ACFA Intellect

HID Integration Module Settings Guide

Last update 02/12/2020

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1 List of Terms Used in HID Integration Module Settings Guide

Access: the act of entering and exiting rooms, buildings, zones, and areas by people, vehicles, and other objects.

Server: a computer that has the **Server** installation version of the *Intellect* software package installed.

HID Server: a set of HID hardware configurations.

PIN: an additional user ID number that is entered with the keypad.
HID controllers: electronic devices for managing and controlling access points, fire detectors, and intrusion sensors.
Access Control System (*ACS*): a hardware and software suite for access control.
Fire and Security Alarm (*FSA*): a hardware and software suite for fast fire detection and for the fast detection of unauthorized access to secure facilities.
Readers: electronic devices for entering human-memorable PINs with the keypad or for reading PINs from the system's security tokens.

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 device.

EEPROM:an electrically erasable programmable read-only memory device (a type of non-volatile memory device).

2 Introduction into HID Integration Module Settings Guide

On the page:

2.1 DocumentPurpose

The *Setup and User Guide for the HID Integration Module* is a reference guide for administrators and operators of the *HID* module. This module is part of access control systems/fire and security alarm systems implemented based on the *ACFA Intellect* software package.

This *Guide* contains:

1. general information on the *HID* integration module;
2. guidance on how to configure the *HID* integration module;
3. guidance on how to work with the *HID* integration module;

2.2 General Information on the «HID» Integration Module

The *HID* integration module is part of FSA/ACS systems based on *ACFA Intellect*. The module is used for:

1. configuring *HID* hardware (manufactured by **HID Global**);
2. enabling interaction between *HID* hardware and *ACFA Intellect* (monitoring and management).

Note:

Detailed information on the *HID system can be found in the vendor documentation.*

The following HID controllers and interface modules are integrated into *ACFA Intellect:*

1. V1000 network controllers;
2. V2000 network door controllers;
3. E400 network single-door controllers;
4. V100 interface modules;
5. V200 interface modules;
6. V300 interface modules;

Before configuring the *HID* integration module:

1. Install the required hardware at the secure facility.
2. Connect the *HID* hardware to the Server.

3 Supported hardware and licensing of the HID integration module

Manufacturer	HID Global 611 Center Ridge Drive Austin, TX 78753 U.S.A Тел: (949) 732-2000, (800) 237-7769 www.hidglobal.ru
Integration type	SDK
Equipment connection	Ethernet

Supported equipment

Equipment	Function	Features
V1000	Network controller	Up to 32 interfaces for doors/readers, controllers or interfaces of output control using two independent networks RS-485 2 imbedded inputs and outputs for local control of inputs and additional management of outputs Storing complete access control and configuration database for up to 32 reader interfaces (up to 64 doors) and 250000 cardholders Interaction with maximum 32 combination of devices board
V2000	Network door controller	Two readers connection through the Wiegand or Clock-and-Data interface to control one or two doors Storing complete access control and configuration database for 2 reader interfaces (up to 2 doors) and 250000 cardholders Interface for two Wiegand or Clock-and-Data readers; inputs for two door contact; 2 REX switches; AC fail; battery fail and tamper.
V100	Interface module	Connecting to controller through the RS-485 interface 2 doors and 1 reader or 1 door and 2 readers
V200	Interface module	Connecting to controller through the RS-485 interface Up to 16 control points for each device
V300	Interface module	Connecting to controller through the RS-485 interface Up to 12 control relays for each device
EH400	Network controller	Possibility to interact with one or two Hi-O iCLASS readers
OMNIKEY® 5321 CL SAM	Reader (integrated separately)	Supports HID iCLASS and MIFARE formats, as well as ISO 14443A/B and ISO 15693 with a transfer speed of up to 848 kbps in the fastest ISO 14443 A/B mode

Protection

Per 1 door (i.e. per 2 readers) and 1 V200/V300 interface module.

4 Configuring the HID Integration Module

4.1 Steps to Configure the HID Integration Module

To configure the *HID* integration module:

1. Configure the *HID* hardware's connection to the Server.
2. In *ACFA Intellect*, activate the *HID* integration module.
3. Create the *HID* integration module's object tree.
4. Set the *HID* integration module's parameters.
5. Configure the HID integration module's controllers.
6. Configure the V2000 controller devices.
7. Configure the V1000 controller devices.
8. Configure the E400 controller devices.
9. Configure the users.
10. Assign tasks to the controllers.

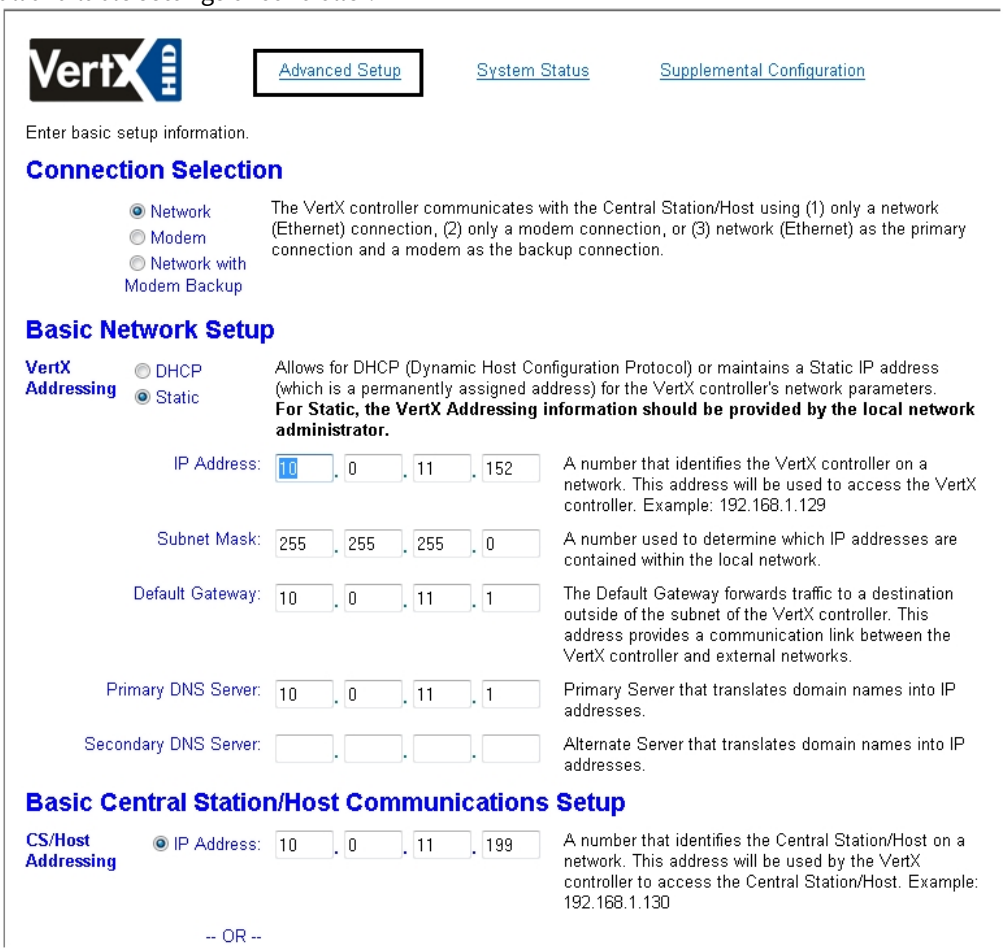
4.2 Setting the main parameters of the VertX controllers by web-interface

4.2.1 Entering the controller web-interface

To enter the controller web-interface, do the following:

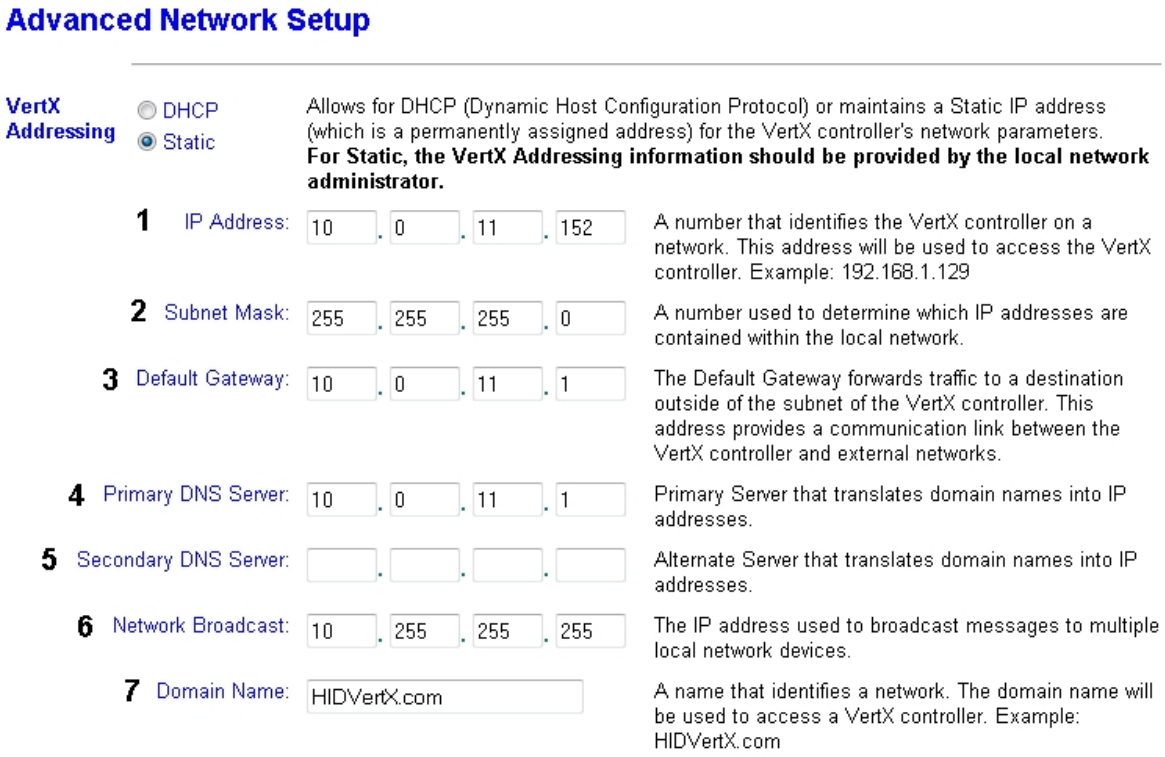
1. Specify the controller's IP address in the browser address line. Click the Enter button on the keyboard.
2. In the opened window specify user name and password to connect to controller.
3. Click the **OK** button.

4. The controller web-interface with main hardware parameeters will be dispalyed. Click the **Advanced Setup** link to display all available settings of controller.



4.2.2 Configuring network parameters of the VertX controller

Network parameters of the VertX controller are configured in the Advanced Network Setup/Basic Network Setup group. It's possible tospecify the following network parameters of the controller:

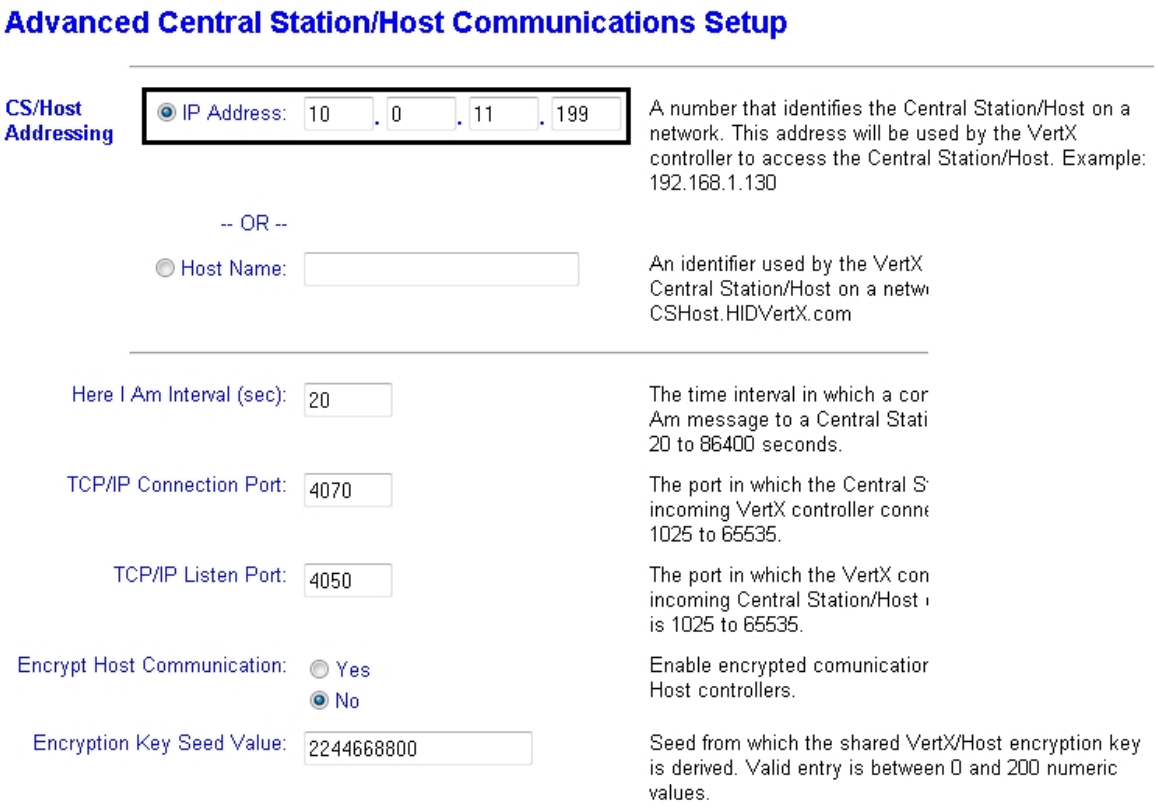


1. IP address.
2. Subnet mask.
3. Default gateway.
4. Primary DNS Server.
5. Secondary DNS Server.
6. Network broadcast.
7. Domain name.

4.2.3 Configuring IP-address to connect to the Intellect Server

To connect the VertX controller to the *Intellect* software package specify the address of the Server controlling and managing hardware in the Web-server.

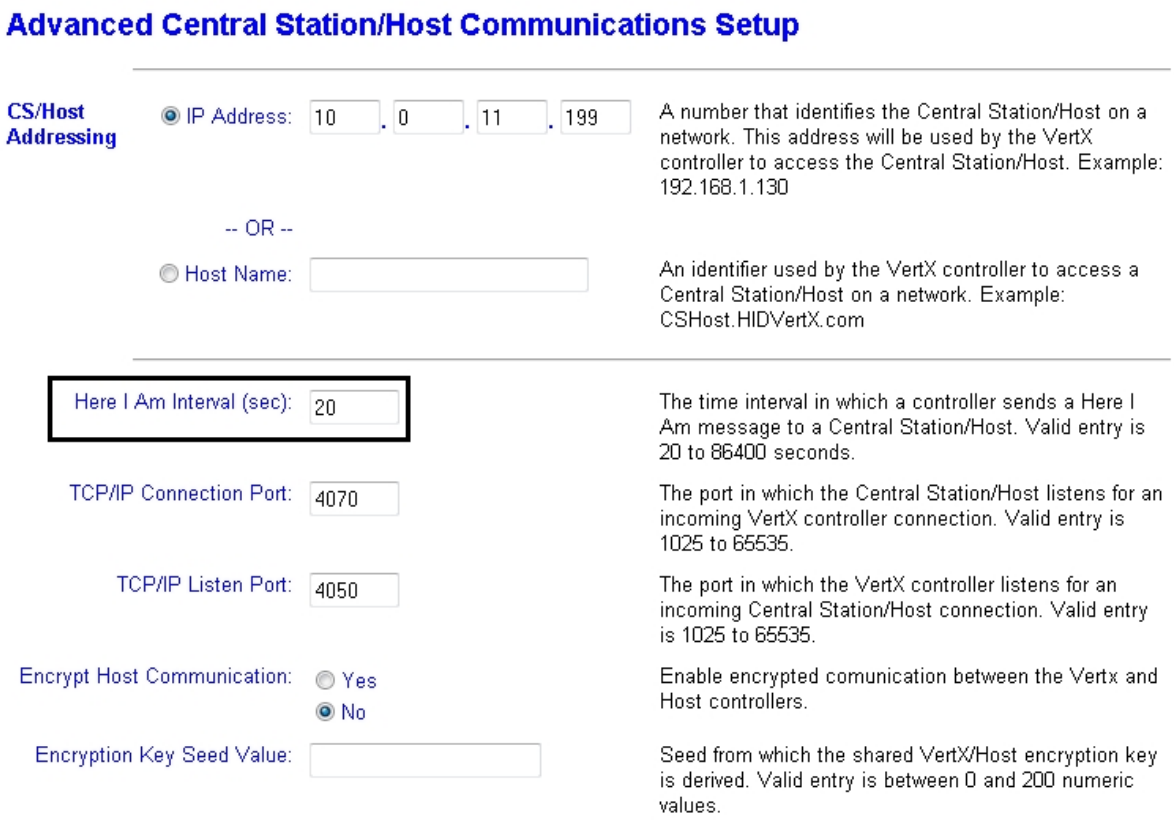
IP-address of the Intellect Server is specified in the IP Address fields located in the CS/Host Addressing group.



4.2.4 Configuring the interval of message sending Here I Am

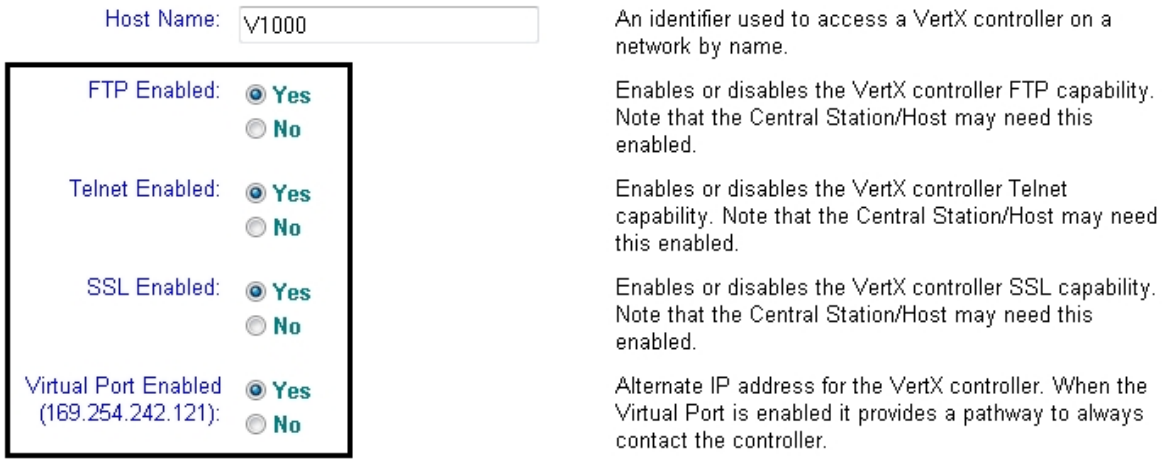
It is required to specify the interval of message sending Here I Am for online working with the VertX controllers in the ACFA Intellect software package. If the interval of message sending Here I Am is not specified, the controller will work correctly, but it will display as offline controller in the ACFA-Intellect software.

The interval of message sending Here I Am is specified in the **Here I Am Interval (sec):** field located in the **Advanced Central Station/Host Communication Setup** group.



4.2.5 Enabling and disabling of protocols in use

It is recommended to set to **Yes** position all switches given in the followinf figure.



Attention!

The controller will not operate if all switched are set into **No** position.

4.3 Configuring the HID Hardware's Connection to the Server

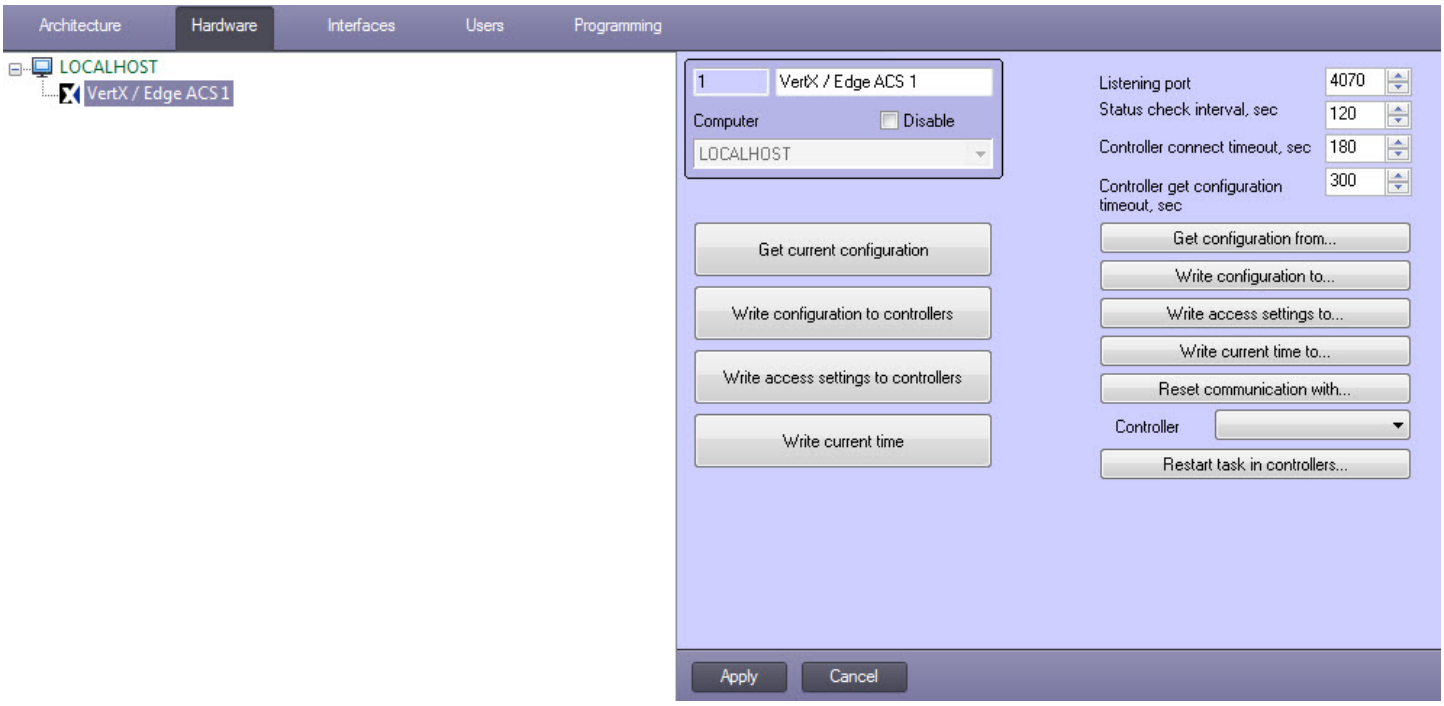
To connect the *HID* hardware to the Server, it's required that IP address of the Server and the HID hardware's IP address will be in the same subnet.

Note:

The default IP address is the same for all HID devices. This IP address can be found in the vendor documentation.

4.4 Activating the HID Integration Module in ACFA Intellect

To activate the *HID* integration module in *ACFA Intellect*, create a **VertX / Edge ACS** object. To create this object, go to the **Settings** dialog box, click the **Hardware** tab, and select a parent **Computer** object.



4.5 Creating the HID Integration Module's Object Tree

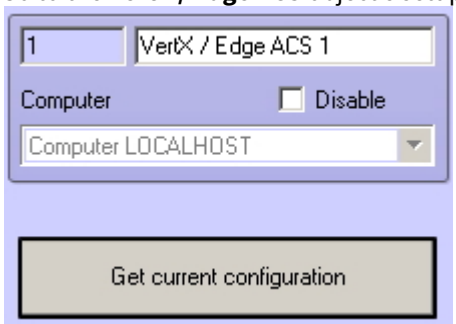
To create the *HID* integration module's object tree, you have two options:

1. Automatic – all controllers, interface modules, readers, and actuators are created automatically.
2. Semiautomatic – controllers are created manually, but interface modules, readers, and actuators are created automatically.

4.5.1 Creating the Object Tree Automatically

To create the *HID* integration module's object tree automatically:

1. Go to the **VertX / Edge ACS** object's setup panel.

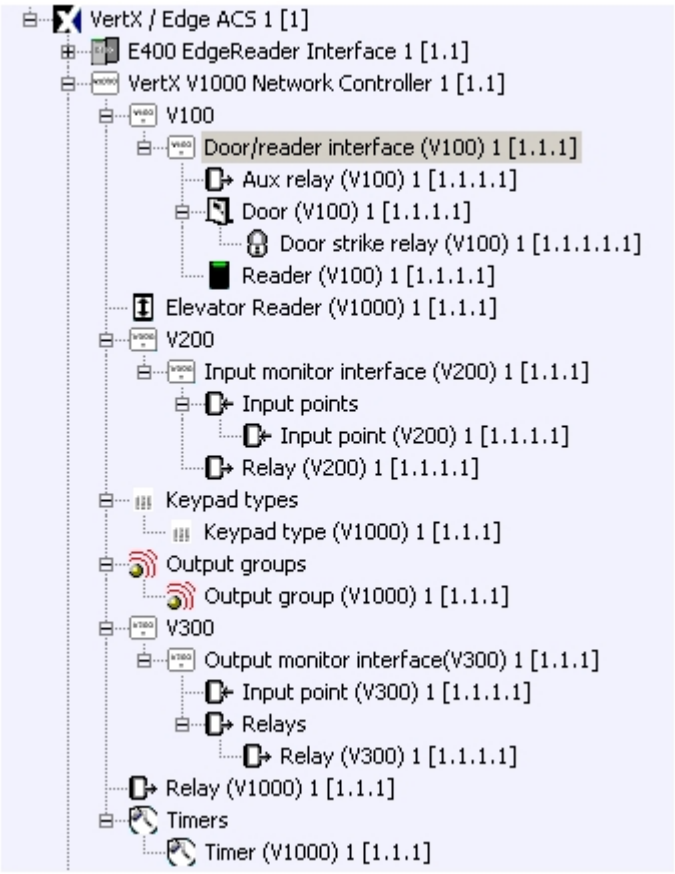


2. Click **Get current configuration**.

The object tree is then created automatically.

