FSG Settings Guide

ACFA PSIM 1.0

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Table of Contents

1 List of terms used in FSG Settings Guide

FSG program — micro code built-in device by manufacturer.

Auto mode of channel working — mode in which device sets values of channel (opens and closes dumpers) according to its internal program. Channel switches to manual mode when values are set by operator while performing other commands using a card or script, macros, etc.

Service mode of device — special mode of working which allows to set values of some parameters directly by user and makes special commands available which are not available in normal mode.

2 Introduction into FSG Settings Guide

On the page:

2.1 Purpose of the document

The *FSG integration module settings guide* provides comprehensive setup and operational guidance for *FSG* module operators.

This Guide presents the following materials:

1. general information about the *FSG* module;
2. *FSG* module settings;
3. working with the *FSG* module.

2.2 General information about the FSG integration module

FSG integration module is designed for connecting IPID Sterownik FSG controller. *FSG* allows to perform data exchange, receive events from this controller and perform rules for connected devices.

FSG integration module supports the following functions:

1. open/close of fire dumper;
2. set the angle of fire dumper;
3. receive the current state of connected devices;
4. receive states of fire dumper (open, close, damage);
5. control program which control all fire dumpers in case of damage;
6. show temperatures inside the ventilation tunnels;
7. control smoke exhaust fan.

3 Configuration of the FSG integration module

3.1 Configuration procedure for the FSG integration module

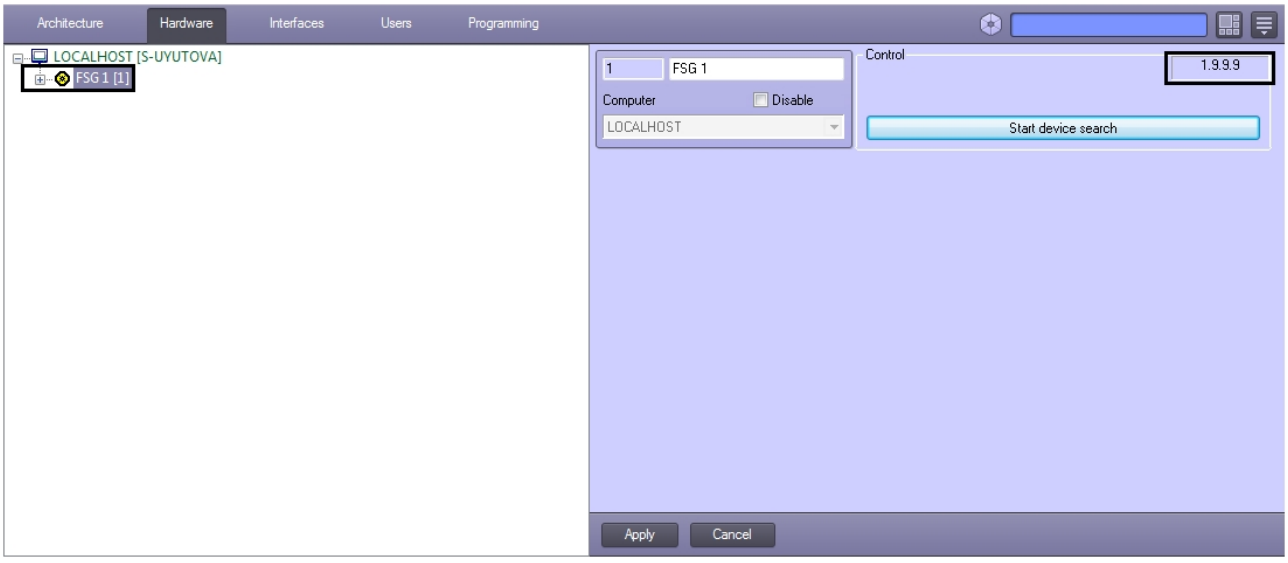
The *FSG* integration module is configured as follows:

1. Activate the *FSG* integration module.
2. Search for *FSG* devices.
3. Configure rules for *FSG* channels.

Also device can be switched to service mode optionally.

3.2 Activate the FSG integration module

To activate the *FSG* integration module create the **FSG** object on the basis of **Computer** object on the **Hardware** tab of the **System settings** dialog box.

