ACFA Intellect

STX-1000 Integration Module Settings Guide

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1 Introduction into STX-1000 Module Settings Guide

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1.1 Purpose of the document

This *STX-1000 Module Settings Guide* is a reference manual designed for *STX-1000* Module configuration technicians.

This Guide presents the following materials:

1. general information about the *STX-1000* integration module;
2. configuration of the *STX-1000* integration module;
3. working with the *STX-1000* integration module.

1.2 General information about the STX-1000 integration module

The *STX-1000* module is a component of an ACS built on the *ACFA Intellect* Software System. It was designed to perform the following functions:

1. Configuration of the *STX-1000* hardware;
2. Interaction between the *STX-1000 hardware* and the *ACFA Intellect* Software System.

Note.

Detailed information about the *STX-1000* ACS is presented in the official documentation for this system (manufactured by GS Software).

Before configuration the *STX-1000* ACS integration module, do the following:

1. Install the *STX-1000* hardware on the protected territory (for details, see the *STX-1000* guide).
2. Connect the *STX-1000* ACS hardware to the *Intellect* Server (for details, see the *STX-1000* guide).

2 Supported hardware and licensing of the STX-1000 integration module

Manufacturer	GS Software ul. Półłanki 80 lok 402 30-740 Kraków, Poland Tel.: (+48) 12 444 69 36 www.gs-software.pl
Integration type	Low-level protocol
Equipment connection	RS-232, RS-485

Supported equipment

Equipment	Function	Features
STX-1000	Controller	• Communication Interface: RS 232, RS 485 • Data Rate: 9600, 19200, 57600, 115200 bps • 4 inputs, 4 outputs (with installed relays) • Readable Transponder Type: UNIQUE 125 kHz

Licensing

Per 1 controller.

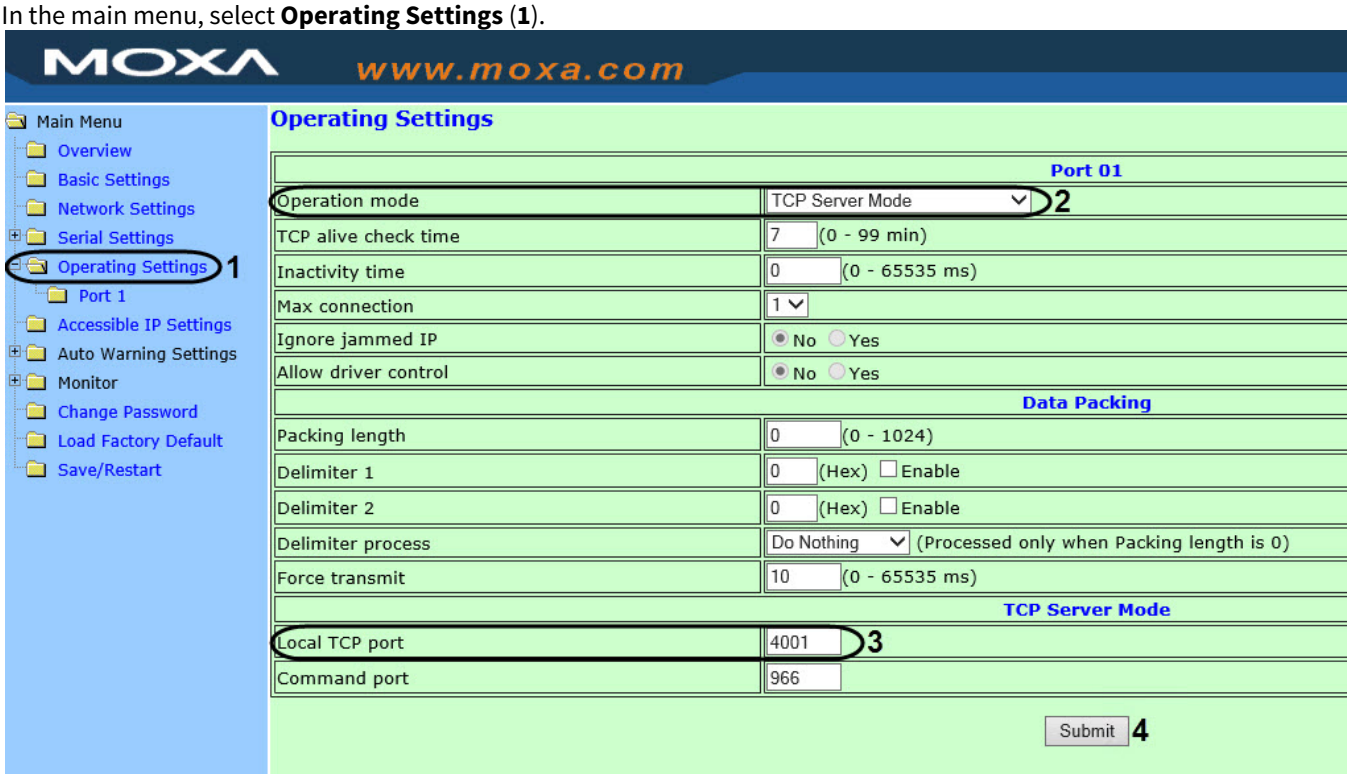
3 Configuration of the STX-1000 integration module

