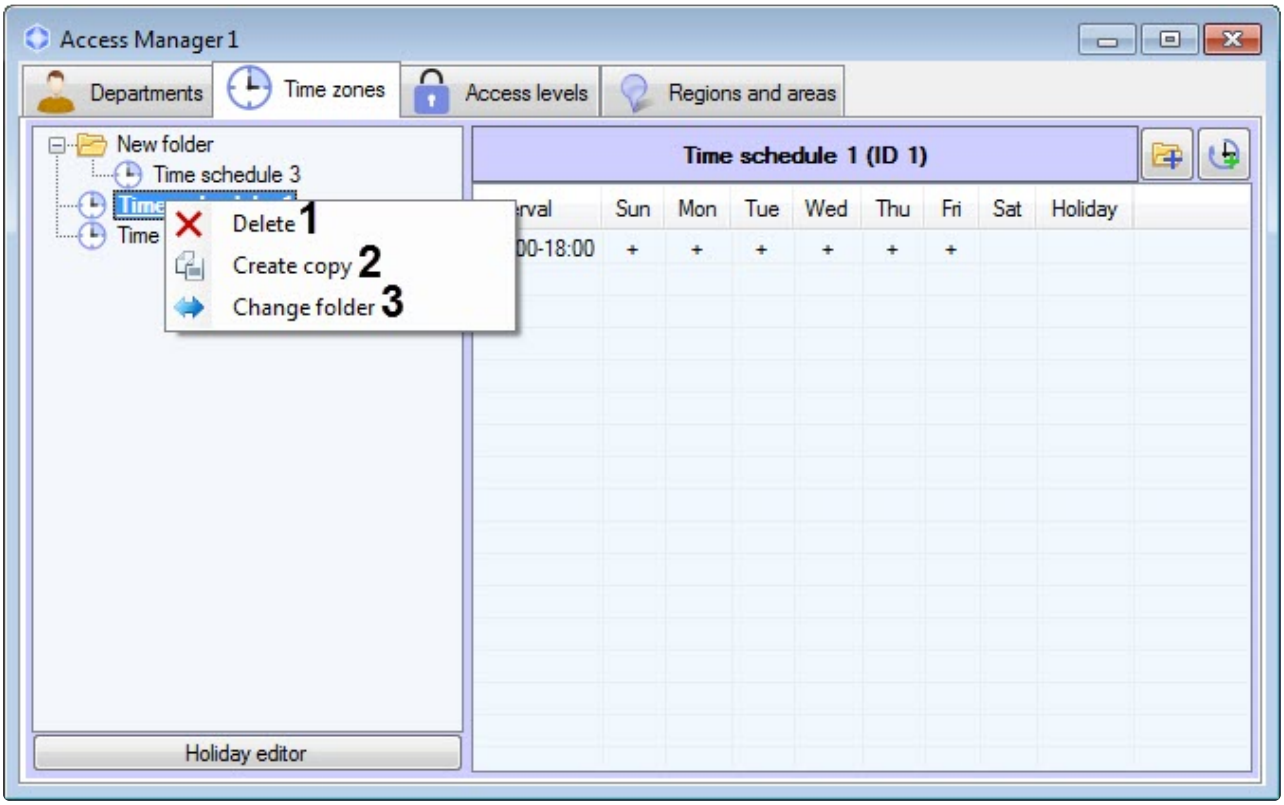
The list of time zones is managed in the *Access Manager* using the context menu, invoked by right-clicking in the free area of the list of time zones.



The context menu commands are described in the table.

№	Command	Description
1	Create root timezone	Adds a new time zone to the list of time zones. When you select this command, the **Edit time zone** window opens, where you can specify a name for a new time zone and add week intervals/intervals of shift schedule to it. For details on creating a time zone, see Creation of a time zone in the Access Manager software module.
2	Create root folder	Adds a folder for grouping time zones to the list of time zones. When you select this command, the **Folder options** window opens, where you can specify a name for the new folder.
3	Quick search	Launches the quick search window for time zones in the list. When you select this command, the **Search for time zone** window opens, where you can search for time zones by various criteria. For details on searching time zones, see Search for time zone.

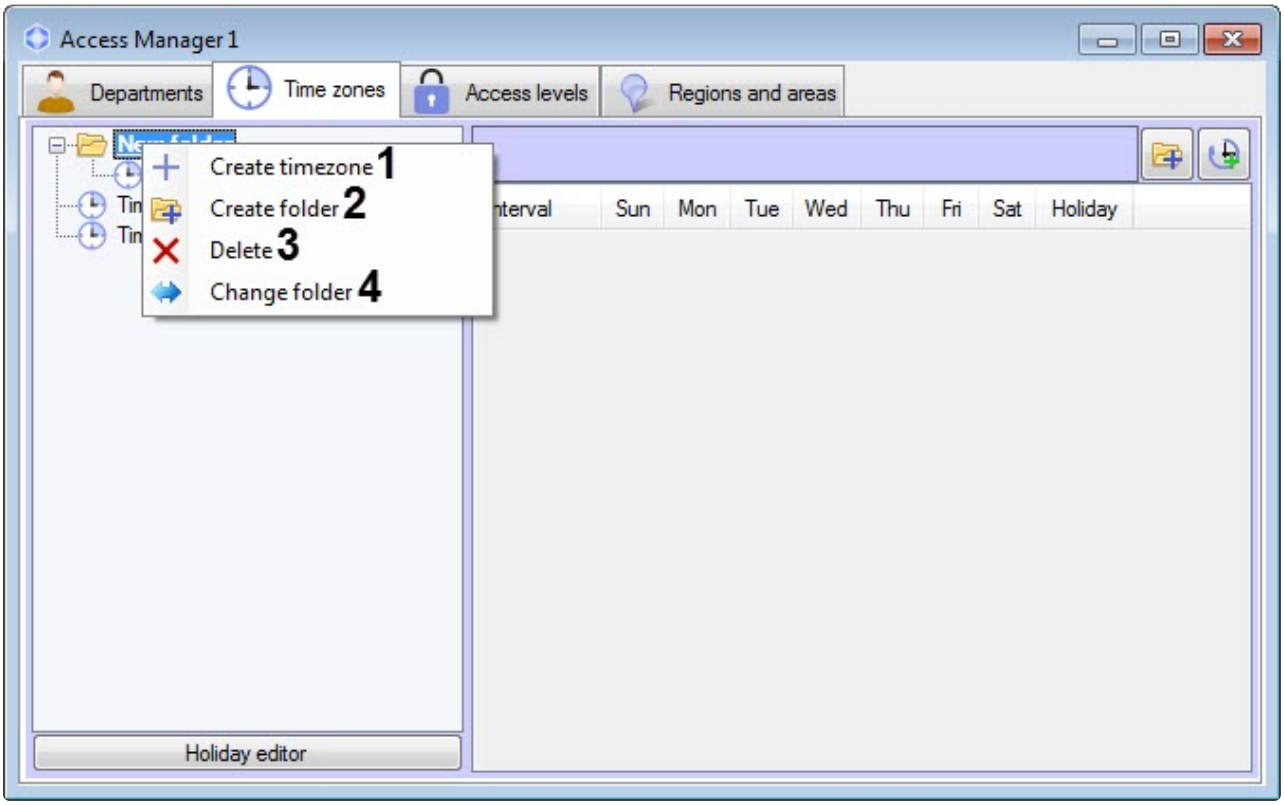
A separate time zone in the root of the list of time zones is managed using the context menu invoked by right-clicking on the time zone.



The context menu commands are described in the table.

№	Command	Description
1	Delete	Deletes the time zone after confirmation from the user. If deletion of assigned time zones is forbidden (see Setting the prohibition of deleting non-empty departments, assigned ALs and TZs), then the time zone can only be deleted if it is not assigned to any access level. When you try to delete an assigned time zone, the **Invalid operation** warning is displayed indicating access levels to which the time zone is assigned.
2	Create copy	Copies the selected time zone. When you select this command, the **Edit time zone** window opens, where you can modify the copy, if necessary. For details on editing a time zone, see Editing a time zone in the Access Manager software module.
3	Change folder	Moves the time zone to the selected folder. When you select this command, the **Search for folder** window opens with a tree of available folders. After you select the required folder, press the Enter key on the keyboard or the **OK** button in the folder selection window.

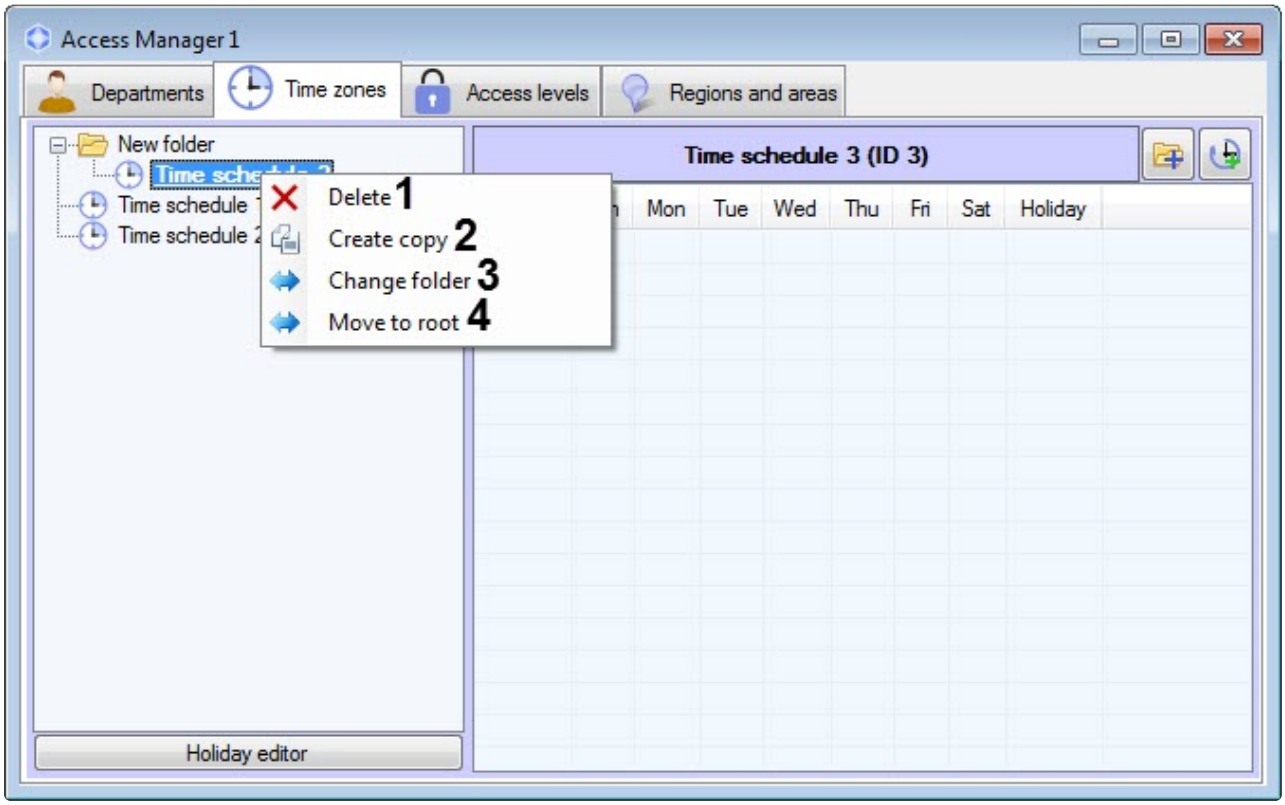
An individual folder in the list of time zones is managed using the context menu invoked by right-clicking on the folder.



The context menu commands are described in the table.

№	Command	Description
1	Create timezone	Adds a new time zone to the folder. When you select this command, the **Edit time zone** window opens, where you can specify a name for a new time zone and add week intervals/ intervals of shift schedule to it. For details on creating and editing a time zone, see Creation of a time zone in the Access Manager software module.
2	Create folder	Adds a subfolder. When you select this command, the **Folder options** window opens, where you can specify a name for the new folder.
3	Delete	Deletes the folder after confirmation from the user. If deletion of assigned time zones is forbidden (see Setting the prohibition of deleting non-empty departments, assigned ALs and TZs), then the time zone can only be deleted if it is not assigned to any access level. When you try to delete an assigned time zone, the **Invalid operation** warning is displayed indicating access levels to which the time zone is assigned.
4	Change folder	Moves the folder to the selected folder. When you select this command, the **Search for folder** window opens with a tree of available folders. After you select the required folder, press the Enter key on the keyboard or the **OK** button in the folder selection window.

A separate time zone located inside a folder is managed using the context menu invoked by right-clicking on the time zone.



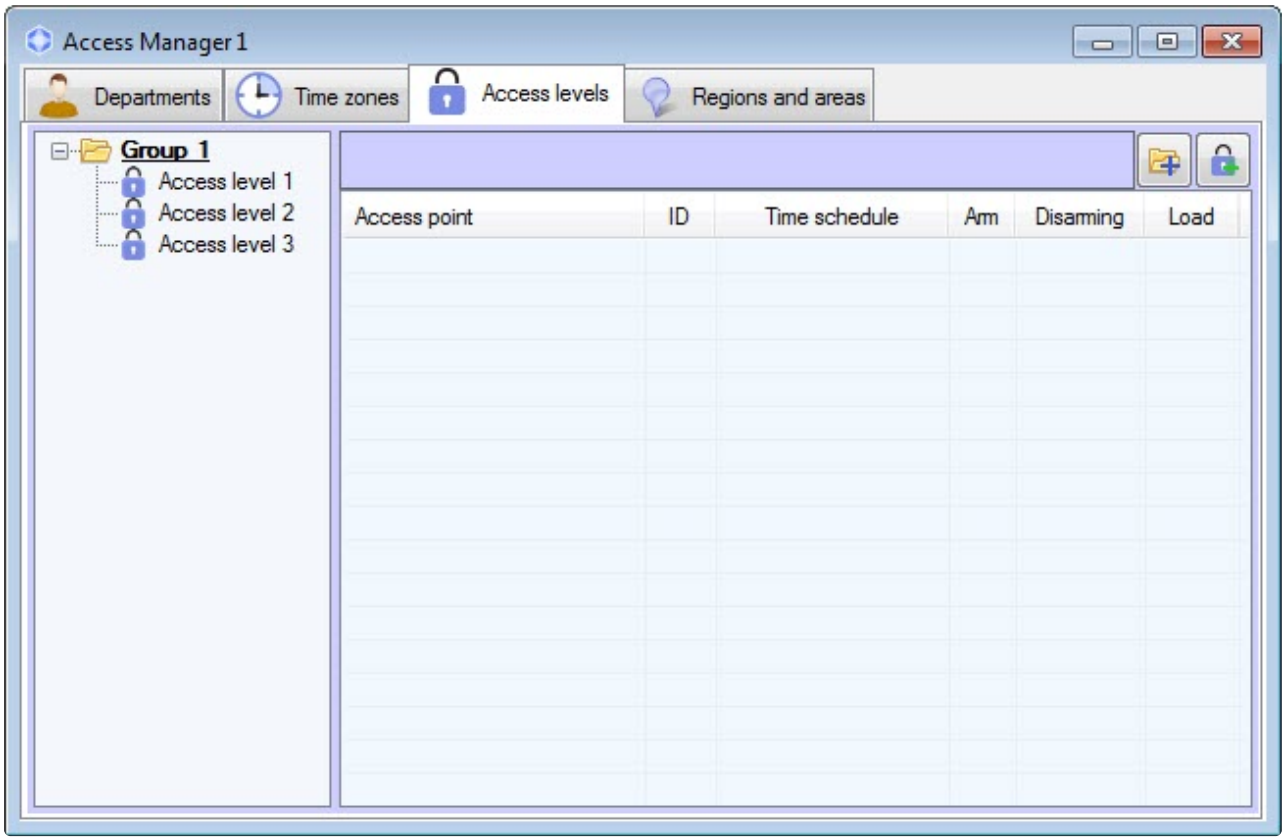
The context menu commands are described in the table.

№	Command	Description
1	Delete	Deletes the time zone after confirmation from the user. If deletion of assigned time zones is forbidden (see Setting the prohibition of deleting non-empty departments, assigned ALs and TZs), then the time zone can only be deleted if it is not assigned to any access level. When you try to delete an assigned time zone, the **Invalid operation** warning is displayed indicating access levels to which the time zone is assigned.
2	Create copy	Copies the selected time zone. When you select this command, the **Edit time zone** window opens, where you can modify the copy, if necessary. For details on editing a time zone, see Editing a time zone in the Access Manager software module.
3	Change folder	Moves the folder to the selected folder. When you select this command, the **Search for folder** window opens with a tree of available folders. After you select the required folder, press the Enter key on the keyboard or the **OK** button in the folder selection window.
4	Move to root	Moves the time zone from the folder to the root of the time zone list.

6.4 Working with access levels in the Access Manager software module

6.4.1 General information about working with access levels in the Access Manager software module

Working with access levels is performed on the **Access levels** tab of the **Access Manager** window.

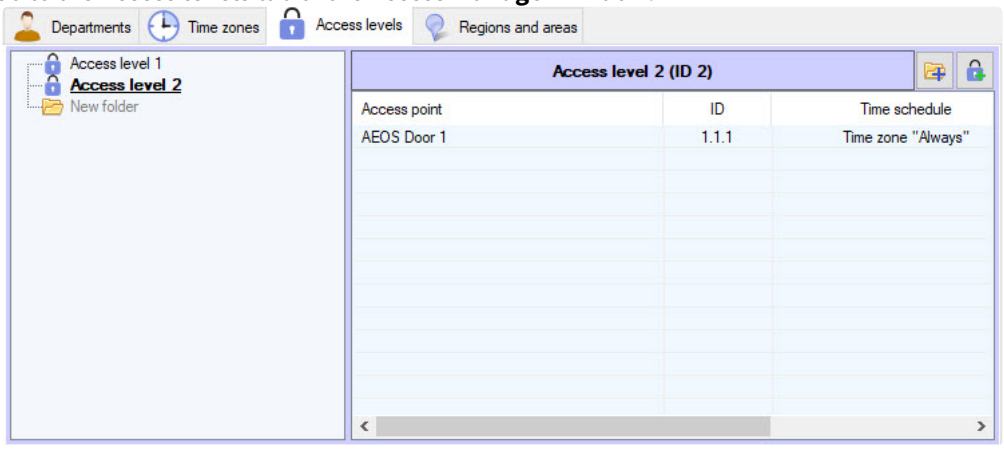


The *Access Manager* software module allows creating, editing, copying, viewing and deleting access levels. At that, possibility of creating, editing and deleting access levels can be forbidden while configuring the *Access Manager* software module - see the Rights for accessing the access levels in Access Manager section.

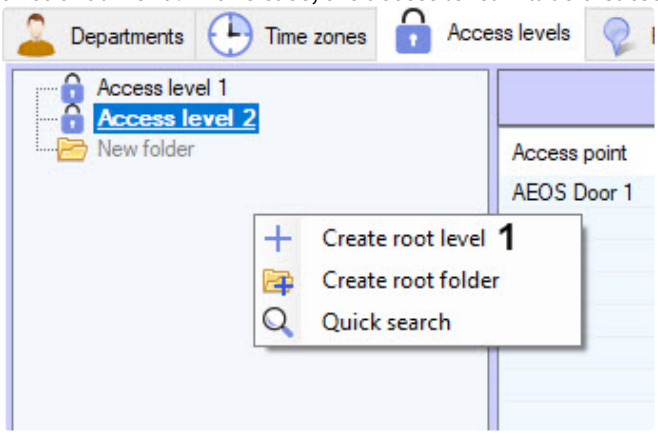
6.4.2 Creating access levels

To create access level, do the following:

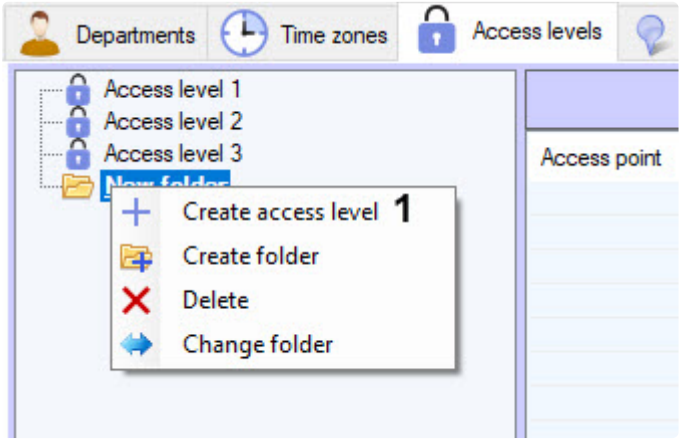
1. Go to the **Access levels** tab of the **Access Manager** window.



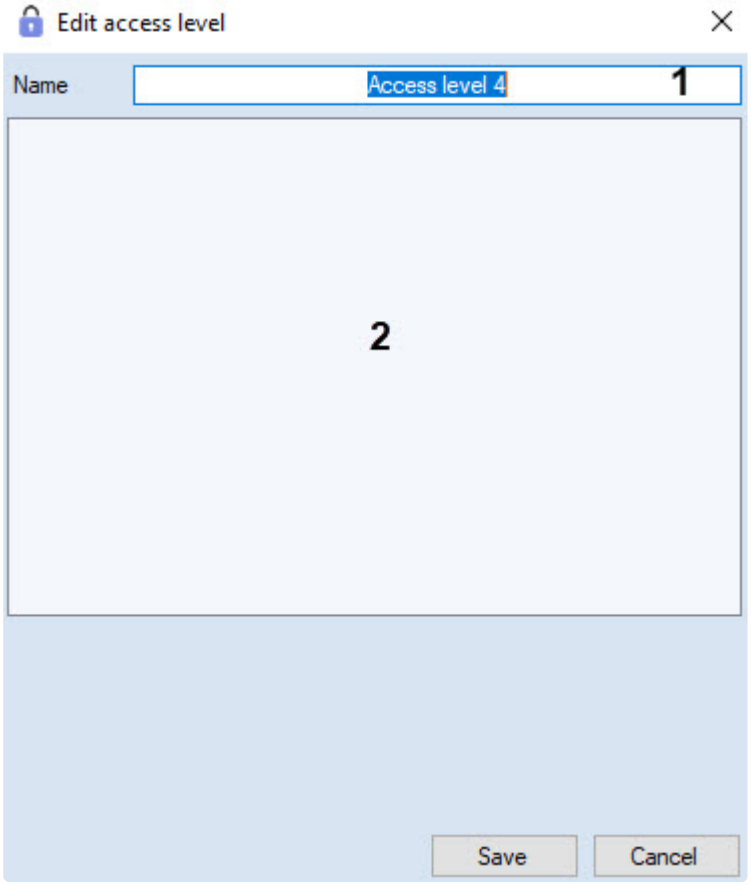
2. There are two ways to create a new access level:
   a. Right-click in the free area of the access level list and select **Create root level** item (**1**) in the functional menu. In this case, the access level will be created in the root list of access levels.



   b. Right-click the folder and select **Create access level** item (**1**). In this case, the access level will be created in the selected folder.



3. If you select any of the commands, the **Edit access level** window will open, enabling you with the following actions:

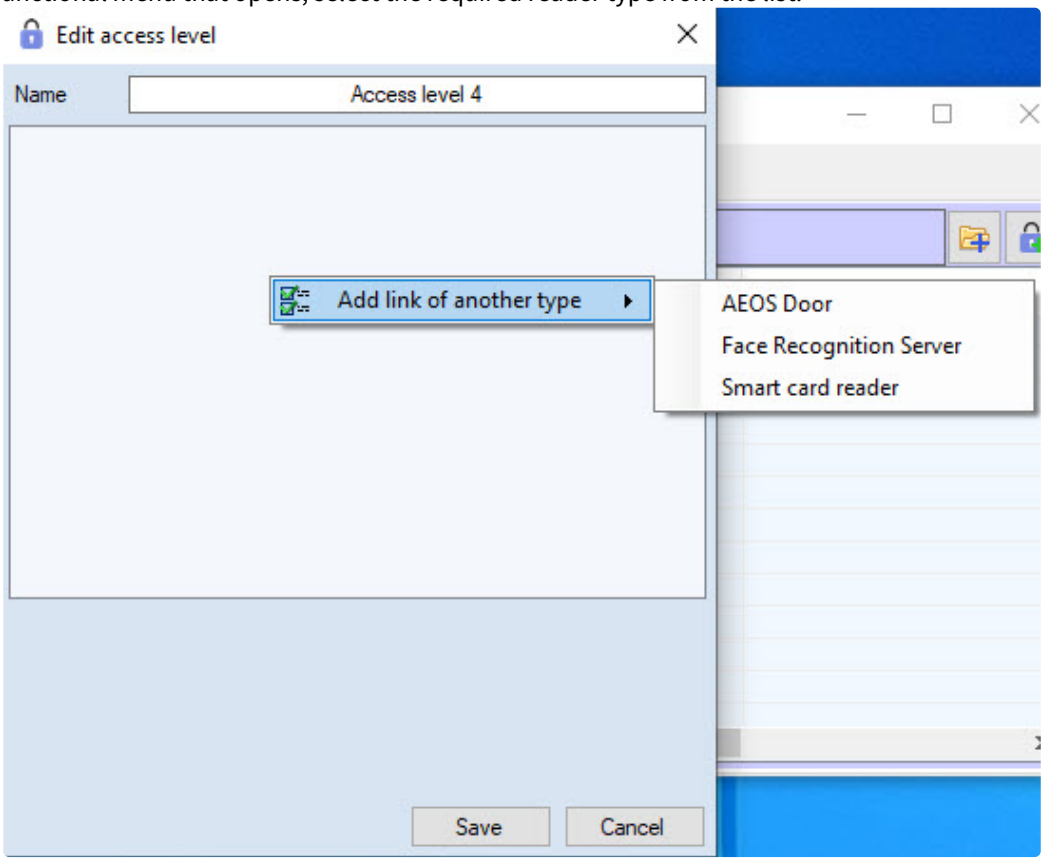


a. In the **Name** field (**1**), enter name of the access level.

> **Note**
>
> The name should be unique. If an access level with the same name has already been created in the system, then the attempt to save will fail and a corresponding message will be displayed. Also, the name should not contain the following characters: < | >.

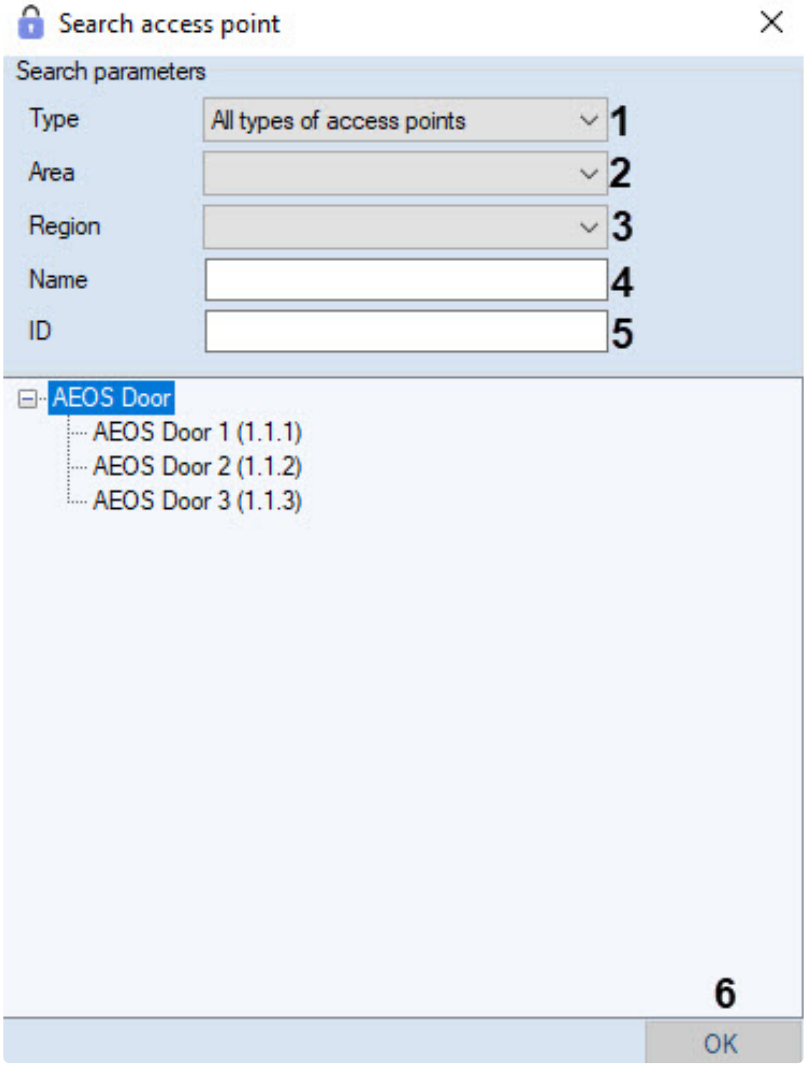
b. In the free area of the list of access rules (**2**), add a rule that links the access point with the time zone:

i. Right-click on a free area of the list of access rules and in the **Add link of another type** functional menu that opens, select the required reader type from the list.



ii. If there is only one access point of this type, or if there is only one available access point from several access points of the same type, then it will be added automatically.

iii. If there are several access points of this type, then the **Search access point** window will open, which will display all available access points of this type.



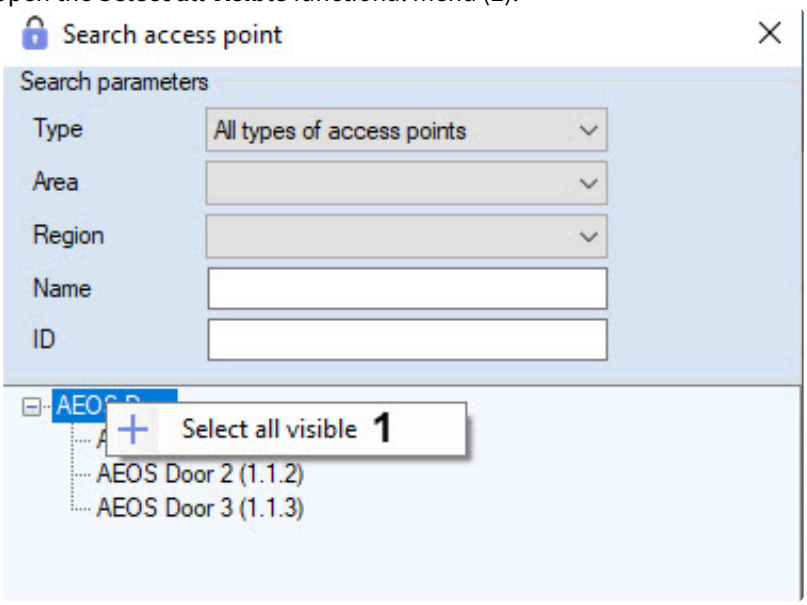
iv. To search and select an access point, do the following:

> **Note**
>
> The suitable access points are searched automatically as you specify the search parameters.

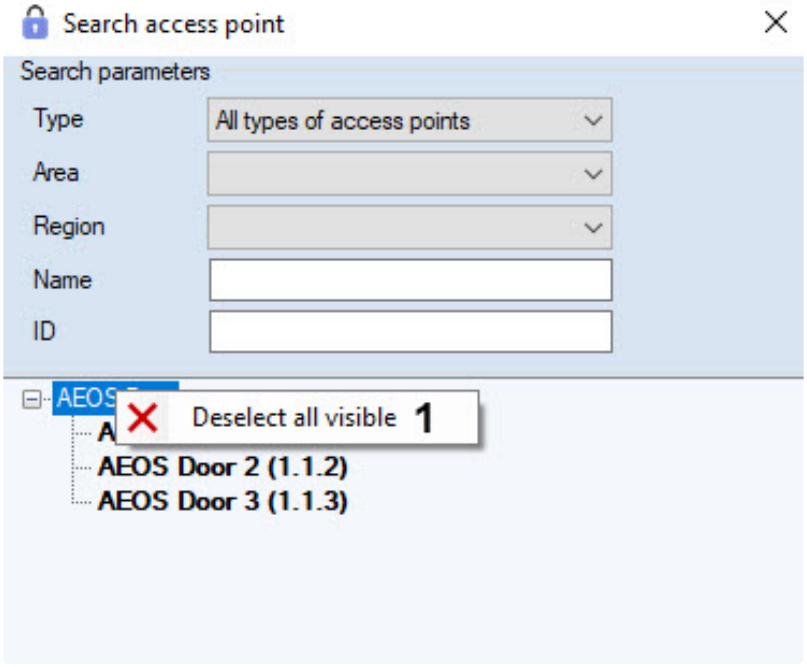
1. Select type of access point from the **Type** drop-down list if it's required (**1**).
2. Select the location of the access point from the **Area** drop-down list if it's required (**2**).
3. Select the location of the access point from the **Region** drop-down list if it's required (**3**).
4. Enter name of access point or its part in the **Name** field if it's required (**4**).
5. Enter ID of required access point in the **ID** field if it's required (**5**).
6. After completing the selection of access points, click the **OK** button (**6**).

v. To select an access point from the list of available access points, double-click on the required object.

vi. To select all available access points of this type at once, right-click on the parent object to open the **Select all visible** functional menu (**1**).



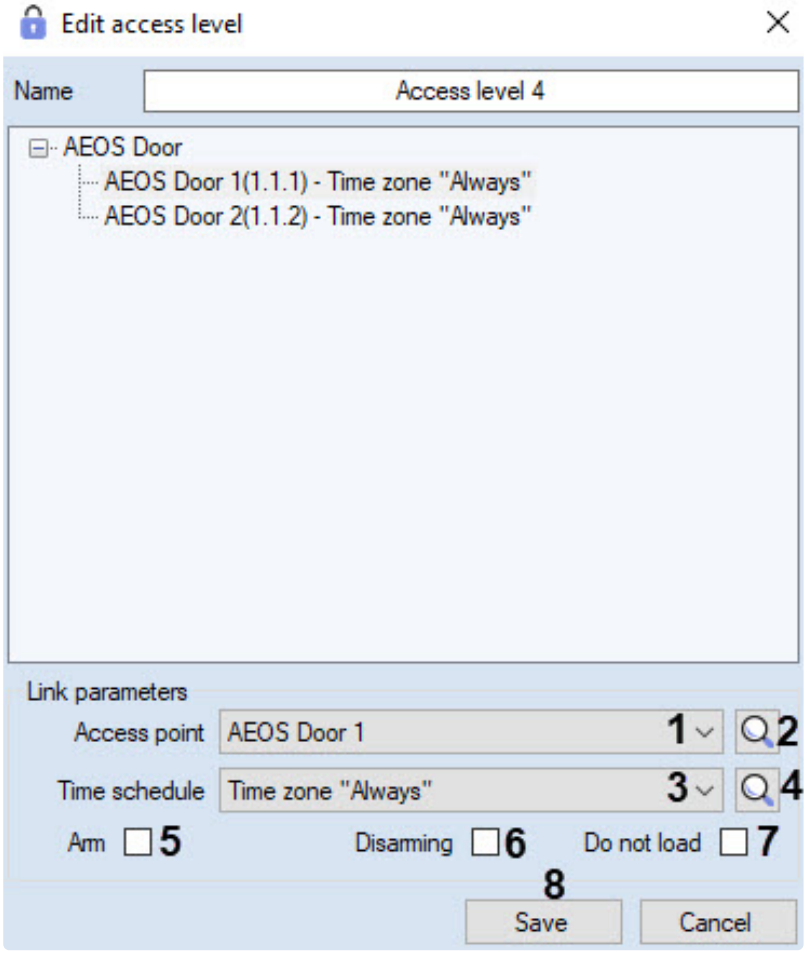
vii. You can deselect all selected access points by right-clicking on the parent object to open the **Deselect all visible** functional menu (**1**).



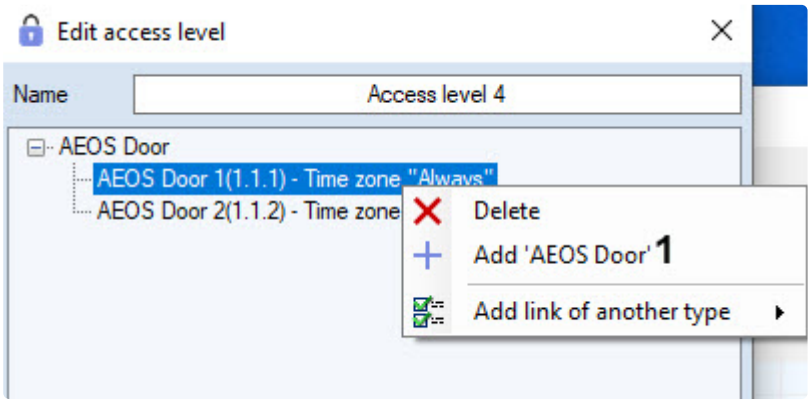
Note

- **Select all visible** and **Deselect all visible** commands can be applied only to those access points that are currently displayed in the list of access points.
- Selected access points are highlighted in bold in the list.

4. You will go back to the **Edit access level** window. The panel for configuring the access level will be displayed at the bottom.



5. Access point specified in the search is selected in the **Access point** drop-down list (**1**). You can change it if necessary.
6. If it is necessary to search for access point, click the button and go to step 3bii. You can also open the search window using the **Add** button (**1**), by right-clicking on the selected access point to open the context menu.



7. From the **Time schedule** drop-down list (**3**), select time zone during which access through the selected access point will be allowed to users with configured access level.

8. If it is necessary to search for time zone, click the button (**4**) (see Working with the Search for time zone window).

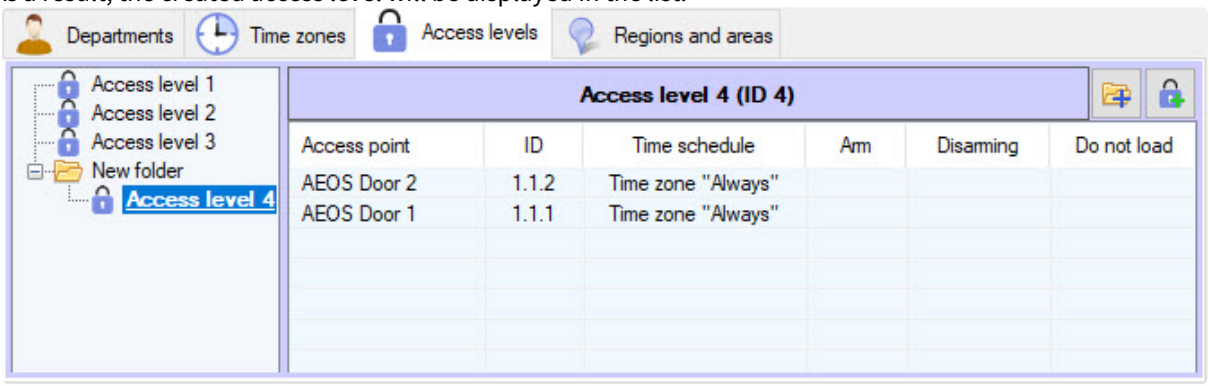
> **Note**
>
> Time zones are created and configured on the **Time zones** tab of the **Access Manager** window - see the Working with time zones in the Access Manager software module section. Also it's possible to use system time zones "Always" and "Never".

9. Set the **Arm** checkbox to arm access point after presenting access card by user (**5**).
10. Set the **Disarming** checkbox to disarm access point after presenting access card by user (**6**).
11. If it's not required to send access cards to controller after presenting access card by user, set the **Do not load** checkbox (**7**).

> **Attention!**
>
> Functions of arming, disarming and sending access cards should be supported by hardware.

> **Note.**
>
> Function of the **Do not load** checkbox can differ depending on the integration module in use. For example, in PERCo-S-20 integration this checkbox enables commission mode.

12. Repeat steps 3-11 for all required links.
13. Click the **Save** button (**8**).
As a result, the created access level will be displayed in the list.



> **Attention!**
>
> When the user configuration is written to the controller/terminal, only those users will be written whose access level contains at least one access point of the corresponding controller/terminal. For example, if a user has an access point of terminal 1 specified in the access levels, but no access point of terminal 2 is specified, then this user will be written only to terminal 1.

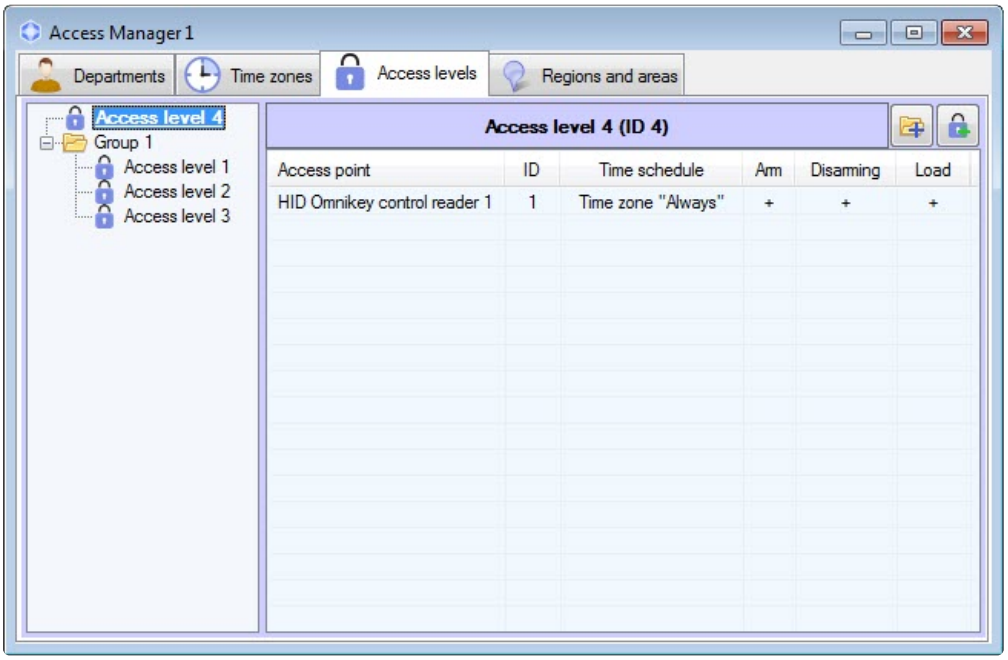
The creation of the access level is complete.

6.4.3 Editing an access level in the Access Manager software module

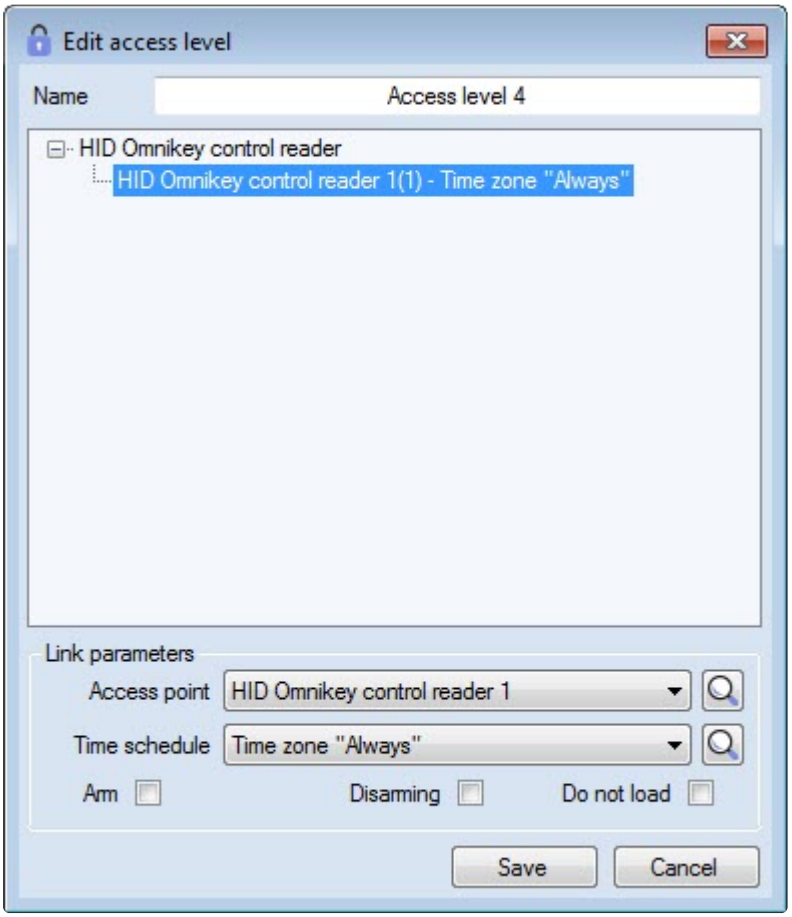
Editing of time zone involves adding, deleting and changing links. To start editing of access levels, double-click the required access level in the list on the **Access levels** tab or on the name of access point in the table of access level parameters.

Note

The link to the corresponding access point will be selected in the opened **Edit access level** window as you click on the name of the access point. The first link will be selected while clicking the access level.

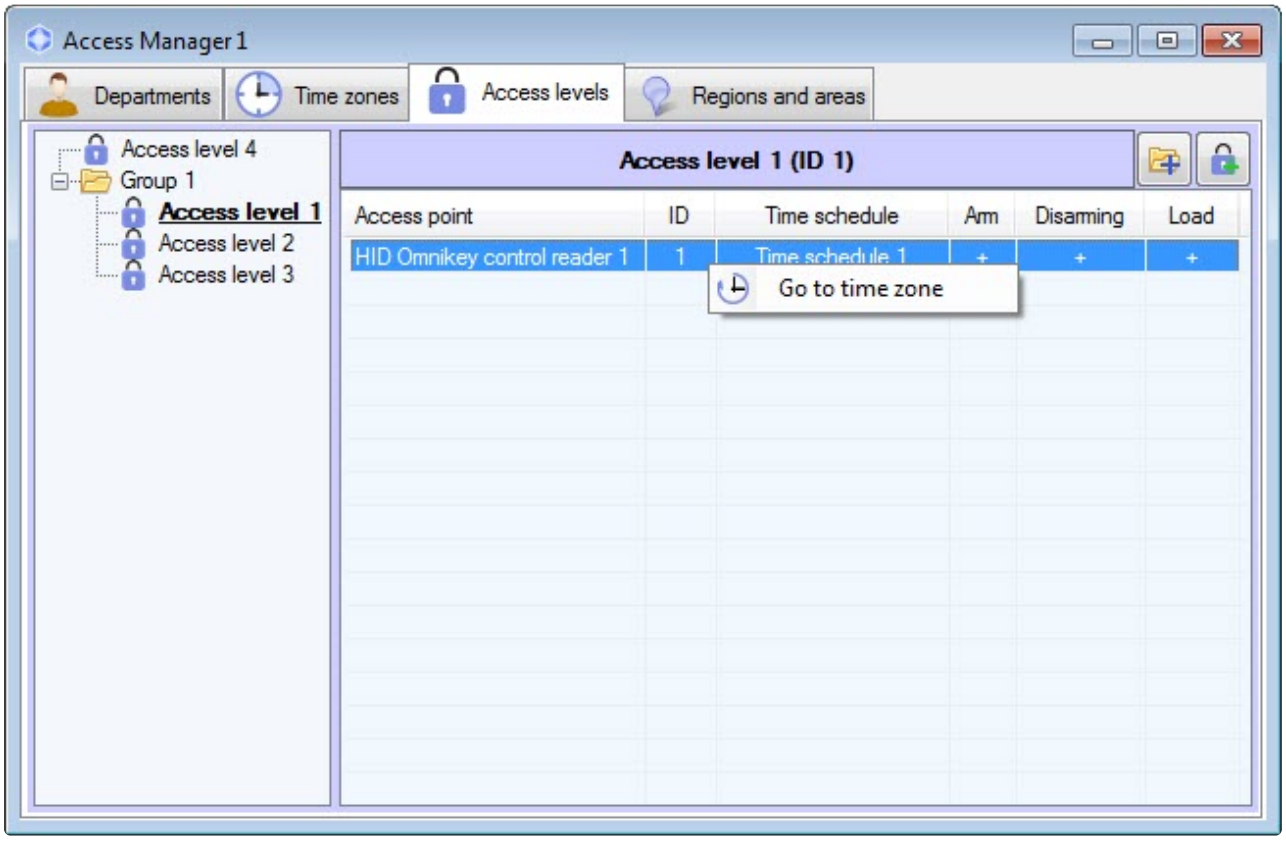


As a result the **Edit access levels** window will be opened. Working with this window is the same as while creating access level - see Create access level section.



6.4.4 Going to the time zone

At the bottom of the **Access levels** tab there is a list of access points added to the selected access level. If the user time zone related to the access point is not **Always** and not **Never**, it's possible to go to this time zone on the **Time zones** tab. Right-click the required access point and select **Go to time zone** in the opened functional menu.



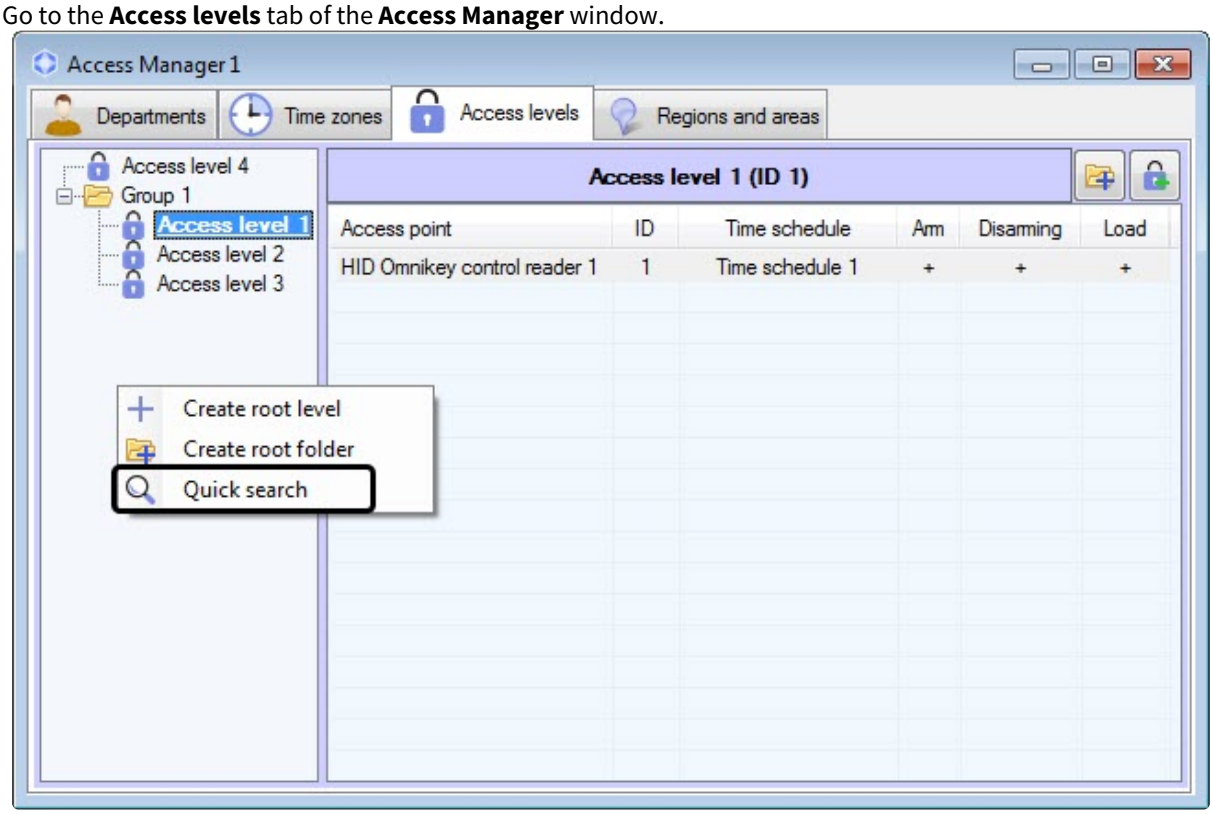
As a result, the **Time zones** tab with the required zone will be opened.

6.4.5 Search for access level

Going to search for access level

In the *Access Manager* software module it's possible to search for access level by name, ID and access point. To go to search for access level, do the following:

1. Go to the **Access levels** tab of the **Access Manager** window.



2. Click the right mouse button in free area of access levels list.
3. Select the **Quick search** item in the opened functional menu. The **Search access level** window will be opened. For details on woking with the functional menu, see Managing the list of access levels.

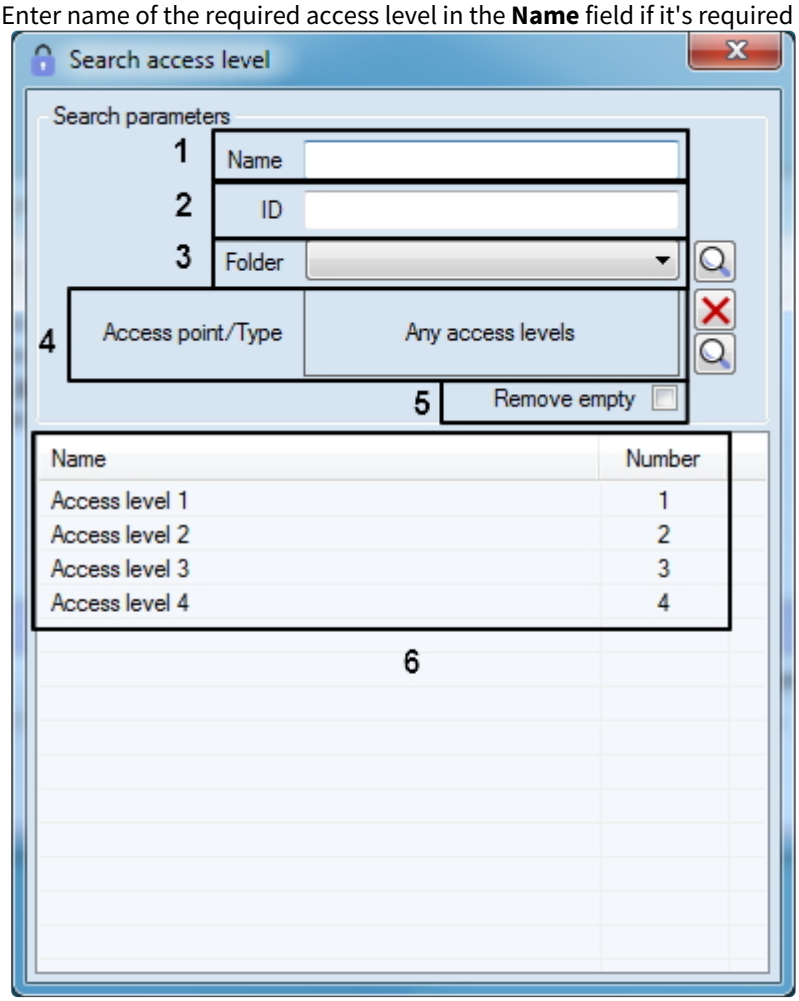
Going to search for access level is completed. Working with the **Search for access level** window is described in the Working with the Search for access level window section.

Working with the Search access level window

The **Search access level** window can be opened while searching for access level (see the Going to search for access level section), department configuring (see the Add department section), searching for department (see the Working with Search for department window section) or while user configuring (see the Assigning access levels to a user section).

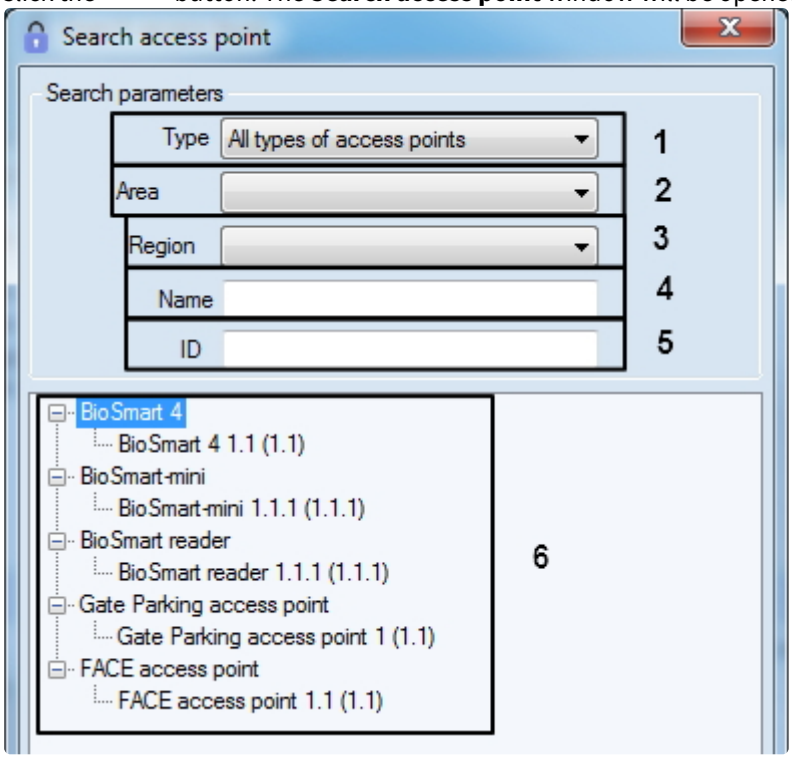
Working with the **Search access level** window is performed as follows:

1. Enter name of the required access level in the **Name** field if it's required (1).



2. Enter the identification number of the required access level in the **ID** field if it's required (2).
3. Select the folder the level is located in from the **Folder** drop-down list if it's required (3).
4. If it's required set the list of access points which the required access levels should contain:

a. Click the button. The **Search access point** window will be opened.



b. Select type of the required access point from the **Type** drop-down list if it's required (1).
c. Select the location of the access point from the **Area** drop-down list if it's required (2).
d. Select the location of the access point from the **Region** drop-down list if it's required (3).
e. Specify the name of access point or its part in the **Name** field if it's required (4).
f. Specify the identification number of the required access point in the **ID** field if it's required (5).
g. The search will be performed automatically, and the list of search results will be displayed below (6).
h. Double-click on the required access point in the list (6).

> **Note**
>
> To clear the list of access points click the button.

5. If it's required to remove access levels not associated to any access points from the search results, set the **Remove empty** checkbox (5).
6. Results of access levels search will be displayed in the list (6). Search is case-insensitive. All objects corresponding fields of which contain specified values will be found.

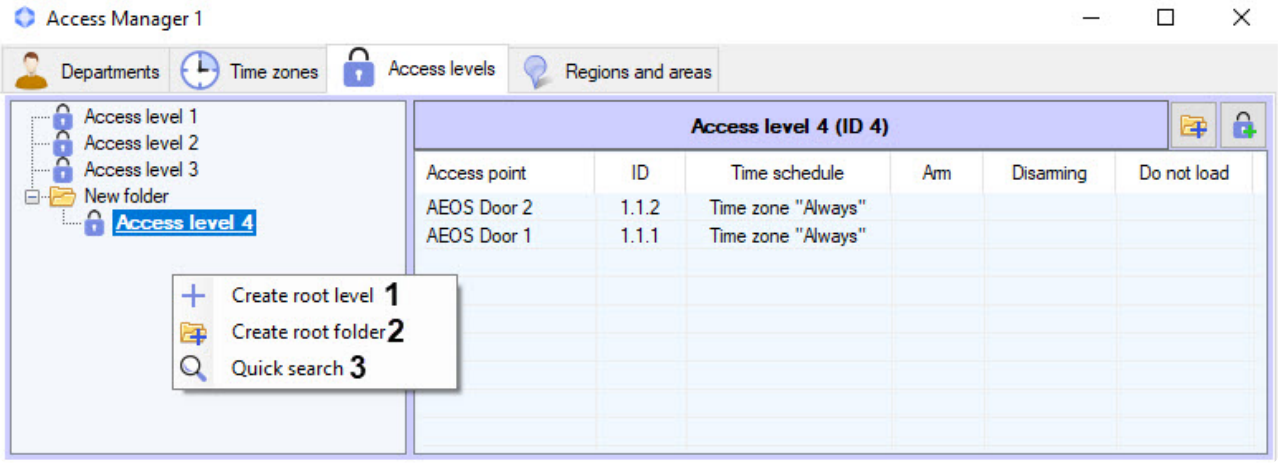
To sort search results click the left mouse button on title of corresponding column.

While double click on access level, the **Search access level** window will be closed and corresponding access level will be selected in the list in the **Access levels** tab or will be added to department or user.

Search for access level is completed.

6.4.6 Managing the list of access levels

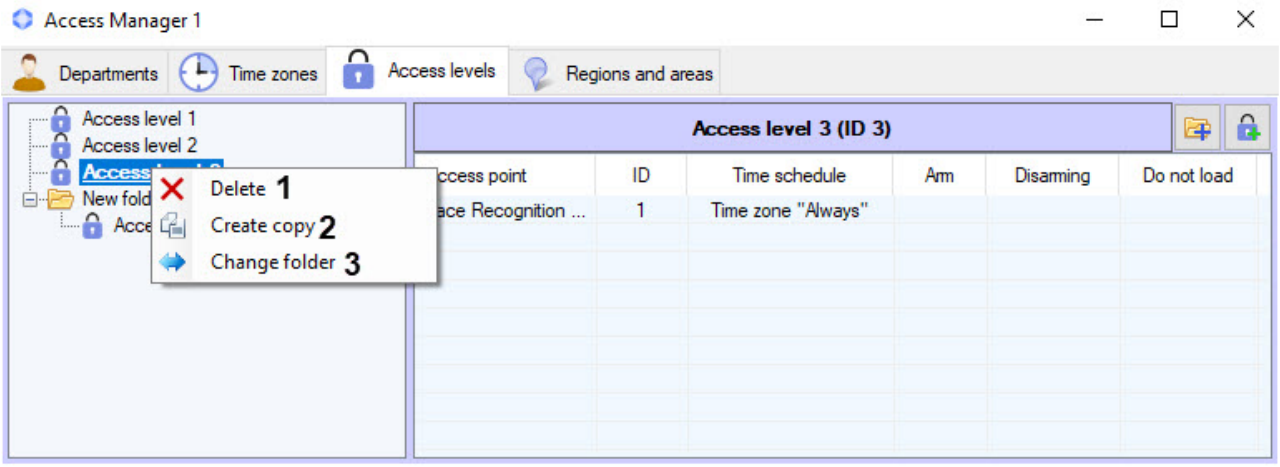
The list of access levels is managed using the context menu, invoked by clicking the right mouse button on the free space around the list.



The commands of the context menu are described in the table.

#	Command	Description
1	Create root level	Adds a new access level to the list of access levels. Clicking the menu item opens the **Edit access level** window. For more information on creating access levels, see Creating access levels.
2	Create root folder	Adds a new folder for organizing access levels in the list. Clicking the menu item opens the **Folder settings** window, which enables setting the name of the new folder.
3	Quick search	Opens the window for quick search of access levels in the list. Clicking the menu item opens the **Quick Search** window, which enables searching for access levels by different criteria. For more information on searching for access levels, see Search for access level.

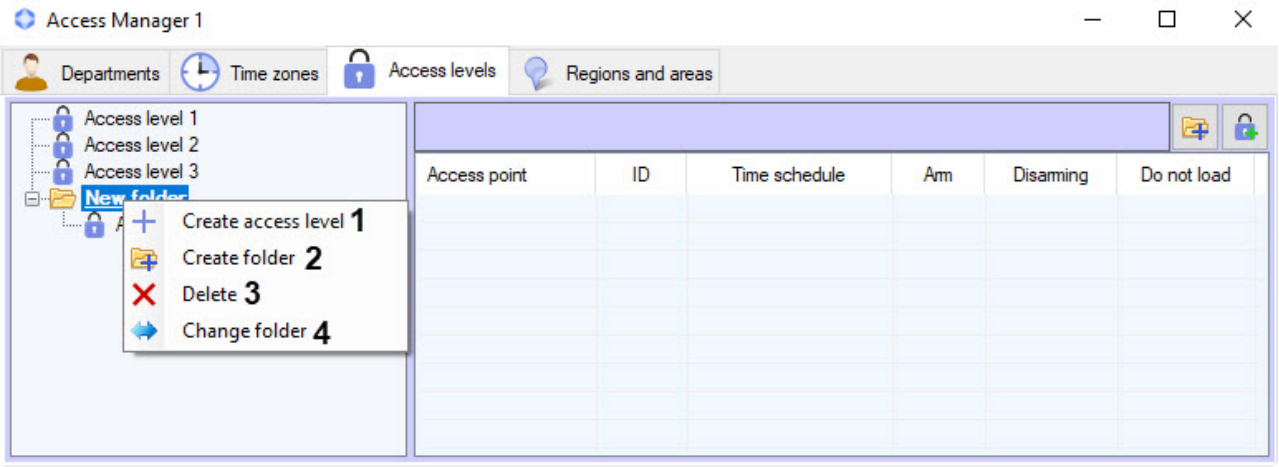
An individual access level in the root of the access level list is managed using the context menu, invoked by clicking the right mouse button on the item.



The commands of the context menu are described in the table.

#	Command	Description
1	Delete	Removes an item from the access level list after confirmation from the user. If deletion of assigned access levels is forbidden (see Setting the prohibition of deleting non-empty departments, assigned ALs and TZs), the access level can only be deleted if it is not assigned to any user. When you try to delete an assigned access level, the **Invalid operation** warning is displayed indicating users to which the access level is assigned.
2	Create copy	Creates a copy of the selected access level with all its settings. Clicking the menu item opens the **Edit access level** window, which enables editing the copy if required. For more information on editing access levels, see Editing an access level in the Access Manager software module.
3	Change folder	Moves the access level list item to the selected folder. When you select a command, the **Folder search** window with a tree of available folders opens. After you select the required folder, press the Enter key on the keyboard or the **OK** button in the folder selection window.

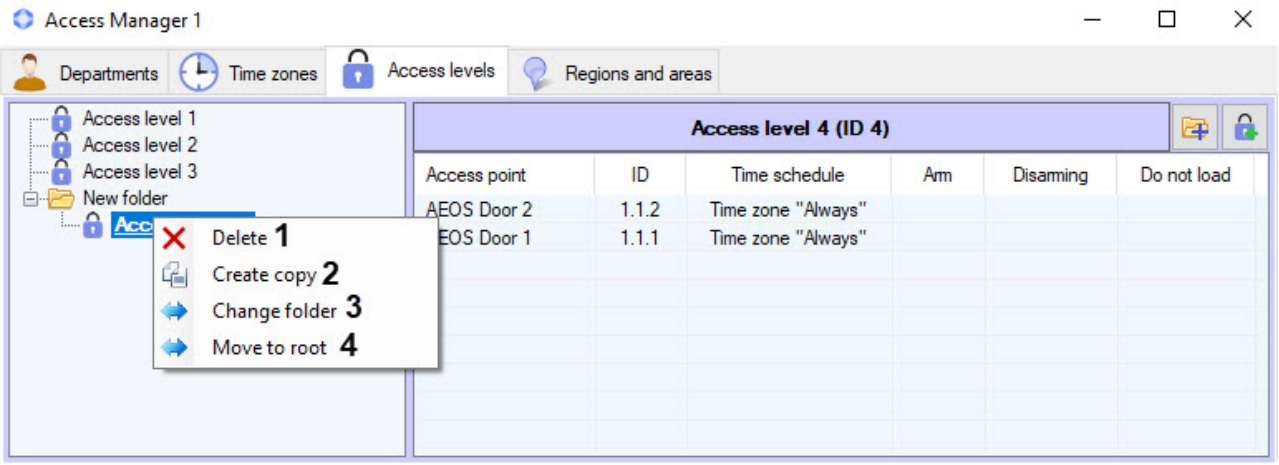
An individual folder in the access level list is managed using the context menu, invoked by clicking the right mouse button on the folder.



The commands of the context menu are described in the table.

#	Command	Description
1	Create access level	Adds a new access level to the folder. When you select a command, the **Edit access level** window opens. For more information on creating access levels, see Creating access levels.
2	Create folder	Adds a subfolder. When you select a command, the **Folder settings** window opens, which enables setting the name of the new folder.
3	Delete	Removes the folder and all its contents from the access level list after confirmation from the user. If deletion of assigned access levels is forbidden (see Setting the prohibition of deleting non-empty departments, assigned ALs and TZs), the access level can only be deleted if it is not assigned to any user. When you try to delete an assigned access level, the **Invalid operation** warning is displayed indicating users to which the access level is assigned.
4	Change folder	Moves the folder to the another folder. When you select a command, the **Folder search** window with a tree of available folders opens. After you select the required folder, press the Enter key on the keyboard or the **OK** button in the folder selection window.

An individual access level within a folder is managed using the context menu, invoked by clicking the right mouse button on the access level.



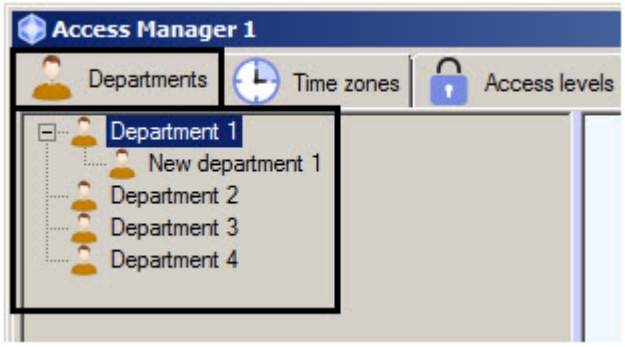
The commands of the context menu are described in the table.

#	Command	Description
1	Delete	Removes an access level from the access level list after confirmation from the user. If deletion of assigned access levels is forbidden (see Setting the prohibition of deleting non-empty departments, assigned ALs and TZs), the access level can only be deleted if it is not assigned to any user. When you try to delete an assigned access level, the **Invalid operation** warning is displayed indicating users to which the access level is assigned.
2	Create copy	Creates a copy of the selected access level with all its settings. Clicking the menu item opens the **Edit access level** window, which enables editing the copy if required. For more information on editing access levels, see Editing an access level in the Access Manager software module.
3	Change folder	Moves the access level list item to the selected folder. When you select a command, the **Folder search** window with a tree of available folders opens. After you select the required folder, press the Enter key on the keyboard or the **OK** button in the folder selection window.
4	Move to root	Moves the selected access level from the folder back to the root of the access level list.

6.5 Working with departments in the Access Manager software module

6.5.1 General information about working with departments

Departments are organized in hierarchy structure in the *ACFA PSIM* software package. Tree of departments is displayed in the **Departments** tab of the **Access Manager** window.

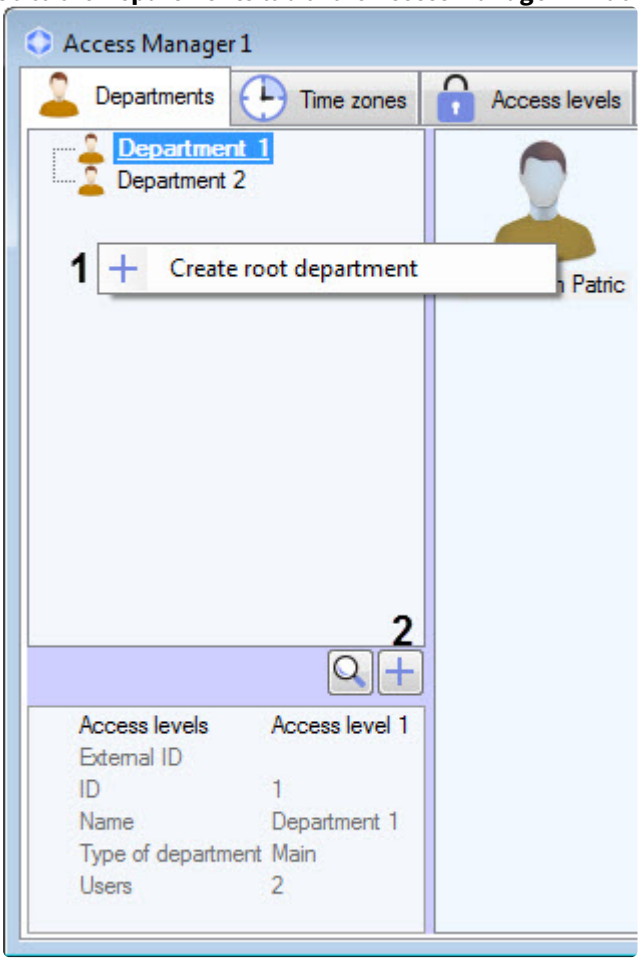


It's possible to create departments on the basis of some existed department and in the root of hierarchy. Functions of editing, deleting and viewing departments are available. Possibility of creating, editing and viewing departments can be limited while configuring the *Access Manager* software module – see the Rights for accessing the departments in the Access Manager section.

