ACFA Intellect

KeyWatcher Settings Guide

Last update 01/04/2020

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1 KeyWatcher Settings Guide. List of terms

The *KeyWatcher ACS* integrated system is a computerized system for control of removal and using of keys and small objects (i.e. the electronic wall-mounted key box with keys access control system).

The *Intellect* Server is the computer with an installed Server configuration of the Intellect.

Operator's time to answer is the period of time during which the *KeyWatcher ACS* interface window is being displayed. The corresponding window will be hidden in case if the Operator hasn't done anything with it during this time.

Time zone is the set of any quantity time intervals within the limits of every twenty-four hours cycle timing (from 1 to 365 days), but also the time intervals during the special dates. Time zones determine the access schedule on the guarded object.

2 Introduction into KeyWatcher Settings Guide

On the page:

2.1 Purpose of the Document

KeyWatcher Settings Guide is a reference and information guide meant for *KeyWatcher* configuration specialists. This module is a part of Access Control System (ACS) carried out on the base of *ACFA Intellect*.

The guide provides the following:

1. General information about *KeyWatcher ACS* module
2. Configuring *KeyWatcher ACS* module
3. Operating *KeyWatcher ACS* module

2.2 General information about KeyWatcher integration module

KeyWatcher module is the *ACS* component carried out on the base of *ACFA Intellect*. It is meant for executing the following functions:

1. *KeyWatcher ACS* configuration (vendor: Morse Watchmans);
2. Ensure *KeyWatcher ACS* interaction with *ACFA intellect* (monitoring, control).

Note.

For more information about *KeyWatcher ACS*, please refer to the official documentation for this system.

The main peculiarity of *KeyWatcher ACS* integration module is that it provides graphical interface for confirming keys replacement and removal by Operator, whereas the *KeyWatcher ACS* hardware itself doesn't make provision for.

At the time of writing this documentation, the KeyWatcher Illuminated model has been integrated into *ACFA Intellect*.

Before configuring *KeyWatcher* integration module do the following:

1. Install *KeyWatcher ACS* on the guarded object (see the *KeyWatcher ACS* help documentation).
2. Connect *KeyWatcher ACS* to the Intellect Server (see the *KeyWatcher ACS* help documentation).
3. Connect to the *Intellect* Server and configure any reader integrated into *ACFA Intellect* according to the documentation.

Important!

To use the *KeyWatcher ACS* integration module, be warned that the reader, which is included in the *KeyWatcher ACS* package contents, is not supported. The connection to an external reader is required.

3 Supported hardware and licensing of KeyWatcher module

Vendor	Morse Watchmans USA 2 Morse Road Oxford, Connecticut 06478 Phone: 203-264-4949 Toll-free: 800-423-8256 https://www.morsewatchmans.com/
Integration type	Low-level protocol
Hardware connection	RS-232

3.1 Supported hardware

Hardware	Function
KeyWatcher	Modular system of key storage

Module licensing

1 COM-Port, i.e. using one key box

4 Configuring KeyWatcher ACS integration module

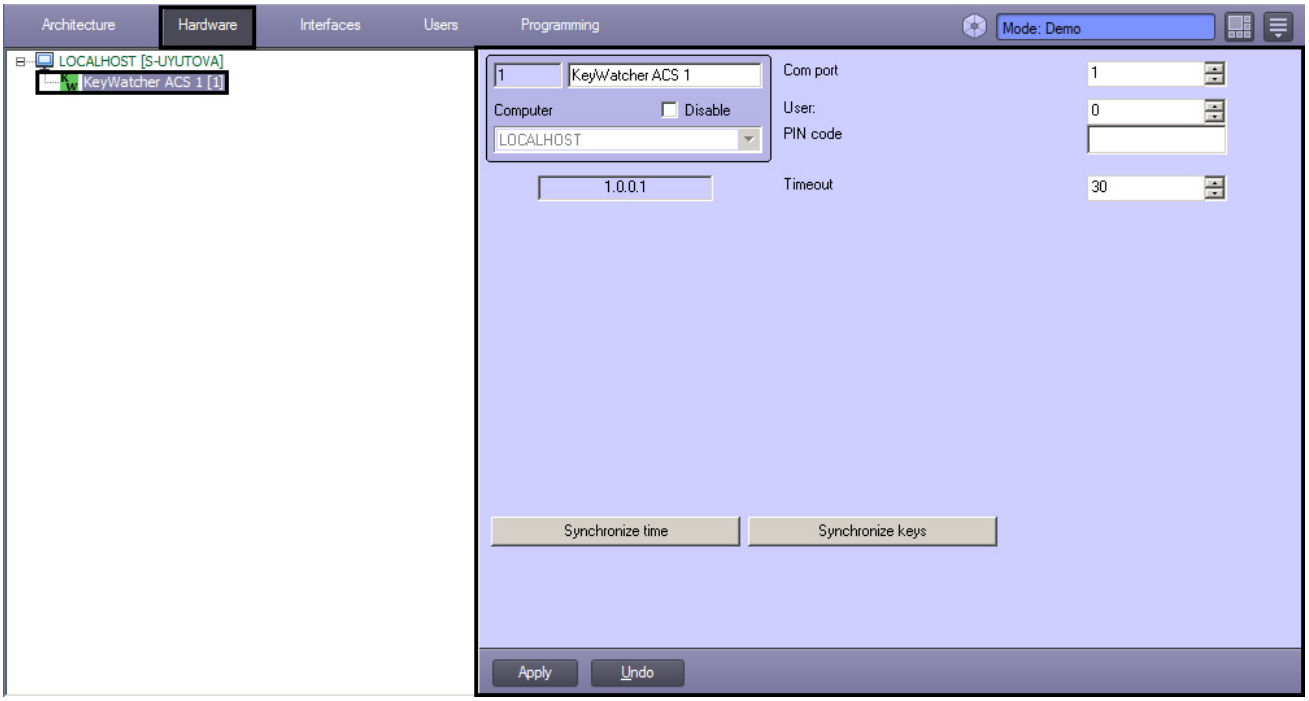
4.1 KeyWatcher ACS integration module setting procedure

1. Adjust the KeyWatcher ACS hardware in ACFA Intellect.
2. Create a program in the ACFA Intellect embedded programming language in order to redirect events from the external reader to the KeyWatcher hardware.
3. Adjust the KeyWatcher ACS interface.