3.1 Pre-configuring the STX-1000 ACS

The *STX-1000* ACS operates with ACFA-Intellect via a serial interface converter in Ethernet Moxa NPort.

The *STX-1000* ACS is pre-configured as follows:

1. Connect the *STX-1000* controller to the Moxa NPort converter, and connect the converter to the ACFA-Intellect.
2. Go to the web interface of the Moxa NPort Converter.
3. In the main menu, select **Operating Settings** (**1**).



4. In the **Operation mode** drop-down list (**2**), select **TCP Server mode**.
5. The **Local TCP port** field (**3**) indicates the port that will need to be specified for connecting the *STX-1000* ACS (see Configuring the STX-1000 ACS connection).
6. Click the **Submit** button (**4**) to save the changes.

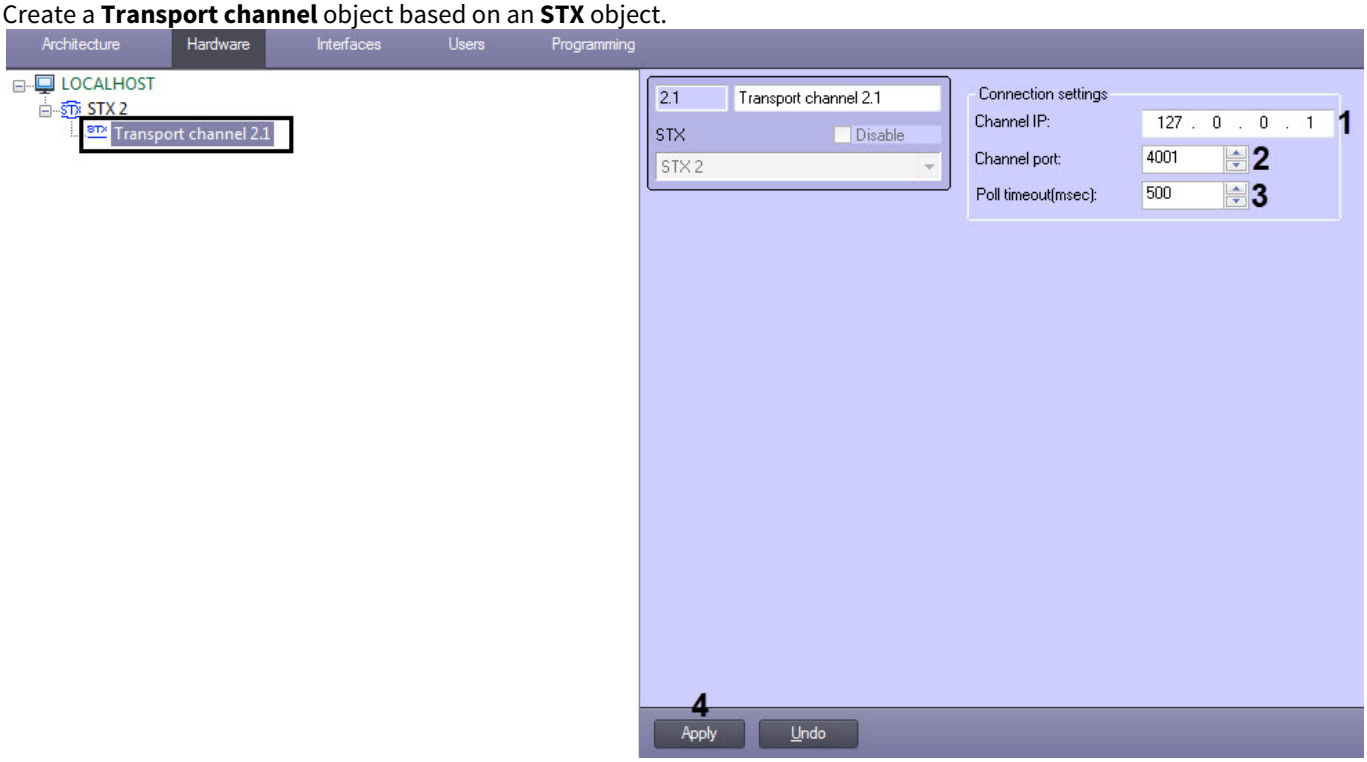
The *STX-1000* ACS is now pre-configured.