Note:

During the object tree creation process, you will see messages in the **Event log** interface window.



Attention!

When the object tree is created automatically, an object is created for each connected device. Do not manually add objects to the tree.

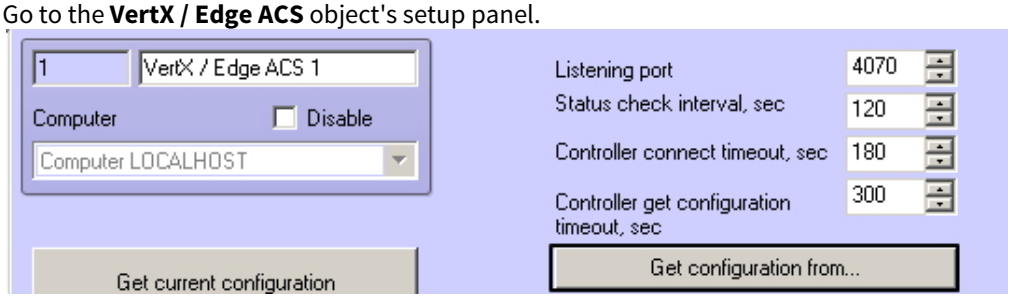
4.5.2 Creating the Object Tree Semiautomatically

When the *HID* integration module's object tree is created semiautomatically, controllers are created manually, but interface modules, readers, and actuators are created automatically.

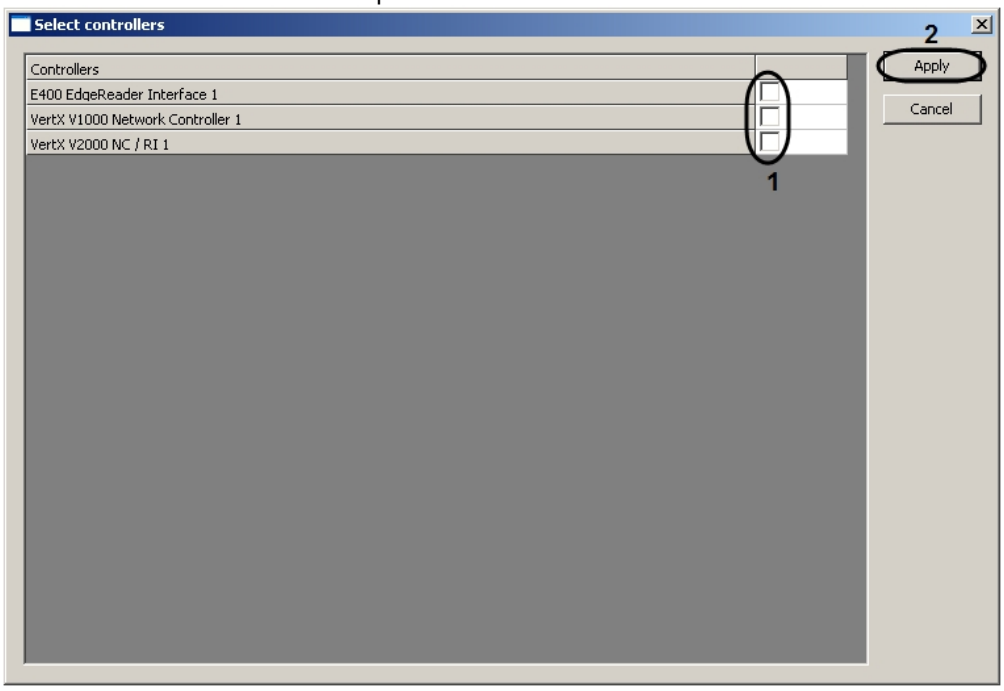
To create the object tree semiautomatically:

1. Create the required number of controller objects (**VertX V1000 Network Controller**, **VertX V2000 NC / RI**, and **E400 EdgeReader Interface** objects), one for each connected device**:** go to the **Settings** dialog box**,** click the **Hardware** tab, and select the parent **VertX / Edge ACS** object.
2. For each created object, go to its setup panel and enter the MAC address of the corresponding connected device (controller).

3. Go to the **VertX / Edge ACS** object's setup panel.



4. Click **Get configuration from...**
   The controller selection window opens .



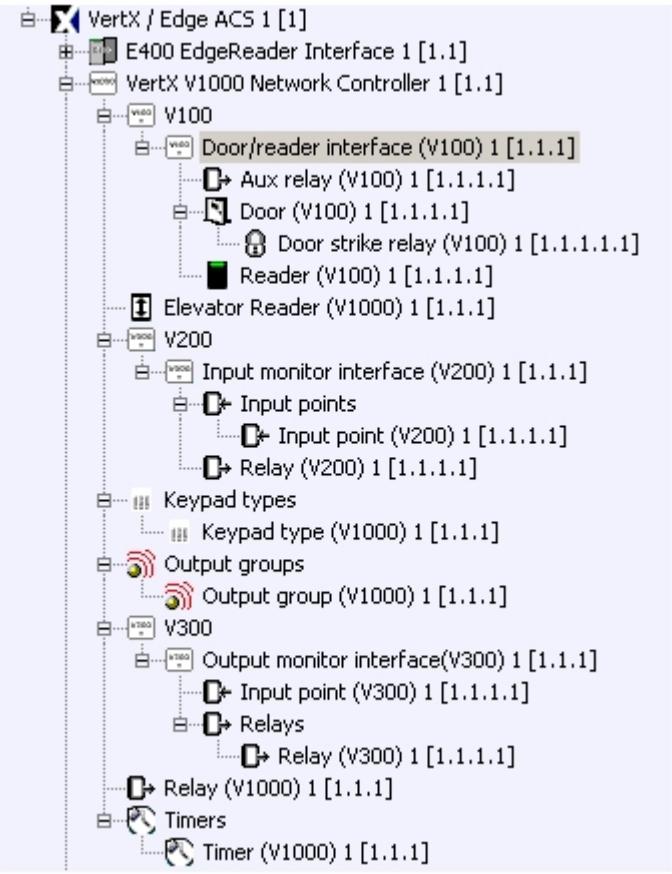
5. Select the checkboxes of the controllers whose configuration (interface modules, readers, and actuators) you want to get (**1**).

> **Note:**
>
> This window shows the created controller objects.

6. Click **Apply** (**2**).

The object tree is then created.

> **Note:**
>
> During the object tree creation process, you will see messages in the **Event log** interface window.



Attention!

When the object tree is created semiautomatically, an object is created for each connected device. Do not manually add objects to the created tree.

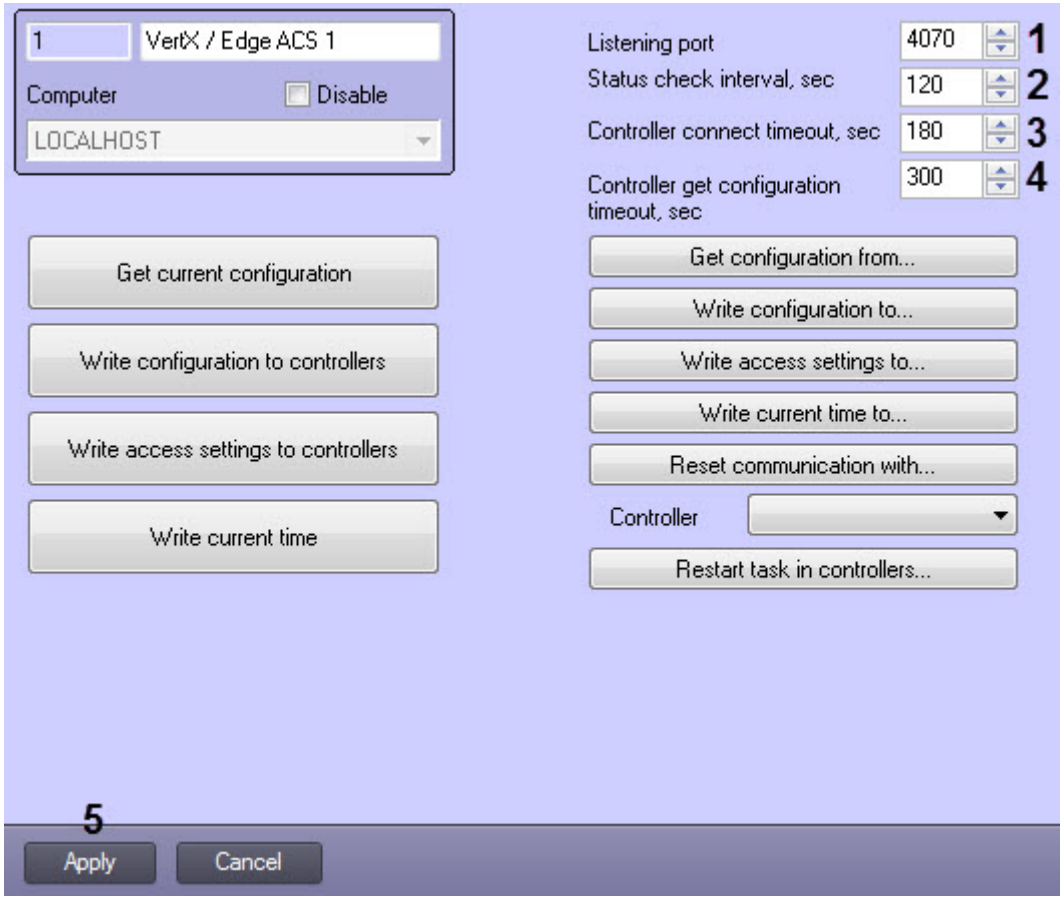
4.6 Setting the HID Integration Module's Parameters

To set the HID integration module's parameters:

1. Go to the **VertX / Edge ACS** object's setup panel.
2. in the **Listening port** field, enter a port number. This is the port to which *HID* controllers connect (**1**).

Note:

The default port number for HID controllers is 4070. If you need to change the port number, enter a new port number and save the configuration (see Managing the HID configuration).



3. In the **Status check interval, sec** field, enter a time period (in seconds). This is the time period between two consecutive status checks of the connected devices (**2**).
4. In the **Controller connect timeout, sec** field, enter a time period (in seconds). When this time period elapses, the system stops waiting for the controller's response and assumes that the controller is disconnected (**3**).
5. In the **Controller get configuration timeout, sec** field, enter a time period (in seconds). If the connection to a controller is lost, the system tries to get the controller's configuration and stops when the time period elapses (**4**).

   > **Note:**
   >
   > When getting the configuration of multiple controllers, the entered time is added together.

6. Click **Apply** to save the changes (**5**).

The *HID* integration module's parameters are now set.

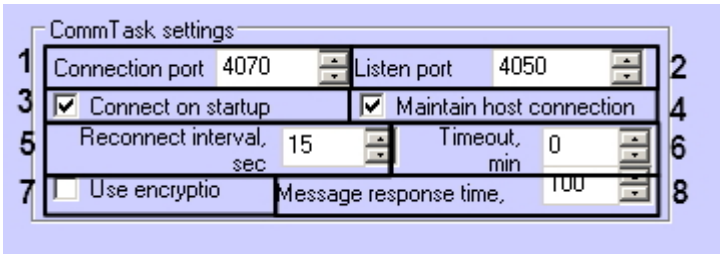
4.7 Configuring the HID Integration Module's Controllers

To configure a *FSA*/*ACSHID* controller, go to the setup panel of the relevant object (**VertX V1000 Network Controller**, **VertX V2000 NC / RI**, or **E400 EdgeReader Interface**).V1000, V2000, and E400 controllers are configured the same way, following the same steps. To configure a controller:

1. Configuring the HID hardware's connection to the Server.
2. Activating the HID integration module in ACFA Intellect.
3. Creating the HID integration module's object tree.
4. Setting the HID integration module's parameters.
5. Configuring the HID integration module's controllers.
6. Configuring V2000 controller devices.
7. Configuring V1000 controller devices.
8. Configuring E400 controller devices.
9. Assign tasks to the controllers.

4.7.1 Configuring Communication Settings of a HID Integration Module's Controller

To configure a controller's connection, go to the setup panel of the relevant object and find the **CommTask settings** parameter group.



To configure the communication settings:

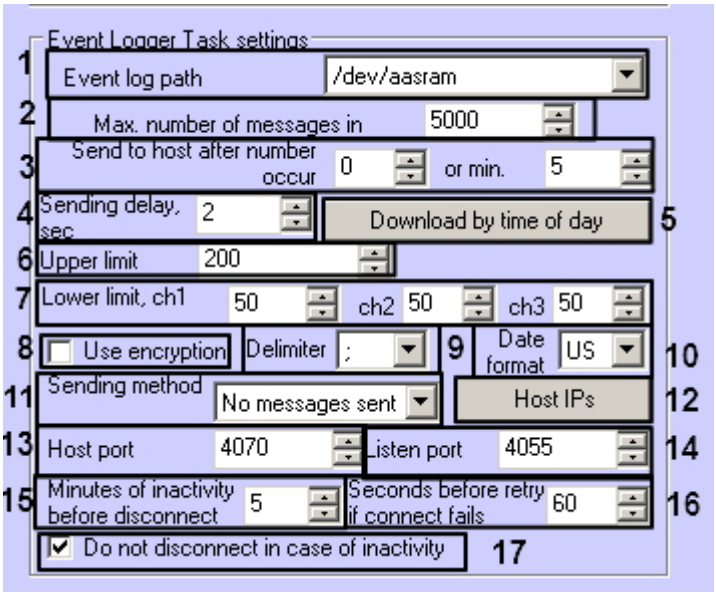
1. In the **Connection port** field, enter the required port number. To find the required port number, go to the **VertX / Edge ACS** object's setup panel and find the **Listening port** field (**1**).
2. In the **Listen port** field, enter a port number. This is the port for receiving messages from the *HID* Server (**2**).
3. If you want to establish the connection immediately after the controller starts up, select the **Connect on startup** checkbox (**3**).
4. If you want to maintain the connection to the *HID* Server, select the **Maintain host connection** checkbox (**4**).
5. In the **Reconnect interval, sec** field, enter the time interval (in seconds) for reconnection to the controller if the connection is lost (**5**)
6. In the **Timeout, min** field, enter a time period (in minutes). When this time period elapses, the system stops waiting for the controller's response and assumes that the controller is disabled (**6**).
7. If you want to use encryption, select the **Use encryption** checkbox (**7**).
8. In the **Message response time, sec** field, enter a time period (in seconds). When this time period elapses and no response is received from the *HID* Server, the system disconnects (**8**).
9. Click **Apply** to save the changes.

The communication settings are now configured.

4.7.2 Configuring the Event Logger of a HID Integration Module's Controller

When an event occurs (for example, a relay changes its state or an invalid access card is read), a message is created and sent to the event log.

To configure a controller's event log, go to the setup panel of the corresponding object and find the **Event Logger Task settings** parameter group.



To configure the event log:

1. In the **Event log path** drop-down list, select the event log's name path and filename (**1**).
2. In the **Max. number of messages in** field, enter the maximum number of messages in the event log (**2**).
3. In the **Sent to host after number occur** fields, enter a number and a time period. When the entered number of messages are accumulated or the entered time period elapses, the messages are sent to the *HID* server (**3**).

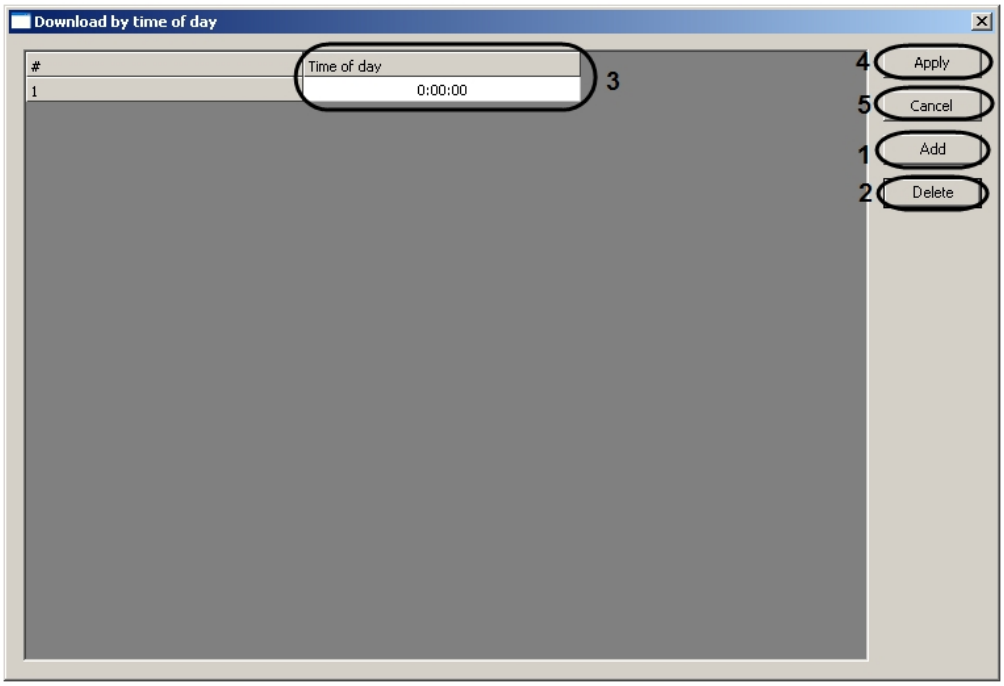
   Note:

   The event log assigns a numeric ID (between 0 and 255) to each message. For each message, the greater its ID, the higher its priority.

4. In the **Sending delay, sec** field, enter a time period (in seconds). After creating a message, the system first waits for this time period to elapse and then sends the message to the event log (**4**).
5. To set the time when messages are downloaded to the *HID* Server, click the **Download by time of day** button (**5**).
   The **Download by time of day** window opens.

   Attention!

   Since there are no default time-of-day boot records, it is necessary to add at least one record before writing the configuration to the controller (see Managing the HID configuration). Otherwise, if no entries are added, and the configuration is written to the controller, then such a controller will start to cyclically reconnect to the HID Server.



   a. Click **Add** (**1**), then go to the **Time of day** (**3**) column and enter the time when messages are downloaded to the *HID* Server (in HH:MM:SS format).
   b. Enter as many times of day as needed.

      Note:

      You may enter a maximum of 4 times of day when messages are downloaded to the HID Server.

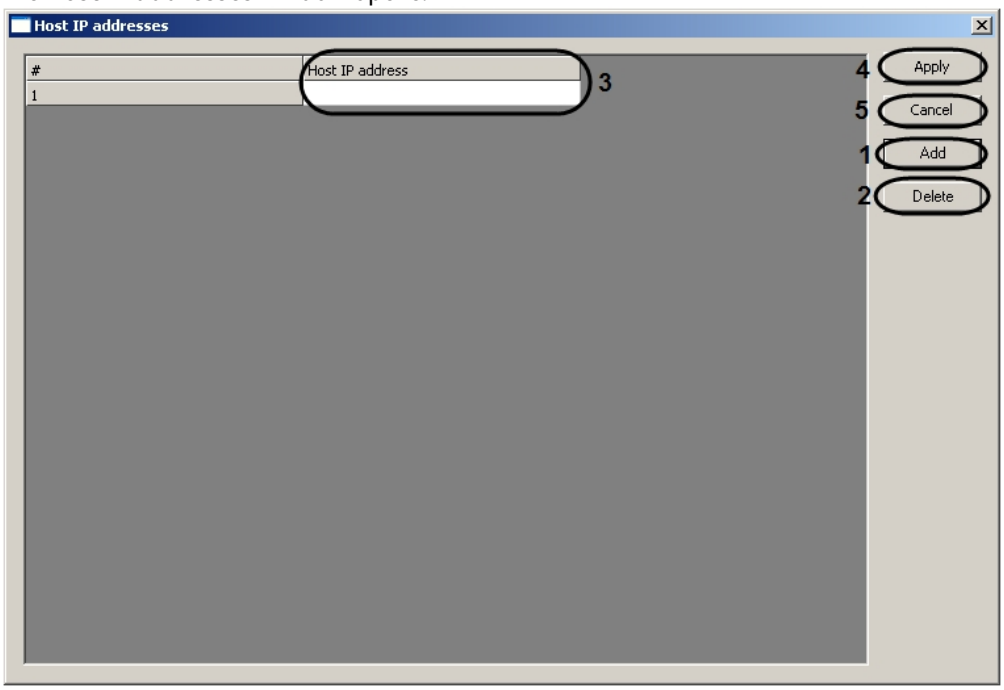
      Note:

      To delete a time of day, select the relevant row in the table and click **Delete** (**2**).

   c. Click **Apply** to save the changes. This brings you back to the controller's setup panel (**4**).

> **Note:**
>
> To come back to the controller's setup panel without saving the changes, click **Cancel** (**5**).

6. In the **Upper alarm limit** field, enter the upper alarm limit for the communication channels (**6**).
7. In each of the three **Lower alarm limit** fields (**ch1**, **ch2**, and **ch3**), enter the lower alarm limit for each of the communication channels (**7**).
8. If you want to use encryption, select the **Use encryption** checkbox (**8**).
9. In the **Delimiter** drop-down list, select the delimiter symbol to be used in messages (**9**).
10. In the **Dateformat** drop-down list, select the date format to be used in messages (**10**).
11. In the **Sending method** drop-down list, select the method for sending messages (**11**).
12. To set the IP addresses of the servers for sending messages (hosts), click the **Host IPs** button (**12**).
    The **Host IP addresses** window opens.



    a. Click **Add** (**1**), go to the **Host IP address** column, and enter the IP address of a server (**3).**
    b. Add as many servers as needed.

> **Note:**
>
> You may add a maximum of 9 servers.

> **Note:**
>
> To delete a server, select the relevant row in the table and click **Delete** (**2**).

    c. Click **Apply** to save the changes. This also brings you back to the controller's setup panel (**4**).

> **Note:**
>
> To come back to the controller's setup panel without saving changes, click **Cancel** (**5**).

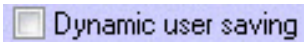
13. In the **Host port field**, enter the *HID* Server's port (**13**).
14. In the **Listen port** field, enter a port number. This is the port for receiving messages from the *HID* Server (**14**).
15. In the **Minutes of inactivity before disconnect**, enter a time period (in minutes).When this time period elapses and no events occur, the connection is broken (**15**).
16. In the **Seconds before retry if connect fails**, enter a time period (in seconds). After the connection is lost, the system first waits for this time period to elapse and then tries to reestablish the connection (**16**).

17. If you do not want to break the connection when no events occur, select the **Do not disconnect in case of inactivity** checkbox(**17**).
18. Click **Apply** to save the changes.

The event log is now configured.

4.7.3 Configuring the dynamic user saving

Dynamic user saving is configured on the settings panel of the corresponding object.



To enable the dynamic user saving, set the **Dynamic user saving** checkbox. As a result, when the *Access Manager* module data is changed, it will be automatically saved in the corresponding controller.

4.7.4 Configuring the controller MAC address

> **Attention!**
>
> The MAC address of the controller is automatically specified when getting the current *HID* configuration. Manual specifying of the MAC address is required only to get the configuration from the selected controller (see Managing the HID configuration).

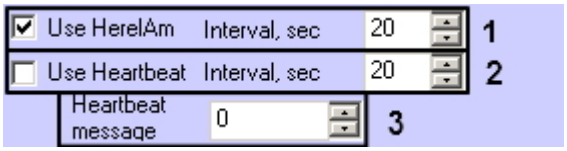
The controller MAC address is configured on the settings panel of the corresponding object.

In the **MAC** field, enter the MAC address of the corresponding controller.

Controller MAC address configuration is complete.

4.7.5 Configuring Messages of a HID Integration Module's Controller

To configure a controller's messages, go to the setup panel of the relevant object.



To configure the messages:

1. If you want to record, in the **Event log**, messages about the fact that the connection to the controller is established successfully and that the controller is available, select the **Use HereIAm** checkbox, go to the **Interval, sec** field and enter the time interval (in seconds) between two consecutive messages (**1**).
2. If you want to send the same messages to the *HID* Server, select the **Use Heartbeat** checkbox, go to the **Interval, sec** field and enter the time interval (in seconds) between two consecutive messages(**2**).

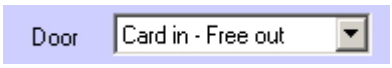
   > **Note:**
   >
   > We recommend using **HereIAm** messages (to enable, select the **Use HereIAm** checkbox).

3. In the **Heartbeat message** field, enter the vendor-defined value(**3**).

The messages are now configured.

4.7.6 Configuring a V2000 controller's door behavior

To configure a V2000 controller's door behavior, go to the setup panel of the relevant **VertX V2000 NC / RI** object.



> **Note:**
>
> For V1000 controllers, skip this section.