4.2 KeyWatcher ACS hardware setup

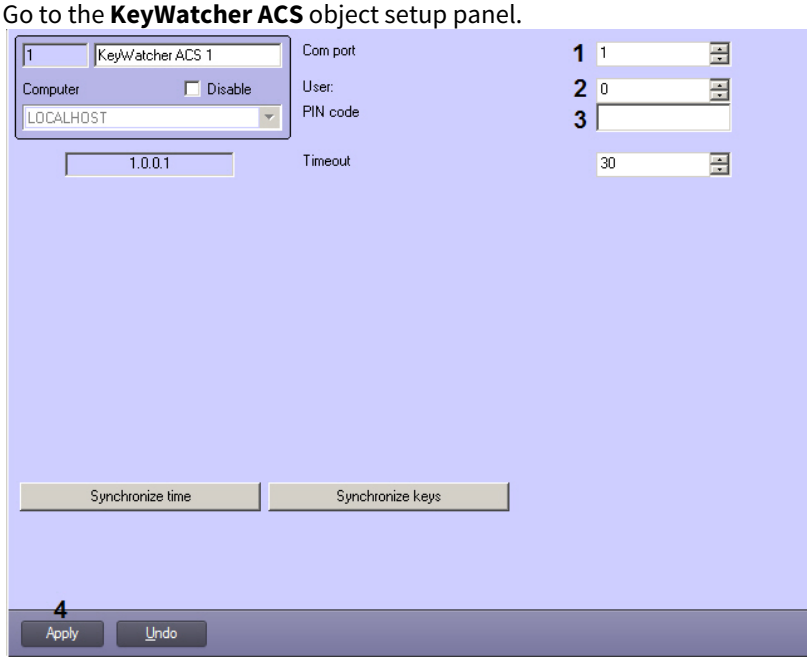
4.2.1 Configuring the KeyWatcher hardware connection

The *KeyWatcher ACS* hardware setup in *ACFA Intellect* is performed on the **KeyWatcher ACS** object setup panel. This object is created on the base of **Computer** object on the **Hardware** tab of the **System settings** dialog box.



The *KeyWatcher ACS* hardware setup is performed in the following sequence:

1. Go to the **KeyWatcher ACS** object setup panel.



2. Enter the number of COM-Port, to which the *KeyWatcher ACS* hardware is connected, in the corresponding field by clicking up-and-down buttons (1).

> **Note.**
>
> In case if the hardware connection is performed by Ethernet interface one should specify the COM-Port virtual number created by Protocol Converter.

3. Enter the user identificator in the corresponding field by clicking up-and-down buttons to get *KeyWatcher* hardware access (2).
4. Enter the user's PIN-code in the corresponding field to get *KeyWatcher ACS* hardware access (3).

> **Note.**
>
> See the user identificator and PIN-code by default in the vendor's documentation.

5. Click **Apply** (4).

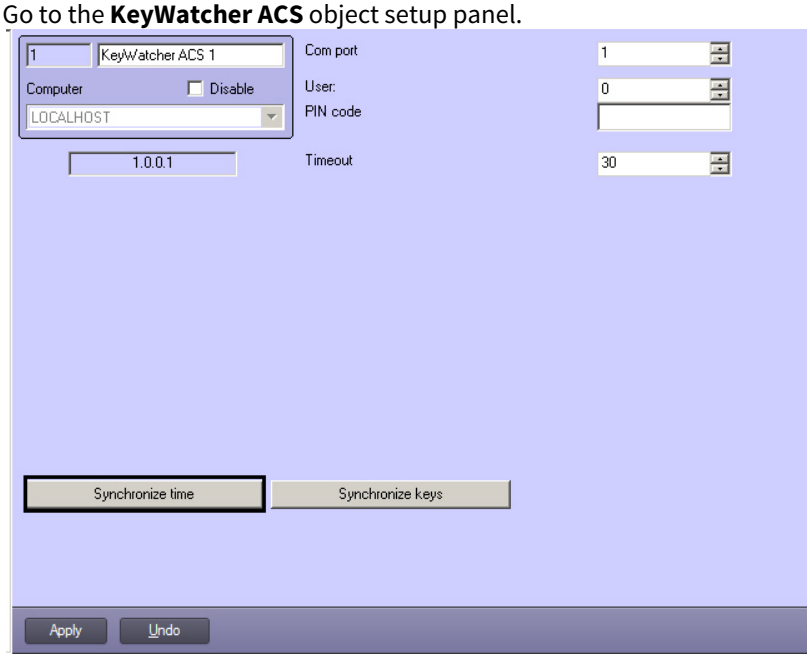
> **Note.**
>
> When the *KeyWatcher ACS* hardware is connected and *ACFA Intellect* is launched, audio signals are constantly arriving from the hardware. That means ACFA Intellect requests to the hardware: reads the events and sends commands.