3.2 Configuring the STX-1000 ACS connection

The *STX-1000* ACS connection is configured as follows:

1. Create an **STX** object on the **Hardware** tab.

2. Create a **Transport channel** object based on an **STX** object.



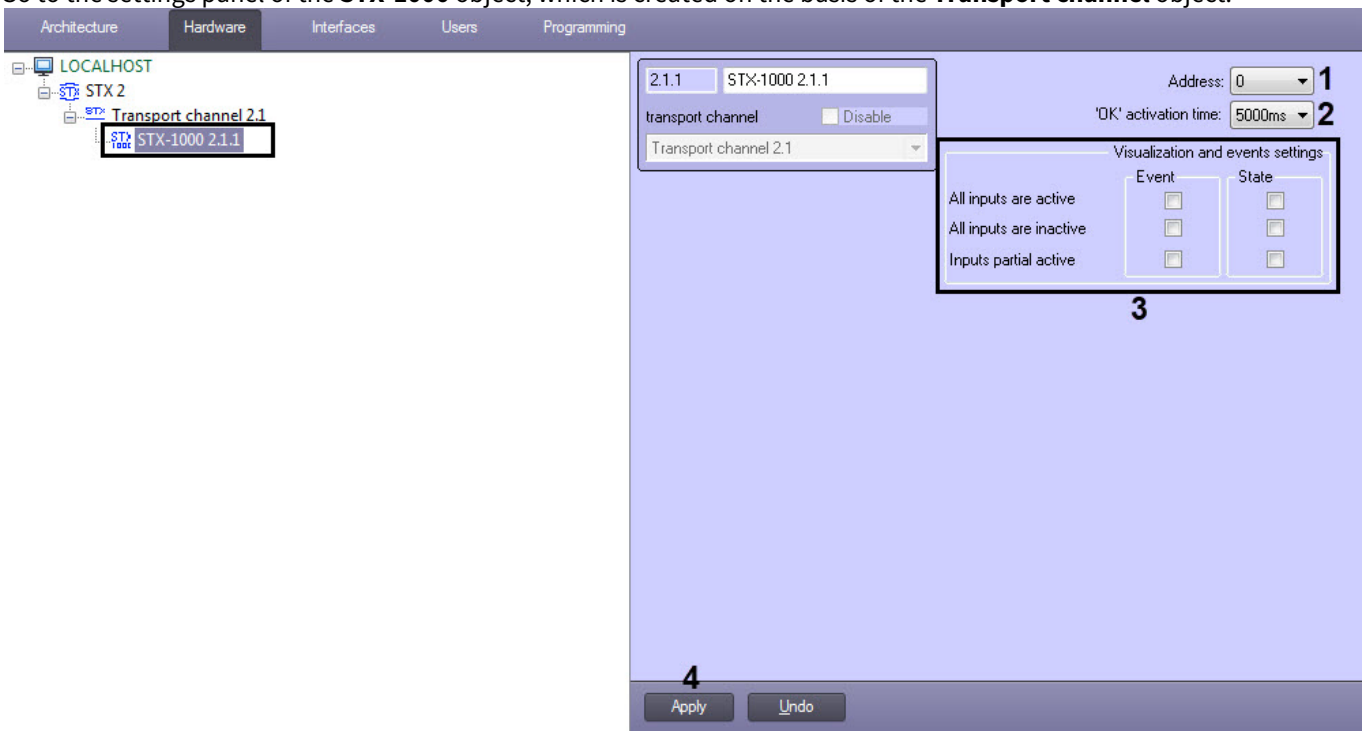
3. On the **Transport channel** object settings panel, in the **IP** (**1**) and **Port** (**2**) fields, specify the IP address and port of the Moxa server (see Pre-configuring the STX-1000 ACS).
4. In the **Poll timeout(msec)** field (**3**), enter the time of the controller polling period in milliseconds. The controller polling period cannot be less than **500** ms.
5. Click the **Apply** button (**4**).