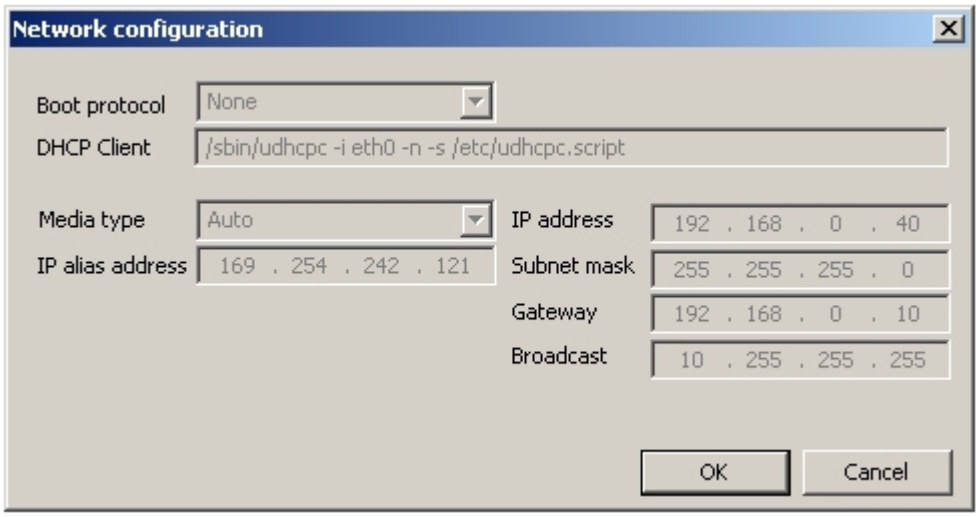
In the **Door behavior** drop-down list, select the door behavior type.

Door behavior	Description
Card in –Free out	Must show the card on entry; free exit
Card in –Card out	Must show the card both on entry and on exit

4.7.7 Viewing the Connection Parameters of a HID Integration Module's Controller

To view a controller's connection parameters, go to the setup panel of the controller's object and click **Network configuration**.

The **Network configuration** window opens.

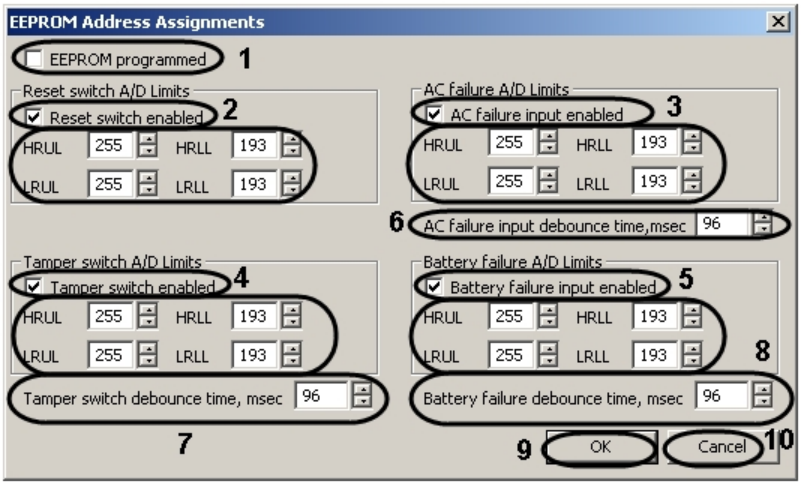


This window shows the connection parameters.

4.7.8 Configuring EEPROM Limits

To configure a controller's EEPROM limits, go to the setup panel of the controller's object and click **EEPROM Address assignments**.

The **EEPROM Address Assignments**window opens.



To configure the EEPROM limits:

1. If you want to configure the EEPROM, select the **EEPROM programmed** checkbox (**1**).
2. If the reset switch is enabled, select the **Reset switch enabled** checkbox (**2**).
3. If the AC failure input is enabled, select the **AC failure input enabled** checkbox (**3**).
4. If the tamper switch is enabled, select the **Tamper switch enabled** checkbox (**4**).
5. If the battery failure input is enabled, select the **Battery failure input enabled** checkbox (**5**).
6. To set the limits for each of the above switches/inputs, go to the relevant parameter group.

Parameter	Description
HRUL	High Range Upper Limit
HRLL	High Range Lower Limit
LRUL	Low Range Upper Limit
LRLL	Low Range Lower Limit

7. In the **AC failure input debounce time, msec** field, enter the time period (in milliseconds) to be used for fixing (debouncing) the bouncing AC failure input signal (**6**).
8. In the **Tamper switch debounce time, msec** field, enter the time period (in milliseconds) to be used for fixing (debouncing) the bouncing tamper switch signal (**7**).
9. In the **Battery failure debounce time, msec** field, enter the time period (in milliseconds) to be used for fixing (debouncing) the bouncing battery failure input signal (**8**).
10. Click **OK** to save the changes. This also brings you back to the setup panel (**9**).

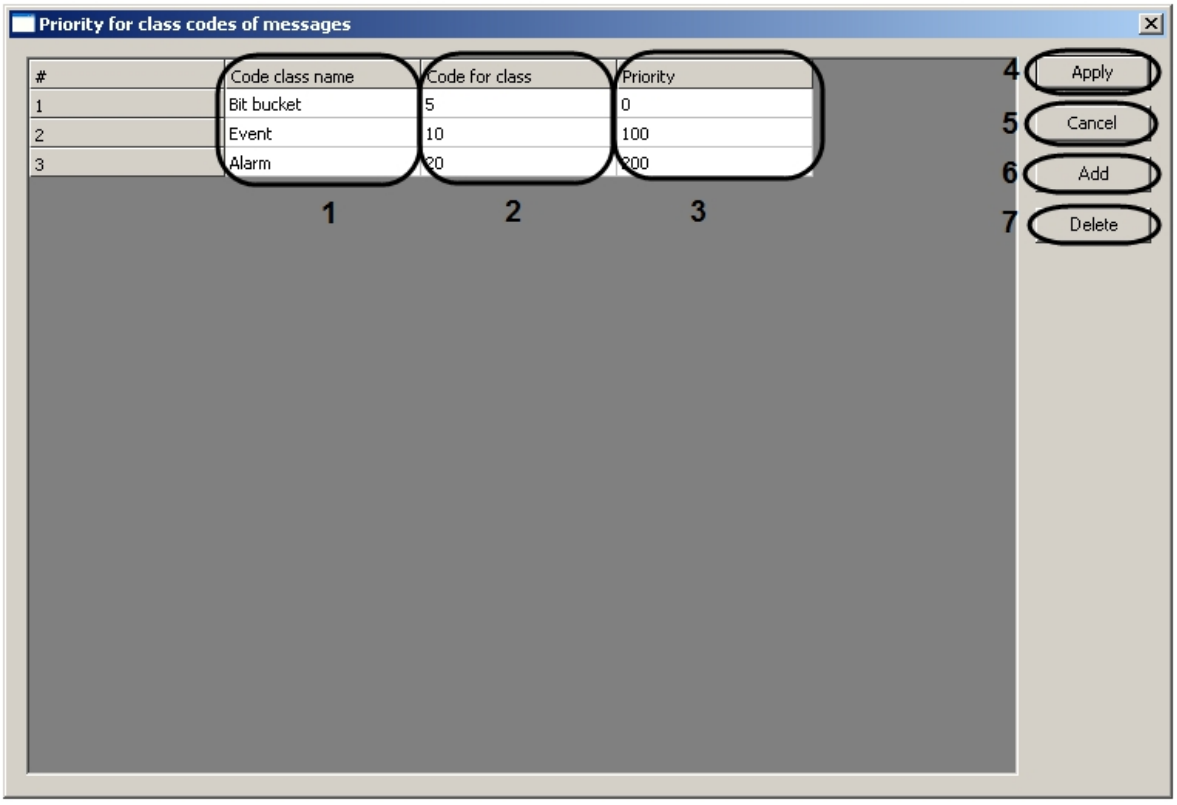
> **Note:**
>
> To come back to the setup panel without saving the changes, click **Cancel** (**10**).

The EEPROM limits are now configured.

4.7.9 Configuring the priority for class codes of messages

To configure the priority for class codes of messages, go to the settings panel of the controller object and click **Message priority**.

The **Priority for class codes of messages** window opens.



The priority for class codes of messages is configured in the following way:

1. To add a new message class code, click **Add** (**6**).

   Note:

   By default, three basic class codes are available.

   Note:

   To delete a message class code, select the relevant row in the table and click **Delete** (**7**).

2. In the **Code class name** column, enter the message code class name (**1**).
3. In the **Code for class** column**,** enter the message class code (**2**).
4. In the **Priority** column**,** enter the message class priority (**3**).
5. Add as many message class codes as needed.
6. Click **Apply** to save the changes. This also brings you back to the setup panel (**4**).

Note:

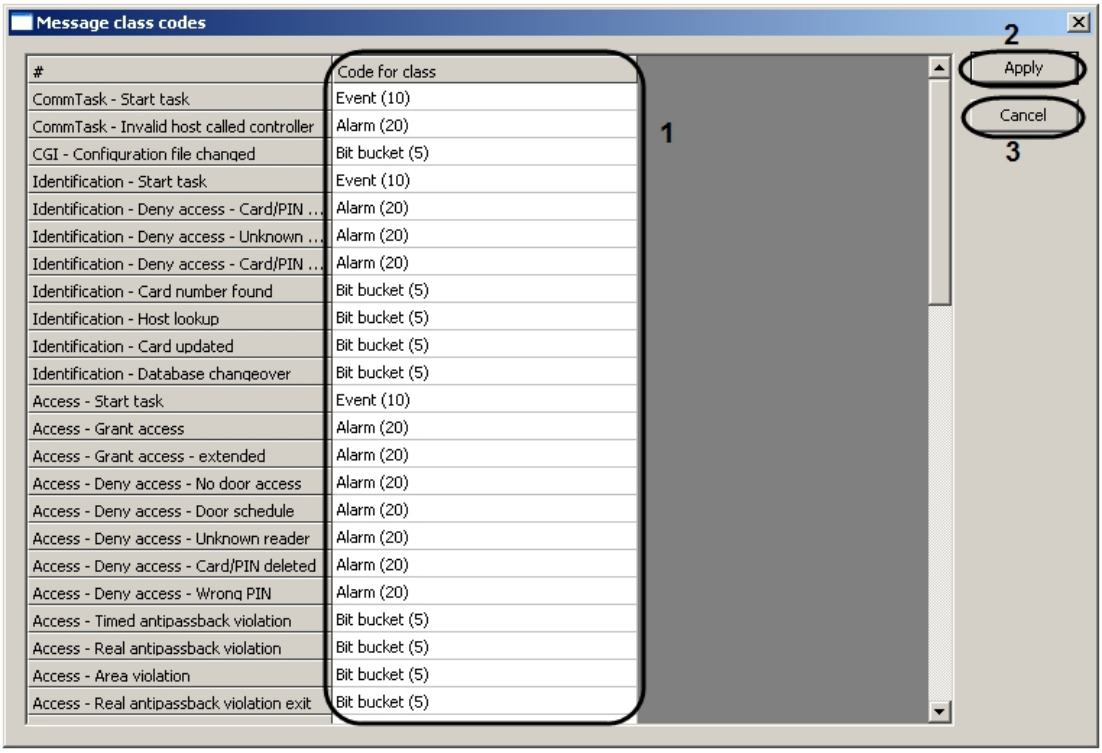
To come back to the setup panel without saving the changes, click **Cancel** (**5**).

The priority for class codes of messages is configured.

4.7.10 Configuring Message-Class Matches

To configure a controller's message-class matches, go to the setup panel of the controller's object and click **Event messages class codes**.

The **Message class codes** window opens.



To configure the message-class matches:

1. In the **Code for class** column, set the message class for each message(**1**).
2. Click **Apply** to save the changes. This also brings you back to the setup panel (**2**).

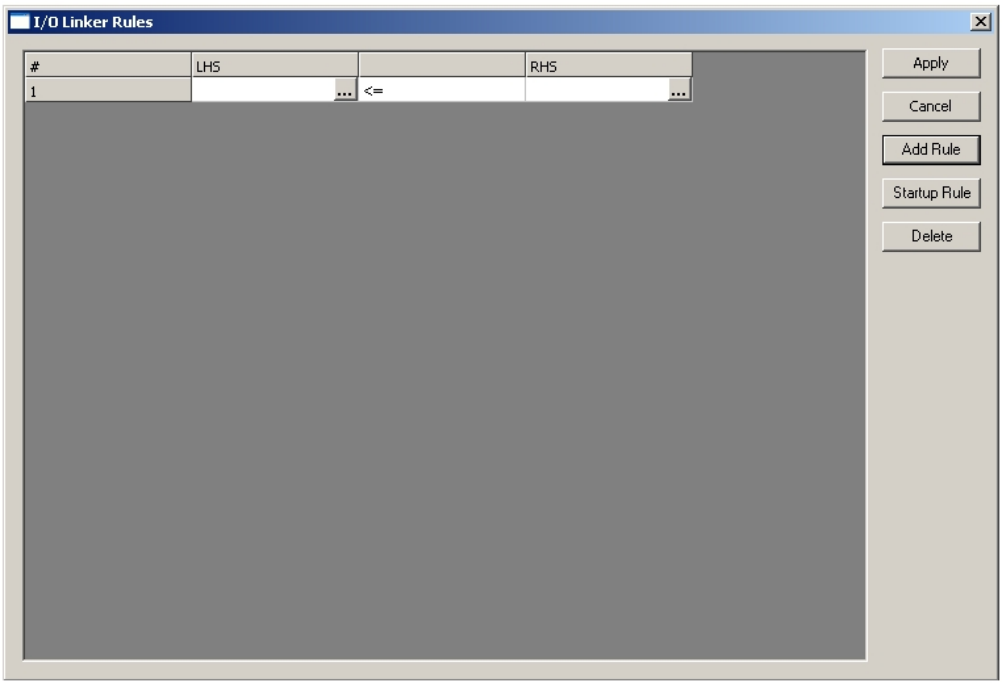
> **Note:**
>
> To come back to the setup panel without saving the changes, click **Cancel** (**3**).

The message-class matches are now configured.

4.7.11 Setting I/O Linker Rules

To configure a controller's I/O Linker rules, go to the setup panel of the controller's object and click **I/O Linker rules**.

The **I/O Linker Rules** windows opens.



To display user events created via I/O Linker rules in the operarol protocol (see Setting Regular Rules and Setting Startup Rules sections), add the following event to the .ddi file:

INTERF_EV_MSG_[event code]_[value],

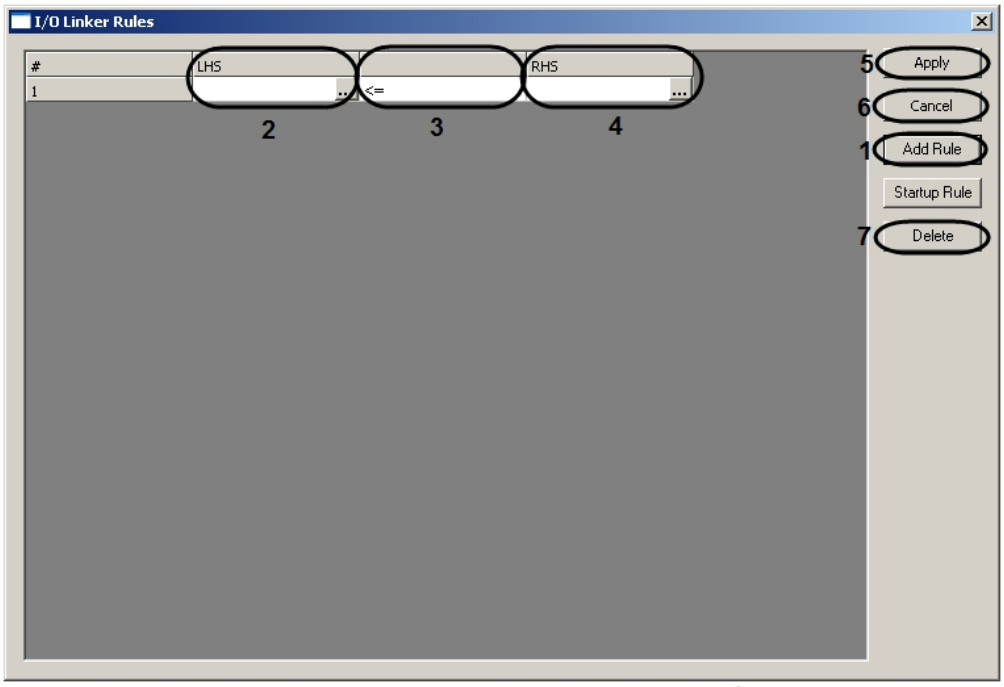
where value – is a value resulting from calculation of the rule's right-hand side.

4.7.11.1 Setting Regular Rules

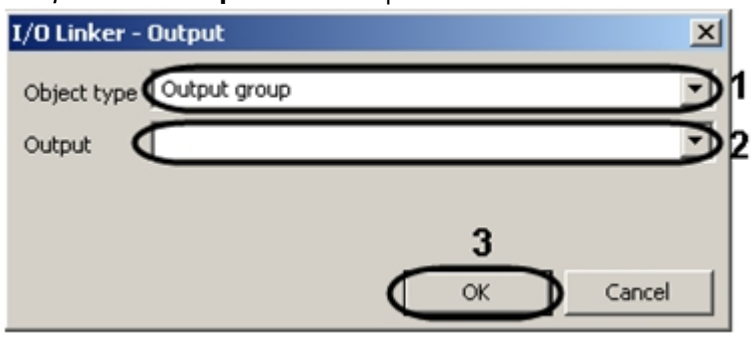
To set a regular rule:

1. In the **I/O Linker Rules** window, click **Add Rule** (**1**).

> **Note:**
>
> To delete a rule, select the relevant row in the table and click **Delete**(**7**).



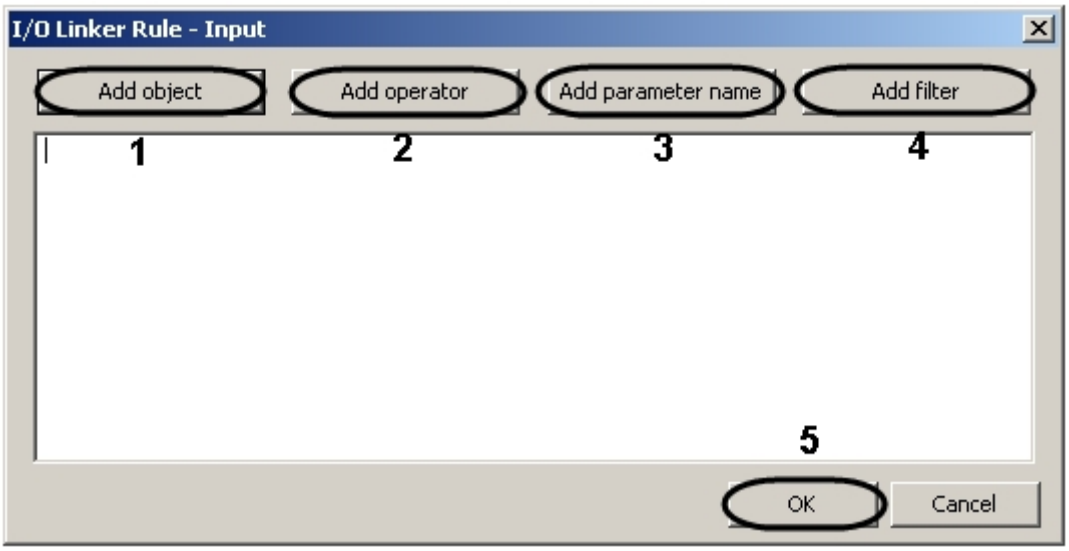
2. To set the rule's left-hand side, go to the **LHS** column and click ... (**2**).
   The **I/O Linker -Output** windows opens.



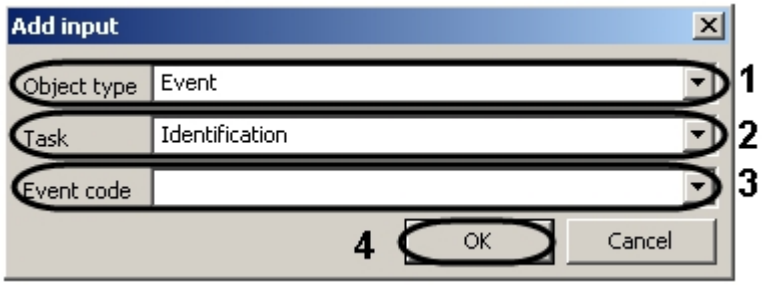
   a. In the **Object type** drop-down list, select the type of the rule's left-hand side object(**1**).
   b. In the **Output** drop-down list, select the left-hand side object(**2**).
   c. Click **OK** (**3**).

3. Set the rule's "sign" (the equality or strict inequality of the rule's sides) (**3**).

4. To set the rule's right-hand side, go to the **RHS** column and click ... (**4**).
   The **I/O Linker Rule -Input** windows opens.

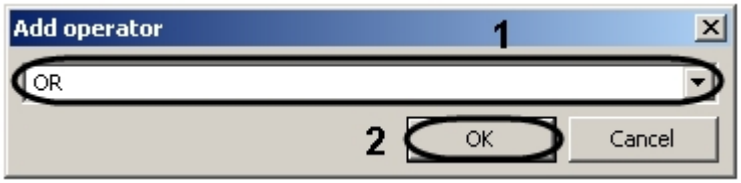


a. Add the right-hand side object: click **Add object** (**1**).
The **Add input** window opens.



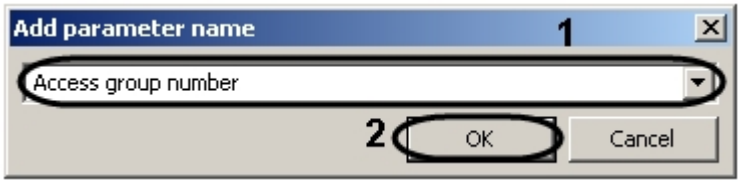
i. In the **Object type** drop-down list, select the type of the rule's right-hand side object(**1**).
ii. In the **Task** drop-down list, select the task of the rule's right-hand side object(**2**).
iii. In the **Event code** drop-down list, select the code for the event of the rule's right-hand side object(**3**).
iv. Click **OK** (**4**).

b. Add the rule's right-hand side operator: click **Add operator** (**2**).
The **Add operator** window opens.



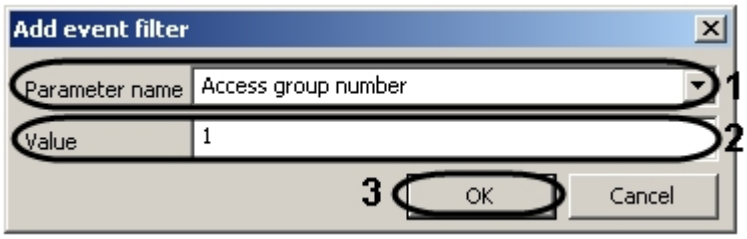
i. In the drop-down list, select the operator of the rule's right-hand side object(**1**).
ii. Click **OK** (**2**).

c. Add a parameter: click **Add parameter name** (**3**).
The **Add parameter name** window opens.



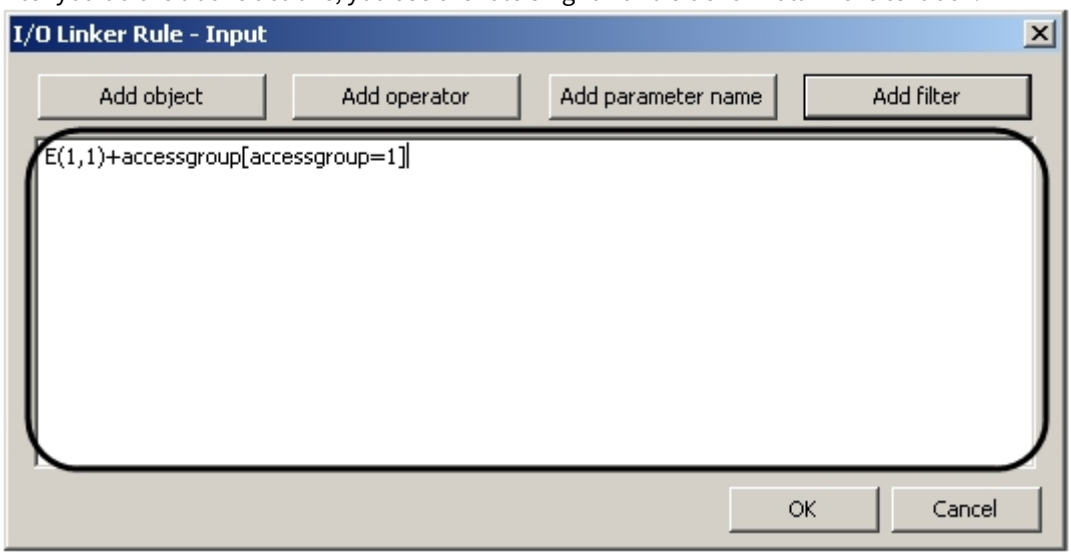
i. In the drop-down list, select the parameter (**1**).
ii. Click **OK** (**2**).

d. Add the rule's right-hand side event filter: click **Add filter** (**4**).
The **Add event filter** window opens.



i. In the **Parameter name** drop-down list, select the required parameter (**1**).
ii. In the **Value**, enter the parameter name (**2**).
iii. Click **OK** (**3**).

After you do the above actions, you see the rule's right-hand side formula in the text box.



e. Click **OK**.

5. Click **Apply** to save the changes. This also brings you back to the controller's setup panel (**5**).

> **Note:**
>
> To come back to the controller's setup panel without saving the changes, click **Cancel** (**6**).