KeyWatcher ACS hardware setup.

4.2.2 Time synchronization of the Server and KeyWatcher ACS hardware time

To synchronize the *KeyWatcher ACS* hardware time with the *Intellect* Server time do the following:

1. Go to the **KeyWatcher ACS** object setup panel.



2. Click **Synchronize time**.

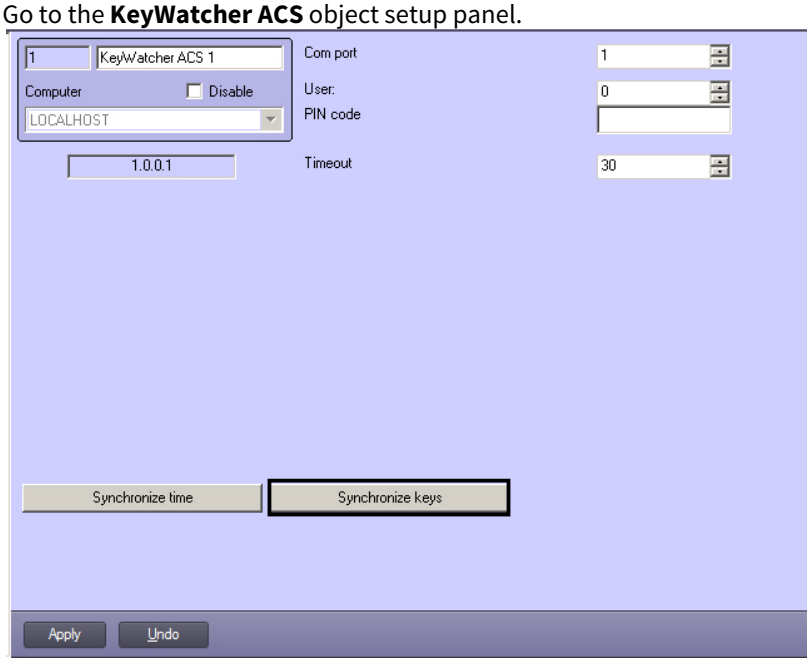
Time synchronization of the Server and *KeyWatcher ACS* hardware time.

4.2.3 KeyWatcher keys synchronization with ACFA Intellect

The *KeyWatcher* keys synchronization is performed in the following way: At first, all of the keys, which are kept in the *KeyWatcher ACS* hardware database, are read. Then, the test is run for the presence of a key in the *ACFA Intellect* tree. If the corresponding key cannot be found in this tree, the key will be added to it. Odd keys are deleted from the hardware tree. Adding or deleting the keys in the hardware tree comes with the corresponding events from *KeyWatcher ACS*.

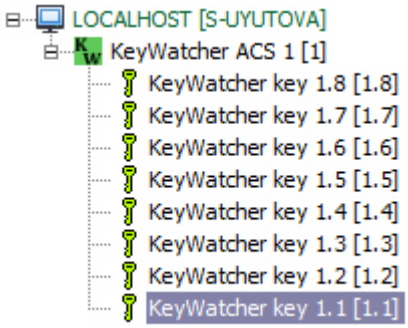
To synchronize *KeyWatcher ACS* keys with *ACFA Intellect* do the following:

1. Go to the **KeyWatcher ACS** object setup panel.



2. Click **Synchronize keys**.

The objects, which correspond to the read keys from the device database, will be added to the *ACFA Intellect* device tree.



The Keys synchronization has been finished.

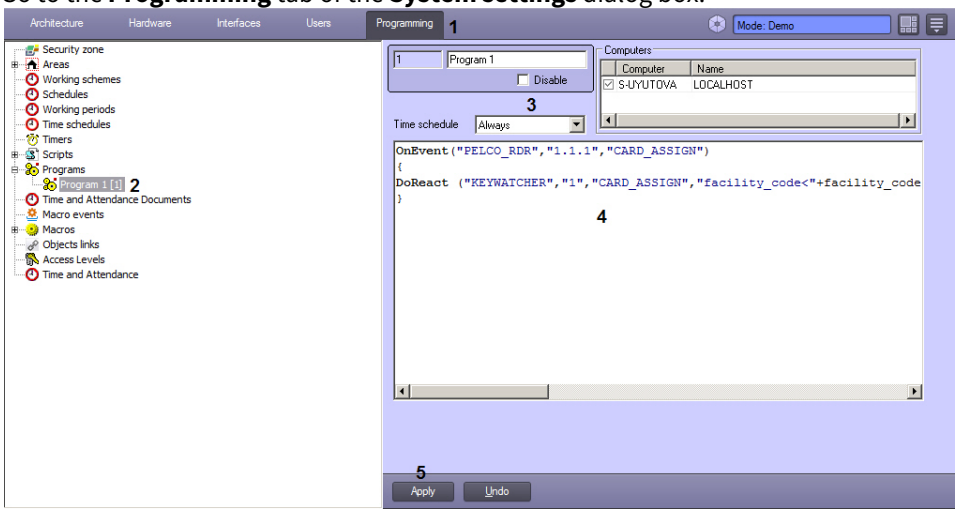
4.3 Creating a program for events redirection

The *KeyWatcher* hardware works with an external reader integrated into *ACFA Intellect* that is why for operation of the integration module one needs to redirect information about the read access card to the *KeyWatcher ACS* hardware. To do so, one needs to create a program in the *ACFA Intellect* embedded programming language.

Before creating a program one needs to connect the reader to the Server, and create and configure the object in *ACFA Intellect* that corresponds to this reader.