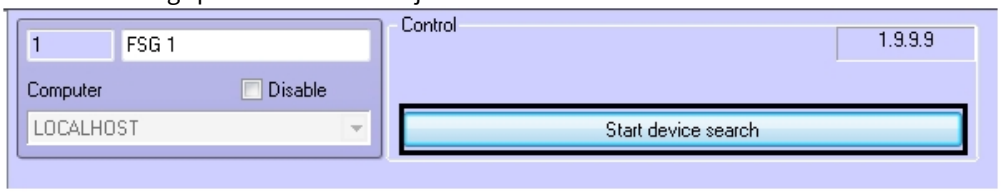


Version of the *FSG* integration module is displayed in the right top corner.

3.3 Search for FSG devices

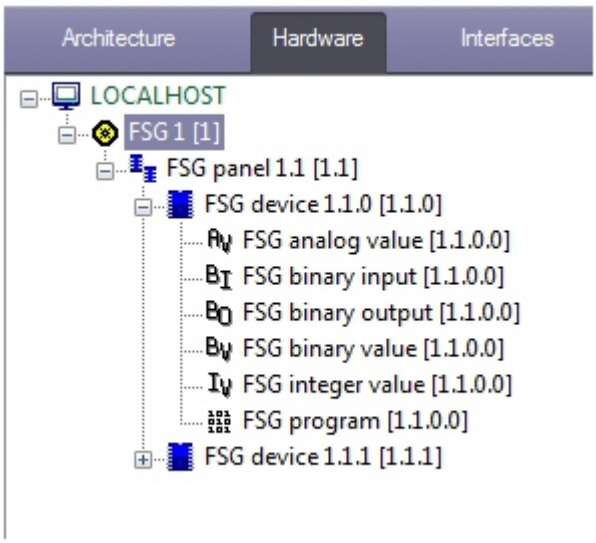
To search *FSG* devices in local network, do the following:

1. Go to the settings panel of the **FSG** object.



2. Click the **Start device search** button.

Search of *FSG* devices will be performed and corresponding objects will be created in the object tree as a result.



Note.

If there are several network connections on the PC where search for devices is performed it is recommended to disable all connections except that connection which provides connection to local network with *FSG* devices.

It is possible to receive the following information on the settings panel of created object:

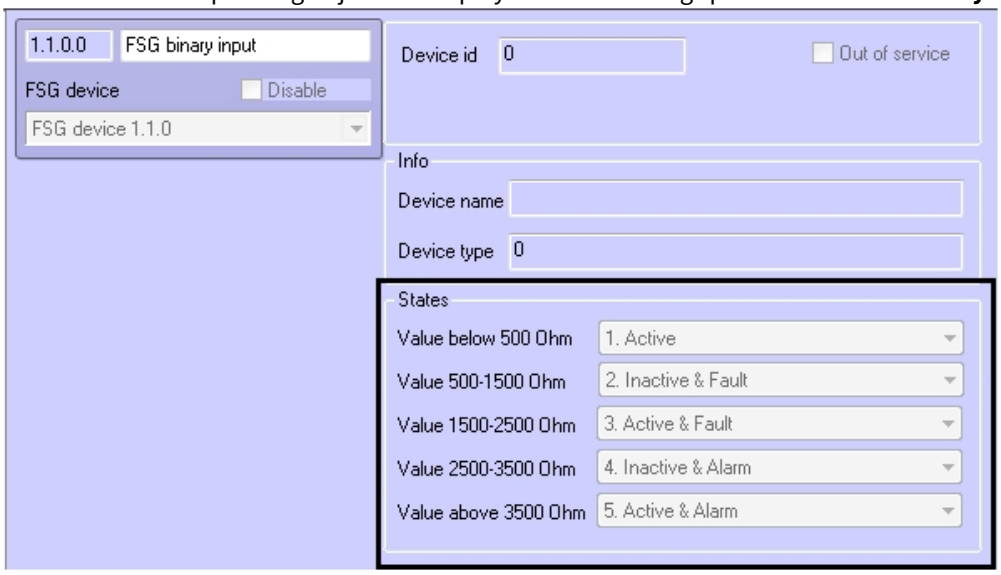
1. Parameters of connection IP panel of *FSG* device are displayed in the settings panel of the **FSG** object.