The *STX-1000* ACS connection is now configured.

3.3 Configuring the STX-1000 controller

The *STX-1000* controller is configured as follows:

1. Go to the settings panel of the **STX-1000** object, which is created on the basis of the **Transport channel** object.



2. In the **Address** field (**1**), enter the physical address of the controller.
3. From the **'OK' activation time** drop-down list (**2**), select the time in milliseconds for which the "OK" LED on the device will be turned on when the corresponding command is sent from the Map. Also, the "OK" LED may blink when **Blink** is selected.
4. Configure the events receiving and states changing (**3**):

Inputs activity	Event	State
All inputs are active	If the checkbox is set, the event will be received only if all inputs are active	If the checkbox is set and all inputs are active, then the state of these inputs will change on the Map
All inputs are inactive	If the checkbox is set, the event will be received only if all inputs are inactive	If the checkbox is set and all inputs are inactive, then the state of these inputs will change on the Map
Inputs partial active	If the checkbox is set, the event will be received even if only some of the inputs are active	If the checkbox is set, the state of all active inputs will change on the Map

> **Note**
>
> Only input objects created in the tree are taken into account. For example, if only 2 out of 4 inputs are created, then the events and states will be monitored only for these 2 inputs.

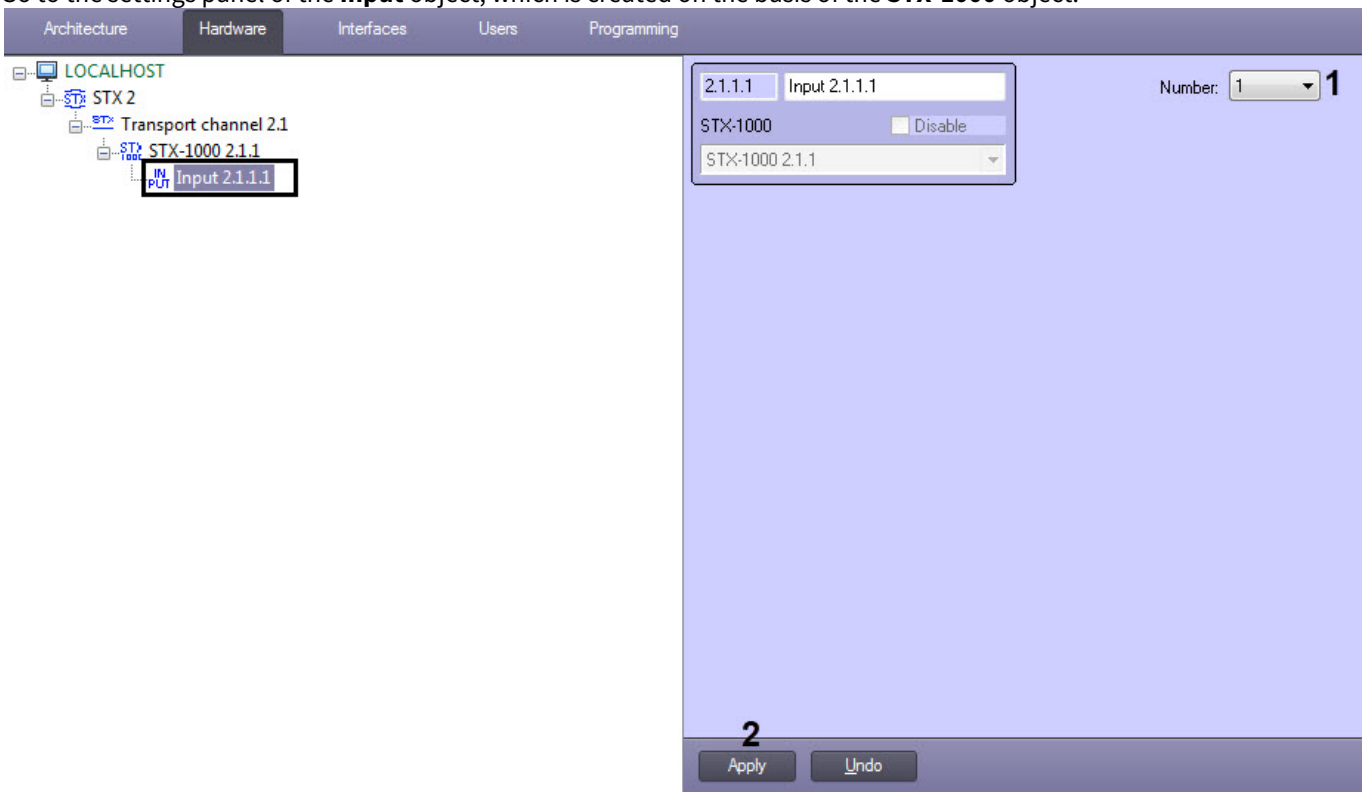
5. Click the **Apply** button (**4**).