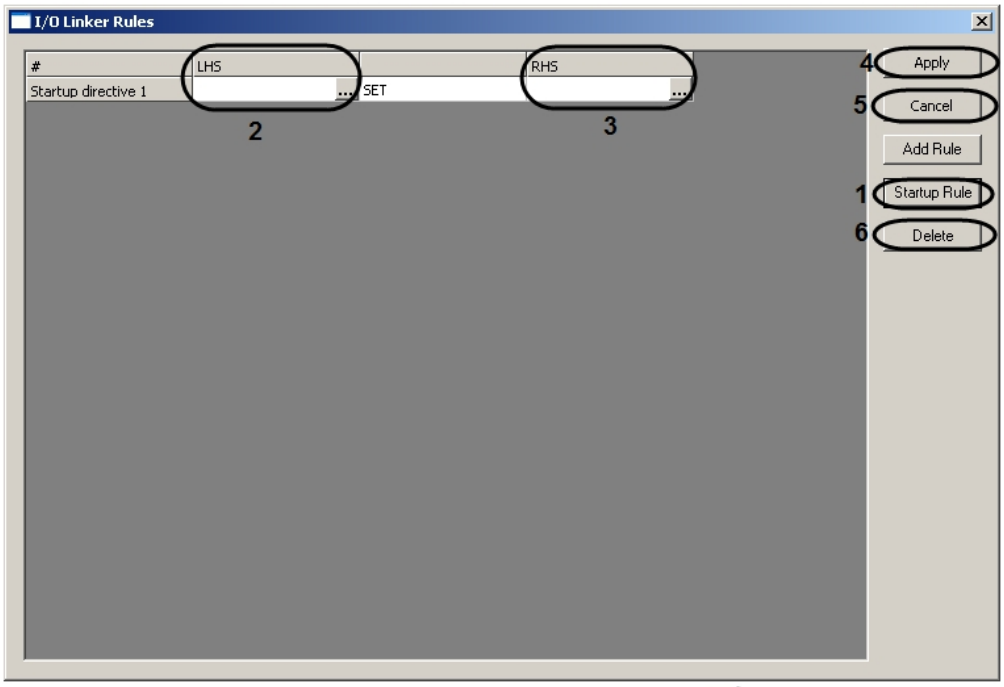
The regular rule is now set.

4.7.11.2 Setting Startup Rules

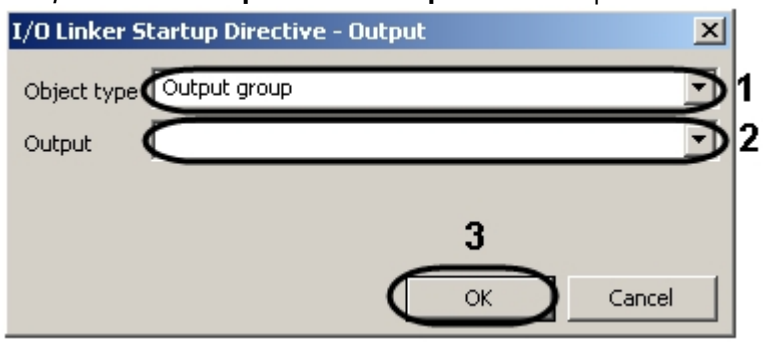
To set a startup rule:

1. In the **I/O Linker Rules** window, click **Startup Rule** (**1**).

> **Note:**
>
> To delete a rule, select the relevant row in the table and click **Delete**(**6**).

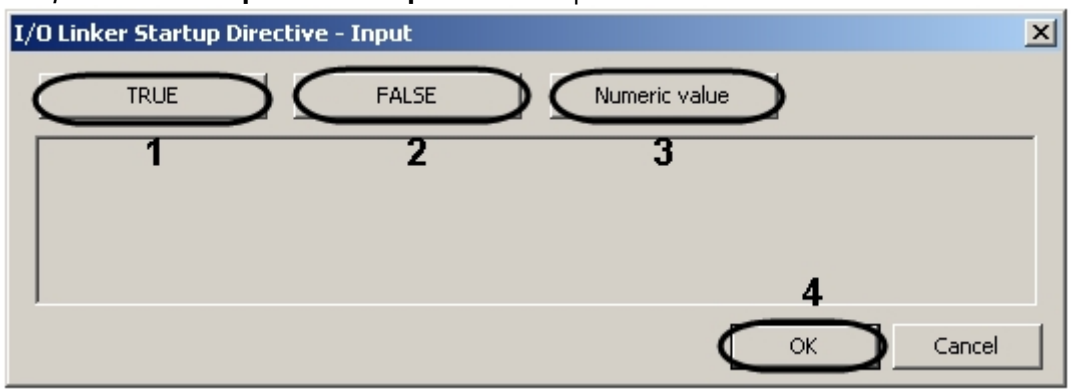


2. To set the rule's left-hand side, go to the **LHS** column and click ... (**2**).
   The **I/O Linker Startup Directive -Output** windows opens.



   a. In the **Object type** drop-down list, select the type of the rule's left-hand side object(**1**).
   b. In the **Output** drop-down list, select the left-hand side object(**2**).
   c. Click **OK** (**3**).

3. To set the rule's right-hand side, go to the **RHS** column and click ... (**4**).
   The **I/O Linker Startup Directive -Input** windows opens.



4. Select the value for the rule's left-hand side object: click **TRUE**, **FALSE**, or **Numeric value** (**1-3**).
5. Click **OK** (**4**).
6. Click **Apply** to save the changes. This also brings you back to the controller's setup panel (**5**).

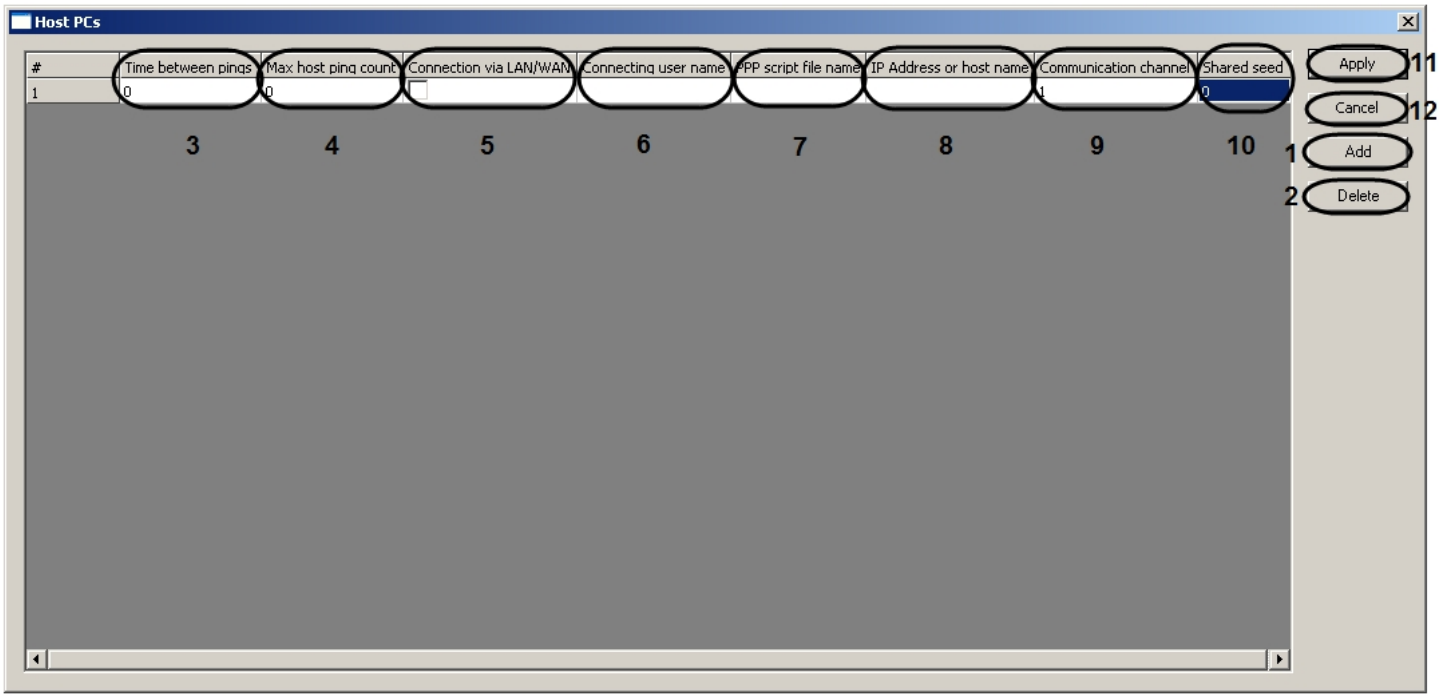
> **Note:**
>
> To come back to the controller's setup panel without saving the changes, click **Cancel** (**6**).

The startup rule is now set.

4.7.12 Configuring Connections with a HID Integration Module's Controller

To configure the host PCs' connections to a controller, go to the controller's setup panel and click **Host PCs**.

The **Host PCs** window opens.



To configure a connection:

1. To add a connection, click **Add** (**1**).

   > **Note:**
   >
   > To delete a connection, select the relevant row in the table and click **Delete**(**2**).

2. In the **Time between pings** column**,** enter the time interval between two consecutive pings (**3**).
3. In the **Max host ping count** column**,** enter the maximum number of pings for the host PC (**4**).

   > **Note:**
   >
   > The maximum allowed ping count is 99.

4. If this is a LAN/WAN connection, go to the **Connection via LAN/WAN** column and select the checkbox (**5**).
5. If this is a PPP connection, go to the **Connecting user name** column and enter the user name(**6**).

   > **Note**
   >
   > If this is a LAN/WAN connection, enter * in this field (set by default).

6. In the **PPP script file name** column, enter the PPP script file name (**7**).

> **Note:**
>
> If this is a LAN/WAN connection, enter * in this field (set by default).

7. In the **IP Address or host name** column**,** enter the host PC's IP address (**8**).
8. In the **Communication channel** column**,** enter the communication channel associated with this IP address (**9**).
9. If needed, in the **Shared seed** column, enter the value to be used both by the host PC and the controller (**10**).
10. Click **Apply** to save the changes. This also brings you back to the controller's setup panel (**11**).

> **Note:**
>
> To come back to the controller's setup panel without saving the changes, click **Cancel** (**12**).

The connection is now configured.

4.7.13 Configuring automatic generation of HID events

It is possible to automatically generate events when the states of the alarm inputs change. Thus, if it is necessary to generate corresponding events, this allows you to avoid creating many rules (see Setting I/O Linker Rules).

Automatic generation of events is configured on the settings panel of the corresponding controller object in the **Event log settings** group. To do this, set the checkboxes next to those service inputs, when changing the states of which the corresponding events will be generated.

View of the **Event log settings** group on the settings panel of the **VertXV1000** object:

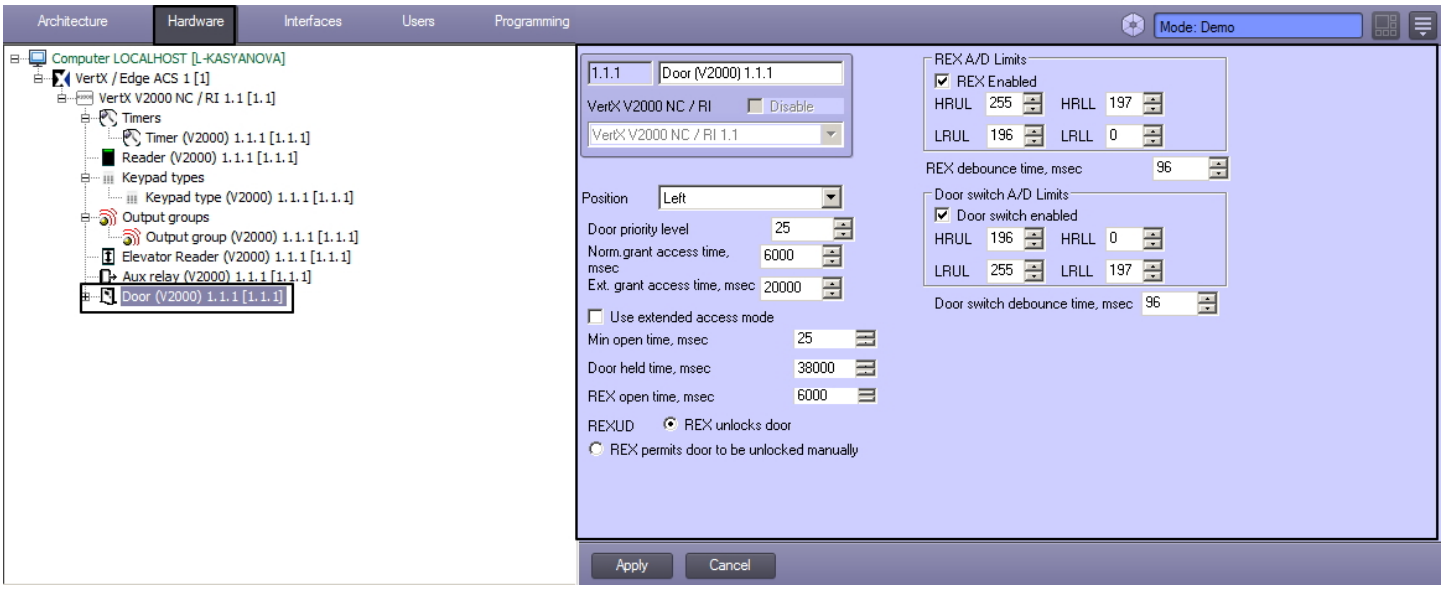
View of the **Event log settings** group on the settings panel of the **VertX V2000 H3 / RI** and **EdgeReader E400** object:

> **Note**
>
> Description of alarm inputs:
>
> - **Power failure switch**, **Controller tamper**, **Battery defect switch** - service inputs of the controller.
> - **Inputs events** - REX (exit button) and Door contact (door sensor) inputs.
> - **Door events** - Input 1 and Input 2.

4.8 Configuring V2000 Controller Devices

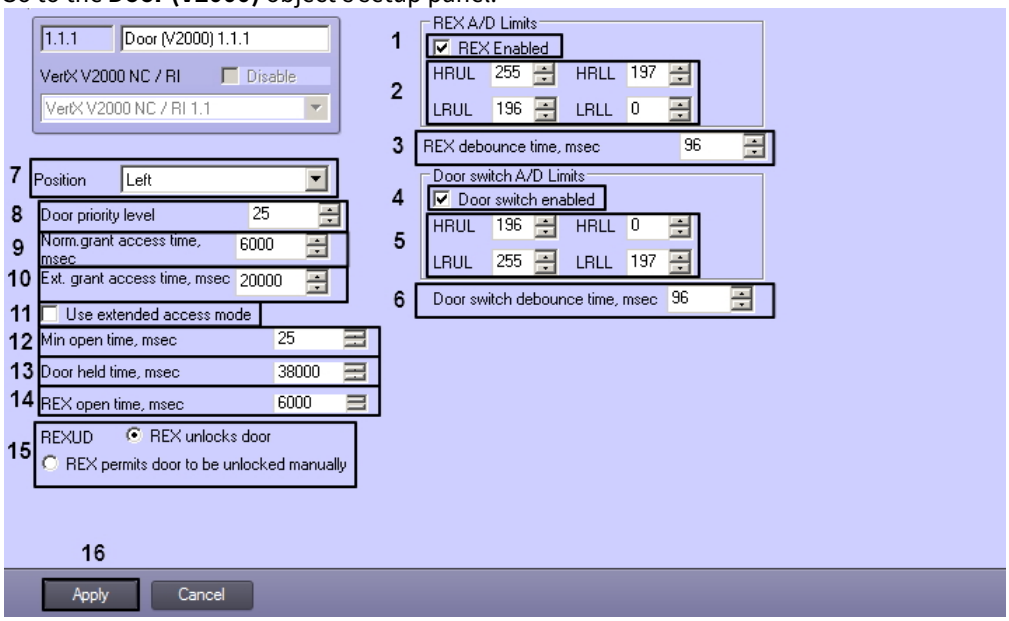
4.8.1 Configuring V2000 Controller Doors

To configure a V2000 controller's doors, use the setup panel of the relevant **Door (V2000)** object: go to the **Settings** dialog box, click the **Hardware** tab, select the relevant parent **VertX V2000 NC/RI** object, and browse its object subtree.



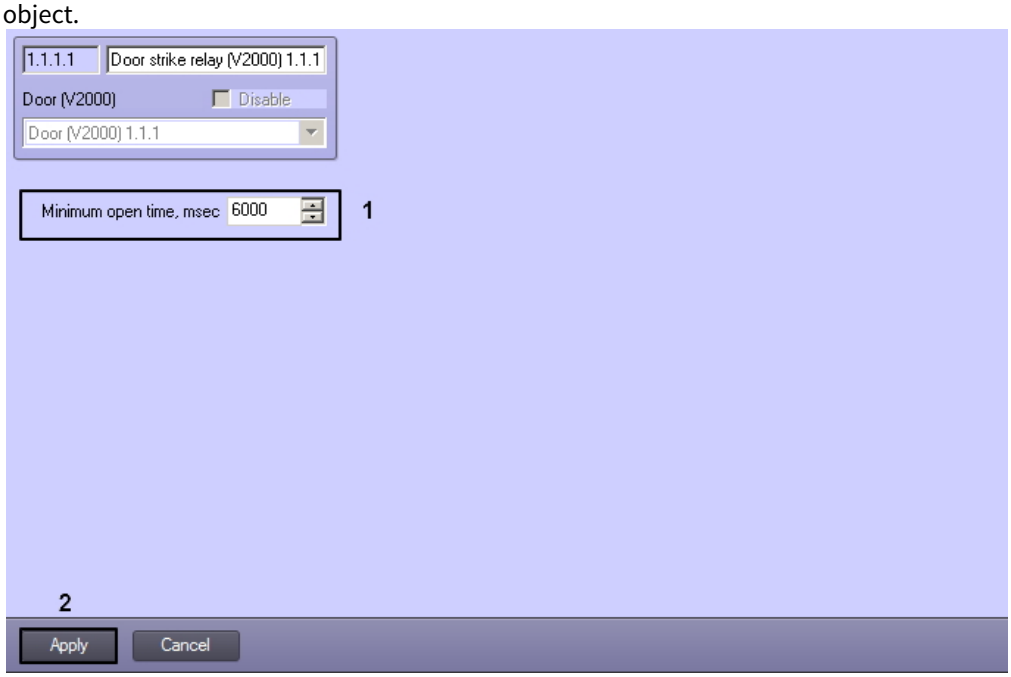
To configure the doors:

1. Go to the **Door (V2000)** object's setup panel.



2. If the **REX switch** is enabled, select the **REX Enabled** checkbox (**1**).
3. Configure the **REX switch** limits (see Section *Configuring EEPROM*) (**2**).
4. In the **REX debounce time, msec** field, enter the time period (in milliseconds) to be used for fixing (debouncing) the bouncing **REX switch** signal(**3**).
5. If the **door switch** is enabled, select the **Door switch enabled** checkbox(**4**).
6. Configure the **door switch** limits (see Section *Configuring EEPROM*) (**5**).
7. In the **Door switch debounce time, msec** field, enter the time period (in milliseconds) to be used for fixing (debouncing) the bouncing **door switch** signal (**6**).
8. In the **Position** field, select the position of the door (**7**).
9. In the **Door priority level** field, use the **up** and **down** buttons to set the door priority level (**8**).
10. In the **Norm. grant access time, msec** field, enter a time period (in milliseconds). This is the time period during which the door allows access, in normal access mode (**9**).
11. In the **Ext. grant access time, msec** field, enter a time period (in milliseconds). This is the time period during which the door allows access, in extended access mode (**10**).
12. To use the door in extended access mode, select the **Use extended access mode** checkbox (**11**).
13. In the **Min open time, msec** field, enter the minimum time period allocated for opening the door (**12**).

14. In the **Door held time, msec** field, enter a time period (in milliseconds). This the time during which the door's lock is kept open after entry (**13**).
15. In the **REX open time, msec** field, enter the time period (in milliseconds) allocated for opening the door with the **REX switch** (**14**).
16. Select the required radio button from the **REXUD option** radio button group: **REX unlocks door** - only the **REX switch** can unlock the door; **REX permits door to be unlocked manually** - allows the door to be unlocked manually as well (**15**).
17. Click **Apply** to save the changes (**16**).
18. Configure the door strike relay:
    a. Under the **Door (V2000)** object, find the **Door strike relay** object. Go to the setup panel of the **Door strike relay** object.

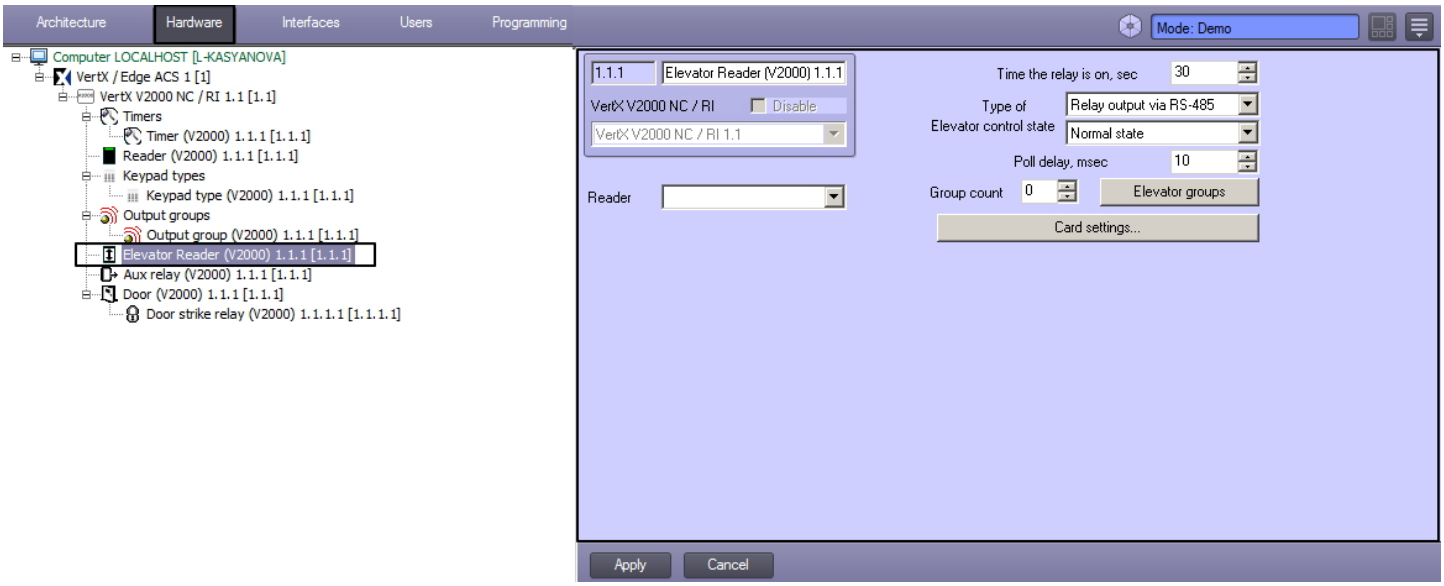


    b. In the **Minimum open time, msec** field, enter a time period (in milliseconds). This is the minimum time period during which the door strike relay is open (1).
    c. Click **Apply** to save the changes (**2**).

The doors are now configured.

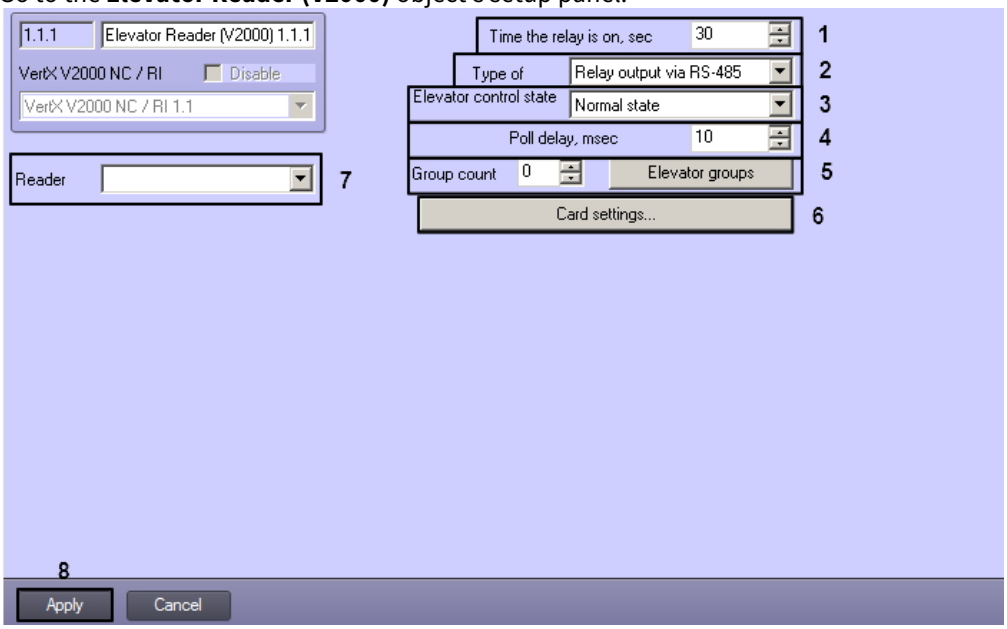
4.8.2 Configuring V2000 Controller Elevator Readers

To configure a V2000 controller's elevator readers, use the setup panel of the relevant **Elevator Reader (V2000)** object. To find this object, go to the **Settings** dialog box, click the **Hardware** tab, select the relevant **VertX V2000 NC/RI** object, and browse its object subtree.



