



Operator's Guide

Monitoring PSIM 1.0 (english)

Last update 03/23/2023

Table of Contents

1	Operator's Guide. Introduction	5
1.1	Purpose of Monitoring PSIM	5
1.2	Document purpose	5
2	Control panel.....	6
2.1	Purpose of the Control panel	6
2.2	Changing alarm group icons	8
2.3	Current Update Time	8
2.4	Selecting an object on the Control panel	9
2.5	Ignoring objects	9
2.6	Processing alarms	10
2.6.1	Confirming alarms	10
2.6.2	Confirming multiple same-type alarms	11
2.6.3	Additional information on alarms	12
2.6.4	Alarm types.....	13
2.6.5	Defining user alarm types.....	16
2.6.6	Configuring the displayed number of alarms.....	16
2.7	Viewing video data on alarms	17
2.7.1	Indication of video data presence.....	17
2.7.2	Viewing video data	17
2.7.3	Video data grouping setup	19
2.7.4	Setting video data list filter	20
2.8	Event log.....	23
2.8.1	Viewing comments.....	24
2.8.2	User that confirmed an alarm	24
2.8.3	Event display period	24
2.8.4	Exporting the event log.....	25
2.8.5	Configuring the position of the event log's columns	25
2.9	Regulatory and reference information	26
2.9.1	Viewing regulatory and reference information	26
2.9.2	Editing regulatory and reference information.....	26
2.9.3	Filling out reference books	27

2.9.4	Column context menu in the Monitoring objects window.....	29
2.10	Viewing objects' live video and archives.....	30
2.10.1	Playing back live video and archive from a specific camera.....	31
2.10.2	Viewing live video and archive from all cameras created on the Agent of Control	33
2.10.3	Viewing video from all cameras of the selected partition of control	35
2.10.4	Playing back live video and archive from selected cameras	36
	Creating, editing and deleting layouts.....	36
	Selecting layout for display	40
2.11	Starting external applications from the Control panel	42
2.12	Executing ad hoc command on the Agent of Control by the operator of Server of Control	44
3	Log panel	47
3.1	Log panel interface	47
3.1.1	Color definitions for events	47
3.1.2	Moving through the list of alarms	49
3.1.3	Ignoring objects	49
3.1.4	Status bar	49
	General information.....	50
	Functioning and non-functioning rates	50
3.2	Number of alarms displayed	51
3.3	Object status	51
3.4	Alarm duration	51
3.5	Information about an object	51
3.6	Selecting an object on the Log panel.....	55
3.7	Exceeding the allowed number of failures	55
3.8	Forcing the confirmation of alarms.....	55
3.9	Custom filter in the Log panel	57
3.10	Info on archives.....	61
4	Owners panel	63
4.1	Owners panel interface.....	63
4.2	Viewing Event log for all objects.....	64
4.3	Viewing details on alarms for all system objects.....	65
5	Alarm message window	66

6	Search in archive	68
6.1	Purpose of the Search in archive component	68
6.2	Request to a video archive by subtitles	68
6.3	Request to a video archive by video clips.....	71
6.4	Request for video frames from an object	74
6.5	Request for video clips from objects.....	77
6.6	Automated video clip loading	80
6.6.1	Video clip request file.....	80
6.6.2	Operating principle of automated video clip loading.....	82
7	Monitoring reports	83
7.1	Purpose of Monitoring reports	83
7.2	System failures.....	84
7.3	Alarms.....	86
7.4	Video report.....	89
7.5	Operator actions	94
7.6	Statistics	96
7.7	Statistics by owners	102
7.8	Vehicle LPs report	103
8	Special operation mode joint with Auto PSIM	105
8.1	Interface of the License plates search window	105
8.2	Interface of the License plates search panel	106
8.3	Viewing recognized LPs	107
9	Appendix 1. Data update periods summary	111
9.1	Data loading from database to the interface objects	111
9.2	Data loading to the database	111
9.3	Sending data from Agent of Control to Server of Control.....	111
9.4	Data transmission scheme	112
9.5	Features of displaying information on short-term and long-term alarms.....	112
9.6	Agent of Control technical condition data collection periods.....	112

1 Operator's Guide. Introduction

On page:

- [Purpose of Monitoring PSIM](#)
- [Document purpose](#)

1.1 Purpose of Monitoring PSIM

Monitoring PSIM is designed to automate the activities of personnel at service companies involved in the operation of *Axxon PSIM*-powered video surveillance systems. The purpose of *Monitoring PSIM* is to improve the quality of operation for such video surveillance systems.