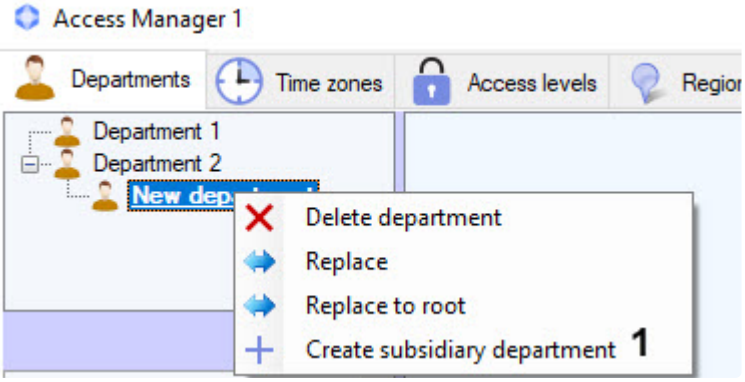
6.5.2 Adding and deleting a department

To add department, do the following:

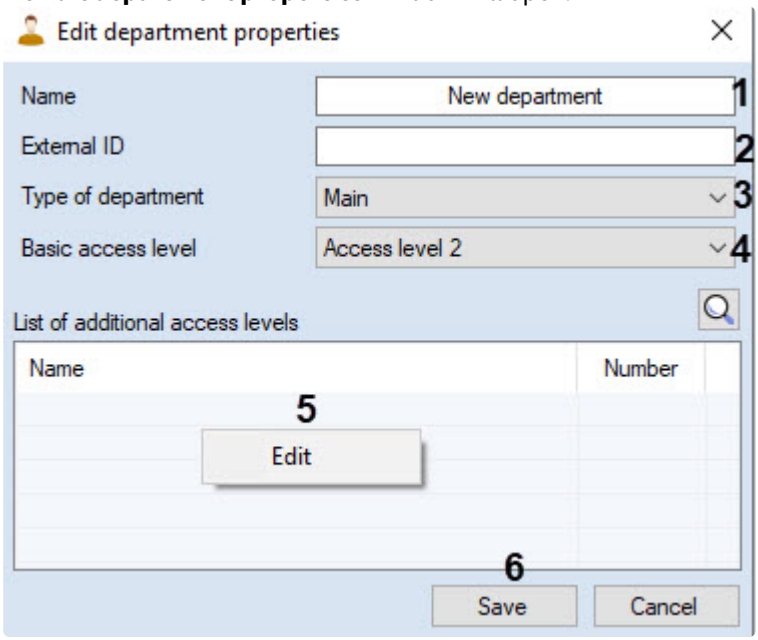
1. Go to the **Departments** tab of the **Access Manager** window.



2. To create department in the root of hierarchy click the right mouse button in free area of departments hierarchy and select the **Create root department** item in the opened functional menu (**1**) or click the button (**2**).
To create department on the basis of existed department click the right mouse button on the required department and select the **Create subsidiary department** item (**1**).



3. The **Edit department properties** window will open.



4. Enter the department name in the **Name** field (**1**).

> **Note**
>
> The name should be unique. If an access level with this name has already been created in the system, then while saving, a corresponding message will be displayed and the department will not be saved. Also, the name should not contain the following characters: < | >.

5. In the **External ID** field enter external identical number of department (2). This field is required if, due to the peculiarities of the ACS integration module, the list of departments and users in the database of the *ACFA PSIM* software package is used together with users database in external software.
6. From the **Type of department** drop-down list select the required type (3). Types of departments are created while configuring the Access Manager software module - see the Configuring a type of department in the Access Manager section. Type of department specifies the list of visible and available for editing fields of user entering to this department. The **Main** type of department is the only default type of department in the *Access Manager* module (see Configuring Main department type).
7. From the **Basic access level** drop-down list select department access level which be inherited on default by all users entering to this department (4).

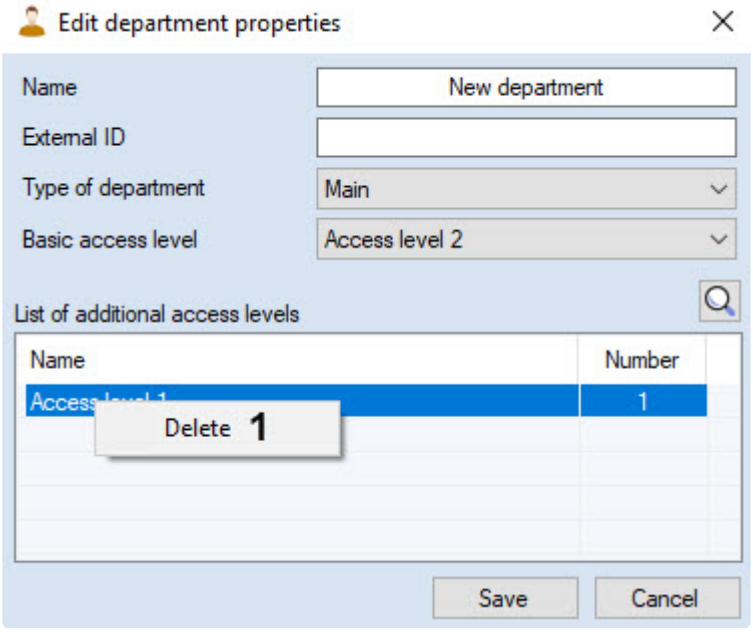
> **Note**
>
> Use can not to inherit the department access level - see the Configuring the department access level inheritance section.

> **Note**
>
> Access levels are created and configured on the **Access levels** tab of the **Access Manager** window (see the Working with access levels in the Access manager software module section). Also it's possible to use system access levels **Always** and **Never**.

8. If it's required, specify the list of additional access levels the following way:
   a. Ensure that user access level is selected from the **Basic access level** drop-down list (i.e. not **Always** and not **Never**).

b. Click the **Edit** button in the **List of additional access levels** table (5).
c. The **Search access level** window will be opened. To search for access level - see the Search for access level section.

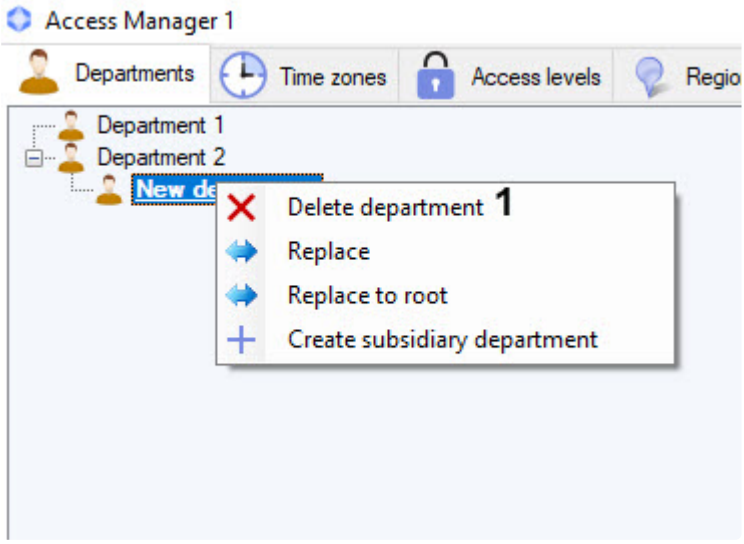
> **Note**
>
> To delete the additional access level click it the right mouse button and select the **Delete** item in the opened functional menu.



9. Click the **Save** button (5) or the Enter key on the keyboard.

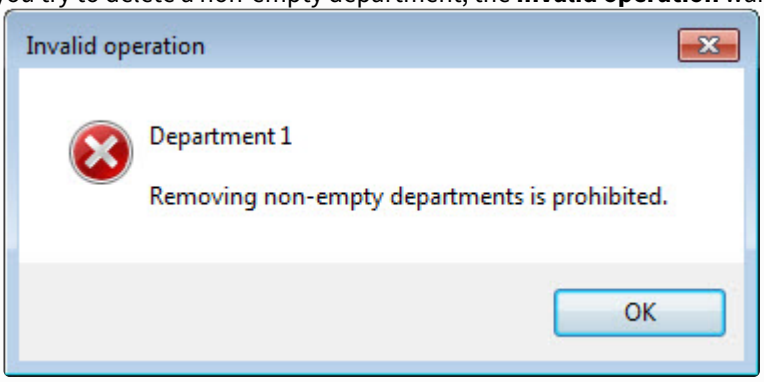
Department will be added to the tree.

To delete department click it the right mouse button and select the **Delete department** item in the opened functional menu.



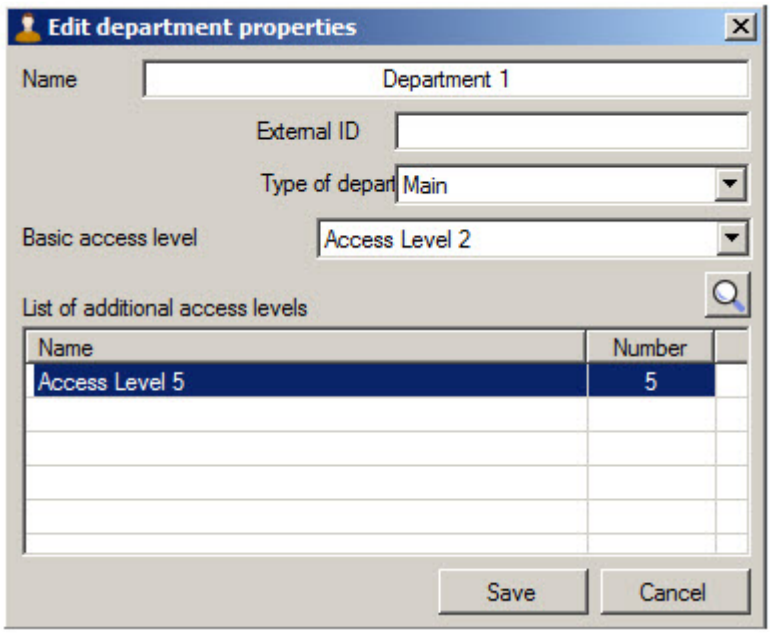
Note

If deletion of non-empty departments is prohibited, the department can only be deleted if there are no users in it (see Setting the prohibition of deleting non-empty departments, assigned ALs and TZs). When you try to delete a non-empty department, the **Invalid operation** warning is shown.



6.5.3 Editing a department

Editing a department involves changing of department parameters. To start editing a department double click the left mouse button on the name of department in a tree. The **Edit department properties** window will open. Working with this window is the same as while described in the Adding and deleting a department section.



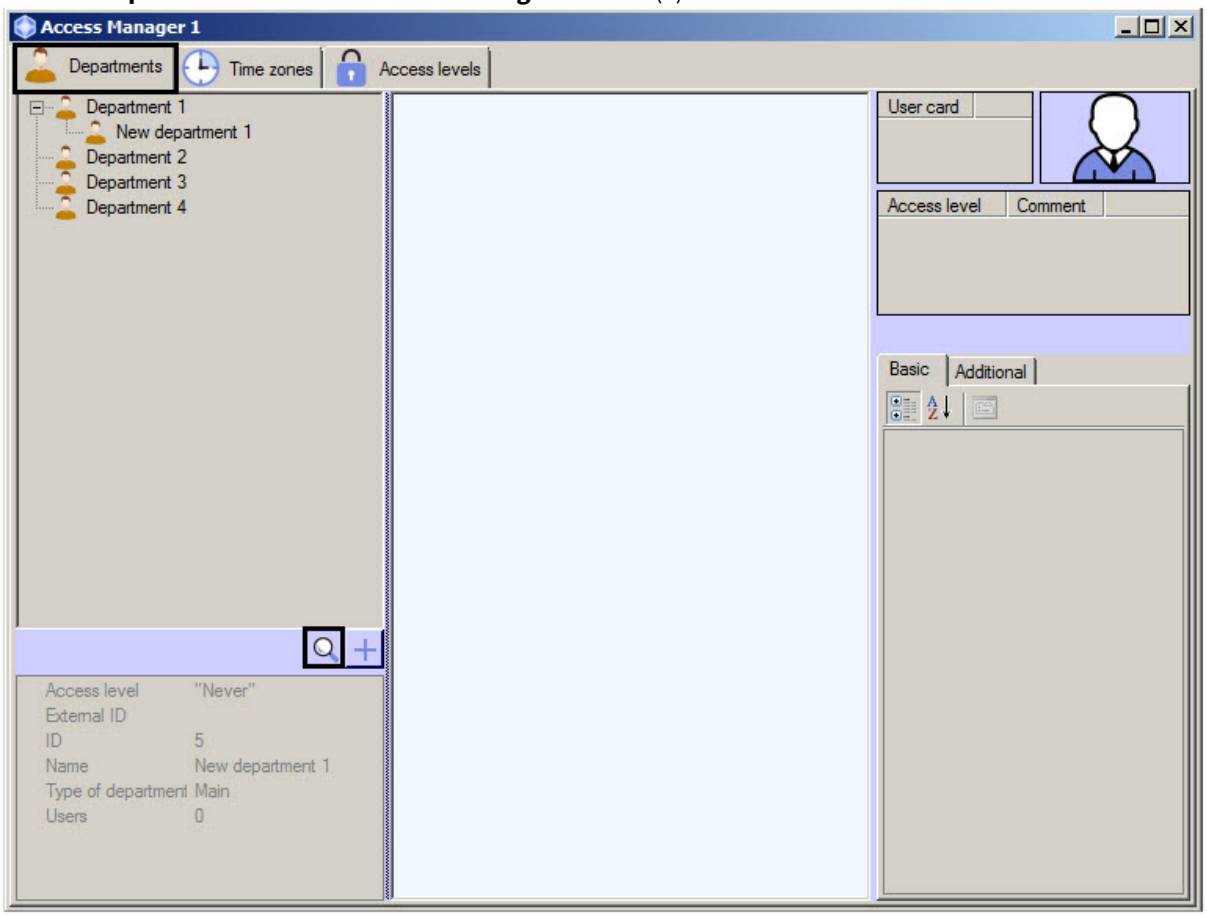
6.5.4 Department search in the Access Manager software module

Going to department search

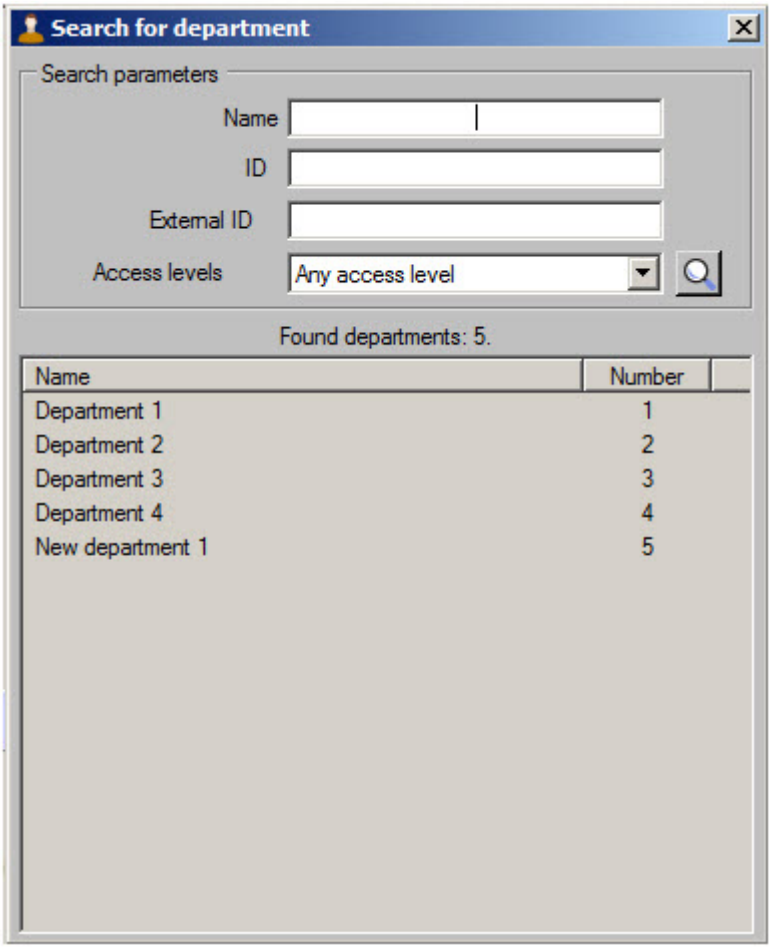
In the *Access Manager* software module it's possible to search for departments by name, ID, external ID and access level.

To go to department search, do the following:

1. Go to the **Departments** tab of the **Access Manager** window (1).



2. Click the  button (2). The **Search for department** window will open.



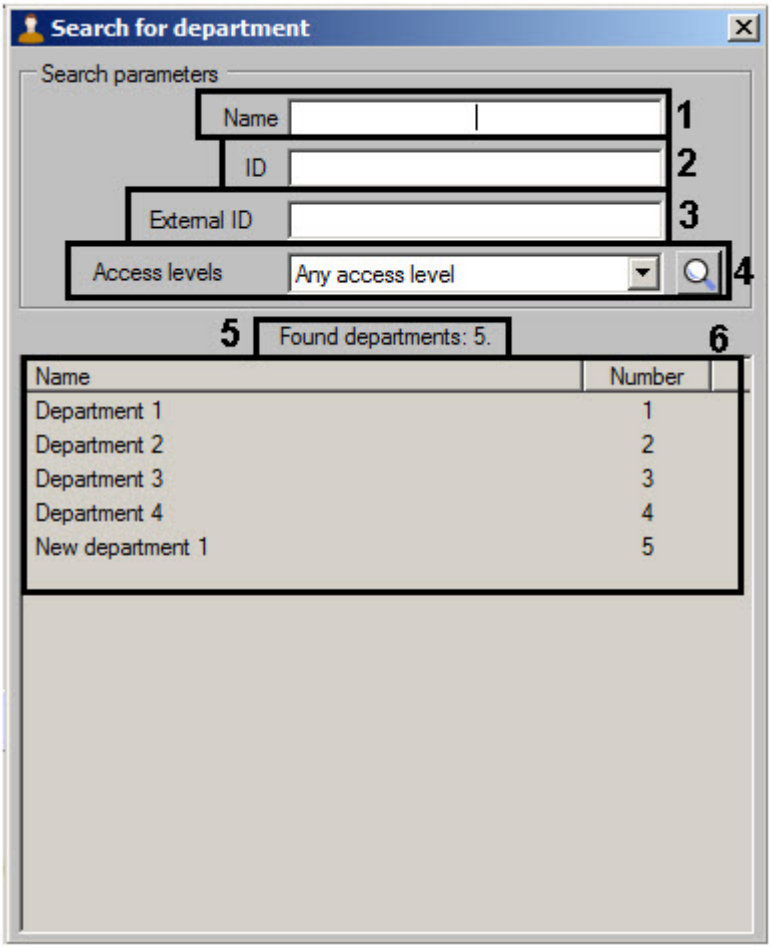
Going to department search is completed. Working with the Search for department is described in the Working with Search for department window section.

Working with Search for department window

Working with **Search for department** window is performed while searching for department (see the Going to department search section), replacing user from one department to another (see the Transferring a user to a different department section), and while creating departments hierarchy (see the Creating departments hierarchy section).

Working with the **Search for department** window is performed as follows:

1. Enter the complete or partial name of a department in the **Name** field if it's required (1).



2. Enter the department ID in the **ID** field if it's required (2).
3. Enter the external ID of an object in the **External ID** field if it's required (3).
4. From the **Access level** drop-down list select name of access level which is to be assigned to required department (4). If it's required click the  button and search for access level (see the Working with the Search access level window section).
5. Click the Enter key.
6. Number of found departments will be displayed (5) and the list of departments satisfying to the specified search parameters (6). Search is case-insensitive. All objects corresponding fields of which contain specified values will be found.

To sort search results click the left mouse button on title of corresponding column.

While double click on department name, the **Search for department** window will be closed and the department will be selected in the departments tree or in the form from which the **Search for department** window was opened.

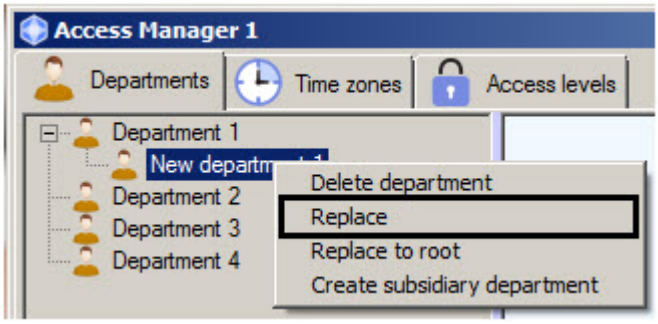
Department search is completed.

6.5.5 Creating departments hierarchy

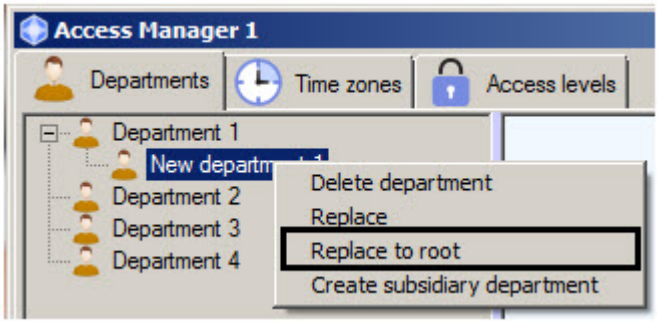
The departments hierarchy is created using the following operations:

1. Changing of parent department. Click the right mouse button on department name in the list of departments and select the **Replace** item in the opened functional menu. As a result the **Search for**

department window will open to select the new parent department - see the Working with Search for department window section.



2. Replacing subsidiary department to the root of hierarchy. Click the right mouse button on department name in the list and select the **Replace to root** item in the opened functional menu. As a result the department will be places to the root of departments hierarchy.



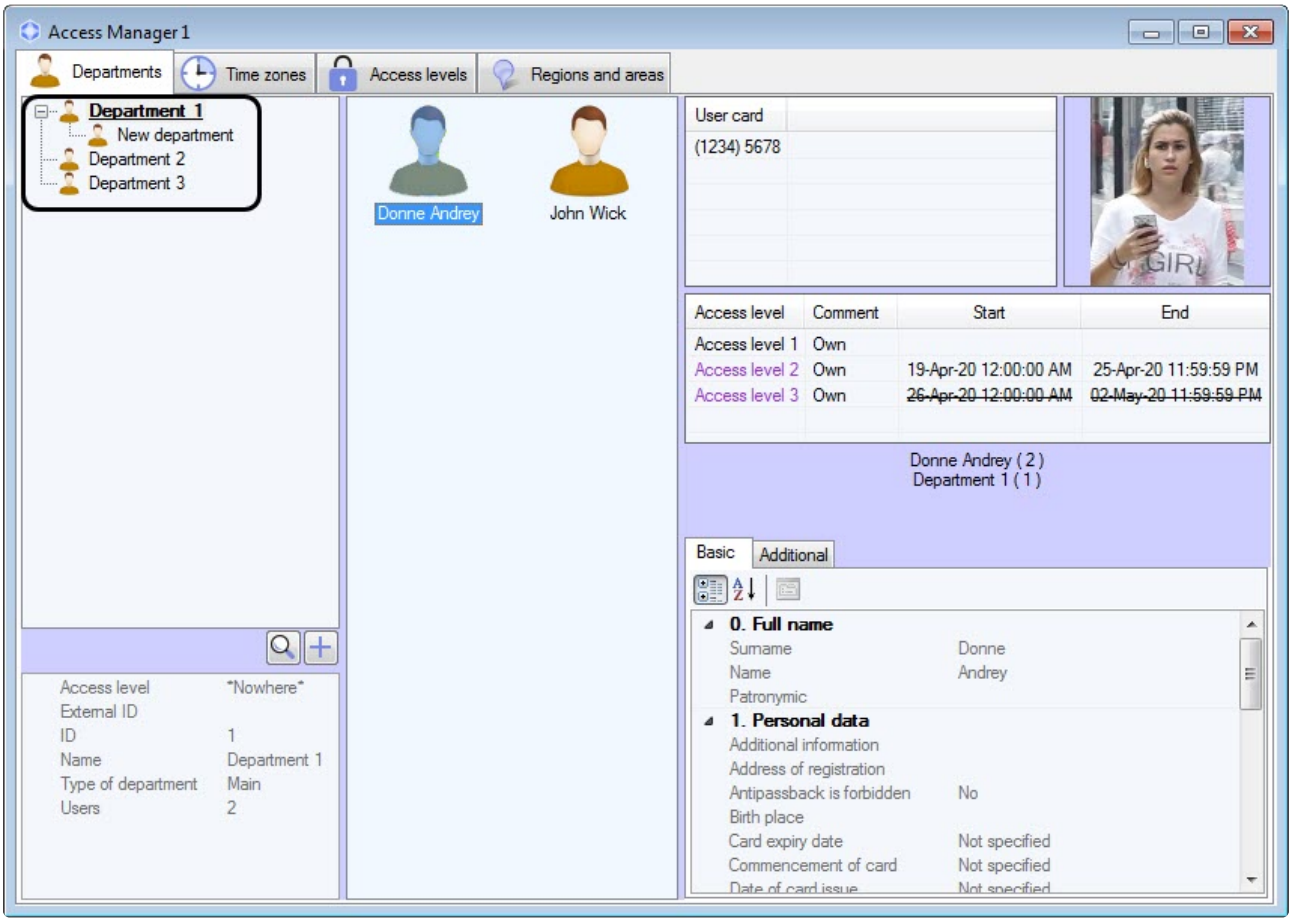
3. Change the department location by dragging it with the left mouse button holding the Ctrl key.

> **Note**
>
> Department replaces in hierarchy with its subsidiary departments.

6.6 Working with users in the Access Manager software module

6.6.1 Viewing a list of users

To view users select one of departments in the tree. A list of users included to this department will be displayed in the middle part of the **Access Manager** window.



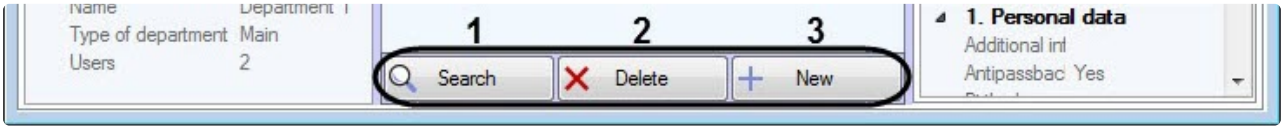
Note

In case of large number of users in the department (more than 2000), displaying of users list can take for some time. Time of displaying a users list depends on computer capacity on which the **Access Manager** window is displaying.

Properties of the selected user are displayed in the right part of the **Access Manager** window. On default the first user from the list will be selected while viewing the department.

Press the key combination Ctrl+Shift+M, and the user control panel will be displayed at the bottom of the window:

- **Search** (**1**) - User search in the Access Manager software module.
- **Delete** (**2**) - Deleting a user in the Access Manager software module.
- **New** (**3**) - Creating users in the Access Manager.



Note

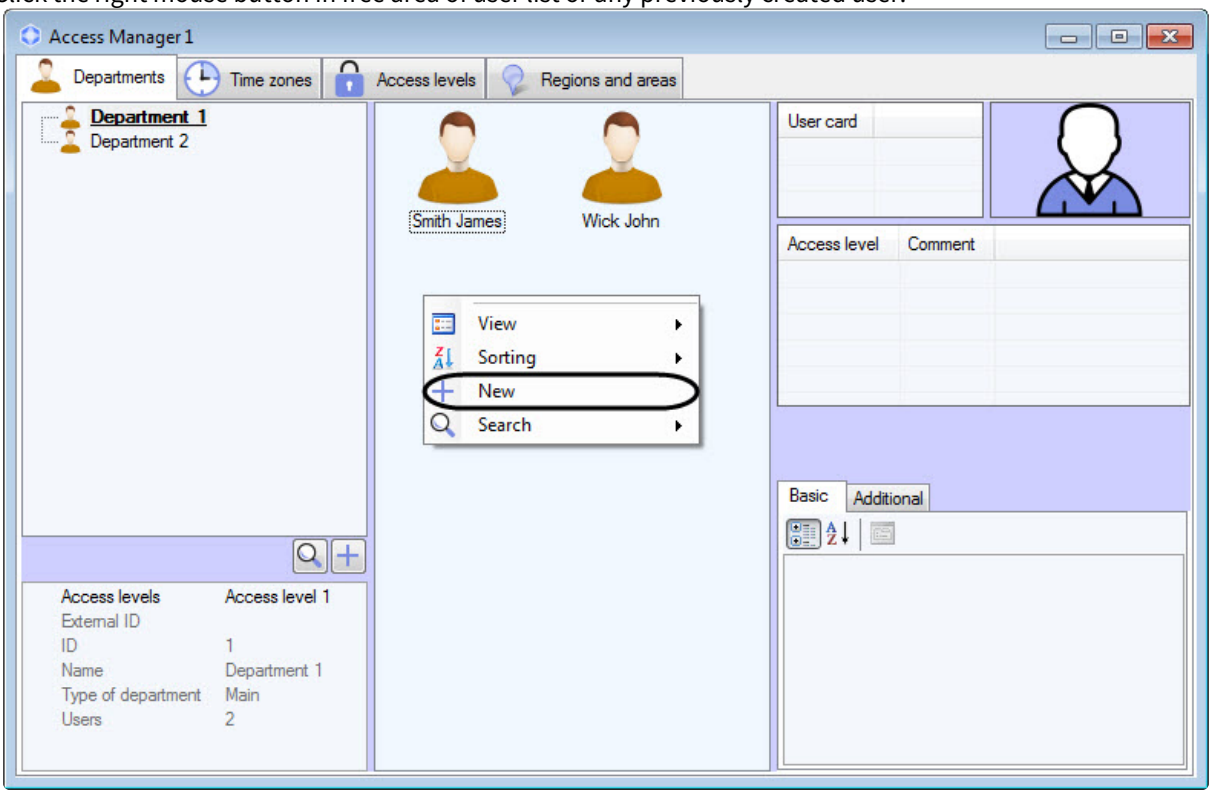
To hide this panel, press the key combination Ctrl+Shift+M again.

6.6.2 Creating users in the Access Manager

To add a new user, do the following:

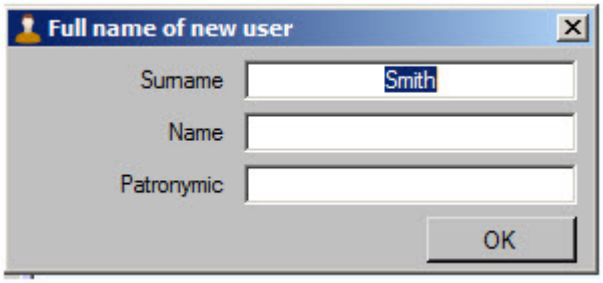
> **Note**
>
> In addition to the method described below, you can also create new users by clicking the **New** button on the user control panel (see Viewing a list of users).

1. Open a list of users (see Viewing a list of users).
2. Click the right mouse button in free area of user list or any previously created user.



> **Note**
>
> Rights for users creating can be limited while configuring the *Access Manager* module. The message about missing of corresponding rights will display. See also the Configuring the object management rights section.

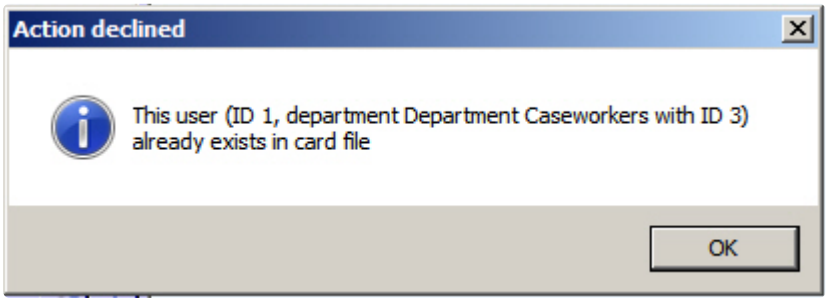
3. Select the **New** item in the opened functional menu. The **Full name of new user** window will open.



4. Enter surname, name and patronymic of creating user and click **OK** button.

Note

- Surname, name and patronymic should not contain the following characters: < | >.
- If criterion of records duplicate is in use and there is user with such name in the system, the error message with ID of existed user and department to which the user belongs will display. See also the Configuring the prohibition of new user parameter duplicates in Access Manager section.



5. The **Editing. <User name> (creation)** window will display.

Further process of user creation is given in the Editing a user section.

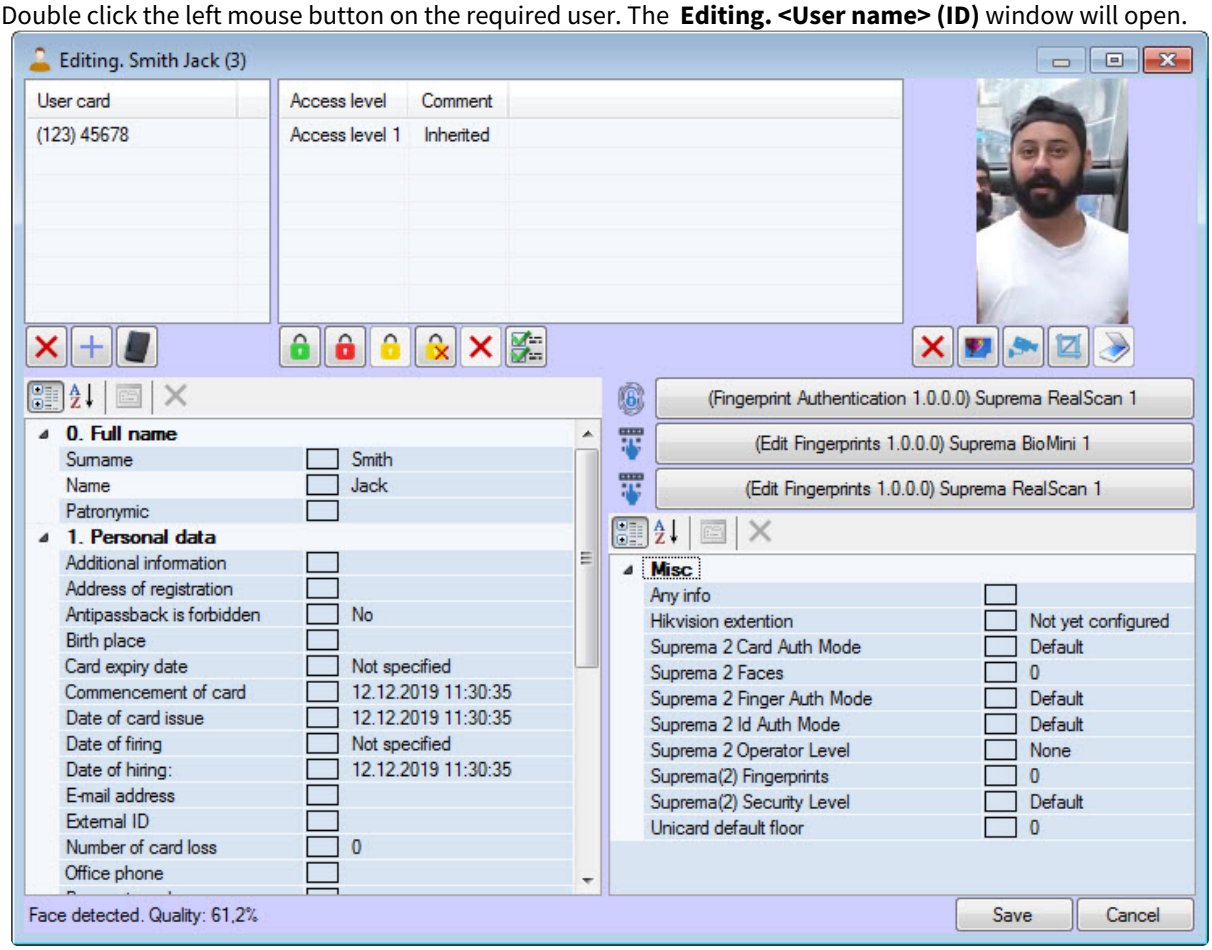
6.6.3 Editing a user

Going to user editing

Going to user editing is performed while user creating (see the Creating users in the Access Manager section) or as follows:

1. Open list of users (see the Viewing a list of users section).

2. Double click the left mouse button on the required user. The **Editing. <User name> (ID)** window will open.



It is possible to do the following operations in this window:

a. Setting user parameters.
b. Assigning access card to user.
c. Assigning access levels to user.
d. Assigning photo to user.
e. Adding biometric parameters (fingerprints).
f. Opening a folder with user documents.
g. Adding extension buttons.

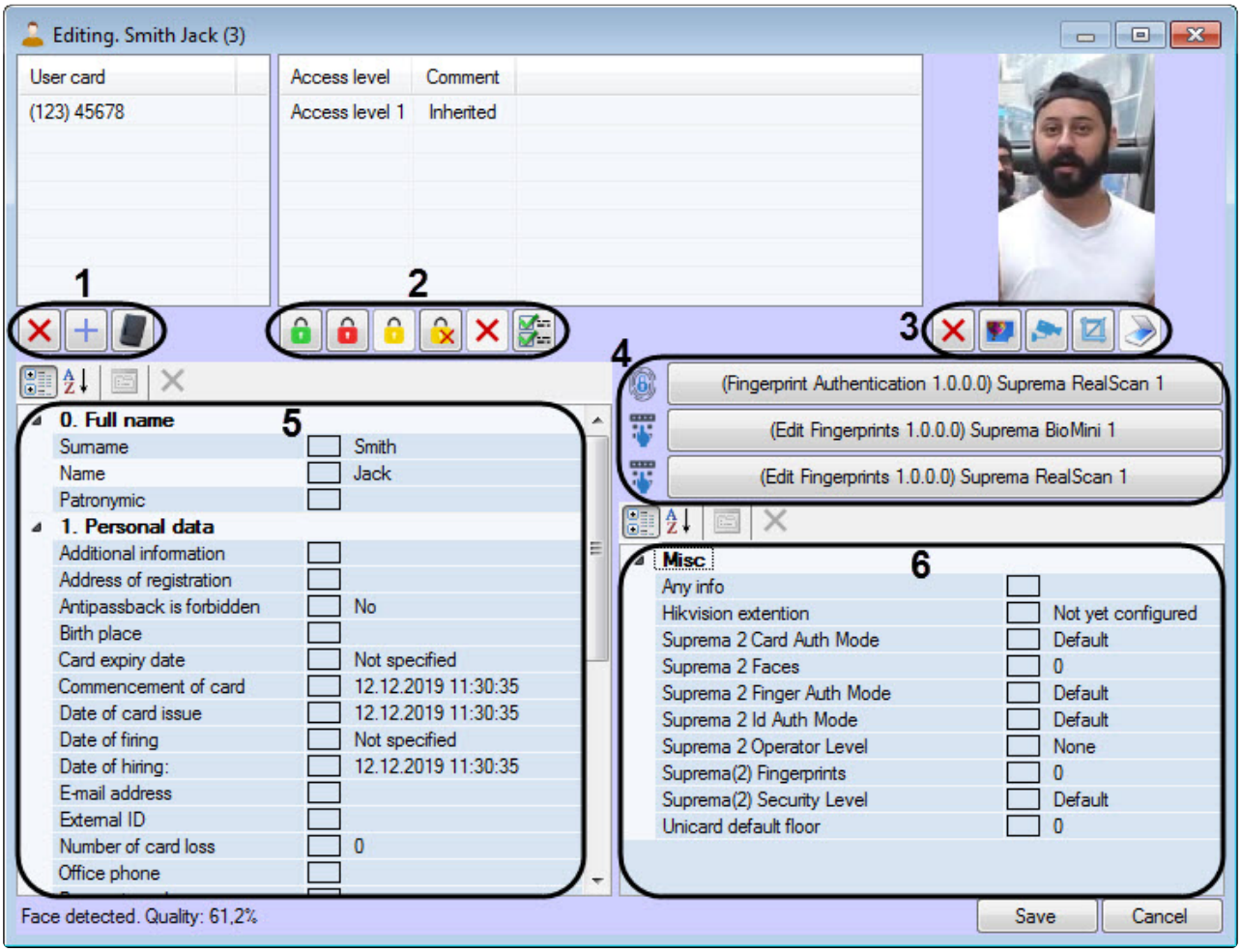
All actions are described as follows.

> **Note**
>
> Rights for user editing can be limited while configuring the *Access Manager* module. The message about missing of corresponding rights will display after double click on the user name. See also the Configuring the object management rights section.

Going to user editing is completed.

Setting user parameters

User parameters are specified in the **Editing. <User name> (ID)** window.



The button panel (**1**) allows performing the following actions:

- —delete the selected user card (see Deleting of access card).
- —add a user card manually (see Manual input of access card number).
- —add a user card using the control reader (see Input of card number using a control reader).

The button panel (**2**) allows performing the following actions:

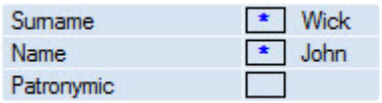
- —set full access (see Assigning Own access level to a user).
- —prohibit the access (see Assigning Own access level to a user).
- —enable the department access level inheritance (see Configuring the department access level inheritance).
- —disable the department access level inheritance (see Configuring the department access level inheritance).
- —delete **Own** access level (see Assigning Own access level to a user).
- —edit access level (see Assigning Own access level to a user).

The button panel (**3**) allows performing the following actions:

-  —delete the photo assigned to the user (see Deleting a photograph).
-  —assign the user a photo from the file (see Assigning photograph from a file).
-  —assign the user a photo from the camera (see Assigning a photograph from a video camera).
-  —crop the photo assigned to the user (see Cropping a photograph).
-  —this button is used only in the Russian version of *ACFA PSIM*, and is inactive in the English version.

The button panel (**4**) allows you to add biometric parameters to users (see Adding biometric parameters).

In the fields (**5**) and (**6**), a rectangle is displayed next to each field. When the field is changed, the "*****" sign is displayed in the rectangle until the user editing window is opened again.



Note

Fields available for editing including list of access levels and list of access cards are specified while configuring the *Access Manager* software module — see Configuring fields displaying in user accounts. Some fields can be hidden or not available for editing depending on settings.

The following **Standard fields** are displayed in the field (**5**):

Parameter name	**Parameter setting method**	**Default category in templates**	**Value range**	**Comment**
Surname	Enter the value in the field	0. Full name	Any characters except: < | >	-
Name	Enter the value in the field	0. Full name	Any characters except: < | >	-
Patronymic	Enter the value in the field	0. Full name	Any characters except: < | >	-

Additional information	Enter the value in the field	1. Personal data	Any characters except: < | >	Enter additional information in text field opening by clicking the "down" button in the Additional information field When you hover the mouse cursor over a user's photo, a pop-up window with the full content of this field is displayed
Access level assigned by	Automatically	1. Personal data	Operator name	Name of operator who last assigned access level to user or visitor (see Assigning access levels to a user)
Address of registration				
Antipassback is forbidden	Select the value from the list	1. Personal data	Yes No	Default value depends on configuring the Access Manager module — see Configuring the prohibition of new user parameter duplicates in Access Manager
Birth place	Enter the value in the field	1. Personal data	Any characters except: < | >	Place of user birth
Card expiry date	Enter the value in the field manually or using the calendar	1. Personal data	Date in Weekday, DD mmm YYYY HH:MM:SS format	If the controller does not support time recording, the card will stop working on the next day at 00:00 from the specified date
Card issued by	Automatically	1. Personal data	Operator name	Name of operator who last assigned access card to user or visitor (see Assigning an access card to a user)
Commencement of card	Enter the value in the field manually or using the calendar	1. Personal data	Date in Weekday, DD mmm YYYY HH:MM:SS format	-

Date of card issue	Enter the value in the field manually or using the calendar	1. Personal data	Date in Weekday, DD mmm YYYY HH:MM:SS format	-
Date of firing	Enter the value in the field manually or using the calendar	1. Personal data	Date in Weekday, DD mmm YYYY HH:MM:SS format	-
Date of hiring	Enter the value in the field manually or using the calendar	1. Personal data	Date in Weekday, DD mmm YYYY HH:MM:SS format	-
E-mail address	Enter the value in the field	1. Personal data	Any characters except: < | >	User e-mail address
External ID	Enter the value in the field	1. Personal data	Any characters except: < | >	This field is in use if list of departments and users in the database of *ACFA PSIM* is used with users database in external software due to features of used ACS integration module
Number of card loss	Enter the value in the field	1. Personal data	Numbers	-
Office phone	Enter the value in the field	1. Personal data	Any characters except: < | >	Office phone number
Passport number	Enter the value in the field	1. Personal data	Any characters except: < | >	Passport number of user
Personnel number	Enter the value in the field	1. Personal data	Any characters except: < | >	-

PIN code	Enter the value in the field	1. Personal data	Numbers	Depending on the selected value in the **Mask PIN code** field in the *Access Manager*, the PIN code can be: • always masked with dots; • masked while reading user data; • not masked 
Position	Enter the value in the field	1. Personal data	Any characters except: < | >	-
Telephone	Enter the value in the field	1. Personal data	Any characters except: < | >	Telephone number
User locked	Select the value from the list	1. Personal data	Yes No	Yes—user locked No—user is active
Driving license	Enter the value in the field	3. Vehicle	Any characters except: < | >	Number of user driving license
Vehicle LP	Enter the value in the field	3. Vehicle	Any characters except: < | >	License plate of user vehicle. Several license plate numbers can be specified divided by space. Access grant by license plate is also enabled in this case when *ACFA PSIM* is set up for operation with *Virtual Access Server* module (see Virtual Access Server Integration Module Configuration and Operation Manual)
Vehicle model	Enter the value in the field	3. Vehicle	Any characters except: < | >	Model of user vehicle
Document	Enter the value in the field	4. Visitor data	Any characters except: < | >	Present document of visitor identification
Origin	Enter the value in the field	4. Visitor data	Any characters except: < | >	Name of organization to which the visitor belongs
Purpose of visit	Enter the value in the field	4. Visitor data	Any characters except: < | >	Purpose of visitor visit

To which department	Enter the value in the field	4. Visitor data	Any characters except: < | >	Department being visited
To whom	Enter the value in the field	4. Visitor data	Any characters except: < | >	Employee being visited

The following **Additional fields** are displayed in the field (**6**):

Parameter name	**Parameter setting method**	**Default category in templates**	**Value range**	**Comment**
Apollo SDK extension	Configurating	Misc	Unconfigured Configured	(see ApolloSDK Integration Module Settings Guide)
Galaxy Dual	Select the value from the list		Yes No	(see Honeywell Galaxy Dimension Integration Module Settings Guide)
Galaxy Dual Access	Select the value from the list		Yes No	
Galaxy Dual Focus	Select the value from the list		Yes No	
Galaxy Duress	Select the value from the list		Yes No	
Galaxy Group Choice	Select the value from the list		Yes No	
Galaxy Keypad	Enter the value in the field		NONE 10-51	
Galaxy Menu Choice	Select the value from the list		Yes No	

Galaxy Menu Level	Select the value from the list	1.0 2.1 2.3 2.4 2.5 3.6	
Galaxy Menu Option	Select the value from the list	NONE 11-71	
Galaxy Pin Change	Select the value from the list	Yes No	
Galaxy Tag Link	Enter the value in the field	Numbers	
Galaxy Temp Code	Enter the value in the field	Numbers	
Galaxy Template	Enter the value in the field	Numbers	
Galaxy Timer Schedule	Enter the value in the field	Numbers	
Group number	Enter the value in the field	Numbers	-
Hikvision extension	Configurating	Unconfigured Configured	(see Hikvision Integration Module Configuration and Operation Guide)
Level in first card mode	Enter the value in the field	Numbers	-

Ravelin Access type	Select the value from the list	Card only Master card Card and pin Slave card	(see Gate Integration Module Setup and User Guide)
Ravelin guest card	Select the value from the list	Yes No	
Soyal Access type	Select the value from the list	Card only Card or PIN Card and PIN Access denied	(see Soyal Integration Module Settings Guide)
Soyal Can pass in and out	Select the value from the list	Yes No	
Soyal Card Level	Select the value from the list	0-10	
Soyal Patrol card	Select the value from the list	Yes No	
Soyal PWD change a vailable	Select the value from the list	Yes No	
Suprema 2 Card Auth Mode	Select the value from the list	Default Only Card Card And Fingerprint Card And Pin Fingerprint Or Pin After Card Card And Fingerprint and Pin Cannot Use	(see Suprema 2 Settings Guide)

Suprema 2 Faces	Automatically	Numbers
Suprema 2 Finger Auth Mode	Select the value from the list	Default Only Fingerprint Fingerprint And Pin Cannot Use
Suprema 2 Id Auth Mode	Select the value from the list	Default Fingerprint After Id Pin After Id Fingerprint Or Pin After Id Fingerprint And Pin After Il Cannot Use
Suprema 2 Operator Level	Select the value from the list	None Admin System settings User information
Suprema Bypass Card	Select the value from the list	Yes No
Suprema(2) Fingerprints	Automatically	Numbers

Suprema(2) Security Level	Select the value from the list	Default Lower Low Normal Hight Higher	
Unicard code	Enter the value in the field	Any characters except: < | >	(see Unicard Integration Module Settings Guide)
Unicard default floor	Enter the value in the field	Numbers	
Unicard disabled	Enter the value in the field	Numbers	
VertX-Edge Access mode	Select the value from the list	Card or "Card and PIN" Card only PIN only Card only and PIN only	(see HID Integration Module Settings Guide)
VertX-Edge Escort	Enter the value in the field	Any characters except: < | >	
VertX-Edge Exempt PIN	Select the value from the list	Yes No	
VertX-Edge Extended access	Select the value from the list	Yes No	
VertX-Edge PIN commands	Select the value from the list	Yes No	

Group number	Enter the value in the field		Numbers	(see ZK Teco Integration Module Settings Guide)
Level in first card mode	Enter the value in the field		Numbers	

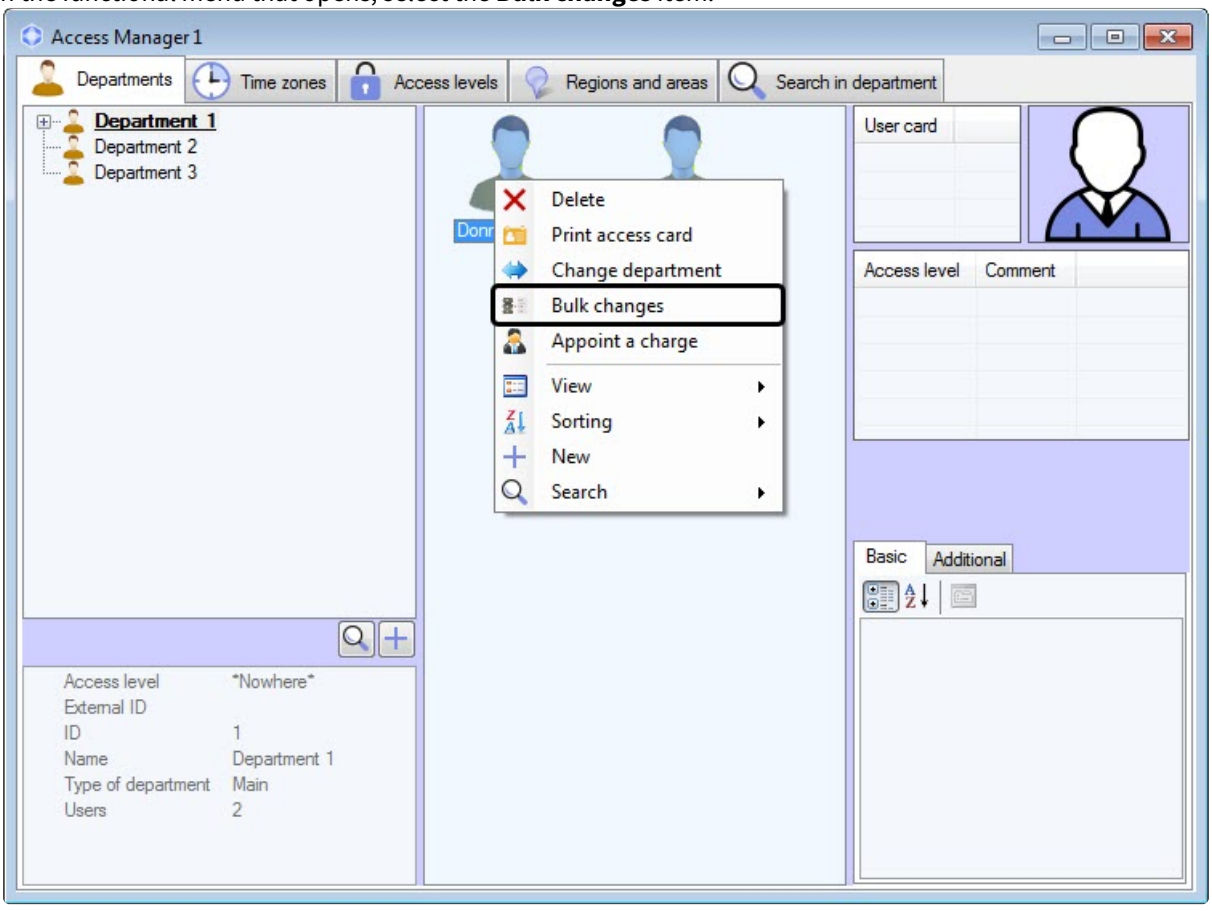
Bulk editing of users

Bulk editing of users is performed as follows:

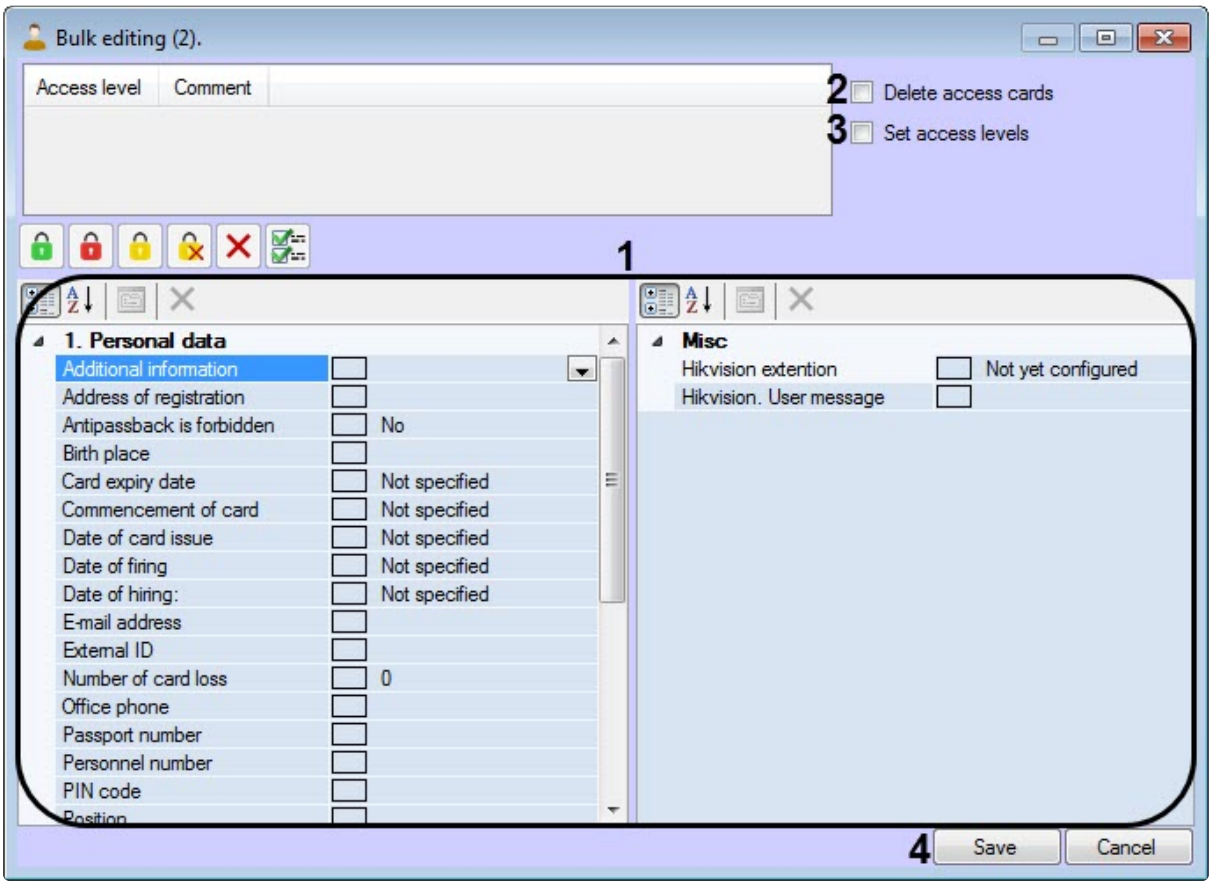
1. Go to viewing the list of users (see Viewing a list of users).
2. Select several users to be edited and right-click on the name of any of the selected users.

> **Note**
>
> You can select several users by using the mouse or keyboard shortcuts (see Keyboard shortcuts for working with interface elements)

3. In the functional menu that opens, select the **Bulk changes** item.



4. As a result, the **Bulk editing** window will open, and the number of users being edited will be displayed in brackets.

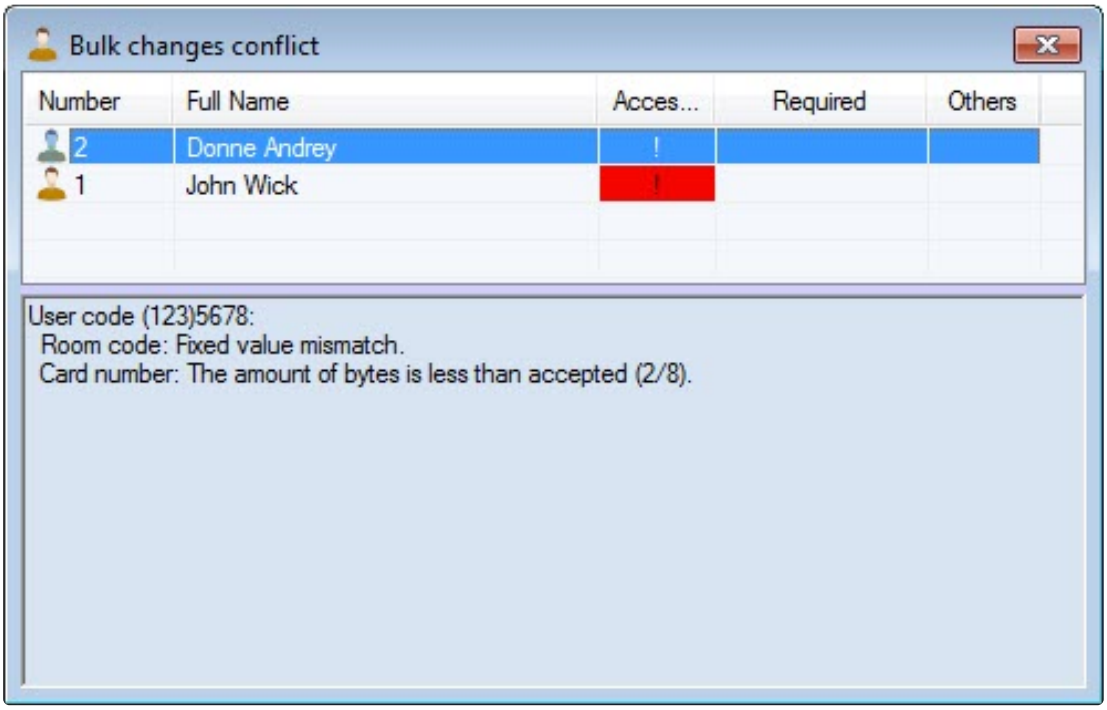


5. Set the standard and additional fields (**1**), which will be the same for all selected users (see Setting user parameters).
6. Set the **Delete access cards** checkbox (**2**) if it is necessary to delete all existing access cards from the selected users.

> **Attention!**
>
> The deletion of access cards for all selected users cannot be undone.

7. Set the **Set access levels** checkbox (**3**) if it is necessary to allow assigning access levels that are the same for all selected users. The procedure of assigning access levels to several users is the same as for one user (see Assigning access levels to a user).
8. Click the **Save** button (**4**) to apply the changes.

> **Attention!**
>
> If the selected users have an access card in a format that differs from the access card format specified in the **Access Manager** object settings (see Configuring access cards), then a list of all users with such cards will be displayed, indicating the cause of the conflict. Changes will not be saved until all conflicts are resolved. If the **Delete access cards** checkbox is set, then the changes can be saved.



Bulk editing of users is complete.

Filling out the user parameters using the ABBYY PassportReader SDK module

The *ABBYY PassportReader SDK* module is used to fill out the users parameters in the *Access Manager* module automatically after the images of the identification documents are recognized (passport, driver's license, passport for traveling abroad, birth certificate, etc.), including the images of the identification documents of some CIS countries (Azerbaijan, Belarus, Kazakhstan, Kyrgyzstan, Tajikistan, Uzbekistan) and foreign passports of any country (MRZ analyzed) from the scanner or hard disk.

The *ABBYY PassportReader SDK* module allows you to recognize user information from images downloaded from a file or obtained using any configured scanner that is connected to the computer.

To set the user parameters using the *ABBYY PassportReader SDK* module, do the following:

1. Go to user editing (see Going to user editing).
2. Click the  button (**1**). As a result, the **Document recognition** window will open.

> **Note**
>
> If this button is inactive, check if the *ABBYY PassportReader SDK* module is configured correctly (see Configuring the ABBYY PassportReader SDK module).

3. Choose a way you want the passport information to be provided:
   - Click the **Scan** button (**1**), if you want to scan the document using the scanner selected by default in Windows OS (see Windows hardware settings). When you click this button, the pre-scan of the document will start.
   - Click the **From file** button (**2**), if you want to download a photo of the document from a file. When you click this button, the standard open file dialog box will open, in which you will need to select the corresponding photo of the first page of the document that you want to download.

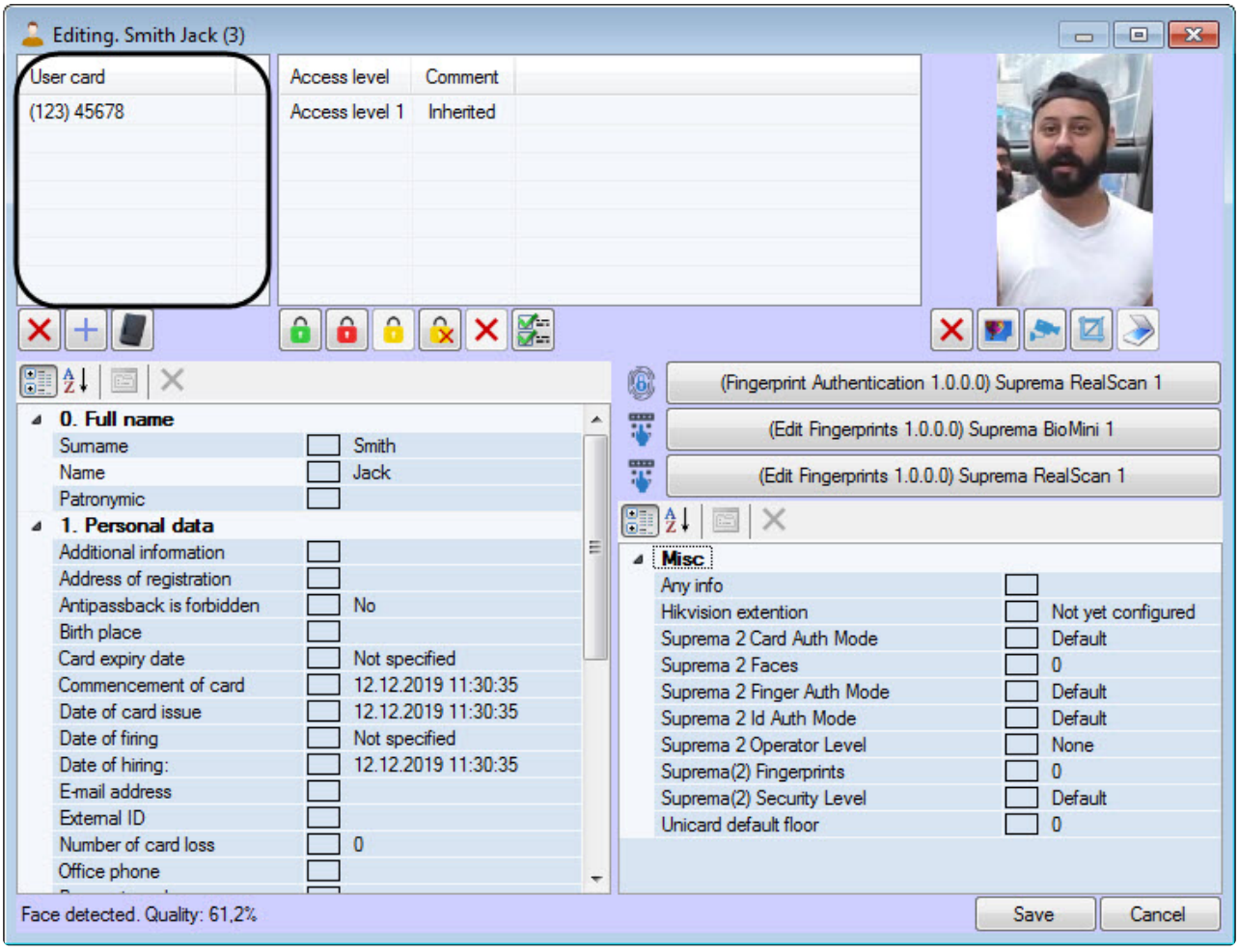
4. When working with the *ABBYY PassportReader SDK* module, you can do the following:
    a. select a printer (**1**);
    b. rotate the scanned image, selecting the necessary value from the **Rotate** drop-down list (**2**):
        i. Do not change,
        ii. Rotate right,
        iii. Rotate left,
        iv. Rotate 180°.
    c. select the type of the document (**3**);
    d. display the license serial number and the number of the remaining recognitions (**4**). The number of the remaining recognitions in the license is specified after the word **activated**.

The values in the fields that are marked red are offered to the operator to double-check and, if necessary, make changes to them (**5**). After the operator checks and makes changes to them, the field turns green, which means that the field has been checked.

Assigning an access card to a user

General information about assigning access cards to a user

List of user access cards is displayed in the **User card** table of the **Editing. <Full name> (ID) window**.



The object code is specified in brackets, then the card code follows. The access cards format is set in the **Access Manager** object settings (see Configuring access cards).

Several access cards can be assigned to one user.

> **Attention!**
>
> Assigning multiple access cards to a user should be supported by hardware and by the corresponding integration module. If used hardware/integration module supports only one card, and multiple cards are assigned to a used, then all cards excepting the first card will be ignored by system.
> Support for multiple user access cards has been tested in the following integration modules: Noder, ApolloSDK, SDK Orion v.2, PERCo-S-20, PERCo-S-20 v.2, AccessNet (ABC), Forteza, ParsecNet 3. For information on others integration modules, please contact the AxxonSoft technical support.

Input of card number and code while assigning access cards to a user can be performed in one of the following ways:

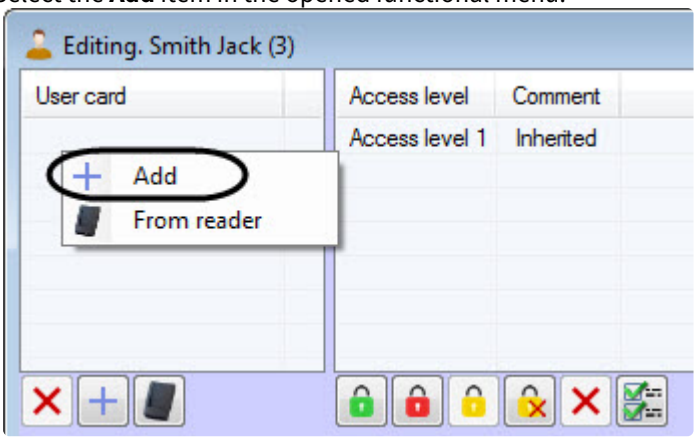
1. Manually.
2. Using the control reader.

> **Note**
>
> List of control readers used for user access cards input is specified while system configuring — see Configuring control readers in the Access Manager.

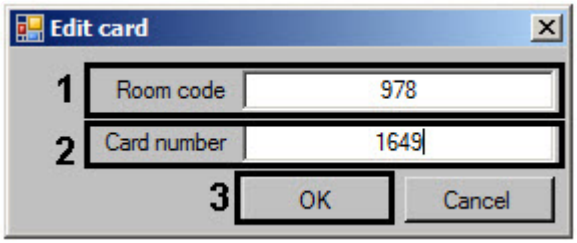
Manual input of access card number

To input access card number manually, do the following:

1. Go to editing a user (see Going to user editing).
2. Click the right mouse button in card selection area.
3. Select the **Add** item in the opened functional menu.

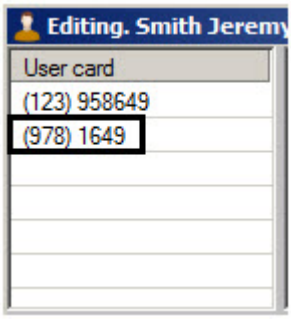


4. The window of input object code and card code will open.



5. Enter the object code (facility-code, room code) in the **Room code** field (**1**).
6. Enter the card code in the **Card number** field (**2**).
7. Click the **OK** button (**3**).

8. The card will be added to the list.



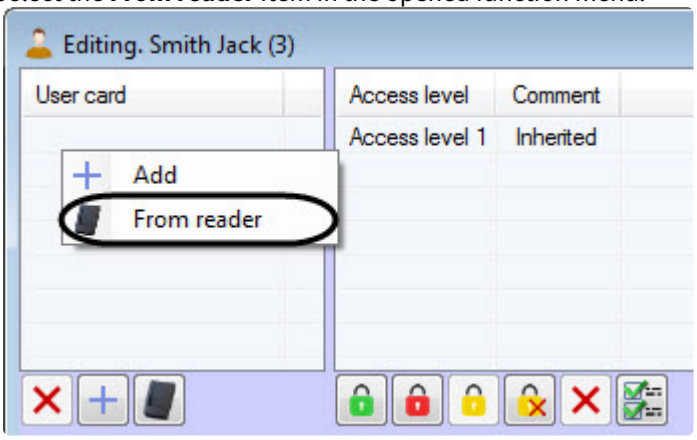
Input of access card number manually is completed.

> **Note**
>
> You also can input access card number manually using the corresponding buttons (see Setting user parameters).

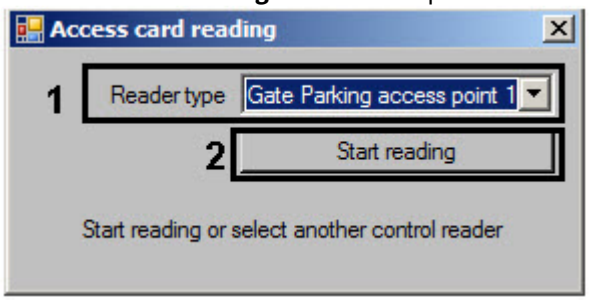
Input of card number using a control reader

To input access card number using a control reader, do the following:

1. Go to editing a user (see Going to user editing).
2. Click the right mouse button in card selection area.
3. Select the **From reader** item in the opened function menu.



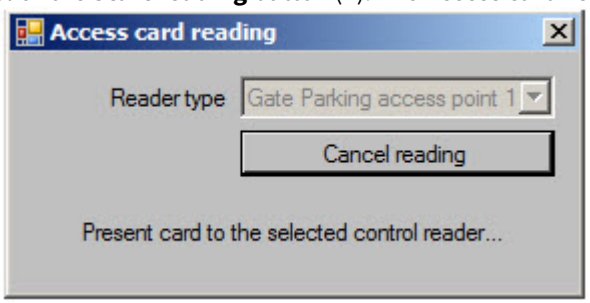
4. The **Access card reading** window will open.



5. From the **Reader type** drop-down list, select a control reader which will be used for input of access card number (**1**).

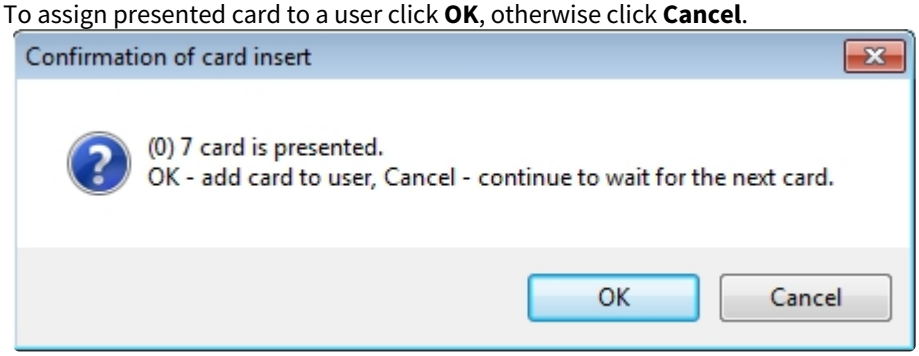
> **Note**
>
> List of accessible control readers is specified while system configuring (see Configuring control readers in the Access Manager).