2. Information about found device is displayed in the settings panel of the **FSG device** object.

3. On the settings panel of objects corresponding to channels of the *FSG* devices there is the **Out of service** checkbox which is not available for editing and has informing manner. The checkbox is set if channel of

device is not in use. In such case value from channel is not read.

4. States of the corresponding object are displayed on the settings panels of the **FSG binary input** object.

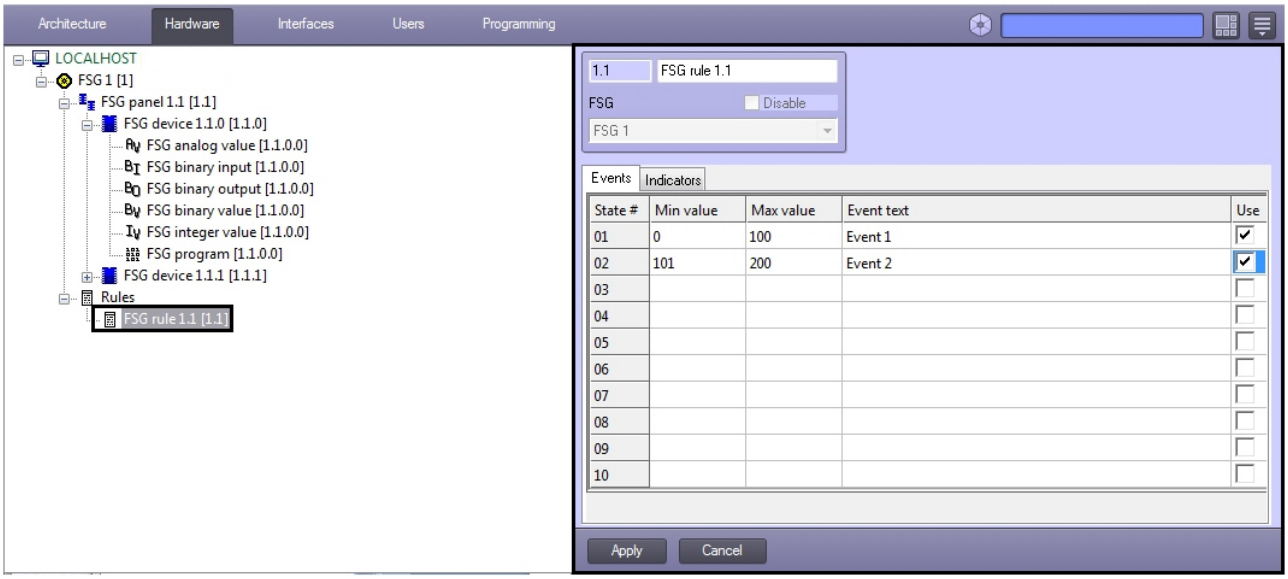


3.4 Configure rules for FSG channels

The following types of rules for *FSG* devices are available:

1. State transition in the system while taking element on a value from the specified range.
2. Change of state indicator taking element on a value from the specified range.

Configuring of rules is performed on the settings panel of the **FSG rule** object which is created on the basis of the **FSG** object.