The *STX-1000* controller is now configured.

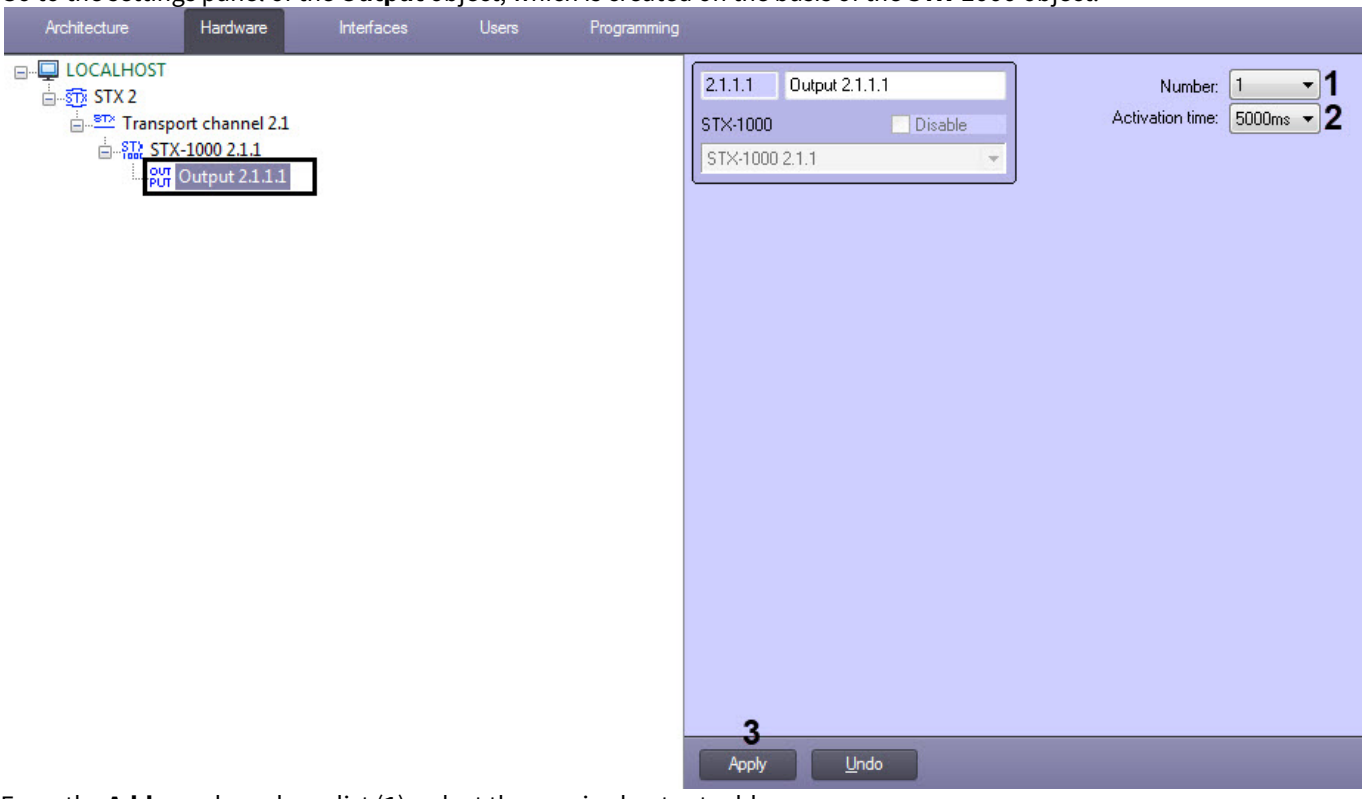
3.4 Configuring the STX-1000 controller inputs and outputs