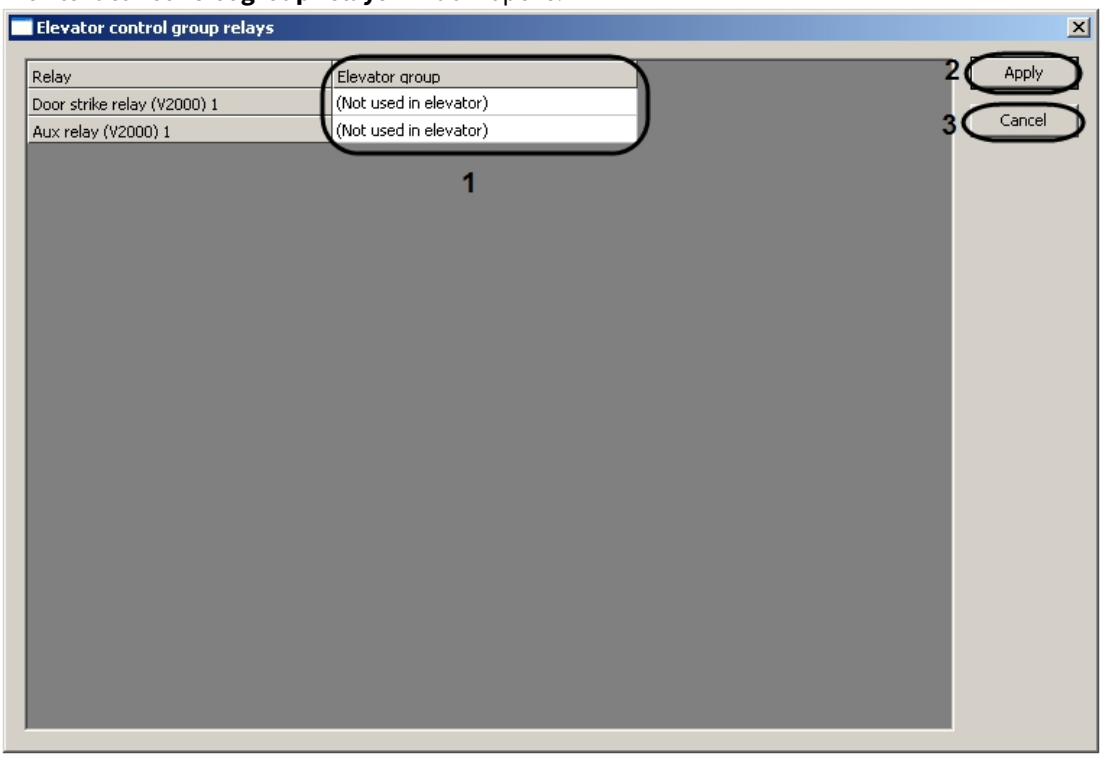
To configure the elevator readers:

1. Go to the **Elevator Reader (V2000)** object's setup panel.



2. In the **Time the relay is on, sec** field, enter a time period (in seconds). This is the time during which the relay is on (**1**).
3. In the **Type of output** drop-down list, select the elevator reader's type of output: relay output via RS-485 or via RS-232 (**2**).
4. In the **Elevator control state** drop-down list, select the elevator control state(**3**).
5. In the **Poll delay, msec** field, enter a time period (in milliseconds). This is the time period between two consecutive polls of the elevator reader (**4**).
6. In the **Group count** field**,** enter the number of elevator groups (**5**).
7. Assign relays to elevator groups:

a. Click **Elevator groups** (**6**).
The **Elevator control group relays** window opens.

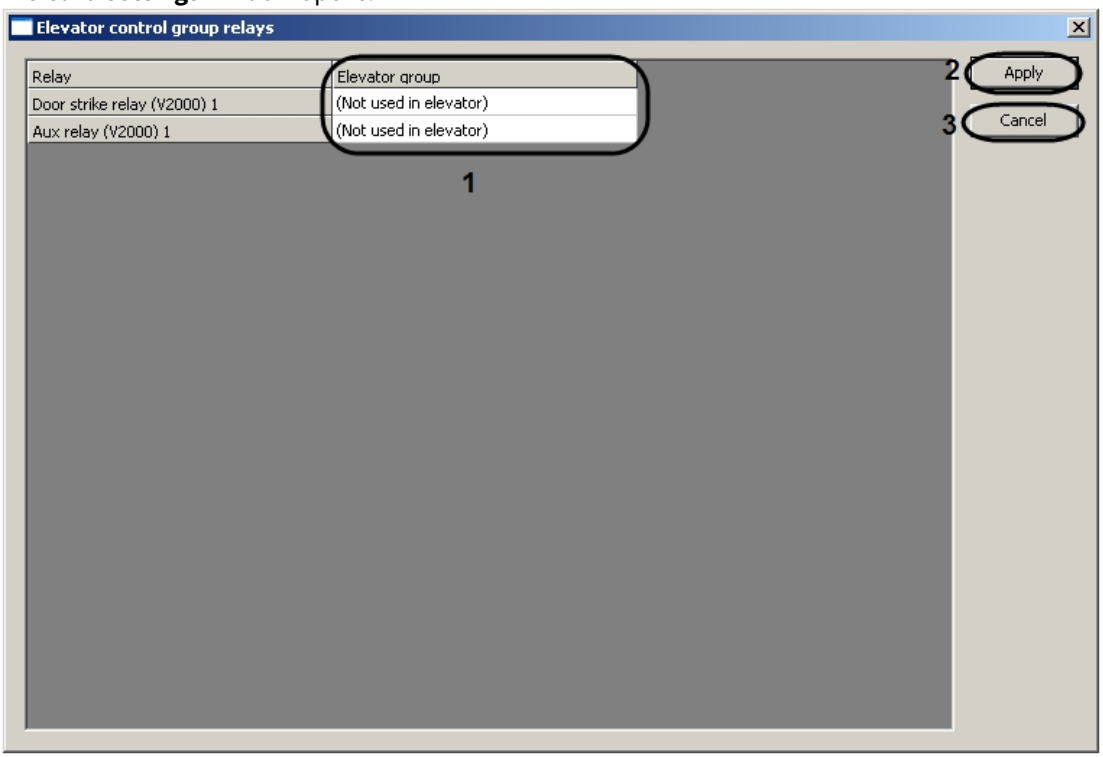


b. For each of the relay, go to the **Elevator group column** and select its elevator group (**1**).
c. Click **Apply** to save the changes (**2**).

> **Note:**
>
> To come back to the setup panel without saving the changes, click **Cancel** (**3**).

8. Assign users to elevator groups:

a. Click **Card settings** (**7**).
The **Card settings** window opens.



b. For each of the system's users, go to the **In-schedule group** column and select the user's in-schedule group (**1**).

> **Note:**
>
> For more detailed information on schedules, refer to the HID system's vendor documentation.

c. For each of the system's users, go to the **Out-schedule group** column and select the user's out-schedule group (**2**).
d. Click **Apply** to save the changes (**3**).

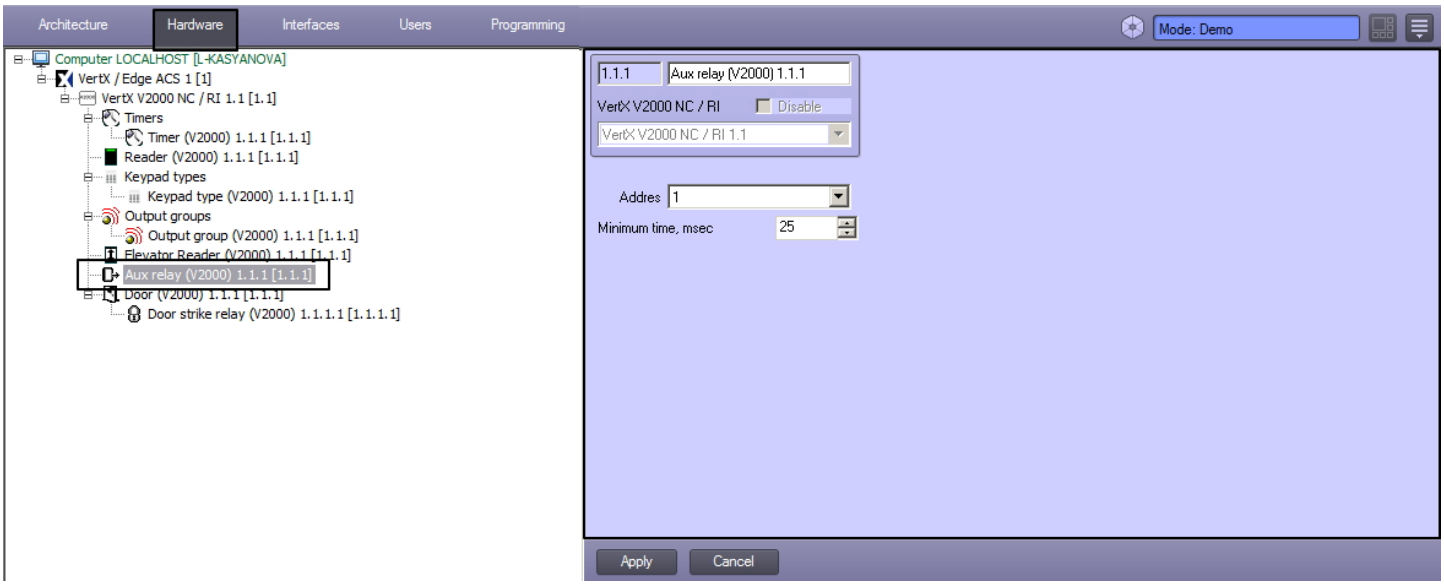
> **Note:**
>
> To come back to the setup panel without saving the changes, click **Cancel** (**4**).

9. In the **Reader** drop-down list, select the reader used in the elevator(**8**).
10. Click **Apply** to save the changes (**9**).

The elevator readers are now configured.

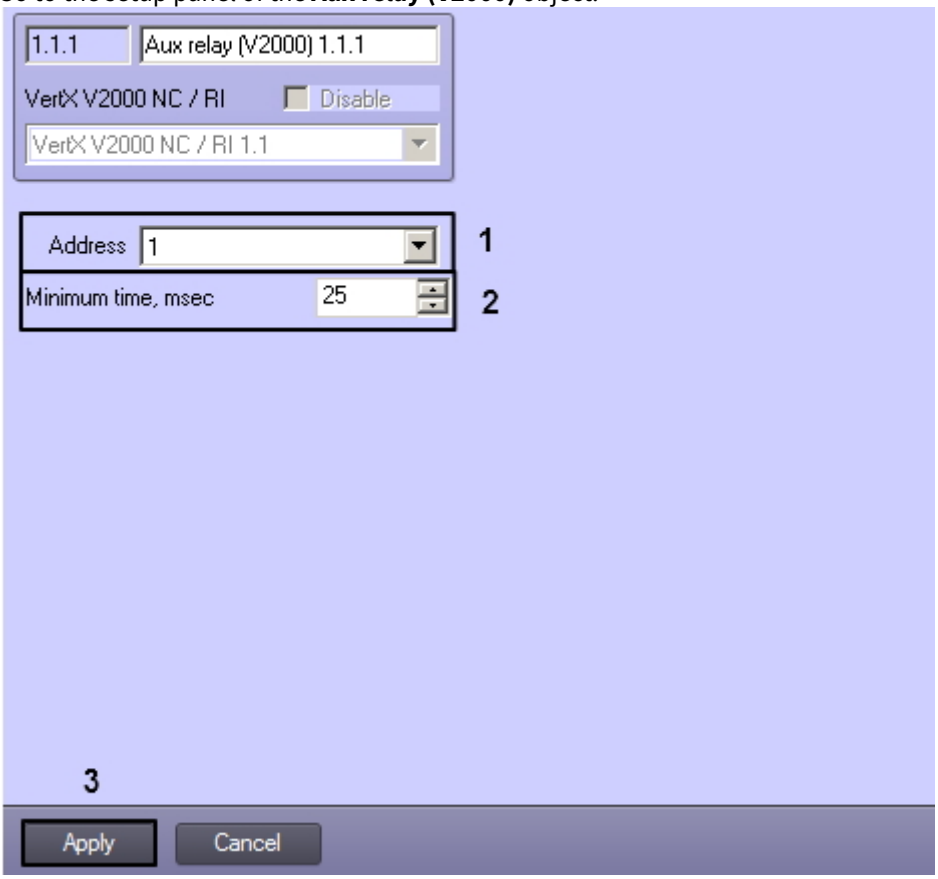
4.8.3 Configuring V2000 Controller Auxiliary Relays

To configure a V2000 controller's auxiliary relays, use the setup panel of the relevant **Aux relay (V2000)** object. To find this object,go to the **Settings** dialog box, click the **Hardware** tab, select the relevant **VertX V2000 NC/RI** object, and browse its object subtree.



To configure an auxiliary relay:

1. Go to the setup panel of the **Aux relay (V2000)** object.



2. In the **Address** drop-down list, select the relay's address (**1**).

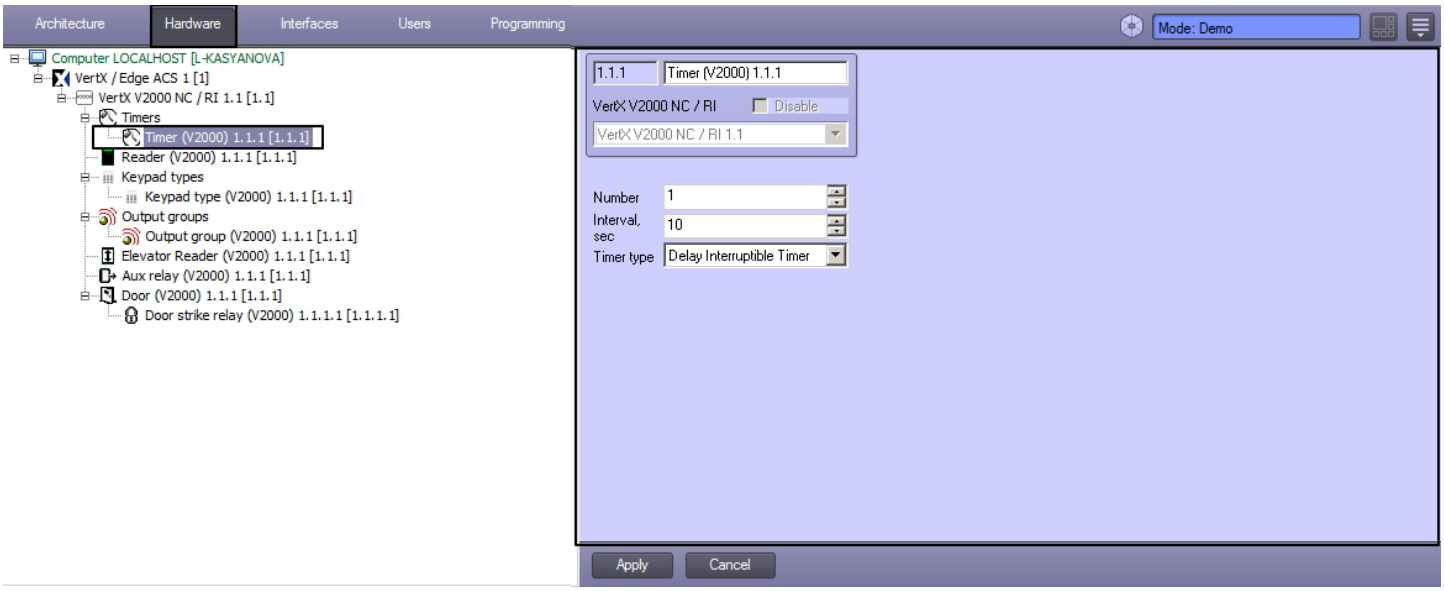
> **Attention!**
>
> The relay's address is set automatically when the object tree is created. Changing the address may lead to losing the connection to the relay.

3. In the **Minimum time, msec** field, enter a time period (in milliseconds). This is the minimum time during which the relay is on (2). The allowed value range is 25 milliseconds to27 minutes.
4. Click **Apply** to save the changes (**3**).

The auxiliary relay is now configured.

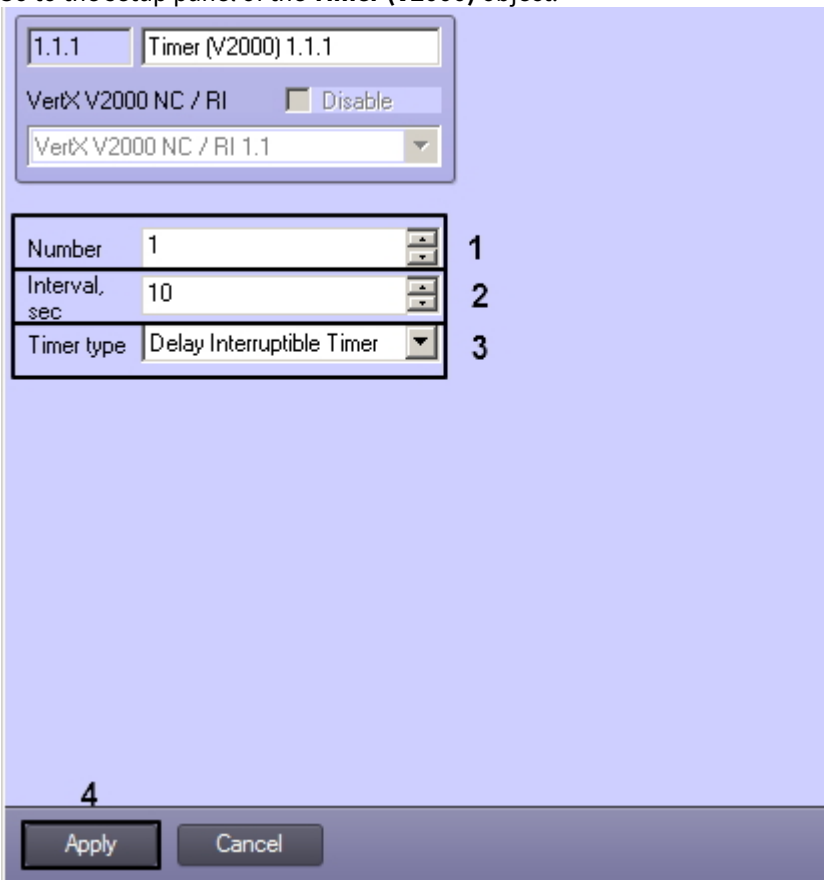
4.8.4 Configuring V2000 Controller Timers

To configure a V2000 controller's timers, use the setup panel of the relevant **Timer (V2000)** object. To find this object,go to the **Settings** dialog box, click the **Hardware** tab, select the relevant **VertX V2000 NC/RI** object, and browse its object subtree.



To configure a timer:

1. Go to the setup panel of the **Timer (V2000)** object.



2. In the **Number** drop-down list, select the timer's unique ID (**1**).
3. In the **Interval, sec** field, enter the timer's expiration interval (in seconds)(**2**).

4. In the **Timer** drop-down list, select the timer's type (**3**).

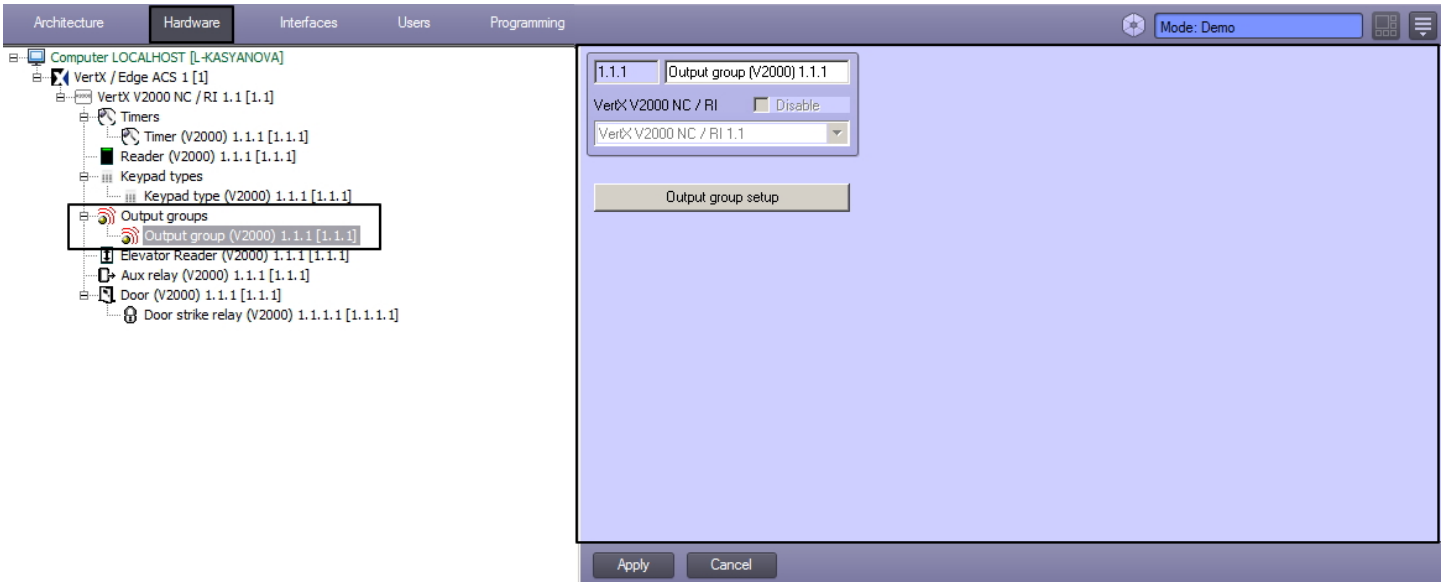
Timer type	Description
Delay	During the entered interval, the timer's value is TRUE.When the interval expires, the timer changes its value to FALSE.
Trigger	When the entered interval expires, the timer takes the value TRUE.This value is a short-term one.When one rule-processing cycle is over, the timer changes its value to FALSE.
Interruptible timer	If the next rule determines that this is the same timer and is applied during countdown, the timer's interval resets and is setagain.The new interval may be shorter or longer than the initial one.To disable the timer, enter 0 as the timer's initial interval.
Uninterruptible timer	During its countdown, the timer ignores any action.

5. Click **Apply** to save the changes (**4**).

The timer is now configured.

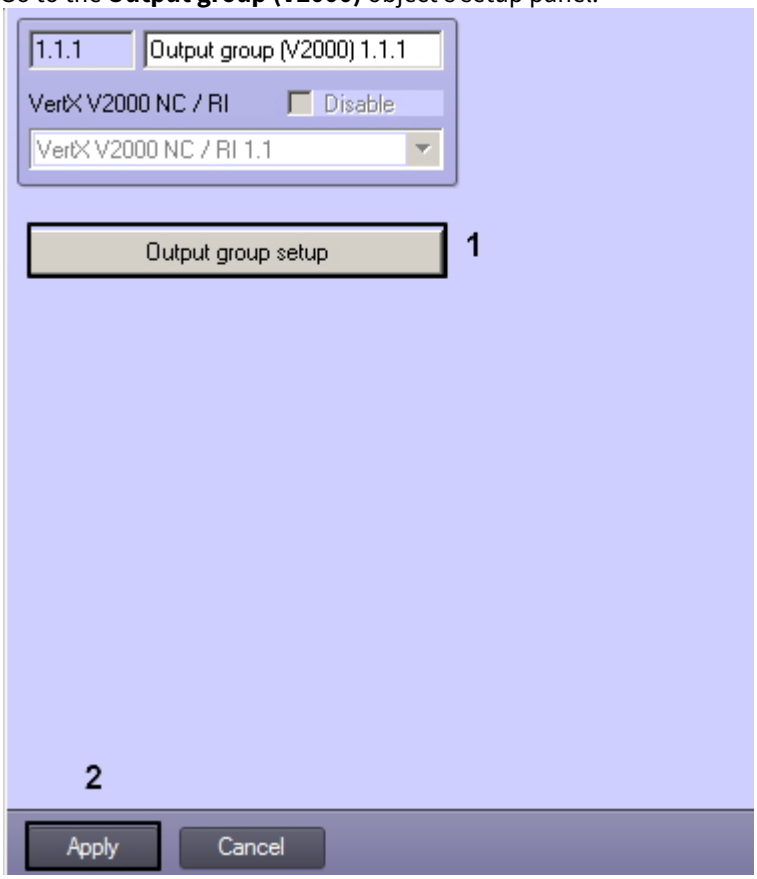
4.8.5 Configuring V2000 Controller Output Groups

To configure a V2000 controller's output groups, use the setup panel of the relevant **Output group (V2000)** object. To find this object, go to the **Settings** dialog box, click the **Hardware** tab, select the relevant **VertX V2000 NC/RI** object, and browse its object subtree.

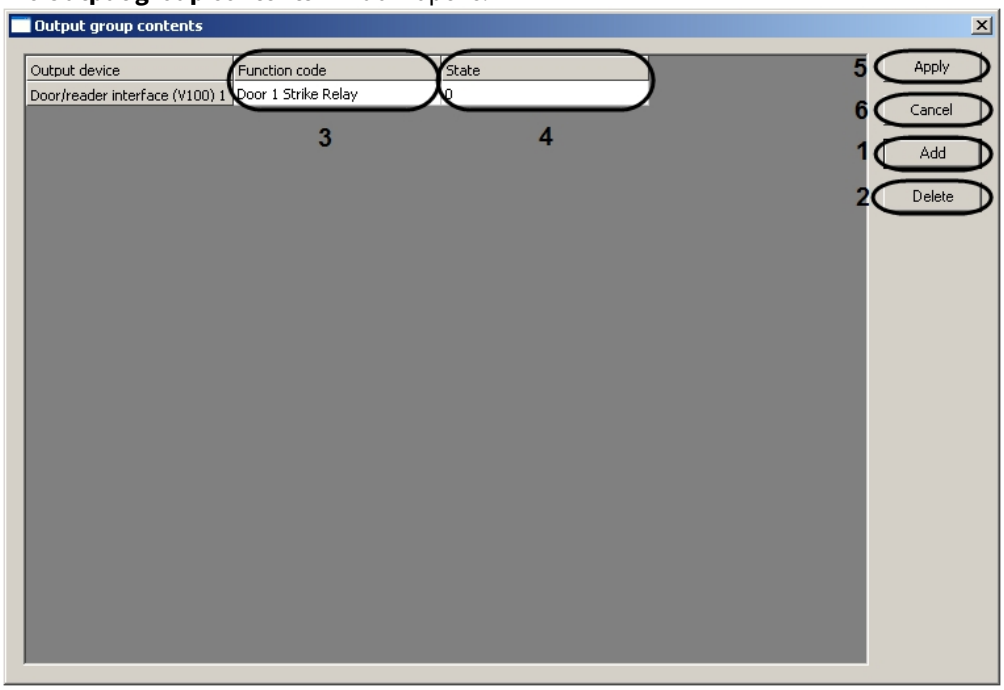


To configure an output group:

1. Go to the **Output group (V2000)** object's setup panel.



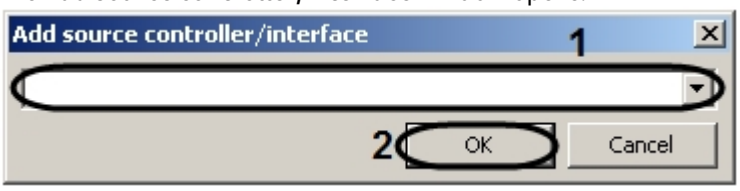
2. Click **Output group setup** (**1**).
   The **Output group contents** window opens.