Create a program in the following way:

1. Go to the **Programming** tab of the **System settings** dialog box.

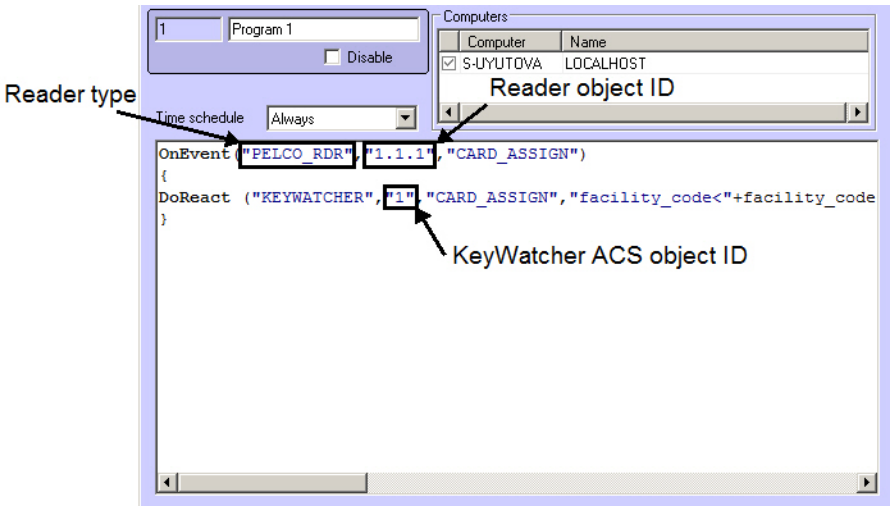


2. Create a **Program** object.
3. Select **Always** from the **Time zone** drop-down list.
4. Enter the program text in the text field.
5. Click **Apply** (5).

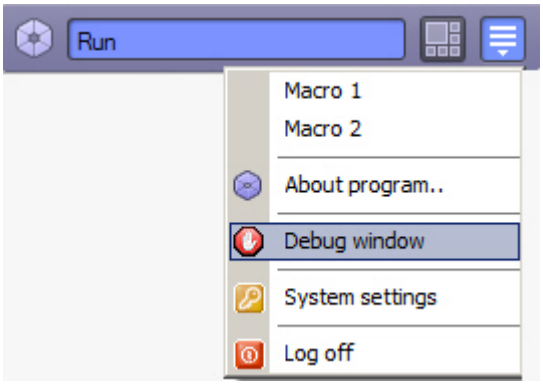
The example of program for *Pelco* reader:

```
OnEvent("Pelco","1.1.1","CARD_IS_PRESENTED")
{
    DoReact ("KEYWATCHER","1","CARD_ASSIGN","facility_code<"+facility_code+">,card<"+card+">");
}
```

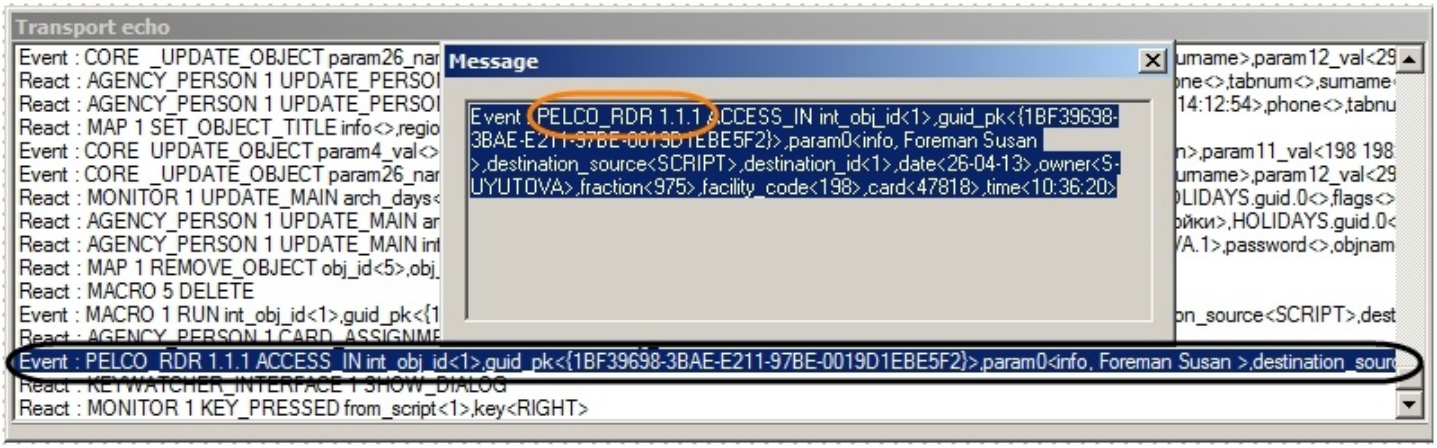
The parts of the program, which are depicted on the picture, should be replaced depending on the reader used and the *ACFA Intellect* settings.



The name of the reader object type and its identification number are clarified by the **Debug** Window. To open the **Debug** Window, one needs to select **Debug window** in the *Intellect* main menu.



When swiping the access card to the reader, the **Debug** Window displays the line containing these parameters.



To open the **Message** Window, one needs to click the right mouse button in the line corresponding to the event. The contents of this window one could copy into the communication buffer.

> **Note.**
>
> For more details on the Debug Window refer to the Intellect Programming Guide (JScript).