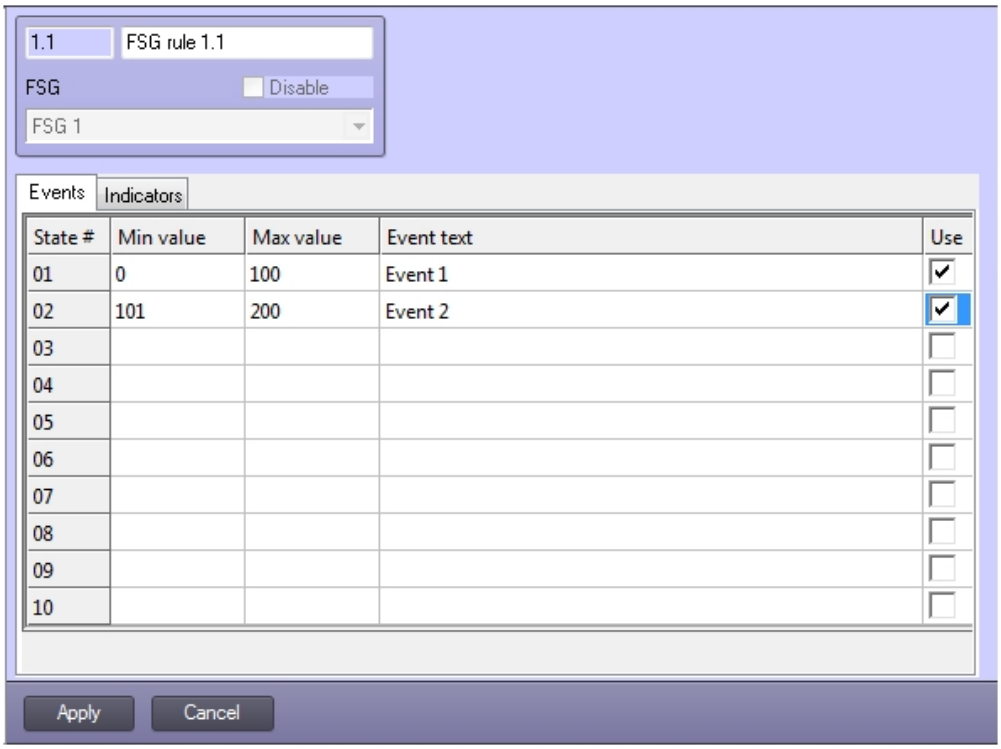
This object is a group of rules in which rules of any types can be included. Only one group of rules can be assigned to each parameter and *FSG* channel.

3.4.1 Configure rule of state transitions of FSG channels

Rules of state transition allows to generate events in case of value of parameter or channel will come into the specified interval.

To configure this rule it is required to set the following parameters in the **Events** tab on the settings panel of the **FSG rule** object.

1. In the **Min value** column enter the begin of interval.
2. In the **Max value** column enter the end of interval.
3. Set the **Use** checkbox to activate interval.
4. In the **Event text** column enter message which will be received while taking element on a value from the specified range.



Attention!

Parameter will be in several states (multistate) if value of parameter or channel comes into several intervals.

3.4.2 Configure rule of change sate indicator of FSG channels

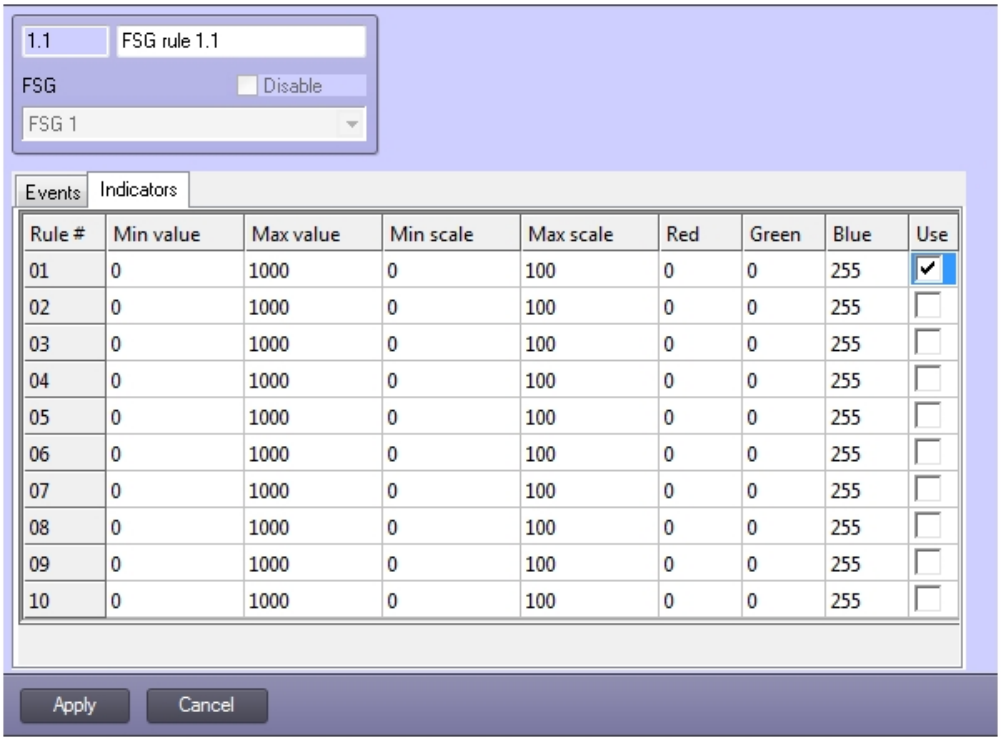
Rule of change the indicator state allows to know how to change indicator of object on the map while coming value of parameter in the specified interval.