1.2 Document purpose

The document is intended for Operators working with *Monitoring PSIM*.

This User's Guide describes how to work with *Monitoring PSIM*'s main graphic user interface (GUI) objects.

2 Control panel

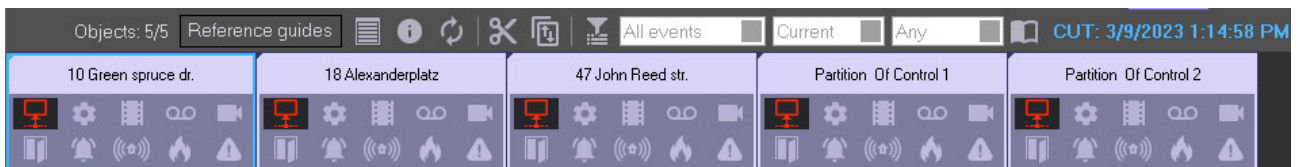
The **Control panel** is part of the **Monitoring** interface window. You can configure this window using the setting panel for the **Monitoring** object. For how to do it, see the document [Monitoring PSIM Software Package Administrator's Guide](#).

You can see the **Control panel** in the figure below.



2.1 Purpose of the Control panel

The **Control panel** is intended for quickly assessing the current status of video surveillance components.



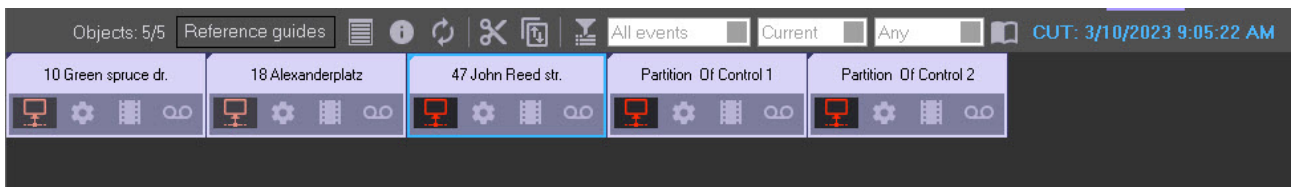
Each object has a corresponding graphic element shown as a rectangle. It contains the object's identification area (at the top) and a configurable number of alarm indication buttons arranged in groups by source type:

1. Communication Channel.
2. Hardware.
3. Videosystem software.
4. Size of archives.
5. Cameras.
6. ACS.
7. SFA.
8. Detections.
9. Extra 1.
10. Extra 2.

If the **Owners panel** is enabled (see [Configuring the Monitoring interface object](#) section of [Administrator's Guide](#)), then only the objects that belong to the selected owner are displayed on the **Control panel**.


The number of shown alarm groups can change from 4 to 10, depending on the **Monitoring** object settings on the **Interfaces** tab.