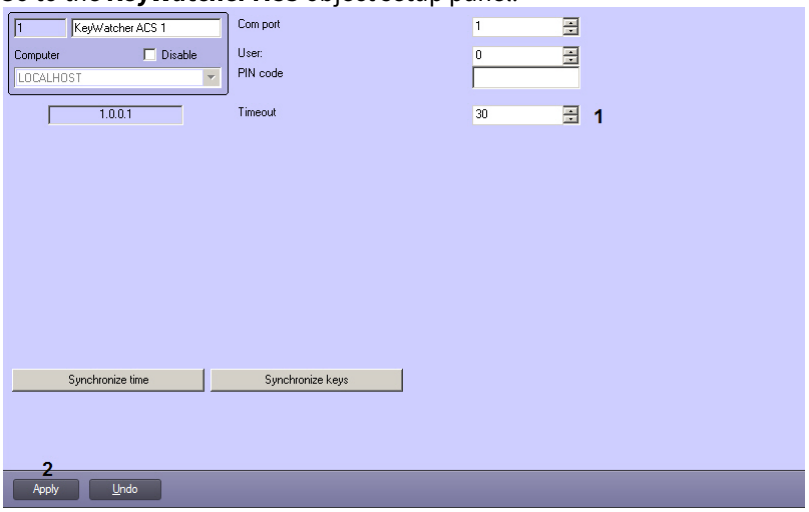
The creating of program for events redirection from the external reader to the *KeyWatcher ACS* has been finished.

4.4 Adjust the KeyWatcher ACS interface

4.4.1 Operator's time to answer setup

Operator's time to answer setup is performed in the following way:

1. Go to the **KeyWatcher ACS** object setup panel.



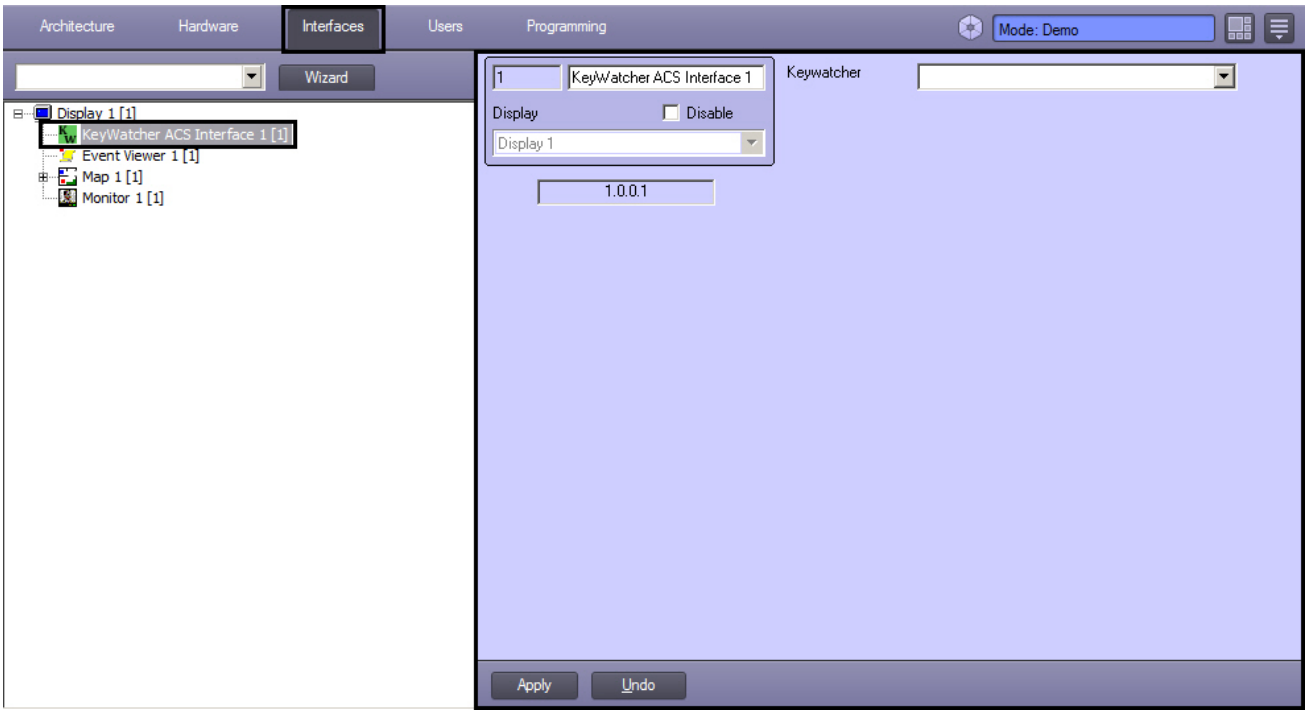
2. Enter the Operator's time to answer in the **Timeout** field in seconds.
3. Click **Apply** (2).

Operator's time to answer setup has been finished.

4.4.2 KeyWatcher ACS Interface interface object setup

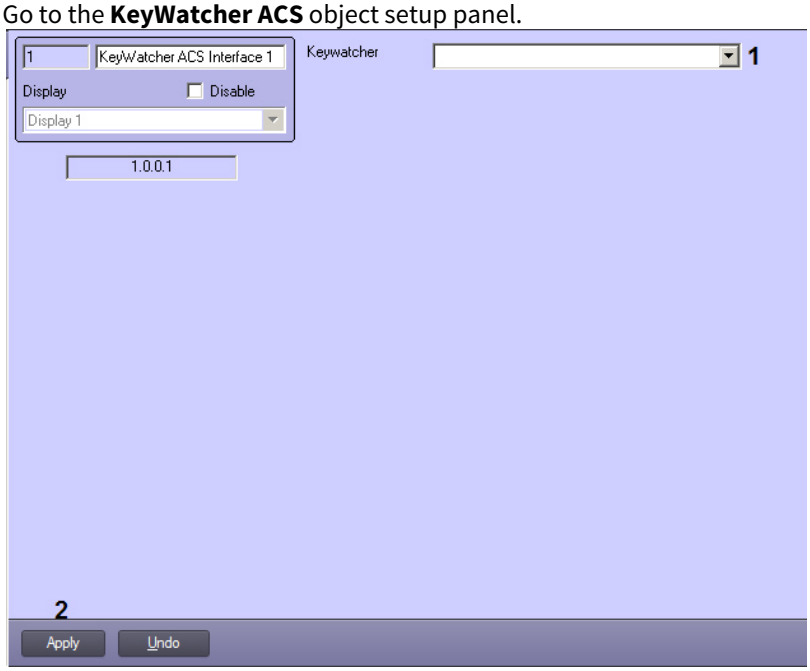
The KeyWatcher Interface interface object is used to display Interrogation Windows for keys replacement and removal. Operation with this window is described in the Keys replacement and removal section.