Configuring of this rule is performed on the **Indicators** tab on the settings panel of the **FSG rule** object. Description of parameters is presented in the following table. It is possible to specify not more than 10 states of indicator.

Parameter	**Description of parameter**
Rule #	Number of rule
Min value , Max value	Range of element values for rule
Min scale, Max scale	Range of values which indicator will take according to the rule
Use	Activation of interval
Red, Green, Blue	Set color of indicator by RGB model

Click the **Apply** button to save changes.

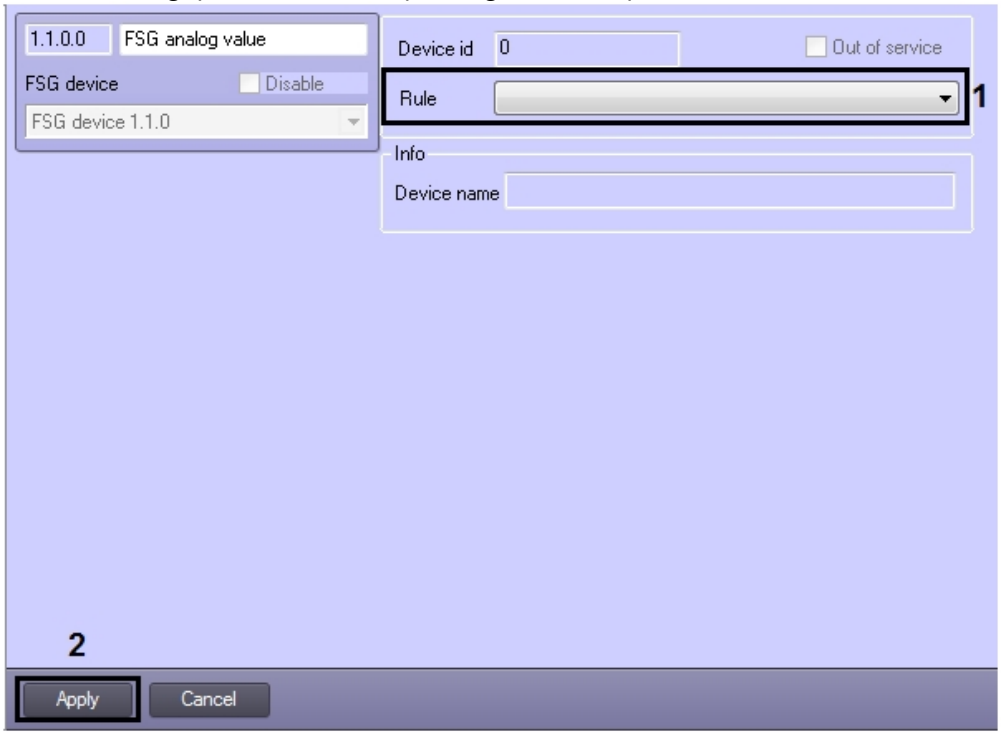
Indicator and its value are displayed in the map.



3.4.3 Assign rule to FSG channel

The rule can be assigned to channels of the **FSG analog value**, **FSG binary value** and **FSG integer value** types. To assign rule to channels or parameter, do the following:

1. Go to the settings panel of the corresponding channel or parameter.



2. Select the required rule - **FSG rule** object from the **Rule** drop-down list (**1**).
3. Click **Apply** button to save changes (**2**).