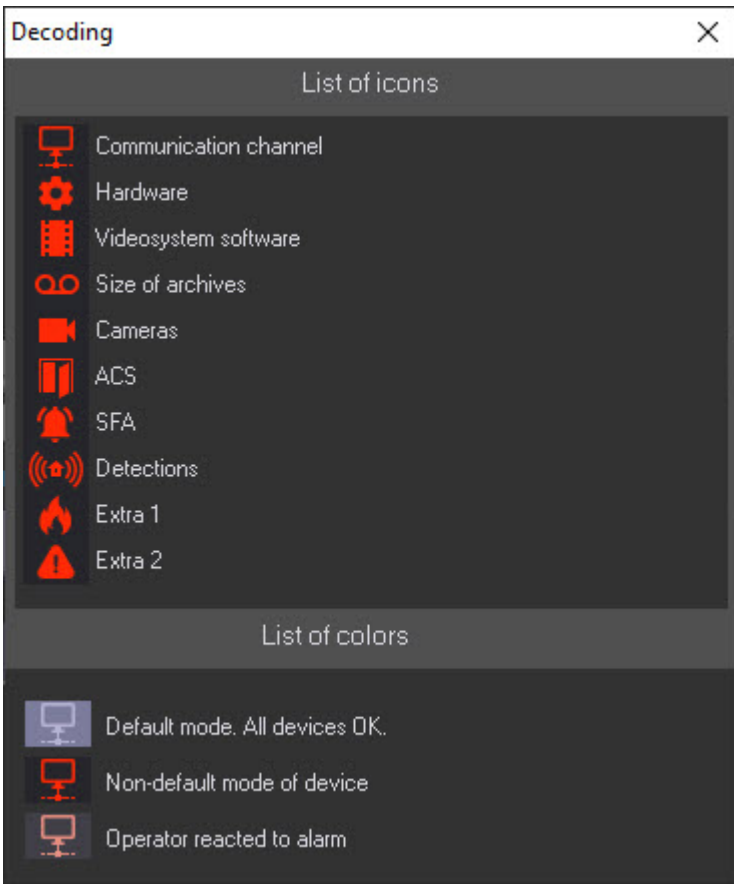
Four alarm groups:



Ten alarm groups:

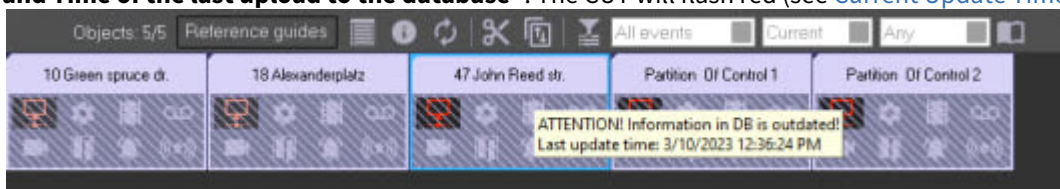


You can learn the meaning of the icons by clicking the button  (**Information about symbols**). When you click this button, the **Decoding** window opens.



By default, if the **MonitorSSTV** database has not been updated for more than 30 minutes, for example, due to a *Data Loader* malfunction or if the communication module (license restrictions) has stopped working on the *Server of Control*, then:

1. On the *Server of Control*, all objects will be covered with diagonal lines. When you hover over such an object, a contextual prompt will appear: **ATTENTION! Information in DB is outdated! Last update time: <Date and Time of the last upload to the database>**. The CUT will flash red (see [Current Update Time](#)).



2. On the *Central Server of Control*, only those objects that belong to the *Servers of Control* with outdated info will be covered with diagonal lines. When you hover over such an object, a similar contextual prompt will appear. However, the CUT will remain blue and will not flash.

Note

To change the waiting time for updating the **MonitorSSTV** database, after which the corresponding indication on the *Server of Control/CSC* will appear, it is necessary to set the required time value in minutes for the **LastLoadThreshold** registry key (for details, see [Registry keys reference guide](#), for more information about working with the registry, see [Working with Windows OS registry](#)).

If there is no connection between the *Central Server of Control* and the *Server of Control*, or if there is a problem in data exchanging with the FTP server (for example, an incorrect password), then only those objects that belong to the *Servers of Control* with this problem will be covered with diagonal lines. When you hover over such an object, a contextual prompt will appear: **ATTENTION! No connection with Server Of Control or error of data exchange with FTP server!** The CUT will remain blue and will not flash.