The **KeyWatcher Interface** object is created on the base of **Display** object on the **Hardware** tab of the **System Settings** dialog box.



The KeyWatcher ACS Interface interface object setup is performed in the following way:

1. Go to the **KeyWatcher ACS** object setup panel.



2. Select the **KeyWatcher ACS** object name from the **KeyWatcher** drop-down list, the operation with which is going to perform via resizable interface window (1).
3. Click **Apply** (2).

The **KeyWatcher ACS Interface** object setup has been finished.

5 Operating KeyWatcher ACS integration module

5.1 General information about KeyWatcher ACS module

The following interface objects are used to work with the *KeyWatcher ACS* module:

1. **Map.**
2. **Event Viewer.**
3. **Access Manager.**

The information about the settings of **Map** and **Event Viewer** interface objects can be found in the Intellect: Administrator's Guide document.

For more details on operating with these interface objects refer to the Intellect: Operator's Guide.

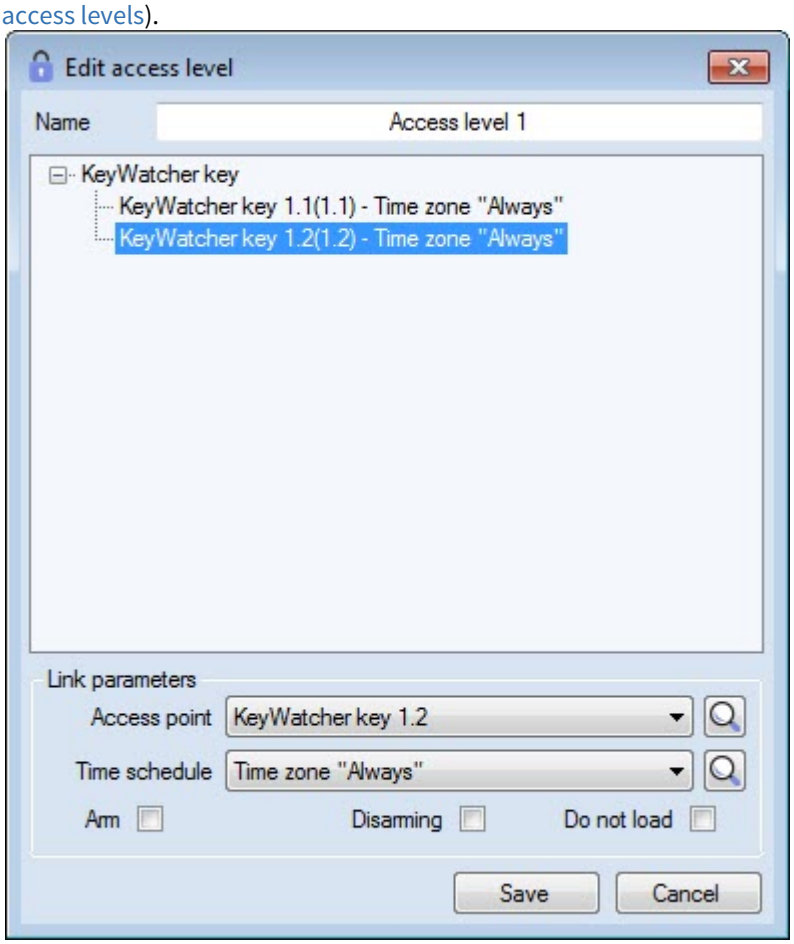
Configuring and operating *Access Manager* module are described in the Access Manager Module Settings and Operation Guide.

5.2 Assigning keys to users

Authorized keys assignment to user is performed by *Access Manager* module. Before keys assignment one should create the required users - see the Access Manager Module Settings and Operation Guide document.

Keys assignment is performed in the following way:

1. Run the *Access Manager* Module.
2. Create an **Access level** object and select the necessary *KeyWatcher* keys as access points (see Creating and deleting access levels).