3. To add a new controller function, click **Add** (**1**).

> **Note:**
>
> To delete a controller function, select the relevant row in the table and click **Delete**(**2**).

The **Add source controller/interface** window opens.



4. In the drop-down list, select the required object that corresponds to the V2000 controller (**1**).
5. Click **OK** (**2**).
6. In the **Function code** column**,** select the controller function (**3**).
7. In the **State** column**,** select the function state (**4**).

> **Note:**
>
> For more detailed information on function states, refer to the HID system's vendor documentation.

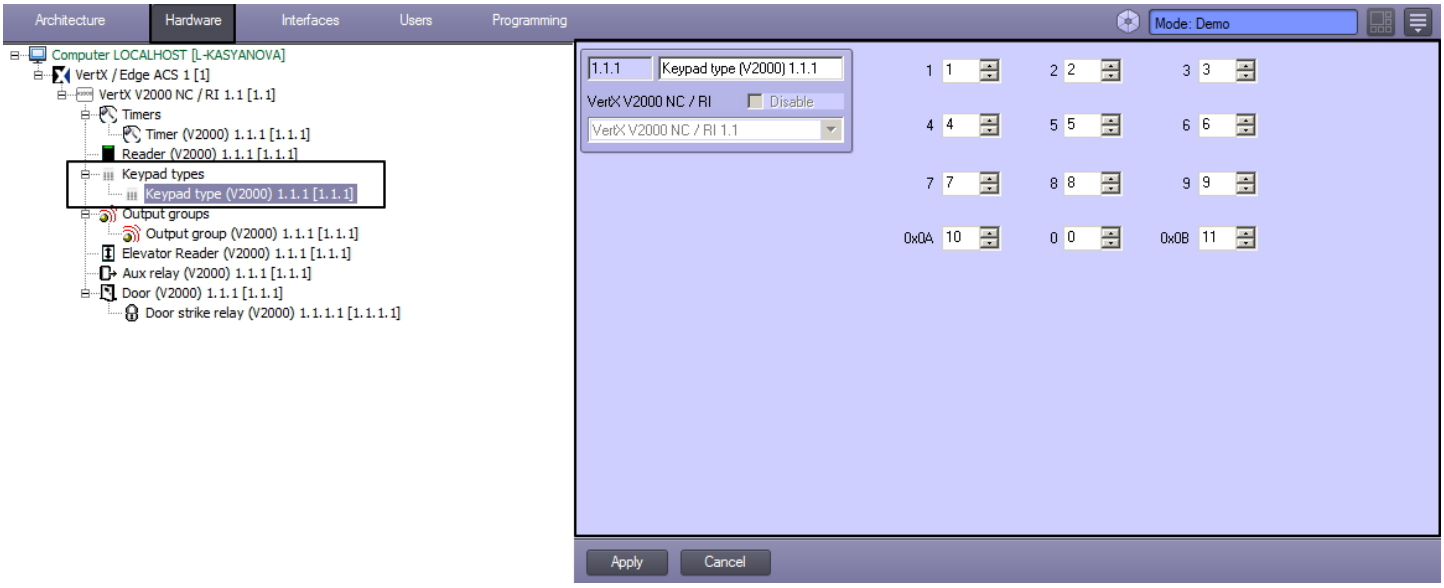
8. Add as many functions as needed.
9. Click **Apply** to save the changes (**5**).

> **Note:**
>
> To come back to the setup panel without saving changes, click **Cancel** (**6**).

The output groups are now configured.

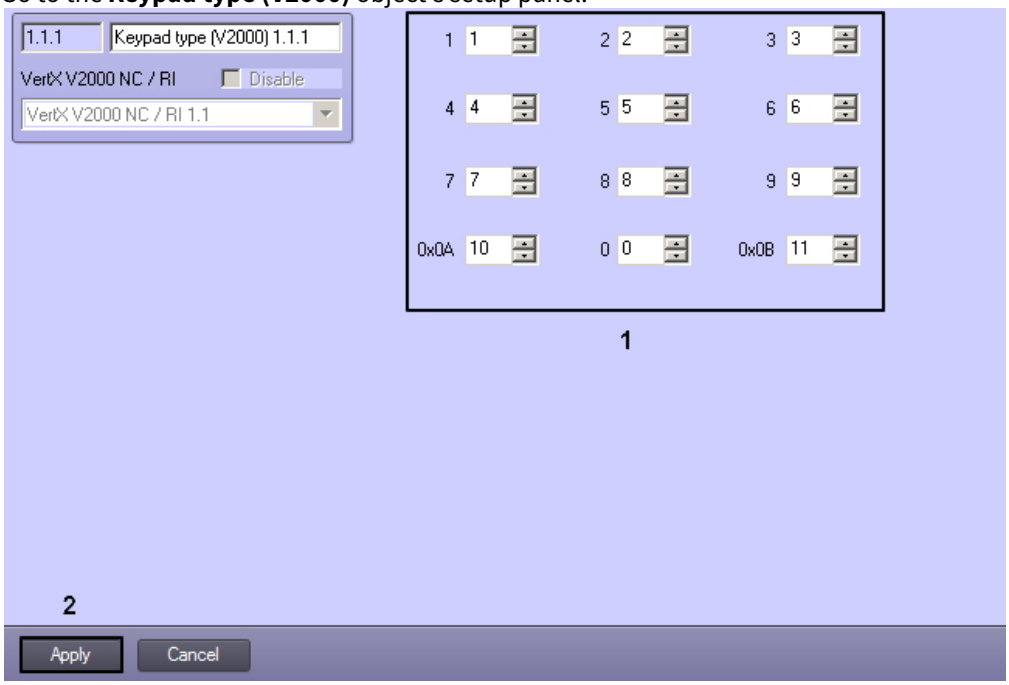
4.8.6 Configuring the V2000 Controller Keypad Types

To configure a V2000 controller's keypad types, use the setup panel of the relevant **Keypad type (V2000)** object. To find this object,go to the **Settings** dialog box, click the **Hardware** tab, select the relevant **VertX V2000 NC/RI** object, and browse its object subtree.



To configure a keypad type:

1. Go to the **Keypad type (V2000)** object's setup panel.



2. In each of the fields **0**, **1**, ..., **9,** enter the value that the controller receives when the field's keypad key is pressed(**1**).
3. In the **0x0A** field**,** enter the value that the controller receives when the keypad's *key is pressed(**1**).
4. In the **0x0B** field**,** enter the value that the controller receives when the keypad's #key is pressed(**1**).
5. Click **Apply** to save the changes (**2**).

The keypad type is now configured.

Example. Configuring of the Keypad type object is described on basis of the *HID ProxPro 5355 AGK11* code-typeset reader.

Output data format for this reader is following: P XXXXX……XXXXX P, where P – parity bit, X – data. Parity bits are needed to increase the reliability of data transferring from reader to controller. The number presented in binary form corresponds to each pressed key:

0 = 0000

1 = 0001

2 = 0010

3 = 0011

4 = 0100

5 = 0101

6 = 0110

7 = 0111

8 = 1000

9 = 1001

* = 1010

= 1011

For example, PIN-code consists of 4 digits and equals to 3476. In binary form the data transferring will be presented as follows: 0011 0100 0111 0110

As it was said before, in every data transferring there are even parity bits.

For the *HID ProxPro 5355AGK11* reader the data transferring will be as follows: E XXXXX……XXXXX O, where E – even parity bit with 0 value; O – odd parity bit with 1 value. Transferring of 6 bits corresponds to each pressed key, where the first and the last bits are the parity bits. 4 bits between them are data bits.

Let's consider the full output format of the *HID ProxPro 5355AGK11* reader for 3476 PIN-code.

The first entered number is 3. Its binary presentation is 0011. The even parity bit (0) will be added in the beginning and the odd parity bit (1) will be added in the end. So the value will be 000111.

Entering all digits of PIN-code the reader will give the following data:

000111 (**3**) 001001 (**4**) 001111 (**7**) 001101 (**6**)

On the basis of these rules fill in the value matrix on settings panel of the **Keypad type** object in the *ACFA Intellect* software. All values should be entered in decimal form. So converting binary values into decimal (considering parity bits), the following values should be entered:

0 = 1

1 = 2

2 = 4

3 = 7

4 = 41

5 = 42

6 = 44

7 = 47

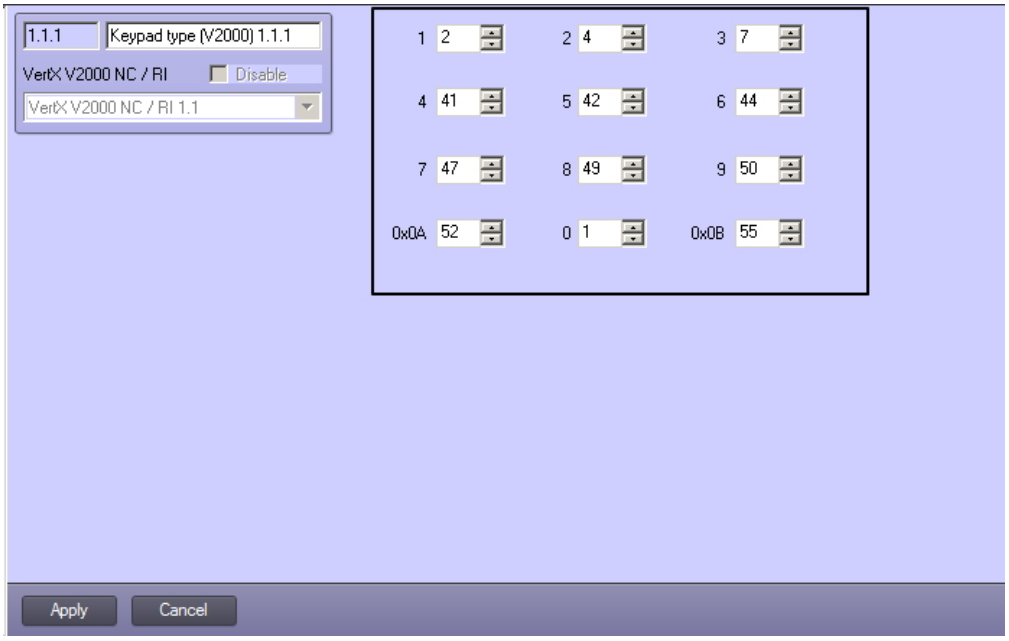
8 = 49

9 = 50

* = 52

= 55

The settings of the **Keypad type** object are presented in the figure:



Attention!

Presence of parity bits is not necessary. Parity bits combinations are also available. In the considered example the HID ProxPro 5355AGK11 has parity bits it this order exactly. But the manufacturer can use other combinations:

E XXXXX……XXXXX O Even parity bit in the beginning (0), odd parity bit in the end (1)

E XXXXX……XXXXX E Even parity bits in the beginning and in the end (0)

O XXXXX……XXXXX E Odd parity bit in the beginning (1), even parity bit in the end (0)

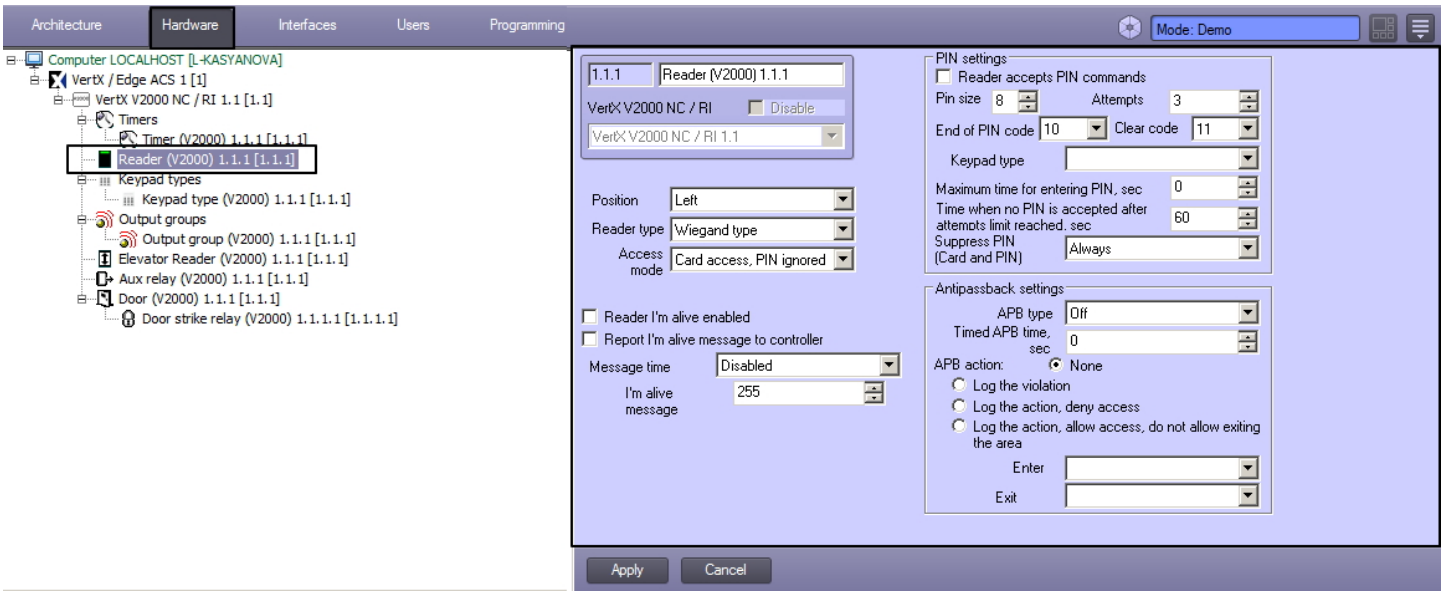
O XXXXX……XXXXX O Odd parity bits in the beginning and in the end (1)

Enter the corresponding values in decimal form depending on the combination which is in use by manufacturer.

Ask the manufacturer about the type of combination which is in use if it is not specified in the manual for reader.

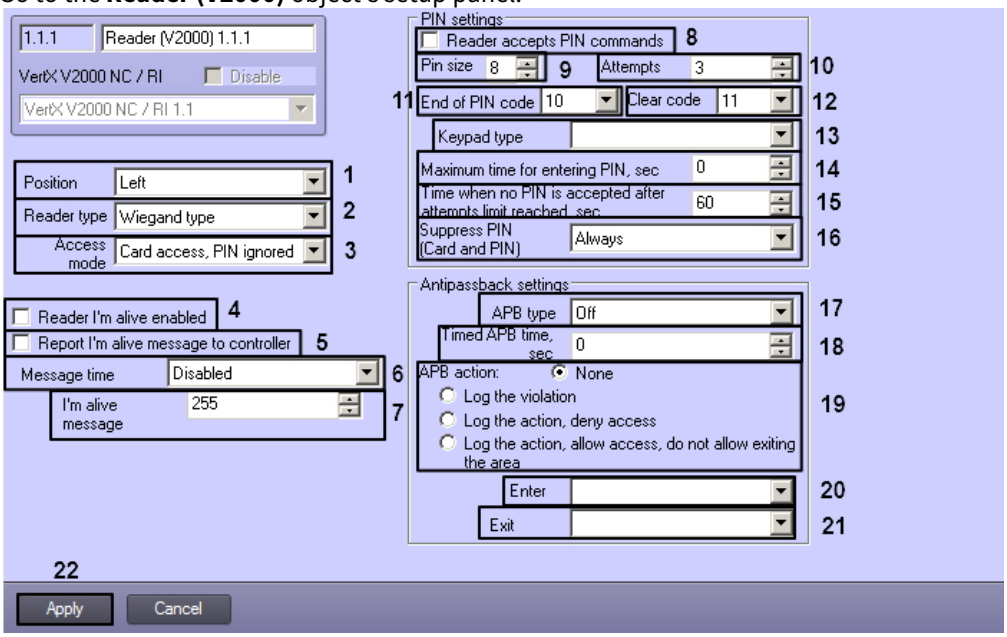
4.8.7 Configuring V2000 Controller Readers

To configure V2000 controller's readers, use the setup panel of the relevant **Reader (V2000)** object. To find this object, go to the **Settings** dialog box, click the **Hardware** tab, select the relevant **VertX V2000 NC/RI** object, and browse its object subtree.



To configure the readers:

1. Go to the **Reader (V2000)** object's setup panel.



2. Select the position of the reader in the **Position** field (**1**).
3. Select the type of reader used in the **Reader type** field (**2**).
4. Set the access mode by selecting it from the corresponding drop-down list (**3**).
5. Check the **Reader I'm alive enabled** box to enable the reader (**4**).
6. Select the **Report I'm alive message to the controller** to send a notification to the controller about the connected reader (**5**).
7. Select the time to send the message after connecting the reader in the **Message time** field (**6**).
8. Select the message code in the **I'm alive message** field (**7**).
9. Check the **Reader accepts PIN commands** box to enable the use of PIN-codes on the reader (**8**).
10. Select the length of the PIN in the **PIN length** field (**9**).
11. Select the number of attempts to enter the PIN in the **Attempts** field (**10**).
12. Specify the digital code associated with the end of the PIN entry in the **End of PIN code** field (**11**).
13. Specify the digital code associated with the clearing command of the entered PIN in the **Clear code** field (**12**).
14. Select the keypad type from the drop-down list (**13**).
15. Set the maximum time for entering the PIN in seconds in the **Maximum time for entering PIN, sec** field (**14**).
16. Set the pause in seconds, during which the reader will not accept attempts to enter the code, if the limit of dialing attempts is exceeded (**15**).
17. Select the mode for suppressing the PIN-schedule in the Card and PIN access mode in the **Suppress PIN (Card and PIN)** field (**16**).
18. Select the type of antipassback control in the **APB type** field (**17**).
19. Set the time period for timed antipassback control in seconds (**18**).
20. Select the action to take when the antipassback is registered by setting the corresponding switch (**19**).
21. Select the region which the user enters in the **Enter** field (20).
22. Select the region from which the user enters in the **Exit** field (21).
23. Click the **Apply** button to save the changes (**22**).

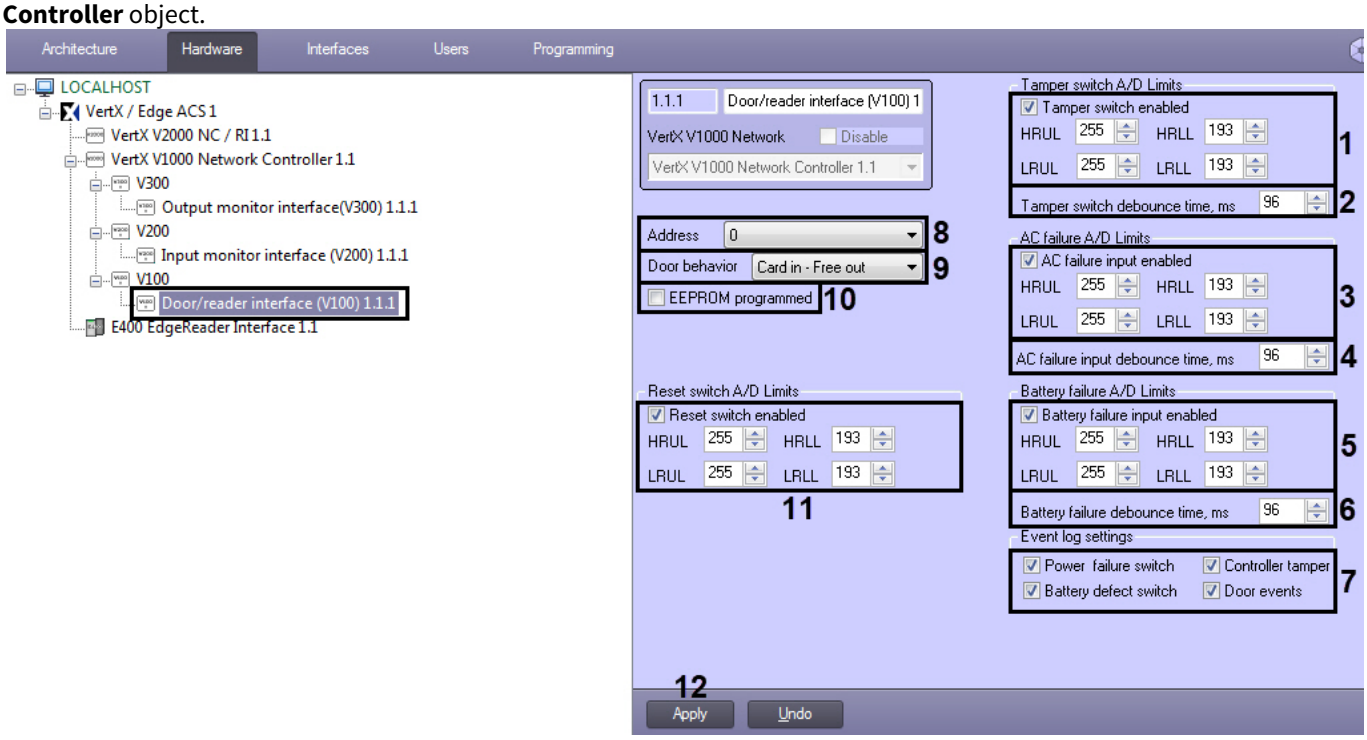
Configuring the V2000 controller reader is completed.

4.9 Configuring V1000 Controller Devices

4.9.1 Configuring a V100 Interface Module

To configure the V100 interface module, do the following:

1. Go to the **Door/reader interface (V100)** object's setup panel, which is created on the basis of the **VertX V1000 Network Controller** object.



2. If the tamper switch is enabled, set the **Tamper switch enabled** checkbox (**1**) and configure the tamper switch A/D limits (see Configuring EEPROM Limits).
3. In the **Tamper switch debounce time, msec** field, enter the time period (in milliseconds) to be used for fixing (debouncing) the bouncing tamper switch signal (**2**).
4. If the AC failure input is enabled, set the **AC failure input enabled** checkbox (**3**) and configure the AC failure A/D limits (see Configuring EEPROM Limits).
5. In the **AC failure input debounce time, msec** field, enter the time period (in milliseconds) to be used for fixing (debouncing) the bouncing AC failure input signal (**4**).
6. If the battery failure input is enabled, set the **Battery failure input enabled** checkbox (**5**) and configure the battery failure A/D limits (see Configuring EEPROM Limits).
7. In the **Battery failure debounce time, msec** field, enter the time period (in milliseconds) to be used for fixing (debouncing) the bouncing battery failure input signal (**6**).
8. Set the checkboxes next to those service inputs, when changing the states of which the corresponding events will be generated (**7**) (see Configuring automatic generation of HID events).
9. In the **Address** drop-down list, select the interface module's address (**8**).

> **Attention!**
>
> The device's address is set automatically when the object tree is created. Changing the address may lead to losing the connection to the device.

10. In the **Door behavior** drop-down list, select the interface's door behavior type (**9**) (see Configuring a V2000 controller's door behavior).
11. If you want to configure EEPROM, set the **EEPROM programmed** checkbox (**10**).
12. If reset switch is enabled, set the **Reset switch enabled** checkbox (**11**) and configure the limits for resetting the switch (see Configuring EEPROM Limits) .
13. Click **Apply** to save the changes (**12**).

The V100 interface module is now configured.

4.9.2 Configuring a V100 Interface Module's Doors

To configure a V100 interface module's doors, do the same actions as for a V2000 controller's doors (see Section Configuring V2000 Controller Doors).

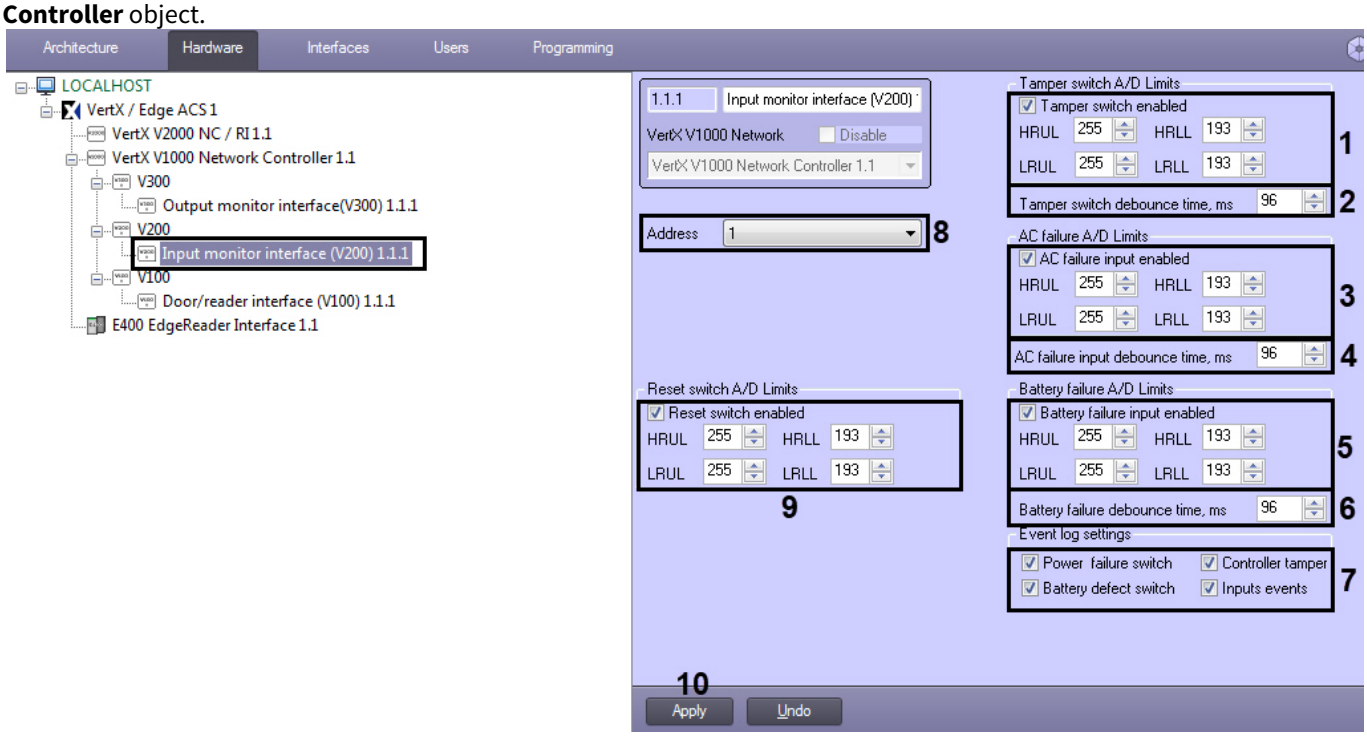
4.9.3 Configuring a V100 Interface Module's Auxiliary Relays

To configure a V100 interface module's auxiliary relays, do the same actions as for a V2000 controller's auxiliary relays (see Section Configuring V2000 Controller Auxiliary Relays).