2.2 Changing alarm group icons

You can change the default icons for each alarm group and assign your own icons. To change an icon, replace the corresponding default picture file in the package. You can find the files in the Bmp subfolder of *Monitoring PSIM's* installation folder. The default path to the folder with pictures is C:\Program Files (x86)\Axxon PSIM\Vhost\Bmp. For example, to change the icon for the Communication Channel group, replace two files:

1. Bmp\Active\01_net_active.bmp;
2. Bmp\InActive\01_net_inactive.bmp.

The size of icons is 33x23 pixels. If the size of your image is different, it will be changed to the above.

If the object scaling parameter exceeds 110% (see [Configuring the Monitoring interface object](#)), then the high-resolution icons of 172x120 pixels will be used on the object with the **_hd** postfix in the name.

So, for example, to replace the high-resolution icon corresponding to the Communication Channel group, it is necessary to replace two files:

- Active\01_net_active_hd.bmp
- InActive\01_net_inactive_hd.bmp

After you replace graphic files, restart *Axxon PSIM*. If at least one of the files is missing from the Bmp folder or has invalid format, the default icons are used.

2.3 Current Update Time

The information in the **Control panel** is refreshed every time data is loaded from the database. The Current Update Time (**CUT**) is shown in the window's upper-right corner.

CUT: 3/9/2023 1:31:00 PM

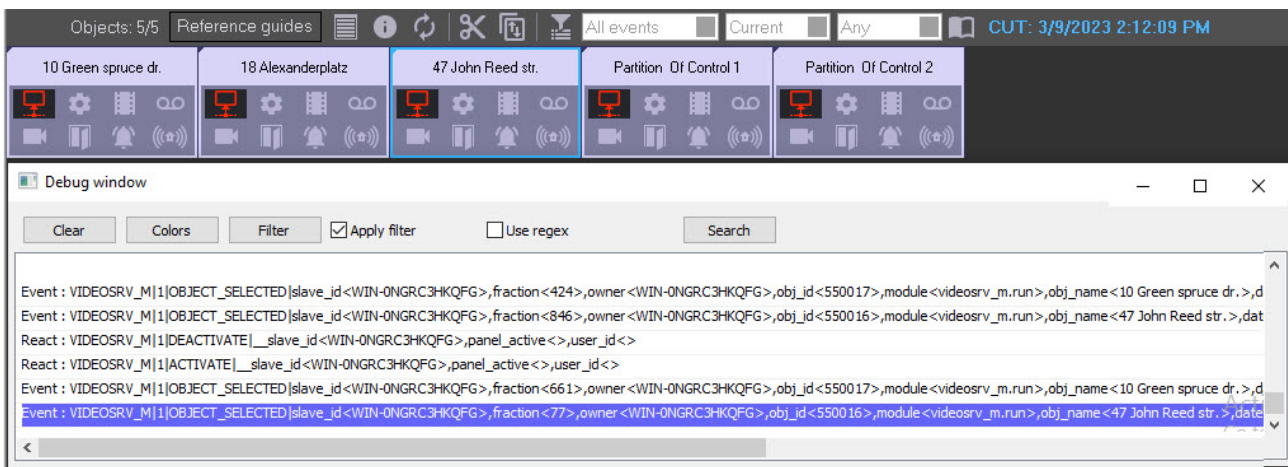
Periods of information updating in the interfaces can vary for particular alarm types – see [Appendix 1. Data update periods summary](#).

To get the latest database information, click the button  (**Refresh data**). This forces the data to load. If new data is found, it is shown.

2.4 Selecting an object on the Control panel

When you select an object on the **Control panel**, the **VIDEOSRV_M|n|OBJECT_SELECTED|obj_id<id>,obj_name<name>** event is sent to *Axxon PSIM*, where **n** is the index number of the **Monitoring** interface object, **id** is the object identifier, **name** is the object name.

You can view the event in the **Debug window** (see [Enabling the Debug window](#)).



When you select one object and successively click different alarm buttons, the **OBJECT_SELECTED** event is not re-sent, it will be sent only if you select a different object.