6. Click the **Start reading** button (**2**). The **Access card reading** window will be as follows:

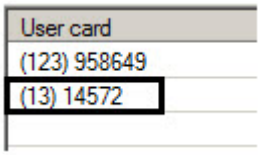


> **Note**
>
> To cancel access card reading click the **Cancel reading** button.

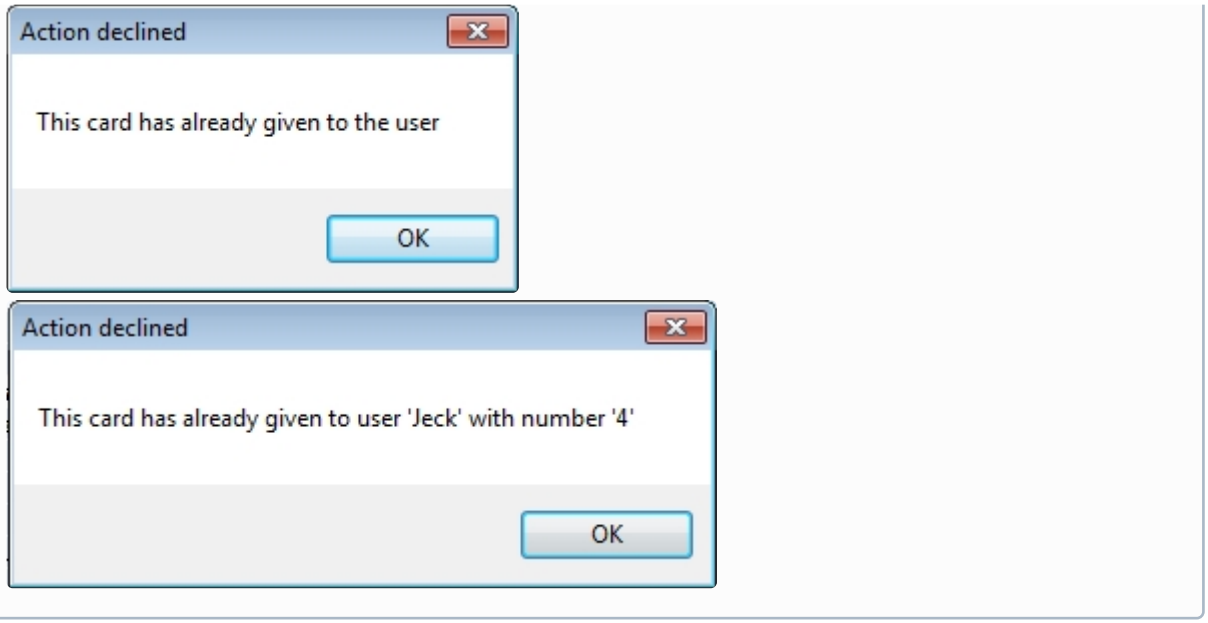
7. Present access card to the selected reader.
8. If confirmation of card input by operator is configured, the **Confirmation of card insert** window will display. To assign presented card to a user click **OK**, otherwise click **Cancel**.



9. Then the **Access card reading** window will be closed and number of presented access card will be added to the list.



> **Note**
>
> If this card is already given to the current or another user, the corresponding window will display.

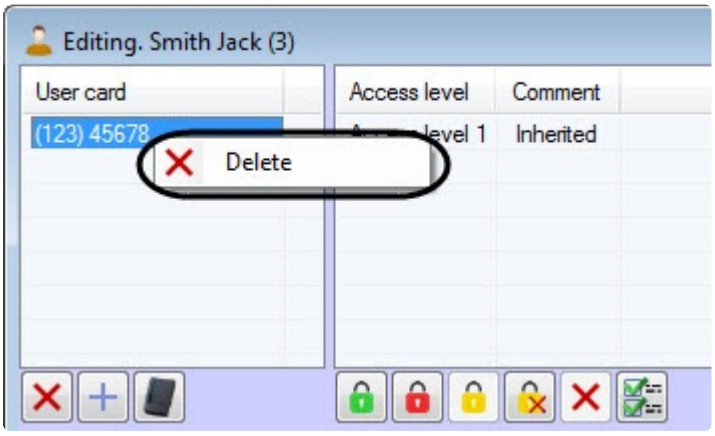


Input of access card using a control reader is completed.

> **Note**
>
> You can also input access card number using a control reader using the corresponding buttons (see Setting user parameters).

Deleting of access card

To remove a card number from the list, right-click on the card number in the list and select the **Delete** item in the opened function menu.

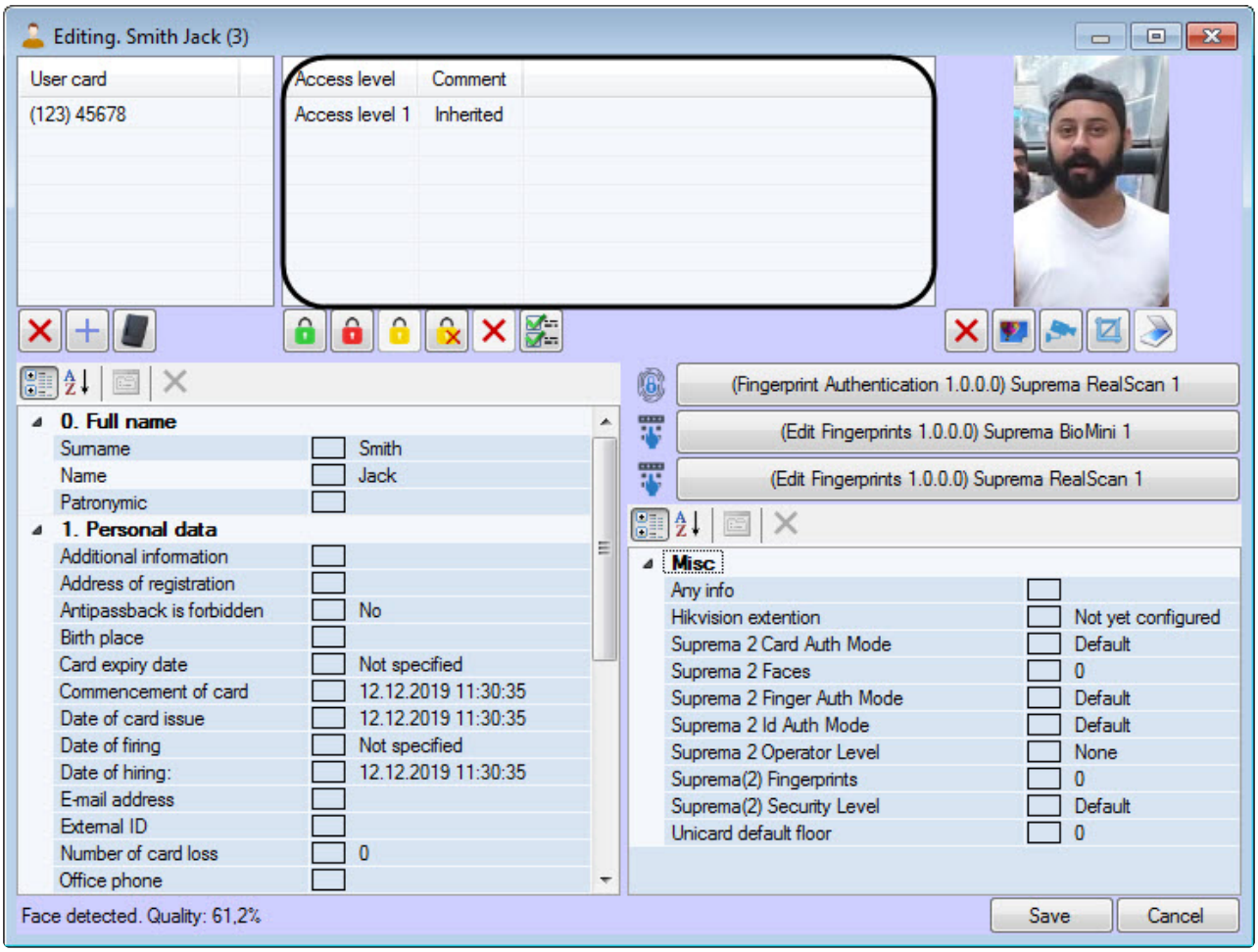


> **Note**
>
> You can also remove a card number from the list using the corresponding buttons (see Setting user parameters).

Assigning access levels to a user

General information about assigning access level to a user

List of access levels is displayed in the table of the **Editing. <User full name> (ID)** window.



In the **Comment** column it's specified whether access level is inherited from Department (**Inherited**) or assigned to a user separately (**Own**). Configuring rules of department access level inheritance is described in the Configuring the department access level inheritance section. Adding of **Own** access levels to a user is described in the Assigning Own access level to a user section.

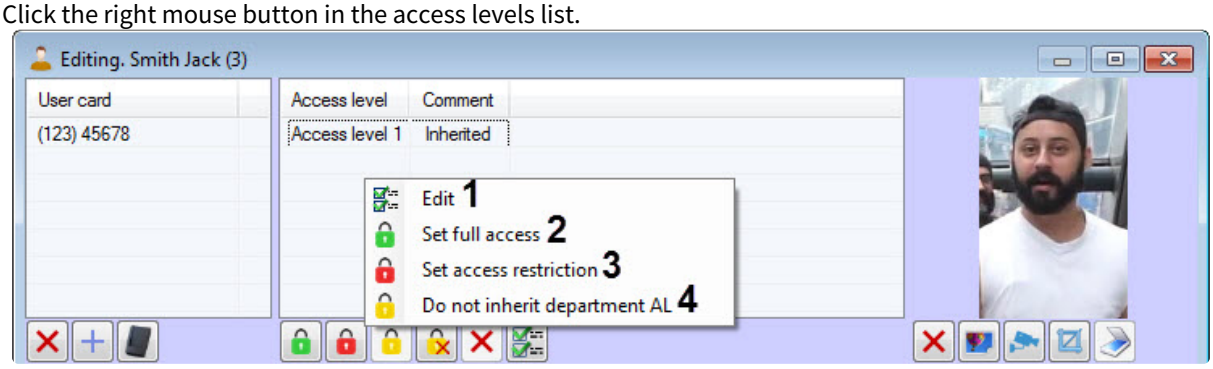
Several access levels can be assigned to a single user.

> **Attention!**
>
> The assignment of several access levels to a single user should be supported by hardware and by an appropriate integration module. If several access levels are assigned to a user, but the ACS equipment or the integration module supports only one access level, then all levels except the first one in the list will be ignored by the system.
> The support for several user access levels has been tested in the following integration modules: ApolloSDK, Elsys, ParsecNet, HID, Suprema, Salto, Perco S20 v.2, BioSmart2, Noder. For information on other integration modules, please contact the AxxonSoft technical support.

Assigning Own access level to a user

Assigning Own access level is performed as follows:

1. Go to editing a user (see the Going to user editing section).
2. Click the right mouse button in the access levels list.



3. In the functional menu that opens:
   - To assign the **Own** access level to a user, select the **Edit** item (**1**). The **Search access level** window opens. In this window, select one or several access levels (see Working with the Search access level window).

     Attention!

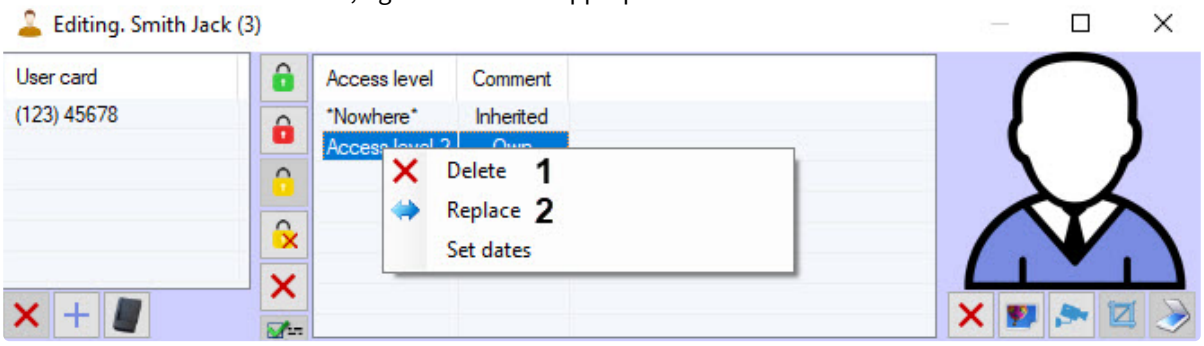
     If **Always** or **Never** Own access levels are inherited to a user, then the selected **Own** access levels will be ignored.

   - To assign the **Always** access level to a user, select the **Set full access** item (**2**).
   - To assign the **Never** access level to a user, select the **Set access restriction** item (**3**).

     Note.

     If **Always** or **Never** access level is assigned to a user, then all other access levels will be deleted.

   - If you disable the access level inheritance from a department by selecting the **Do not inherit department AL** item (**4**), the user will also be assigned the **Own** access level (for details, see Configuring the department access level inheritance)
4. To remove the **Own** access level, right-click on the appropriate access level and select **Delete**.



Note

If the user has only one **Own** access level, then when it is deleted, the access level inheritance from a department will be enabled.

5. To replace one access level (**Own**) with another, right-click on the corresponding access level and select **Replace** (**2**). The **Search access level** window opens. In this window, select one or several access levels (see Working with the Search access level window).

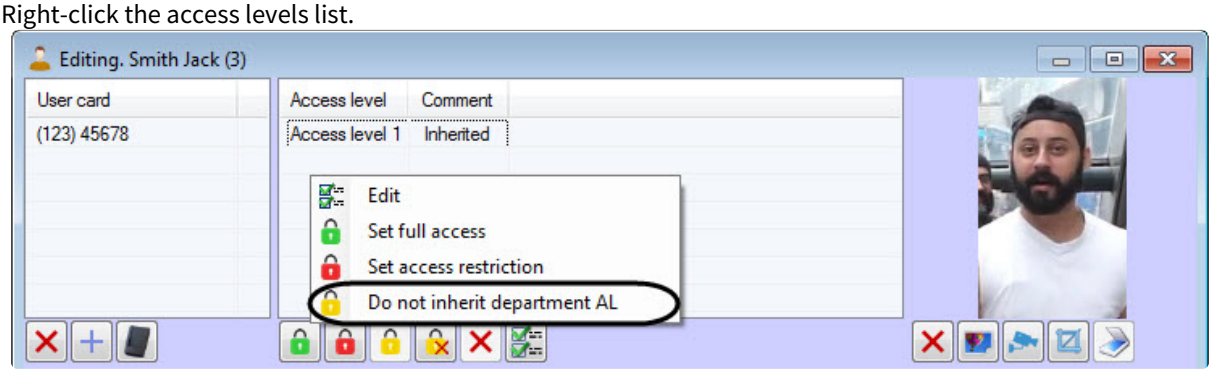
Assigning **Own** access level to a user is completed.

> **Note**
>
> You can perform all the actions described above using the corresponding buttons (see Setting user parameters).

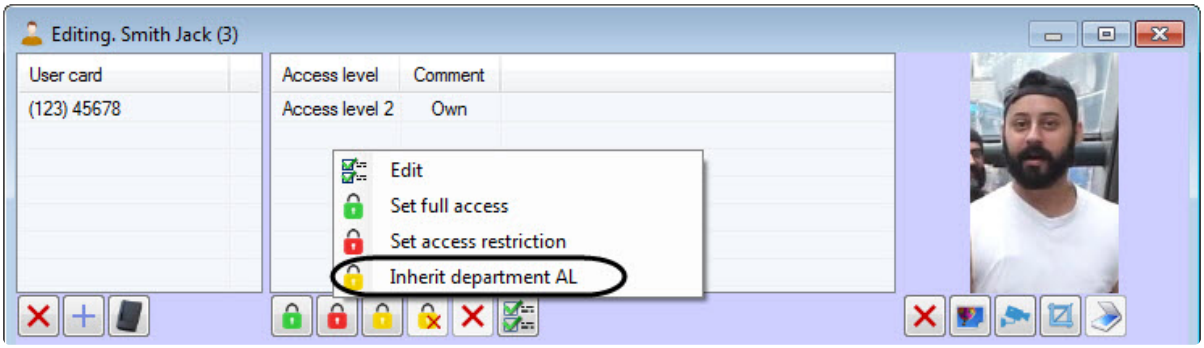
Configuring the department access level inheritance

By default, the user inherits the department access level. If it's required not to inherit the department access level, do the following:

1. Go to editing a user (see Going to user editing).
2. Right-click the access levels list.



3. Select the **Do not inherit department AL** item in the opened functional menu. If the user does not have any other access levels assigned except the inherited, the **Search access level** window will be opened. In that window, select one or several access levels (see Working with the Search access level window). As a result, the inherited access level will be removed from the list.
4. To restore the inheritance of department access levels, select the **Inherit department AL** item in the function menu.



Configuring of department access level inheritance is completed.

> **Note**
>
> You can perform all the actions described above using the corresponding buttons (see Setting user parameters).

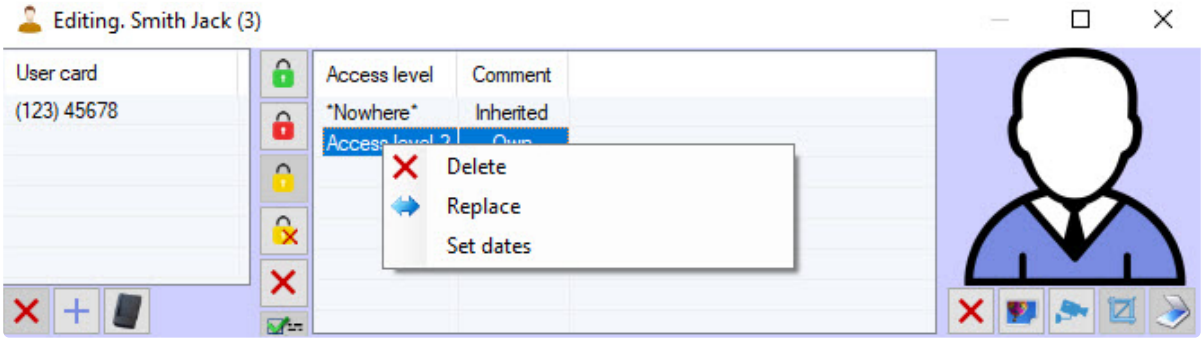
Assigning temporary access level to a user

> **Attention!**
>
> A user can be assigned a temporary access level only if the **Temporary Access Levels** object (service module) is created in the hardware tree.

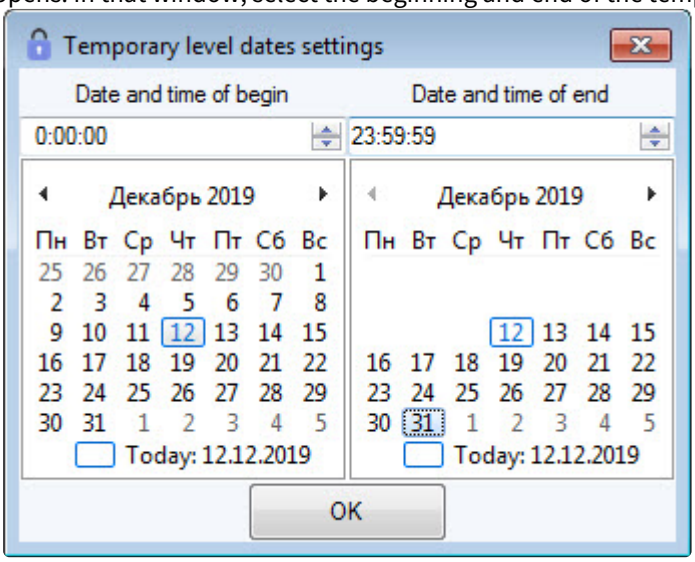
To assign temporary access level to a user, do the following:

1. Go to editing a user (see the Going to user editing section).
2. Right-click the required access level (**Own**) which should be made temporary (see Assigning Own access level to a user).

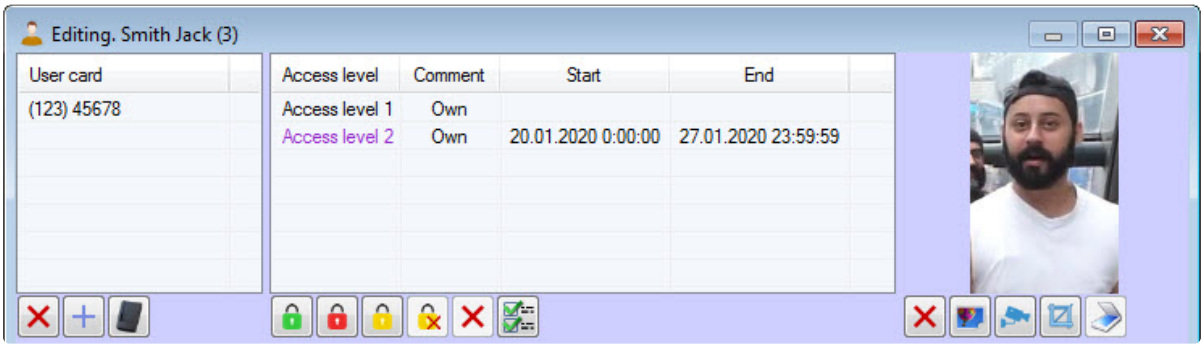
   > **Note**
   >
   > You can also select several access levels (**Own**): for example, by selecting them with the mouse or by using keyboard shortcuts (see Keyboard shortcuts for working with interface elements).



3. In the opened functional menu, select the **Set dates** item. The **Temporary level dates settings** window opens. In that window, select the beginning and end of the temporary access level and click **OK**.



4. As a result, this access level will become temporary. In the **Start** and **End** columns next to it the date and time of the temporary access level will be displayed.



If the date and time of validity of the temporary access level has already expired or has not yet started, then the date and time of validity of the temporary access level will be crossed out.

Access level	Comment	Start	End
Access level 1	Own		
Access level 2	Own	19-Apr-20 12:00:00 AM	25-Apr-20 11:59:59 PM
Access level 3	Own	~~26-Apr-20 12:00:00 AM~~	~~02-May-20 11:59:59 PM~~

Note

You can delete temporary access levels in the same way as **Own** access levels (see Assigning Own access level to a user).

Assigning temporary access level to a user is completed.

Assigning a photograph to a user in the Access Manager software module

General information about assigning a photograph to a user

Assigning a photograph to a user is performed in the **Editing. <User full name> (ID)** window in one of the following ways:

1. From a file.
2. From a video camera.

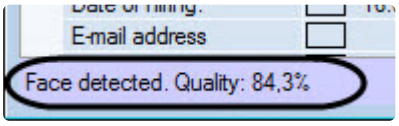
Note

List of video cameras used for assigning photograph to users is specified while system configuring (see the Selecting available cameras in the Access Manager section).

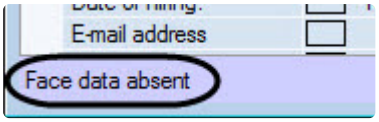
Assigned photographs are stored in the *<ACFA PSIM* installation directory>/Bmp/Person folder. Name of the file with the user's photograph is the same as the user ID. Content of the Bmp/Person folder is synchronized on all servers of distributed system.

It is possible to check the quality of an image before saving the assigned photo. To do this, it is necessary to configure the interaction with the *Face PSIM* Face recognition server (see Configuring the interaction with the Face PSIM Face recognition server.

As a result, after a user's photo is added, a message about face detection and its quality will be displayed in the lower left corner of the user parameters editing window, if this face meets the requirements specified on the **Face recognition server** object settings panel.



If the face does not meet the requirements specified on the **Face recognition server** object settings panel, the **Face data absent** message will be displayed. In this case, it is recommended to repeat the process of adding a user's photo by selecting another photo or selecting a new image from the camera.



It is also possible to automatically synchronize the users of the *Access Manager* module with the *Face PSIM* reference face database (see Appendix 5. Face synchronization module).

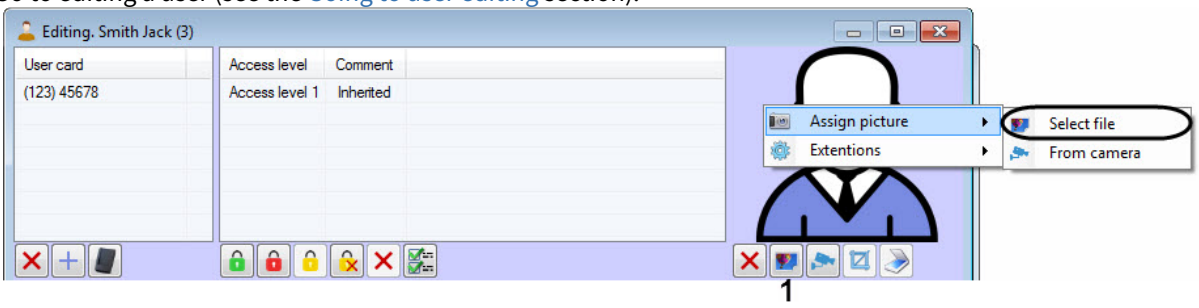
> **Note**
>
> If the quality of the face photo does not meet the requirements specified on the **Face recognition server** object settings panel, then this user will not be synchronized.

You can check the quality of the already assigned user photos using the CHECK_QUALITY_START command (for details, see FIRSERVER commands, Examples of frequently used scripts). This check is used, for example, in two-factor verification (see Configuring the two-step verification).

Assigning a photograph from a file

To assign photograph from a file, do the following:

1. Go to editing a user (see the Going to user editing section).



2. Click the  button (**1**). As a result, the standard Windows dialog window will be opened. In this window, select a file with a photo, which will be assigned to the user.

> **Note**
>
> You can also assign a photo to the user by right-clicking on the user's photo area and selecting **Assign picture -> Select file** in the opened functional menu.

Assigning photograph from a file is completed.

Assigning a photograph from a video camera

To assign a photograph from a video camera, do the following:

Note

List of video camera used for assigning photographs is specified while system configuring (see the Selecting available cameras in the Access Manager section).

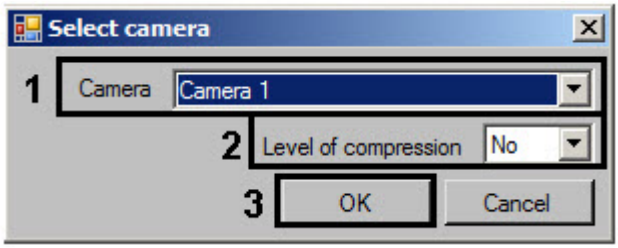
1. Go to editing a user (see the Going to user editing section).

2. Click the  button (**1**). As a result, the **Select camera** window will open.

Note

You can also open the **Select camera** window by right-clicking on the user's photo area and selecting **Assign picture -> From camera** in the opened functional menu.

3. From the **Camera** drop-down list select the camera from which photograph will be captured (**1**).

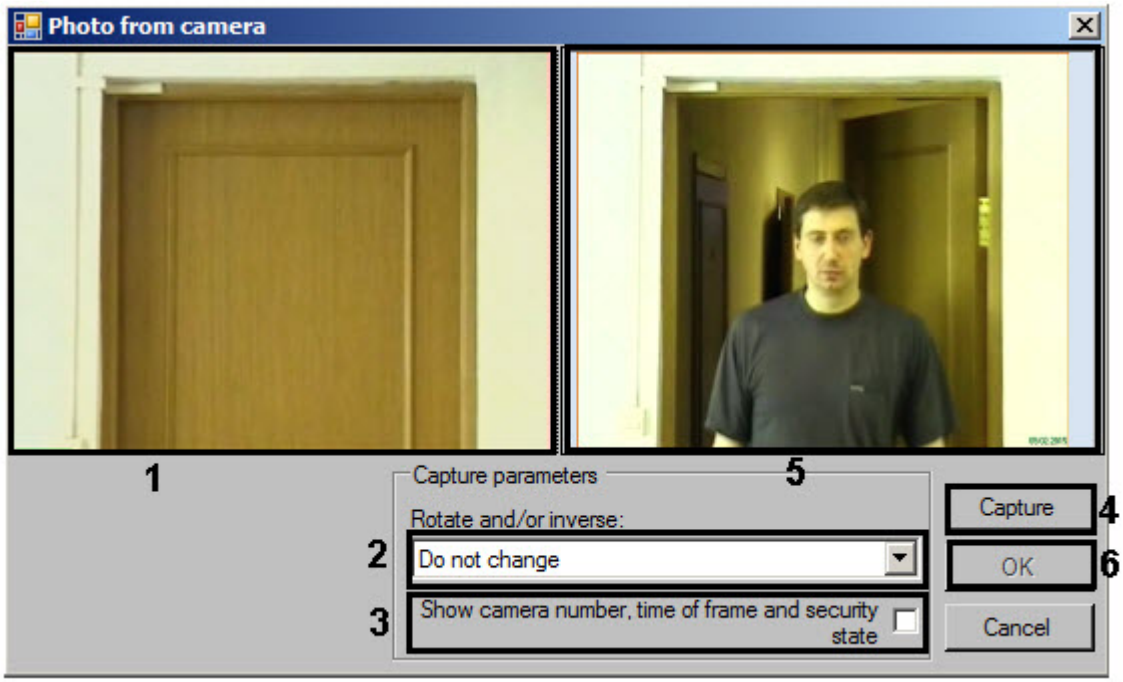


4. If it's required to change the level of video signal compression used for assigning a photograph, select from the **Level of compression** drop-down list the required level of video signal compression (**2**). Compression level is increasing from 0 (without compression) to 5 (maximum compression).

Note

Configuring of compression is required while using analog cameras. It's not recommended to use compression for IP-cameras.

5. Click **OK** button (**3**). The **Photo from camera** window will open.



6. Video from the selected video camera is displayed in the window (**1**).
7. If it's required selected the way of frame processing from the **Rotate and/or inverse** drop-down list (**2**). the following ways of frame processing are available:
    a. Do not change (on default).
    b. Rotate 90.
    c. Rotate 180.
    d. Rotate 270.
    e. Inverse horizontally.
    f. Rotate 90 and inverse horizontally.
    g. Inverse vertically.
    h. Rotate 90 and inverse vertically.
8. The frame is saving without information about camera number, time of frame receiving, without information about camera arming or disarming (it is defined by color of the frame around camera). If it's required to add this information to the captured frame with the user image, set the **Show camera number, time of frame and security state** checkbox (**3**).

> **Note**
>
> It's recommended to configure rotation and add information to the frame before the image capturing. Changing of these settings after capturing won't lead to their disappearing from the captured frame.

9. Wait for appropriate frame with the user image and click the **Capture** button (**4**).
10. The received frame will display in the (**5**) window.
11. Click the **OK** button (**6**). The received frame will be assigned as the user photograph.

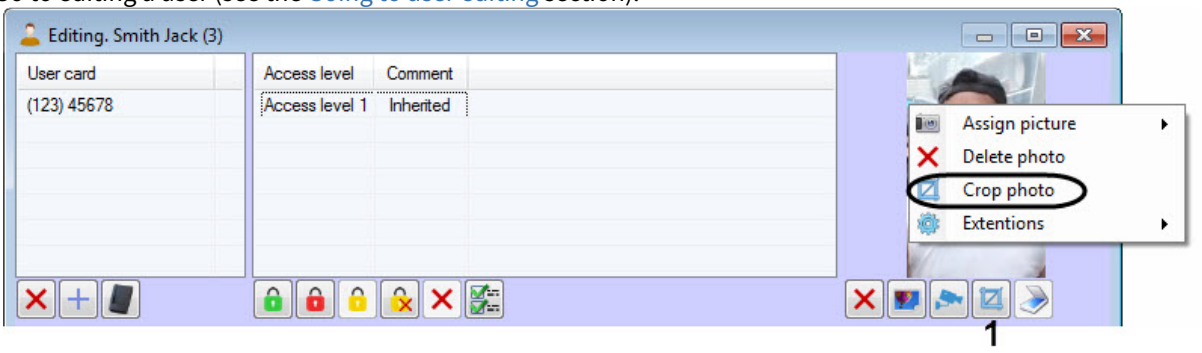
Assigning a photograph to user from a video camera is completed.

Cropping a photograph

It's possible to crop the assigned photograph in the *Access Manager* software module.

To crop a photograph, do the following:

1. Go to editing a user (see the Going to user editing section).



2. Click the  button (**1**). As a result, the **Framing** window will open

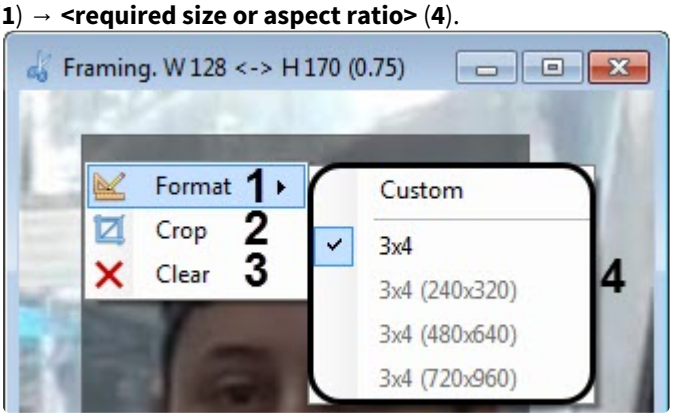
> **Note**
>
> You can also open the **Framing** window by right-clicking on the user's photo area and selecting **Crop photo** from the opened functional menu.

3. Select the area which should remain in the photo. To do this, left-click the required point and stretch the rectangle marking the selected area. The selected area can be moved by holding down the left mouse button on the rectangle.

> **Note**
>
> In the upper part of the **Framing** window displays the width "W" and height "H" in pixels, and the aspect ratio of the selected area in parentheses.

4. To select the preset size of the resulting photo or the aspect ratio of the rectangle, right-click, either on the selected area, or in the area not marked by the rectangle, and in the opened function menu select **Format**

(**1**) → **<required size or aspect ratio>** (**4**).



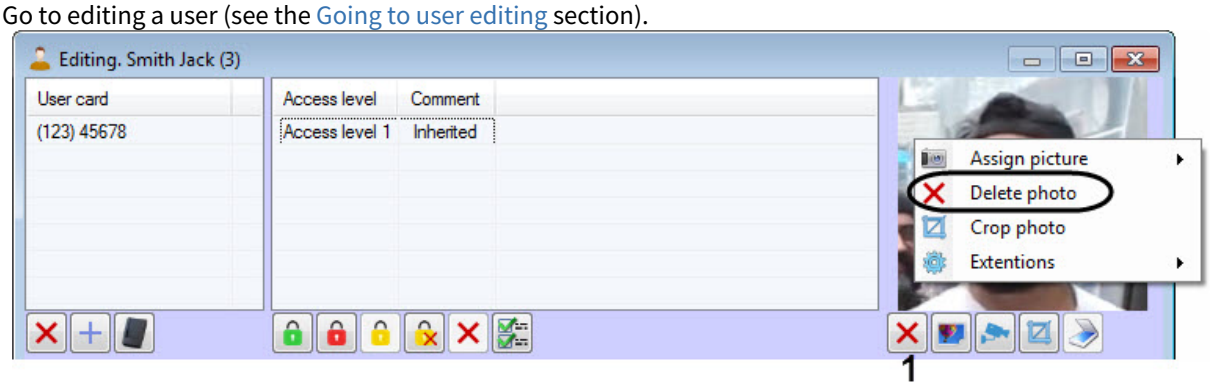
5. To delete the selected area, left-click on the area not marked by the rectangle and make the selection again. Or right-click on the selected area and select **Clear** (**3**) in the opened function menu.
6. To confirm cropping of the photo, right-click on the selected area and select **Crop** (**2**) in the opened functional menu.

Cropping a photograph is completed.

Deleting a photograph

To delete a photograph, do the following:

1. Go to editing a user (see the Going to user editing section).



2. Click the  button (**1**).

> **Note**
>
> You can also delete a photo of the user by right-clicking on the user's photo area and selecting **Delete photo** in the opened functional menu.

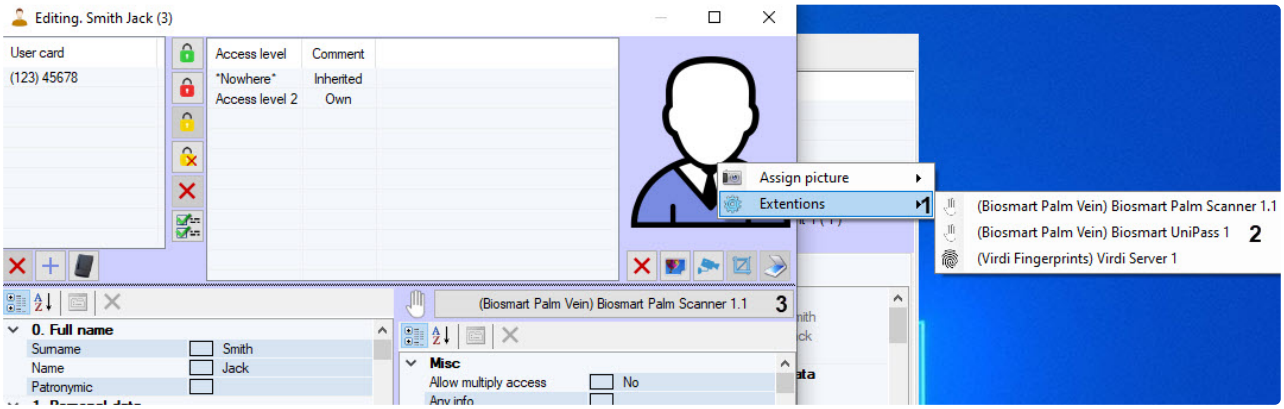
Deleting a photograph is completed.

Adding biometric parameters

Adding biometric parameters (faces, fingerprints, etc.) is performed using control readers or biometric ACS terminals.

To add a user's biometric parameters, do the following:

1. Right-click on the user's photo and hover over the **Extensions** item (**1**).
2. Select a biometric reader from the list (**2**).
3. If an extension button is added, then instead of the first 2 steps, you can click this button (**3**).



As a result, a dialog box for adding user biometric parameters opens. This dialog box differs depending on the equipment used. Operation in this dialog box is described in the documentation for the corresponding ACS integration module (see ACS integration modules), as well as in the documentation for the corresponding control reader integration module (see Control Readers Settings Guide).

> **Note.**
>
> In order for a reader or controller to be available for selection in the **Extensions** list, it is necessary to select it when configuring the *Access Manager* module – see Configuring control readers in the Access Manager.

By default, extension buttons are hidden. To add (or remove) extension buttons:

1. Right-click on the user's photo and hover over the **Extensions** item (**1**).
2. Holding down the Shift key, click on the extension from the list (**2**).

As a result, the button with the selected biometric reader (**3**) will be added to the area under the user's photo.

To remove the extension button, follow the same steps.

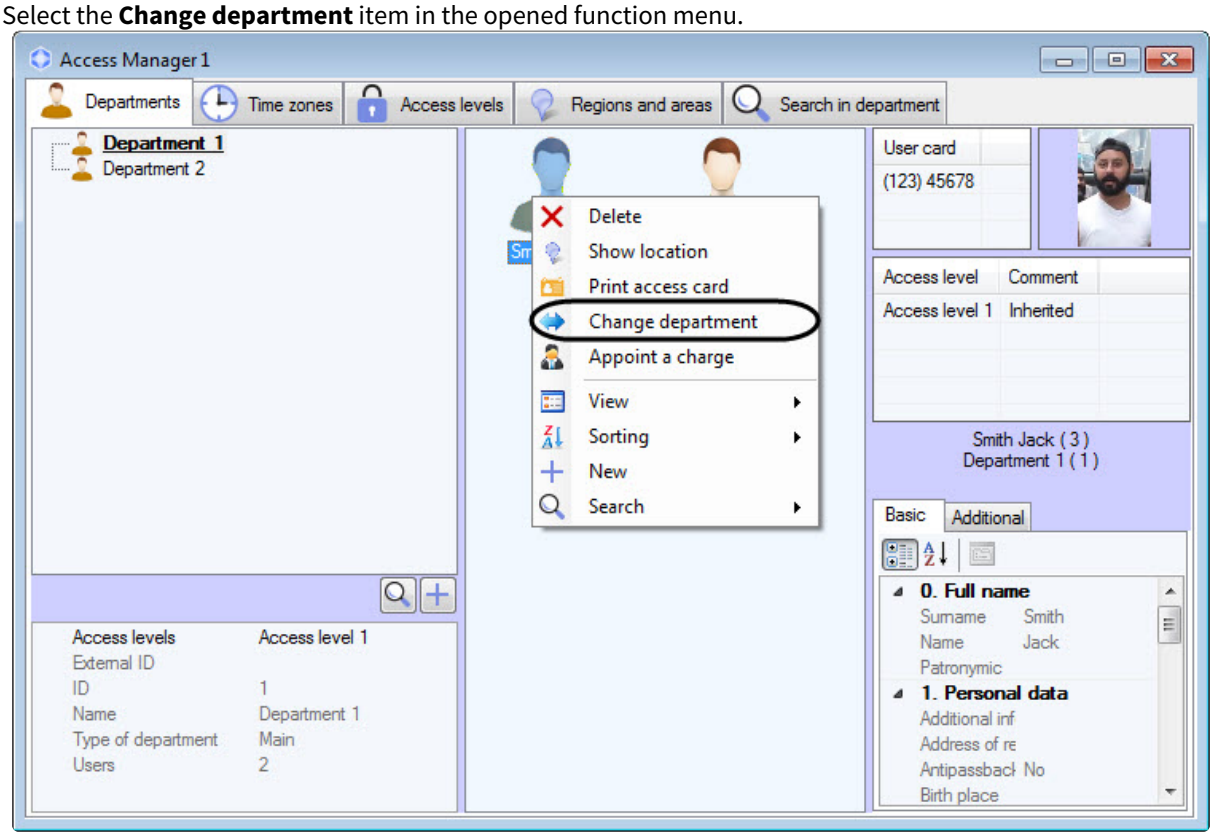
Transferring a user to a different department in the Access Manager software module

To transfer a user to a different department, do the following:

1. Go to viewing users list (see Viewing a list of users).
2. Click the right mouse button on the name of the required user.

> **Note**
>
> You can also select several users: for example, by selecting them with the mouse or by using keyboard shortcuts (see Keyboard shortcuts for working with interface elements).

3. Select the **Change department** item in the opened function menu.



4. As a result the **Search for department** window will open. After searching select the department to which user is to be transferred (see Working with Search for department window).
5. As a result the user will be transferred to the selected department.

Transferring a user to a different department is completed.

Changing a user type

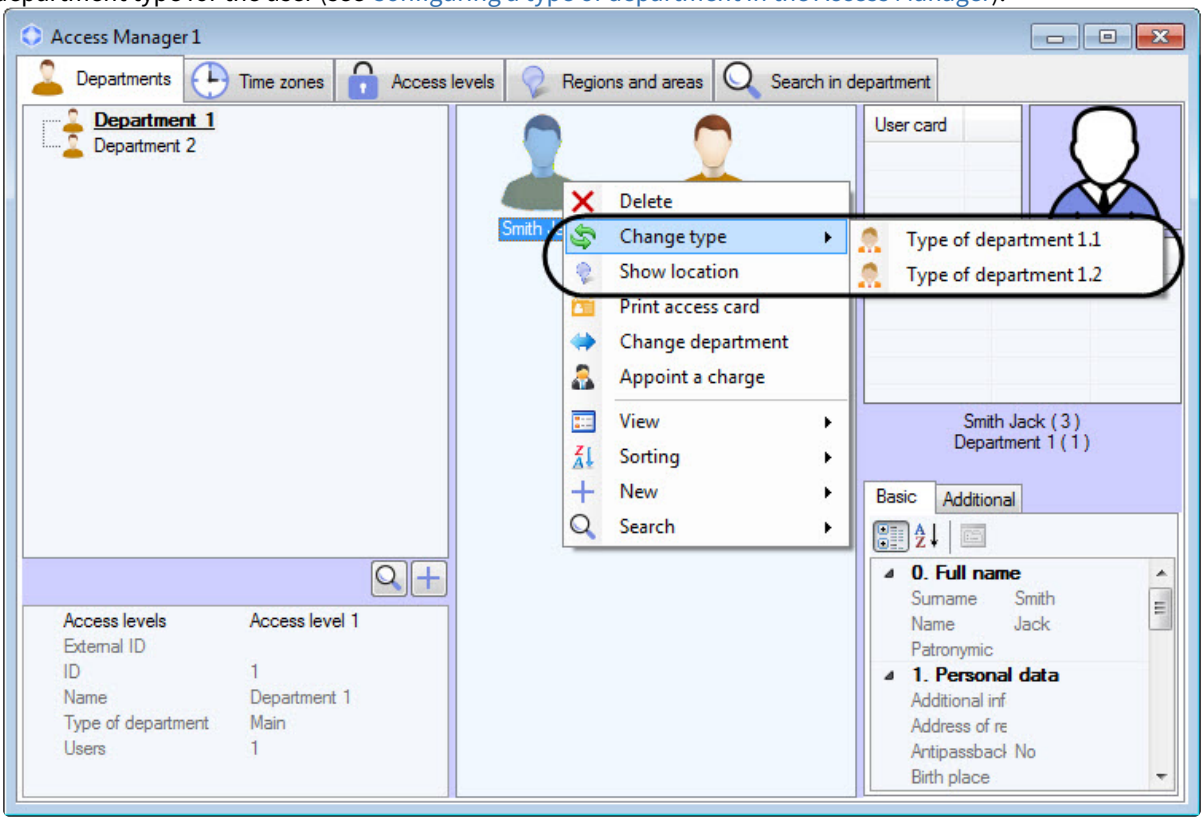
> **Attention!**
>
> You can change the user type only if it is allowed (see Configuring the permission to change user type).

Change user type as follows:

1. Go to viewing the list of users (see Viewing a list of users).
2. Right-click on the name of the required user.

> **Note**
>
> You can also select several users: for example, by selecting them with the mouse or by using keyboard shortcuts (see Keyboard shortcuts for working with interface elements).

3. In the function menu that opens, select the **Change type** item and in the drop-down list select the required department type for the user (see Configuring a type of department in the Access Manager).



4. As a result, the user type will be changed.

Changing a user type is now completed.

6.6.4 User search in the Access Manager software module

General information about user search

Searching for users is performed in one of the following ways in the *Access Manager* software module:

1. By surname.
2. By number.
3. By card.
4. By card (control reader).
5. By access level.
6. General search.

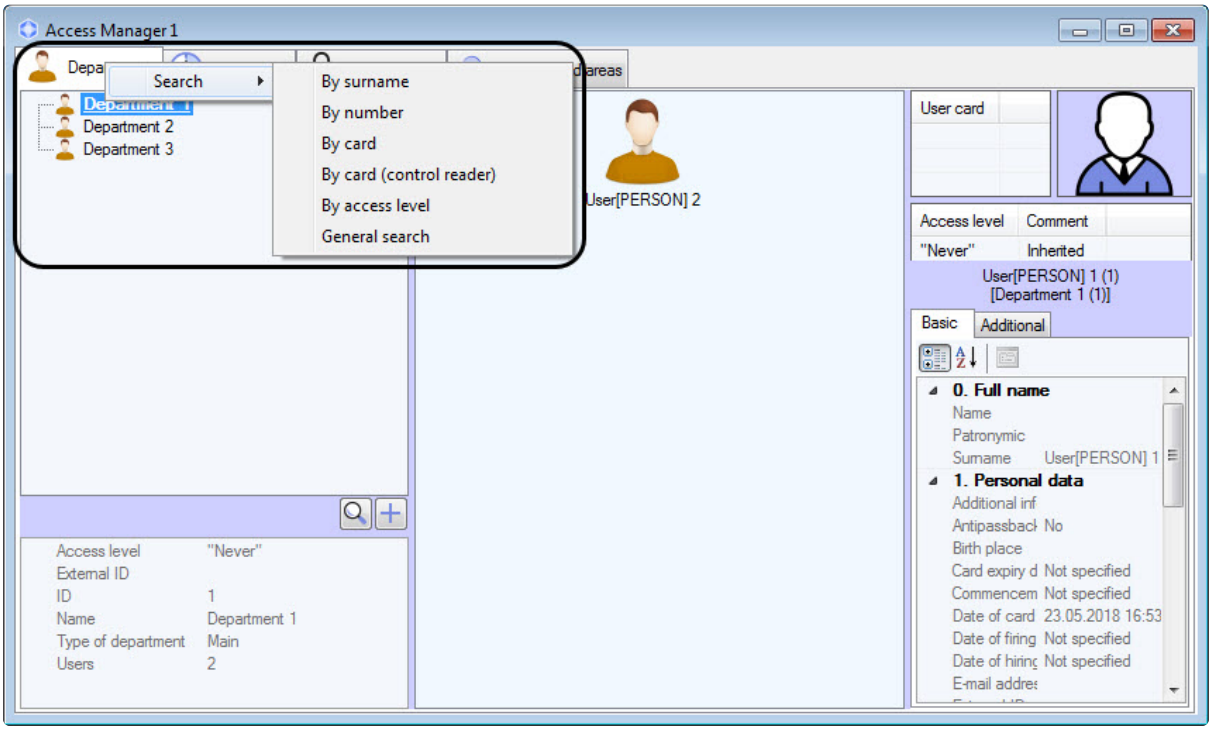
Going to user search

Go to the user search using one of the following ways.

> **Note**
>
> In addition to the method described below, you can also use the **Search** button on the user control panel (see Viewing a list of users).

The first way:

1. Right-click the **Departments** tab.
2. Select the required search parameter in the opened **Search** functional menu — see General information about user search.

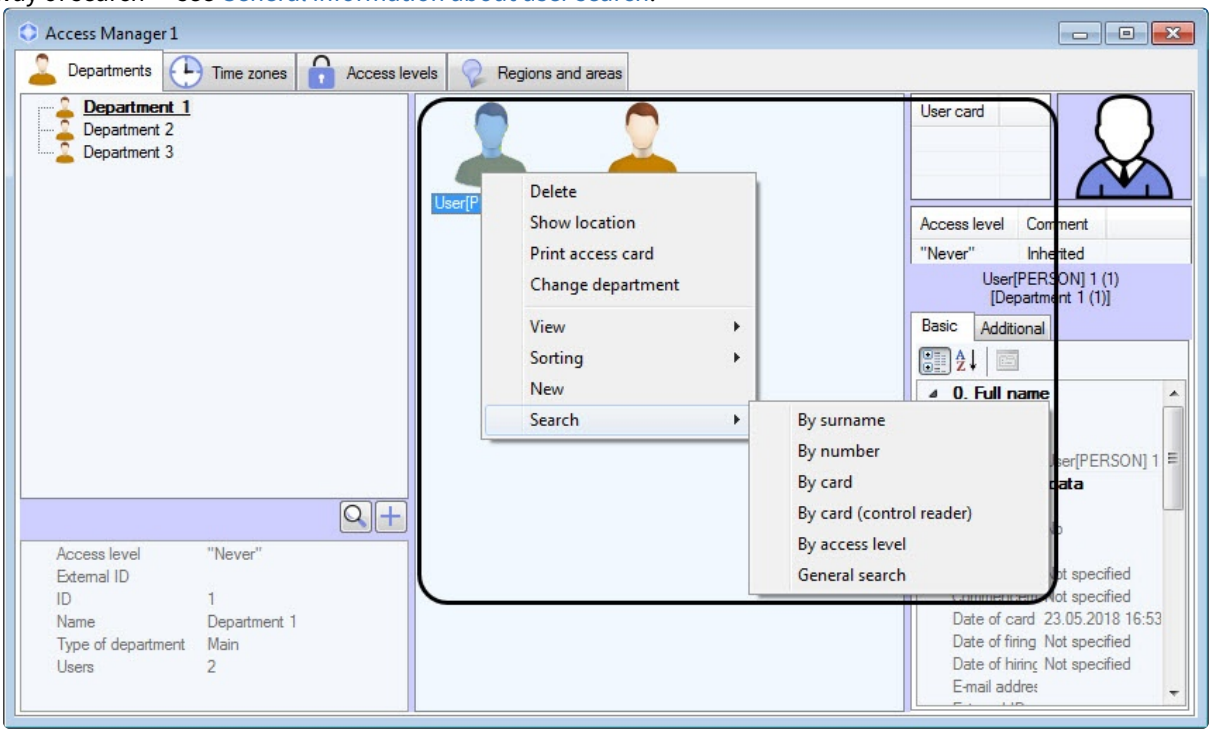


The second way:

1. Go to viewing users list (see Viewing a list of users).
2. Right-click the free area in the users list or right-click the user.

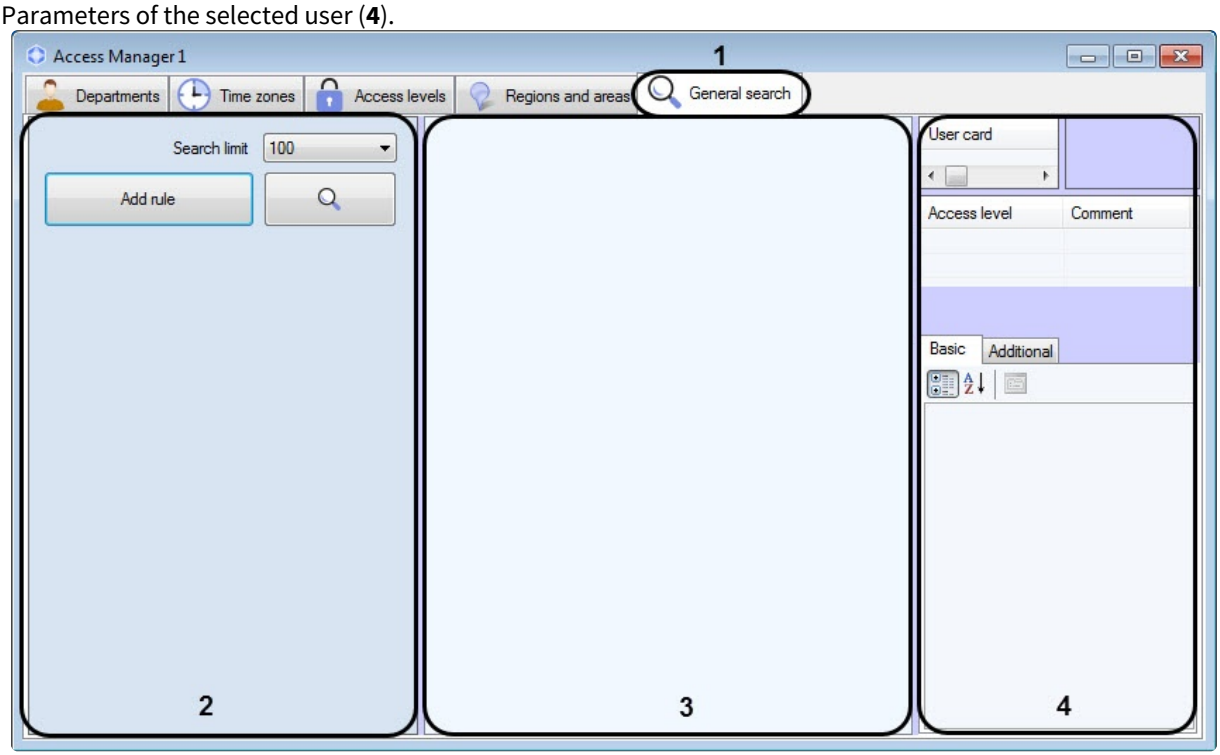
> **Note**
>
> Also going to user search is performed by Ctrl+F keys combination — see Keyboard shortcuts for working with interface elements. While going to user search using the key combination, the **Search in department** tab will open where the search condition by the department will be specified.

3. Select the **Search** item in the opened functional menu. In the opened functional menu select the required way of search — see General information about user search.

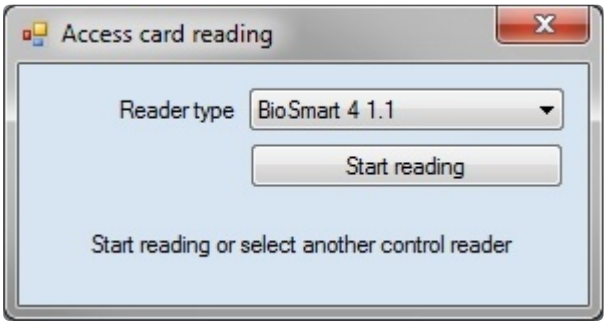


As a result, the new tab will be opened for search (**1**). The name of the tab depends on the selected way of search. The tab contains the following interface elements:

1. List of search rules (**2**).
2. List of found users (**3**).
3. Parameters of the selected user (**4**).



4. In case the search is performed by number, surname, card or access level, the corresponding rule will be specified in the list of rules. It's possible to add search rules to the list if it's required (see the Adding a search rule section).
5. In case the search is performed by card using a control reader, a window will open, offering to select the control reader and start the search:



In the opened window, click **Start reading** and present the card to the selected reader device.

Adding a search rule

When searching for objects in the *Access Manager* module, you can use the following logic operators:

1. Logic AND.
2. Logic OR.

Search rules are combined according to the following principle:

(Rule11 OR Rule12 OR ... OR Rule 1N) AND

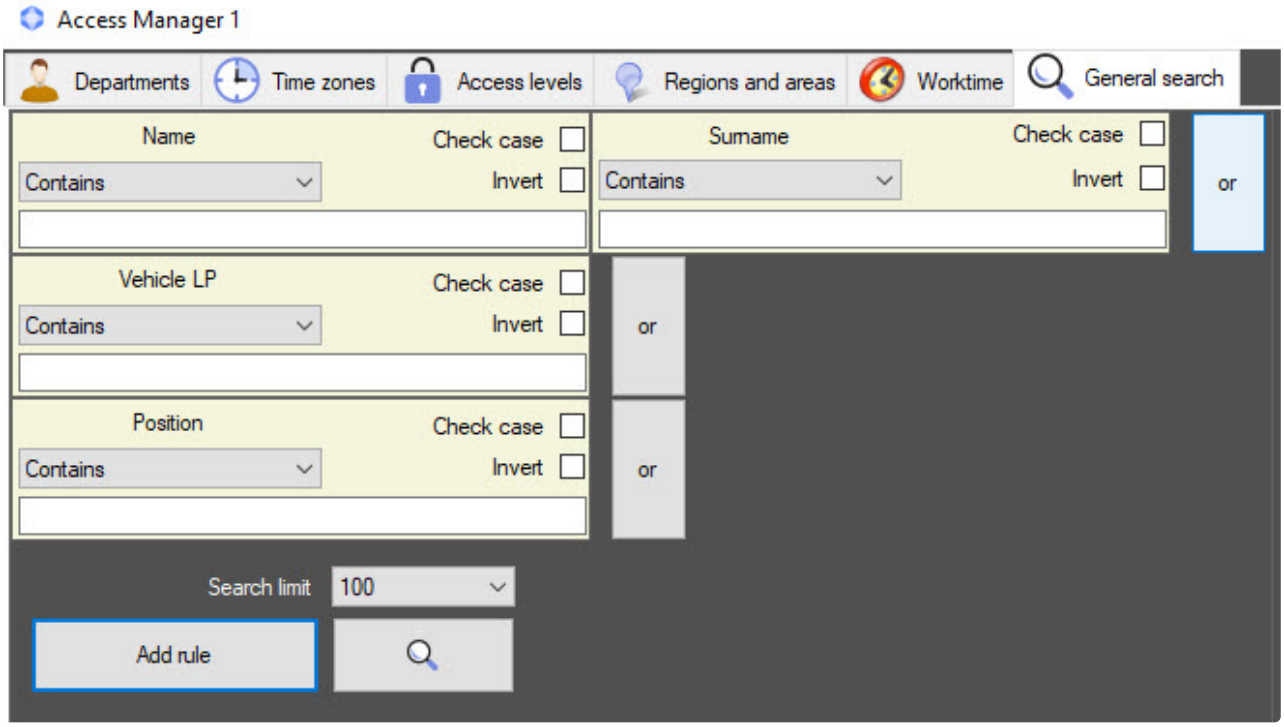
(Rule21 OR Rule22 OR ...Rule 2M) AND

...

(Rule K1 OR Rule K2 OR ... OR Rule KL)

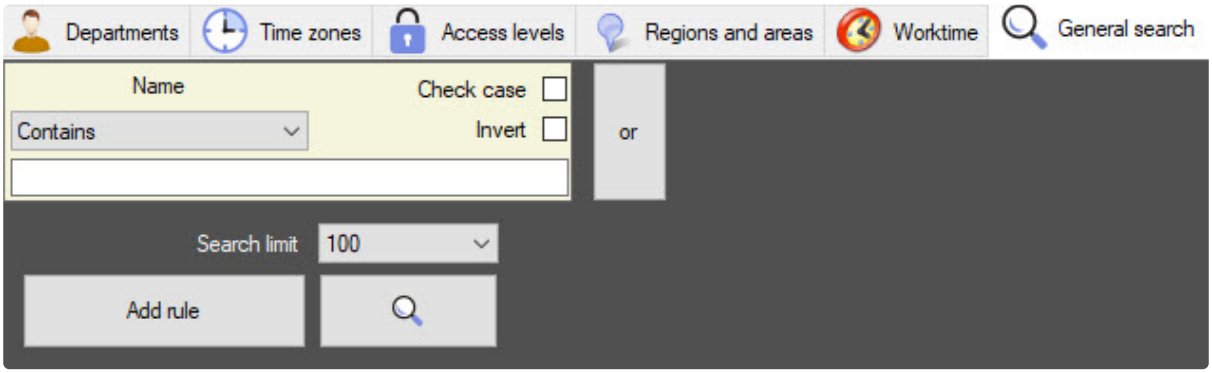
Where N, M, K, L are arbitrary integers.

In the **Access Manager** window, the search rules combined by the OR operator are displayed in one string. The search rules combined by the AND operator are displayed under each other.



To add a search rule, do the following:

1. Go to the user search (see Going to user search).
2. Click the **Add rule** button to add the AND rule or the **or** button to add the OR rule.

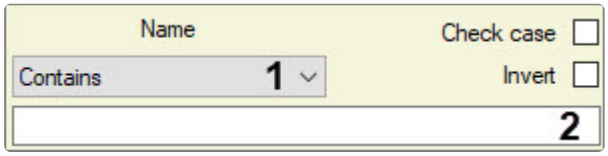


The **Select condition for search** window will open.

a. The **Additional** group contains the criteria for filtering by additional user parameters.
b. The **Commonly used** group contains the commonly used criteria for filtering by user parameters, and the **Time in the region** criterion that is used for searching the users by the time they were present or absent in the selected region.
c. The **Standard** group contains the criteria for filtering by the standard user parameters.

> **Note**
>
> For the details on the user parameters description, see Setting user parameters.

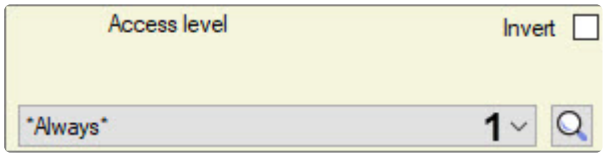
3. Select the search parameter by double-clicking its name.
   The search rule by selected field will be added. Configuring the search rules differs depending on the type of the rule. The following types of search rules are available:
   a. Text field



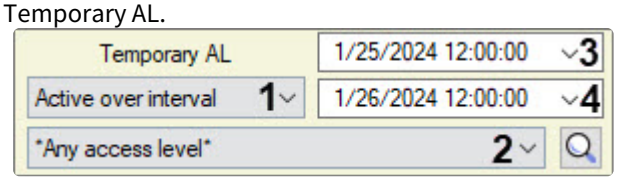
      i. From the drop-down list (**1**), select the comparison method of a field value with the specified search line.

Comparison method	Description
Equals	Search for all users for which the value of the selected field is fully coincides with the specified search line
Contains	Search for all users for which the value of the selected field contains the specified search line
Starts with	Search for all users for which the value of the selected field starts with the specified search line
Ends with	Search for all users for which the value of the selected field ends with the specified search line

      ii. Set the **Check case** checkbox if you want the search to be case-sensitive.
      iii. Set the **Invert** checkbox if you want to apply the negation of the specified search rule. if you set this checkbox, all users that don't meet the specified search condition will be found.
      iv. Enter the search line in the field (**2**).
   b. Access level.



      i. Set the **Invert** checkbox if it's required to apply the negation of the specified search rule.
      ii. Select value for search from the drop-down list (**1**) or click the button. Working with the search window is described in Working with the Search access level window.
   c. Temporary AL.

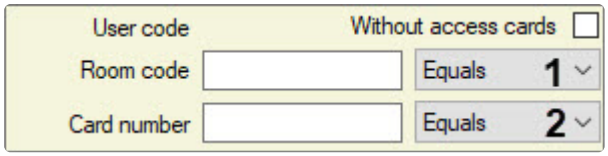


      i. Select the search criteria from the drop-down list (**1**):
         1. **Activation date**—the start date of the temporary access level.

2. **Active on this day**—the date between the start and end of the temporary access level.
3. **Active over interval**—the interval that falls entirely between the start and end of the temporary access level. If the interval includes a day when the temporary access level isn't valid, the search will have no results.
4. **Active in this interval**—the interval that falls at least partially between the start and end of the temporary access level.

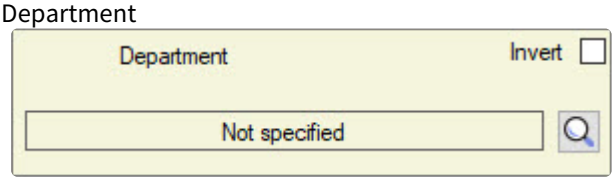
ii. Select the search criteria from the drop-down list (**2**). You can also click the button to search for the required temporary access level. Working with the search window is described in Working with the Search access level window.
iii. Use the calendar to set the search date (**3**).
iv. If you select **Active in this interval** or **Active over interval**, set the end of the interval for the search (**4**).

d. Access card:



i. Set the **Without access card** checkbox if user doesn't have an access card. As a result, other fields of the **User code** condition will become unavailable for editing.
ii. In the **Room code** field, enter the required room code.
iii. From the drop-down list (**1**), select the comparison method of a field value with the specified search line similar to step 3ai.
iv. In the **Card number** field, enter the required number of the access card.
v. From the drop-down list (**2**), select the comparison method of a field value with the specified search line similar to step 3ai.

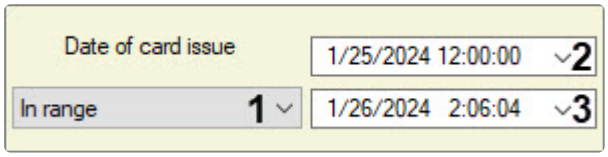
e. Department



i. Set the **Invert** checkbox if it's required to apply the negation of the specified search rule.
ii. To search for required department, click the button. Working with the search window is described in Working with Search for department window.

> **Note**
>
> You can search for department only if you performed user search by pressing the Ctrl+F keys.

f. Time values:



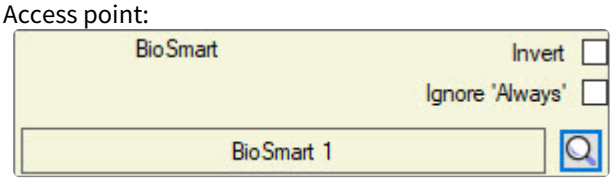
i. Select the comparison method of the specified value for search with a field value (**1**):

Comparison method	Description

Equals	Search for all users for which the value of the selected field is fully coincides with the specified date
Not equals	Search for all users for which the value of the selected field is not coincide with the specified date
Higher	Search for all users for which the value of the selected field is higher than the specified date
Lower	Search for all users for which the value of the selected field is lower than the specified date
In range	Search for all users for which the value of the selected field is in the specified range of dates
Out of range	Search for all users for which the value of the selected field is out of the specified range of dates

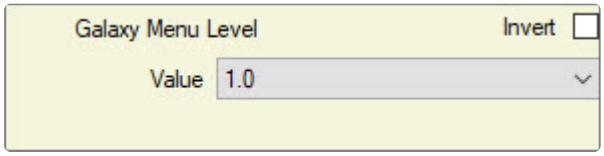
ii. Set the date for search using the calendar (**2**). If you use the last two comparison methods from the table, the selected value sets the start of search interval.
iii. If you use the last two comparison methods from the table, specify the end of search interval (**3**).

g. Access point:



i. Set the **Invert** checkbox if it's required to apply the negation of the specified search rule.
ii. Set the **Ignore 'Always'** checkbox to select users whose access level differs from **Always**.
iii. Click the  button to select the search value. Working with the access point search window is described in Working with the Search access level window.

h. Additional fields:



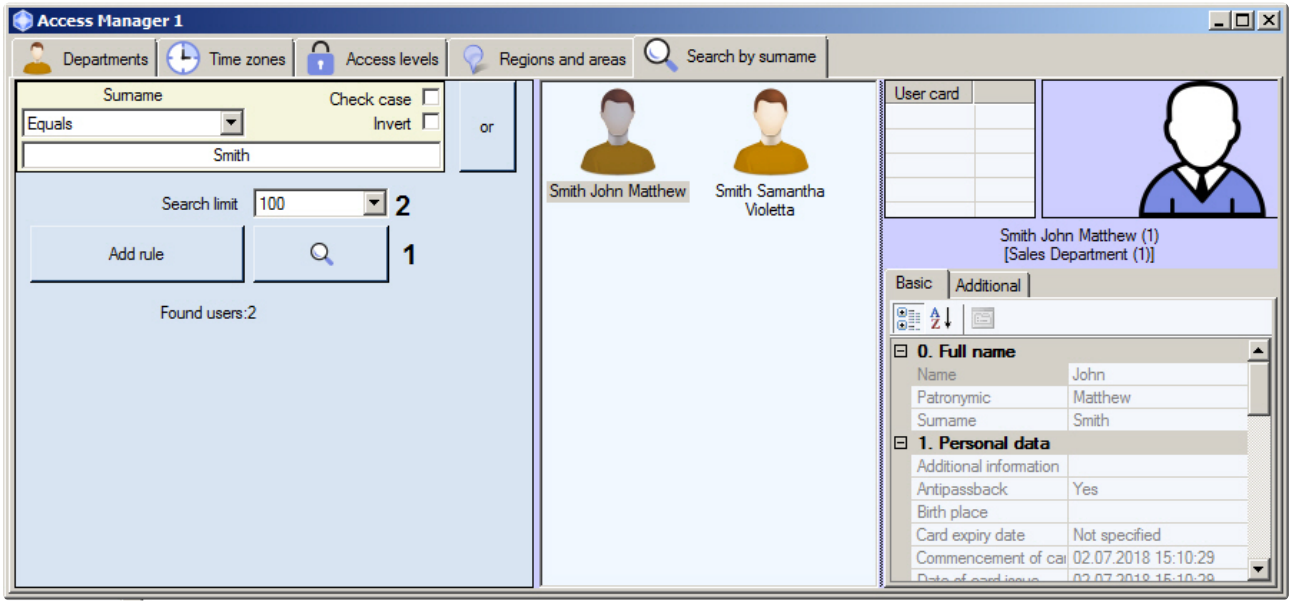
i. Set the **Invert** checkbox if it's required to apply the negation of the specified search rule.
ii. From the **Value** drop-down list, select the search value.

Adding a search rule is completed.

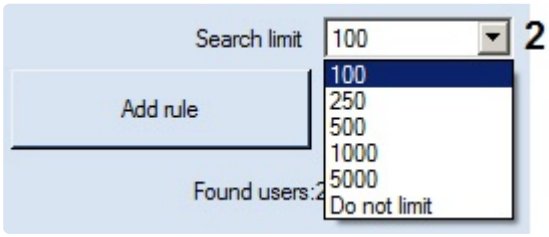
Start of user search

When all required search rules are specified (see the Adding a search rule section), click the  button to start search (**1**).

Found users will be displayed in the list.

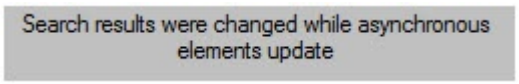


Number of users in the search result list can be limited. To change the limit, select the required number of users displayed from the **Search limit** drop-down list (**2**).



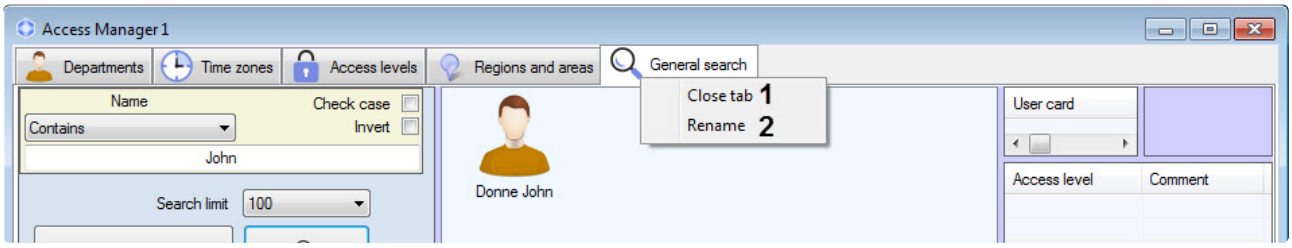
The list of found users can be changed dynamically.