4.9.4 Configuring the Input monitor interface (V200)

To configure the input monitor interface (V200), do the following:

1. Go to the **Input monitor interface (V200)** object's setup panel, which is created on the basis of the **VertX V1000 Network Controller** object.



2. If the tamper switch is enabled, set the **Tamper switch enabled** checkbox (**1**) and configure the tamper switch A/D limits (see Configuring EEPROM Limits).
3. In the **Tamper switch debounce time, msec** field, enter the time period (in milliseconds) to be used for fixing (debouncing) the bouncing tamper switch signal (**2**).
4. If the AC failure input is enabled, set the **AC failure input enabled** checkbox (**3**) and configure the AC failure A/D limits (see Configuring EEPROM Limits).
5. In the **AC failure input debounce time, msec** field, enter the time period (in milliseconds) to be used for fixing (debouncing) the bouncing AC failure input signal (**4**).
6. If the battery failure input is enabled, set the **Battery failure input enabled** checkbox (**5**) and configure the battery failure A/D limits (see Configuring EEPROM Limits).
7. In the **Battery failure debounce time, msec** field, enter the time period (in milliseconds) to be used for fixing (debouncing) the bouncing battery failure input signal (**6**).
8. Set the checkboxes next to those service inputs, when changing the states of which the corresponding events will be generated (**7**) (see Configuring automatic generation of HID events).
9. In the **Address** drop-down list, select the interface module's address (**8**).

> **Attention!**
>
> The device's address is set automatically when the object tree is created. Changing the address may lead to losing the connection to the device.

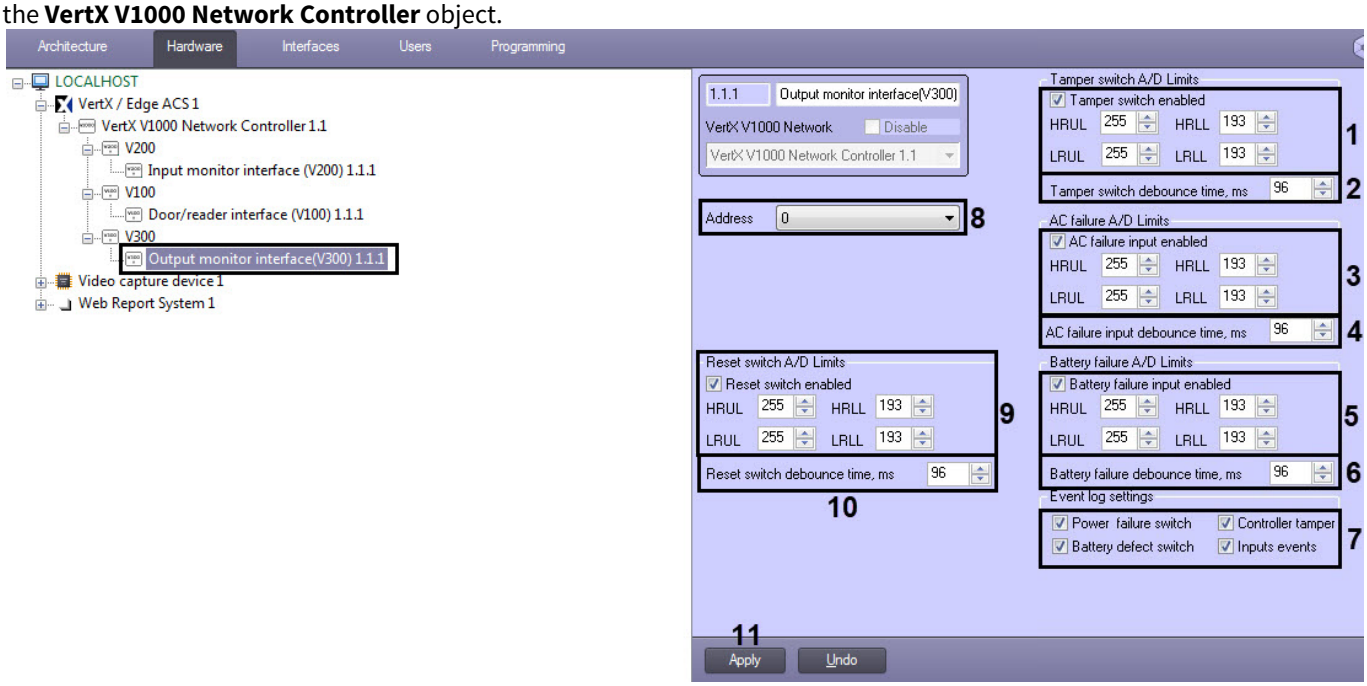
10. If reset switch is enabled, set the **Reset switch enabled** checkbox (**9**) and configure the limits for resetting the switch (see Configuring EEPROM Limits).
11. Click **Apply** to save the changes (**10**).

The input monitor interface (V200) is now configured.

4.9.5 Configuring the Output monitor interface(V300)

To configure the output monitor interface (V300), do the following:

1. Go to the **Output monitor interface (V300)** object's setup panel, which is created on the basis of the **VertX V1000 Network Controller** object.



2. If the tamper switch is enabled, set the **Tamper switch enabled** checkbox (**1**) and configure the tamper switch A/D limits (see Configuring EEPROM Limits).
3. In the **Tamper switch debounce time, msec** field, enter the time period (in milliseconds) to be used for fixing (debouncing) the bouncing tamper switch signal (**2**).
4. If the AC failure input is enabled, set the **AC failure input enabled** checkbox (**3**) and configure the AC failure A/D limits (see Configuring EEPROM Limits).
5. In the **AC failure input debounce time, msec** field, enter the time period (in milliseconds) to be used for fixing (debouncing) the bouncing AC failure input signal (**4**).
6. If the battery failure input is enabled, set the **Battery failure input enabled** checkbox (**5**) and configure the battery failure A/D limits (see Configuring EEPROM Limits).
7. In the **Battery failure debounce time, msec** field, enter the time period (in milliseconds) to be used for fixing (debouncing) the bouncing battery failure input signal (**6**).
8. Set the checkboxes next to those service inputs, when changing the states of which the corresponding events will be generated (**7**) (see Configuring automatic generation of HID events).
9. In the **Address** drop-down list, select the interface module's address (**8**).

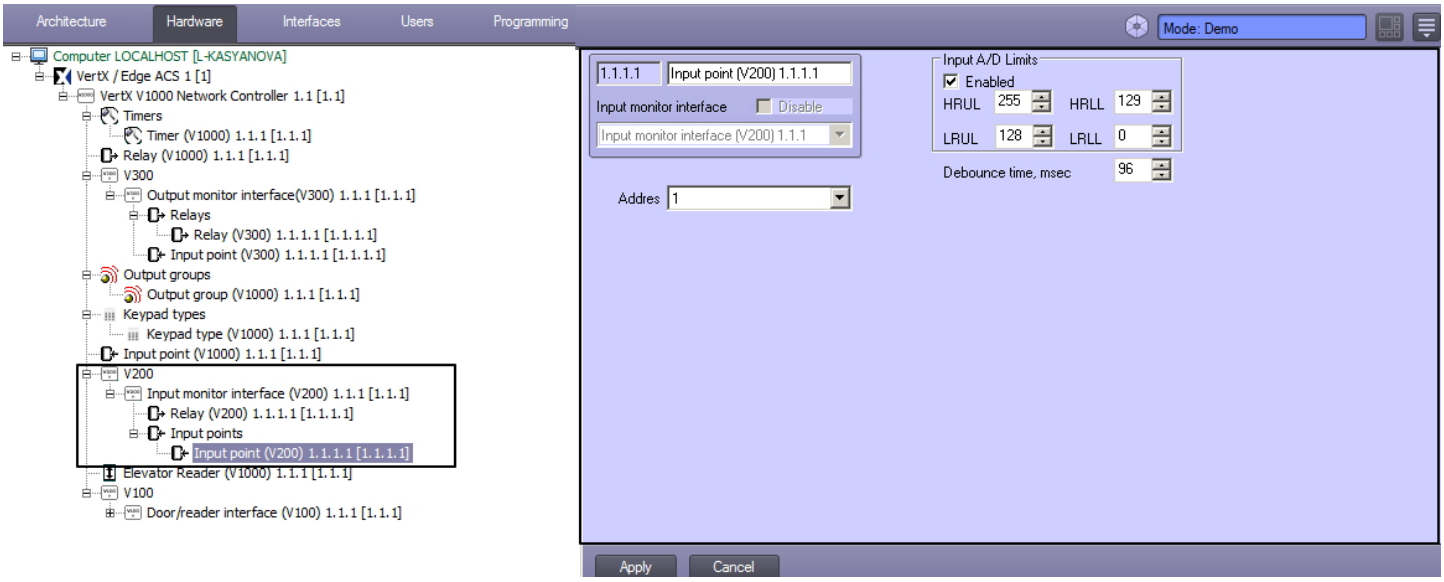
> **Attention!**
>
> The device's address is set automatically when the object tree is created. Changing the address may lead to losing the connection to the device.

10. If reset switch is enabled, set the **Reset switch enabled** checkbox (**9**) and configure the limits for resetting the switch (see Configuring EEPROM Limits).
11. Enter the time period in milliseconds, which is required for resetting the switch debounce time of alarm inputs, in the corresponding field (**10**).
12. Click **Apply** to save the changes (**11**).

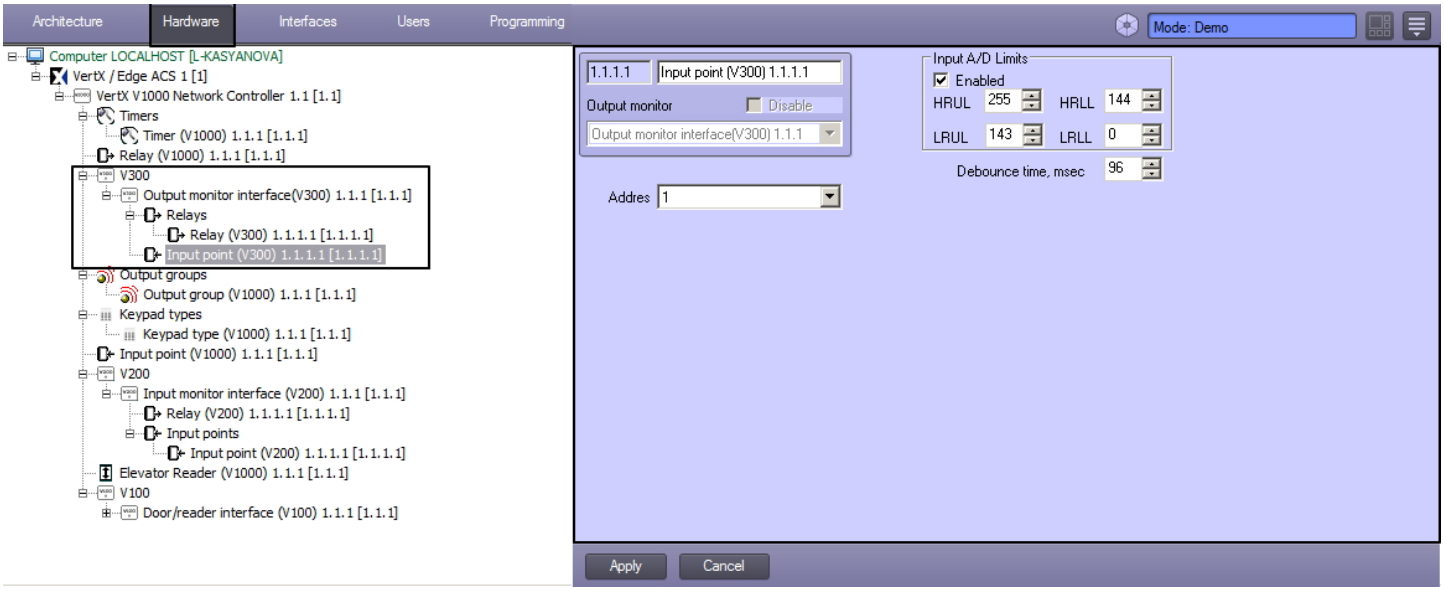
The output monitor interface (V300) is now configured.

4.9.6 Configuring a V200/V300 Interface Module's Input Points

To configure a V200 input monitor interface's input point, use the setup panel of the relevant **Input point (V200)** object.To find this object,go to the **Settings** dialog box, click the **Hardware** tab, select the relevant **Input monitor interface (V200)** object and browse its object subtree.

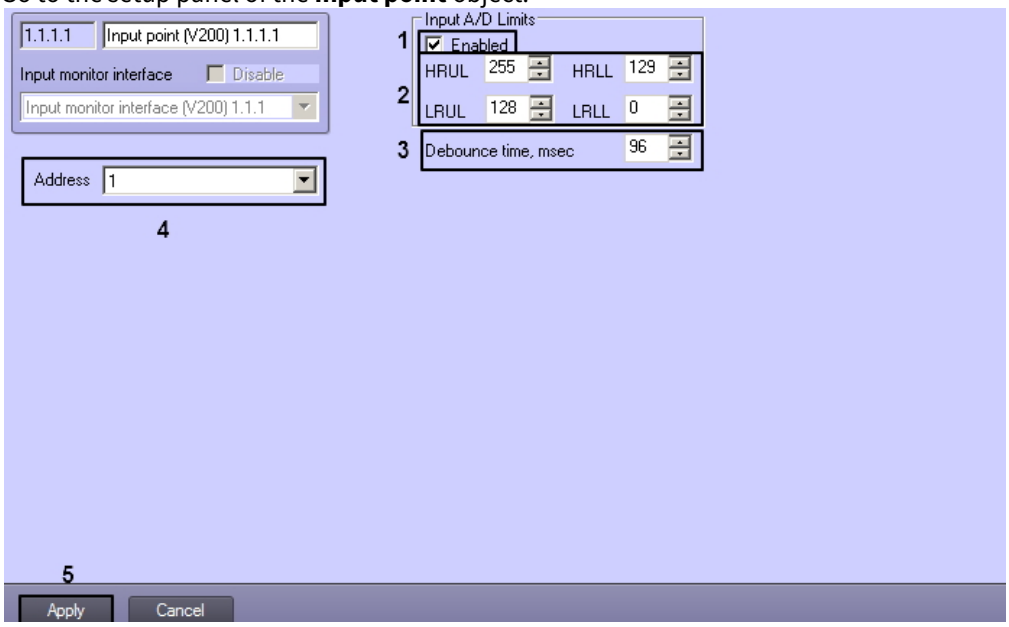


To configure a V300 interface module's input point, use the setup panel of the relevant **Input point (V300)** object. To find this object, go to the **Settings** dialog box, click the **Hardware** tab, select the relevant **Output monitor interface (V300)** object and browse its object subtree.



To configure the input points:

1. Go to the setup panel of the **Input point** object.

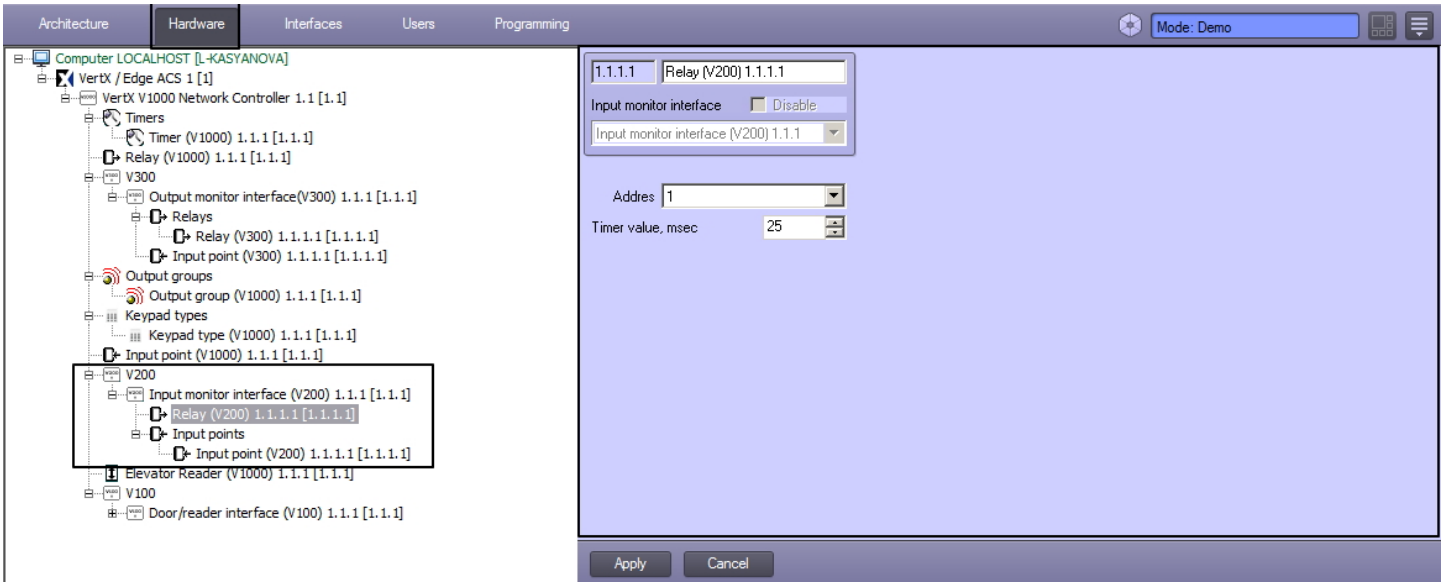


2. If the input point is enabled, select the **Enabled** checkbox (**1**).
3. Configure the input A/D limits (**2**) (see Section Configuring EEPROM Limits).
4. In the **Debounce time, msec** field, enter the time period (in milliseconds) to be used for fixing (debouncing) the bouncing input point signal (**3**).
5. In the **Address** field, the input point's address is preset (**4**). Changing the address may lead to losing connection to the input point.
6. Click **Apply** to save the changes (**5**).

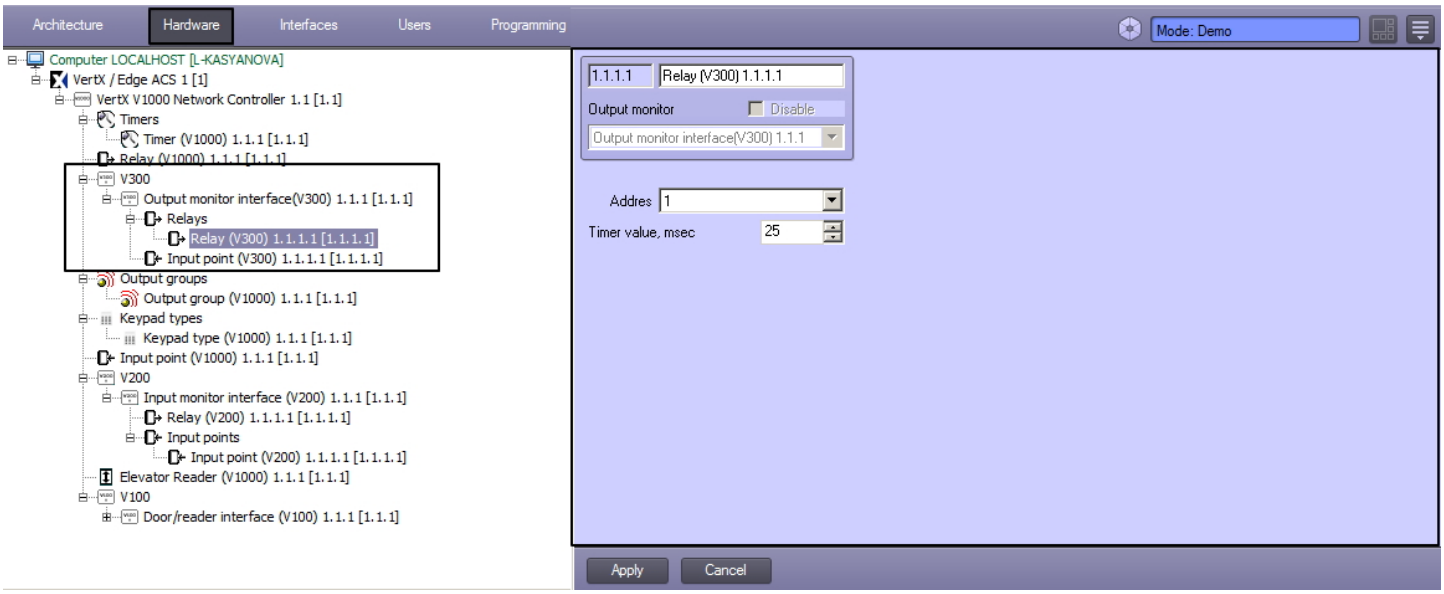
The input points are now configured.

4.9.7 Configuring a V200/V300 Interface Module Relays

To configure a V200 interface module's relays, use the setup panel of the relevant **Relay (V200)** object. To find this object, go to the **Settings** dialog box, click the **Hardware** tab, select the relevant **Input monitor interface (V200)** object, and browse its object subtree.

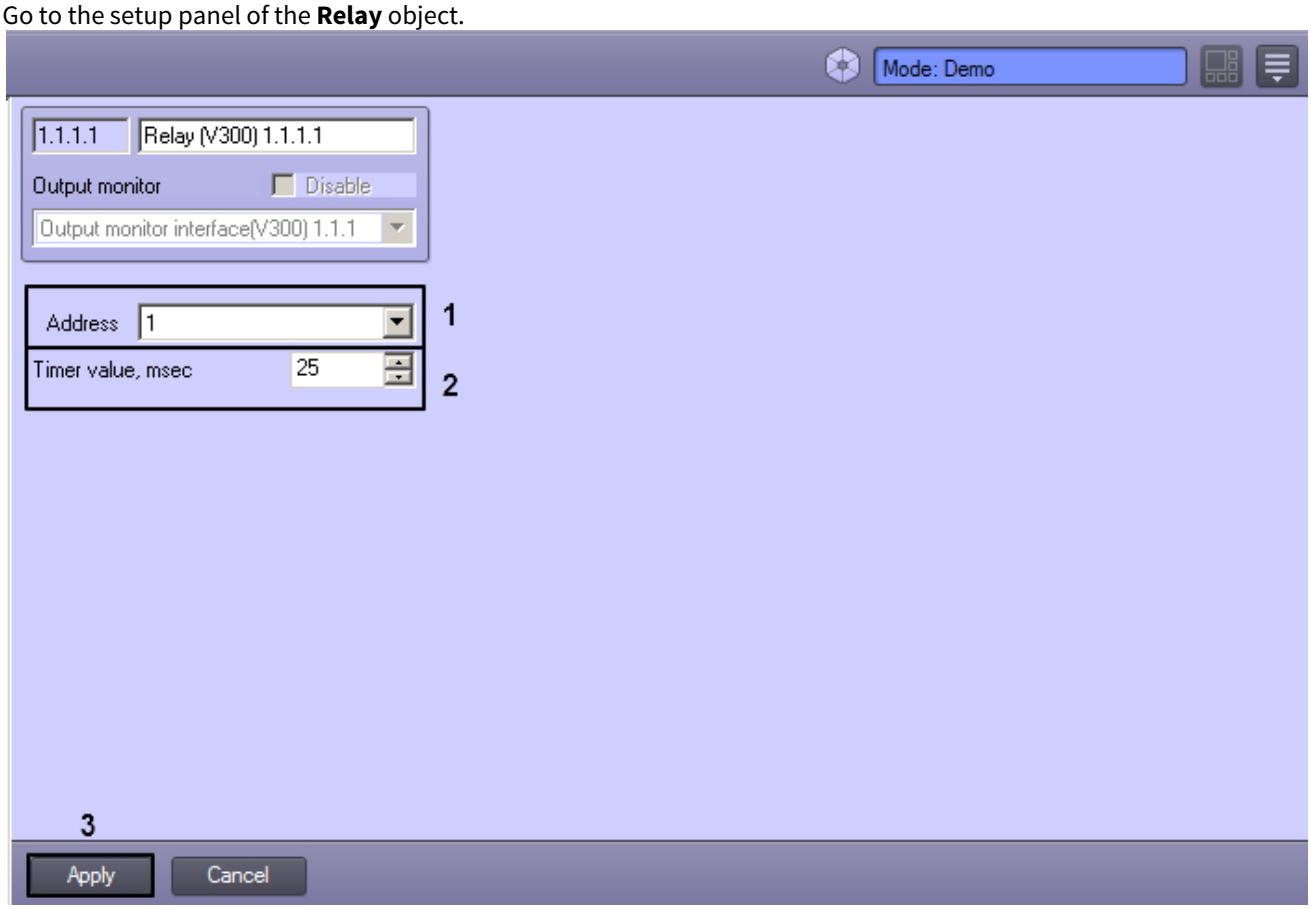


To configure a V300 input monitor interface's relays, use the setup panel of the relevant **Relay (V300)** object.To find this object,go to the **Settings** dialog box, click the **Hardware** tab, select the relevant **Output monitor interface (V300)** object, and browse its object subtree.