This feature can be used to create various scenarios using scripts, for example, to display an object scheme when it is selected in the **Monitoring** interface object. In this scenario, the operator selects an object in the **Monitoring** interface, and a pre-created diagram or map of the selected object is displayed on another monitor. Objects are visualized using scripts; for this, the **OBJECT_SELECTED** event from the **VIDEOSRV_M** object is processed.

When you select an object on the **Log panel** (see [Selecting an object on the Log panel](#)), the event is sent to *Axxon PSIM* in the similar way.

2.5 Ignoring objects


You can put the objects that must not be shown on the ignored objects list. For example, these can be objects that were created on *Monitoring PSIM*'s server, but not launched yet or objects that are known for sure to be under maintenance at the moment.

The objects on the ignored objects list are not shown in the **Control panel** or **Log panel**. They are also not included in system reports.

To move an object to the ignored objects list, press the Shift key and left-click on one or multiple objects. The selected objects are now highlighted with a blue border.



Then click the button  (**Ignore/Analyze**).

You can see the ignored objects list by clicking the button  (**Show ignored objects**).

Use the same actions to move objects back from the list.

2.6 Processing alarms

2.6.1 Confirming alarms

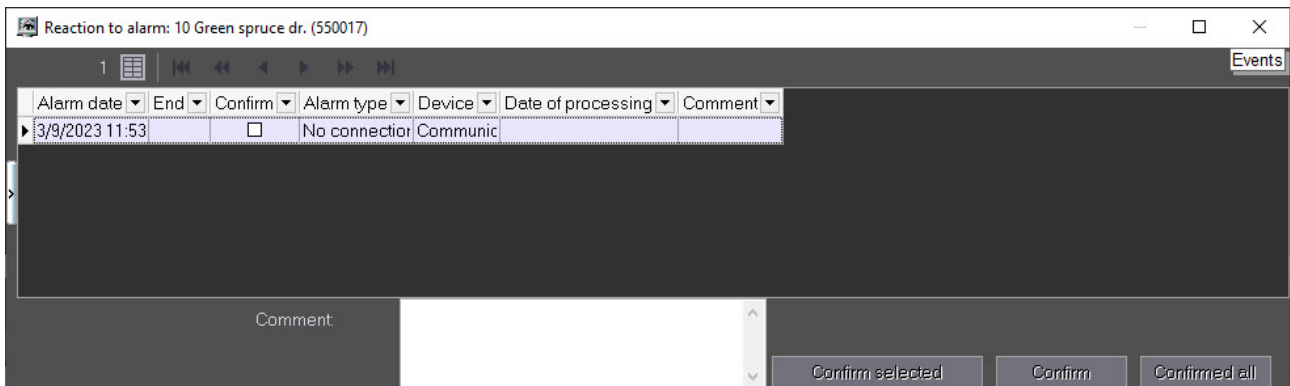
Alarm indicator badges both indicate information and allow performing actions.

1. Information: if an alarm occurs, the badge becomes red; if confirmed by the operator, it becomes pink, and when the alarm ends, the badge becomes inactive again.
2. Actions: the operator can click the badge to get details on the device or event.

If a camera at an object becomes inoperative, the indicator badge for the **Cameras** alarm group becomes red.



To get the details about an alarm, click the alarm's icon. The **Reaction to alarm** window opens. The title of the window contains the selected object's name and ID.



In the **Alarm date** field, the time when *Server of Control* had loaded the alarm from *Agent of Control* to the database. This is not the time when the alarm appeared on the *Agent of Control*. For more information on data transmission see section [Appendix 1. Data update periods summary](#).

The **Alarm type** field contains the name of the alarm, and the **Device** field gives details on the device or event.

If you check the **Confirm** box in the **Reaction to alarm** window, the icon's background in the **Control panel** changes from red to orange and the **Date of processing** column is automatically filled.