Example. Search by surname was performed and several users were found. If a surname of one of found users will be changed than this user will be deleted from the search results. Conversely: if a new user will be added with a surname satisfying to the search rule, than this user will be added to the search results automatically. And the message about dynamic data changing will display in the line of search results .



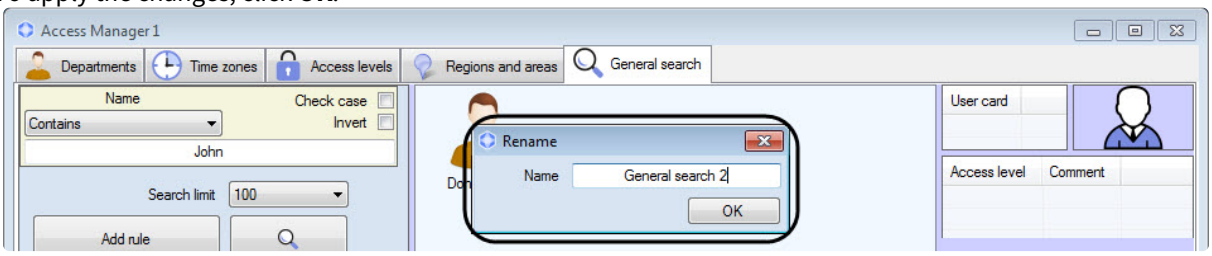
Parameters of the user selected from the list are displayed in the right part of the **Access Manager** window.

To close a tab after search completion click the right mouse button on the tab name and select the **Close tab** (**1**) item in the opened functional menu.



The search tab name can be changed. To rename it, do the following:

1. Right-click the tab name and select **Rename** (**2**) from the menu.
2. In the opened dialog box, in the **Name** field, enter the new name for the search tab.
3. To apply the changes, click **OK**.



Note.

The search tab with all conditions set is saved at *Access Manager* restart for the logged in *Axxon PSIM* user.

6.6.5 Deleting a user in the Access Manager software module

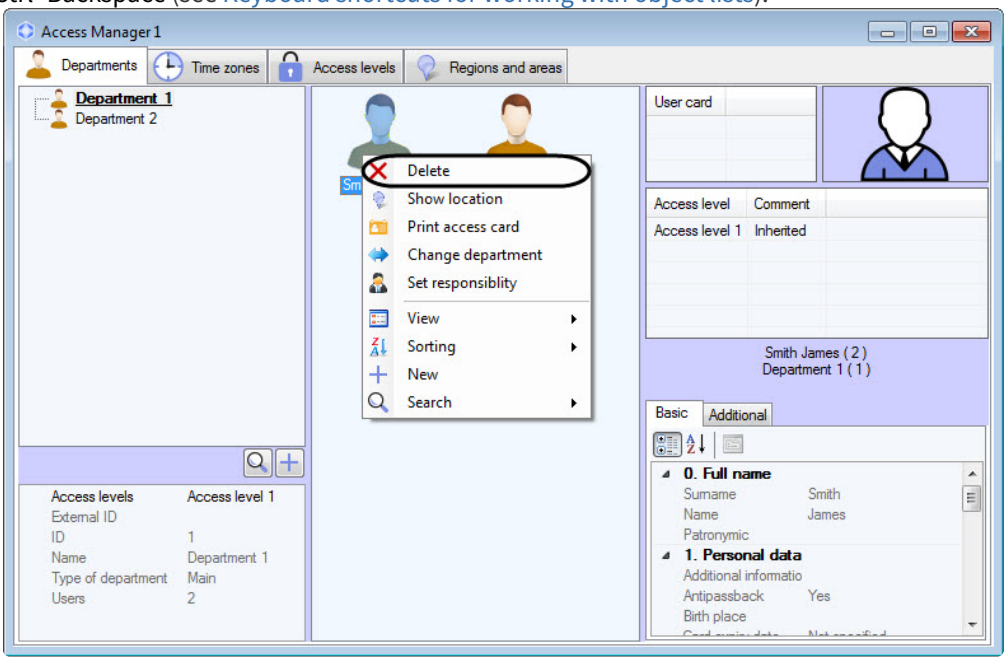
Deleting a user is performed as follows:

1. Go to viewing users list (see Viewing a list of users).
2. Click the right mouse button on a user which is to be deleted.

Note

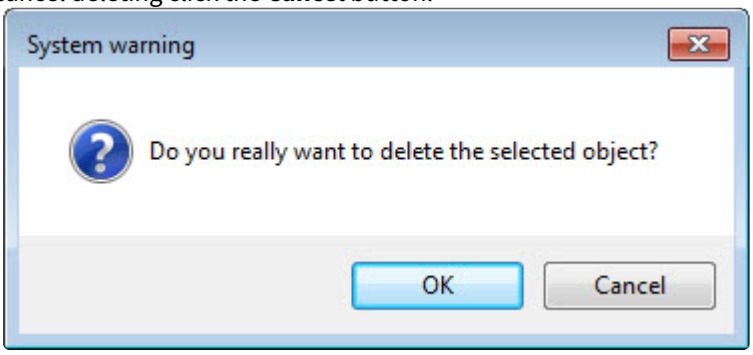
You can also select several users: for example, by selecting them with the mouse or by using keyboard shortcuts (see Keyboard shortcuts for working with object lists).

3. In the opened functional menu, select **Delete** or use the keyboard shortcut Ctrl+Del and Ctrl+Backspace (see Keyboard shortcuts for working with object lists).



> **Note**
>
> Rights for deleting a user can be limited while configuring the *Access Manager* module. The message about missing the corresponding rights will be displayed. See also Configuring the object management rights.

4. The confirmation message will display. To confirm deleting of the selected user click the **OK** button. To cancel deleting click the **Cancel** button.



Deleting a user is completed.

6.6.6 Printing a user access card in the Access Manager software module

> **Attention!**
>
> To ensure the correct printing of the user access cards, set the Windows screen scale to the default value (see Change the size of text in Windows 10).

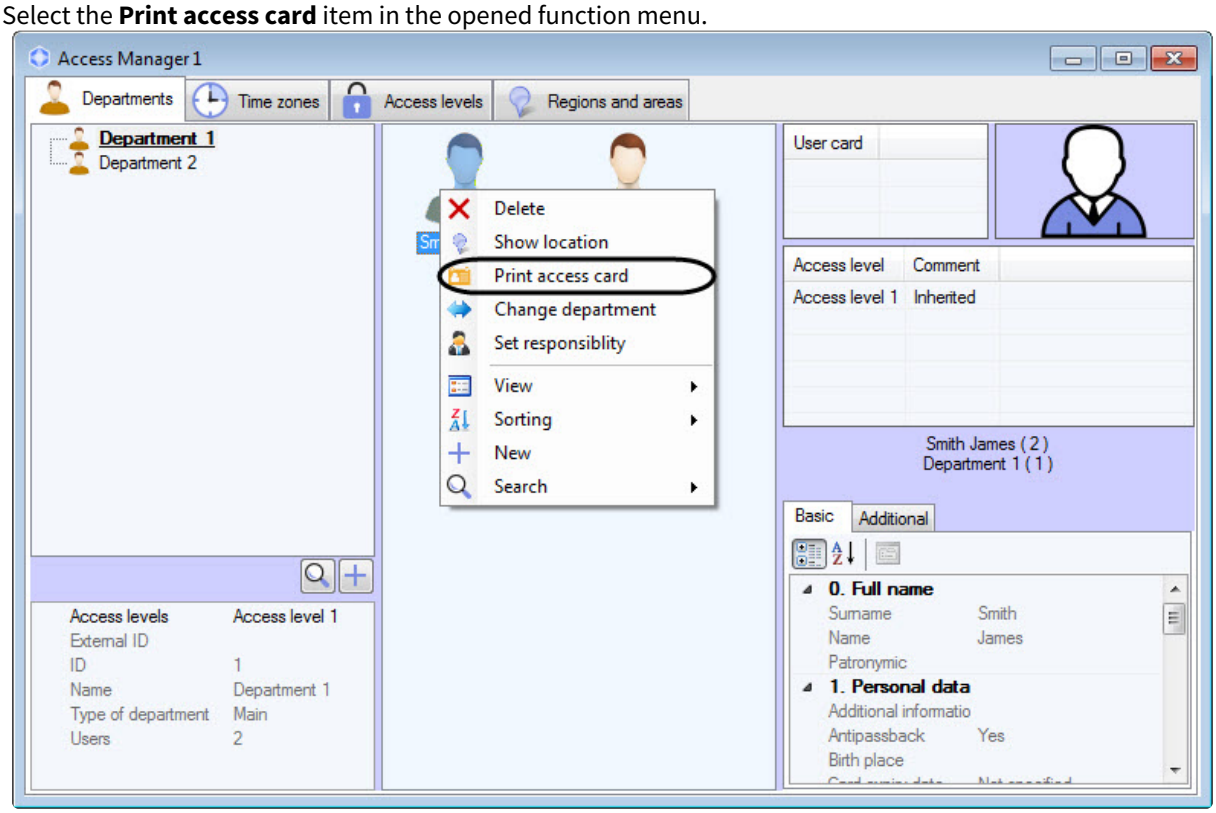
You can print user access cards in the *Access Manager* software module.

To print a user access card, do the following:

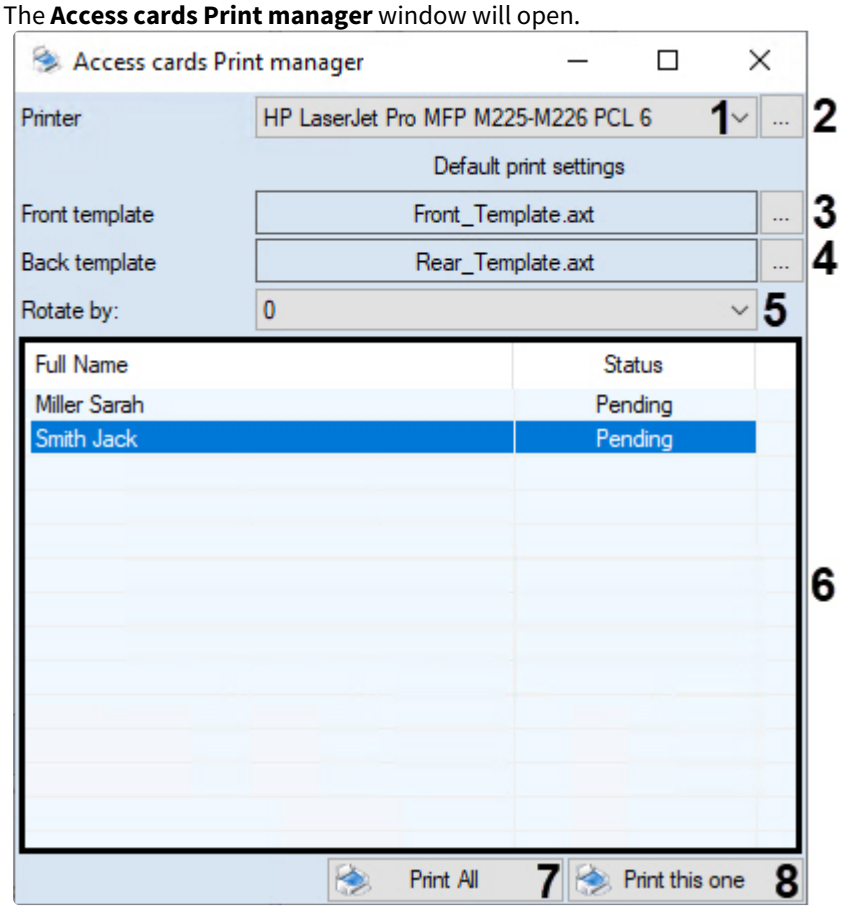
1. Go to viewing users list (see Viewing a list of users).
2. Right-click on the name of the required user.

> **Note**
>
> You can also select several users: for example, by selecting them with the mouse or by using keyboard shortcuts (see Keyboard shortcuts for working with object lists).

3. Select the **Print access card** item in the opened function menu.



4. The **Access cards Print manager** window will open.



5. From the **Printer** drop-down list (**1**), select the printer that will be used for printing. Click the (**2**) button if it is necessary to change the print settings for the selected printer.
6. Click the (**3**) button to select the front template of the access card. For duplex printing, click the (**4**) button to select the back template.

> **Note**
>
> Templates are created using the *Template Editor* utility — see the Template Editor Utility Operation Guide. **Note**: To create a template file that can be uploaded to **Access Manager**, you should manually run the *EditorWpf.exe* utility from the *Modules* folder in the *Axxon PSIM* installation directory.

> **Note**
>
> If the template has a bar code which is not shown in the preview, make sure that the suitable code format is selected – see Barcode object properties.

7. Select rotation angle in the (**5**) drop-down list to rotate template on the printed list by **0, 90, 180** or **270** degrees.

> **Note**
>
> Rotation angle can also be set via **RotateAngle** registry key (see Registry keys reference guide for more details on the key and Working with Windows OS registry for details on how to operate the registry.

8. The list (**6**) displays all users for whom the access cards will be printed, as well as information on the status of printing. To preview the access card template, double-click on the required user. This will open the **Print Preview** window.
9. To print access cards for all users, click **Print All** (**7**). The **Access Manager** module will automatically create print queue and send access cards to the selected printer.
10. To print an access card for only one user, select the required user from the list (**6**) and click the **Print this one** button (**8**). The **Access Manager** module will automatically create a print queue and send the card to the selected printer.

> **Note**
>
> If a template was sent for printing, the *Access Manager* module will generate the "Print access card" event. A user full name, its ID, name of computer from which access card was printed and person initiated printing (operator working with the *Access Manager* module) will be specified in event parameters.

Printing a user access card is completed.

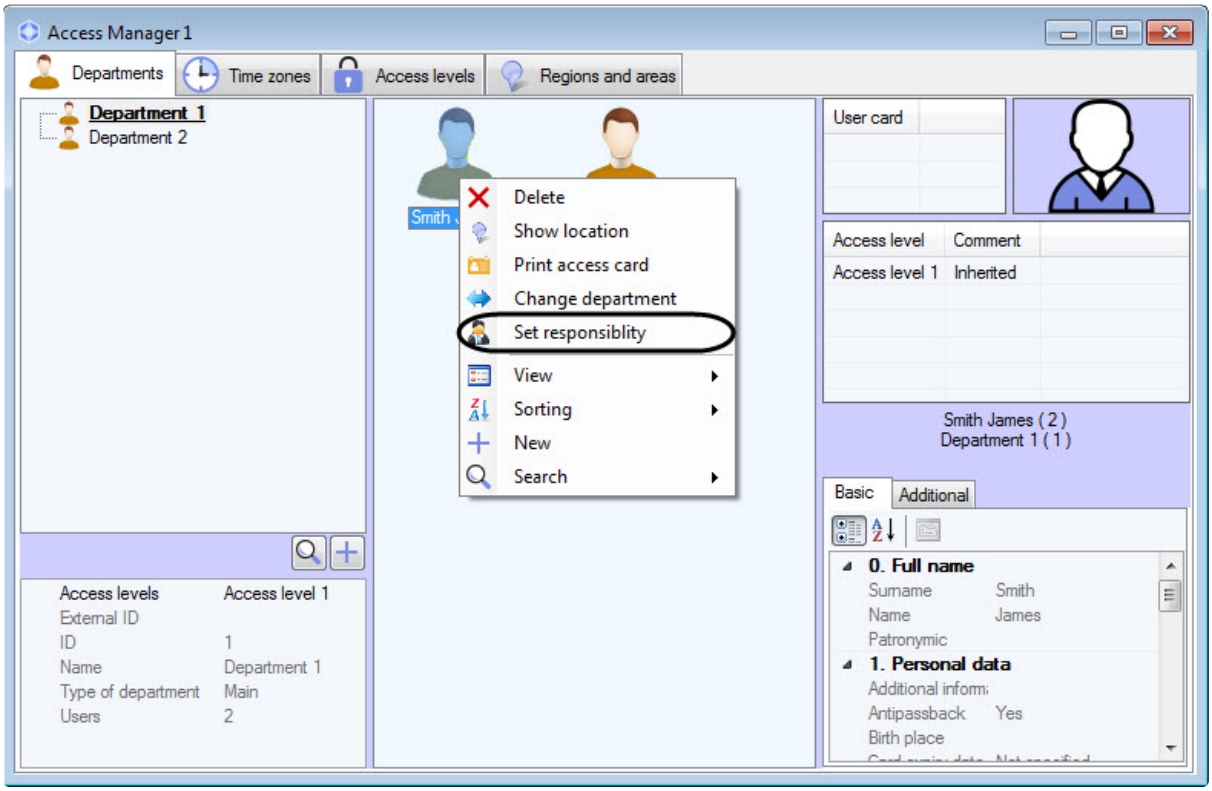
6.6.7 Assigning a user responsible for the region

It is possible to assign a user responsible for the region in the *Access Manager* software module.

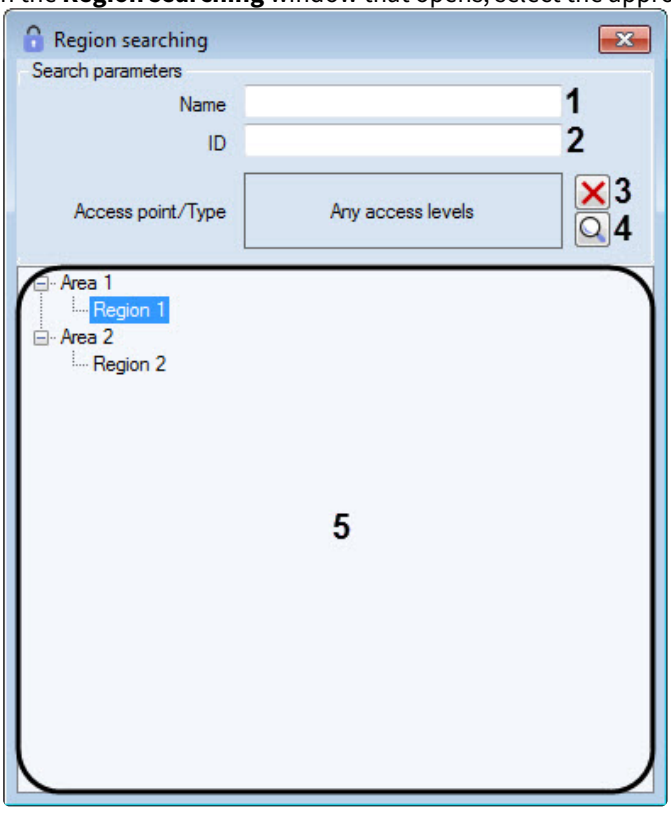
To assign a responsible user, do the following:

1. Go to the list of users (see Viewing a list of users).
2. Right-click on the name of the required user and select the **Set responsibility** item in the function menu that opens.

> **Note**
>
> You can also select several users: for example, by selecting them with the mouse or by using keyboard shortcuts (see Keyboard shortcuts for working with interface elements).

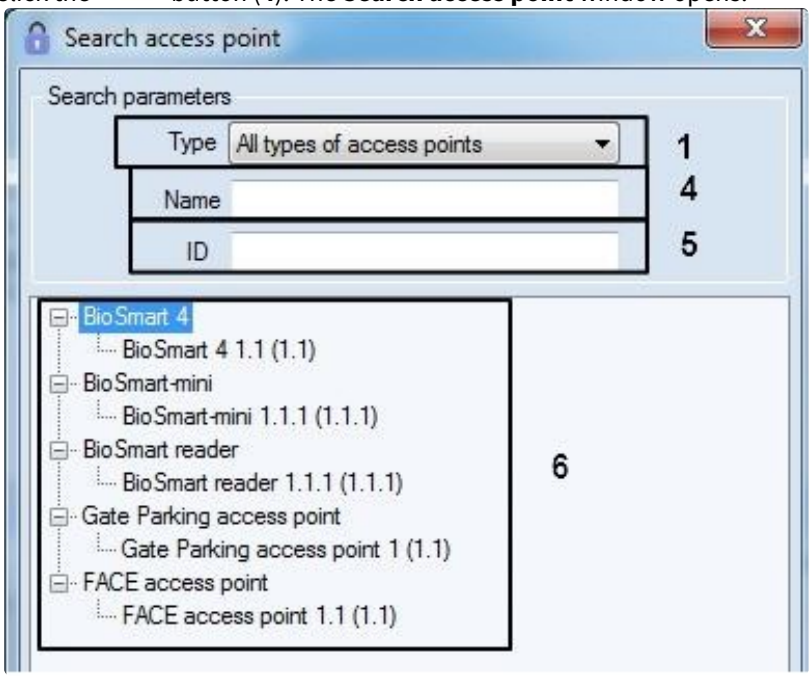


3. In the **Region searching** window that opens, select the appropriate region.



4. If necessary, specify the name of the required region in the **Name** field (**1**).
5. If necessary, enter the identifier of the required region in the **ID** field (**2**).

6. If necessary, specify a list of access points that should be included in the required region, as follows:
   a. Click the  button (**4**). The **Search access point** window opens.

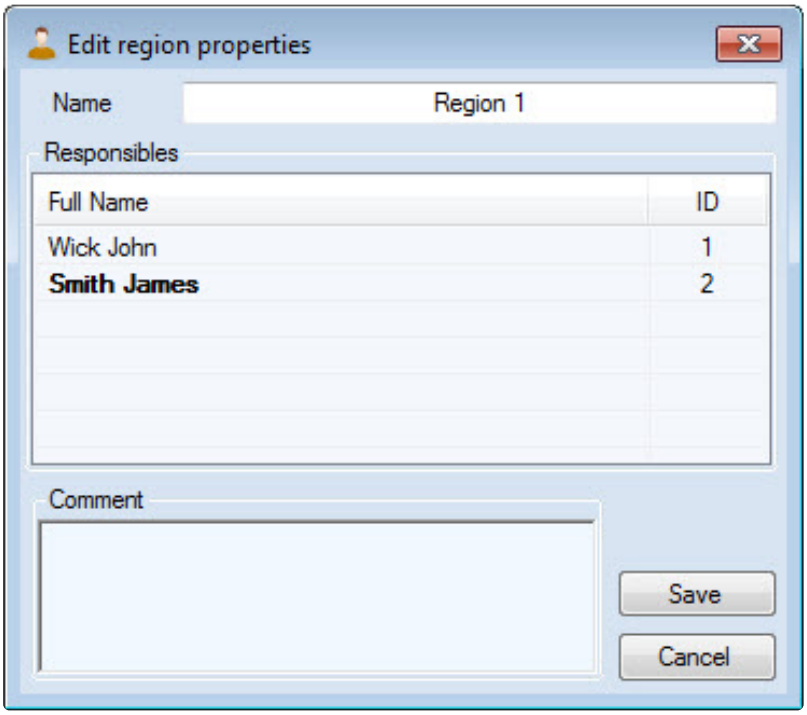


   b. If necessary, select the access point type from the **Type** drop-down list (**1**).
   c. If necessary, specify the access point name or its part in the **Name** field (**4**).
   d. If necessary, specify the access point identifier in the **ID** field (**5**).
   e. As a result, a list of search results satisfying the specified parameters will be displayed (**6**).
   f. Double-click the necessary access point.

> **Note**
>
> To clear the list of access points, click the  button (**3**).

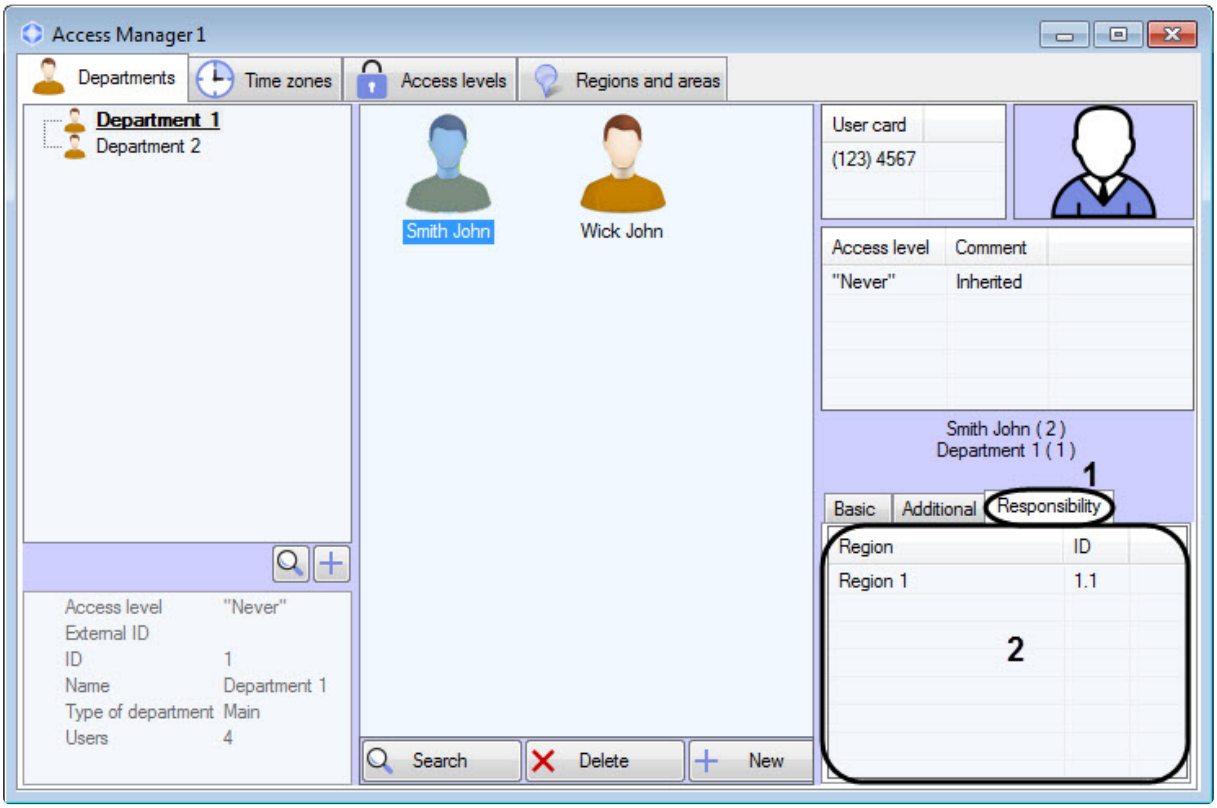
   Region search results will be displayed in the list (**5**). The search is case insensitive.
7. Double-click the necessary region. As a result, you will be taken to editing the region properties (see Creating and editing regions).

> **Note**
>
> The user that is currently being assigned responsible is highlighted in bold.



8. Click **Save** to confirm the assignment of the selected user responsible for the region.

The user who is responsible for the region will have the **Responsibility** tab (**1**). On this tab, a list of regions for which the corresponding user is responsible will be displayed (**2**).

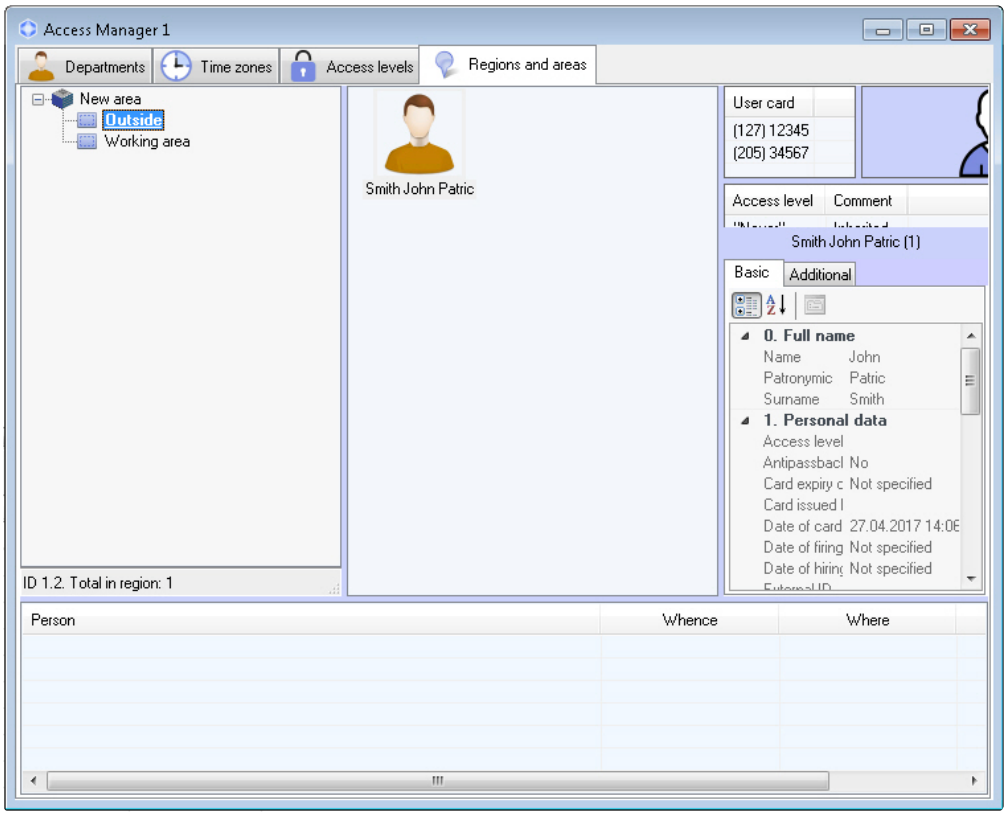


Assigning a user responsible for the region is now complete.

6.7 Performing Emergency Monitoring

6.7.1 General information about Emergency Monitoring

Emergency monitoring is performed on the **Regions and areas** tab of the **Access Manager** window.



The Emergency monitoring includes the following features:

1. Switch over from access-related events in the *Event viewer* window to the user profile in the *Access manager* window (see Viewing user profile from an access event in the Event Viewer).
2. Find out the region where user is currently located (see Finding out the region where the user currently is).
3. Find out user list in the specified region (see Viewing the list of users in the region).
4. Switch over to the specified region on the *Axxon PSIM* software *Map* (see Viewing region on the Map).

At switching between interfaces (*e.g.* from the *Map* to the *Access Manager*, or from the *Event Viewer* to the *Access Manager*, or backwards), an interface object created on the basis of the same **Display** object as the source interface is selected for transition.

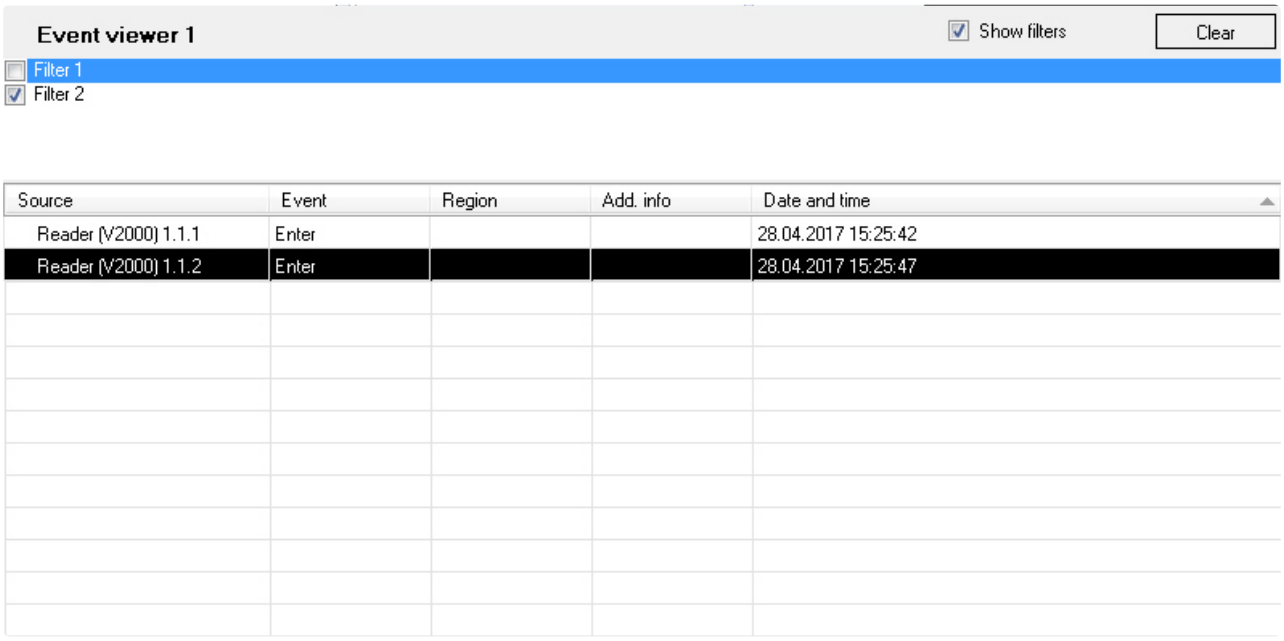
Configuration of the **Map**, **Event Viewer**, **Display, Area, Region** objects is described in the *Axxon PSIM software. Administrator's Guide*. Operation of these interface objects is described in the *Axxon PSIM software. Operator's Guide.* The most recent versions of these documents are available in the AxxonSoft documentation repository.

Creating, editing and deletion of the **Area** and **Region** objects in **Access Manager** is also possible – see Creating, editing and deleting Area and Region objects.

6.7.2 Card number displaying in the Event viewer window for access events

Facility code and card number of the user related to the access event is displayed in the **Card** column of the **Event viewer** window.

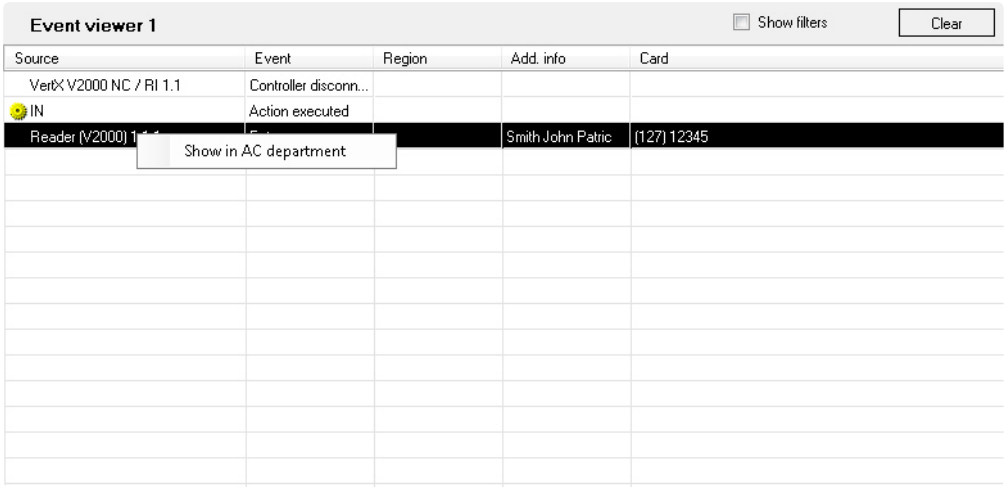
> **Note**
>
> This column can be disabled according to the **Event viewer** object settings — see Administrator's Guide, the Event viewer parameters section. The most relevant version of this document is available in the AxxonSoft documentation repository.



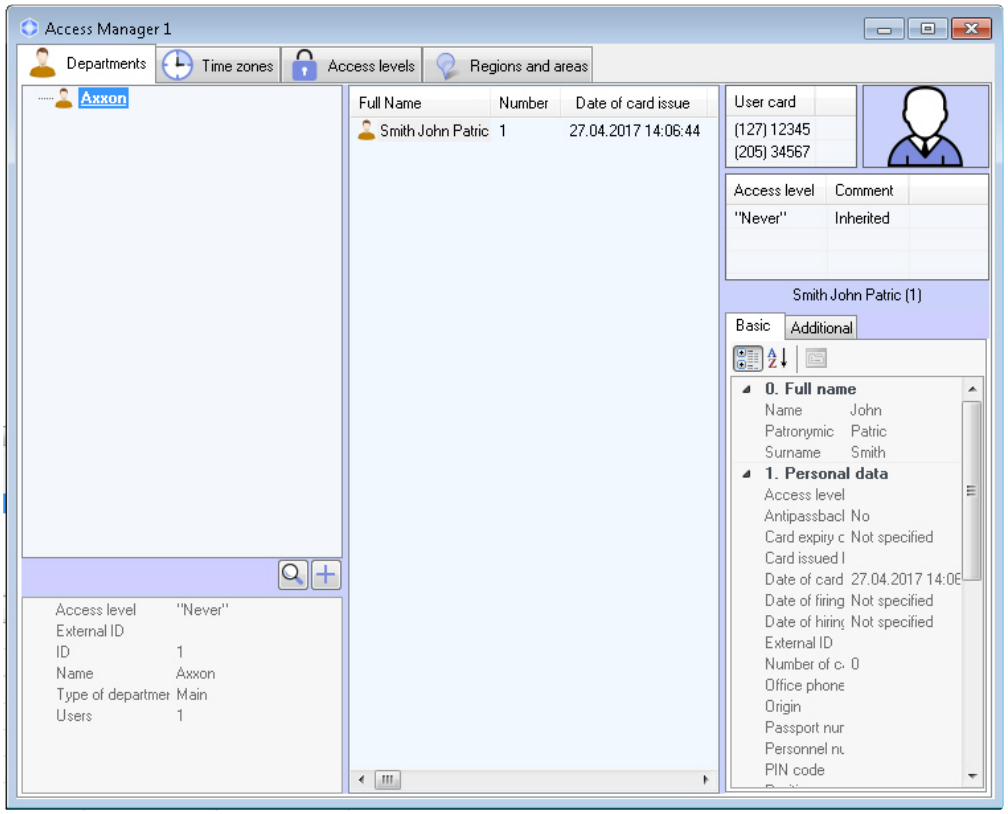
6.7.3 Viewing user profile by an access event in the Event viewer

Switching to the user profile in the Access Manager from Event viewer is possible for **Entrance** (ACCESS_IN) and **Exit** (ACCESS_OUT1) events.

To view user profile in the Access Manager right-click on the corresponding event in the **Event viewer** window and select the **Show in AC department** menu item.



The **Departments** tab opens in the **Access Manager** window. A department to which the user belongs to is selected in the departments hierarchy, and the user himself is selected in the list.



Note.

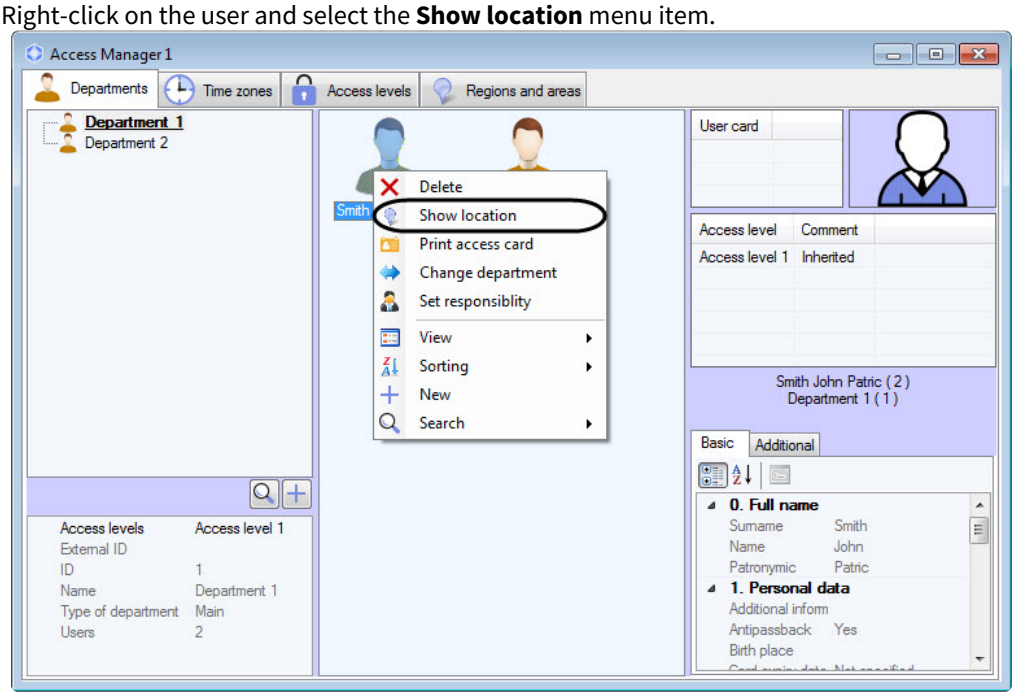
It is also possible to find out the user current location – see Finding out the region where the user currently is.

6.7.4 Finding out the region where the user currently is

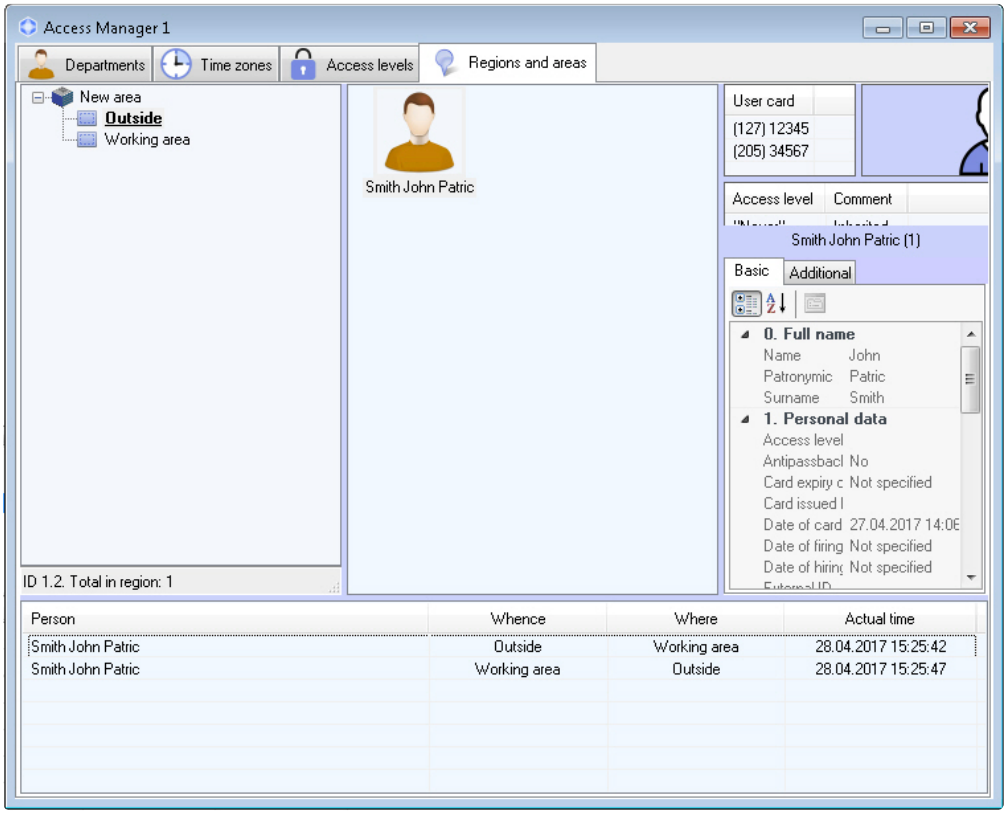
To find out the user current location, do the following:

1. Find the user on the Departments tab manually or perform the user search (see User search in the Access Manager software module).

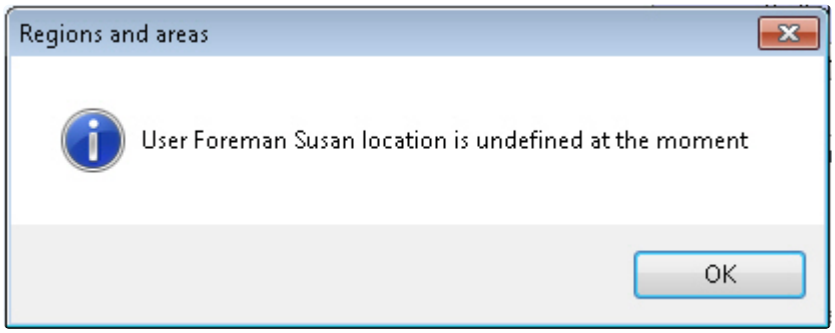
2. Right-click on the user and select the **Show location** menu item.



3. The **Regions and areas** tab opens. The region where the user is currently located is selected in the regions and areas hierarchy while the user himself is selected in the list of persons located in this region.



If the user location is undefined, the corresponding message is displayed.

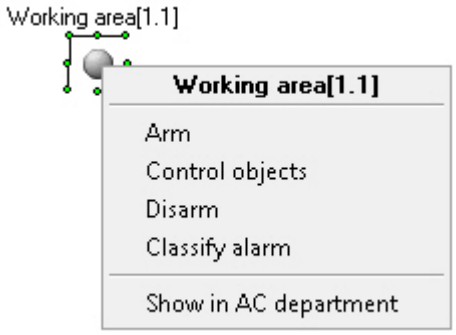


Defining the user current location is completed.

6.7.5 Viewing the list of users in the region

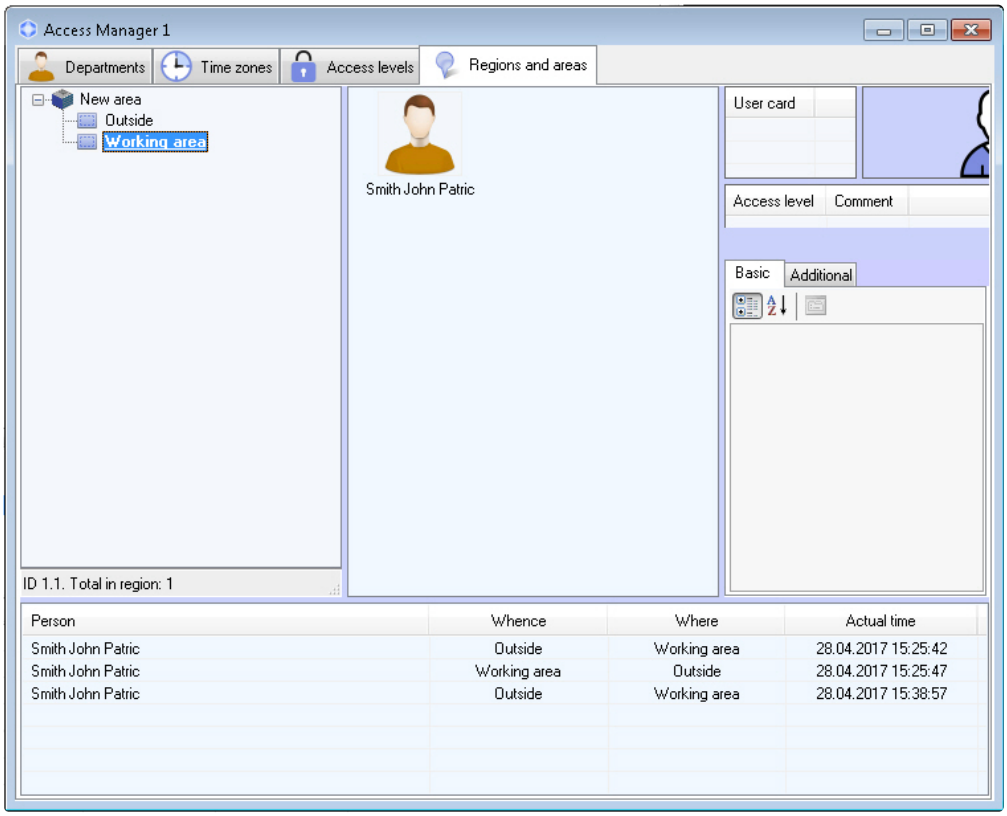
Switch to viewing users in the region in one of the following ways:

1. From the *ACFA PSIM* Map, if the region is added to the Map. For that, right-click on the region and select the **Show in the Access Manager** menu item.



2. Select the region manually in the **Regions and areas** tab of the **Access Manager** window.

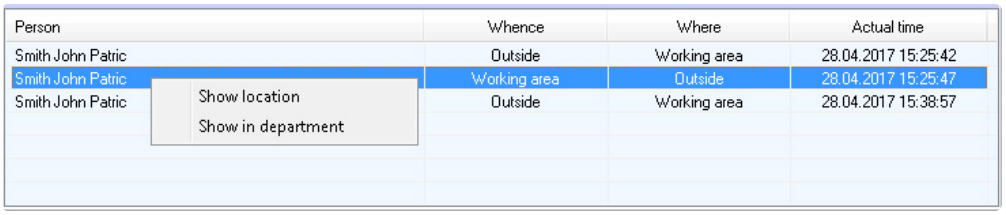
As a result, the list of users in the selected region is displayed. The information panel in the lower part of the regions and areas hierarchy displays the identifier of the selected region or ares and the number of users, that are currently located in this region or ares.



In the lower part off the **Regions and areas** tab there is a log of passes of all users registered in the system. The list of users in the region is displayed on real-time basis, while the passes of users between regions are displayed in the log.

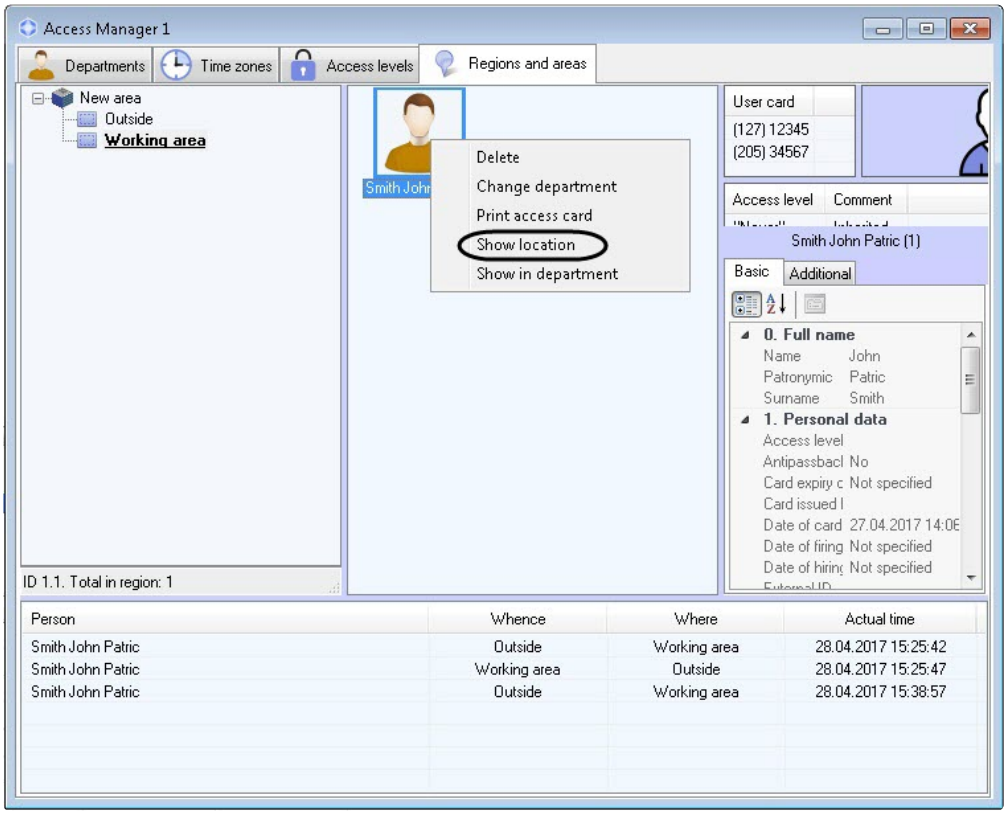
> **Note.**
>
> This data on passes is given for information only, it is not recorded in a separate database.

To view the passed user in the current region on the **Regions and areas** tab, right-click on the required event and select the **Show location** item in the menu opened. To view the passed user in his or her department on the **Departments** tab, select the **Show in department** item in the above menu



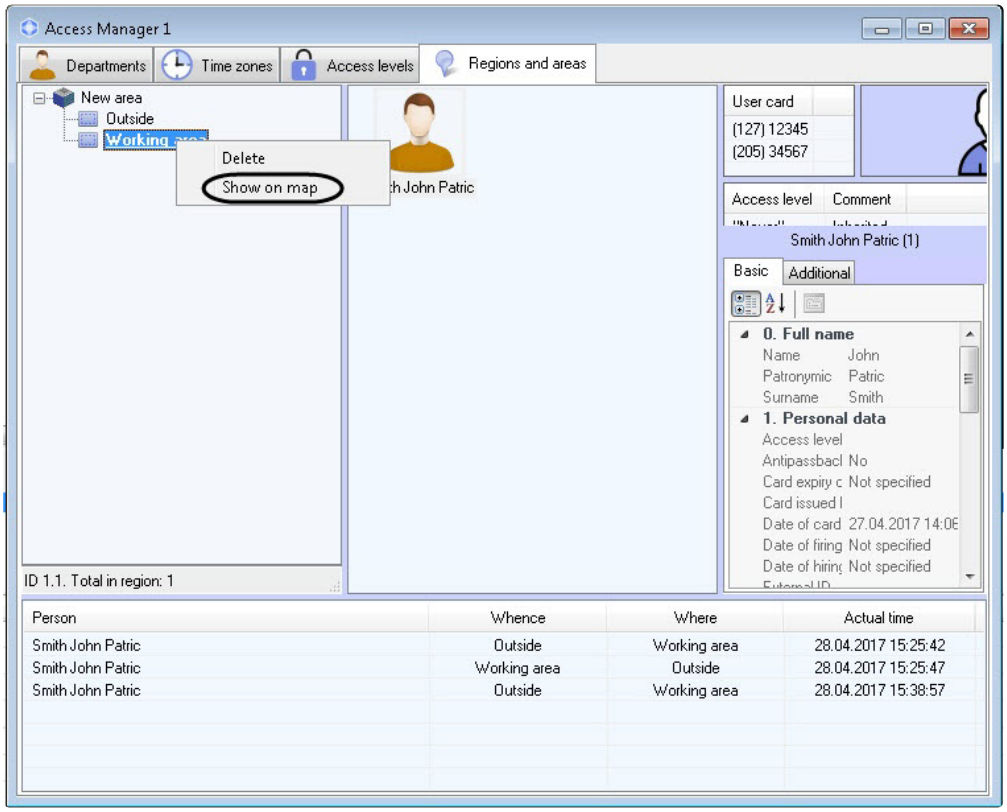
On the **Regions and areas** tab the same actions with a user as in the **Departments** tab are available (see Working with users in the Access Manager software module).

To view the user profile on the **Departments** tab, select the **Show in department** item in the user functional menu.



6.7.6 Viewing region on the Map

To view a region on the Map, right click on the corresponding object in the hierarchy and select the **Show on map** item in the menu opened.



As a result, the region is selected in the Map window and the region icon blinks twice.

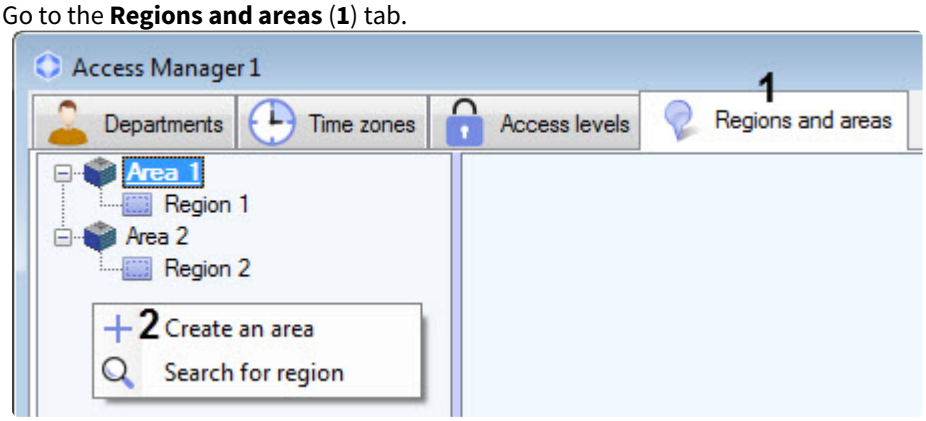
6.7.7 Creating, editing and deleting Area and Region objects

> **Note.**
>
> Creating, editing and deleting areas and regions can be done without using the Access Manager with the tools of the base *Axxon PSIM* software. See *Axxon PSIM software. Administrator's Guide*. The most recent version of this document is available in the AxxonSoft documentation repository

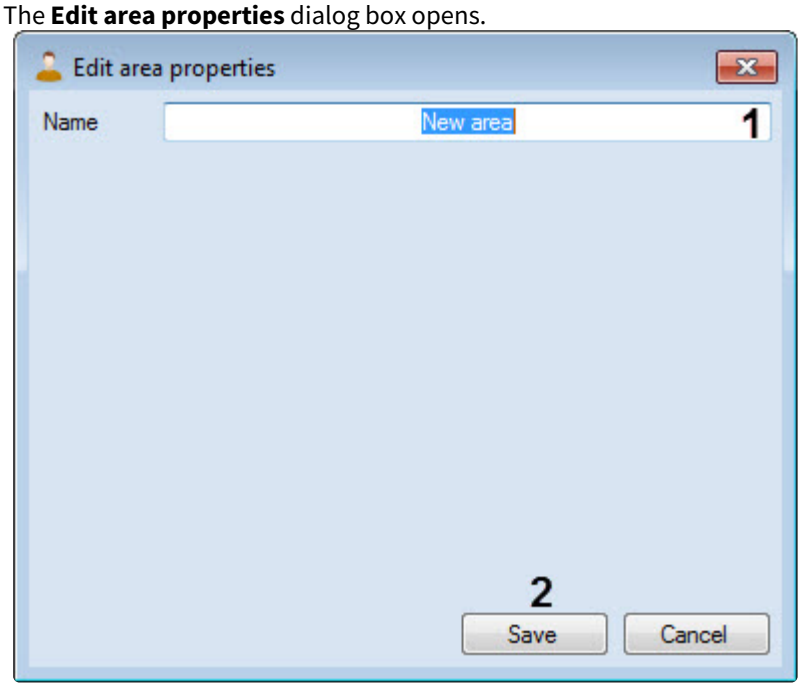
Creating areas

An **Area** object is created in the following order:

1. Go to the **Regions and areas** (**1**) tab.



2. Right-click in the regions hierarchy area free from objects.
3. In the menu opened select the **Create an area** (**2**) item.
4. The **Edit area properties** dialog box opens.



5. In the **Name** field enter the name of the area.

> **Note**
>
> The name should be unique. If an area with this name has already been created in the system, then while saving, a corresponding message will be displayed and the area will not be saved. Also, the name should not contain the following characters: < | >.

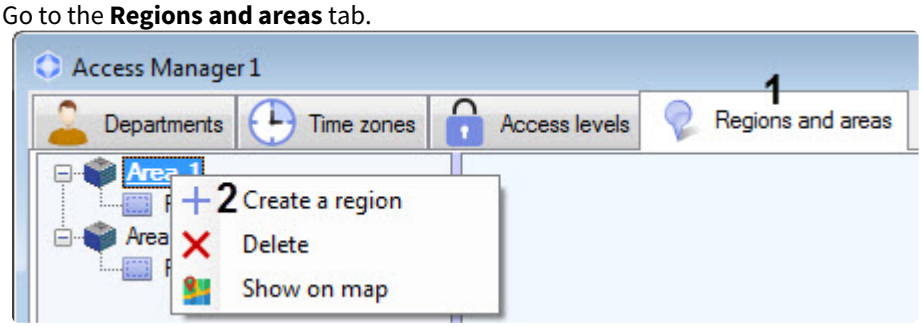
6. Click **Save** (**2**).

The area is created.

Creating and editing regions

To create or edit the region, do the following:

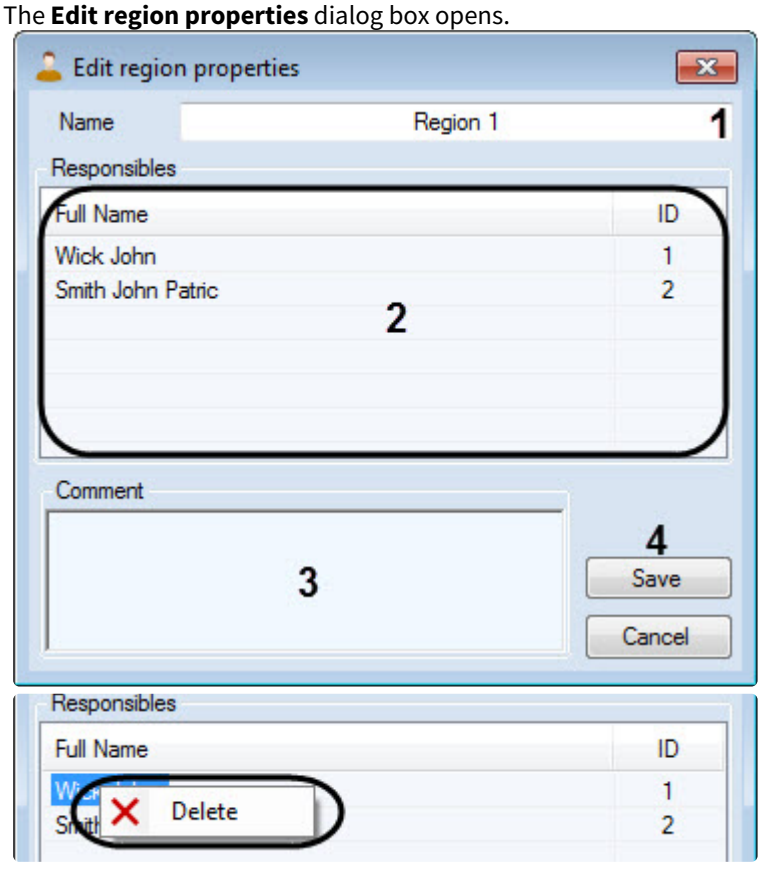
1. Go to the **Regions and areas** tab.



2. Right-click on the area under which the region is to be created.
3. In the menu that opens, select the **Create a region** item.

> **Note**
>
> To edit an existing region, double left-click the corresponding region.

4. The **Edit region properties** dialog box opens.



5. In the **Name** field (**1**), enter the region name.

> **Note**
>
> The name should be unique. If a region with this name has already been created in the system, then while saving, a corresponding message will be displayed and the region will not be saved. Also, the name should not contain the following characters: < | >.

6. In the **Responsibles** area (**2**), a list of users who are assigned responsible for this region is displayed (see Assigning a user responsible for the region).

7. To remove a user from the list of responsible users, right-click on the user and click the **Delete** button.

> **Note**
>
> You can select multiple users.

8. If necessary, in the **Comment** field (**3**), enter the region description.
9. Click **Save** (**4**).

The region is created or edited.

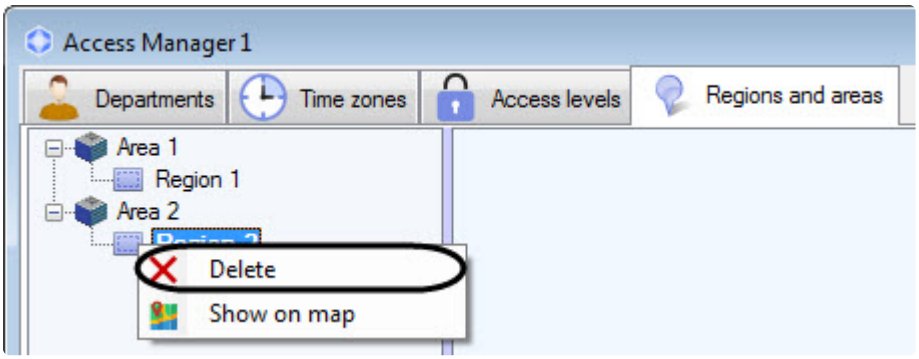
Editing areas and regions

To edit area or region, double-left-click on it.

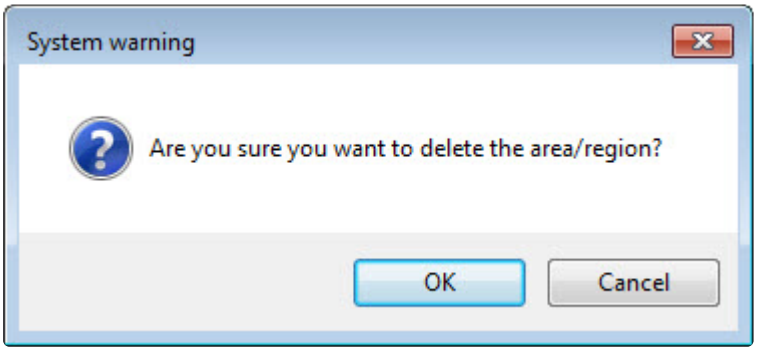
The **Edit area properties/Edit region properties** dialog box opens. Working with this dialog box is described in the Creating areas or Creating and editing regions section correspondingly.

Deleting areas and regions

To delete an area or region, right-click on it and select the **Delete** menu item.



The **System warning** dialog box opens. Click **OK** to delete the **Area** or **Region**, or **Cancel** to abort the operation.



When you delete an area, all the child regions in it are deleted.

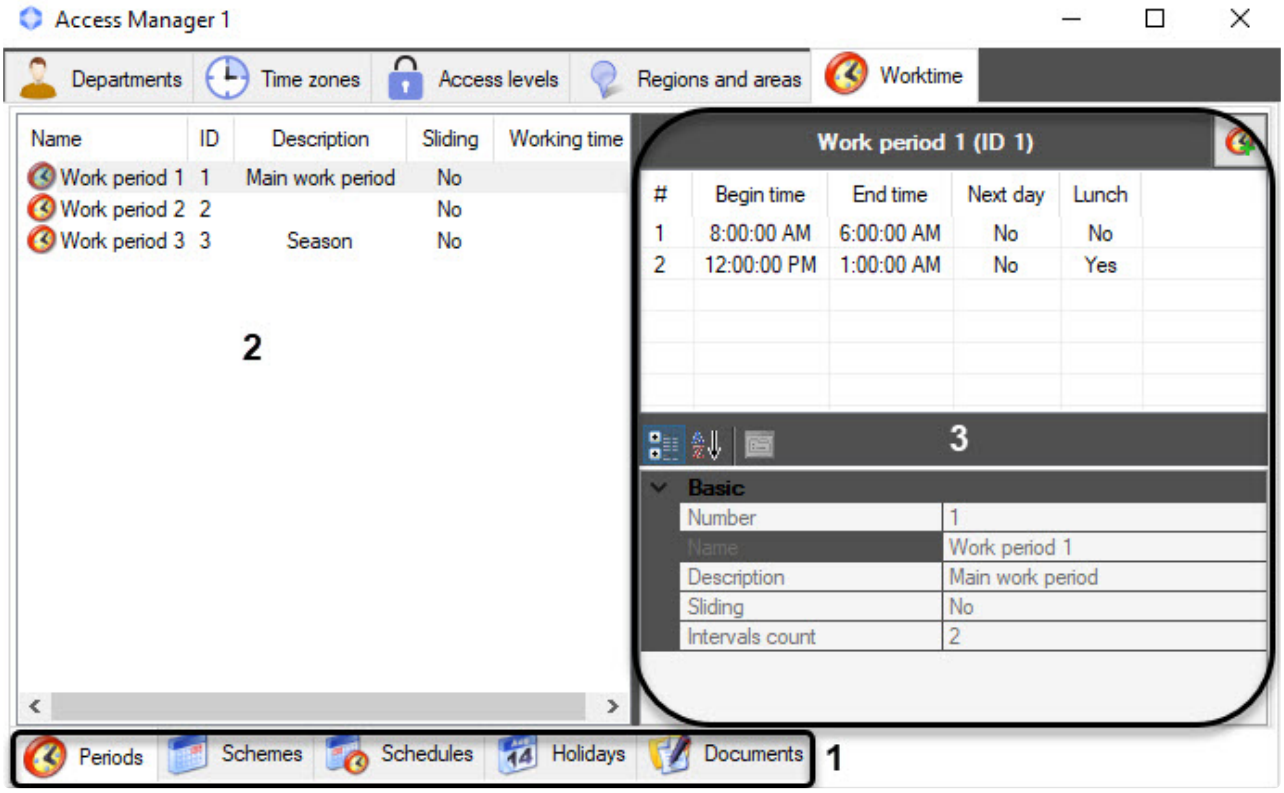
Deleting area or region is completed.

6.8 Working with the Time and Attendance subsystem

6.8.1 The Worktime tab of the Access Manager interface window

The main elements of the Worktime tab

The **Worktime** tab of the **Access Manager** interface window consists of three interactive parts. When you switch between the menu items (**1**), the contents of the information field (**2**) and the properties panel (**3**) changes.



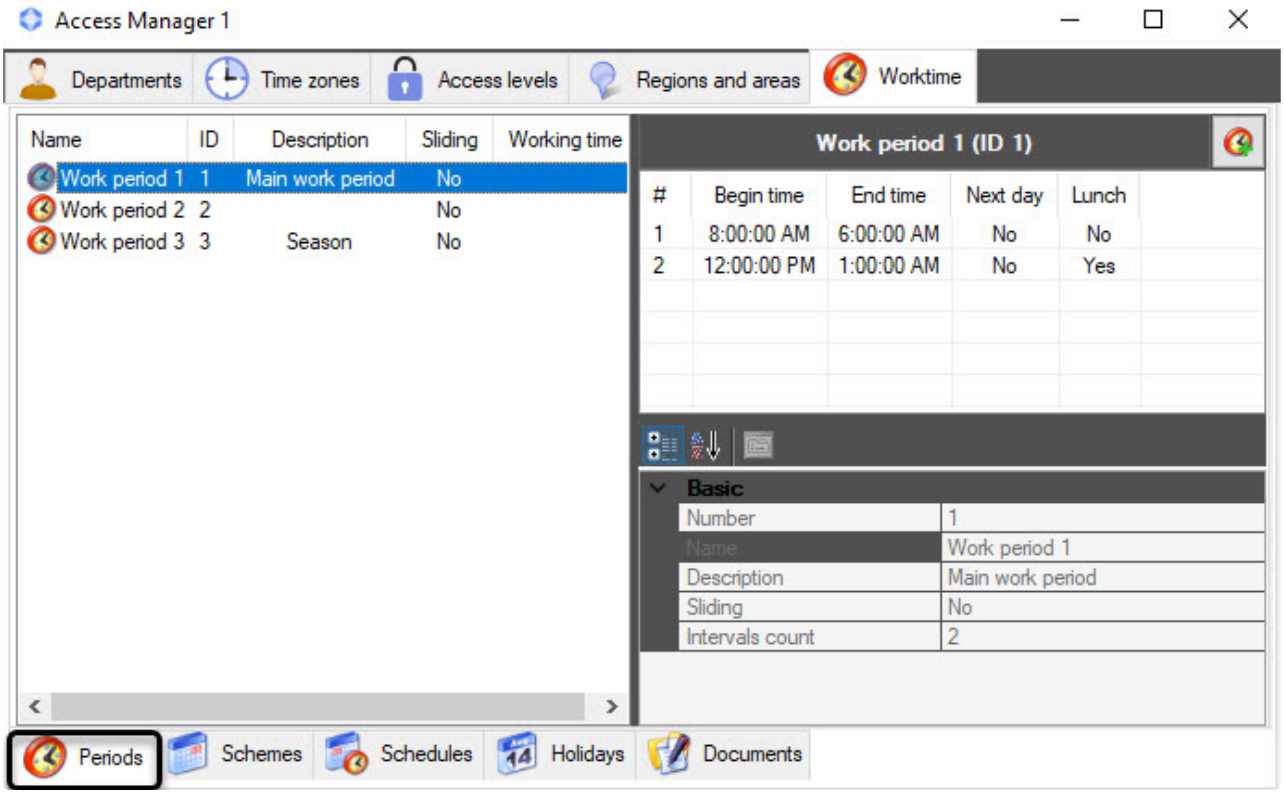
The navigation bar (**1**) is located in the lower left part of the window and used to switch between the menu items of the *Time and Attendance* subsystem.

The information field (**2**) is located in the central left part of the window and displays information on the objects existing in the system of the *Time and Attendance* subsystem.

The properties panel (**3**) is located in the right part of the window. It displays the parameters of the objects from the area (**2**).

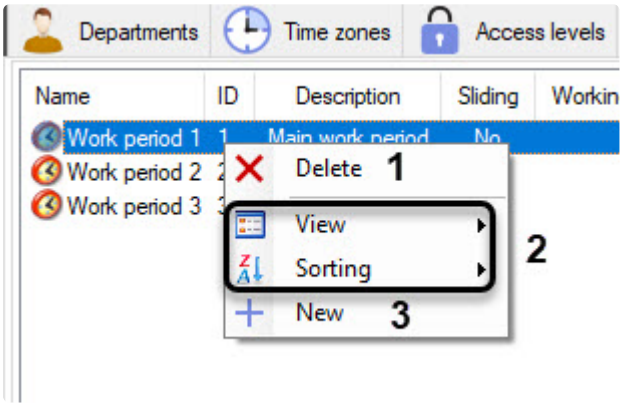
The Periods menu of the Worktime tab

To go to the **Periods** menu, select it on the navigation bar at the bottom of the **Worktime** tab of the **Access Manager** interface window.