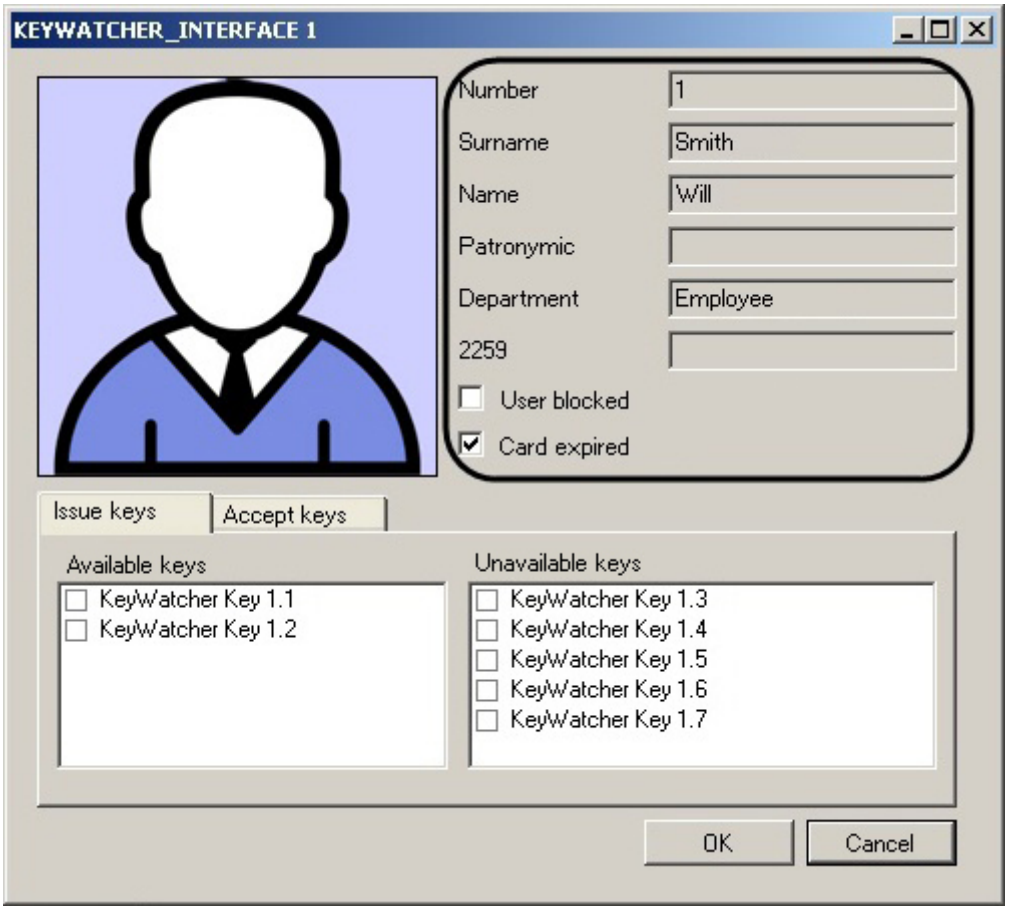
3. Assign the created Access Level to the employee (see Assigning access levels to a user).

The keys, which are added to the Access Level, will be displayed in the list of available keys when keys are issued to the user (see Keys issuance). All other keys available in the *ACFA Intellect* hardware tree will be displayed in the list of unavailable keys for user.

The authorized keys assignment to user is complete.

5.3 Keys issuance and return

When the access card is presented to the reader connected to the *KeyWatcher* hardware via program (See the Creating a program for events redirection section), the *KeyWatcher* interface window is opened. This interface window displays the card holder information.



Keys issuance and return are performed by this interface window. If no action is taken with the interface window, it will be closed after a predefiined time has passed (see Operator's time to answer setup).

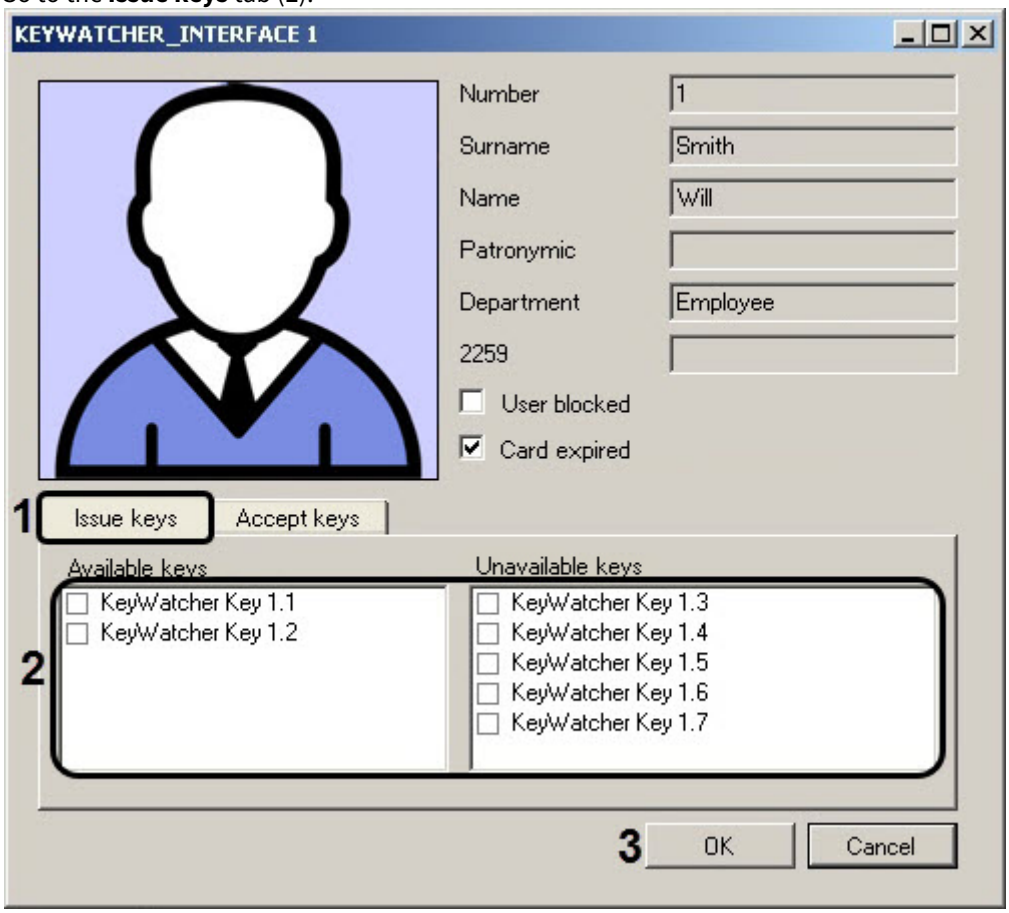
The interface window can be also launched by using the command from the interactive map (see Managing the KeyWatcher ACS).