The *STX-1000* controller inputs and outputs are configured as follows:

1. Go to the settings panel of the **Input** object, which is created on the basis of the **STX-1000** object.



2. From the **Address** drop-down list (**1**), select the required input address.
3. Click the **Apply** button (**2**).
4. Go to the settings panel of the **Output** object, which is created on the basis of the **STX-1000** object.



5. From the **Address** drop-down list (**1**), select the required output address.
6. From the **Activation time** drop-down list (**2**) select the time in milliseconds for which the output will be activated when the corresponding command is sent from the Map. The output can also blink when **Blink** is selected.
7. Click the **Apply** button (**3**).

The *STX-1000* controller inputs and outputs are now configured.

4 Working with the STX-1000 integration module

4.1 General information about working with the STX-1000 Module

The following interface objects are used for *STX-1000* integration module operation:

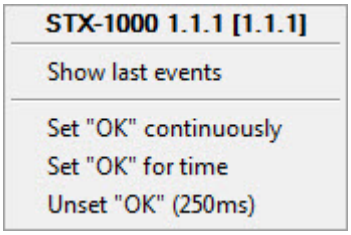
1. **Map**;
2. **Event Log**.

For detailed description of configuring these interface objects, please refer to the Intellect PSIM Administrator's Guide.

For detailed description of using these interface objects, please refer to the Intellect PSIM Operator's Guide.

4.2 Managing the STX-1000 controller

The *STX-1000* controller is managed in the **Map** interactive window using the **STX-1000** object functional menu:



The *STX-1000* object functional menu commands description is given in the table.

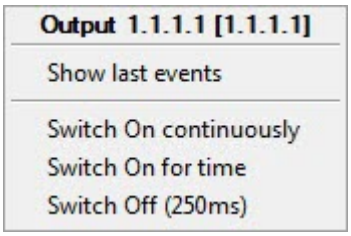
Menu command	Function performed
Set "OK" continuously	Turns on the "OK" LED permanently
Set "OK" for time	Turns on the "OK" LED for the time specified on the *STX-1000* controller settings panel (see Configuring the STX-1000 controller)
Unset "OK" (250ms)	Turns on the "OK" LED for 250 milliseconds

The *STX-1000* controller object can have the following states:

	All inputs are active
	All inputs are inactive
	Controller is connected
	Controller is disconnected
	Inputs are partially active

4.3 Managing the STX-1000 controller output

The *STX-1000* controller output is managed in the **Map** interactive window using the **Output** object functional menu.



The *STX-1000* controller output functional menu commands description is given in the table.

Menu command	Function performed
Switch On continuously	Turns on the output permanently
Switch On for time	Turns on the output for the time specified on the output settings panel (see Configuring the STX-1000 controller inputs and outputs)
Switch Off (250ms)	Turns on the output for 250 milliseconds

The *STX-1000* controller output can have the following states:

	Disconnected
	Disabled
	Enabled

4.4 Managing the STX-1000 controller input

The *STX-1000* controller input is not managed in the **Map** interactive window.

The *STX-1000* controller input can have the following states:

	Disconnected
	Disabled
	Enabled