The main elements of the **Periods** menu are described in The main elements of the Worktime tab.

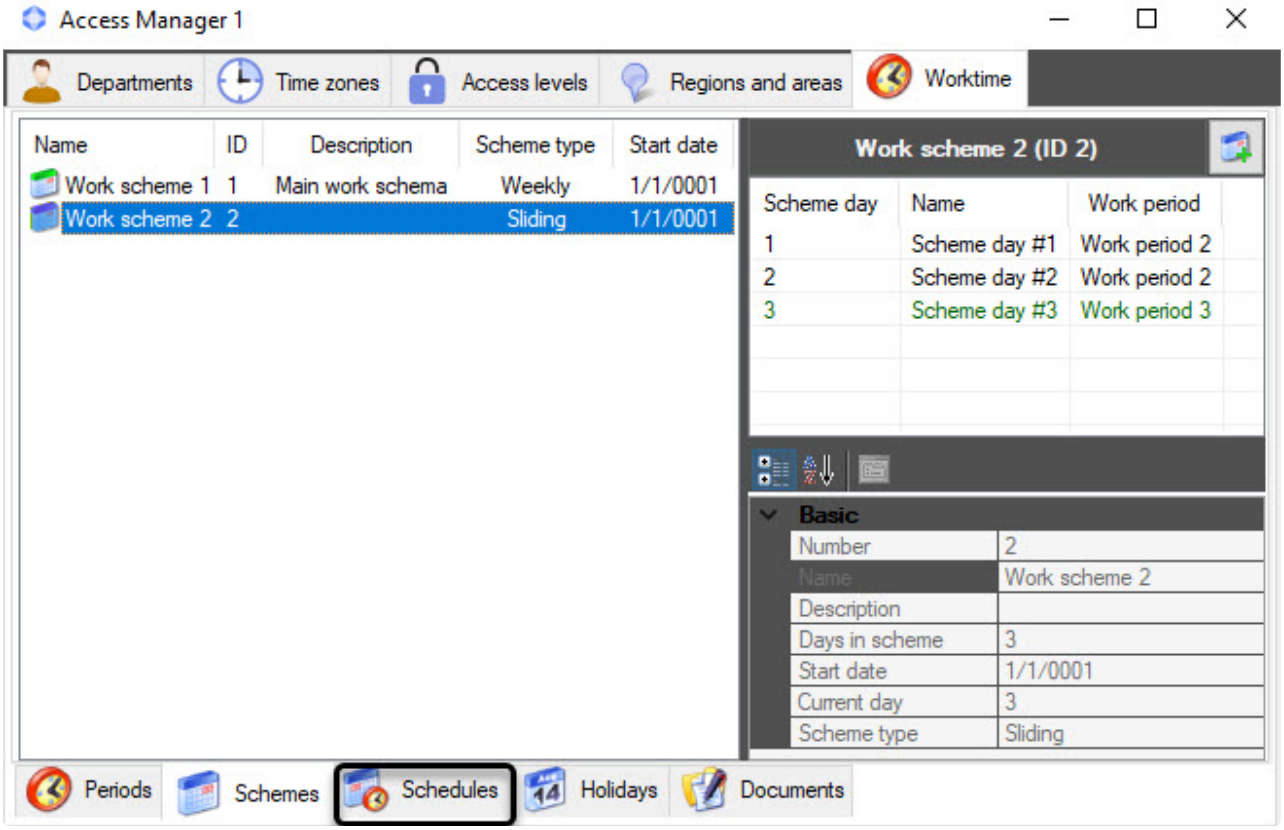
When you right-click a work period, the context menu appears, which includes the following actions:



1. **Delete** (**1**)—delete work period (see Work periods).
2. **View** and **Sorting** (**2**)—these actions with interface elements, common to the whole *Access Manager* module, are described in General operations with the Access Manager interface elements.
3. **New** (**3**)—create a new work period (see Work periods).

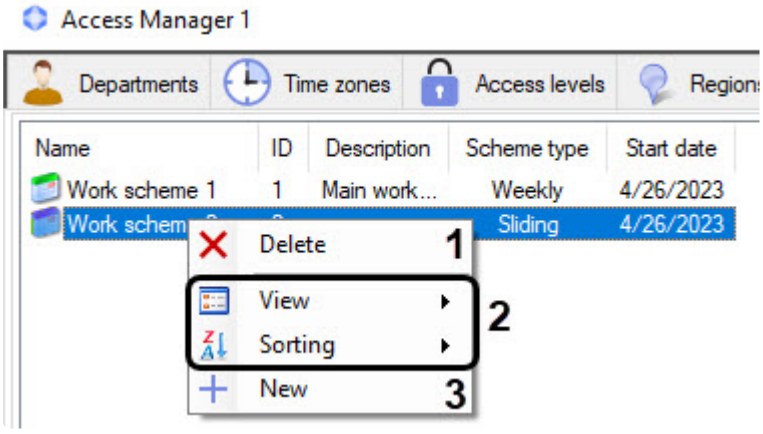
The Schemes menu of the Worktime tab

To go to the **Schemes** menu, select it on the navigation bar at the bottom of the **Worktime** tab of the **Access Manager** interface window.



The main elements of the **Schemes** menu are described in The main elements of the Worktime tab.

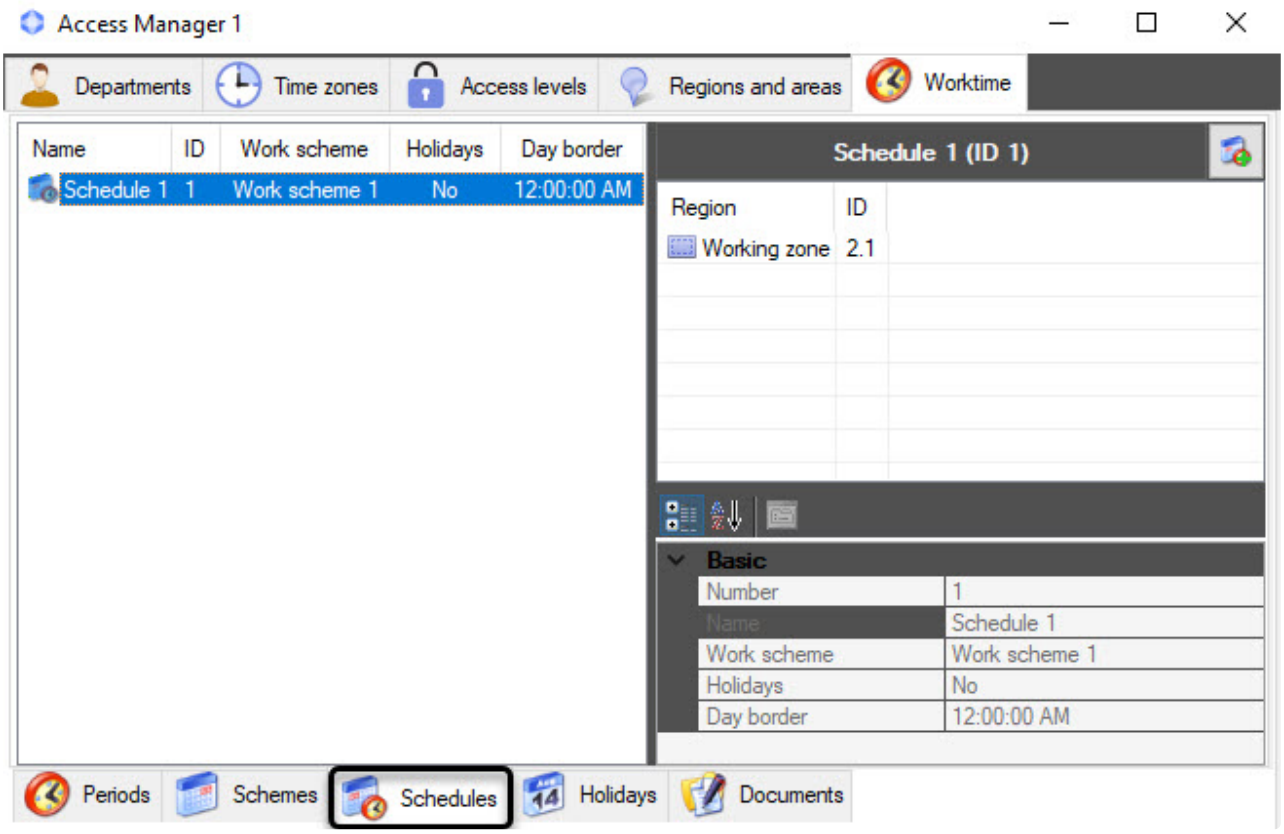
When you right-click a work scheme, the context menu appears, which includes the following actions:



1. **Delete** (**1**)—delete work scheme (see Work schemes).
2. **View** and **Sorting** (**2**)—these actions with interface elements, common to the whole *Access Manager* module, are described in General operations with the Access Manager interface elements.
3. **New** (**3**)—create a new work scheme (see Work schemes).

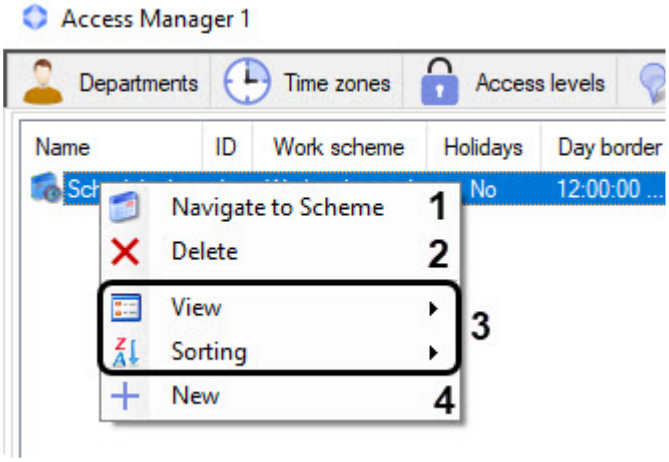
The Schedules menu of the Worktime tab

To go to the **Schedules** menu, select it on the navigation bar at the bottom of the **Worktime** tab of the **Access Manager** interface window.



The main elements of the **Schedules** menu are described in The main elements of the Worktime tab.

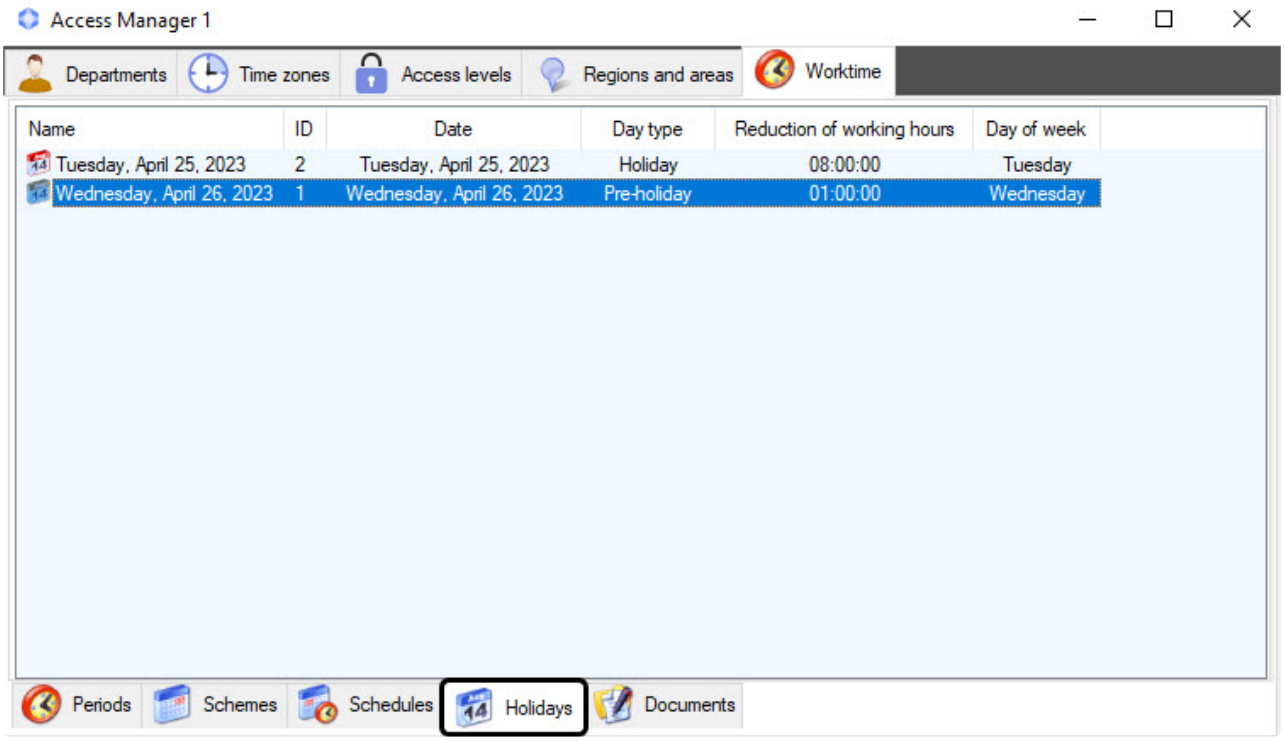
When you right-click a work schedule, the context menu appears, which includes the following actions:



1. **Navigate to Scheme** (**1**)—go to the work scheme that is the basis of this schedule.
2. **Delete** (**2**)—delete work schedule (see Work schedules).
3. **View** and **Sorting** (**3**)—these actions with interface elements, common to the whole *Access Manager* module, are described in General operations with the Access Manager interface elements.
4. **New** (**4**)—create a new work schedule (see Work schedules).

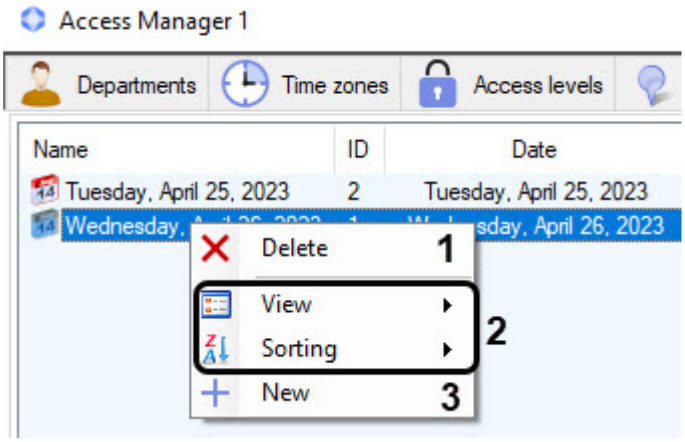
The Holidays menu of the Worktime tab

To go to the **Holidays** menu, select it on the navigation bar at the bottom of the **Worktime** tab of the **Access Manager** interface window.



The window of the **Holidays** menu consists of a navigation bar and an information field. For details, see The main elements of the Worktime tab.

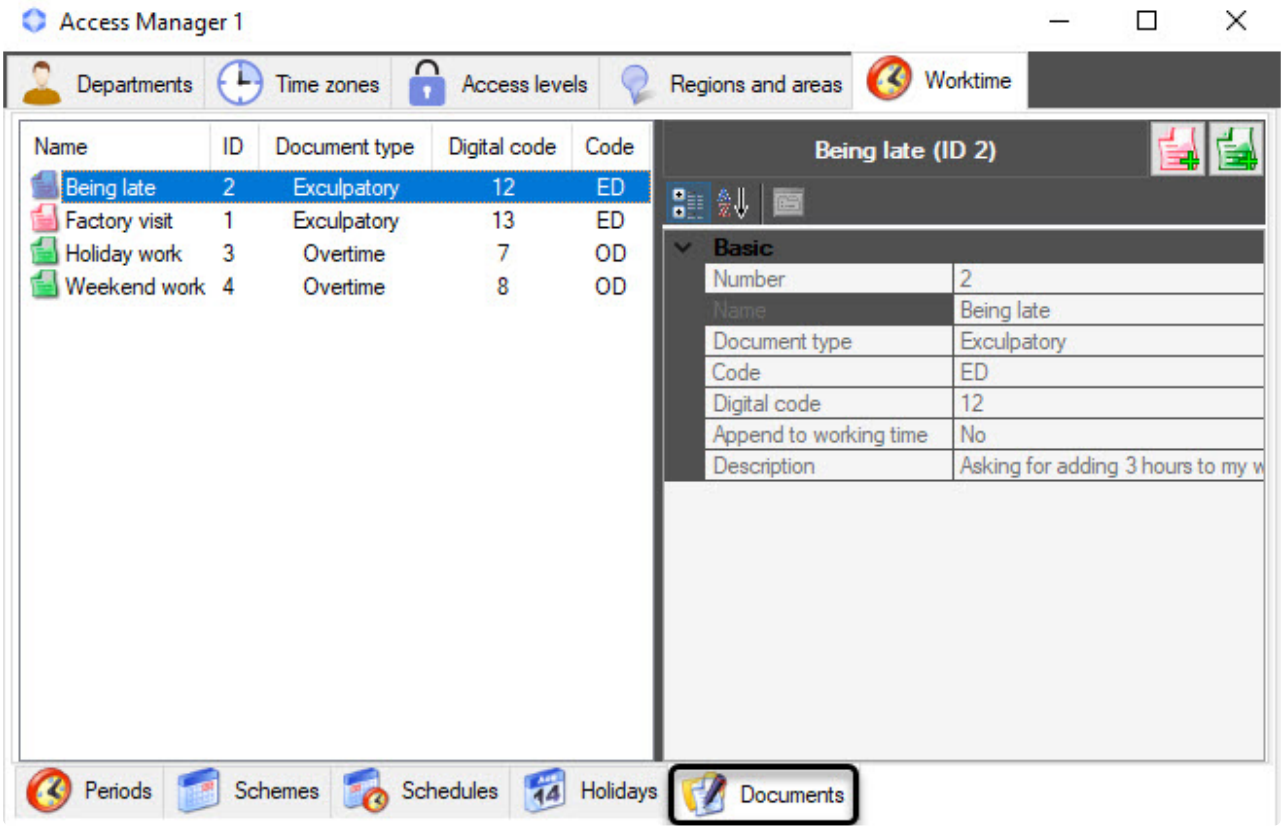
When you right-click a holiday, the context menu appears, which includes the following actions:



1. **Delete** (**1**)—delete holiday (see Holidays).
2. **View** and **Sorting** (**2**)—these actions with interface elements, common to the whole *Access Manager* module, are described in General operations with the Access Manager interface elements.
3. **New** (**3**)—create a new holiday (see Holidays).

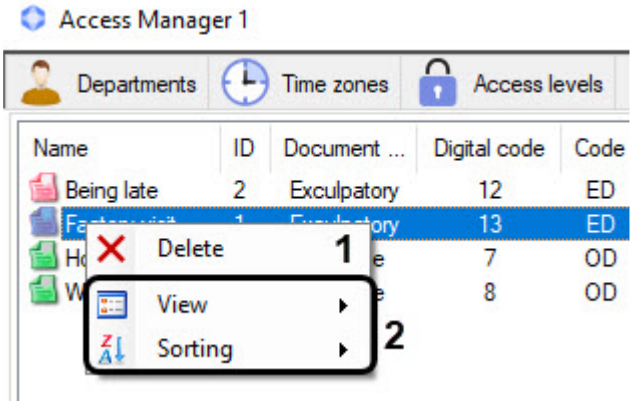
The Documents menu of the Worktime tab

To go to the **Documents** menu, select it on the navigation bar at the bottom of the **Worktime** tab of the **Access Manager** interface window.



The main elements of the **Documents** menu are described in The main elements of the Worktime tab.

When you right-click a document, the context menu appears, which includes the following actions:



1. **Delete** (**1**)—delete document (see Documents).
2. **View** and **Sorting** (**2**)—these actions with interface elements, common to the whole *Access Manager* module, are described in General operations with the Access Manager interface elements.

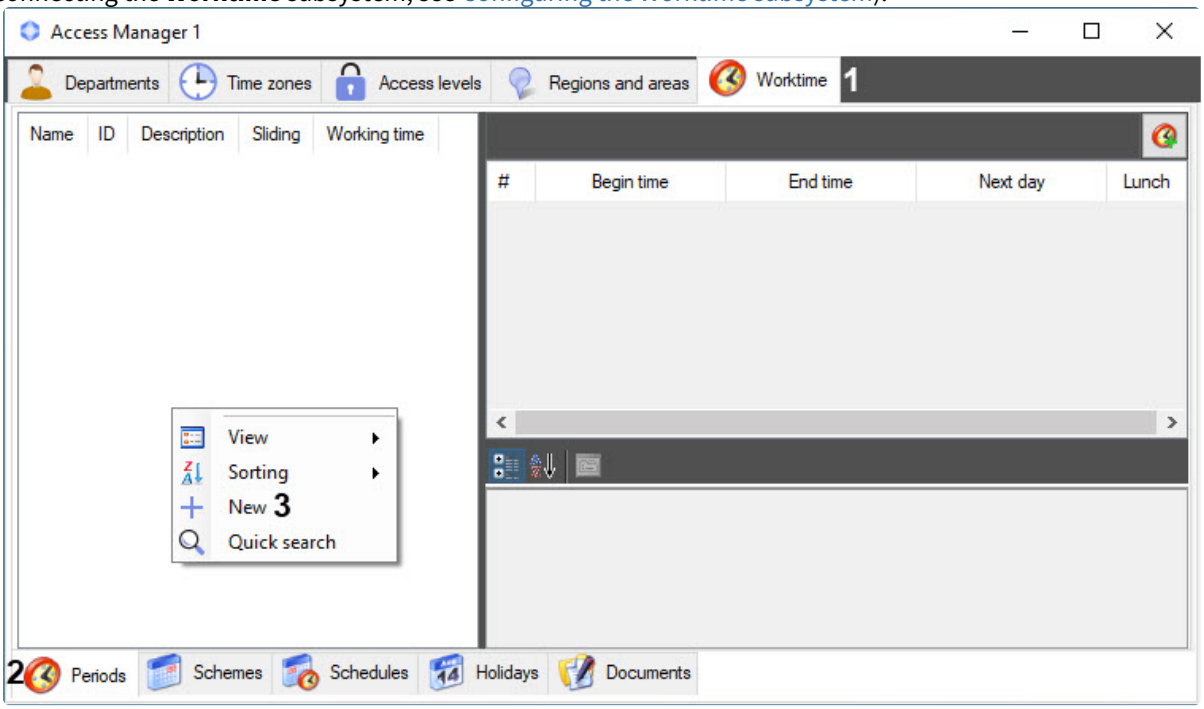
6.8.2 Work periods

On the page:

To work with the *Time and Attendance* subsystem, you need to create and configure work periods.

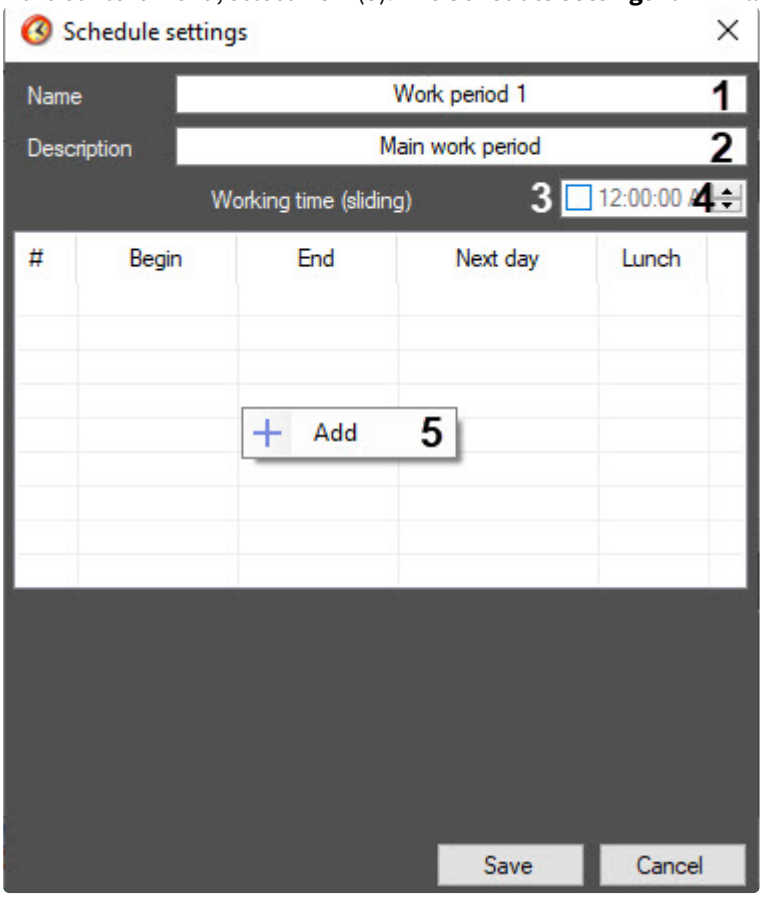
Creating work periods

1. Go to the **Worktime** tab (**1**) of the **Access Manager** interface window (For more information about connecting the **Worktime** subsystem, see Configuring the Worktime subsystem).



2. Go to the **Periods** menu (**2**).
3. Right-click the empty space on the left side of the window to open the context menu.

4. In the context menu, select **New** (**3**). The **Schedule settings** form will open.

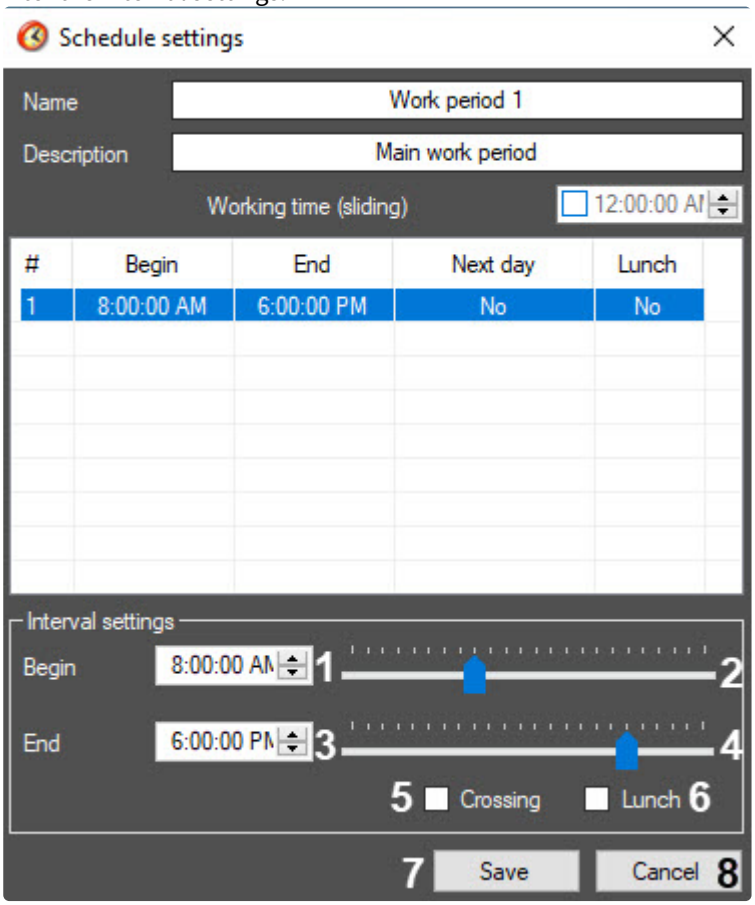


5. In the **Name** field (**1**), enter the name of the work period.
6. In the **Description** field (**2**), enter the description of the work period.
7. Set the **Working time (sliding)** checkbox (**3**), if sliding work schedule is used.

> **Note**
>
> Sliding schedule implies unregulated time of an employee at the workplace, but in a certain time interval of the work shift.

8. In the **Working time (sliding)** field (**4**), enter the employee sliding working time in the HH:MM:SS format.
9. To add work intervals, right-click an empty space in the central part of the form and select **Add** (**5**) in the context menu.

10. Enter the interval settings:

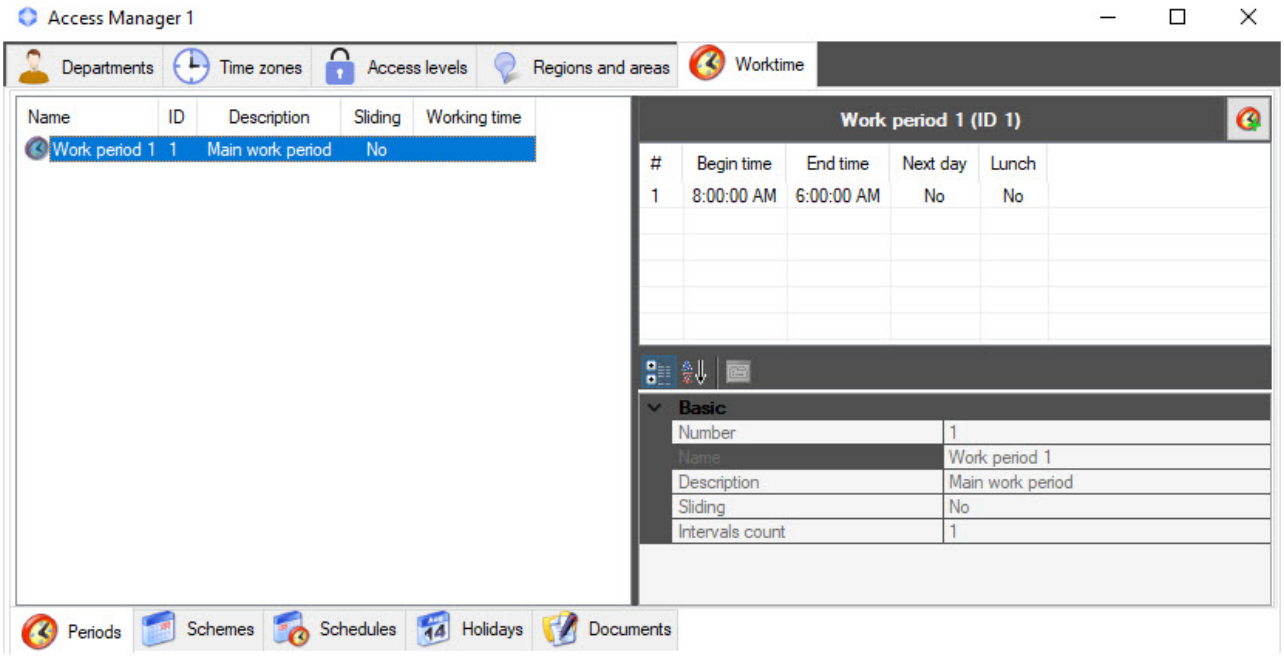


a. In the **Begin** field (**1**), enter the start time of the work interval in the HH:MM:SS format, or select it with the slider (**2**).
b. In the **End** field (**3**), enter the end time of the work interval in the HH:MM:SS format, or select it with the slider (**4**).
c. Set the **Crossing** checkbox (**5**), if the start of the work interval is on the current day and the end is the next day. If the start time of the work interval is longer than the end time, the **Crossing** checkbox will be set automatically.
d. Set the **Lunch** checkbox (**6**), so that the employee's presence at work isn't taken into account when calculating the work period. If the checkbox isn't set, the employee's presence is included in the calculation. To add a lunch break, you need to create a second work interval in which the **Lunch** checkbox will be set (see Examples of work periods).

> **Attention!**
>
> To create correct Time and Attendance reports, it is necessary that only one work interval with the clear **Lunch** checkbox is set (see Working with Time and Attendance reports).

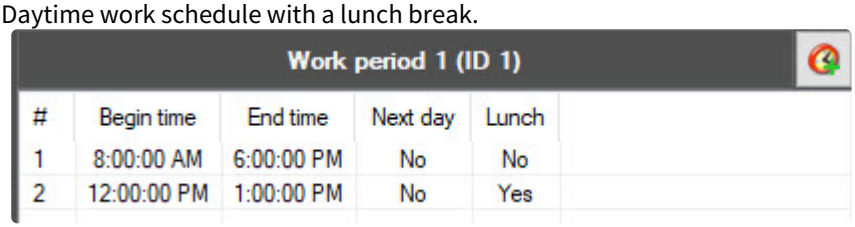
e. Click the **Save** button (**7**) to save the changes. Click the **Cancel** button (**8**) to cancel the changes.

Creating a work period is complete. The created work period will appear in the information field and in the properties panel of the **Periods** menu on the **Worktime** tab of the **Access Manager** interface window.

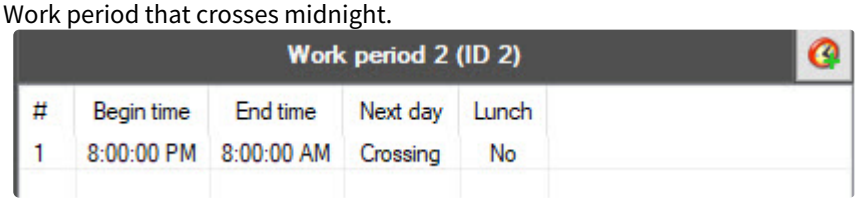


Examples of work periods

1. Daytime work schedule with a lunch break.

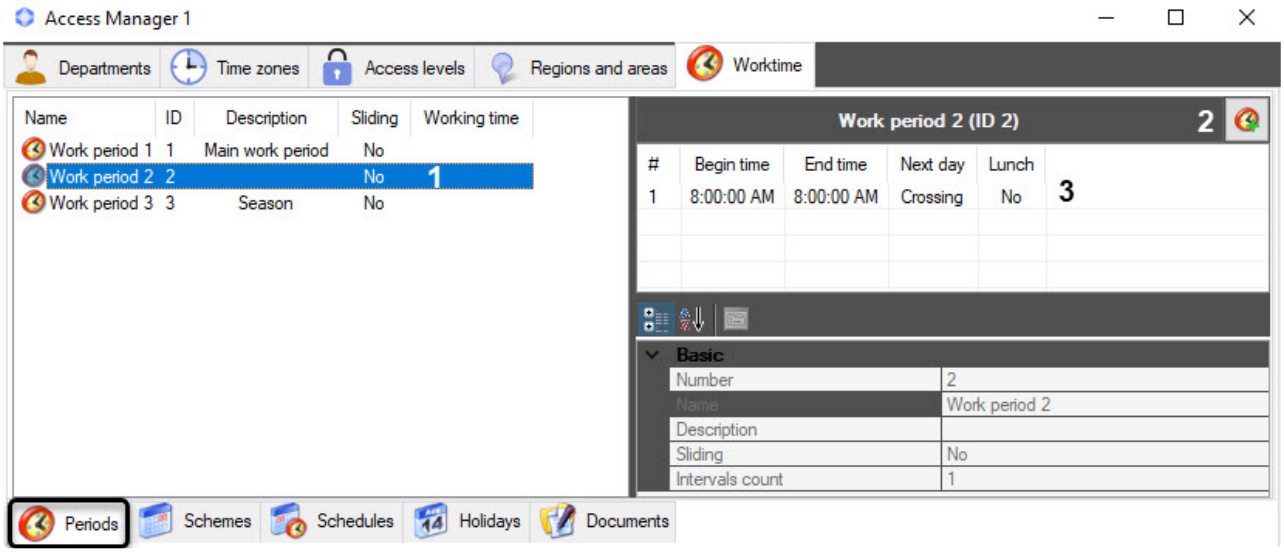


2. Work period that crosses midnight.



Editing work periods

To edit a work period saved in the system, go to the **Periods** menu on the **Worktime** tab of the **Access Manager** interface window and use one of three methods:



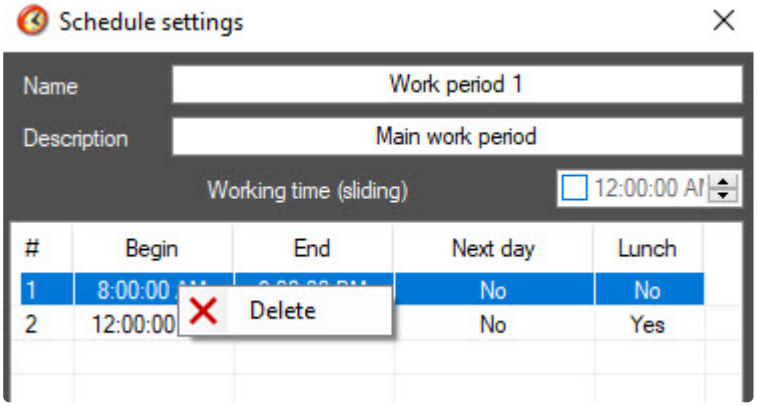
1. In the information field, double-click the period you want to change (**1**).
2. Select the period you want to change, and on the properties panel, click the  button (**2**).
3. Double-click the selected period on the properties panel (**3**).

As a result, the window for editing work period will open.

Deleting work intervals and periods

Deleting work intervals

To delete a work interval saved in the system, do the following:



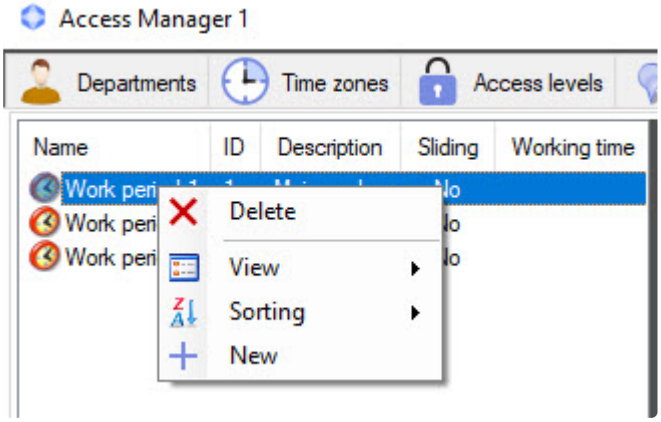
1. Go to the **Periods** menu on the **Worktime** tab of the **Access Manager** interface window.
2. Open the **Schedule settings** form.
3. Right-click the work interval you want to delete to open the context menu.
4. Select **Delete** in the context menu.

The work interval is deleted.

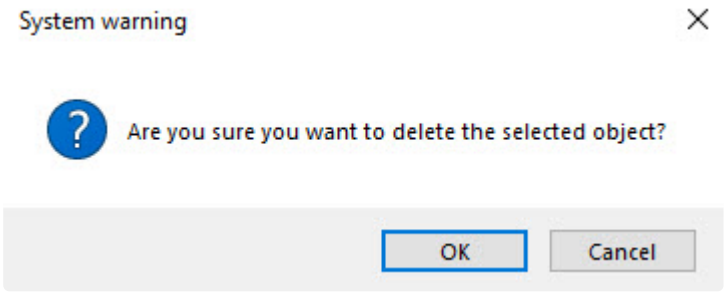
Deleting work periods

To delete a work period saved in the system, do the following:

1. Go to the **Periods** menu on the **Worktime** tab of the **Access Manager** interface window.



2. Right-click the work period you want to delete to open the context menu.
3. Select **Delete** in the context menu.
4. Click the **OK** button in the system warning message.



The work period is deleted.

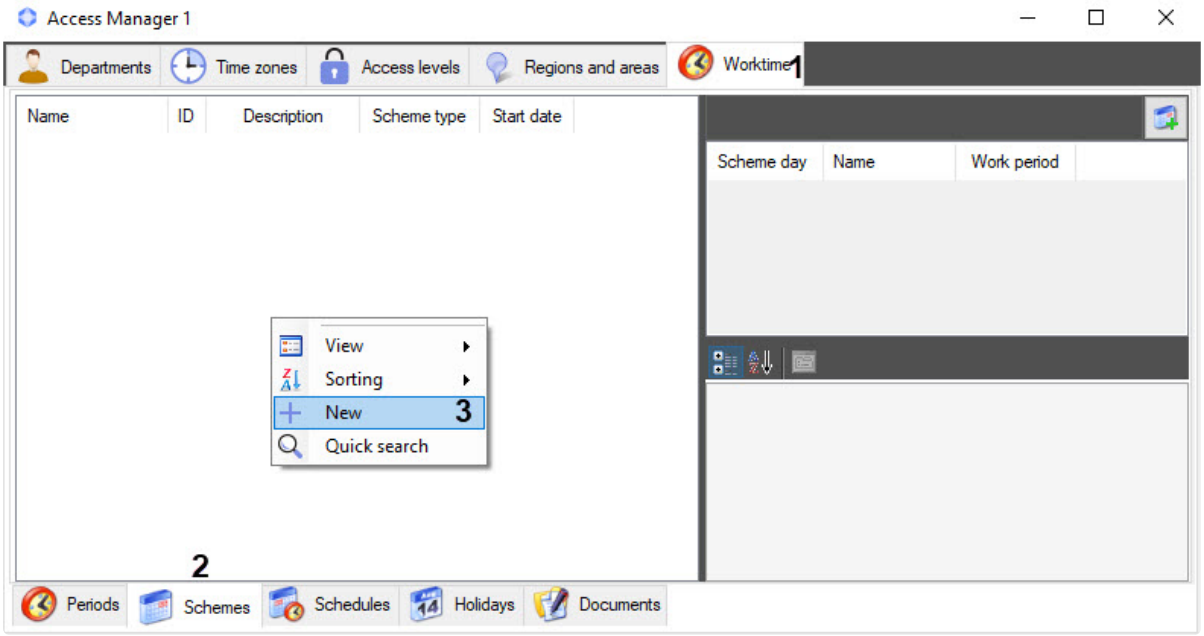
6.8.3 Work schemes

On the page:

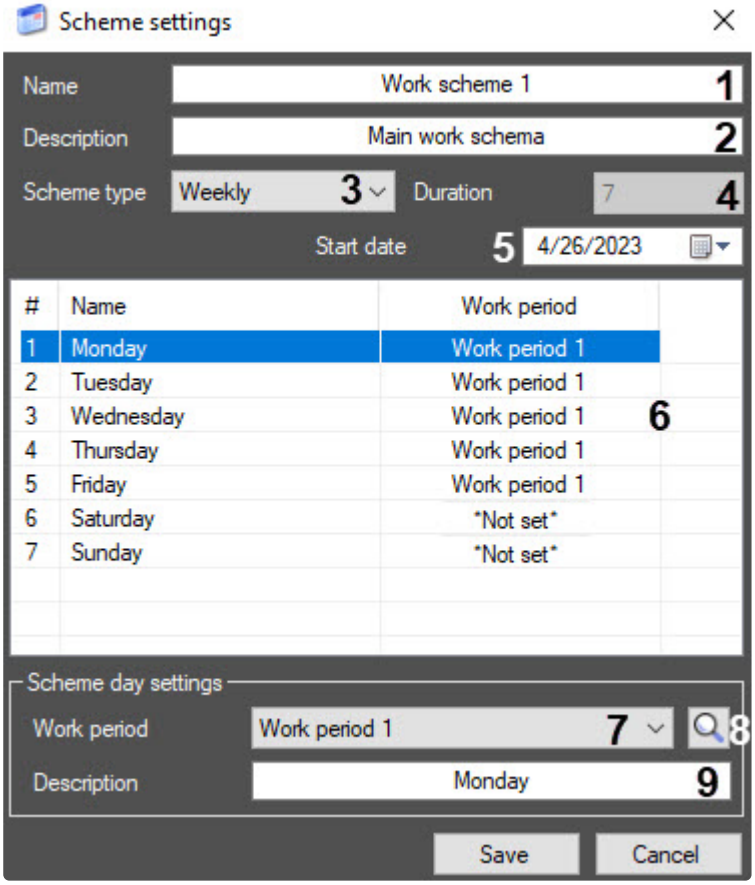
To work with the *Time and Attendance* subsystem, you need to create and configure work schemes.

Creating work schemes

1. Go to the **Worktime** tab (**1**) of the **Access Manager** interface window (For more information about connecting the **Worktime** subsystem, see Configuring the Worktime subsystem).

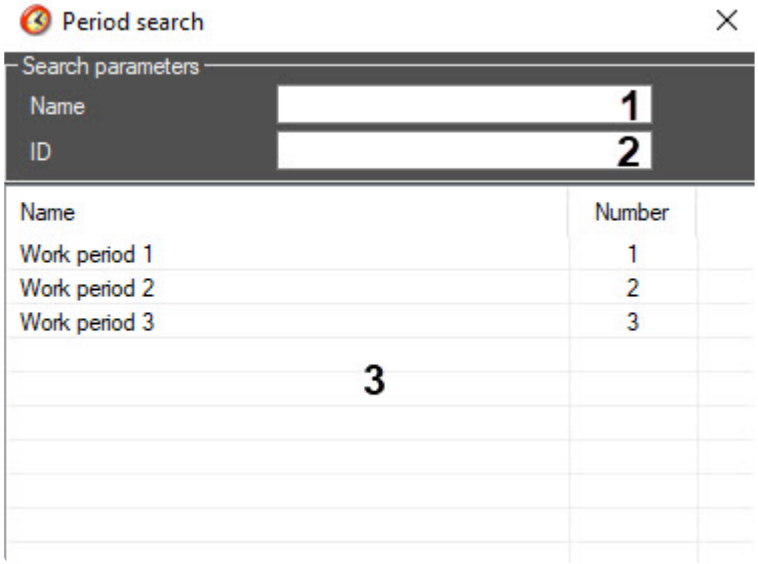


2. Go to the **Schemes** menu (**2**).
3. Right-click the empty space on the left side of the window to open the context menu.
4. In the context menu, select **New** (**3**). The **Scheme settings** form will open.



5. In the **Name** field (**1**), enter the name of the scheme.
6. In the **Description** field (**2**), enter the description of the scheme.

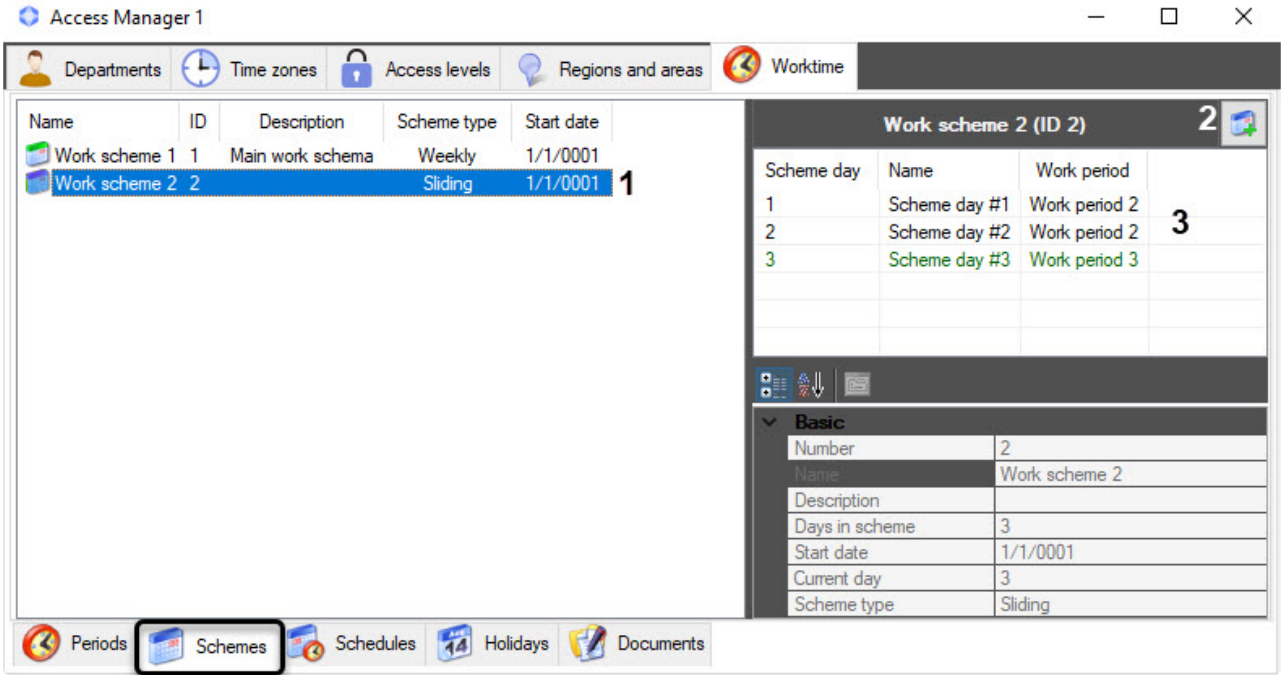
7. From the **Scheme type** drop-down list (**3**), select the type of a scheme you want to use. The scheme type determines the duration of the scheme in days (**4**). There are three types of scheme available:
    a. **Weekly**—the duration of the scheme is seven days.
    b. **Sliding**—the duration of the scheme is set manually.
    c. **Monthly**—the duration of the scheme is 31 days.
8. If you selected the **Sliding** scheme type, in the **Duration** field (**4**), enter the duration of the scheme in days.
9. In the **Start date** field (**5**), set the start date of the work scheme by clicking the button and opening a calendar, or enter the start date manually in the DD.MM.YYYY format.
10. Set the parameters for each day of the work scheme:
    a. For each scheme day in table (**6**) assign a work period by selecting it from the **Work period** drop-down list (**7**) or by using the search button (**8**). When you click the button, the **Period search** window will open, where you can select a work period from the list (**3**) or search it by parameters:



        i. In the **Name** field (**1**), enter the work period name to search by it. The search starts with the first character.
        ii. In the **ID** field (**2**), enter the work period ID to search by it.
    b. If necessary, in the **Description** field (**9**), enter a description of the scheme day.
11. Click the **Save** button to save all changes.

Editing work schemes

To edit a work scheme saved in the system, go to the **Schemes** menu on the **Worktime** tab of the **Access Manager** interface window and use one of three methods:



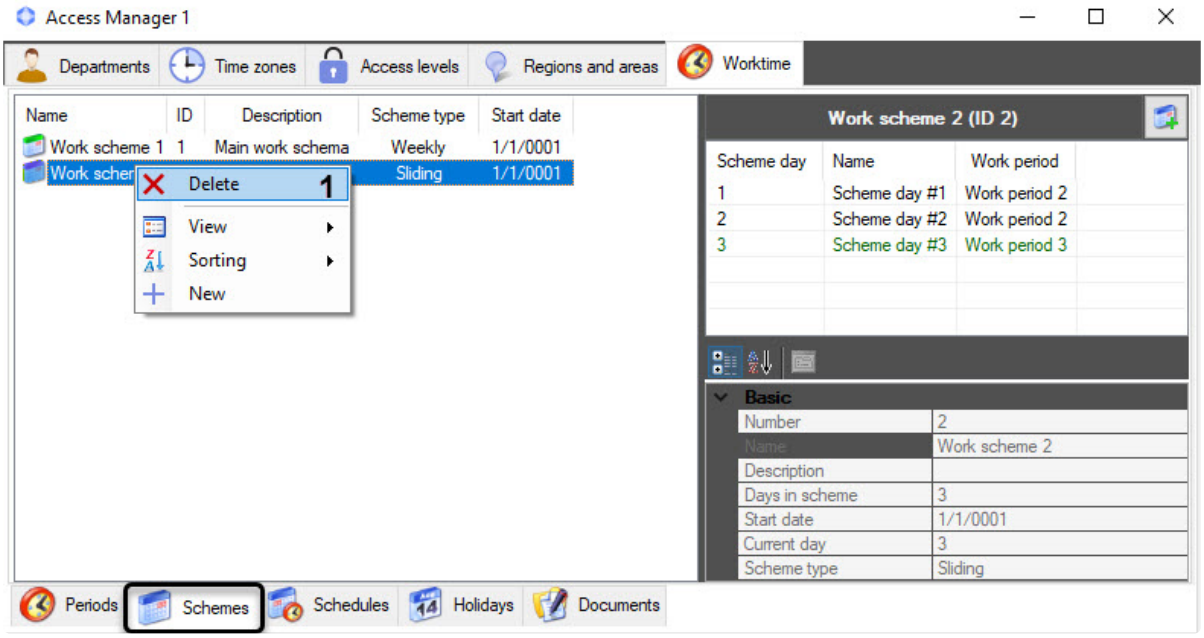
1. In the information field, double-click the work scheme you want to change (**1**).
2. Select the work scheme you want to change, and on the properties panel, click the  button (**2**).
3. Double-click any day of the selected work scheme on the properties panel (**3**).

As a result, the window for editing work scheme will open.

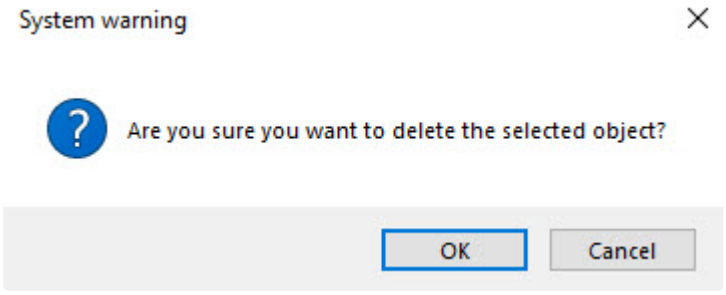
Deleting work scheme

To delete a work scheme saved in the system, do the following:

1. Go to the **Schemes** menu on the **Worktime** tab of the **Access Manager** interface window.



2. Right-click the work scheme you want to delete to open the context menu.
3. Select **Delete** (**1**) in the context menu.
4. Click the **OK** button in the system warning message.



The work scheme is deleted.

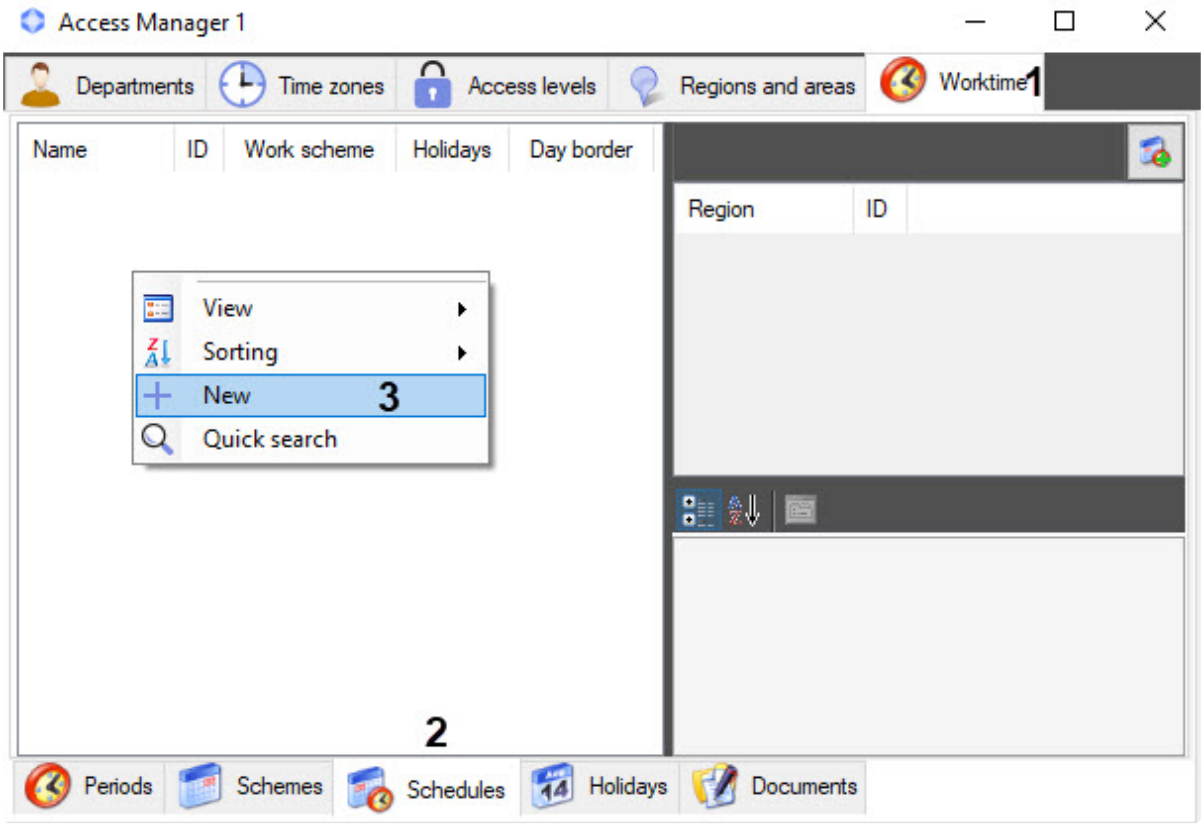
6.8.4 Work schedules

On the page:

To work with the *Time and Attendance* subsystem, you need to create and configure work schedules.

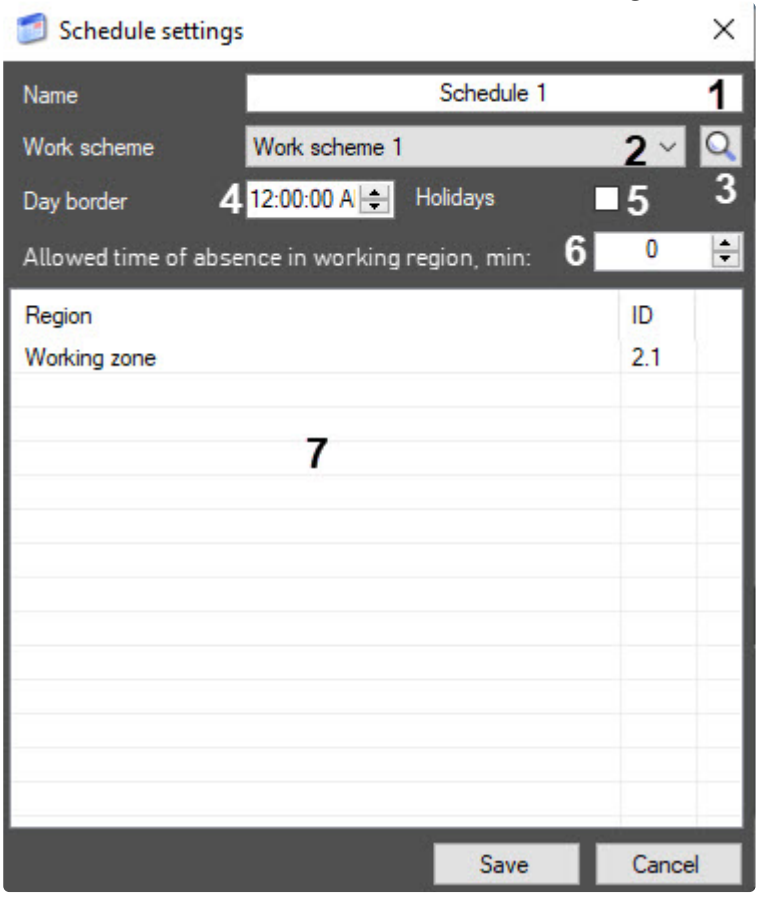
Creating work schedules

1. Go to the **Worktime** tab (**1**) of the **Access Manager** interface window (For more information about connecting the **Worktime** subsystem, see Configuring the Worktime subsystem).

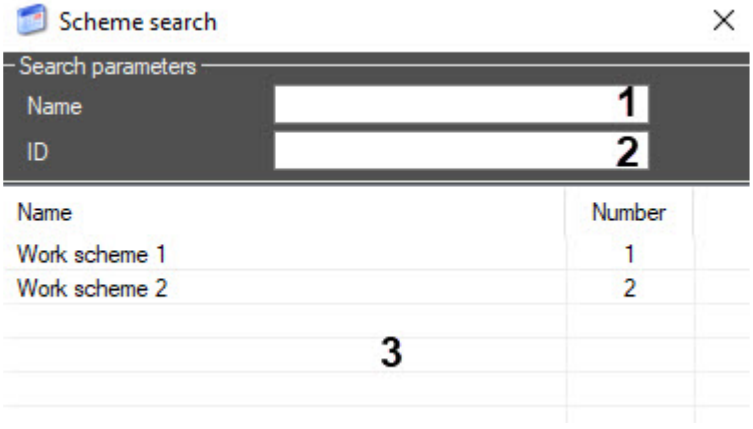


2. Go to the **Schedules** menu (**2**).
3. Right-click the empty space on the left side of the window to open the context menu.

4. In the context menu, select **New** (**3**). The **Schedule settings** form will open.

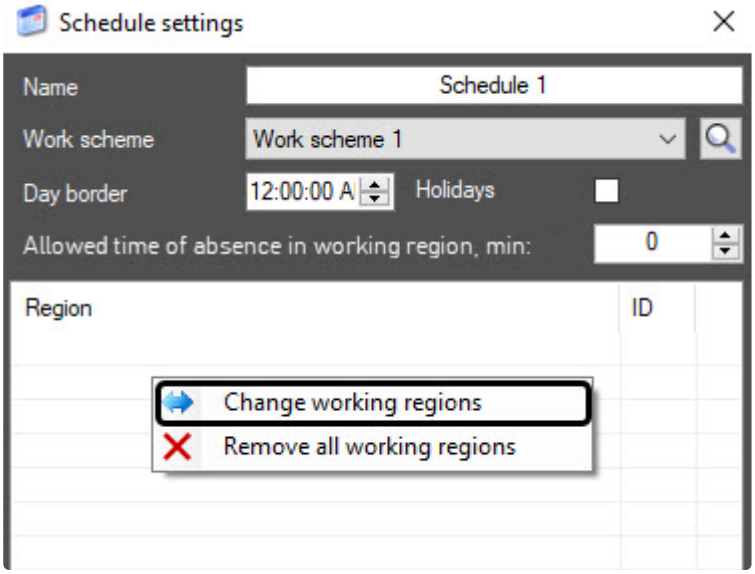


5. In the **Name** field (**1**), enter the name of the work schedule.
6. From the **Work scheme** drop-down list (**2**), select a work scheme for the schedule, or use the search button (**3**). The **Scheme search** window will open, in which you can double-click to select the required work scheme in the area (**3**), or search by parameters:

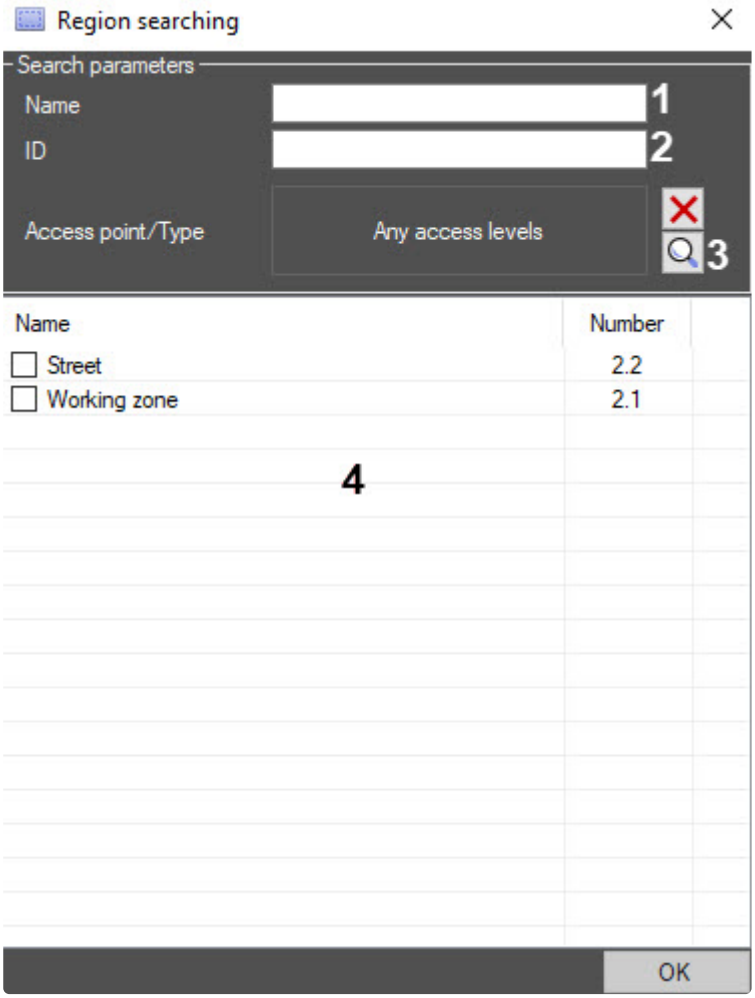


   a. In the **Name** field (**1**), enter the work scheme name to search by it. The search starts with the first character.
   b. In the **ID** field (**2**), enter the work scheme ID to search by it.
7. In the **Day border** field (**4**), enter the time in the HH:MM:SS format from which the day begins.
8. Set the **Holidays** checkbox (**5**) to include holidays in this work schedule (see Holidays).

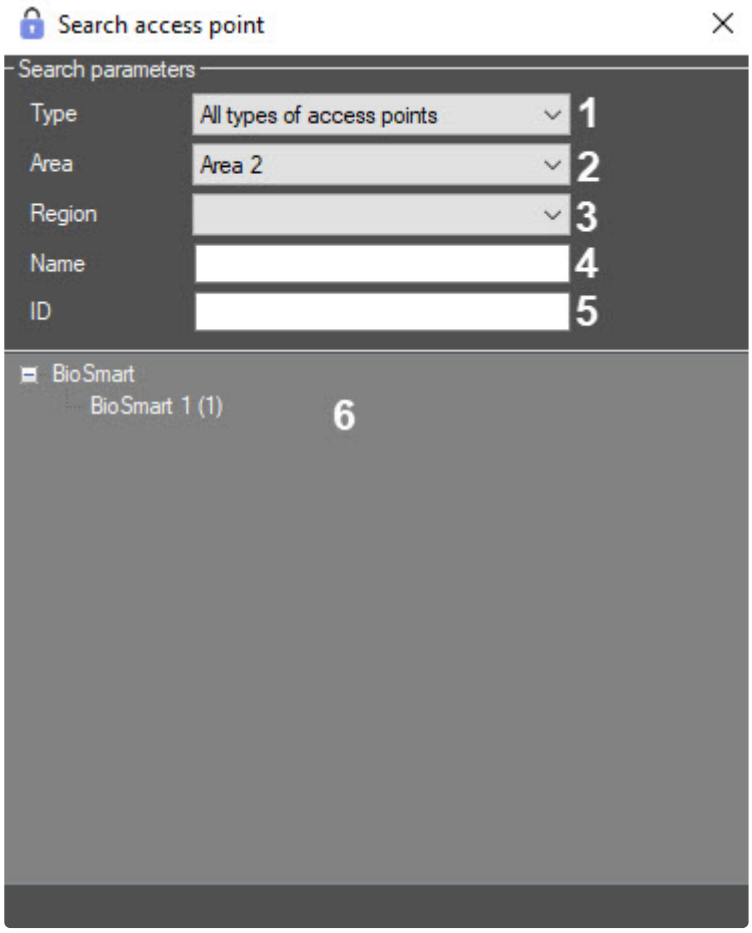
9. In the **Allowed time of absence in working region, min** (**6**) field, enter the time in minutes of an employee absence from work (in the area determined by the **Region** object) that won't be considered as leaving work. In case when an employee is absent from the workplace for longer than the allowed time, the whole period is considered as absence from the working region. The default value is **0**, i.e., any time an employee is out of the working region is considered an absence from work.
10. To add working regions, right-click the empty space in the form and in the context menu, select **Change working regions** (see Appendix 1. Configuring Regions for the ACS Readers to work with the Time and Attendance subsystem).



11. As a result, the **Region searching** window will open. Double-click to select the required working region in the area (**4**) or search by parameters:

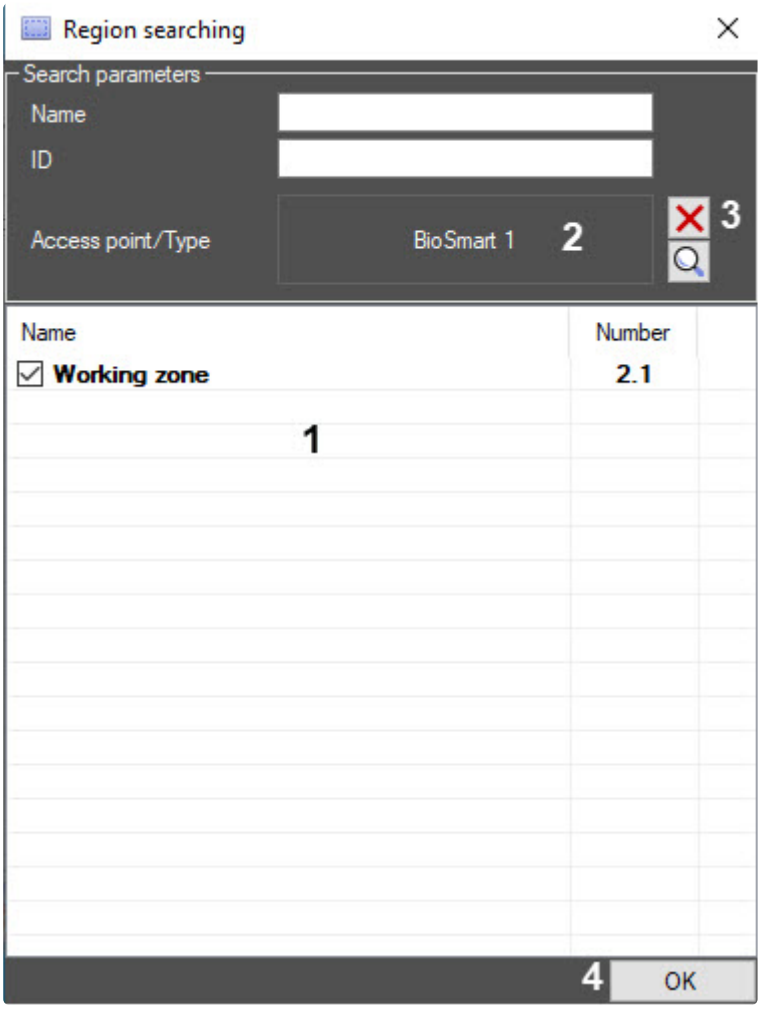


a. In the **Name** field (**1**), enter the working region name to search by it. The search starts with the first character.
b. In the **ID** field (**2**), enter the working region ID to search by it.
c. Click the search button (**3**) to search the region by the access point. In the **Search access point** window, double-click to select the required access point in the area (**6**), or fill out the search parameters:



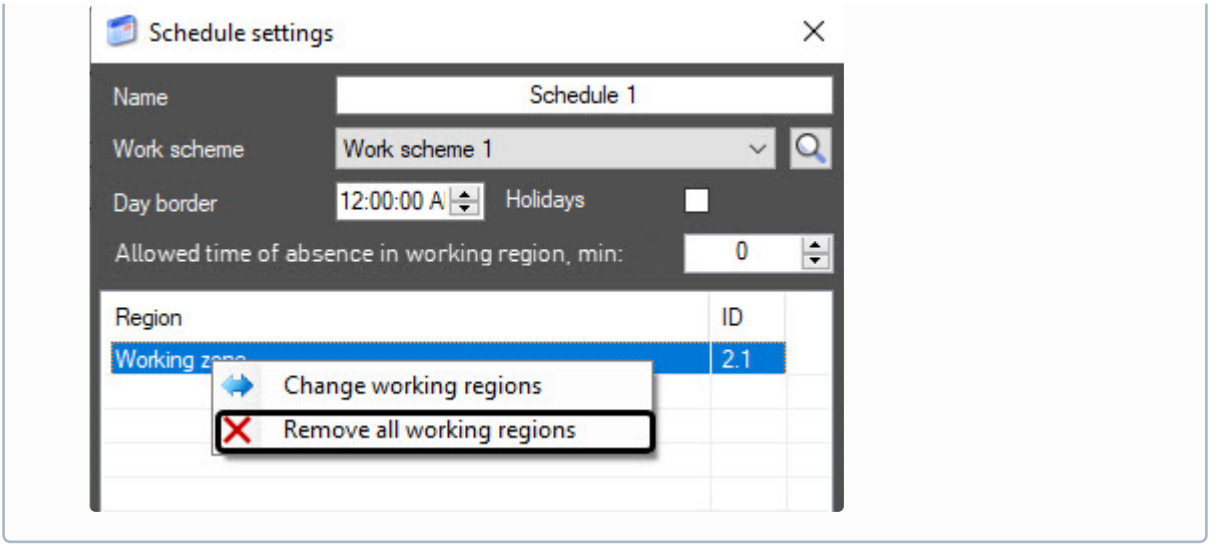
i. From the **Type** drop-down list (**1**), select the type of the access point.
ii. From the **Area** drop-down list (**2**), select the area to which the access point belongs.
iii. From the **Region** drop-down list (**3**), select the region to which the access point belongs.
iv. In the **Name** field (**4**), enter the name of the access point. The search starts with the first character.
v. In the **ID** field (**5**), enter the ID of the access point.
After you select the access point, the **Search access point** window will close.