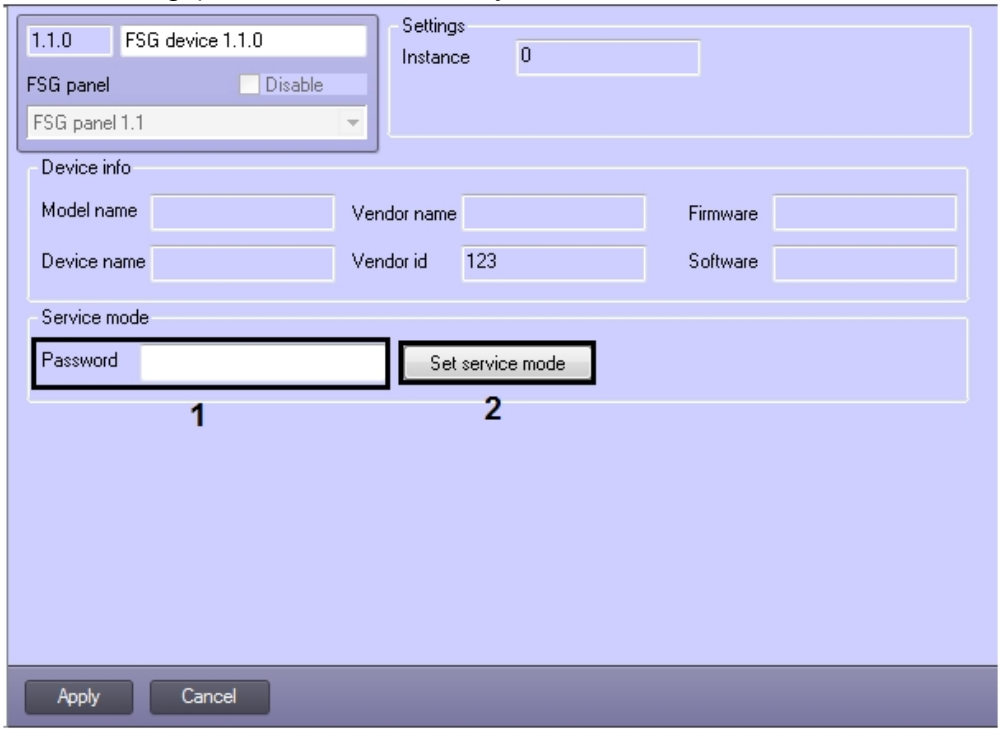
Assigning rule to channels or parameter is completed.

3.5 Switch the FSG device to service mode

Service mode of device is a special mode of working which allows user to set values of some parameters and make available some commands.

To switch device to service mode, do the following:

1. Go to the settings panel of the **FSG device** object.



2. In the **Password** field enter password for switching device to service mode (**1**).

> **Note.**
>
> Password is specified in documentation of device manufacturer.

3. Click the **Set service mode** button (**2**).

As a result device will be switched to the service mode.

4 Working with FSG integration module

4.1 General information on working with FSG integration module

Events of *FSG* devices are sent to the *Events protocol*.

Icon and indicator of state and value of parameter or FSG channel can be displayed in the map.

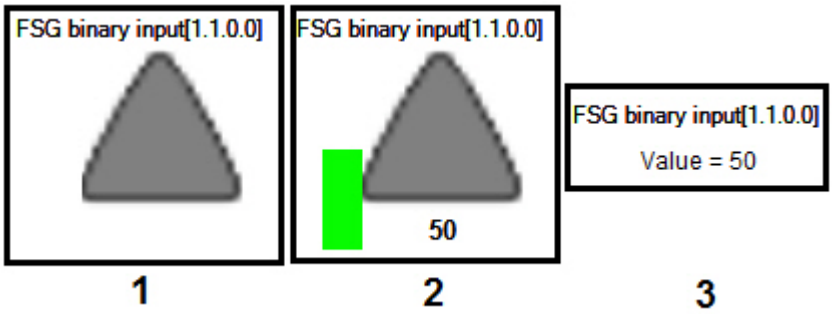
Information about configuring the **Events protocol** and **Map** interface objects is given in details in Axxon PSIM software package. Administrator's Guide document.

Working with **Events protocol** and **Map** interface objects is given in details in Axxon PSIM software package. Operator's Guide document.

It is possible to configure reactions on some values of elements with the help of scripts and macros. Working with scripts and macros is given in details in Axxon PSIM software package. Programming Guide and Axxon PSIM software package. Programming Guide (Jscript) documents.

It is possible to add *FSG* channels to the map in three views (perhaps simultaneously):

1. As sign of state (**1**).
2. As sign of state and indicator (**2**).
3. In the text view (value of element, **3**).



Note.