> **Note.**
>
> The window does not appear after the card has been presented to the reader if the card holder is not registered as a user in *ACFA Intellect*.

5.3.1 Keys issuance

Keys are issued as follows:

1. Go to the **Issue keys** tab (**1**).



2. Set the checkbox next to the key which should be issued to the user (**2**).

> **Note**
>
> If the key has already been issued (not available in the device) or blocked (see Managing the KeyWatcher key), it is not displayed in the key lists.
>
> It is possible to issue to the user both available and unavailable keys.

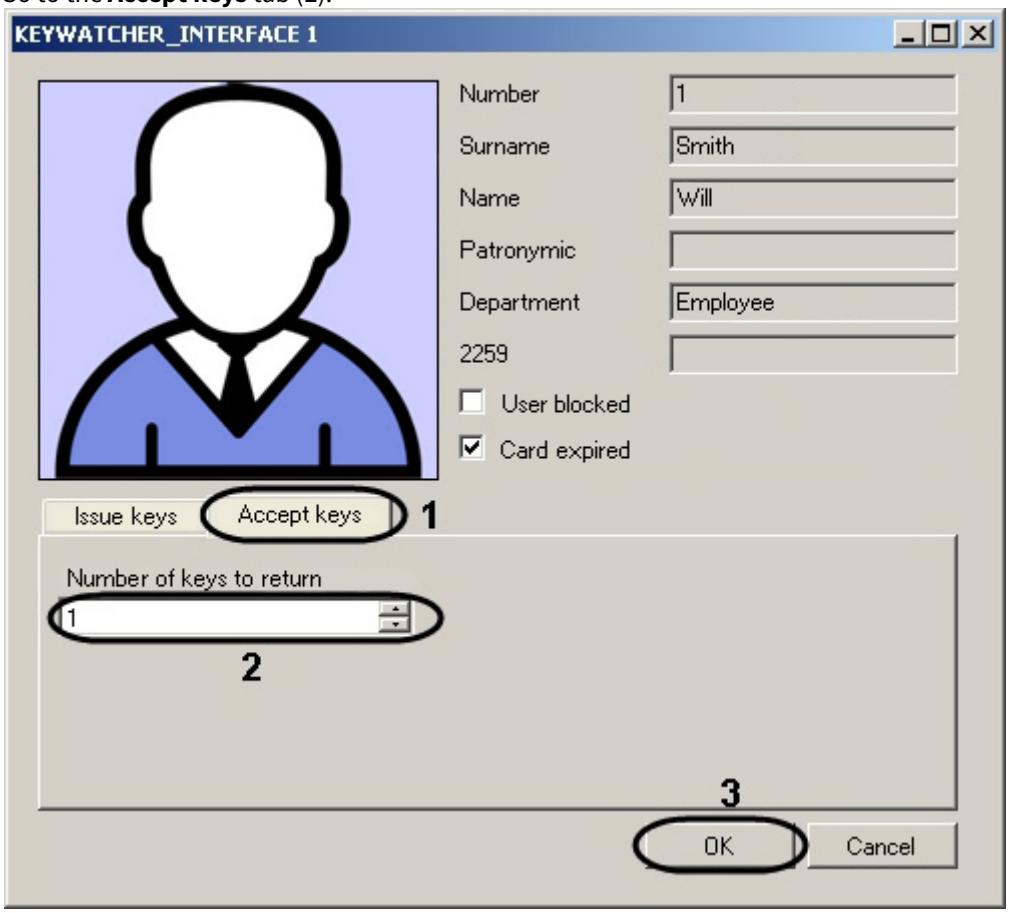
3. Click the **OK** button (**3**).
4. Pick up the selected key from the *KeyWatcher* device.

Keys issuance is complete.

5.3.2 Keys return

To return the key, do the following:

1. Go to the **Accept keys** tab (**1**).



2. In the **Number of keys to return** field (**2**), enter the number of keys to be returned by the user.
3. Click the **OK** button (**3**).
4. Place the keys in the *KeyWatcher* device.

Key return is complete.

5.4 Managing the KeyWatcher key

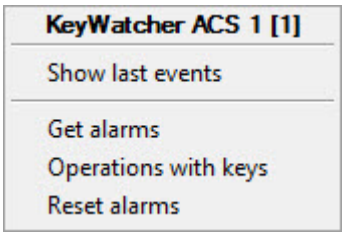
The *KeyWatcher* key is managed in the **Map** interactive window using the **KeyWatcher key** object functional menu:

The **KeyWatcher key** object functional menu commands description is given in the table.

Menu command	Function performed
Lock	The key is locked. The key cannot be issued to users
Unlock	The key is unlocked. The key can be issued to users

5.5 Managing the KeyWatcher ACS

The KeyWatcher ACS is managed in the **Map** interactive window using the **KeyWatcher ACS** object functional menu:



The **KeyWatcher ACS** object functional menu commands description is given in the table.

Menu command	Function performed
Get alarms	The alarm messages from *KeyWatcher* ACS equipment are requested
Operations with keys	Issuing or returning keys without an access card
Reset alarms	The alarms on *KeyWatcher* ACS device are reset