12. In the **Region searching** form, in the area (**1**), a region will appear to which the selected access point belongs in the area (**2**). To cancel the selected access point, click the button (**3**).



13. Set the checkbox next to the required region and click the **OK** button (**4**). After that the **Region searching** form will close.
14. In the **Schedule settings** form, the selected region will be displayed in the area (**7**). Click the **Save** button to save the changes.

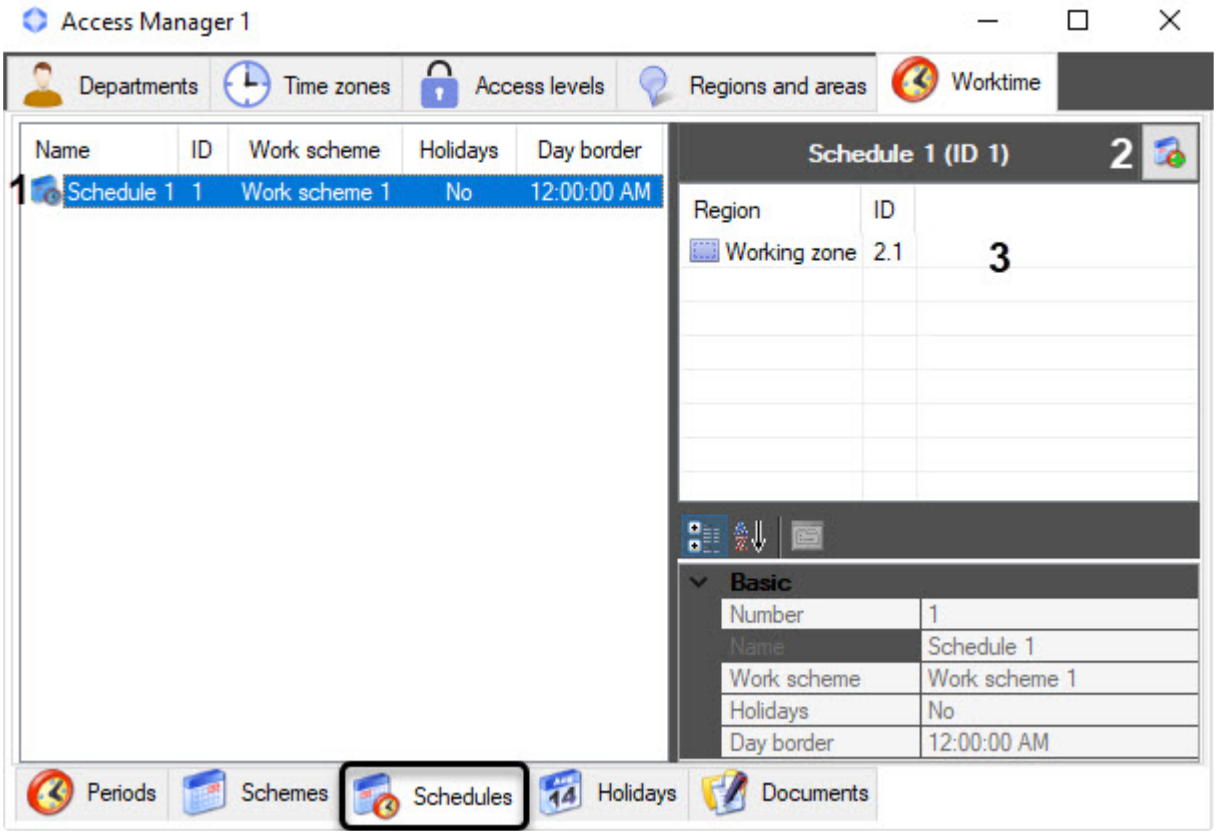
> **Note**
>
> - Assigning working regions to each work schedule is mandatory.
> - The number of working regions that will be included in this work schedule is unlimited.
> - You can delete only all working regions. To do this, in the **Schedule settings** window, right-click any region and in the context menu, select **Remove all working regions**.



The work schedule is created and configured.

Editing work schedules

To edit a work schedule saved in the system, go to the **Schedules** menu on the **Worktime** tab of the **Access Manager** interface window and use one of three methods:



1. In the information field, double-click the work schedule you want to change (**1**).

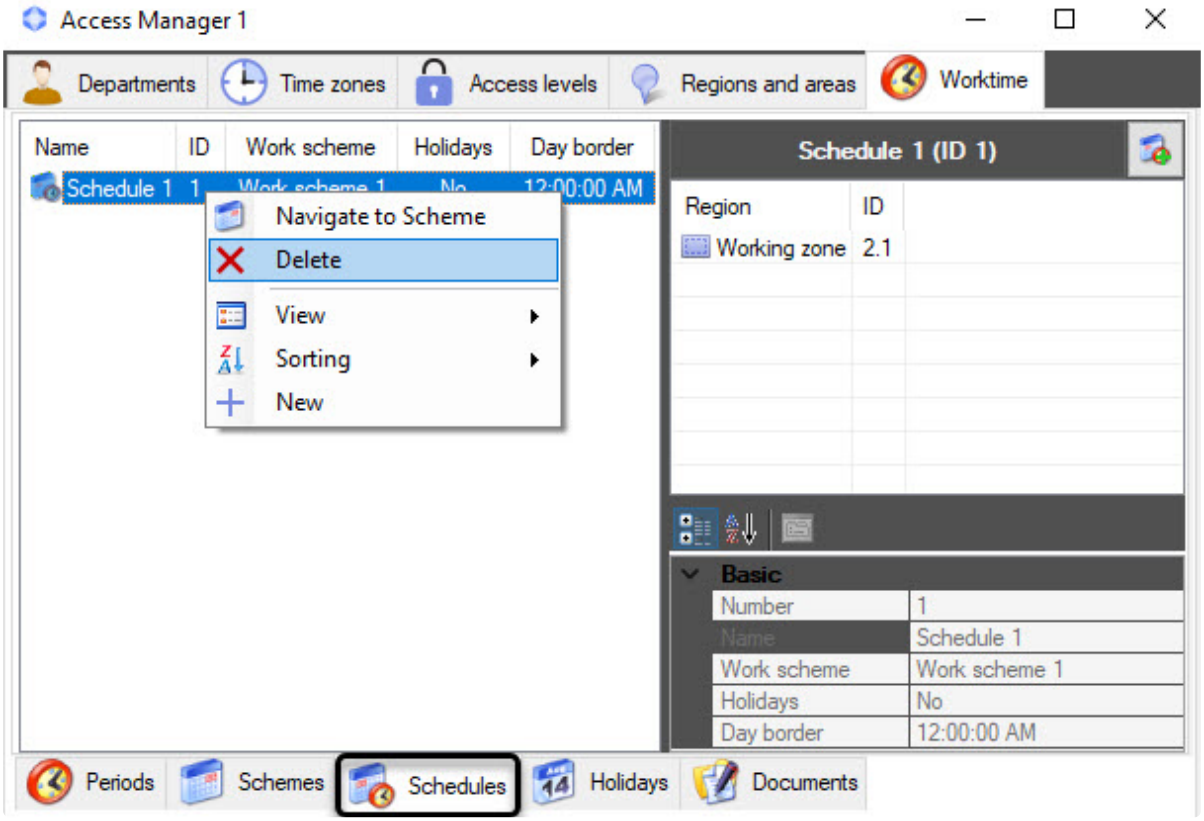
2. Select the work schedule you want to change, and on the properties panel, click the button (**2**).
3. Double-click the selected working region on the properties panel (**3**).

As a result, the window for editing work schedule will open.

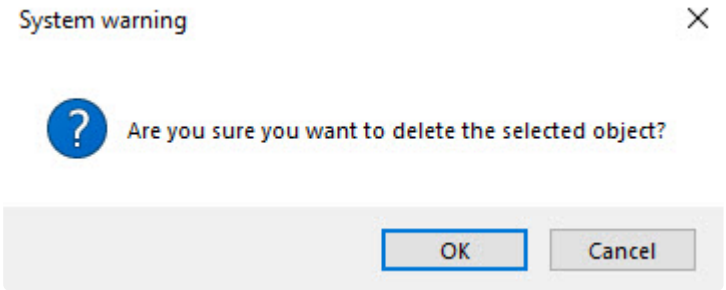
Deleting work schedules

To delete a work schedule saved in the system, do the following:

1. Go to the **Schedules** menu on the **Worktime** tab of the **Access Manager** interface window.



2. Right-click the work schedule you want to delete to open the context menu.
3. Select **Delete** in the context menu.
4. Click the **OK** button in the system warning message.



The work schedule is deleted.

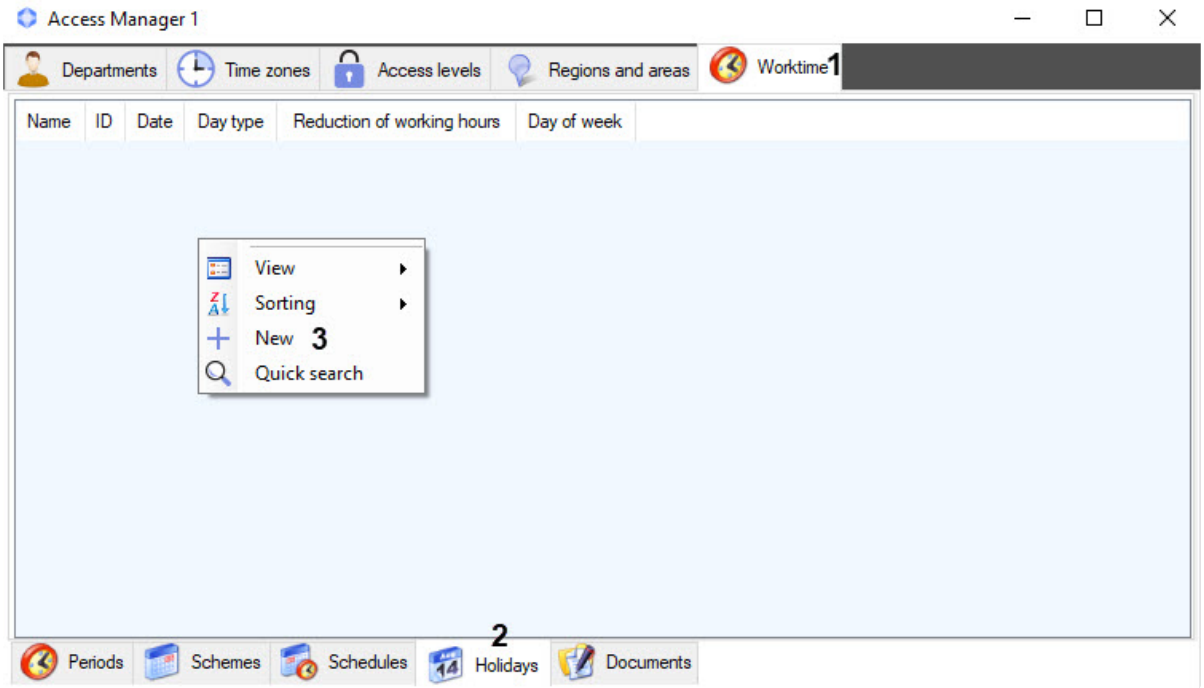
6.8.5 Holidays

On the page:

To work with the *Time and Attendance* subsystem, you need to create and configure holidays.

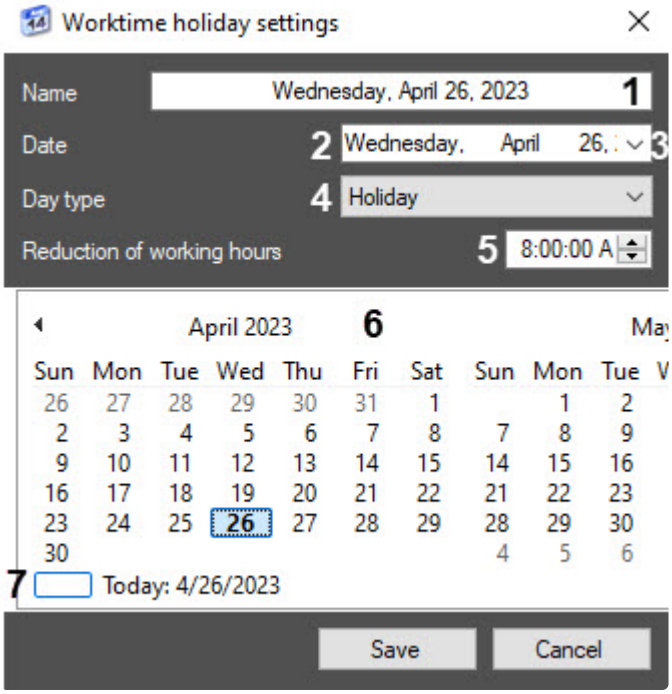
Creating holidays

1. Go to the **Worktime** tab (**1**) of the **Access Manager** interface window.



2. Go to the **Holidays** menu (**2**).
3. Right-click the empty space on the left side of the window to open the context menu.

4. In the context menu, select **New** (**3**). The **Worktime holiday settings** form will open.



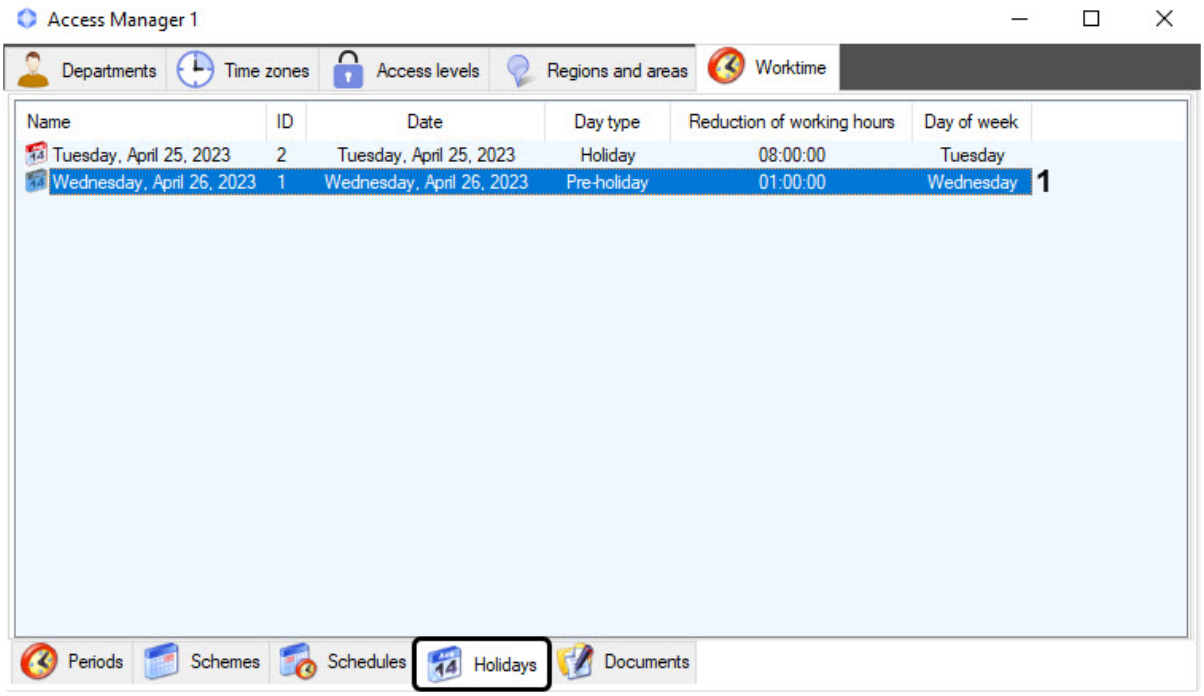
5. In the **Name** field (**1**), enter the name of the holiday. The default name is the current date.
6. In the **Date** field (**2**), enter the date using the calendar that opens when clicking the button (**3**), or by clicking the required date in the area (**6**). The current date is specified in the area (**7**).
7. From the **Day type** drop-down list (**4**), select **Holiday** (usually non-working day) or **Pre-holiday** (working hours are usually reduced by a set time) day type.
8. In the **Reduction of working hours** field (**5**), specify the time in the HH:MM:SS format by which the working day will be reduced. The default value is 8:00:00, i.e., eight hours.
9. Click the **Save** button to save the changes.

Creating holidays is complete.

Editing holidays

To edit a holiday saved in the system, do the following:

1. Go to the **Holidays** menu on the **Worktime** tab of the **Access Manager** interface window.



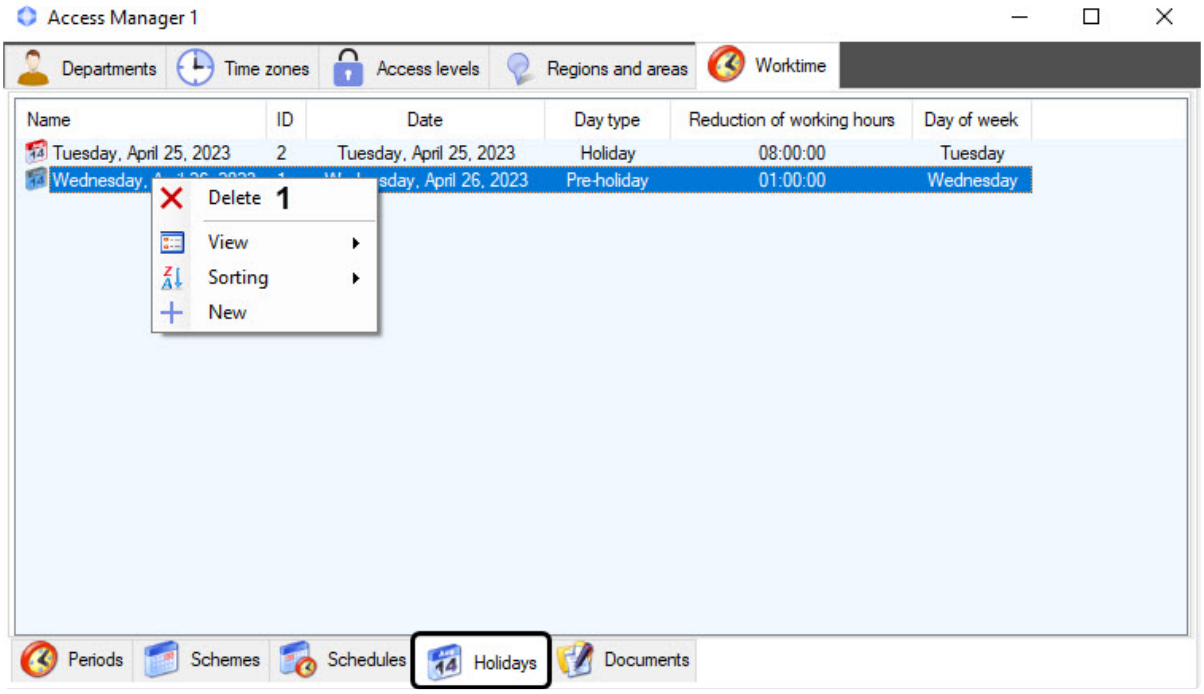
2. In the information field, double-click the holiday you want to change (**1**).

As a result, the window for editing a holiday will open.

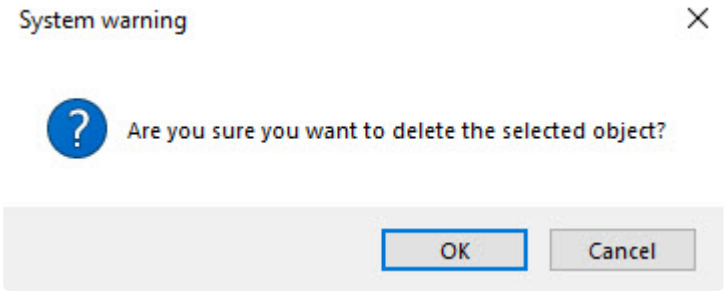
Deleting holidays

To delete a holiday saved in the system, do the following:

1. Go to the **Holidays** menu on the **Worktime** tab of the **Access Manager** interface window.



2. Right-click the holiday you want to delete to open the context menu.
3. Select **Delete** (**1**) in the context menu.
4. Click the **OK** button in the system warning message.



The holiday is deleted.

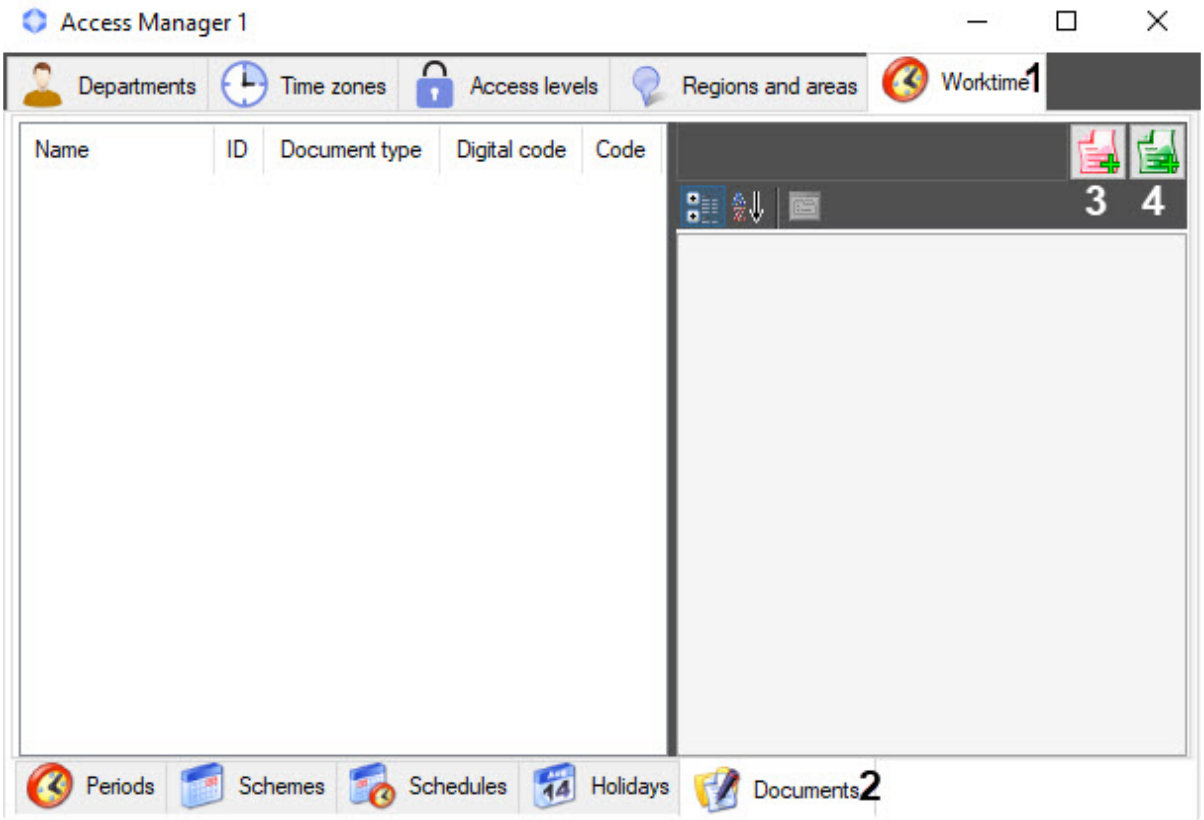
6.8.6 Documents

On the page:

You can create exculpatory and overtime documents in the *Time and Attendance* subsystem.

Creating documents

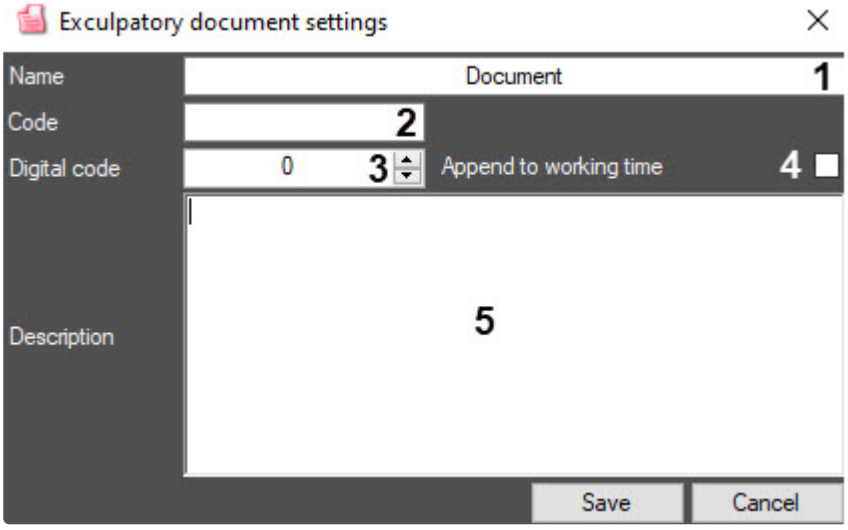
1. Go to the **Worktime** tab (**1**) of the **Access Manager** interface window (For more information about connecting the **Worktime** subsystem, see Configuring the Worktime subsystem).



2. Go to the **Documents** menu (**2**).
3. To create an exculpatory document, click the  button (**3**). To create an overtime document, click the  button (**4**).
   As a result, the window for editing a corresponding document will open.

Creating an exculpatory document

1. In the **Exculpatory document settings** window, in the **Name** field (**1**), enter the name of the document.

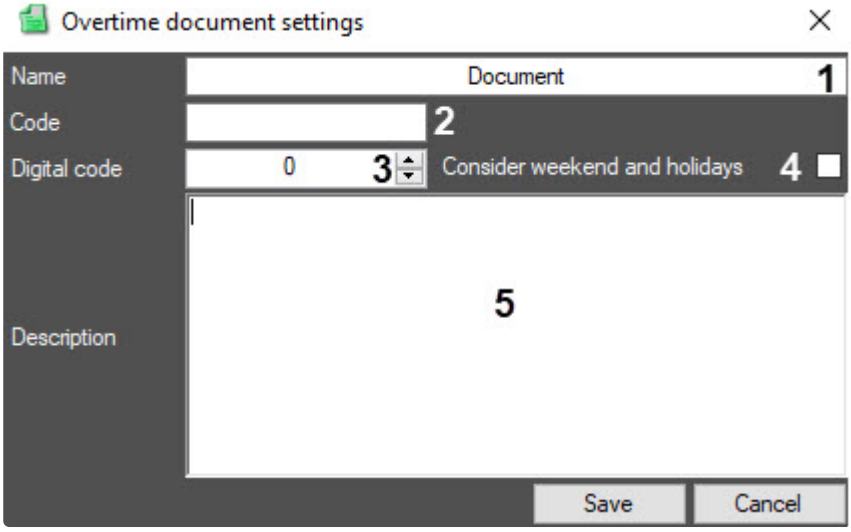


2. In the **Code** field (**2**), enter a letter code (or a second digital code) of the document.

3. In the **Digital code** field (**3**), enter a unique digital code of the document.
4. Set the **Append to working time** checkbox (**4**) to add the time of an employee absence from the workplace to the total working time.
5. In the **Description** field (**5**), add a comment to the document.
6. Click the **Save** button to save the exculpatory document.

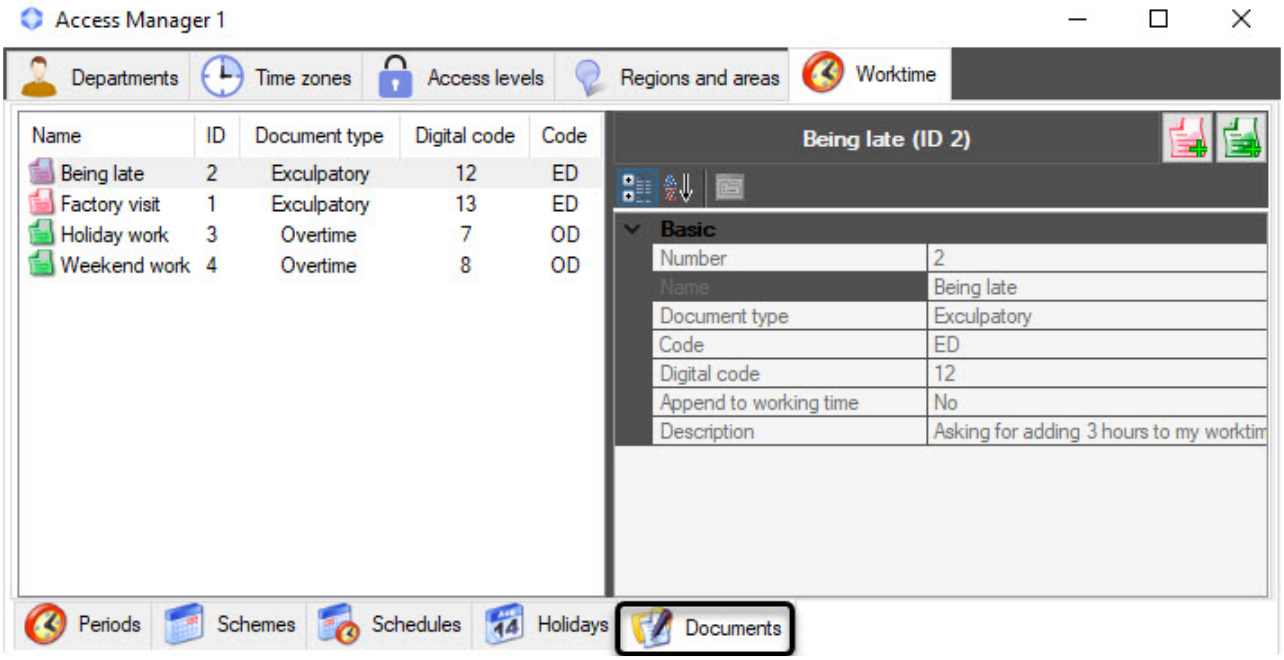
Creating an overtime document

1. In the **Overtime document settings** window, in the **Name** field (**1**), enter the name of the document.



2. In the **Code** field (**2**), enter a letter code (or a second digital code) of the document.
3. In the **Digital code** field (**3**), enter a unique digital code of the document.
4. Set the **Consider weekend and holidays** checkbox (**4**), so that when an employee works on weekend or holiday, this time is considered as working time.
5. In the **Description** field (**5**), add a comment to the document.
6. Click the **Save** button to save the overtime document.

After saving, the document will be displayed in the information field of the **Documents** menu on the **Worktime** tab of the **Access Manager** interface window.

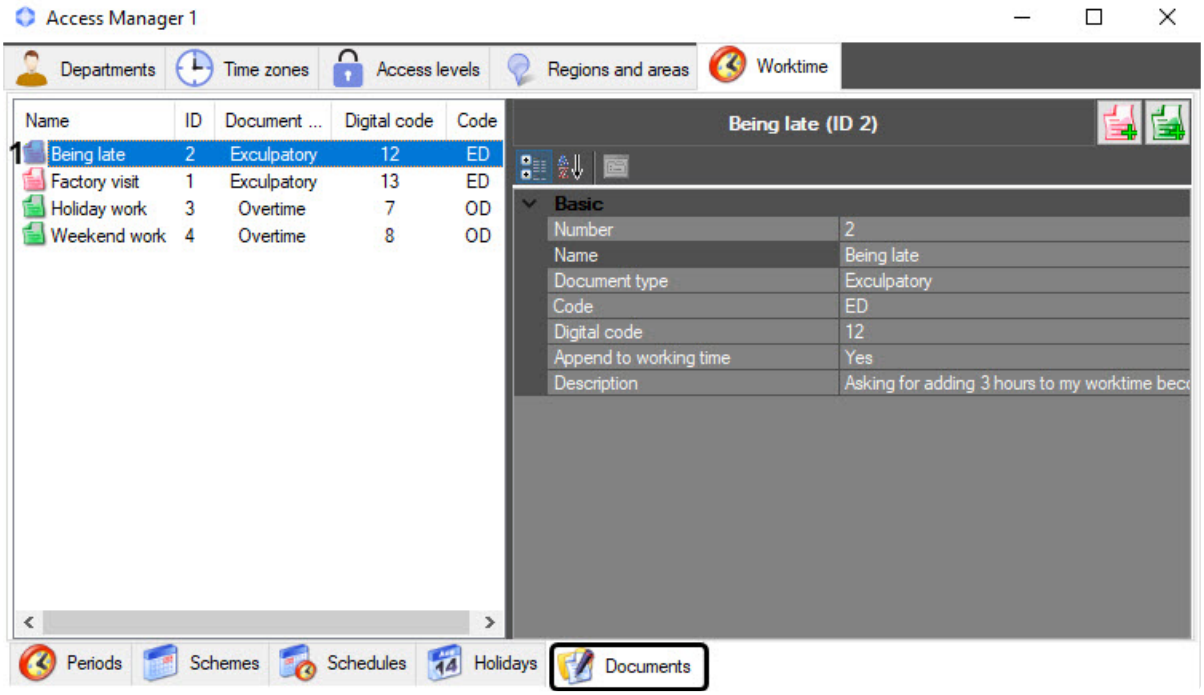


Creating documents is complete.

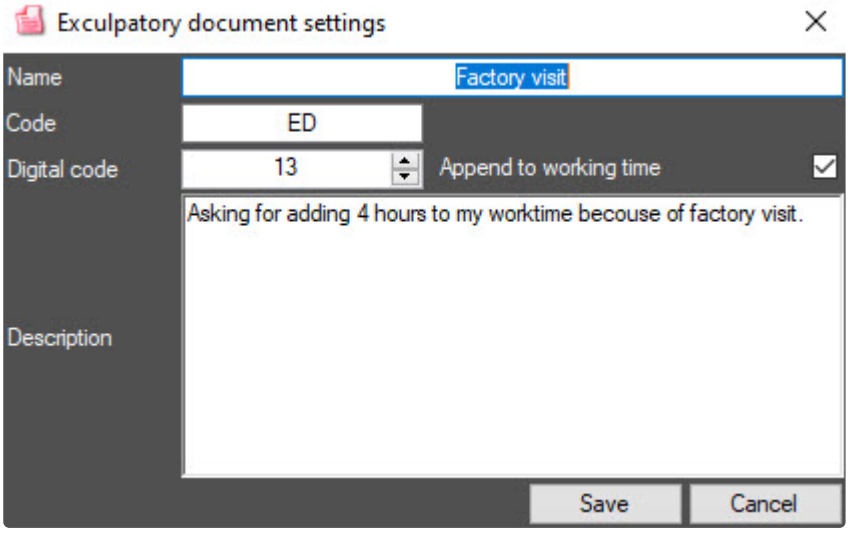
Editing documents

To edit an exculpatory and overtime document saved in the system, do the following:

1. Go to the **Documents** menu on the **Worktime** tab of the **Access Manager** interface window.



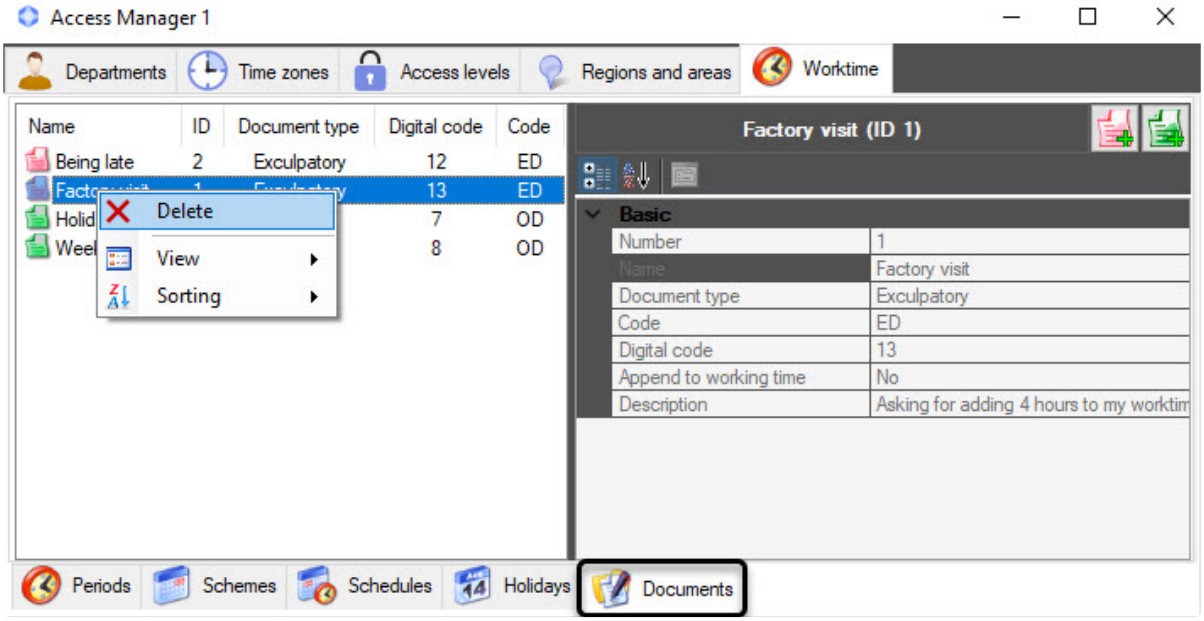
2. In the information field, double-click the document you want to change (**1**).
   As a result, the **Exculpatory document settings** window will open.



Deleting documents

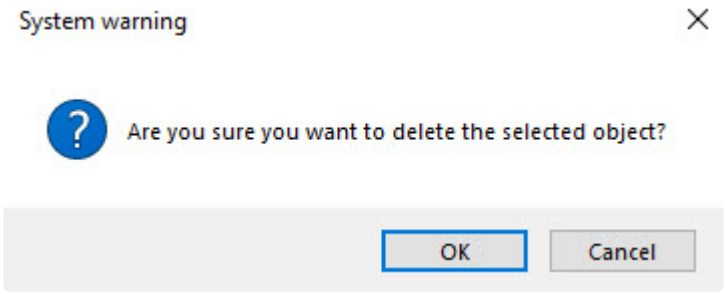
To delete an exculpatory and overtime document saved in the system, do the following:

1. Go to the **Documents** menu on the **Worktime** tab of the **Access Manager** interface window.



2. Right-click the document you want to delete to open the context menu.
3. Select **Delete** in the context menu.

4. Click the **OK** button in the system warning message.

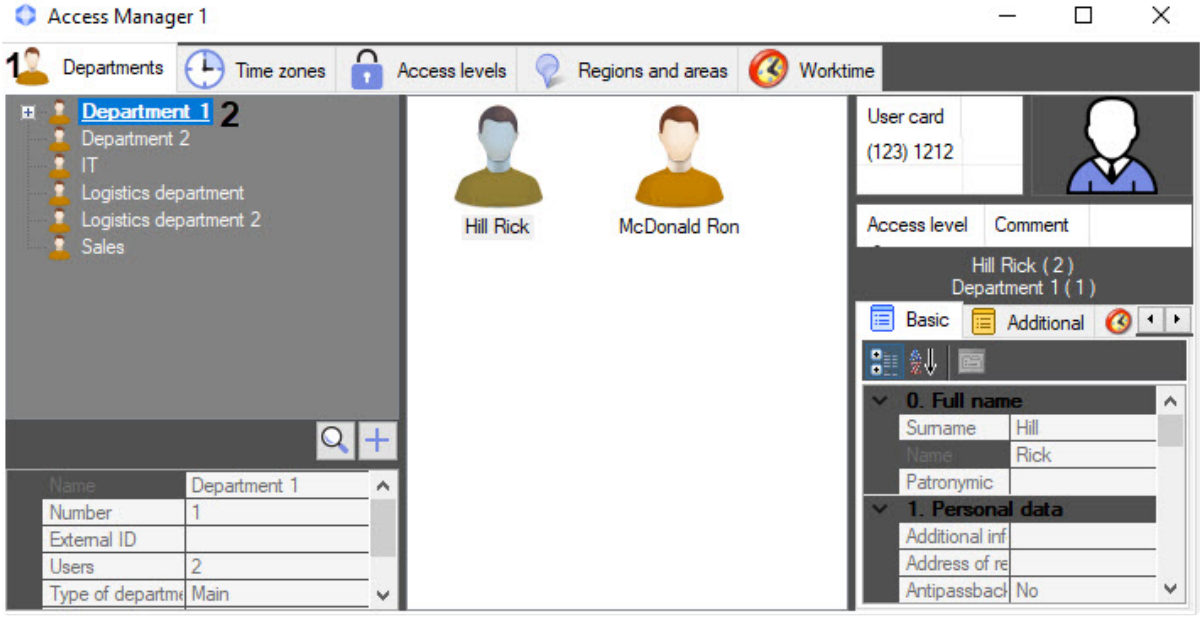


The document is deleted.

6.8.7 Assigning a work schedule to a department

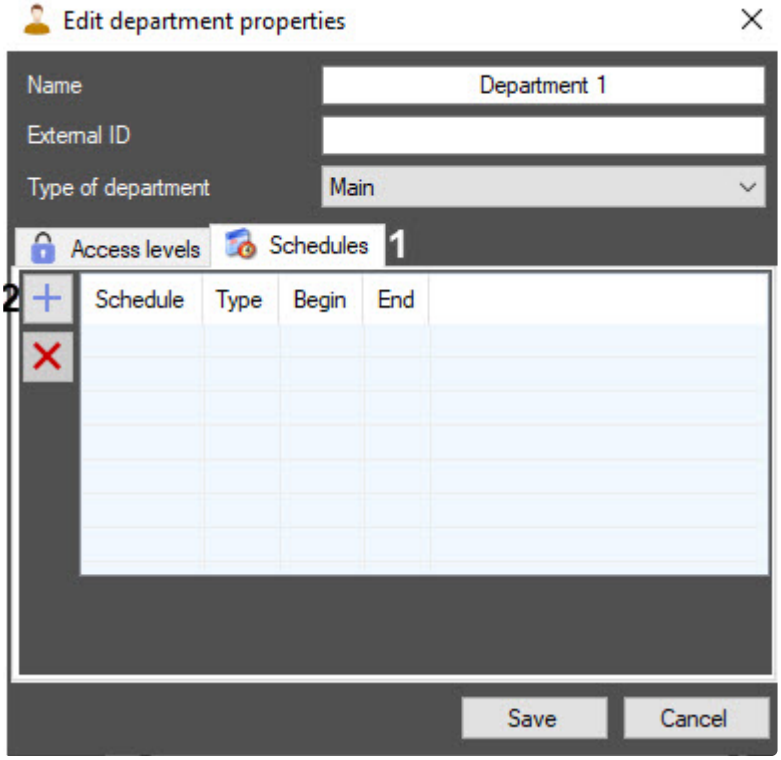
You can add a work schedule to a department in the *Time and Attendance* subsystem. To do this, do the following:

1. Go to the **Departments** tab (**1**) of the **Access Manager** interface window.

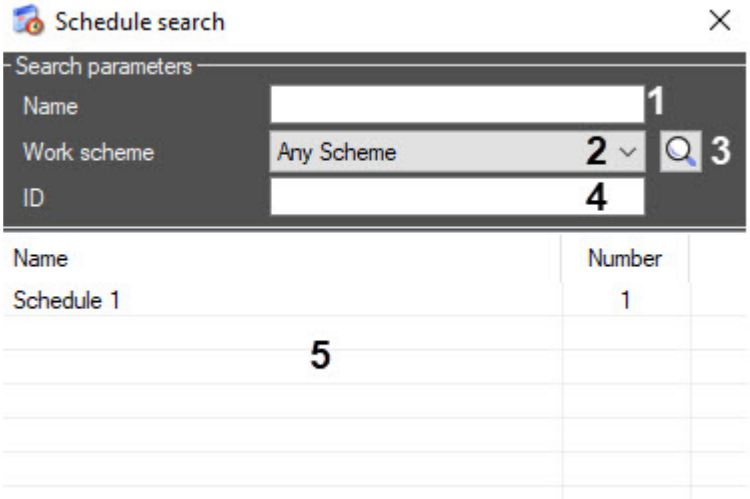


2. Double-click the required department (**2**) to open the **Edit department properties** window.

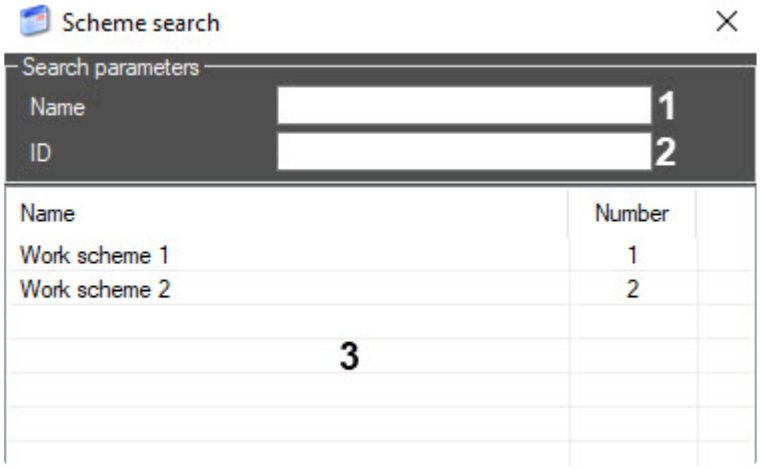
3. In the **Edit department properties** window, go to the **Schedules** tab (**1**).



4. To add a work schedule to a department, click the  button (**2**). As a result, the **Schedule search** window will open.

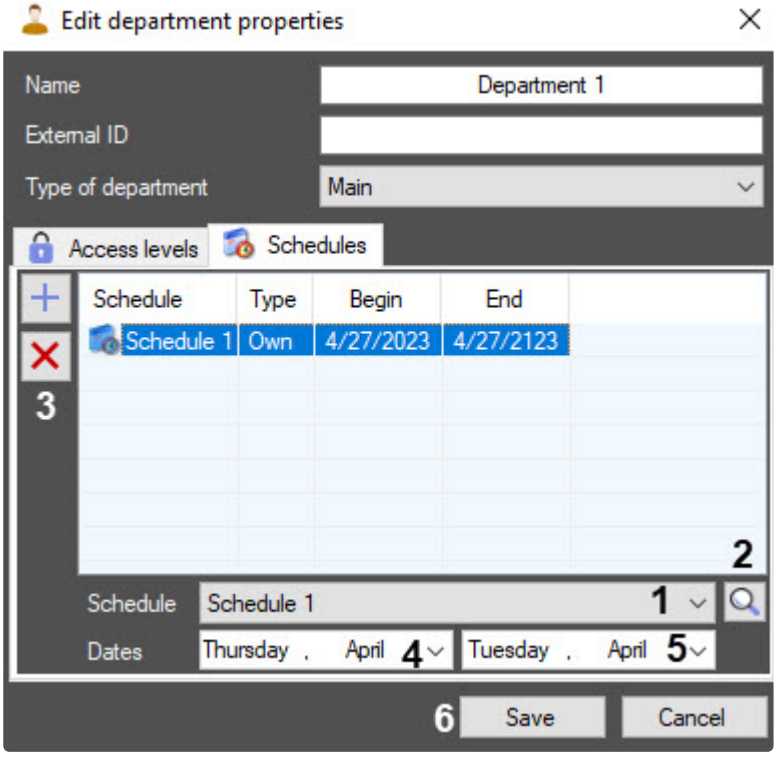


5. In the **Schedule search** window, double-click to select the required schedule in the area (**5**) or search by parameters:
   a. In the **Name** field (**1**), enter the work schedule name to search by it. The search starts with the first character.
   b. In the **ID** field (**4**), enter the work schedule ID to search by it.
   c. To search by the work scheme, in the **Work scheme** drop-down list (**2**), select the required work scheme or click the  button (**3**).
   As a result, the **Scheme search** window will open. Select the required scheme in the area (**3**) or search by parameters:



i. In the **Name** field (**1**), enter the work scheme name to search by it. The search starts with the first character.
ii. In the **ID** field (**2**), enter the work scheme ID to search by it.

6. In the **Edit department properties** window, from the **Schedule** drop-down list (**1**), select the required work schedule, or use the search button (**2**) to open the **Schedule search** window (see step 5).

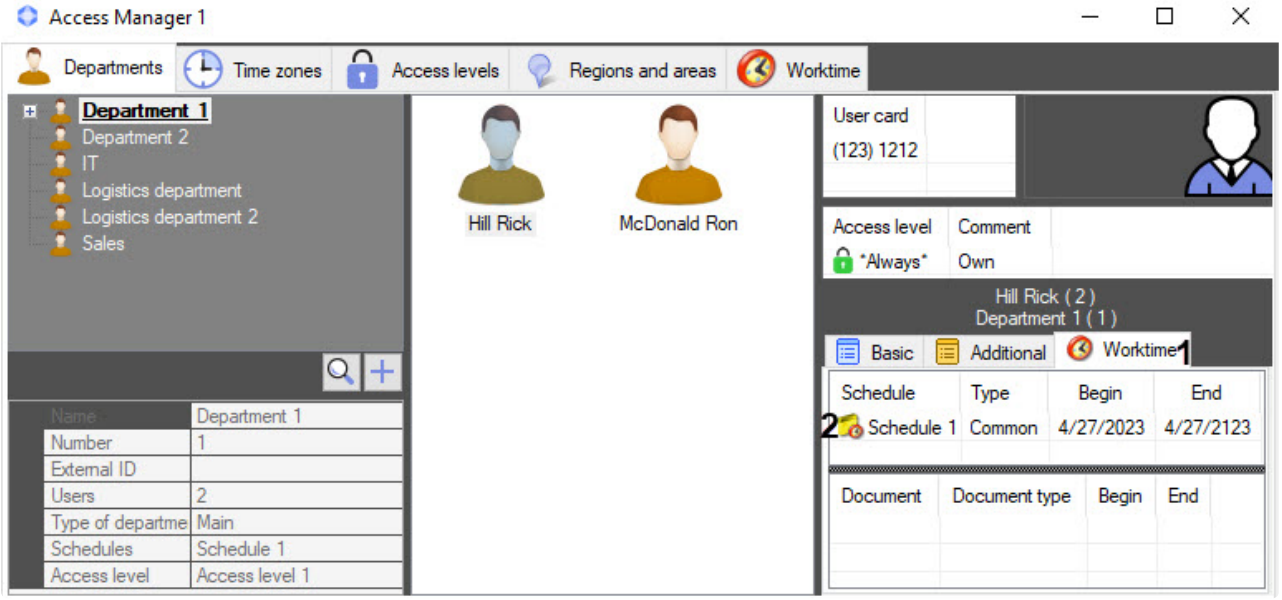


7. Open the calendar by clicking the button. Set the start date (**4**) and end date (**5**) of the work schedule. By default, the start date is the current date, and the end date is the current date plus 100 years.

> **Note**
>
> To delete a schedule, select it and click the button.

8. Click the **Save** button (**6**) to save the changes.

The work schedule for a department is added to the **Worktime** tab (**1**) of the properties panel of the departments to the schedules list (**2**).

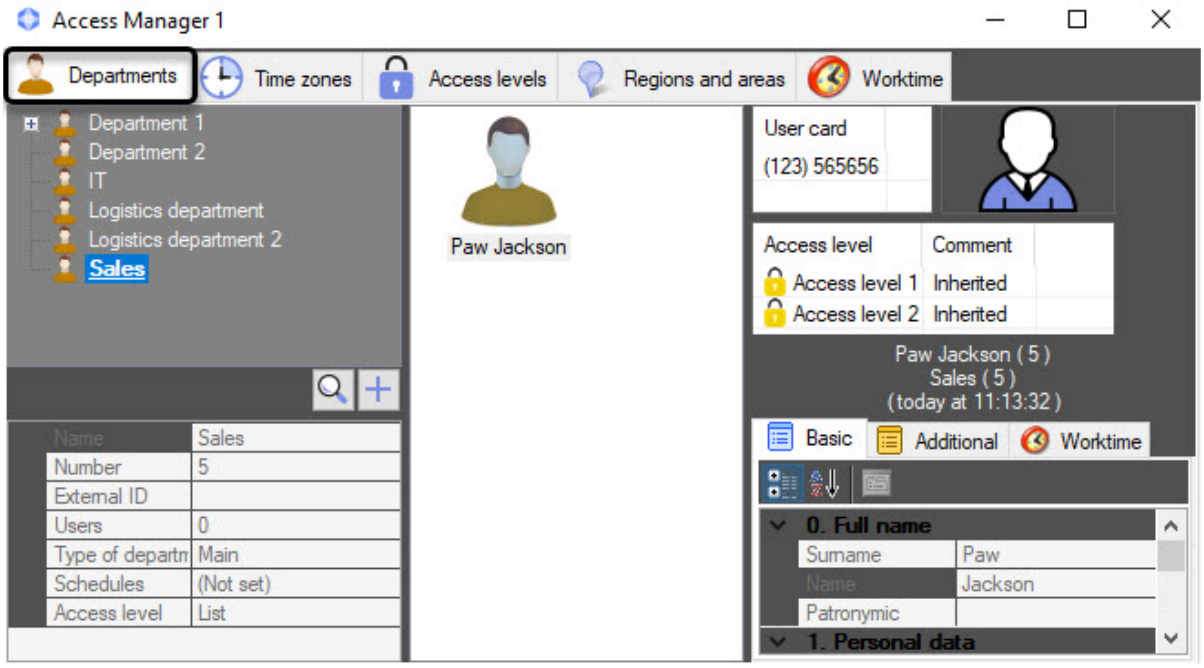


By default, the work schedule that is assigned to a department is extended to all users who belong to it. For employees who belong to child departments, the work schedule must be set additionally (see Assigning a work schedule to a user).

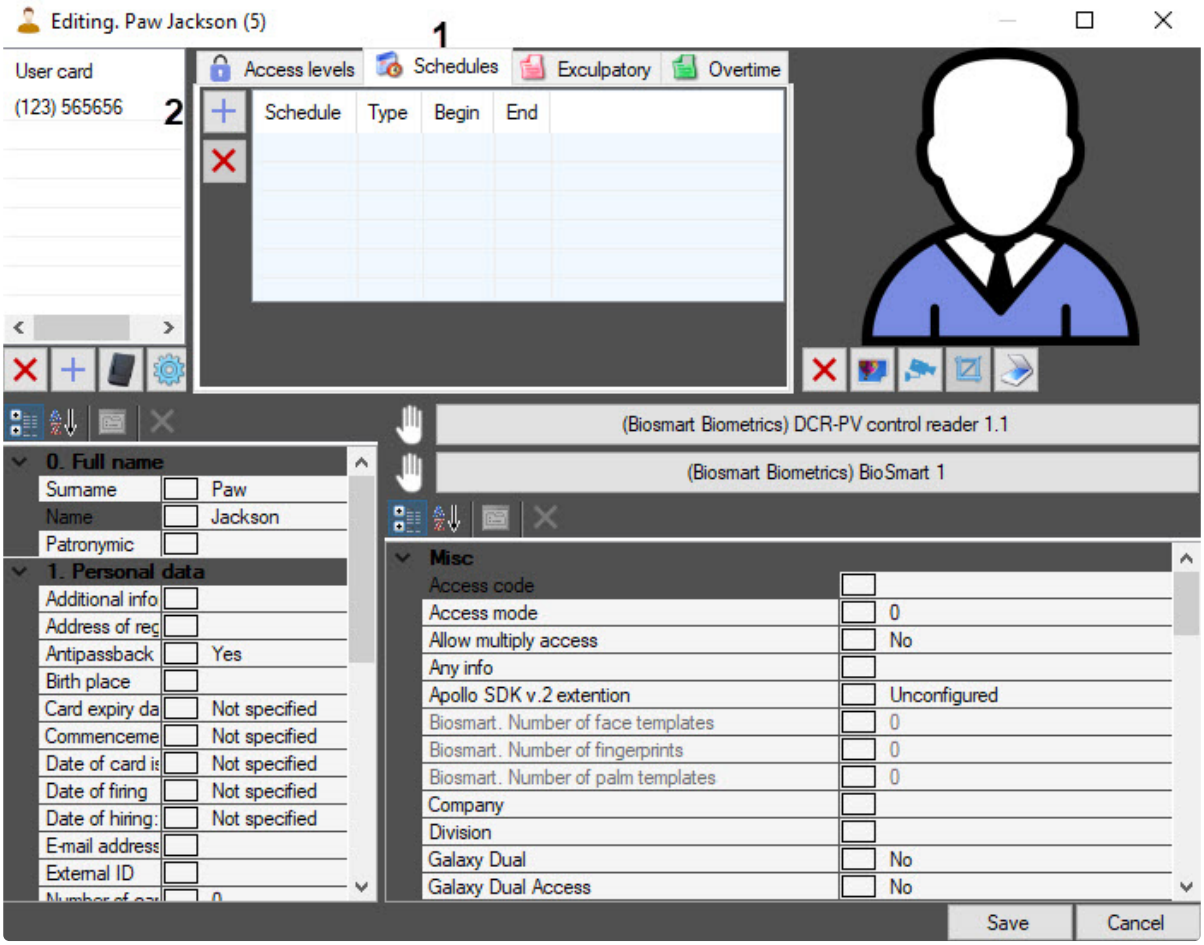
6.8.8 Assigning a work schedule to a user

The work schedule that is assigned to a department is extended to all users who belong to it. For employees who belong to child departments, the work schedule must be set additionally. To do this, do the following:

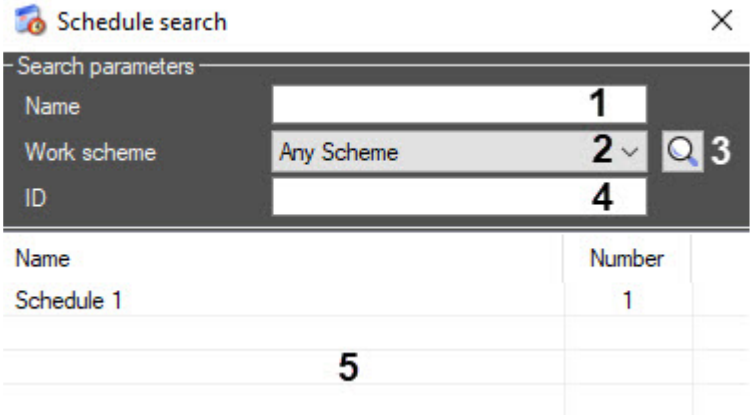
1. Go to the **Departments** tab of the **Access Manager** interface window.



2. Double-click the required user to open their editing window.

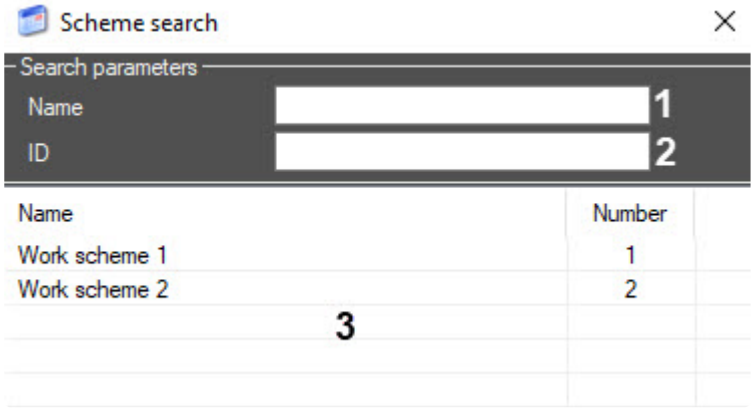


3. In the user editing window, go to the **Schedules** tab (**1**).
4. To add a work schedule, click the  button (**2**). As a result, the **Schedule search** window will open.



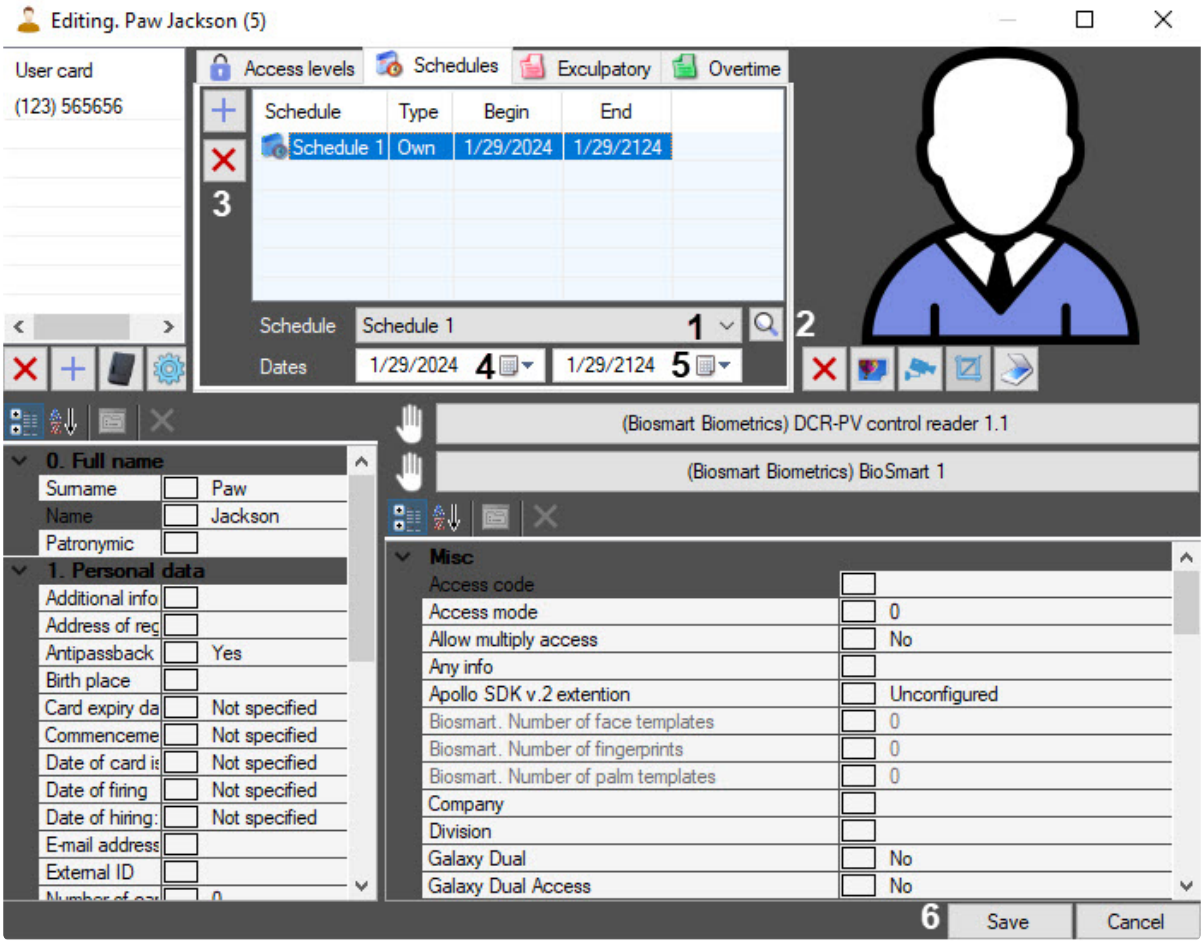
5. In the **Schedule search** window, double-click to select the required schedule in the area (**5**) or search by parameters:
    a. In the **Name** field (**1**), enter the work schedule name to search by it. The search starts with the first character.
    b. In the **ID** field (**4**), enter the work schedule ID to search by it.

c. To search by the work scheme, in the **Work scheme** drop-down list (**2**), select the required work scheme or click the button (**3**). As a result, the **Scheme search** window will open. Select the required scheme in the area (**3**) or search by parameters:



i. In the **Name** field (**1**), enter the work scheme name to search by it.
ii. In the **ID** field (**2**), enter the work scheme ID to search by it.

6. In the user editing window, from the **Schedule** drop-down list (**1**), select the work schedule, or click the button to open the **Schedule search** window (see steps 4-5).

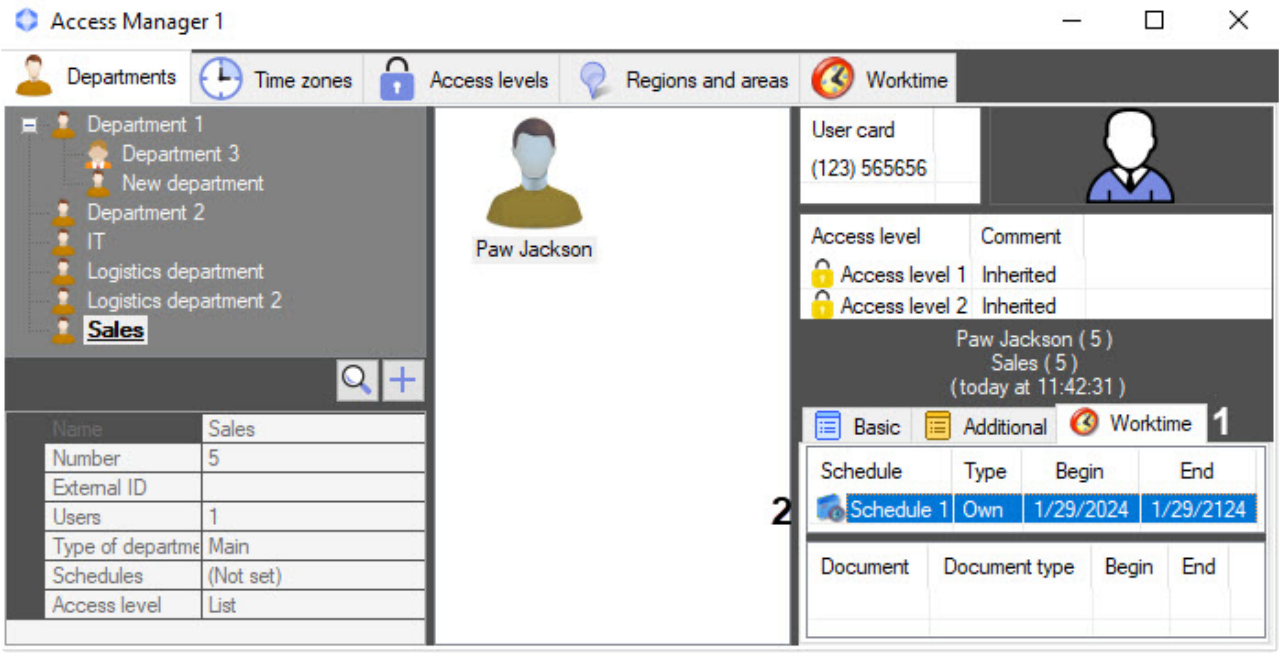


7. Open the calendar by clicking the button. Set the start date (**4**) and end date (**5**) of the work schedule. By default, the start date is the current date, and the end date is the current date plus 100 years.

> **Note**
>
> To delete a schedule, select it and click the button.

8. Click the **Save** button (**6**) to save the changes.

The work schedule for a user is added to the **Worktime** tab (**1**) of the properties panel of a user to the schedules list (**2**).

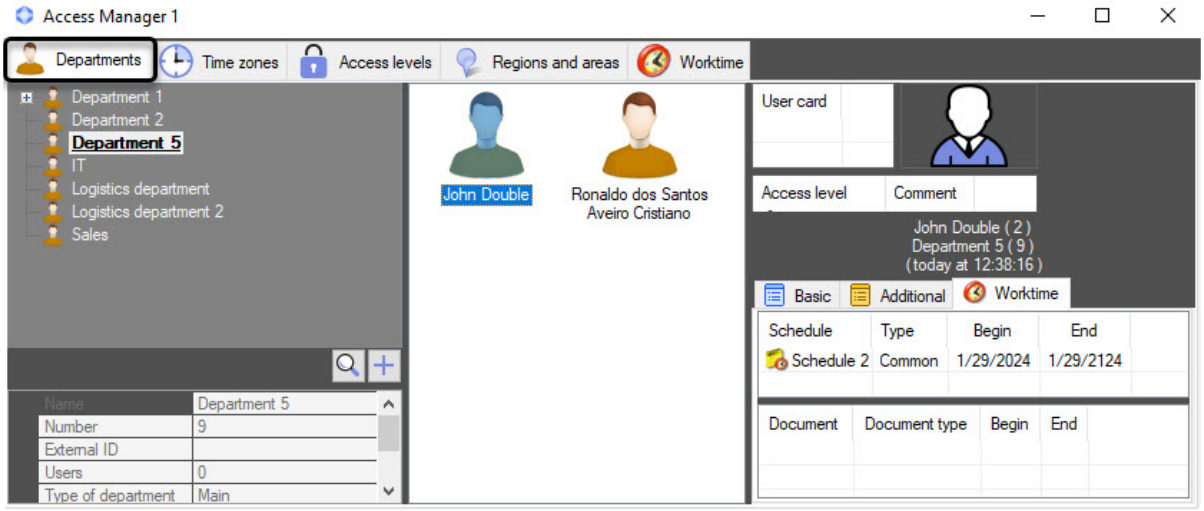


6.8.9 Assigning documents to a user

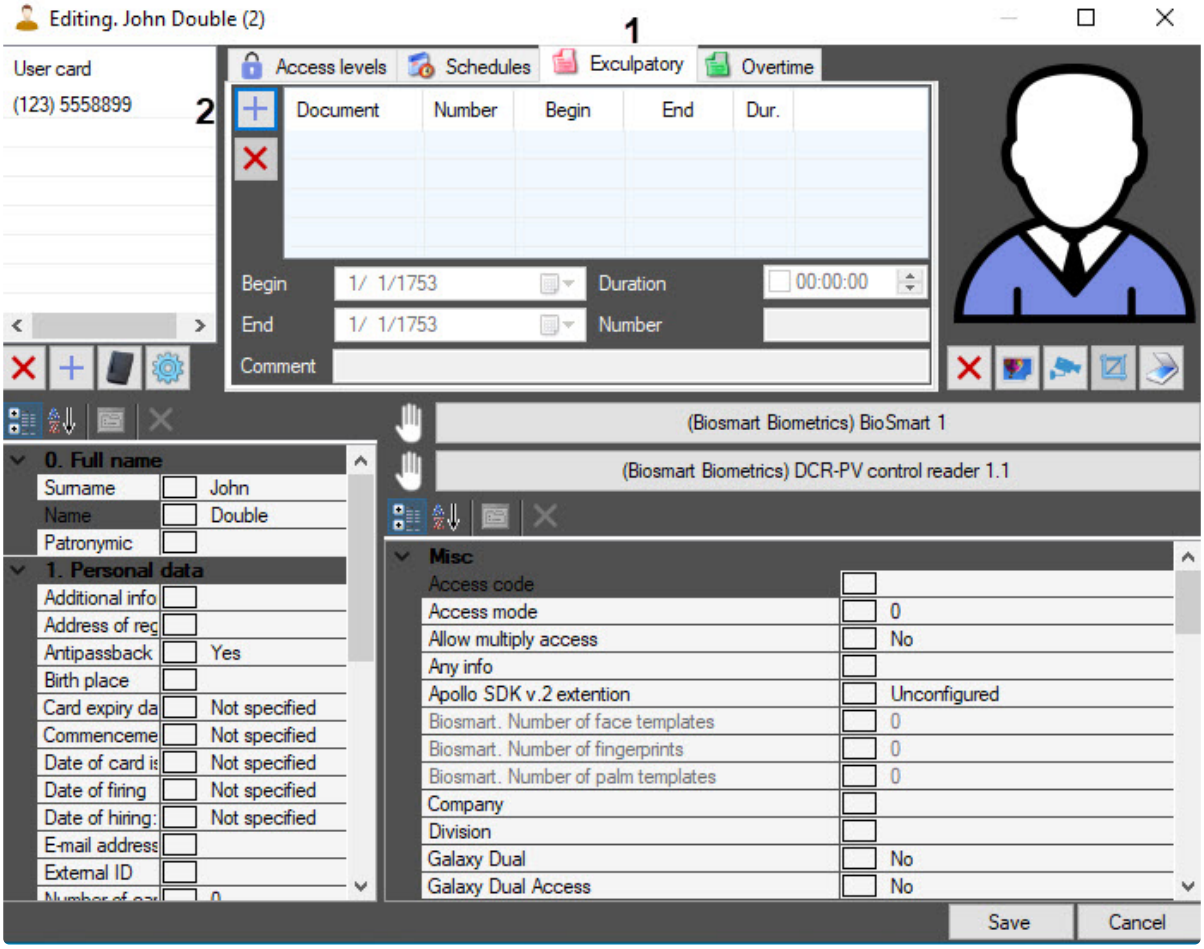
Assigning exculpatory documents to a user

In order for an exculpatory document to be taken into account in calculations and displayed in reports, it must be added to a user. To do this, do the following:

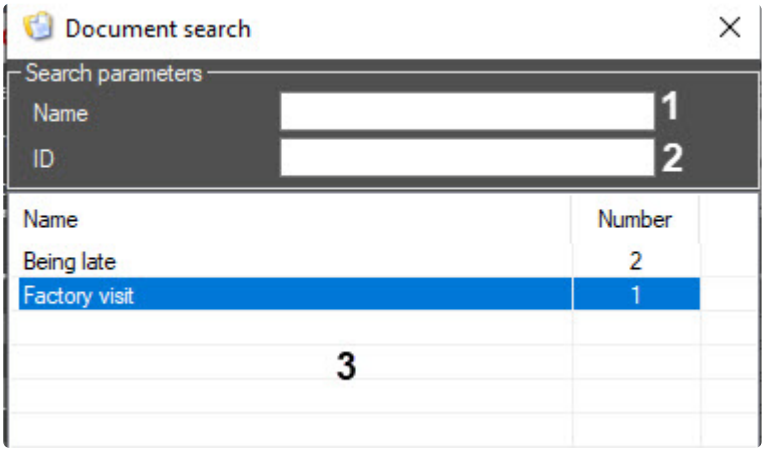
1. Go to the **Departments** tab of the **Access Manager** interface window.