To configure a relay:

1. Go to the setup panel of the **Relay** object.



2. In the **Address** field, the relay's address is preset (**1**). Changing the address may lead to losing the connection to the relay.
3. In the **Timer value, msec** field, enter the timer's time interval (in milliseconds)(2).
4. Click **Apply** to save the changes (**3**).

The relay is now configured.

4.9.8 Configuring a V1000 Controller's Input Points

To configure a V1000 controller's input points, do the same actions as for a V200/V300 interface module's input points (see Section Configuring a V200/V300 Interface Module's Input Points).

4.9.9 Configuring a V1000 Controller's Relays

To configure a V1000 controller's relays, do the same actions as for a V200/V300 interface's relays (see Section Configuring a V200/V300 Interface Module Relays).

4.9.10 Configuring a V1000 Controller's Elevator Readers

To configure a V1000 controller's elevator readers, do the same actions as for a V2000 controller's elevator readers (see Section Configuring V2000 Controller Elevator Readers).

4.9.11 Configuring a V1000 Controller's Timers

To configure a V1000 controller's timers, do the same actions as for a V2000 controller's timers (see Section Configuring V2000 Controller Timers).

4.9.12 Configuring a V1000 Controller's Output Groups

To configure a V1000 controller's output groups, do the same actions as for a V2000 controller's output groups (see Section Configuring V2000 Controller Output Groups).

4.9.13 Configuring a V1000 Controller's Keypad Types

To configure a V1000 controller's keypad type, do the same actions as for a V2000 controller's keypad type (see Section Configuring the V2000 Controller Keypad Types).

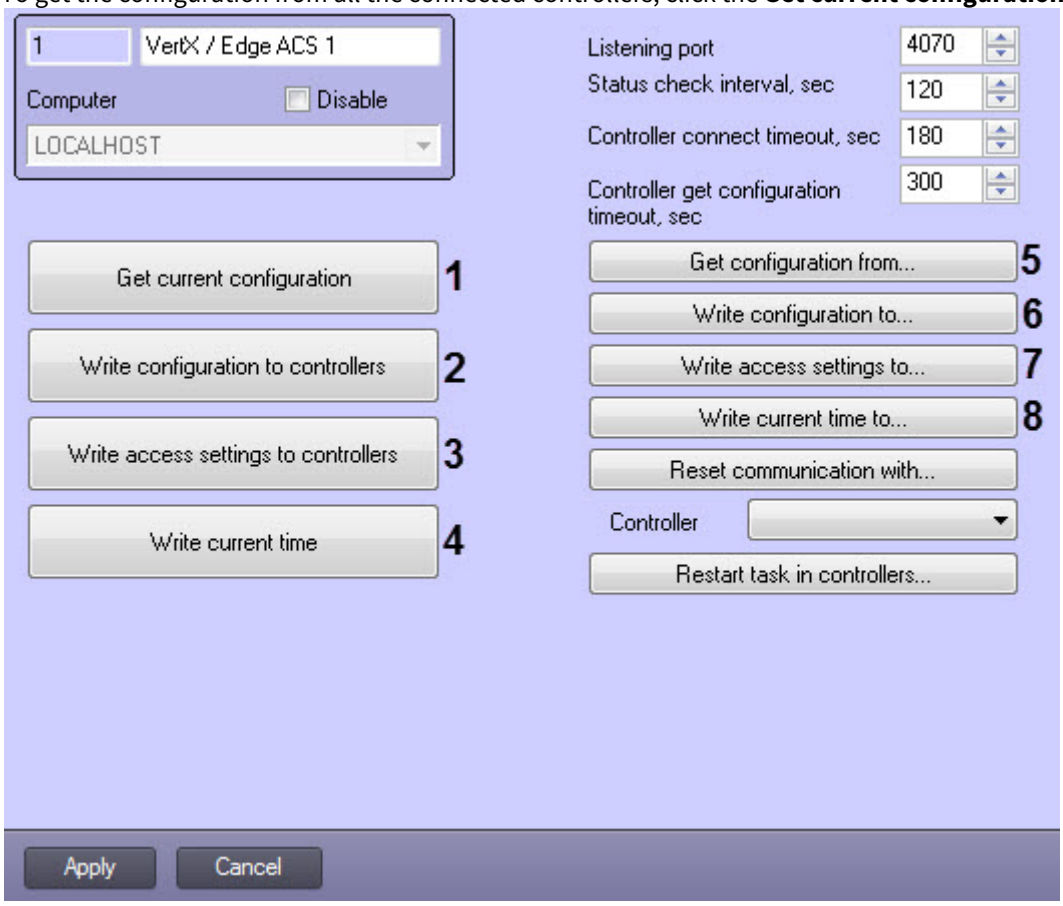
4.10 Configuring E400 Controller Devices

To configure an E400 controller's device, do the same actions as for a V2000 controller's device (see Section Configuring V2000 Controller Devices). To find the object that represents a device, select the relevant **E400 EdgeReader Interface** and browse its object subtree.

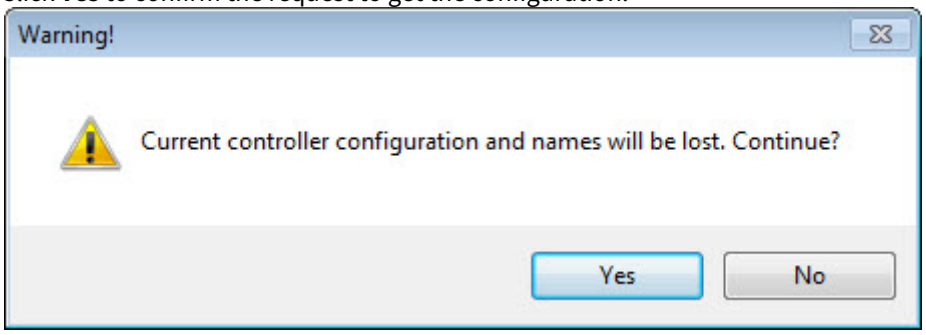
4.11 Managing the HID configuration

The *HID* configuration is managed on the settings panel of the **VertX / Edge ACS** object as follows:

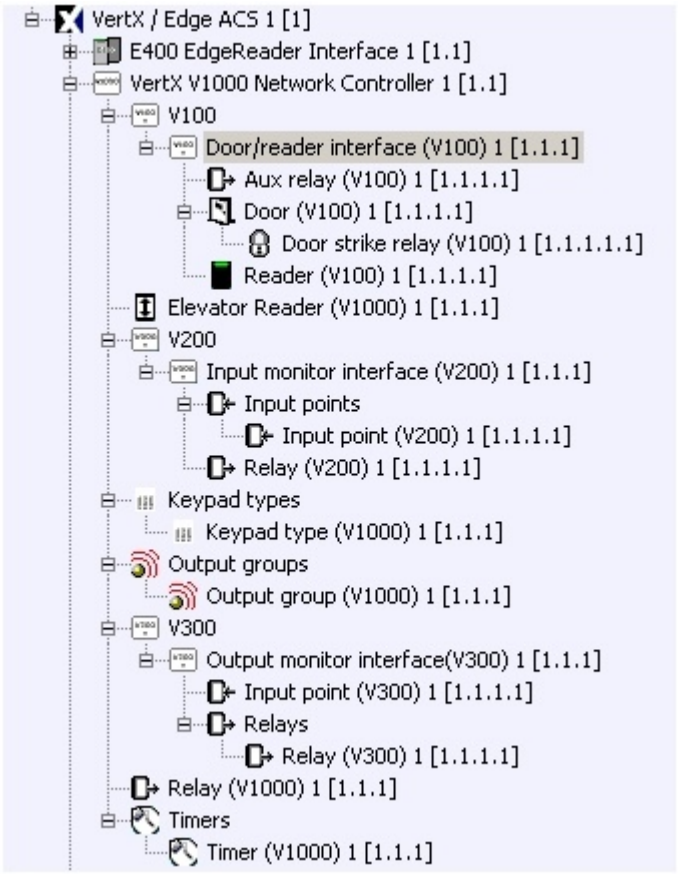
1. To get the configuration from all the connected controllers, click the **Get current configuration** button (**1**).



After clicking this button, the **Attention!** dialog box will open with a warning about deleting the current *HID* object tree. Click **Yes** to confirm the request to get the configuration.



As a result, the object tree with all connected controllers and *HID* devices will be automatically created.



Attention!

Once you get the current configuration, it is no longer necessary to create the objects corresponding to the connected controllers and *HID* devices.

2. To write the configuration to all the controllers, click the **Write configuration to controllers** button (**2**).
3. To write the *Access manager* data to all the controllers, click the **Write access settings to controllers** button (**3**).

Attention!

It is highly recommended to regularly write the complete *Access manager* data to all the controllers to avoid controller errors in case of vendor constraints violations.

Note

The following **constraints** are placed:

It is possible to dynamically create only 10000 users if in the database there is less than 10000 users. Otherwise, it is possible to create only 100 users.

To change the access type (card+pin, only card, only pin, card or pin) it is needed to update the database.

It is impossible to delete user. As deletion emulation specify January, 1, 1990 as card validity end date. In such case the “Card date expired” message will display.

It is impossible to change the card number.

Attention!

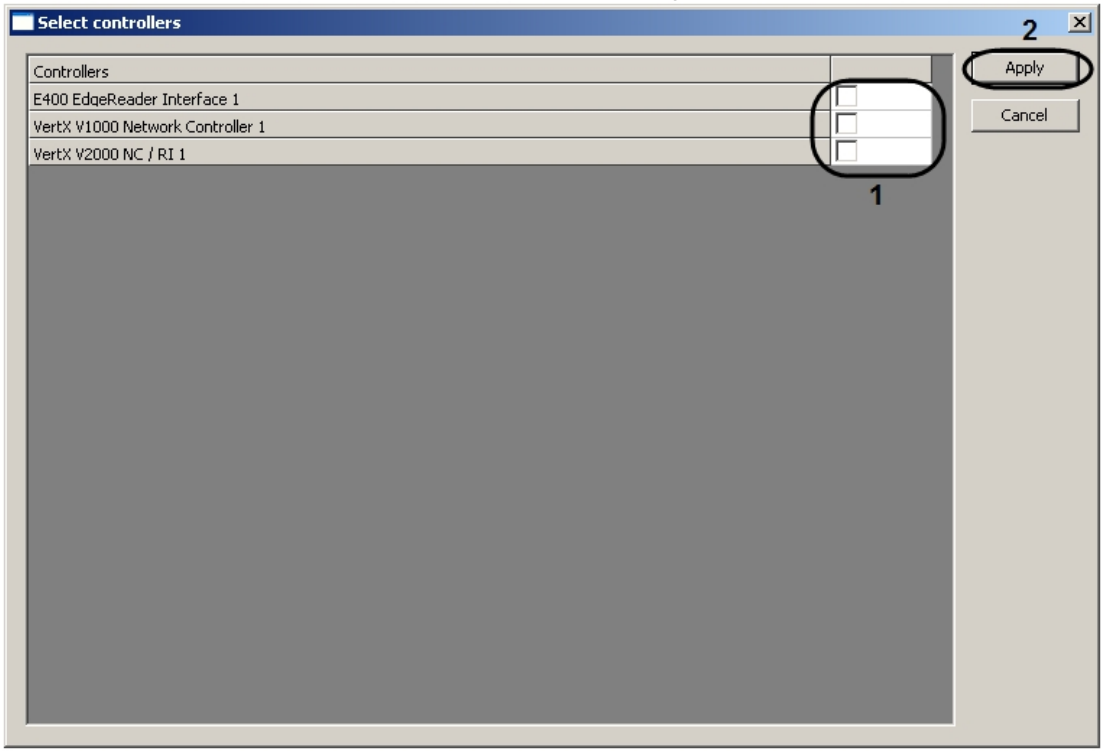
It is impossible to delete user and then create the new user with other card number. In such case the user id will be identical and record of other card number with the same user id is impossible.

4. To synchronize the Server's time with the time of all the controllers, click the **Write current time** button (**4**).
5. To get the configuration from selected controllers, click the **Get configuration from...** button (**5**).

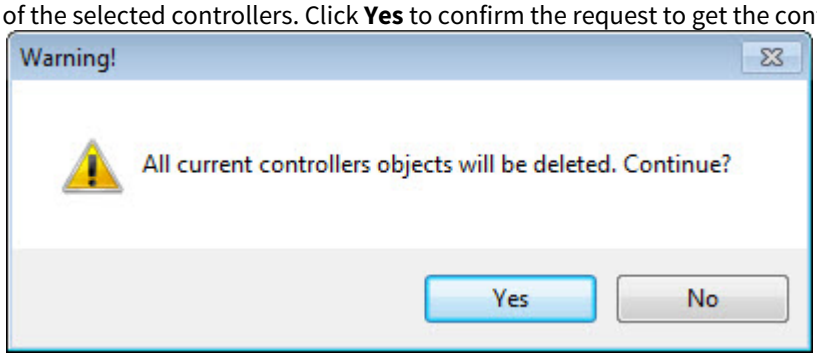
Attention!

To get the configuration from the selected controllers, it is necessary to first create the controller objects corresponding to the connected equipment (**VertX V1000**, **VertX V2000 NC / RI**, **EdgeReader E400**), based on the **VertX / Edge ACS** object on the **Hardware** tab of the **Settings** dialog box. Then, on the settings panel of the created objects, enter the MAC address of the controllers (see Configuring the controller MAC address).

After you click the **Get configuration from...** button, the **Select controllers** window will open. In this window, set the checkboxes of the selected controllers (**1**), and click the **Apply** button (**2**).



After you click the **Apply** button, the **Attention!** dialog box will open with a warning about deleting the current object tree of the selected controllers. Click **Yes** to confirm the request to get the configuration.



As a result, the object tree corresponding to the selected HID controllers configuration will be created.

> **Attention!**
>
> Once you get the configuration of the selected controllers, it is no longer necessary to create the objects corresponding to the *HID* devices.

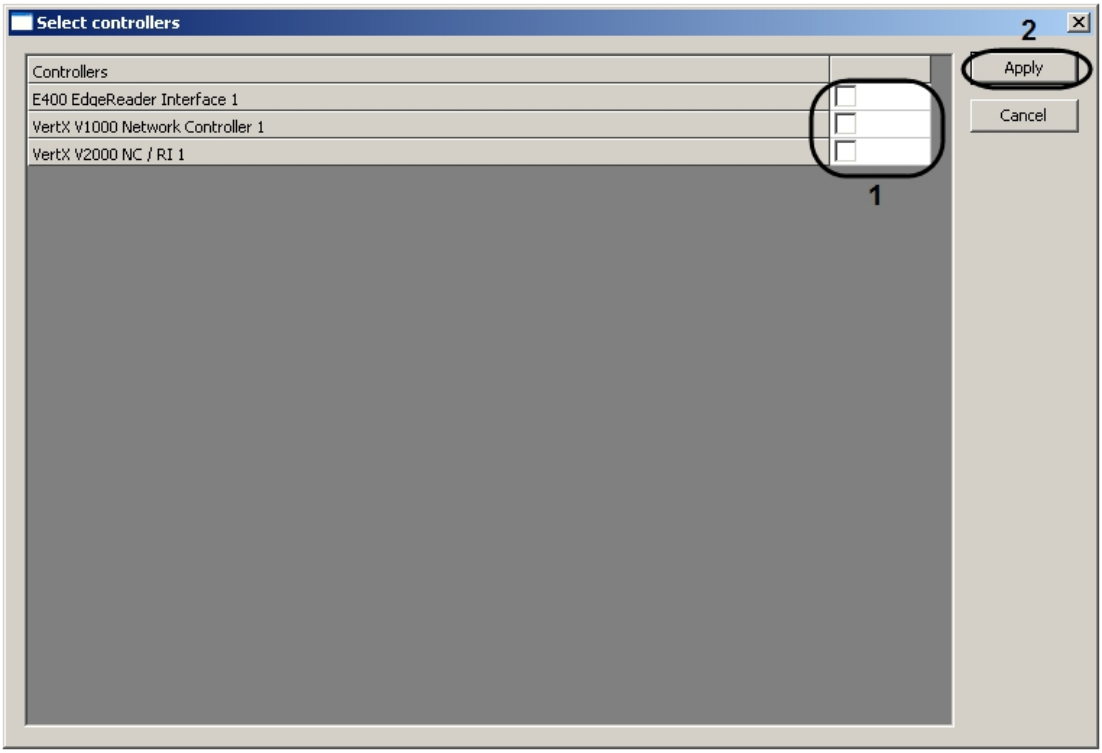
6. To write the configuration to the selected controllers, click **Write configuration to...** (**6**), select the checkboxes of the required controllers (**1**), and click the **Apply** button (**2**).
7. To write the *Access manager* data to the selected controllers, click **Write access settings to...** (**7**), select the checkboxes of the required controllers (**1**), and click the **Apply** button (**2**).
8. To synchronize the Server's time with the time of selected controllers, click the **Write current time to...** button (**8**), select the checkboxes of the required controllers (**1**) and click the **Apply** button (**2**).

Managing the HID configuration is complete.

4.12 Resetting Communication with Controllers

To reset communication with controllers, go to the **VertX / Edge ACS** object's setup panel.

To reset communication with selected controllers, click the **Reset communication with...**button, select the checkboxes of the required controllers (**1**) and click the **Apply** button (**2**).



4.13 Assigning Tasks to the Controllers

To assign tasks to the controllers, go to the **VertX / Edge ACS** object's setup panel.

To assign tasks to the controllers, select the required task from the drop-down list (**1**) and click the **Restart task in controllers...**button (**2**).

5 Working with the HID integration module

5.1 General Information on Working with the HID Integration Module

To work with the *HID* integration module, use the following GUI objects:

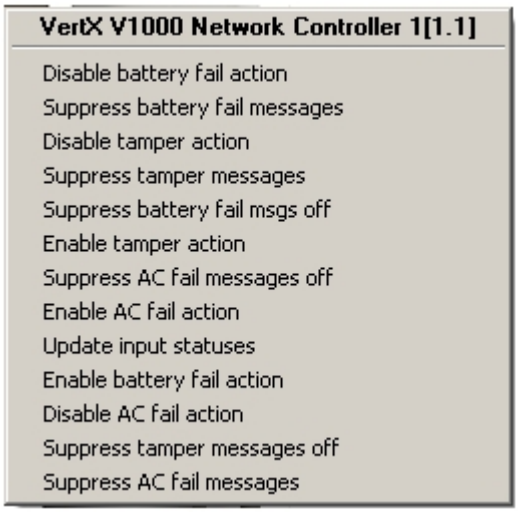
1. **Map**;
2. **Event log;**
3. **Access Control Service**.

The information on how to configure these GUI objects can be found in the Intellect Software Package: Administrator's Guide and the Visitor Management System Module Settings and Operation Guide.

The detailed information on how to work with the GUI objects can be found in Intellect Software Package: Operator's Guide.

5.2 Managing V1000 controllers

To manage a V1000 controller, go to the **Map** window and use the menu of the relevant **VertX V1000 Network Controller** object.



Description of the **VertX V1000 Network Controller** menu items is given in the table.

Menu item	Executed function
Disable battery fail action	Disables the battery failure sensor
Suppress battery fail messages	Disables logging battery failure messages
Disable tamper action	Disables the temper switch
Suppress tamper messages	Disables logging tamper switch messages
Suppress battery fail msgs off	Enables logging battery failure messages
Enable tamper action	Enables the temper switch
Suppress AC fail messages off	Enables logging AC failure messages
Enable AC fail action	Enables the AC failure sensor

Menu item	Executed function
Update input statuses	Updates input statuses
Enable battery fail action	Enables the battery failure sensor
Disable AC fail action	Disables the AC failure sensor
Suppress tamper messages off	Enables logging tamper switch messages
Suppress AC fail messages	Disables logging AC failure messages

5.3 Managing V2000 controllers

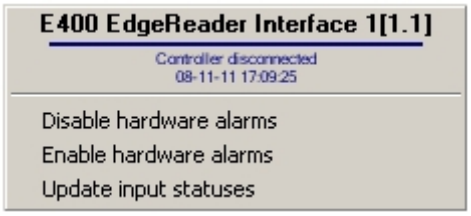
To manage a V2000 controller, go to the **Map** window and use the menu of the relevant **VertX V2000 NC / RI** object.

Description of the **VertX V2000 NC / RI** menu items is given in the table.

Menu item	Executed function
Disable hardware alarms	Disables the use of hardware alarms
Enable hardware alarms	Enables the use of hardware alarms
Update input statuses	Updates input statuses

5.4 Managing E400 controllers

To manage an E400 controller, go to the **Map** window and use the menu of the relevant **E400 EdgeReader Interface** object.

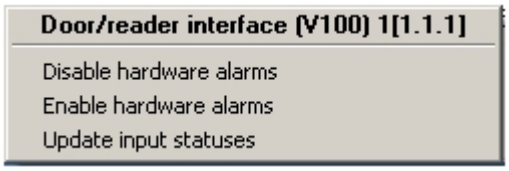


Description of the **E400 EdgeReader Interface** menu items is given in the table.

Menu item	Executed function
Disable hardware alarms	Disables the use of hardware alarms
Enable hardware alarms	Enables the use of hardware alarms
Update input statuses	Updates input statuses

5.5 Managing V100 interface modules

To manage a V100 interface module, go to the **Map** window and use the menu of the relevant **Door/reader interface (V100)** object.

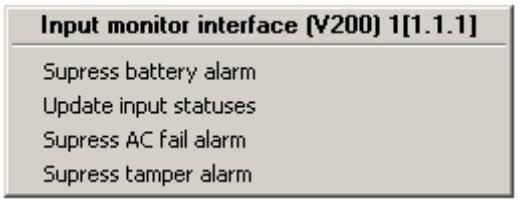


Description of the **Door/reader interface (V100)** menu items is given in the table.

Menu item	Executed function
Disable hardware alarms	Disables the use of hardware alarms
Enable hardware alarms	Enables the use of hardware alarms
Update input statuses	Updates input statuses

5.6 Managing V200 interface modules

To manage a V200 interface module, go to the **Map** window and use the menu of the relevant **Input monitor interface(V200)** object.



Description of the **Input monitor interface (V200)** menu items is given in the table

Menu item	Executed function
Update input statuses	Updates input statuses
Suppress battery alarm	Disables logging battery failure alarm messages
Suppress AC fail alarm	Disables logging AC failure alarm messages
Suppress tamper alarm	Disables logging tamper switch alarm messages

5.7 Managing V300 interface modules

To manage a V300 interface module, go to the **Map** window and use the menu of the relevant **Output monitor interface (V300)** object.

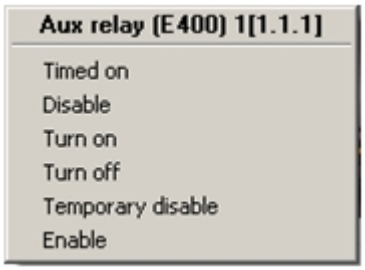
Description of the **Output monitor interface (V300)** menu items is given in the table.

Menu item	Executed function
Update input statuses	Updates input statuses

5.8 Managing HID module Relays

To manage a relay of the HID integration module, go to the **Map** window and use the menu of the relevent relay object.

The set of menu items is the same for all the relay types of the HID integration module.

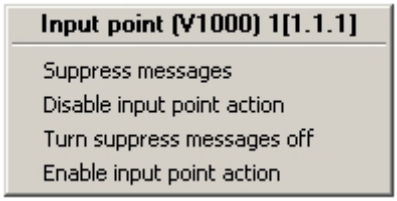


Description of the **Relay** menu items is given in the table.

Menu item	Executed function
Timed on	Temporarily enables the relay
Disable	Disable the relay
Turn on	Turns the relay on
Turn off	Turns the relay off
Temporary disable	Temporarily disables the relay
Enable	Enables the relay

5.9 Managing a V1000 controller's input point

To manage a V1000 controller's input point, go to the **Map** window and use the menu of the relevant **Input point (V1000)** object.



Description of the **Input point (V1000)** menu items is given in the table.

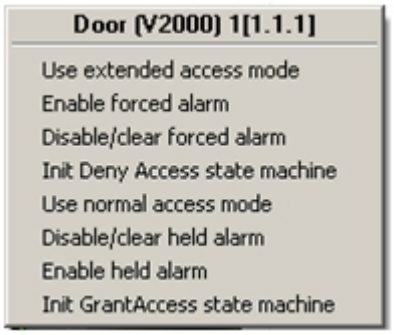
Menu item	Executed function
Suppress messages	Disables logging messages
Disable input point action	Disables the input point's action

Menu item	Executed function
Suppress messages off	Enables logging messages
Enable input point action	Enables the input point's action

5.10 Managing HID module Doors

To manage a door of the HID integration module, go to the **Map** window and use the menu of the relevent **Door** object.

The set of menu items is the same for all the door types of the HID integration module



Description of the **Door (V2000)** menu items is given in he table.

Menu item	Executed function
Use extended access mode	Switches the door to extended access mode
Enable forced alarm	Initializes the door forced alarm
Disable/clear forced alarm	Resets the door forced alarm
Init Deny Access state machine	The door is usually locked
Use normal access mode	Switches the door to normal access mode
Disable/clear held alarm	Initializes the door held alarm
Enable held alarm	Resets the door held alarm
Init GrantAccess state machine	The door is usually unlocked