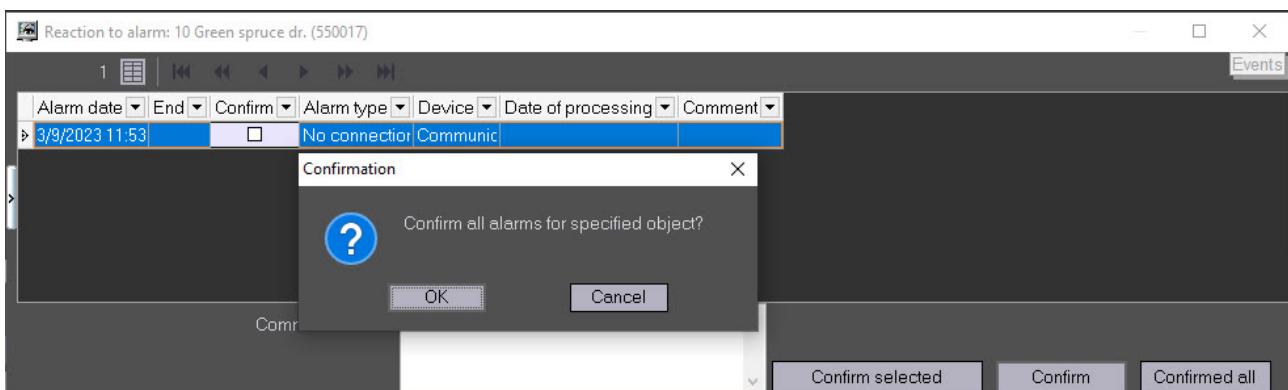
Note that the **Date of processing** column will contain not the current computer time, but the current update time (see the [Current Update Time](#) section) stored in the database. This ensures that the operator cannot roll back the system time to confirm the alarm with a different time.

Note

When viewing the **Cameras** alarm group, the **Reaction to alarm** window will also display a line with the camera statistics of this object.

If when configuring the **Monitoring** interface object, you check the **Non-empty Comment field** check box, alarms are not closed until an operator comments on them or his/her actions. Any alarm is closed automatically after its cause is resolved (for example, the connection was broken and then restored).


If a complex confirmation of alarm acceptance is configured, then an additional dialog box appears. To confirm the alarm acceptance click the **OK** button, to cancel the action click the **Cancel** button.



Confirmations of alarms that have been automatically accepted by the *Server of Control* are not sent.

Note.

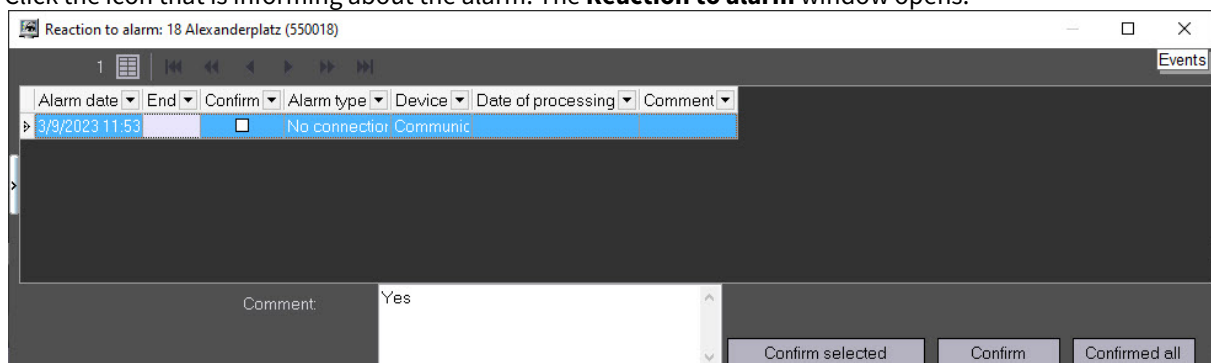
If the operator does not accept a short alarm for 5 days, it is accepted automatically.

The **Reaction to alarm** window displays no more than 10000 alarm events; to view other events, use the navigation button  in the lower right corner.