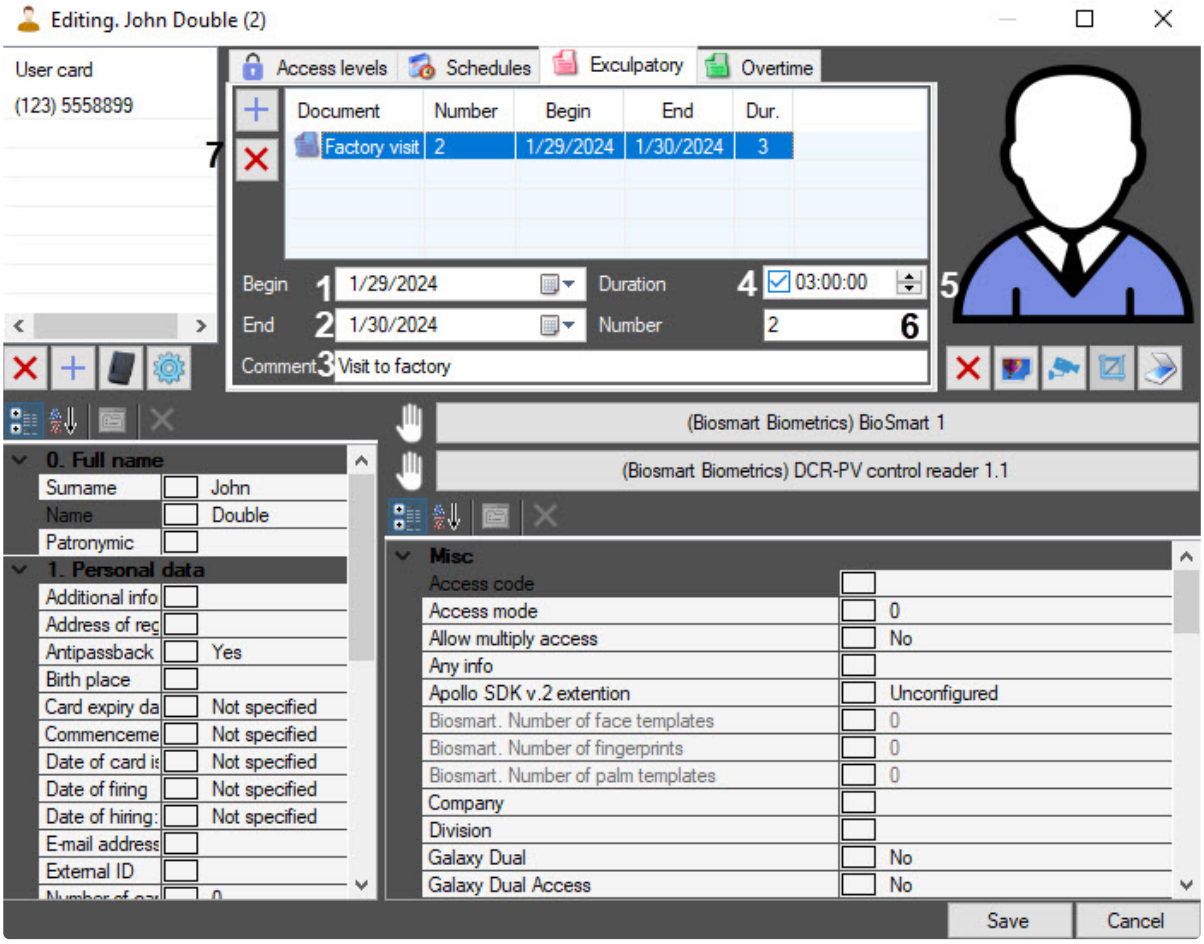
2. Double-click to open the editing window of the user to whom the document is added.



3. In the editing window, go to the **Exculpatory** tab (**1**).
4. To add an exculpatory document, click the  button (**2**). As a result, the **Document search** window will open.



5. Select the required document from the list in the area (**3**) or search by parameters:
   a. In the **Name** field (**1**), enter the document name to search by it. The search starts with the first character.
   b. In the **ID** field (**2**), enter the document ID to search by it.
6. For the added exculpatory document:



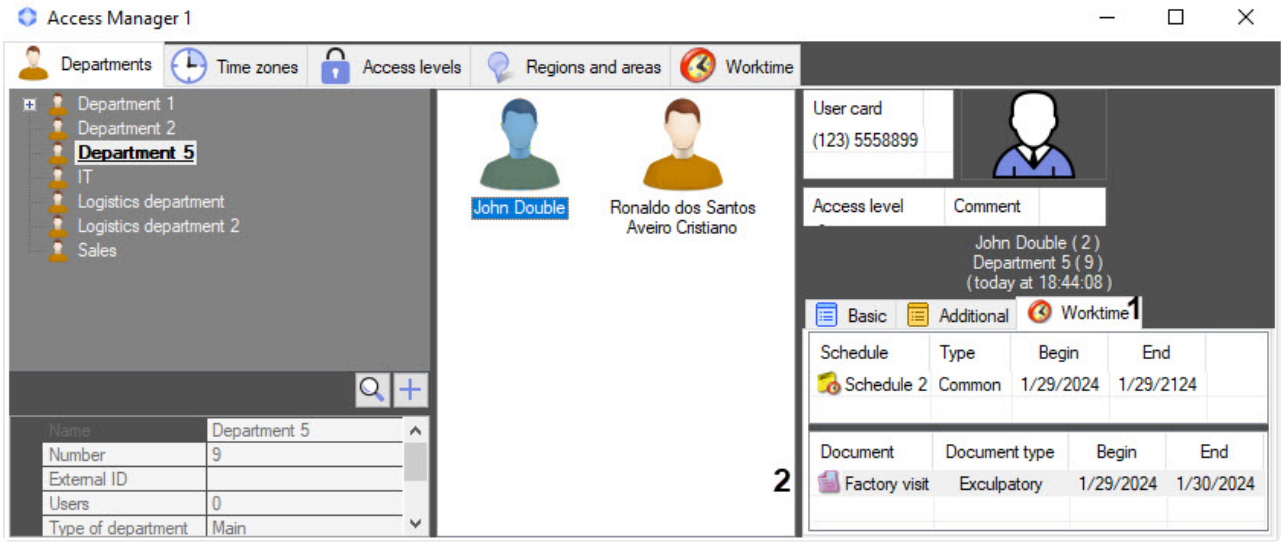
   a. In the **Begin** (**1**) and **End** (**2**) fields, specify the begin date and end date of the exculpatory document, using the calendar that opens by clicking the button.
   b. If necessary, in the **Comment** field (**3**), enter a comment.

c. Set the **Duration** checkbox (**4**), specifying the time interval in the HH:MM:SS format (**5**), so that this time is also counted as working time.
d. In the **Number** field (**6**), enter the ID of the document.

> **Note**
>
> To delete a document, click the button (**7**).

7. Click the **Save** button to save the changes.

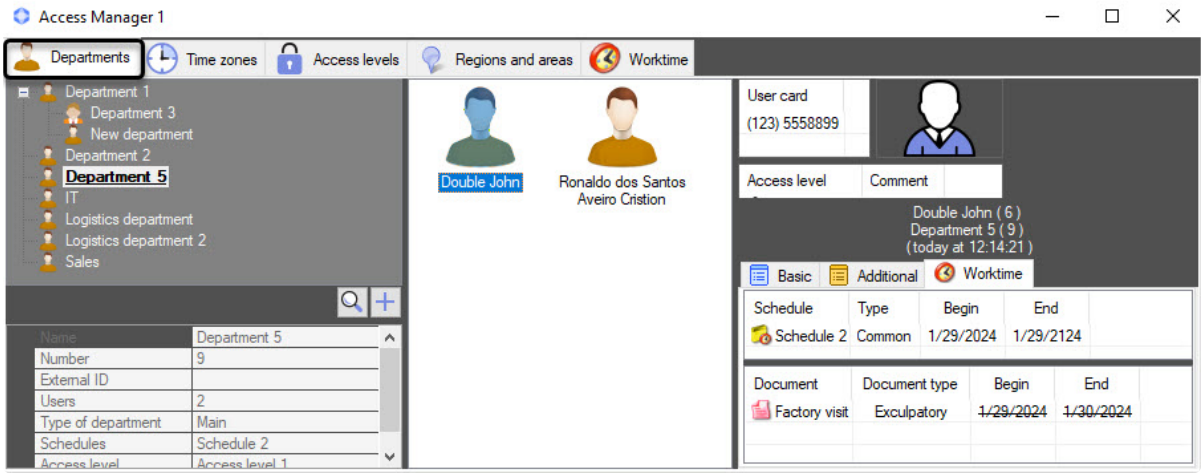
The user exculpatory document is added to the **Worktime** tab (**1**) of the user properties panel to the documents list (**2**).



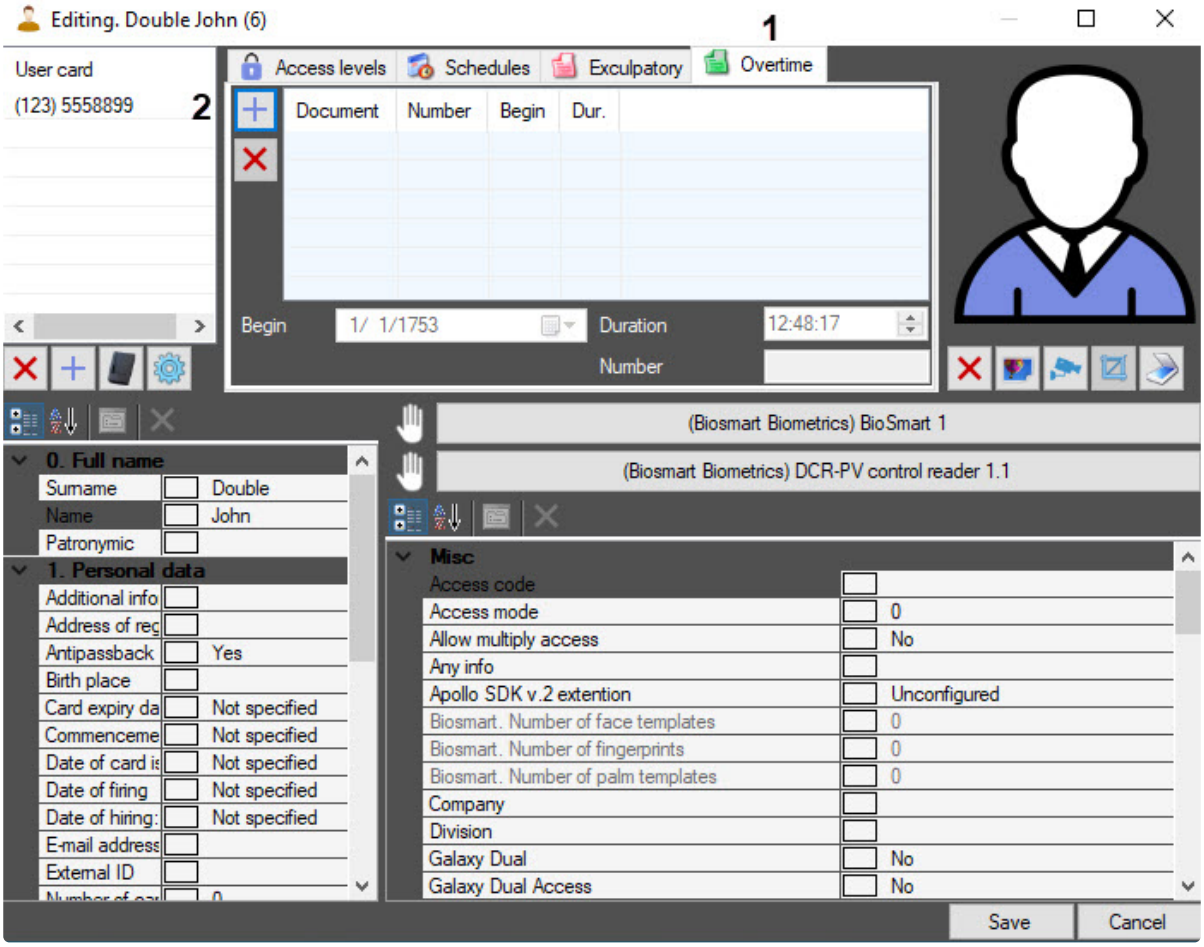
Assigning overtime documents to a user

In order for an overtime document to be taken into account in calculations and displayed in reports, it must be added to a user. To do this, do the following:

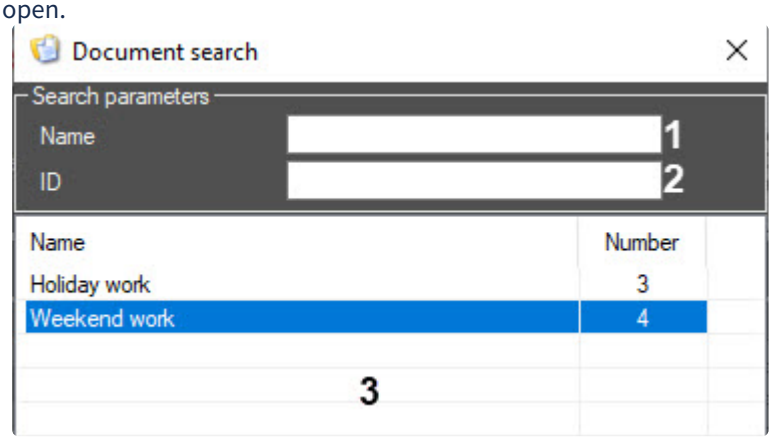
1. Go to the **Departments** tab of the **Access Manager** interface window.



2. Double-click to open the editing window of the user to whom the document is added.

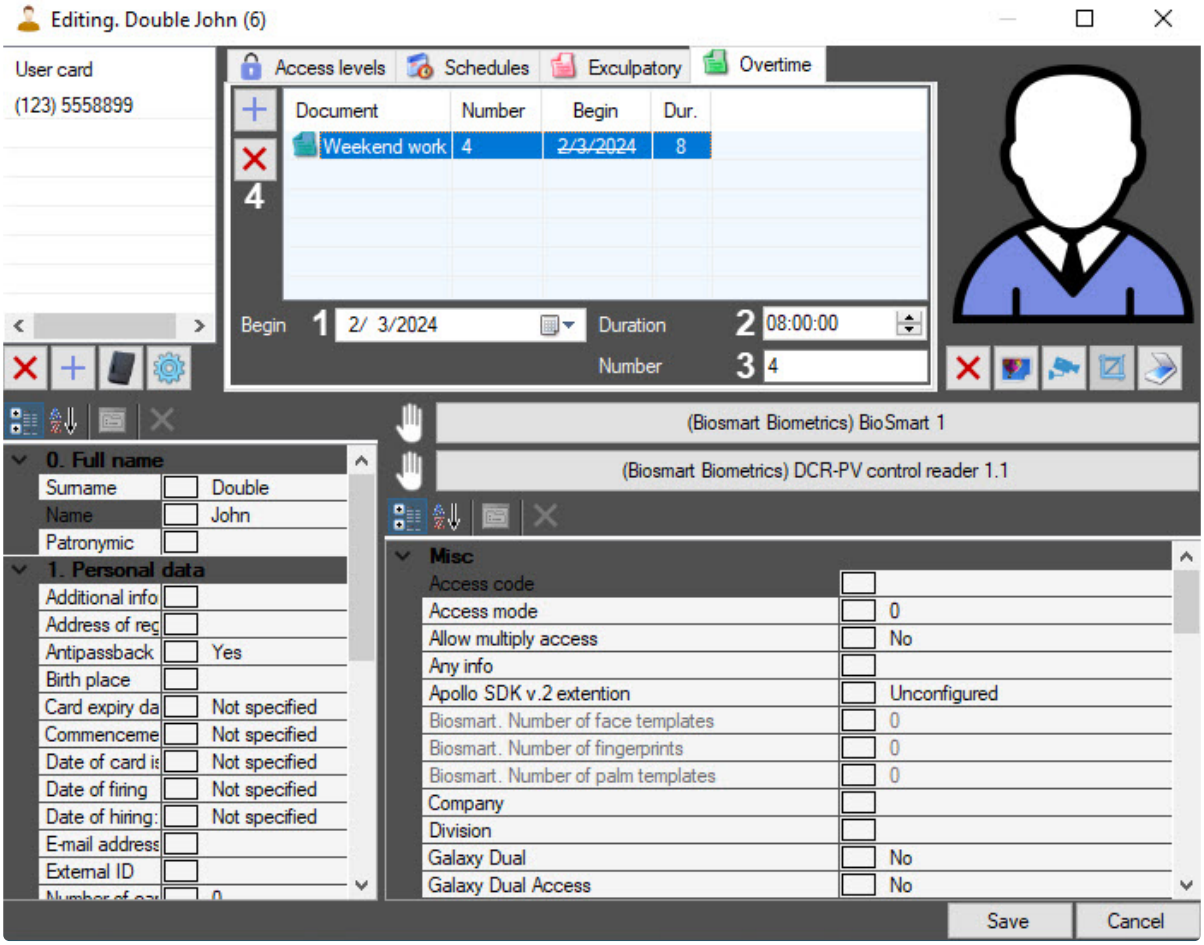


3. In the editing window, go to the **Overtime** tab (**1**).
4. To add an overtime document, click the button (**2**). As a result, the **Document search** window will open.



5. Select the required document from the list in the area (**3**) or search by parameters:
   a. In the **Name** field (**1**), enter the document name to search by it. The search starts with the first character.
   b. In the **ID** field (**2**), enter the document ID to search by it.

6. For the added overtime document:

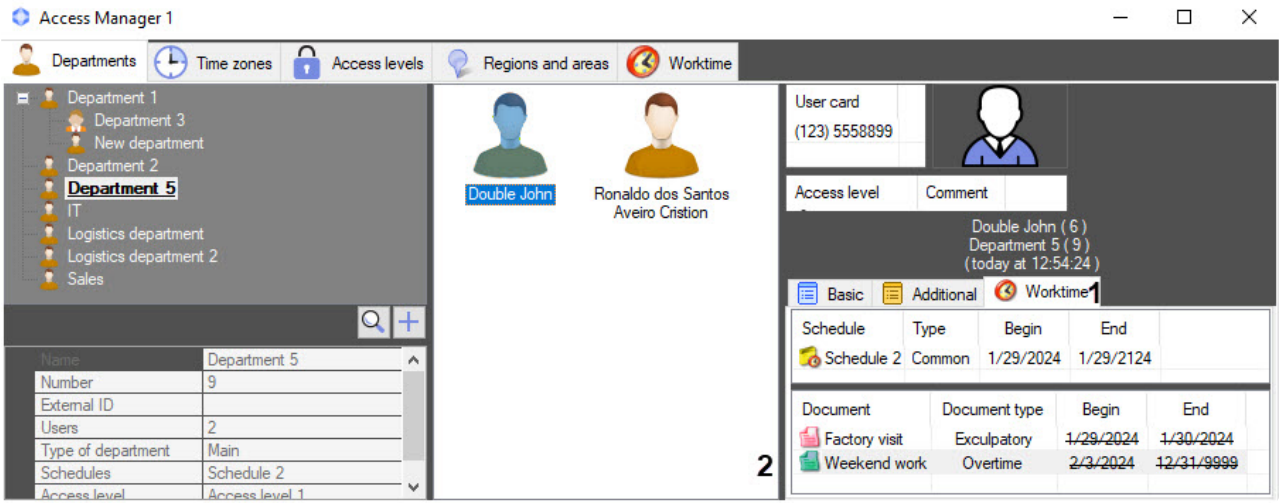


   a. In the **Begin** field (**1**), specify the begin date of the overtime document, using the calendar that opens by clicking the button.
   b. In the **Duration** field (**2**), specifying the time interval in the HH:MM:SS format, so that this time is also counted as working time.
   c. In the **Number** field (**3**), enter the ID of the document.

> **Note**
>
> To delete a document, click the button (**4**).

7. Click the **Save** button to save the changes.

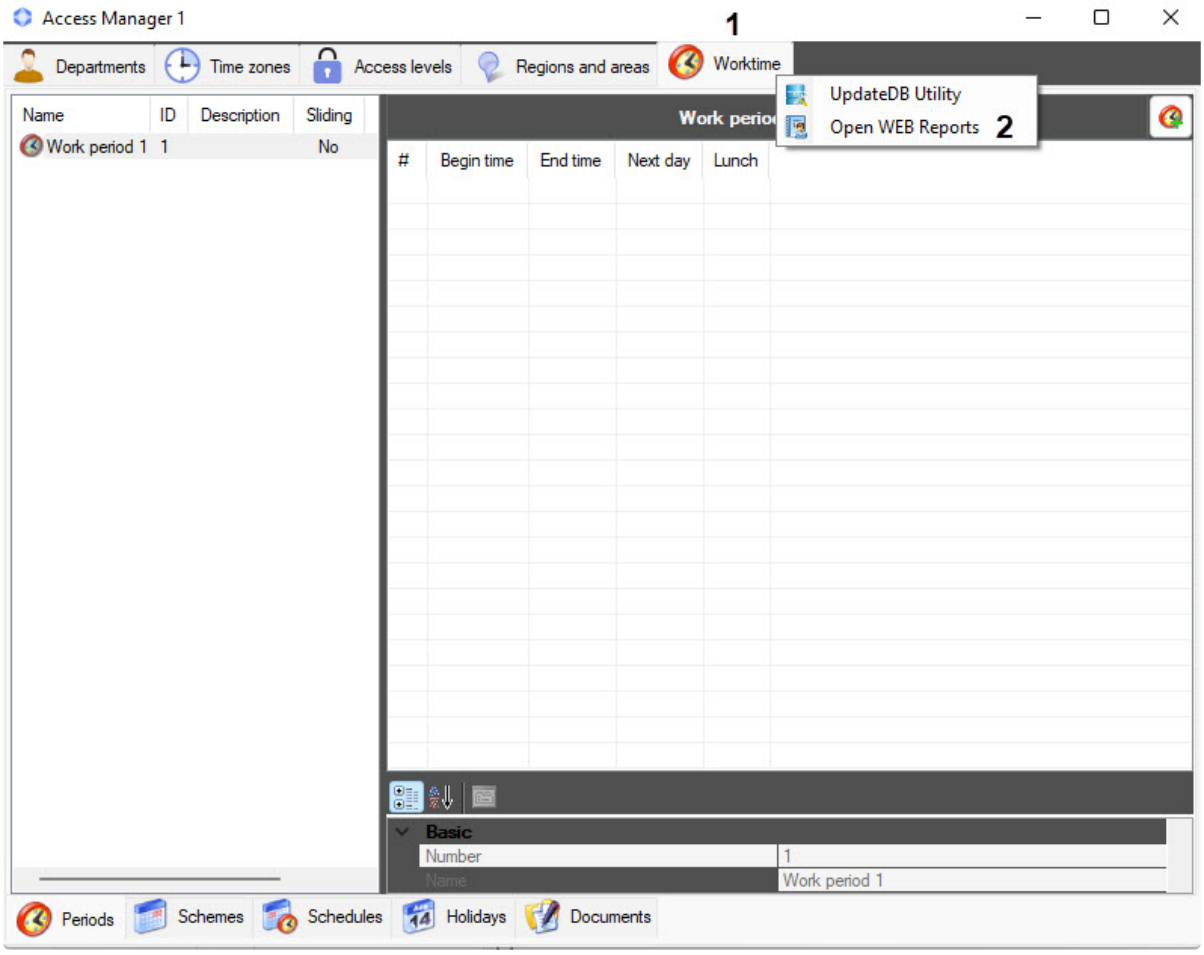
The user overtime document is added to the **Worktime** tab (**1**) of the user properties panel to the documents list (**2**).



6.8.10 Working with the reports

In the *Worktime* subsystem, you can run the *WEB Report System* (if it is installed). For this, do the following:

1. Go to the **Worktime** tab (**1**).



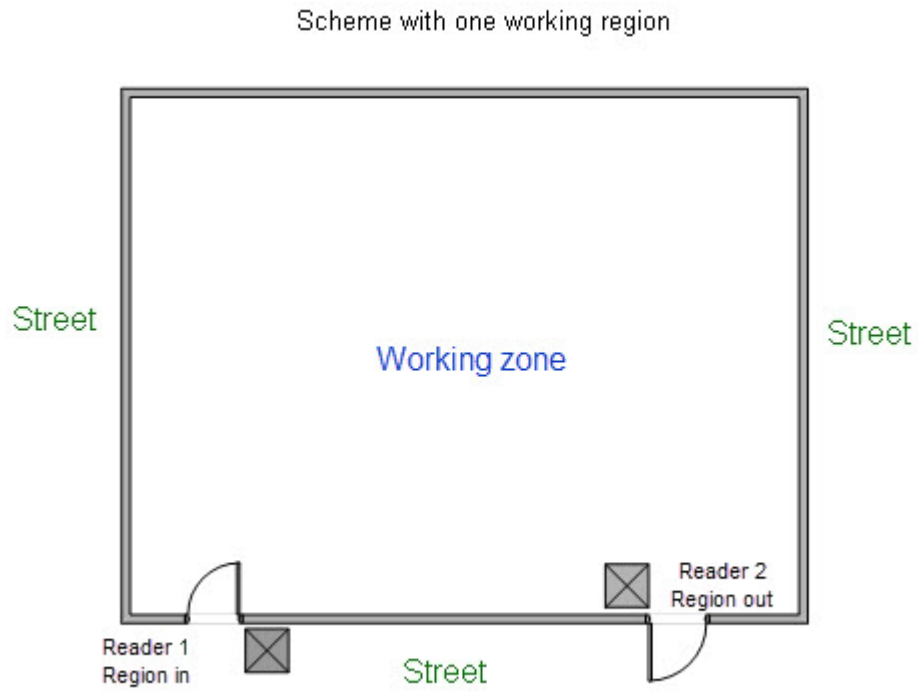
2. Right-click to open the context menu of the tab.

3. Select the **Open WEB Reports** menu item (**2**). For the information about configuring and working with the system, see WEB Report System PSIM. User Guide.
   As a result, you will go to the link specified in the **Report Server address** field when configuring the **Worktime support** object (see Configuring the Worktime subsystem).

> **Note**
>
> If many events are stored in the *ACFA PSIM* database, the performance of the *WEB Report System* may be low when generating the Worktime and general protocol reports. To improve the performance of the subsystem, it is recommended to use the **Remote Protocol Connector** utility (see Appendix 3. Working with the Remote Protocol Connector utility).

6.8.11 Appendix 1. Configuring Regions for the ACS Readers to work with the Time and Attendance subsystem

There is a scheme with one working region.



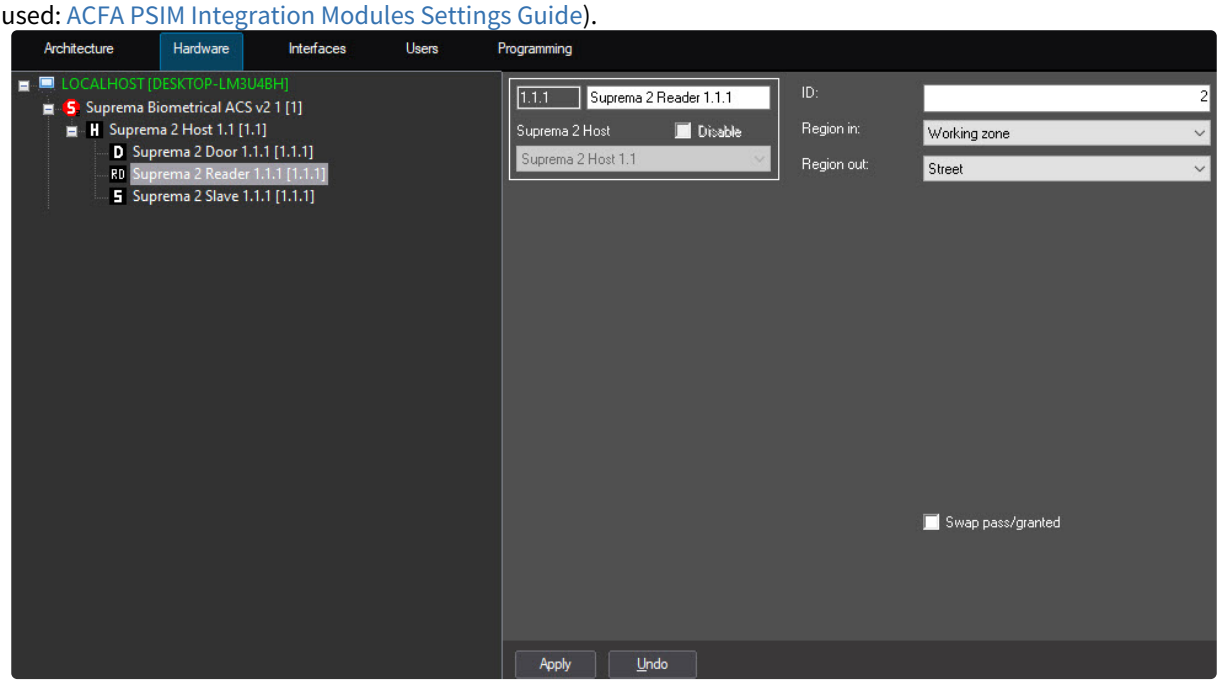
In this case, the following settings must be made in *ACFA PSIM*:

1. Create two **Region** objects corresponding to the working zone and street. The **Region** objects are created on the basis of the **Area** object on the **Programming** tab of the **System settings** dialog box. Let's call them

Street and Working zone.

> **Note**
>
> You can also create regions using the *Access Manager* module (see Creating, editing and deleting Area and Region objects).

2. Configure the readers of the used ACS by specifying the created **Region** objects in the **Region in** and **Region out** fields in accordance with the installation place of the configured reader: at the entrance or exit of the room (for more information on assigning a region to readers, see the manual for the integration module used: ACFA PSIM Integration Modules Settings Guide).

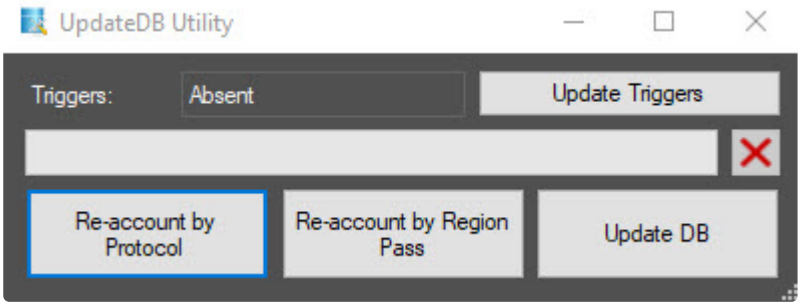


6.8.12 Appendix 2. The UpdateDB Utility

The UpdateDB Utility is used to update and re-account the *Axxon PSIM* database after the installation of the *Time and Attendance* subsystem that is a part of the *Access Manager* module. During the *Axxon PSIM* database update, using the UpdateDB Utility, the following operations are performed:

- the stored procedures and triggers are installed;
- the tables necessary for the correct operation of the *Time and Attendance* subsystem are created and updated.

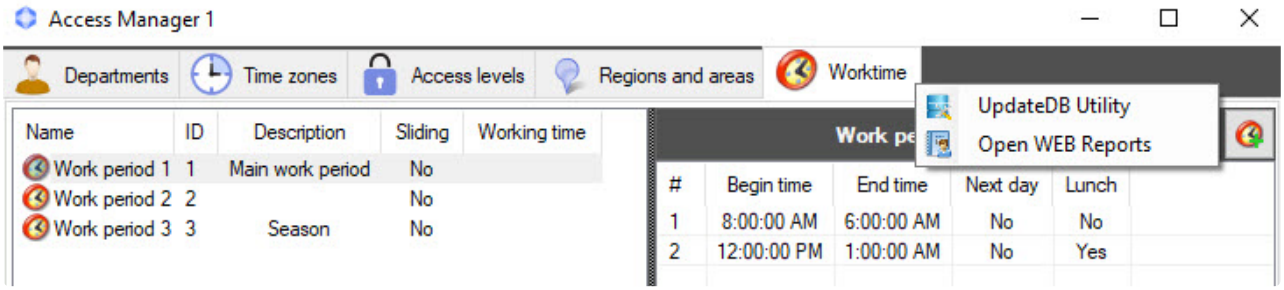
The UpdateDB Utility has the following interface:



Starting and working with the UpdateDB Utility

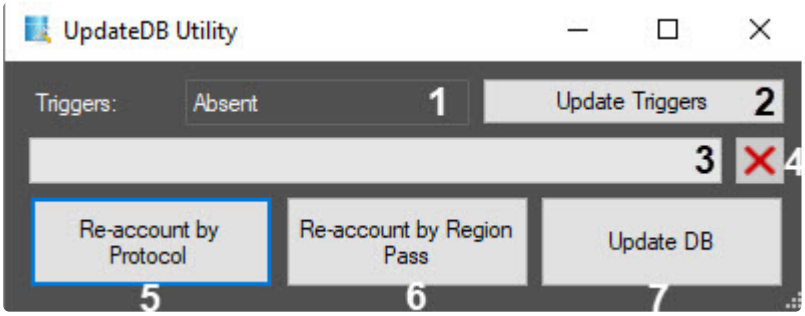
Starting the UpdateDB Utility

You can start the UpdateDB Utility by right-clicking the **Worktime** tab in the **Access Manager** interface window.



As a result, the **UpdateDB Utility** window will open.

Working with the UpdateDB Utility



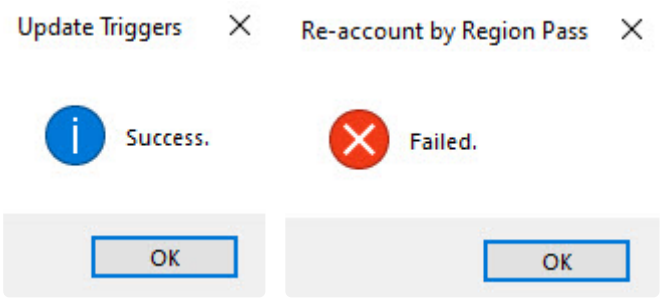
You can work with the UpdateDB Utility as follows:

1. The **Triggers** area (**1**) displays triggers. If necessary, e.g., when upgrading to a newer version of *ACFA PSIM*, you must update the triggers by clicking the **Update Triggers** button (**2**). The progress will be displayed in the area (**3**). To cancel the action, click the button (**4**).
2. To update the database, click the **Update DB** button (**7**). Both triggers and stored procedures, required for the correct operation of the subsystem, will be updated. You need to do this once when connecting the *Time and Attendance* subsystem. The progress will be displayed in the area (**3**). To cancel the action, click the button (**4**).
3. If it is necessary to take into account the passes made before configuring the *Time and Attendance* subsystem, after starting the*Time and Attendance* subsystem in *Axxon PSIM*, re-account the database using

the **Re-account by Protocol** (**5**) and **Re-account by Region Pass** (**6**) buttons. The progress will be displayed in the area (**3**). To cancel the action, click the button (**4**).

> **Attention!**
>
> It is strongly not recommended to use the re-account buttons without recommendations of AxxonSoft technical support specialists!
> When you click the **Re-account by Protocol** button (**5**), the dbo.Region_Enter_Exit table is completely cleared and filled out again depending on the pass information currently contained in the dbo.protocol table.
> When you click the **Re-account by Region Pass** button (**6**), the dbo.Region_Enter_Exit table is completely cleared and filled out again depending on the pass information currently contained in the dbo.Region_pass table.
> **Attention!** Because of the different depth of the event archive of these tables, there is a risk of data loss when clearing the dbo.Region_Enter_Exit table.

4. If the update (re-account) succeeds or fails, the corresponding message appears: about success in the first case and failure in the second case:



5. Click the **OK** button in the message window.
6. To close the **UpdateDB Utility** window, click the button in the top right corner of the form.

Working with the UpdateDB Utility is complete.

> **Note**
>
> By default, only the passes that were made after the installation and configuration of the *Time and Attendance* subsystem are taken into account.

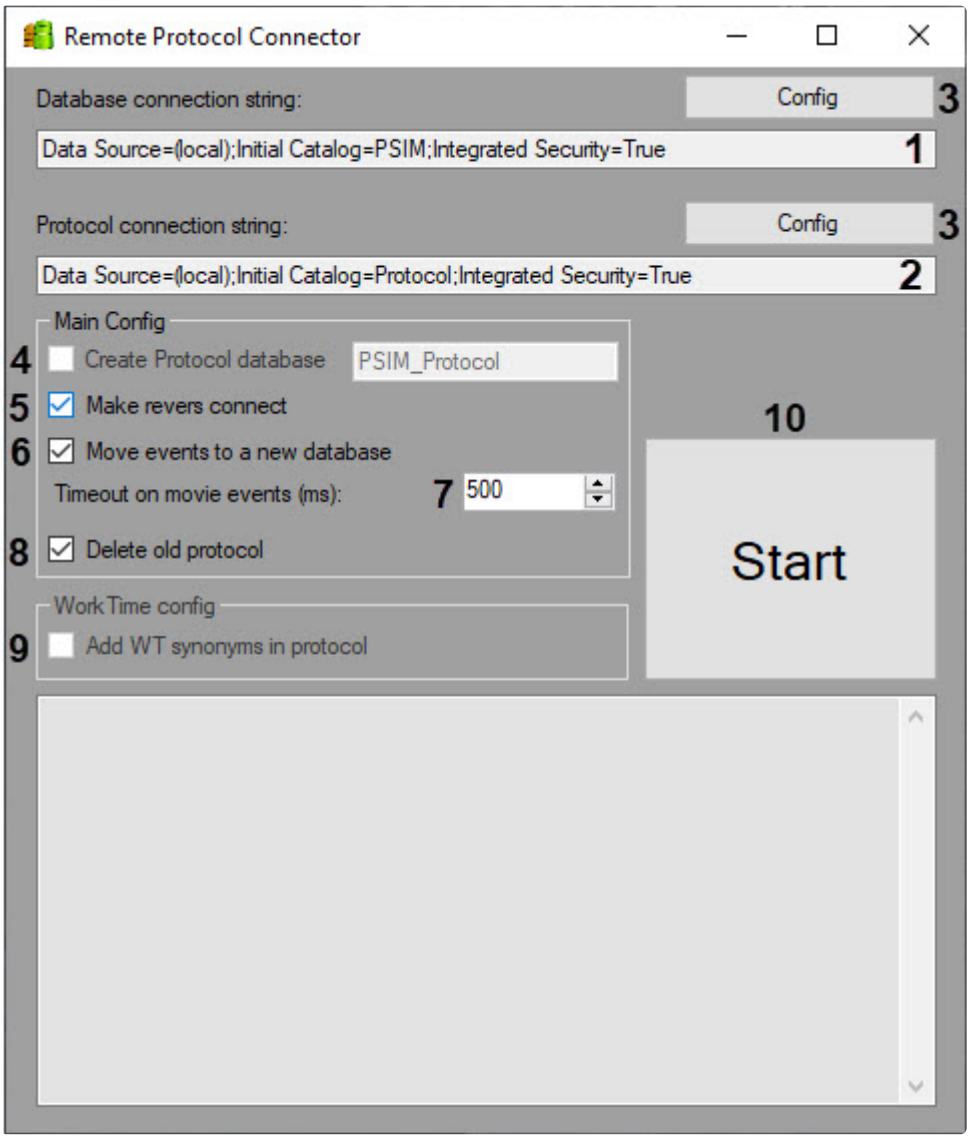
6.8.13 Appendix 3. Working with the Remote Protocol Connector utility

The **Remote Protocol Connector** utility is used to improve the system performance by optimizing the work with the database when generating general and Worktime reports by event protocol, both in the *Time and Attendance* subsystem and in the Axxon PSIM WEB Report System.

The utility enables the following actions:

1. Migrate the events protocol into a separate database.
2. Create a protocol database.
3. Transfer data from the old protocol table to a new one in a separate database.
4. Delete the old protocol table.
5. Create synonyms for a new protocol database, which will enable the work of the *Time and Attendance* subsystem.

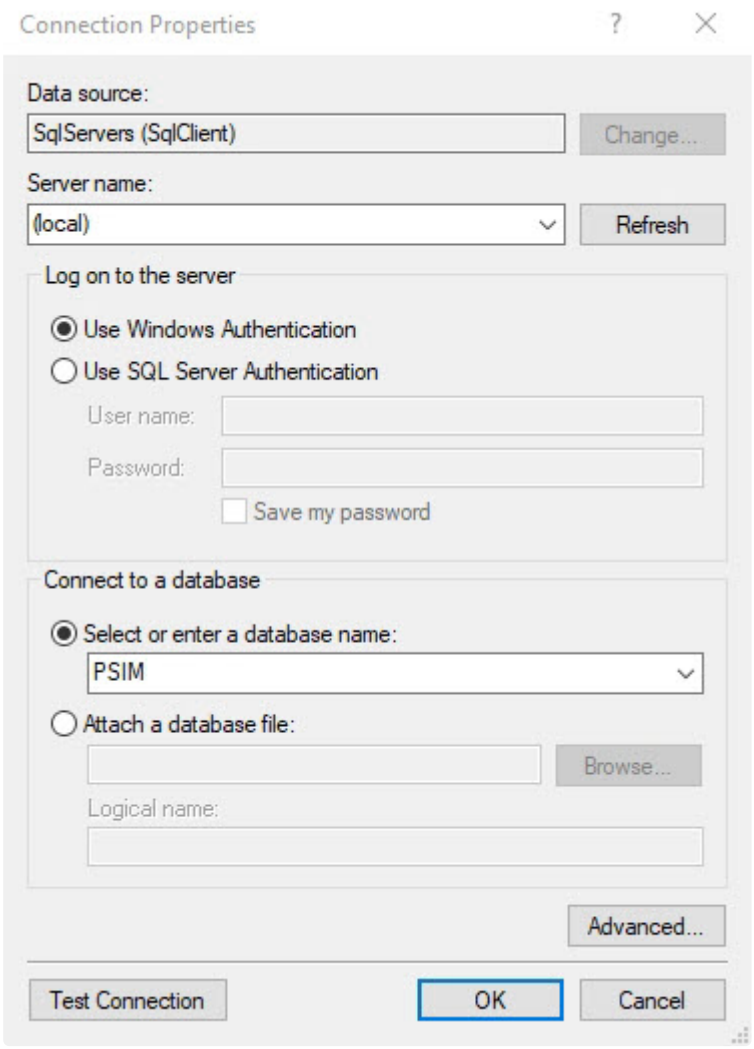
The utility is located in the /Axxon PSIM/ Tools folder.



> **Attention!**
>
> Before starting to work with the utility, *Axxon PSIM* must be shut down.

To work with the utility, do the following:

1. In the **Database connection string** field (**1**), specify the path to the *Axxon PSIM* database.
2. In the **Protocol connection string** field (**2**), specify the path to the events protocol table.
   The **Config** button (**3**) for both fields enables automatic generation of connection strings to the database and to the protocol table. When you click the button, the connection settings window opens, where you can select the server name and the name of the database or table.

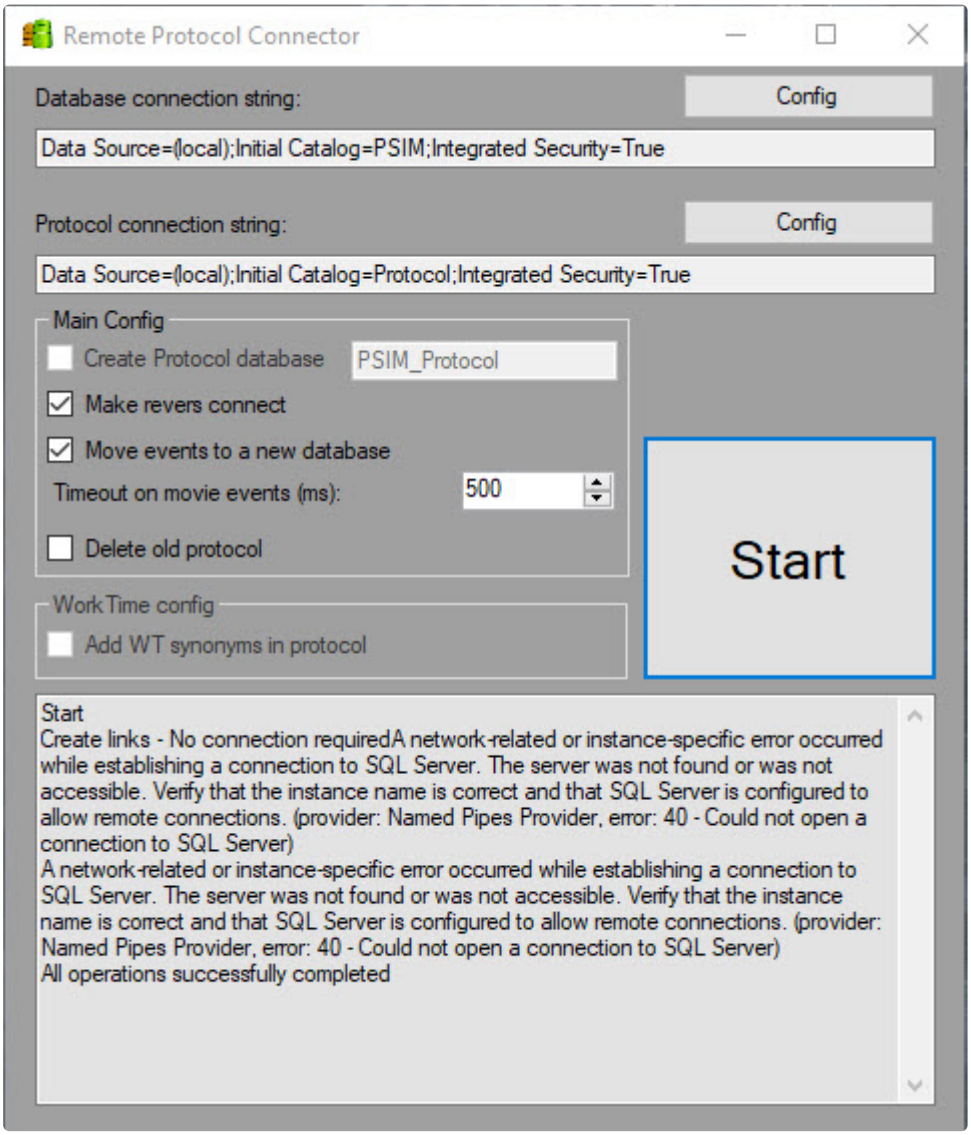


3. Set the **Create Protocol database** checkbox (**4**) if you want to create a separate database for the events protocol. By default, the name of the database is *PSIM_Protocol*, however, it can be changed.
4. Set the **Make revers connect** checkbox (**5**) if you want to keep the old event protocol table, but associate it with the new database that will be created by the utility.
5. Set the **Move events to a new database** checkbox (**6**) if you want to migrate all entries from the old event protocol table to the new database.
6. In the **Timeout on movie events (ms)** (**7**), specify the timeout for transferring entries in milliseconds (if the event transfer setting is enabled).
7. Set the **Delete old protocol** checkbox (**8**) if you do not want to save the old event table.

> **Note**
>
> It is recommended to migrate the events to a new database beforehand.

8. Set the **Add WT synonyms in protocol** checkbox (**9**) if you want to transfer the links of the old event protocol table to the other *Time and Attendance* tables to the new database.
9. Click the **Start** button (**10**) to run the utility.

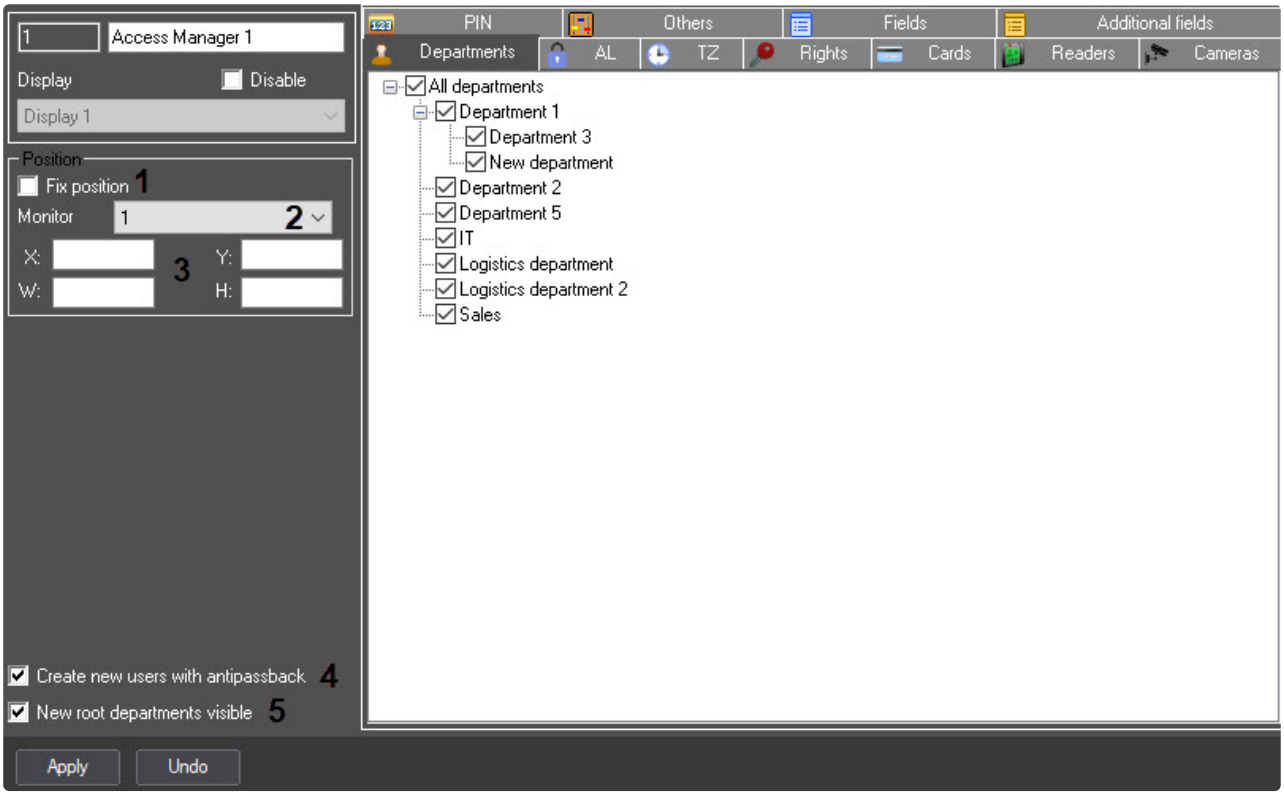
The migration progress and possible errors will be displayed in the field below the settings panel.


Remote Protocol Connector
Database connection string:
Config
Data Source=(local);Initial Catalog=PSIM;Integrated Security=True
Protocol connection string:
Config
Data Source=(local);Initial Catalog=Protocol;Integrated Security=True
Main Config
Create Protocol database
PSIM_Protocol
Make revers connect
Move events to a new database
Timeout on movie events (ms):
500
Delete old protocol
Start
Work Time config
Add WT synonyms in protocol
Start
Create links - No connection requiredA network-related or instance-specific error occurred while establishing a connection to SQL Server. The server was not found or was not accessible. Verify that the instance name is correct and that SQL Server is configured to allow remote connections. (provider: Named Pipes Provider, error: 40 - Could not open a connection to SQL Server)
A network-related or instance-specific error occurred while establishing a connection to SQL Server. The server was not found or was not accessible. Verify that the instance name is correct and that SQL Server is configured to allow remote connections. (provider: Named Pipes Provider, error: 40 - Could not open a connection to SQL Server)
All operations successfully completed

7 Appendix 1. Description of the Access Manager interfaces

7.1 The settings panel of the Access Manager object

The settings panel of the **Access Manager** interface object is shown in the figures.

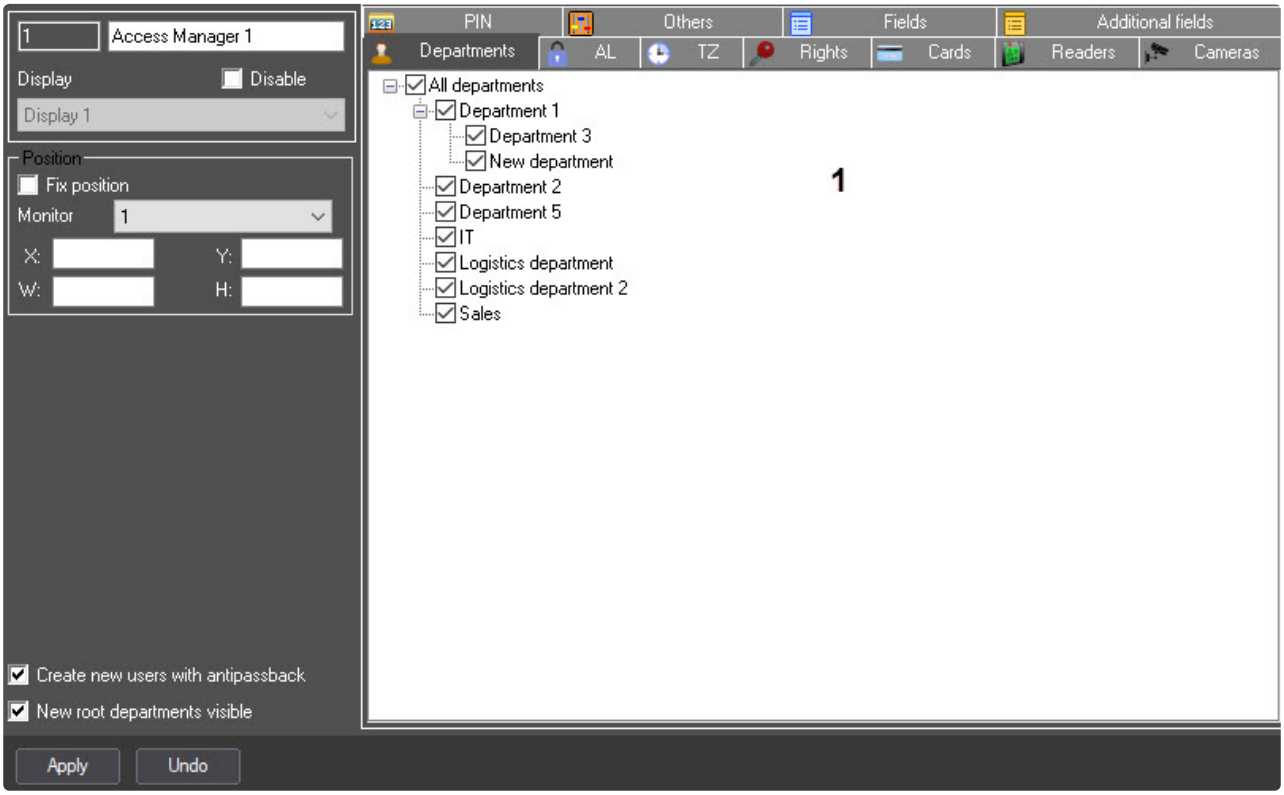


№	Parameter name	Method of setting the parameter value	Parameter description	Representation	Default value	Value range
The **Position** group						
1	**Fix position**	Set the checkbox	Set the checkbox if you want to specify the coordinates and the size of the **Access Manager** window on the screen and prohibit its movement	Boolean type	Clear	**Set**—position of the **Access Manager** window is fixed **Clear**—position of the **Access Manager** window can be changed

2	**Monitor**	Select the value from the drop-down list	Sets the number of the monitor on which the **Access Manager** window will be displayed	List of available computer monitors	Monitor 1	Depends on the number of the connected computer monitors
3	**X**	Enter the value in the field	Sets the coordinate of the upper left corner of the **Access Manager** window along the horizontal X axis	% of screen width	0	From 0 to M*100, where M is a number of installed computer monitors
	Y	Enter the value in the field	Sets the coordinate of the upper left corner of the **Access Manager** window along the vertical Y axis	% of screen height	0	From 0 to M*100, where M is a number of installed computer monitors
	W	Enter the value in the field	Sets the width of the **Access Manager** window	% of screen width	0	From 0 to M*100, where M is a number of installed computer monitors
	H	Enter the value in the field	Sets the height of the **Access Manager** window	% of screen height	0	From 0 to M*100, where M is a number of installed computer monitors
Outside the groups						
4	**Create new users with antipassback**	Set the checkbox	Sets the default value for the user antipassback parameter	Boolean type	Clear	**Set**—by default, the users are created with enabled antipassback **Clear**—by default, the users are created with disabled antipassback

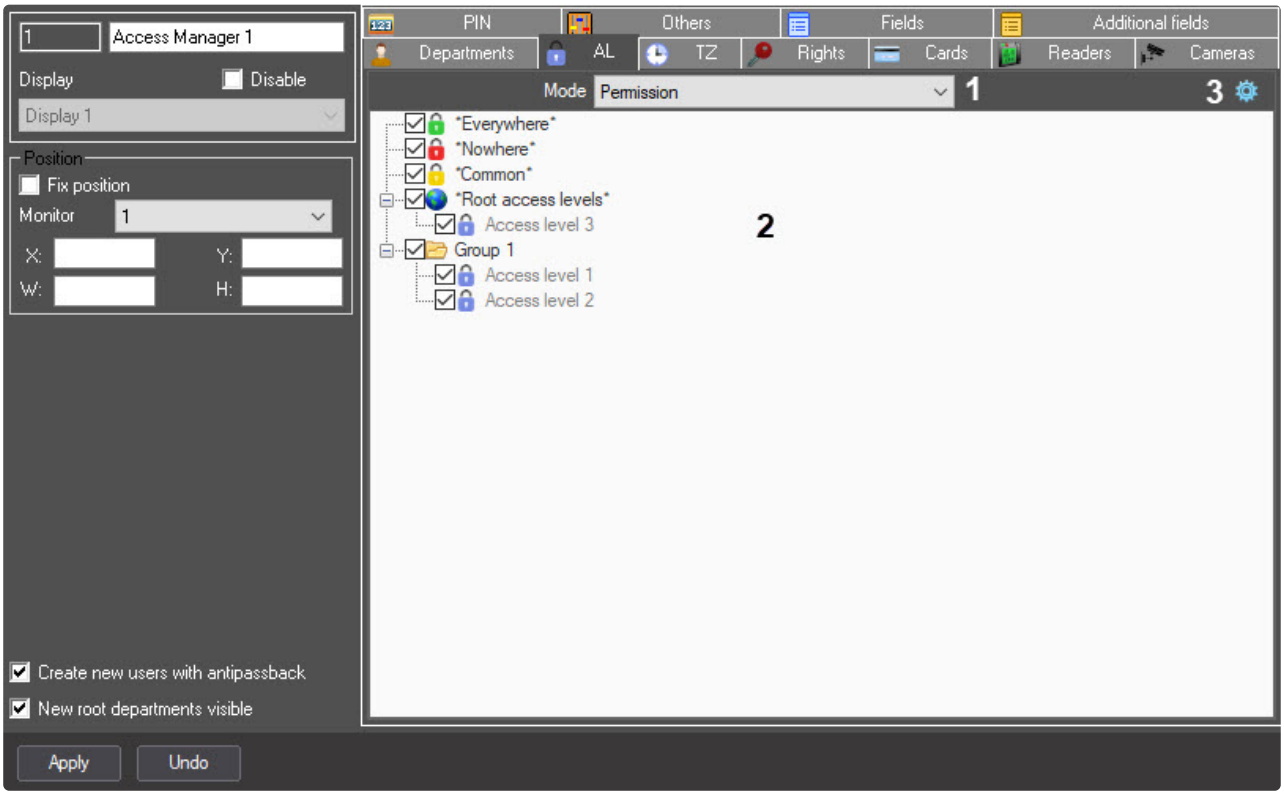
5	**New root departments visible**	Set the checkbox	Sets the availability of the created departments in the **Access Manager** that are located in the root of the hierarchy	Boolean type	Set	**Set**—new departments created in the root of the hierarchy are available in the **Access Manager** **Clear**—new departments created in the root of the hierarchy aren't available in the **Access Manager**

The **Departments** tab



№	Parameter name	Method of setting the parameter value	Parameter description	Representation	Default value	Value range
1	Departments tree	Set the checkbox	Sets the departments available in the **Access Manager** window	Boolean type	Set of boolean variables	Department will be available in the **Access Manager** window if you set the checkbox next to it

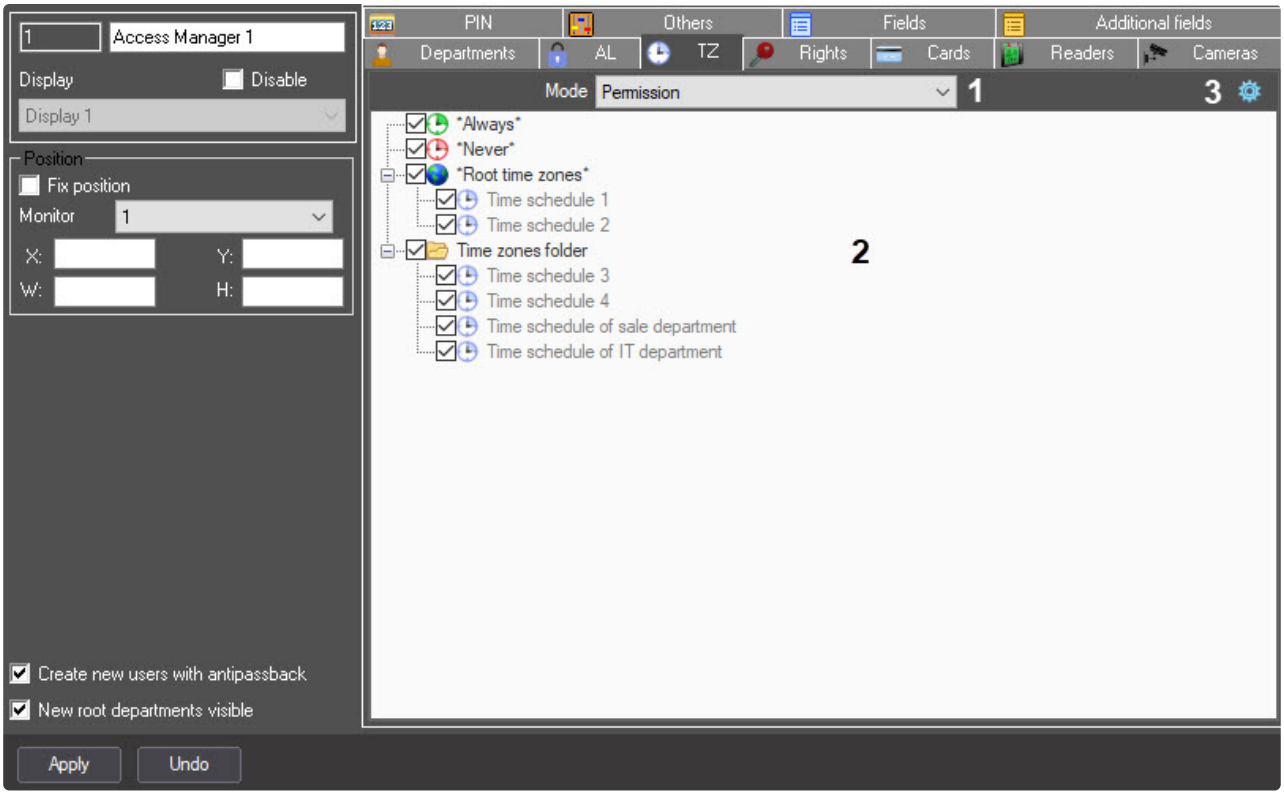
The **AL** tab



№	Parameter name	Method of setting the parameter value	Parameter description	Representation	Default value	Value range
1	**Mode**	Select the value from the list	Sets the access restriction mode to the access levels in the **Access Manager** interface object	-	Prohibition	**Prohibition**— restrict the access to the selected access levels **Permission**—allow the access to the selected access levels
2	Access levels tree	Set the checkbox	Specifies the access levels, the access to which must be configured	Boolean type	Set of boolean variables	If the checkbox is set for the access level, the selected access restriction mode will be applied to it in the **Access Manager** interface object

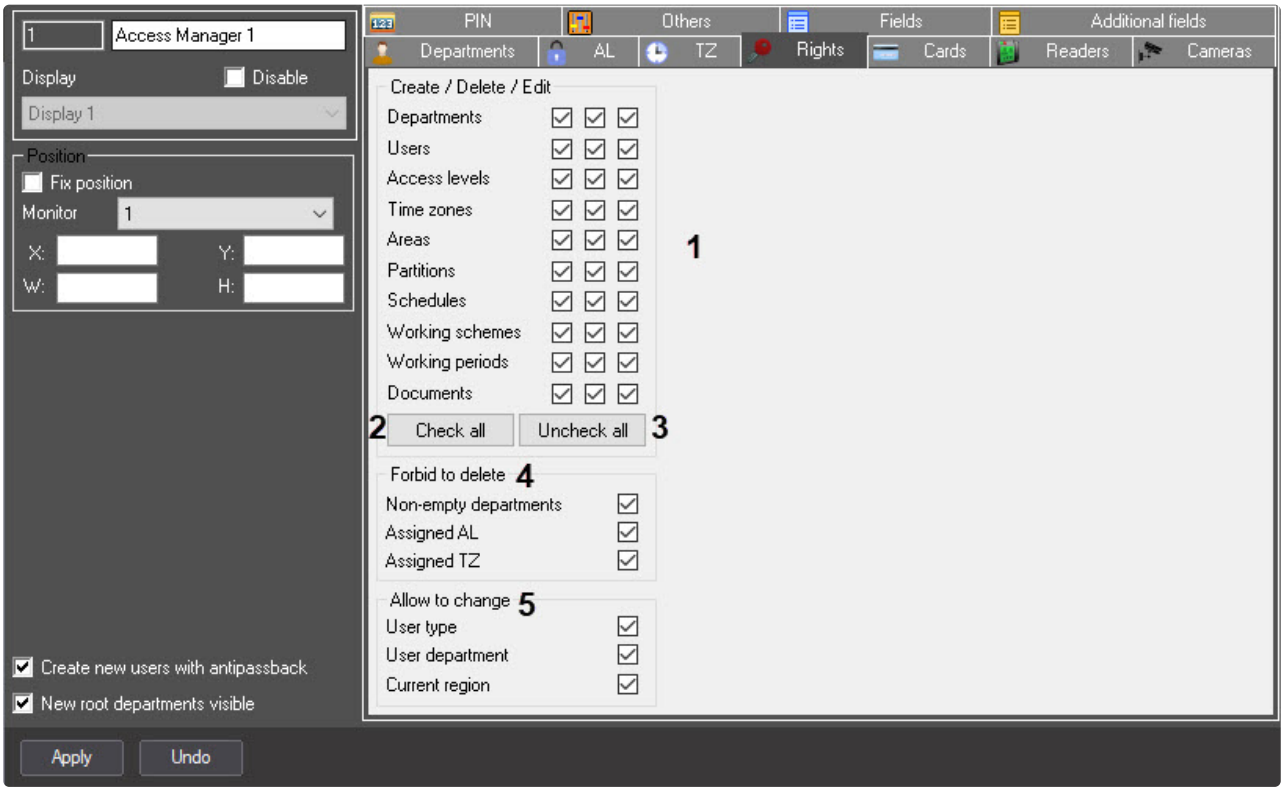
3	The action button	Select the value from the list	Opens a list of actions for managing the access levels tree	-	-	**Minimize**—minimizes all access levels in the tree **Expand**—expands all access levels in the tree **Select all**—sets the checkboxes for all access levels **Remove all**—clears checkboxes for all access levels **Search**—opens the **Access level search** or folder search window for access level or folder searching by the name or identifier

The **TZ** tab



№	Parameter name	Method of setting the parameter value	Parameter description	Representation	Default value	Value range
1	**Mode**	Select the value from the list	Sets the access restriction mode to the time zones in the **Access Manager** interface object	-	Prohibition	**Prohibition**— restrict the access to the selected time zones **Permission**—allow the access to the selected time zones
2	Time zones tree	Set the checkbox	Specifies the time zones, the access to which must be configured	Boolean type	Set of boolean variables	If the checkbox is set for the time zone, the selected access restriction mode will be applied to it in the **Access Manager** interface object
3	The action button	Select the value from the list	Opens a list of actions for managing the time zones tree	-	-	**Minimize**— minimizes all time zones in the tree **Expand**—expands all time zones in the tree **Select all**—sets the checkboxes for all time zones **Remove all**—clears the checkboxes for all time zones **Search**—opens the **Time zone search** or folder search window for time zone or folder searching by the name or identifier

The **Right** tab

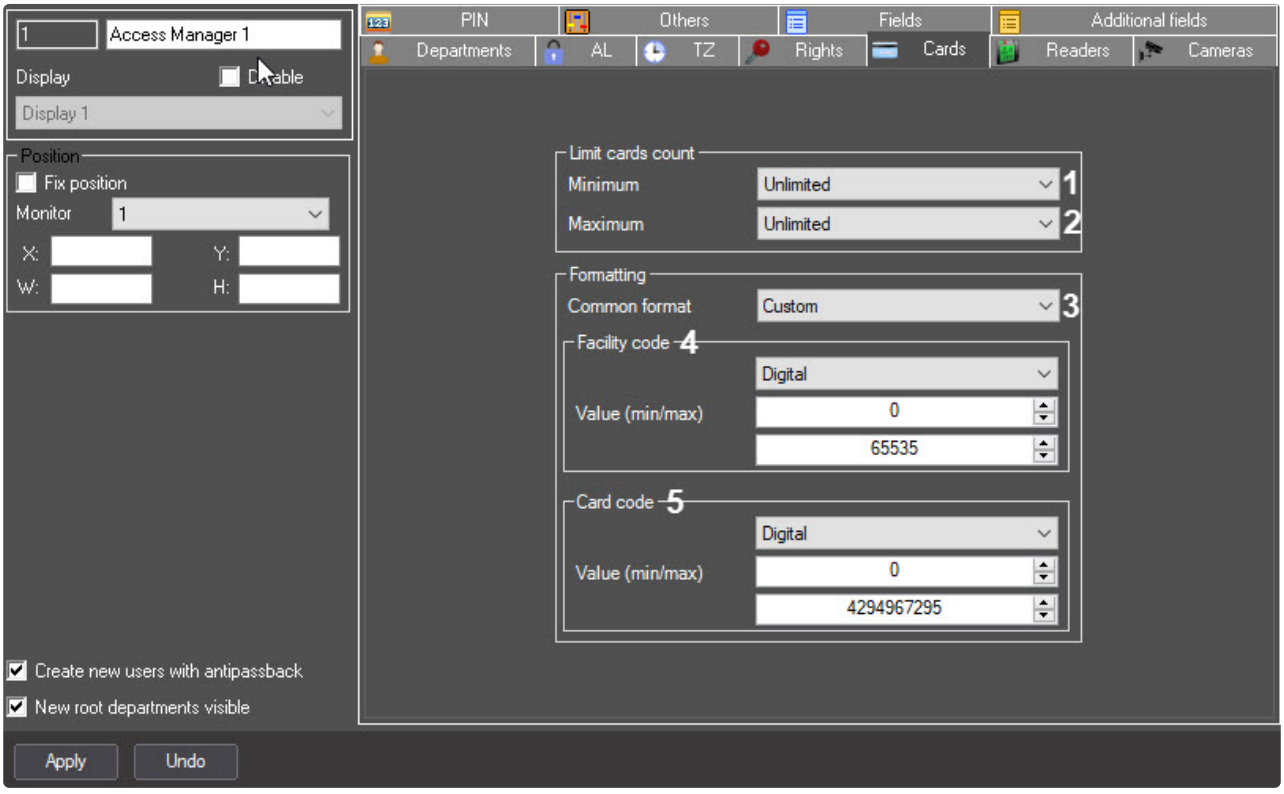


№	Parameter name	Method of setting the parameter value	Parameter description	Representation	Default value	Value range
The **Create / Delete / Edit** group						
1	**Create**	Set the checkbox	Sets possibility to create the corresponding object in the **Access Manager** window	Boolean type	Set	**Set**—creating the corresponding object from the **Access Manager** window is allowed **Clear**—creating the corresponding object from the **Access Manager** window is forbidden

	Delete	Set the checkbox	Sets possibility to delete the corresponding object in the **Access Manager** window	Boolean type	Set	**Set**—deleting the corresponding object from the **Access Manager** window is allowed **Clear**—deleting the corresponding object from the **Access Manager** window is forbidden
	Edit	Set the checkbox	Sets possibility to edit the corresponding object in the **Access Manager** window	Boolean type	Set	**Set**—editing the corresponding object from the **Access Manager** window is allowed **Clear**—editing the corresponding object from the **Access Manager** window is forbidden
2	**Check all**	Click the button	Sets all checkboxes in the **Create / Delete / Edit** group	-	-	-
3	**Uncheck all**	Click the button	Clears all checkboxes in the **Create / Delete / Edit** group	-	-	-
The **Forbid to delete** group						
4	**Non-empty departments**	Set the checkbox	Forbids to delete departments if there are users in them	Boolean type	Clear	**Set**—non-empty departments cannot be deleted **Clear**—non-empty departments can be deleted
	Assigned AL	Set the checkbox	Forbids to delete access levels if they are assigned to a user or department	Boolean type	Clear	**Set**—assigned access levels cannot be deleted **Clear**—assigned access levels can be deleted
	Assigned TZ	Set the checkbox	Forbids to delete time zones if they are assigned to an access levels	Boolean type	Clear	**Set**—assigned time zones cannot be deleted **Clear**—assigned time zones can be deleted
The **Allow to change** group						

5	**User type**	Set the checkbox	Enables the possibility to change the user type	Boolean type	Clear	**Set**—the user type change is allowed **Clear**—the user type change is not allowed
	User department	Set the checkbox	Enables the possibility to change the user department	Boolean type	Clear	**Set**—the user department change is allowed **Clear**—the user department change is not allowed
	Current region	Set the checkbox	Enables the possibility to change the current region	Boolean type	Clear	**Set**—the current region change is allowed **Clear**—the current region change is not allowed

The **Cards** tab



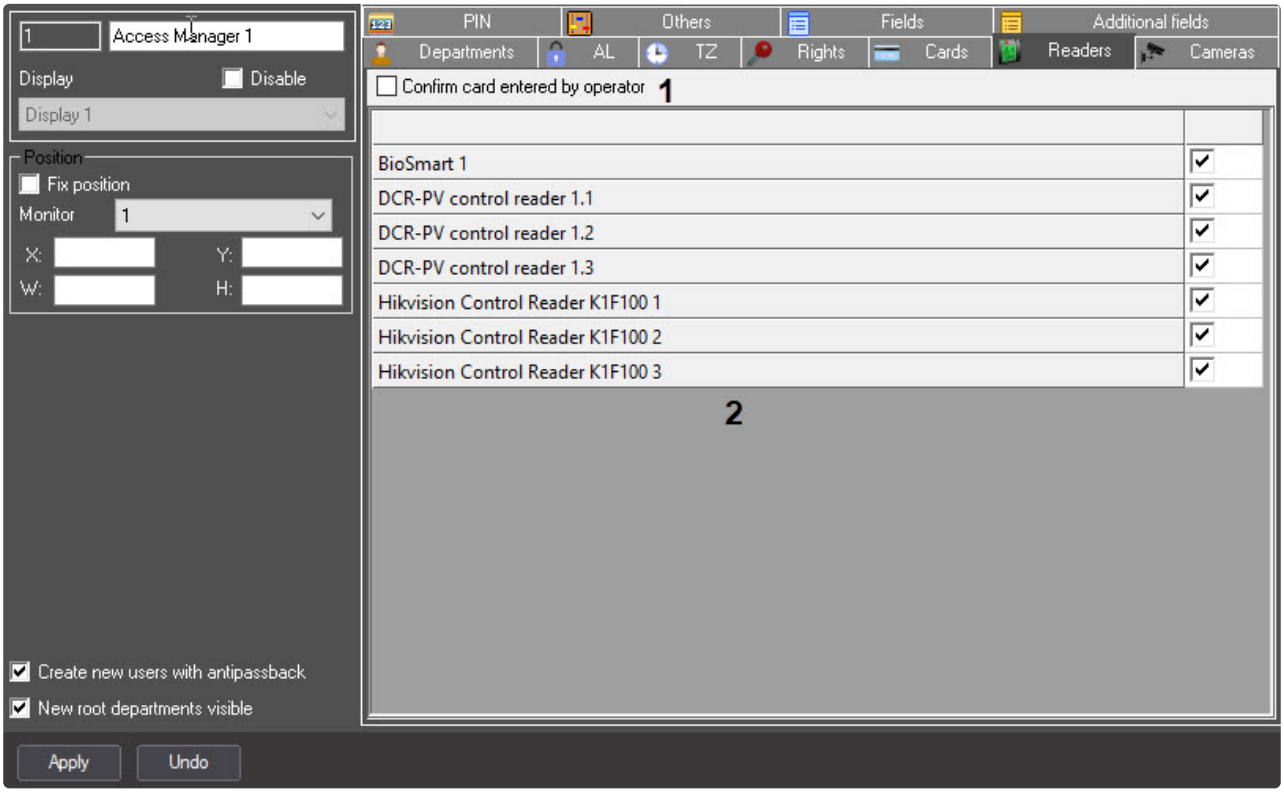
№	Parameter name	Method of setting the parameter value	Parameter description	Representation	Default value	Value range

The **Limit cards count** group						
1	**Minimum**	Select the value from the list	Sets the minimum number of access cards that must be assigned to the user	List of values of the minimum number of access cards of a user	Unlimited	• from **1** to **10**—if the specified number of access cards is not assigned to the user, then this user cannot be saved in the **Access Manager** interface object • **Unlimited**—an unlimited number of access cards can be assigned to the user • **Prohibited**—the user cannot be assigned access cards. Buttons and function menu for assigning access cards will be inactive in the **Access Manager** interface object
2	**Maximum**	Select the value from the list	Sets the maximum number of access cards that must be assigned to the user	List of values of the maximum number of access cards of a user	Unlimited	• from **1** to **10**—if the user is assigned more than the specified number of access cards, then this user cannot be saved in the **Access Manager** interface object • **Unlimited**—an unlimited number of access cards can be assigned to the user • **Prohibited**—the user cannot be assigned access cards. Buttons and function menu for assigning access cards will be inactive in the **Access Manager** interface object
The **Formatting** group						

3	**Common format**	Select the value from the list	Sets the format of access cards	List of values of access cards fprmats	Default	• **Default**—allows setting an arbitrary value for the facility code and card code. Any letters, numbers and symbols are allowed
						• **Wiegand26**—allows entering a 1-byte facility code (from 0 to 255), and a 2-byte card code (from 0 to 65535). If the limit of the code length is exceeded, the user cannot be saved
						• **Wiegand32**—allows entering a 2-byte facility code (from 0 to 65535), and a 2-byte card code (from 0 to 65535). If the limit of the code length is exceeded, the user cannot be saved
						• **Wiegand26** (code only)—the facility code cannot be set, only a 3-byte card code is set (from 0 to 16777215)
						• **Wiegand32** (code only)—the facility code cannot be set, only a 4-byte card code is set (from 0 to 4294967295)
						• **TouchMemory**—the facility code cannot be set, only the 8-byte card code is set. The format is hexadecimal, characters A, B, C, D, E, F are allowed. The code must be eight characters or longer. If the entered card code is less than eight characters long, the the higher order digits are filled with zeros
						• **Hikvision**—the *Hikvision* ACS format. It always has a fixed H character in the facility code. The card code is specified by a string with a maximum length of 32 characters
						• **Configurable**—allows setting the parameters of the facility code (**4**) and card code (**5**)
						  • **Fixed character**—the specified single character will always be hard-coded, which cannot be changed in the **Access Manager** interface object
						  • **String**—allows entering a string of 0 to 255 characters
						  • **Numeric**—allows entering only numbers from 0 to 4294967295.
						  • **Hexadecimal**—allows entering numbers in HEX format (numbers and characters A, B, C, D, E, F) from 0 to 8 bytes long.