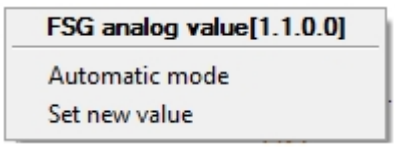
View of object displaying on the map is selected while the object adding (see Axxon PSIM software package. Administrator's Guide).

Note.

Current versions of all specified documents are stored in the AxxonSoft documentation repository.

4.2 Control analog and integer FSG value

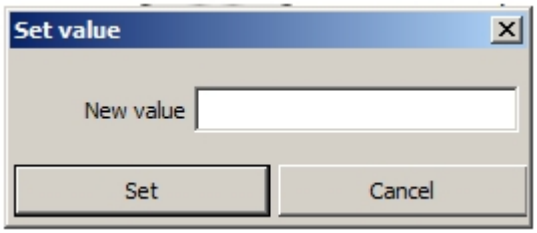
Control analog and integer *FSG* value is performed from the functional menu of the corresponding object on the map.



The **Automatic mode** is designed for switching channel to the auto mode of working. In this mode device sets values by itself (opens and closes dumper) according to its internal program. In manual mode operator sets values using the **Set new value** command. Values specified in manual mode are more high-priority.

To change values of channel (present value) select the **Set new value** item in the context menu.

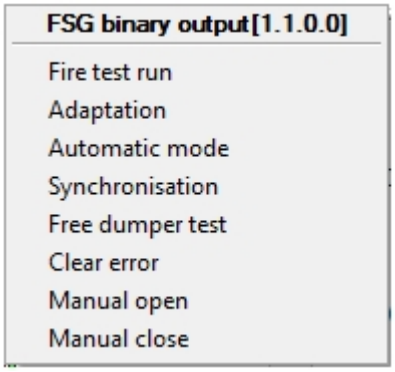
In the opened **Set value** window enter new value and click **Set**.



As a result the new value will be assigned to channel and indicator will take a value and color according to the rule (see the Configure rules for FSG channels section).

4.3 Control FSG binary output

Control *FSG* binary output is performed using the functional menu of the **FSG binary output** object.



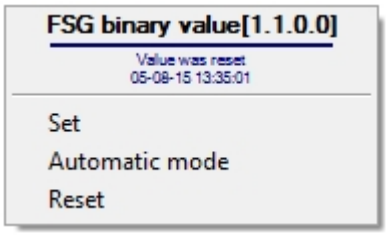
Available commands in the context menu are described in the table.

Command	Description
Fire test run	Test commands. Close dumper shortly simulating fire and then slowly restore the previous state of dumper.
Free dumper test	
Adaptation	Adaptation.
Automatic mode	Switch channel to auto mode.
Synchronization	Synchronization.

Clear error	Reset of error connected with integrity damage of pressure sensor. **Note.** Other types of errors are reset automatically while error correction.
Manual open	Open dumper.
Manual close	Close dumper.

4.4 Control FSG binary value

Control *FSG* binary value is performed using the functional menu of the **FSG binary value** object.

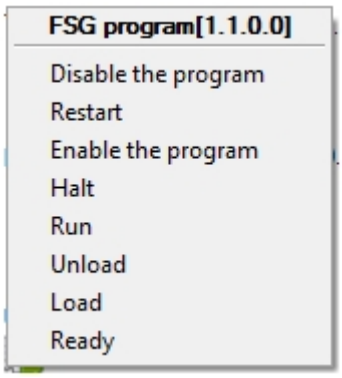


Available commands in the context menu are described in the table.

Command	**Description**
Set	Set value 1 to channel
Automatic mode	Set auto mode to channel
Reset	Set value 0 to channel

4.5 Control FSG program

Control *FSG* program is performed using the functional menu of the **FSG binary output** object.



Available commands in the context menu are described in the table.

Command	**Description**
Disable the program	Disable program
Restart	Restart program
Enable the program	Enable program
Halt	Interrupt program
Run	Launch program
Unload	Unload program
Load	Load program
Ready	Switch over program to the ready state

4.6 Control FSG device

FSG integration module allows to control *FSG* device from the map using functional menu of the **FSG device** object. Functional menu of this object allows to switch over device to service mode using the Set service mode command (see also Switch the FSG device to service mode section).