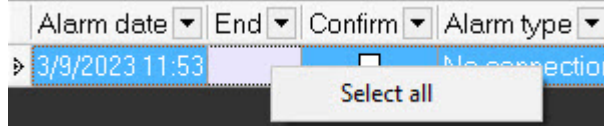
2.6.2 Confirming multiple same-type alarms

To accept several alarms, or all alarms of an object, or all alarms of all objects, simultaneously, do the following:

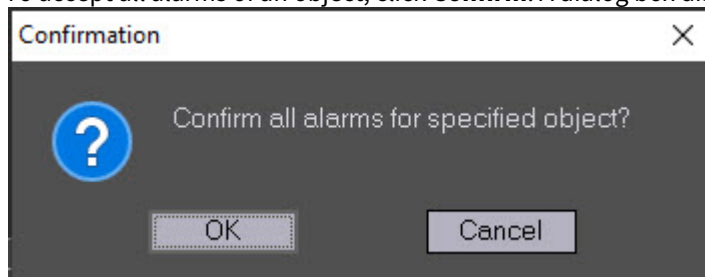
1. Click the icon that is informing about the alarm. The **Reaction to alarm** window opens.



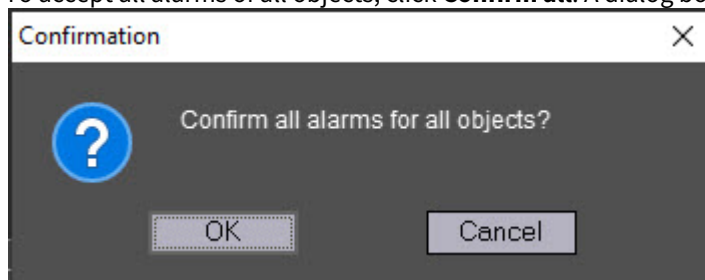
2. To accept several similar alarms, proceed as follows:
 - a. Select several alarms from the list in one of the following ways:
 - i. Use the left mouse button and the Ctrl or Shift key.
 - ii. Right-click on the list and click **Select all** item in the menu.



- b. Fill in the **Comment** field if necessary.
 - c. Click **Confirm selected**.
3. To accept all alarms of an object, click **Confirm**. A dialog box displays to confirm the action. Click **OK**.



4. To accept all alarms of all objects, click **Confirm all**. A dialog box displays to confirm the action. Click **OK**.



Note

If a comment is required but the **Comment** field is empty, the **Confirm selected**, **Confirm** and **Confirm all** buttons are inactive.

Multiple alarms are now confirmed.

If a simple confirmation of alarm acceptance is configured, then only one confirmation is sent to the *Agent of Control* when a group of similar alarms is accepted on the *Server of Control*. If there should be a complex confirmation, then several alarms of the same type cannot be accepted. Each alarm is to be processed individually.

If all alarms of one or all objects are confirmed, simple or complex confirmation settings are ignored and no confirmation is sent to the *Agent of Control*.

2.6.3 Additional information on alarms

You can get additional information on alarms by clicking on the object name.



The **Error decoding** window opens.

Beginning	End	Duration	Reason, device	From 2/16/2023 12:13:48 PM to 3/9/2023 3:26:23 PM downtimes:...
2/16/2023 12:13:48 PM		21 03:12:35	No connection with object (Communicatio	

Alarms caused by different reasons can overlap, creating common alarm periods for the object. In the table, they are shown in gray. If an alarm is still active, its **End** column is empty.

If there are too many alarms, not more than 200 alarms are shown in the **Error decoding** window. To view other events, use the navigation buttons and the additional tool **View from date** in the lower-right corner.

2.6.4 Alarm types

The following table contains all the alarm types that are controlled by the Monitoring PSIM system by default. For **Communication channel** alarm group: if *Agent Of Control* connects to *Server of Control* via the TCP/IP protocol and it has connected to it before, the **Device** field shows the object's IP address.