						• **Fixed number**—similar to **Fixed character**, but instead of a character, a number between 0 and 4294967295 is used • **Regular template**—allows defining an access card template with specified restrictions, lengths and value ranges

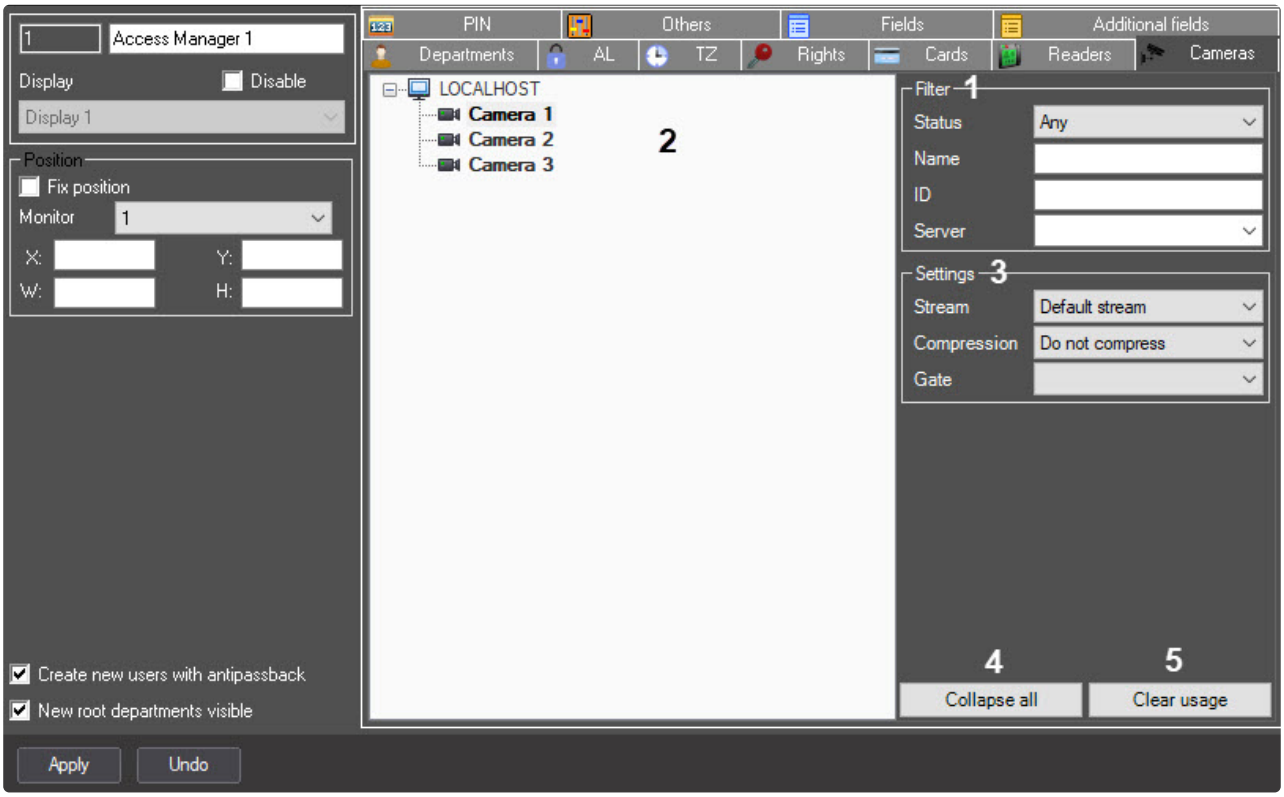
The **Readers** tab



№	Parameter name	Method of setting the parameter value	Parameter description	Representation	Default value	Value range
1	**Confirm card entered by operator**	Set the checkbox	Sets the requirement to confirm the card code entered by operator	Boolean type	Clear	**Set**—operator confirmation is required to assign access card to a user **Clear**—operator confirmation is not required to assign access card to a user

2	List of readers	Set the checkbox	Sets the list of control readers used for entering user access cards from the **Access Manager**	List of readers created in the system	Set of boolean variables	The reader will be available for entering the user access card using the control reader if checkbox is set next to the reader

The **Cameras** tab



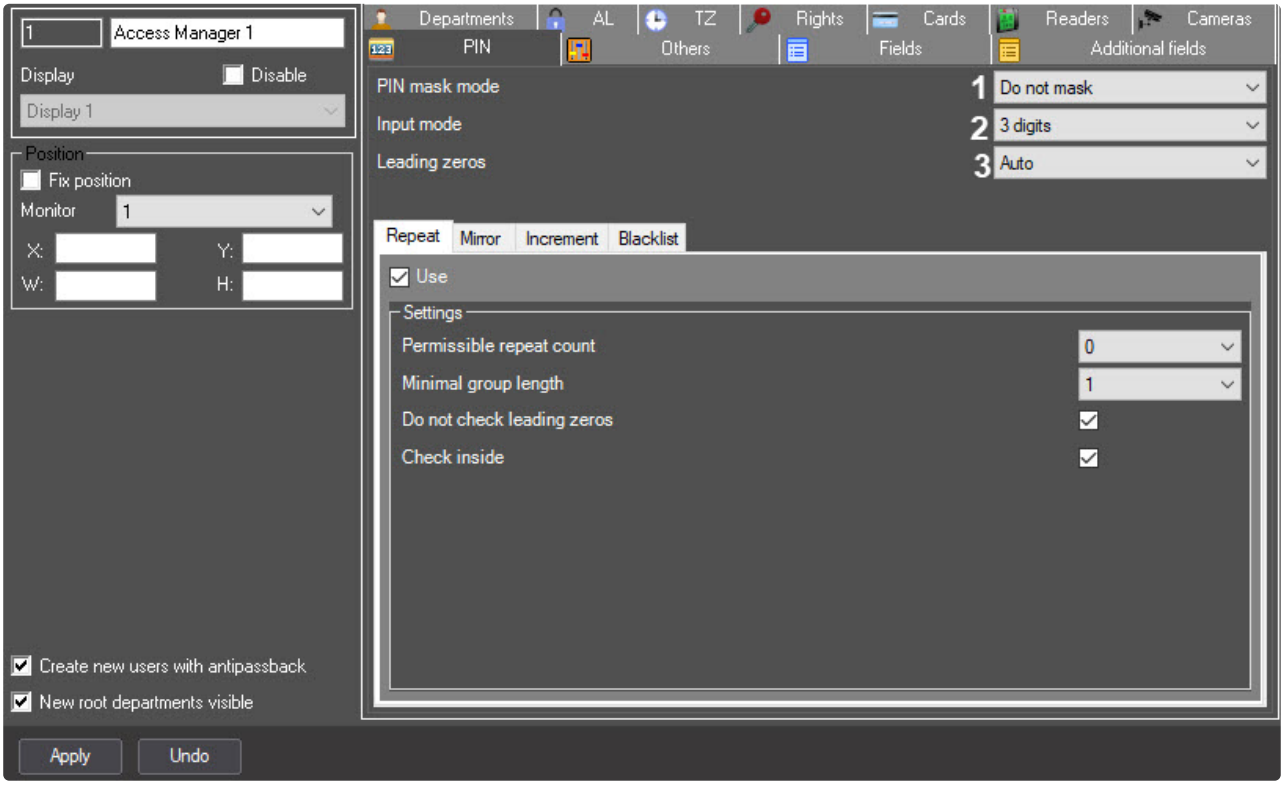
№	Parameter name	Method of setting the parameter value	Parameter description	Representation	Default value	Value range
The **Filter** group						

1	**Status**	Select the value from the list	Displays the list of statuses of the **Camera** object to search by the value of this field	List of statuses of the **Camera** object	Do not use	**Any**—all cameras created in the system **Used**—only cameras that are used **Unused**—only cameras that aren't used
	Name	Enter the value in the field	Sets the name of the camera to search by the value of this field	Latin and Cyrillic alphabet, digits 0-9	-	-
	ID	Enter the value in the field	Sets a unique camera identifier to search by the value of this field	Natural number series	-	-
	Server	Select the value from the list	Sets the name of the server to search by the value of this field	List of the **Server** objects	-	Depends on the number of the **Server** objects
2	The tree of **Cameras** objects	Automatically	Displays the list of the **Camera** objects	List of the **Camera** objects filtered in step 1	-	Depends on the number of the **Camera** objects filtered in step 1
The **Settings** group						

3	**Stream**	Select the value from the list	Sets the camera stream that will be used to assign photos to users	-	Do not use	**Do not use**—camera cannot be used to input a photo **Default stream**—the default stream of a camera will be used **Stream #1**—the first stream of a camera will be used **Stream #2**—the second stream of a camera will be used **Stream #3**—the third stream of a camera will be used **Stream #4**—the forth stream of a camera will be used
	Compression	Select the value from the list	Sets the compression level of the selected video stream	List of compression options	Do not compress	**Do not compress**—compression of the camera video stream is disabled **Level 1**—the lowest level of video stream compression .... **Level 5**—the highest level of video stream compression
	Gate	Select the value from the list	Sets the **Videogate** object used for receiving video signal from camera	List of the **Videogate** objects created in the system	-	Depends on the number of the **Videogate** objects created in the system

4	**Collapse all**	Click the button	Collapses the list of cameras	-	-	-
5	**Clear usage**	Click the button	Resets all camera settings to default values	-	-	-

The **PIN** tab



№	Parameter name	Method of setting the parameter value	Parameter description	Representation	Default value	Value range
1	**PIN mask mode**	Select the value from the list	Sets the mask mode of the PIN code	List of options for PIN code masking	Mask always	**Do not mask**—PIN code isn't masked with dots **Mask view**—PIN code is masked with dots when reading user data **Mask always**—PIN code is always masked with dots

2	**Input mode**	Select the value from the list	Sets the input mode of the PIN code	List of PIN code input modes	Common	**Common**—any variant of the PIN code is allowed. It is allowed to enter symbols, letters and numbers. If you select this mode, no further settings are required **3 digits**—PIN code must contain three digits. ... **9 digits**—PIN code must contain nine digits. **Range**—PIN code is within the specified numeric range
3	**Leading zeros**	Select the value from the list	Sets the mode of setting zeros at the beginning of the PIN code. The setting is made for all modes except for the **Common** mode	List of modes for setting zeros at the beginning of the PIN code	Ignore	**Ignore**—leading zeros aren't considered as characters **Required**—leading zeros are considered as characters **Auto**—leading zeros are entered automatically, completing the PIN code to the required number of characters

The **Repeat** tab

1	**Use**	Set the checkbox	Enables the required PIN check	Boolean type	Clear	**Set**—the required check is enabled **Clear**—the required check is disabled

2	**Permissible repeat count**	Select the value from the list	Sets the maximum number of allowed character repetitions in the PIN code	Digits 0–7	0	Depends on the selected input mode
3	**Minimal group length**	Select the value from the list	Sets the number of characters in the group to search for repetitions	Digits 1–8	1	Depends on the selected input mode
4	**Do not check leading zeros**	Set the checkbox	Disregards leading zeros as characters when entering the PIN code	Boolean type	Clear	**Set**—leading zeros are disregarded **Clear**—leading zeros aren't disregarded
5	**Check inside**	Set the checkbox	Enables the corresponding search in the entire PIN code	Boolean type	Clear	**Set**—search in the entire PIN code **Clear**—search only from the beginning
The **Mirror** tab 						
1	**Use**	Set the checkbox	Enables the required PIN check	Boolean type	Clear	**Set**—the required check is enabled **Clear**—the required check is disabled
2	**Minimal side length**	Select the value from the list	Sets the number of characters in the group to search for repetitions in the mirror image	Digits 1–8	1	Depends on the selected input mode
3	**Do not check leading zeros**	Set the checkbox	Disregards leading zeros as characters when entering the PIN code	Boolean type	Clear	**Set**—leading zeros are disregarded **Clear**—leading zeros aren't disregarded

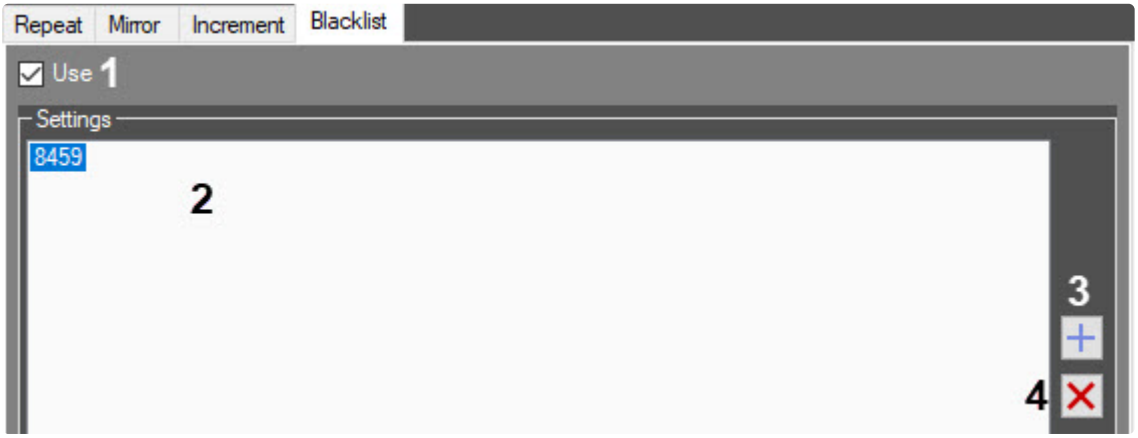
4	**Check inside**	Set the checkbox	Enables the corresponding search in the entire PIN code	Boolean type	Clear	**Set**—search in the entire PIN code **Clear**—search only from the beginning

The **Increment** tab

1	**Use**	Set the checkbox	Enables the required PIN check	Boolean type	Clear	**Set**—the required check is enabled **Clear**—the required check is disabled
2	**Permissible 'stair' length**	Select the value from the list	Sets the number of characters in increasing/decreasing order from which the search will be performed	Digits 1–8	1	Depends on the selected input mode
3	**Checking mode**	Select the value from the list	Sets the checking mode of the PIN code character sequence	List of checking modes of the PIN code character sequence	Both	**Both**—sequences of characters are checked in increasing (increment) and decreasing (decrement) order. **Increment**—sequences of characters are checked in increasing order **Decrement**—sequences of characters are checked in decreasing order
4	**Do not check leading zeros**	Set the checkbox	Disregards leading zeros as characters when entering the PIN code	Boolean type	Clear	**Set**—leading zeros are disregarded **Clear**—leading zeros aren't disregarded

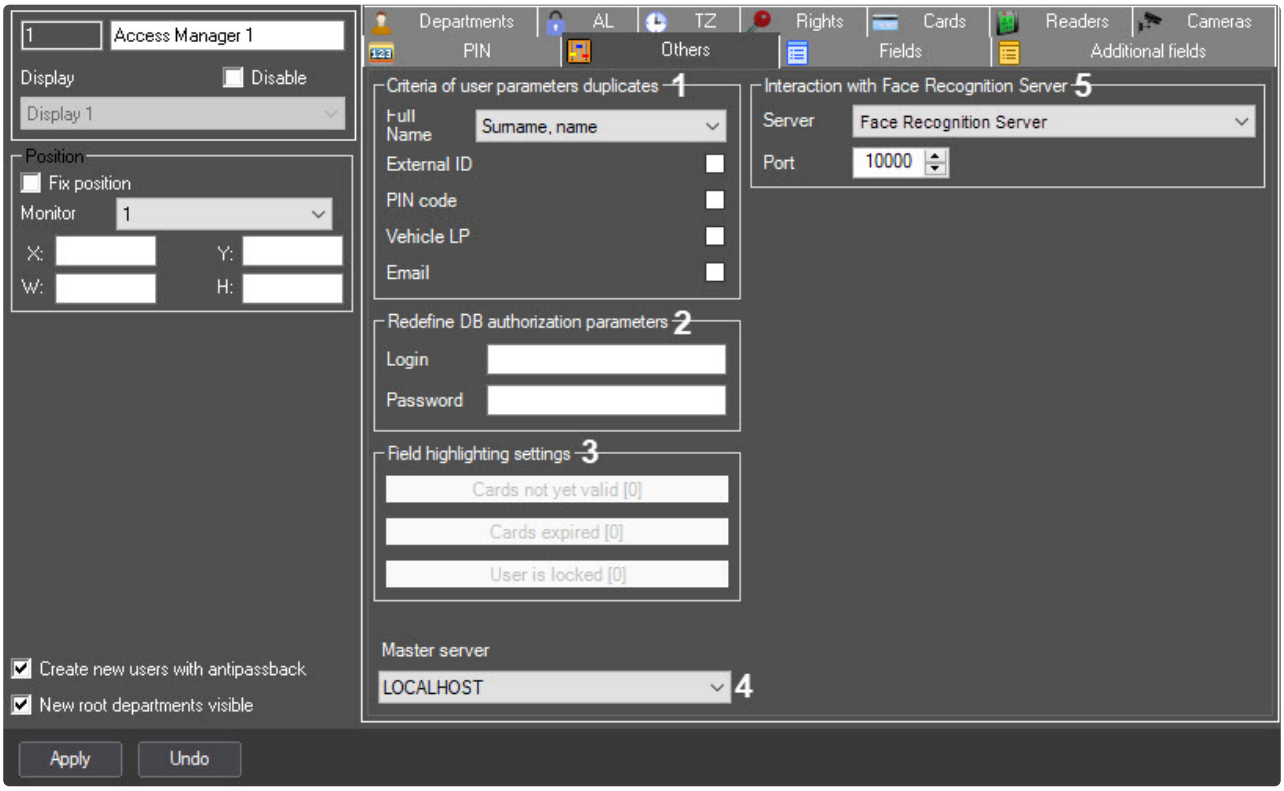
5	**Check inside**	Set the checkbox	Enables the corresponding search in the entire PIN code	Boolean type	Clear	**Set**—search in the entire PIN code **Clear**—search only from the beginning

The **Blacklist** tab



1	**Use**	Set the checkbox	Enables the required PIN check	Boolean type	Clear	**Set**—the required check is enabled **Clear**—the required check is disabled
2	List of PIN codes	Using the Add button	Contains the list of PIN codes prohibited for use	String	-	-
3	The Add button	Click the button	Opens the form for adding a PIN code to the blacklist	-	-	-
4	The Delete button	Click the button	Removes the PIN code from the blacklist	-	-	-

The **Others** tab

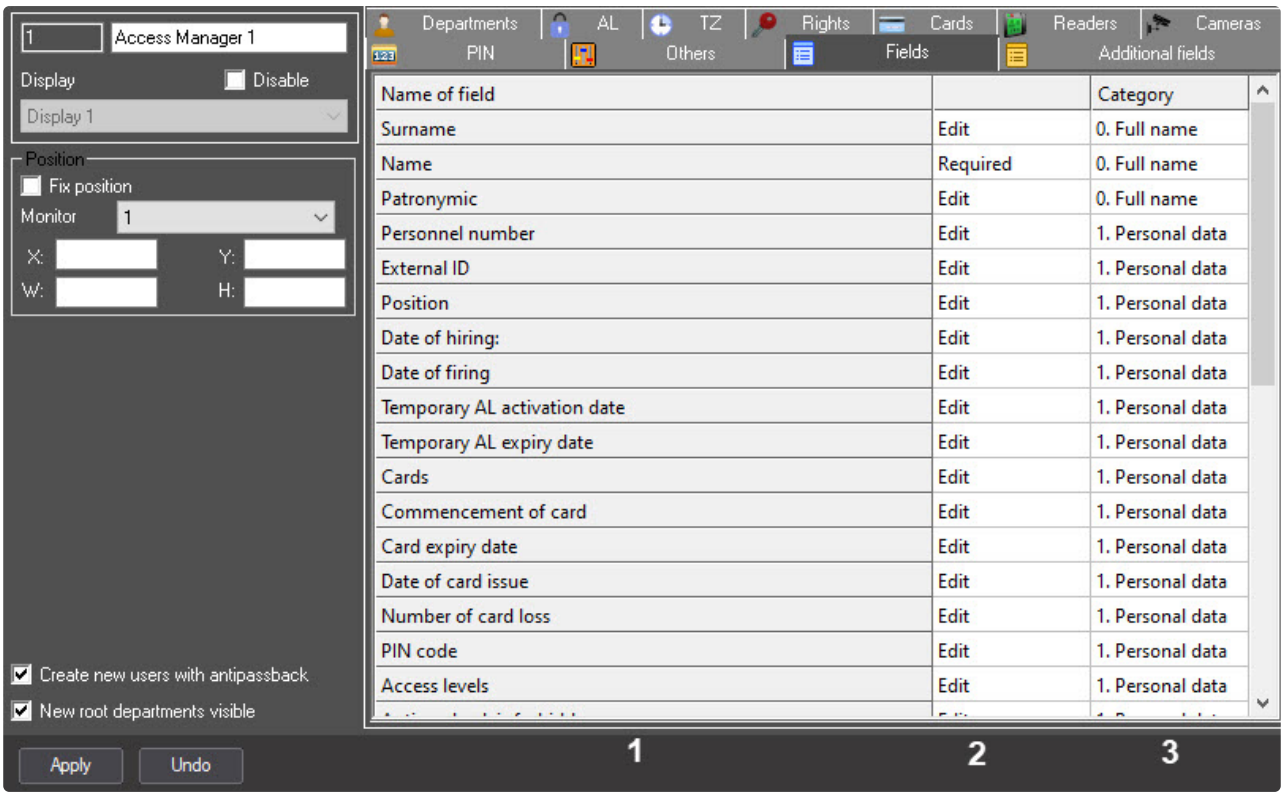


№	Parameter name	Method of setting the parameter value	Parameter description	Representation	Default value	Value range
The **Criteria of user parameters duplicates** group						
1	**Full name**	Select the value from the list	Displays a list of criteria for restricting duplicate user parameters by name, surname, patronymic	List of available combinations	Not used	**Not used**—added users are not checked for duplicate name, surname, patronymic **Surname, name**—added users are checked for duplicate name and surname **Surname, name, patronymic**—added users are checked for duplicate name, surname, patronymic

	External ID	Set the checkbox	Checks the added users for duplicate external ID	Boolean type	Clear	**Set**—added users are checked for duplicate external ID **Clear**—added users aren't checked for duplicate external ID
	PIN code	Set the checkbox	Checks the added users for duplicate PIN code	Boolean type	Clear	**Set**—added users are checked for duplicate PIN code **Clear**—added users aren't checked for duplicate PIN code
	Vehicle LP	Set the checkbox	Checks the added users for duplicate license plates	Boolean type	Clear	**Set**—added users are checked for duplicate license plates **Clear**—added users aren't checked for duplicate license plates
	Email	Set the checkbox	Checks the added users for duplicate emails	Boolean type	Clear	**Set**—added users are checked for duplicate emails **Clear**—added users aren't checked for duplicate emails
2	The **Redefine DB authorization parameters**—this group of settings is currently rudimentary					
The **Field highlighting settings** group						
3	**Cards not yet valid [0]**	Click the button	Sets the color highlighting of the **Cards not yet valid** field			
	Cards expired [0]	Click the button	Sets the color highlighting of the **Cards expired** field			
	User is locked [0]	Click the button	Sets the color highlighting of the **User is locked** field			

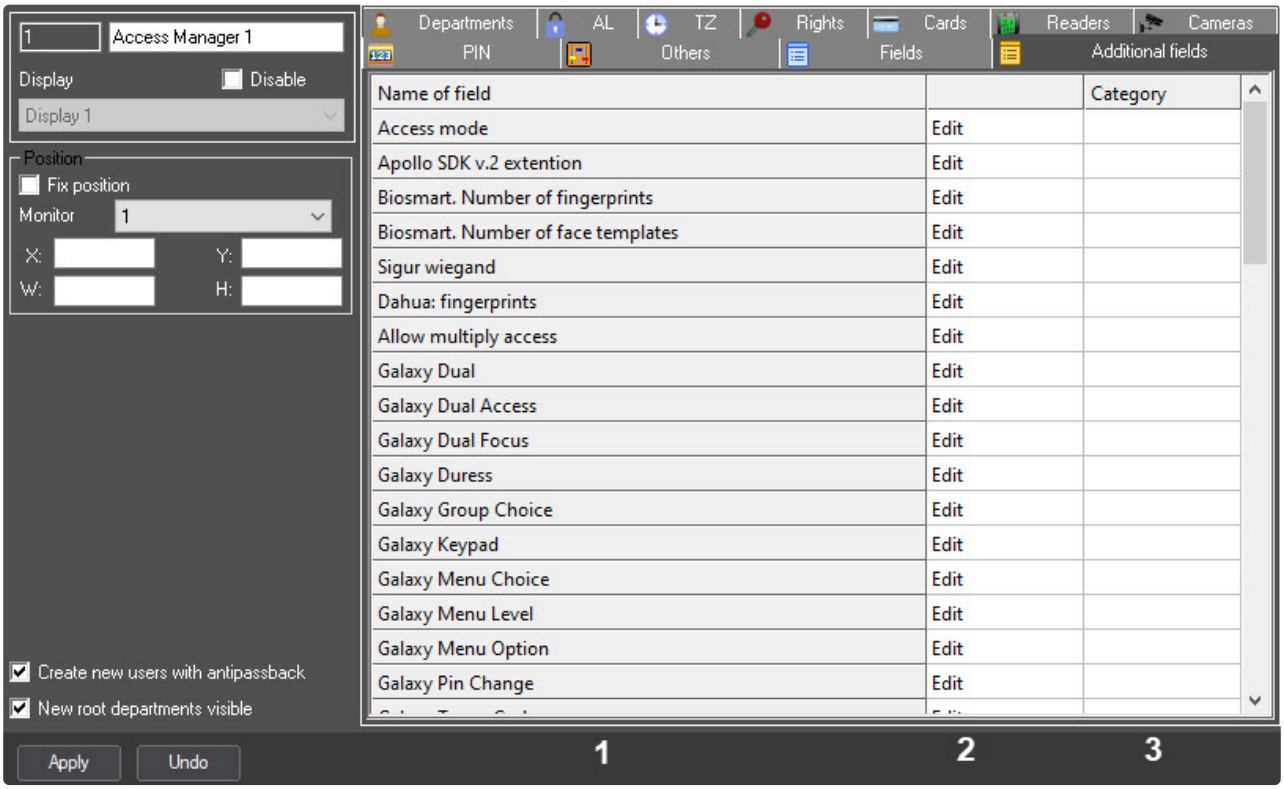
4	**Master server**	Select the value from the list	Displays the list of the **Server** objects	List of the **Server** objects	-	Depends on the number of the created **Server** objects
The **Interaction with Face Recognition Server** group						
5	**Server**	Select the value from the list	Displays the list of the **Face Recognition Server** objects created on the **Hardware** tab of the **System settings** dialog window	List of the **Face Recognition Server** objects created in the system	-	Depends on the **Face Recognition Server** objects created in the system
	Port	Enter the value in the field	Sets the communication port to connect to the Face Recognition Server via the REST API. The default value is **10000**	Natural number series	0	-

The **Fields** tab



№	Parameter name	Method of setting the parameter value	Parameter description	Representation	Default value	Value range
1	**Name of field**	Automatically	Displays the list of standard user fields	-	Names of the standard user fields	-
2	Drop-down list	Select the value from the list	Sets the permissions to edit, specify or hide the standard fields from the **Access Manager** interface object	-	Depends on the standard field	**Edit**—the field will be displayed with the possibility of editing **Hidden**—the field will be hidden **Read only**—the field won't be available for editing **Mandatory**—this field is mandatory when creating and editing a user in the *Access Manager* module. If you don't fill out the parameter, the field will be highlighted with red asterisks
3	**Category**	Enter the value in the field	Sets the name of the category to which the standard field belongs	-	Depends on the standard field	Any value

The **Additional fields** tab

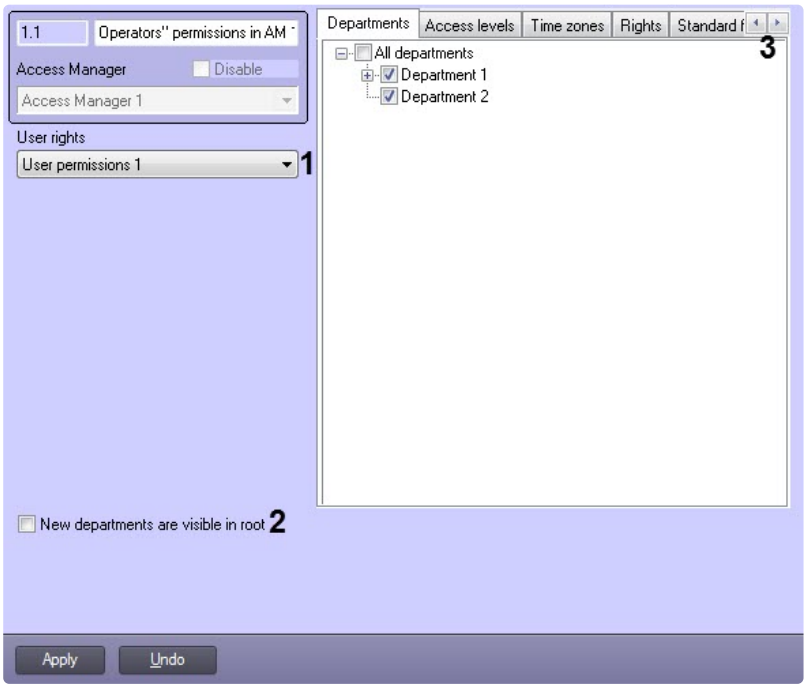


№	Parameter name	Method of setting the parameter value	Parameter description	Representation	Default value	Value range
1	**Name of field**	Automatically	Displays the list of additional user fields	-	Names of the additional user fields	-

2	Drop-down list	Select the value from the list	Sets the permissions to edit, specify or hide the additional fields from the **Access Manager** interface object	-	Depends on the additional field	**Edit**—the field will be displayed with the possibility of editing **Hidden**—the field will be hidden **Read only**—the field won't be available for editing **Mandatory**—this field is mandatory when creating and editing a user in the *Access Manager* module. If you don't fill out the parameter, the field will be highlighted with red asterisks
3	**Category**	Enter the value in the field	Sets the name of the category to which the additional field belongs	-	-	Any value

7.2 The Operators'' permissions in AM object settings panel

The figure shows the **Operators'' permissions in AM** interface object settings panel.



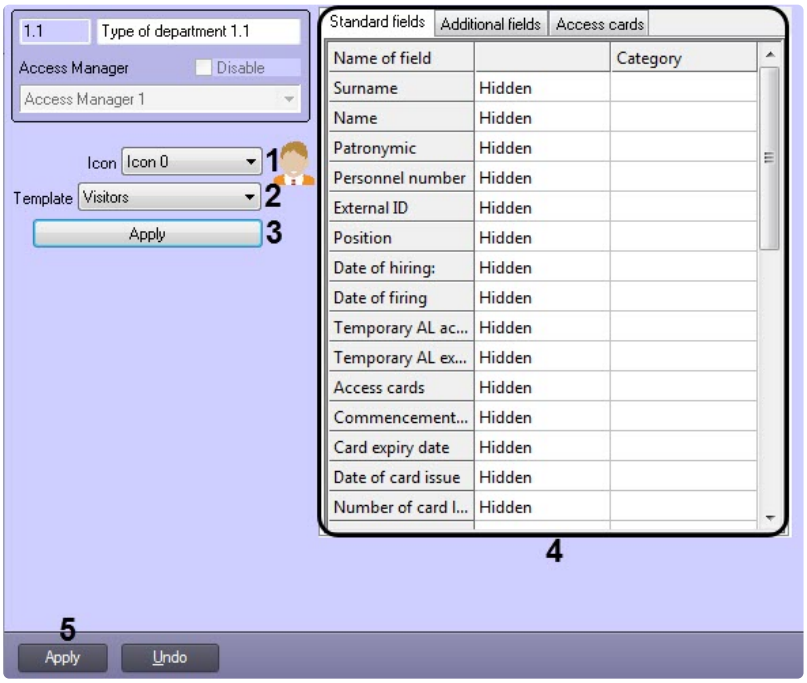
The following table shows the elements in the **Operators'' permissions in AM** settings panel.

№	Parameter name	Parameter setting method	Description
User rights group			
1	**User rights** drop-down list	Selecting the value in the list	Sets user rights in the *ACFA PSIM* software package, corresponding the configured **Operators'' permissions in AM** object
Without group			
2	**New departments are visible in root** checkbox	Setting the checkbox	Sets availability of new created departments in the **Access Manage** hierarchy root
3	Tab navigation buttons	Click the button	Buttons switch the active tab

The **Departments**, **Access levels**, **Time zones**, **Rights**, **Standard fields** and **Additional fields** tabs are similar to the tabs on the settings panel of the **Access Manager** object (see The settings panel of the Access Manager object).

7.3 The Type of department object settings panel

The figure shows the **Type of department** interface object settings panel.



The following table shows the elements in the **Type of department** settings panel.

№	Parameter name	Parameter setting method	Description	Data type	Default value	Value range
1	**Icon** drop-down list	Selecting the value from the list	Sets icon used for displaying department in the tree in the **Access Manager** window	Name of accessible icons	Icon 0	Icon 0 – Icon 29
2	**Template** drop-down list	Selecting the value from the list	Sets fields available for viewing and editing typical for some users category	Name of accessible templates	-	Employees Vehicle Visitors
3	**Apply** button	Clicking the button	Applying the selected template	-	-	-

4	Group of tabs	-	Access to the **Standard fields**, **Additional fields** for setting the visibility of user fields, as well as access to the **Access cards** to configure the parameters of access cards of this type of department	-	-	-

8 Appendix 2. Configuring the correct operation of the Access Manager module in a distributed system

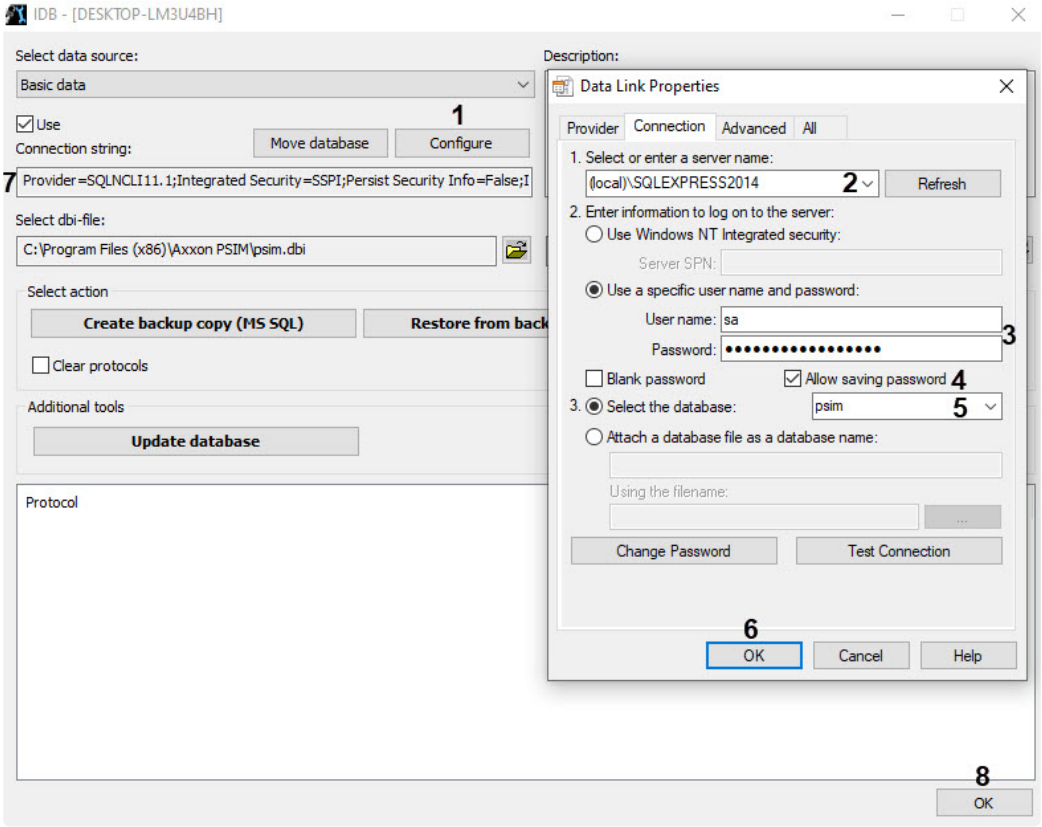
The *Access Manager* module gets the objects required for its operation directly from the SQL Server database of the *Axxon PSIM* Server. This causes some issues for the module operation in distributed systems, based on a variety of combinations between the *Axxon PSIM* Server, the Remote Administrator's workstation, and the Remote Client (see Configuration of distributed architecture).

In particular, when you try to run the *Access Manager* module remotely from a computer with a Remote Client, the *Access Manager* will not display the objects, which are loaded from the database of the *Axxon PSIM* Server, e.g. the lists of users and departments. In order to eliminate this issue, when configuring the distributed system, the administrator should do the following:

1. On the computer with the installed Remote Client:
    a. Install the OLE DB Driver for SQL SERVER driver by selecting the msoledbsql file that is located in the redist folder in the installation directory according to the language and bitness of the Remote Client, or fully install the SQL Server. Thus, the SQL Server on the computer with the installed Remote Client will be able to connect to the SQL Server on the computer with the *Axxon PSIM* Server.
    b. Ensure the SQL Server authentication through the base **sa** account.
    c. Ensure uninterrupted connection of the SQL Server on the computer with the installed Remote Client to the SQL Server on the computer with the installed *Axxon PSIM* Server.

2. On the computer with the installed *Axxon PSIM* Server and the *Access Manager* module:
    a. Configure the SQL Server to allow remote connections.
    b. Ensure the SQL Server authentication through the base **sa** account.
    c. Configure the *Axxon PSIM* Server connection to its database using the idb.exe utility. For this, do the following:

i. Run the utility from the *Axxon PSIM* Server installation directory.



ii. In the utility interface, click the **Configure** button (**1**). The database connection window will open.

iii. In the **Select or enter a server name** field (**2**), enter the name or the IP address of the SQL server used to for database management.

> **Note**
>
> Note that you must specify the explicit name or the IP address of the machine on which the database is installed. The format (local)\ SQLEXPRESS would be incorrect.

iv. In the **Enter the information to log on to the server** settings section (**3**), select the **Use a specific user name and password** radio button. In the **User name** field enter **sa**. In the **Password** field, enter the password for the **sa** user.

> **Note**
>
> Note that user names other than **sa** are not allowed.

v. Set the **Allow saving password** checkbox (**4**).

> **Note**
>
> This step is mandatory.

vi. Select the **Select the database on the server** radio button and select **psim** from the drop-down list (**5**).

vii. Click the **OK** button to save the connection parameters (**6**). The parameters will be displayed in the **Connection string** field (**7**) in the idb.exe utility interface.

viii. Click the **OK** button (**8**) in the idb.exe utility interface to save the changes.

Configuring the correct operation of the *Access Manager* module in a distributed system is complete.

9 Appendix 3. Creating additional fields for the User object

You can create additional fields for the User object which are used in the Access Manager module (see Working with users in the Access Manager software module).

Additional fields are created using the text editor that allows you to view and edit the ASCII text encoding.

9.1 Structure of additional fields in .dbi

Additional fields for the **User** object are divided into 2 groups:

1. The base field with default processing has the following structure: (db_name), (db_type) // (description).
   Example: is_guest, BIT // Guest key.
   The default processing depends on the data type (see Supported SQL data types).
2. The base field with special processing has the following structure: (db_name), (db_type) // (description) {(fmt)%(prms)}.
   Example: job_title, CHAR, 20 // Position{C%Waiter|Cashier|Storekeeper}.

> **Attention!**
>
> The **db_name** structural element cannot be empty and must not match the existing standard user fields, because this disrupts the general logic of the *Access Manager* module and leads to failures and data loss.
> The **description** structural element cannot be empty, because it is also the name of an additional field displayed in the *Access Manager* interface window, otherwise it will be ignored by the system.
> The **fmt** structural element must be one of a fixed set of modifiers (see Field formats with special processing). If a modifier not from the set is specified or the parameters (**prms**) are specified incorrectly, the field will be processed by default according to its type (see Supported SQL data types).

9.2 Supported SQL data types

SQL data type	Representation	Default processing
BIT	Boolean	Drop-down list with Yes/No values
INTEGER Range (-2147483648; 2147483647)	Integer	Numeric field with increment/decrement and manual input option
SMALLINT Range: from -32768 to 32767, values outside the range will not be updated in the database		
DATETIME	DateTime	Calendar with date and time selection option

SQL data type	Representation	Default processing
CHAR The maximum size must be specified (example: 'CHAR, 30')	String	Text field
TEXT		

9.3 Field formats with special processing

Format	Description	Syntax
C	A drop-down list with a predefined and fixed set of possible values. *Note. The type in the database can also be numeric, in which case the entire set of values must be numeric*	{C%value1|value2|...|valueN} Example: {C%Waiter|Cashier|Storekeeper|Security}
CT	A drop-down list where you can enter arbitrary values. The logic is similar to the C format, but it allows you to manually fill the field with text if necessary. It is used if the full list of possible values is too large, but there are few most frequently used options (they are predefined)	{CT%value1|value2|...|valueN} Example: {CT%Tokyo|Paris}
CCI	A drop-down list with predefined values and option to generate events on saving. It is used if changes in key user parameters need to be logged in the database or "intercepted" by an event dispatcher/script. It is recommended to make this field mandatory. *Note. The event is generated if the given user was saved after changing the field, and the event is not generated when new users are currently created. The event that was edited is generated for the Access Manager module object. To see this event in the Event Viewer or use it in the Event Manager, add these events to the Access Manager object in the DDI file of the Access Manager module*	{CCI%Descr1(EVENT1)|Descr2(EVENT2)|...|| DescrN(EVENTN)} Example: {CCI%Issued(CARD_ISSUED)| Lost(CARD_LOST)|Broken(CARD_BROKEN)}

Format	Description	Syntax
S	A numeric field with increment/decrement and manual input option. *Note. If a numeric data type is selected for a field in the database, then it is necessary to take into account the minimum and maximum values in accordance with the ranges in the syntax*	{S%0} or {S%min|max} Example 1: {S%0}—range of values: min -2147483648, max 2147483647 Example 2: {S%100|999}—range of values: min 100, max 999
U	This format is internal and cannot be used to generate additional fields	-
UT	Unique text with validation (checking for compliance with certain requirements) using a regular expression template. It is a convenient customization tool, but it requires technical knowledge in writing regular expressions. The text entered by the operator is checked against the template, and only if it matches the template—the field value can be changed. Also, when saving a user, the uniqueness of the entered value is checked: there cannot be two users with the same value for this field	{UT%pattern_base64} Example: {UT%XlvQkNCS0JXQmtCc0J3QntCg0KHQotCj0KVdXGR7M31b0JDQktCV0JrQnNCd0J7QoNCh0KLQo9ClXXsyfVxkezIsM30k} The text packed in Base64 format contains the following template (for the English version of the product): ^[A-Z]\d{3}-\d{3}-\d{2}-\d{3}-\d$. This template allows you to check the entry of a car license plate in the state of Florida: • F031-469-45-999-5—matches the template, • F 31-469 45-A99-5—does not match the template
UTS	Unique text. When saving a user, the uniqueness of the entered value is checked: there cannot be two users with the same value for this field. If another user tries to enter the same value into a field, a warning message is displayed that this value is already set for another user	{UTS%0}

Format	Description	Syntax
TC	Non-unique text that contains predefined values, with the option to add new values. It allows you to supplement the set of text values as necessary and re-select values from the list. It may have a fixed set of predefined values. *Note. Before you edit a field, you should collect all variants of the value of this field from all users, eliminate the duplicates and add values to the list of predefined values, if any. Therefore:* *1) If you want to remove a certain cached value from this list, you need to clear or change it for all users who have this value set in their fields.* *2) If you save a value with an error, it will be cached along with other values. That is, the options "bucket", "buc ket", "bUcket" or "buket" will end up in the cache and can appear in the list of available values*	{TC%EMPTY} or {TC%value1|value2|...|valueN} Example 1: {TC%EMPTY}—no predefined values. Example 2: {TC%Engineer|Medic|Accountant}
TL	Text with limited length. *Note. It is necessary to make sure that the field type in the database does not exceed the allowed length. The example above requires TEXT or CHAR, 10 (or more)*	{TL%length} Example: {TL%10}—the line length is limited to 10 characters
RO	An arbitrary readonly field. It is used, for example, to display data when importing users from an external system or if this field is filled in with a script when manual input by the operator is prohibited. *Note. This format is similar to the normal text field, which is used in the Access Manager by default and marked as "Read Only" settings. The difference is that this field remains non-editable even if it is marked as editable. It also has a default value*	{RO%def_value} Example: {RO%Not specified}

9.4 Creating additional fields for the User object

To create additional fields for the **User** object, do the following:

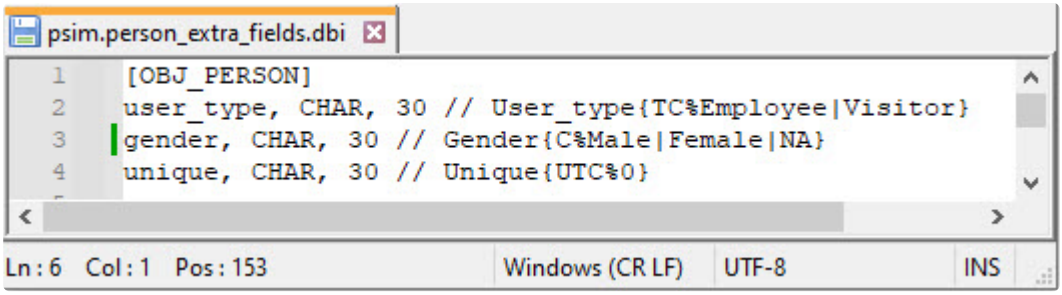
1. In the *Axxon PSIM* installation directory, for example **C:\Program Files (x86)\Axxon PSIM** create a .dbi text document, for example, **psim.person_extra_fields.dbi**.
2. Open the created .dbi file in the text editor.

   > **Attention!**
   >
   > Before you enter any data, make sure that the UTF-8 text encoding is selected. Otherwise, when adding additional fields to the database, the text will be recognized incorrectly.

3. In the first line of the text document, enter **[OBJ_PERSON]**.
4. In subsequent lines, specify the additional fields parameters:
   a. Separated by commas, enter the field name (**db_name**) that will be saved in the database, the field data type (**db_type**) with the maximum field size, if required—see Supported SQL data types.
   b. Using a double slash "**//**", indicate the field description (**description**) that will be displayed in the interface window of the *Access Manager*.
   c. If necessary, set the field behavior pattern by indicating the beginning and end using curly braces "**{ }**".
5. Save the changes.

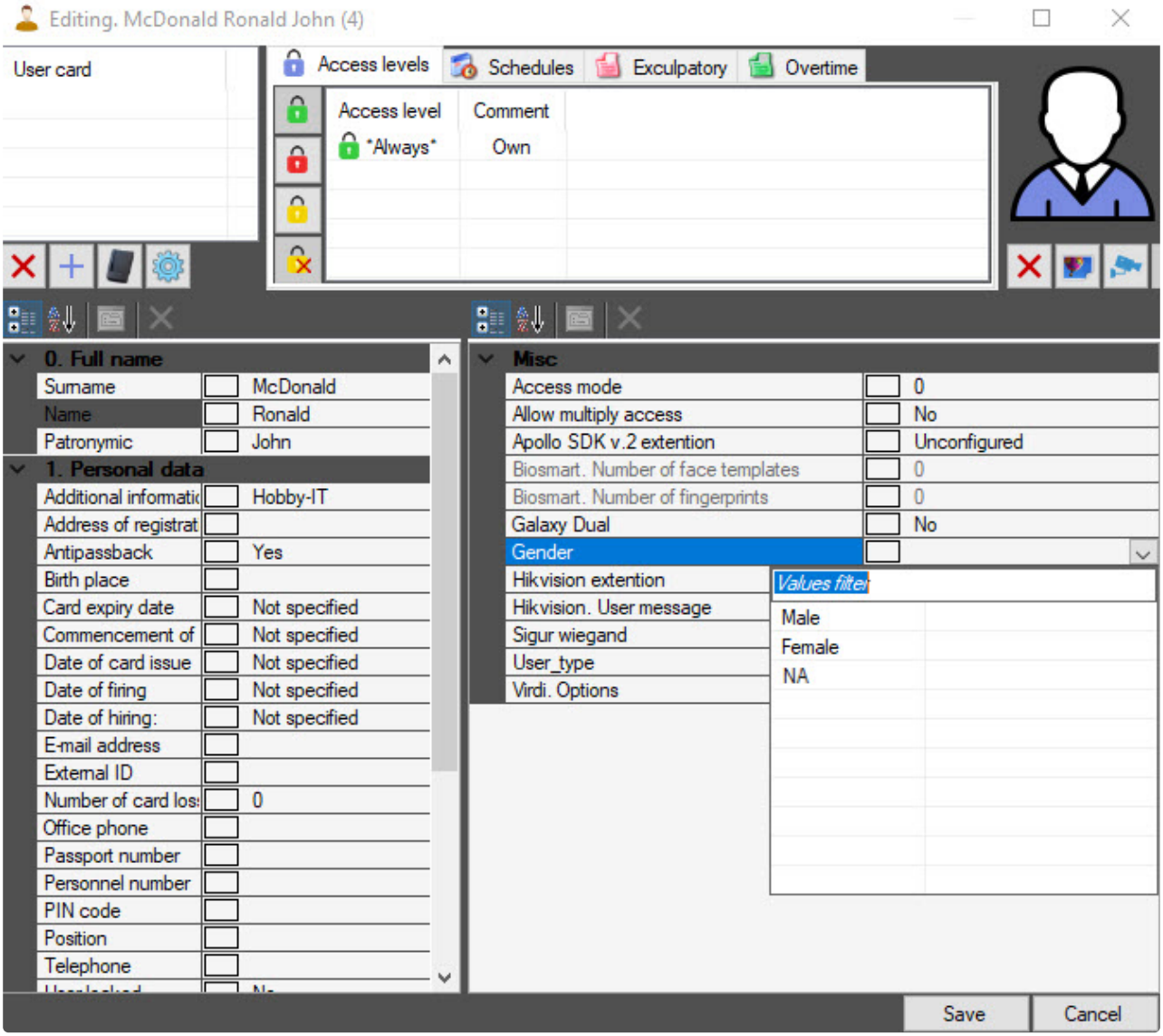
   > **Attention!**
   >
   > After you save the .dbi file, it is necessary to update the main database. To do this, use the idb.exe utility (see The idb.exe utility for converting databases, selecting database templates and making backup copies of databases).

An example of a .dbi file with additional fields for the **User** object is shown in the figure below:



As a result, the created fields will be available on the settings panel of the **Access Manager** object on the **Additional fields** tab (see Configuring Main department type).

In the interface window of the **Access Manager**, in the area of additional fields, the corresponding additional fields will be displayed depending on the configured visibility and availability of fields for editing, as well as the specified category.



9.5 Basic structural elements of the additional field of the User object

Indication	Description
db_name	The additional field name (db_name) that will be saved in the database
db_type	Data type (db_type) of the additional field, size (if required, see Supported SQL data types)
description	Name of the additional field displayed in the **Access Manager** interface window
fmt	A modifier from the set (see Field formats with special processing)

Indication	Description
prms	Field value parameters, entered using parentheses ()
{	Beginning of the additional field behavior pattern
%	After the %, the names of the predefined values of the additional field are listed. *Note. If you specify %EMPTY, there will be no predefined values*
value1, valueN	Names of predefined values of the additional field
|	Separation of predefined values of the additional field
length	Line length limit
def_value	Default value
}	End of the additional field behavior pattern

Creating additional fields for the **User** object is complete.

10 Appendix 4. Creating a single photograph database

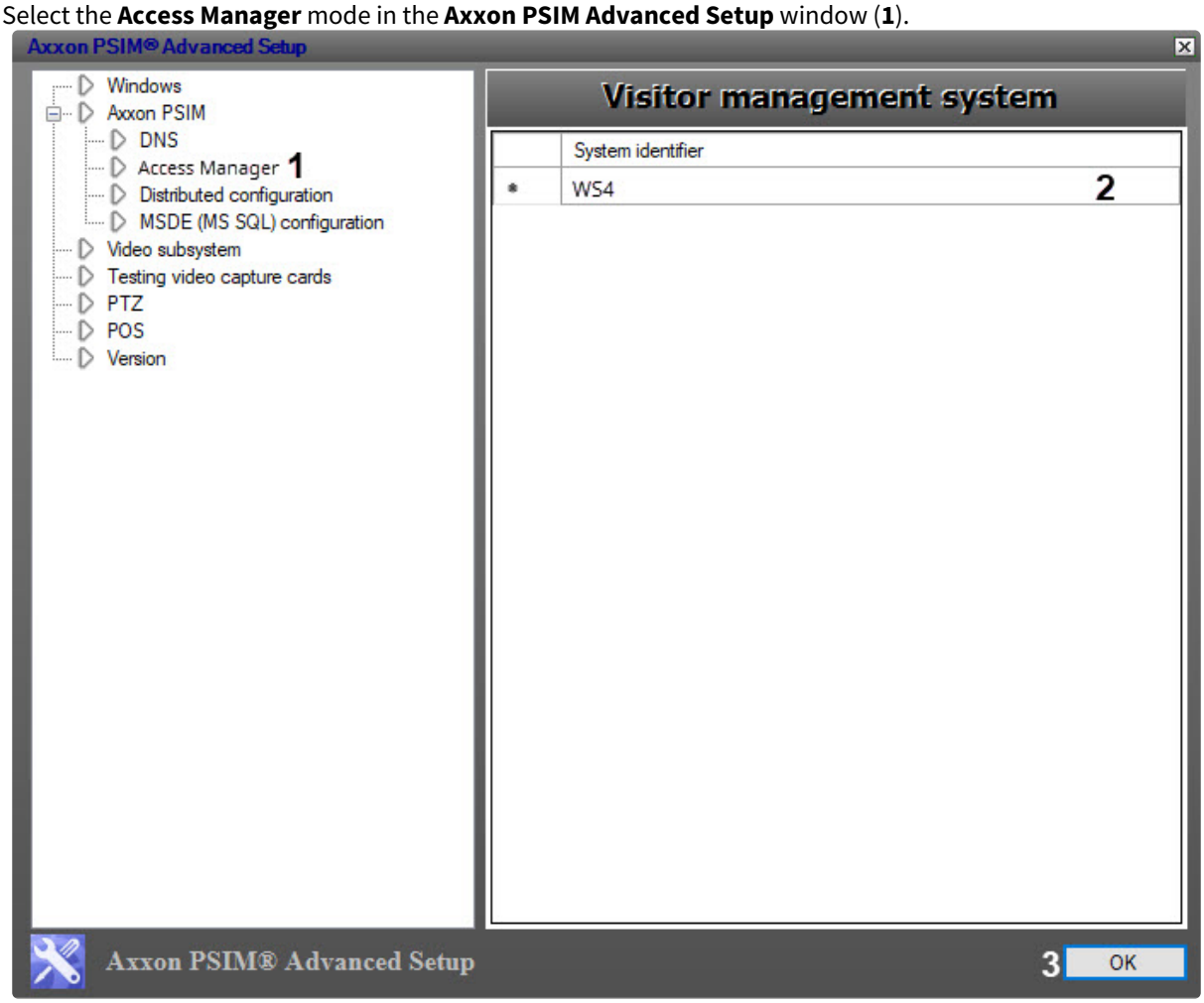
ACFA PSIM supports storing user photographs on several computers.

ACFA PSIM advanced settings utility tweaki.exe is used to create a single photograph database. There are two ways to launch the tweaki.exe utility:

1. From the Windows **Start** menu: **Start** ->**All Programs** ->**Axxon PSIM** ->**Utilities** ->**Advanced settings utility**.
2. From the **Tools** folder of *ACFA PSIM* installation directory: <*Axxon PSIM* installation directory>\Tools\tweaki.exe.

To configure the creation of a single photograph database, do the following:

1. Select the **Access Manager** mode in the **Axxon PSIM Advanced Setup** window (**1**).



2. In the **System identifier** column, enter the names of the Servers/RAWs that will store the photographs assigned by a user using the *Access Manager* module (**2**).

> **Note**
>
> The specified Servers/RAWs must be connected to the *Axxon PSIM* Server to which photos from *Access Manager* are added. Detailed information about configuring server connections is given in *Axxon PSIM* Software System. Administrator's Guide. However, the *Access Manager* module does not have to be installed on the specified computers. Do not add Clients to the list.

> **Note**
>
> Only photographs that have been newly added using the *Access Manager* module will be placed on the specified computers. Photographs added to the system before the configuration of the creation of a single photograph database will not be distributed to these computers.

> **Note**
>
> Photographs will be stored on both the computers specified using the tweaki.exe utility as well as the computer from which photographs are added. Added photographs are stored in: *<Axxon PSIM* installation directory>\Bmp\Person.

3. Click the **OK** button (**3**).

This completes the process of configuring the creation of a single photograph database.

11 Appendix 5. Face synchronization module

11.1 General information about the Face synchronization module and its licensing

The *Face synchronization* module is designed to automatically synchronize the users of the *Access Manager* module who have photos with the *Face PSIM* reference face database (see *Face PSIM* software package. Working with the reference face database).

The *Face synchronization* module allows you to do the following:

1. Automatically create a face in the reference face database when you assign a photograph to the user in the *Access Manager* module.
2. Automatically change the face image in the reference face database when you change a user's photo in the *Access Manager* module.
3. Automatically delete a face from the reference face database when you delete a user's photo in the *Access Manager* module.
4. Automatically delete a user in the *Access Manager* module when you delete a face from the reference face database.

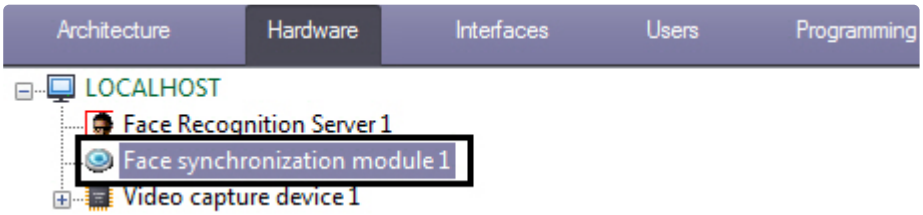
> **Attention!**
>
> In case you create users in the *Face PSIM* database using the **Face recognition and search** interface object (see Adding images to the reference face database), the correct synchronization of faces is not guaranteed.

Protection

The *Face synchronization* module is provided free of charge upon purchase of the *Access Manager* module.

11.2 Activation of the Face synchronization module

To activate the Face synchronization module, create the **Face synchronization module** object based on the **Computer** object on the **Hardware** tab of the **System settings** dialog window.

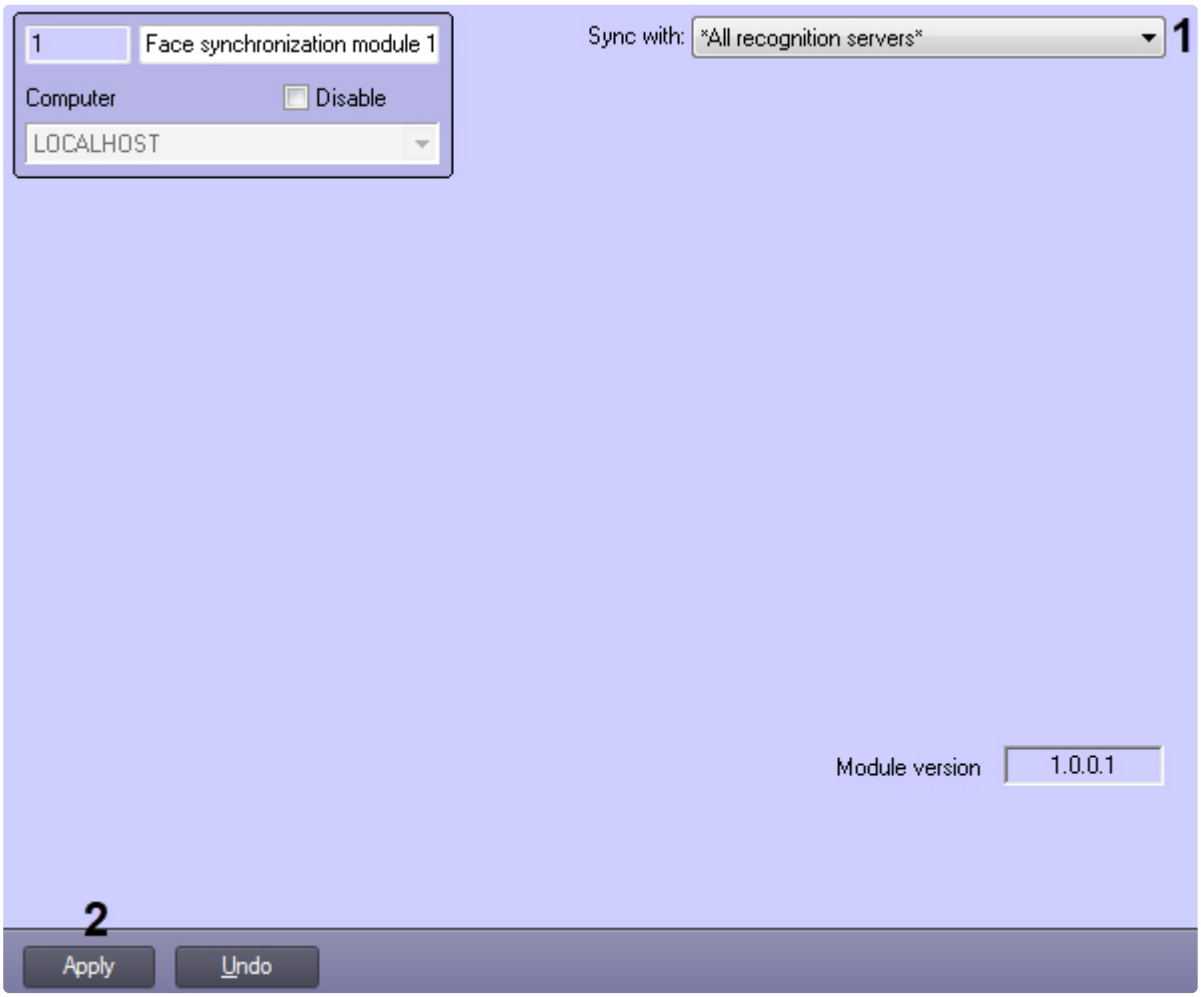


11.3 Configuring the Face synchronization module

On the page:

11.3.1 Selecting the Face Recognition Servers for synchronization

The selection of Face Recognition Servers with which faces will be automatically synchronized is carried on the **Face synchronization module** object settings panel.



In the **Synch with** drop-down list (**1**), select the required Face Recognition Server. If you select the value **All recognition servers** will be synchronized with all Face Recognition Servers in the distributed system.

> **Note**
>
> In the **Module version** field is displayed the current version of the Face synchronization module.

11.3.2 Selecting the Face Recognition Servers in the Access Manager module

To receive events about the impossibility of adding a photo to the Face Recognition Server due to its poor quality, you must specify the corresponding Face Recognition Servers as control readers on the *Access Manager* module settings panel (see Configuring control readers in the Access Manager).

12 Appendix 6. Additional features of Access Manager module

12.1 Event generation when a photo is assigned to a user

It is possible to generate an event with the captured frame image when a photo is assigned to a user from a camera (see Assigning a photograph from a video camera).

> **Attention!**
>
> The **account_manager.run.config** file should be configured on the same computer on which you are planning to work with the *Access Manager* module.
> After you make changes to the **account_manager.run.config** file, it is necessary to restart *ACFA PSIM*.

1. Go to the *<Axxon PSIM* installation directory>\Modules\ path.
2. Open the **account_manager.run.config** file for editing.
3. Add the following lines to the **applicationSettings** group:

```
<setting name="NotifyInitialPhoto" serializeAs="String">
    <value>True</value>
</setting>
```

account_manager.run.config

```
 8    <applicationSettings>
 9        <RunModule.account_manager_run.Properties.Settings>
10            <setting name="CommonBackground" serializeAs="String">
11                <value>206, 206, 255</value>
12            </setting>
13            <setting name="ControlsBackground" serializeAs="String">
14                <value>244, 247, 252</value>
15            </setting>
16            <setting name="FormsBackground" serializeAs="String">
17                <value>215, 228, 242</value>
18            </setting>
19            <setting name="SettingsBackground" serializeAs="String">
20                <value>AliceBlue</value>
21            </setting>
22            <setting name="ScanifyAPIEnabled" serializeAs="String">
23                <value>False</value>
24            </setting>
25            <setting name="AutoCropFrame" serializeAs="String">
26                <value />
27            </setting>
28            <setting name="NotifyInitialPhoto" serializeAs="String">
29                <value>True</value>
30            </setting>
31        </RunModule.account_manager_run.Properties.Settings>
32    </applicationSettings>
33</configuration>
```

4. Save the changes to the **account_manager.run.config** file.

As a result, when a photo is assigned to a user from a camera, an event will be generated:

```
PERSON|id|NOTIFY_PHOTO|core_global<0>,base64<>
```

where id is the identifier of the user to whom the photo is assigned, and base64 is the jpeg image in Base64 format.