Alarm group	Alarm type	Device	Comment
Communication channel	No connection with the object	Communication channel	<i>Agent of Control</i> connects to <i>Server of Control</i> in client mode
	No connection with the Monitoring PSIM agent	Local video system	<i>Agent of Control</i> connects to <i>Server of Control</i> in server mode
Hardware	Disk failure	101:Disk name	<i>Axxon PSIM's</i> settings contain the names of the disks to record video archive on. This alarm occurs when one of these disks does not exist or has the wrong type. The correct type for a disk: fixed, removable, or network.
		102:Disk size	Error when computing the free disk space
		103:VIDEO folder	The VIDEO folder is not present
		104:Number of disks=0	No disks were selected in <i>Axxon PSIM</i> for recording the video archive.
		105:Disk error	An unknown disk error was received from <i>Agent of Control</i>

UPS signal	<p>1000:PowerChute started</p> <p>1001:PowerChute stopped</p> <p>1002:Connection restored</p> <p>1003:Power restored</p> <p>1004:Self-Test passed</p> <p>1005:Administrative shutdown</p> <p>1006: Shutdown canceled</p> <p>1007:Battery charged</p> <p>1009:Battery changed</p> <p>1013:Allowed overload</p> <p>1014:RTC Started</p> <p>1015:RTC Finished</p> <p>1016: Shutdown in process</p> <p>1102:Normal temperature</p> <p>2000:Power is off</p> <p>2001:Shutdown performed</p> <p>2002:Low power</p> <p>2003:Battery discharging</p> <p>2004:RTC Aborted</p> <p>2007:High power</p> <p>3000:Connection lost</p> <p>3001:Overload</p> <p>1004:Self-Test not passed</p>	
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		3003:Battery discharged 3004:Connection lost - battery 3016:Change battery 3107:High temperature	
Videosystem software	Software error	Core software	psim.exe unloaded
		Base software (video)	video.run unloaded or hanging
		Registry	The registry does not have the data necessary for <i>Agent of Control</i> to work
		Database	Error when connecting to the <i>Axxon PSIM</i> database
Size of archives	Small archive size	Archive 1 ... Archive N	The archive depth requirements are not met (see Info on archives).
Cameras	Camera is off	Camera 1 ... Camera N	Camera is not working: there is no signal from camera or the connection is lost
SFA	Vibration detector signal	Vibration detector	The four sensors that cannot be renamed on <i>Agent of Control</i> i. e. they must be used according to their names (Vibration detector, Lock, etc.).
	Lock sensor signal	Lock	
	Overheat detector signal	Overheat detector	
	Additional sensor signal	Additional sensor	
	Additional sensor signal	EXT. SENSOR	12 sensors whose names must be renamed on <i>Agent of Control</i> These names are shown in the Device column. By default, the following line will be shown: EXT. SENSOR

	Computer restarted normally	Computer	Logged off from Windows normally before restarting
	Computer restarted abnormally	Computer	The computer was restarted without logging off from Windows correctly (power off)

Note.

Periods of information updating in the interfaces can vary for particular alarm types – see [Appendix 1. Data update periods summary](#).

For the **ACS** and **Detections** alarm groups, no data is sent from *Agent of Control*.

The alarms tracked by the *Monitoring PSIM* system can be of two types:

1. Long-term.
2. Short-term.

Long-term alarms are alarms that have a start and end time (for example, **Camera is off/Camera is on, No connection with object/Connection with object**).

Short-term alarms have no duration. They inform about occurred events, such as **Vibration detector triggered** or **Computer restarted normally**. These alarms are not included when the system's performance indicators are calculated.


Alarms that are configured as described above (in the motion detector example) are always short-term. For short-term alarms, the **End** field is immediately filled with a time shifted by one second from the alarm detection time. Confirmed short-term alarms are shown in the **Control panel** for 10 minutes. Long-term alarms include the following alarm types:

- No connection with object;
- No connection with monitoring agent;
- Disk failure;
- Software error;
- Small archive size;
- Camera is off;
- Object disarmed (this alarm type becomes available when you activate the special mode of *Monitoring PSIM* operation with *ACFA PSIM* (see [Configuring the special mode of Monitoring operation with ACFA PSIM](#)), or when you enable the object status monitoring on the *Agent of Control* side (see [Configuring alarms for monitoring the object state on the Agent of Control side](#)).

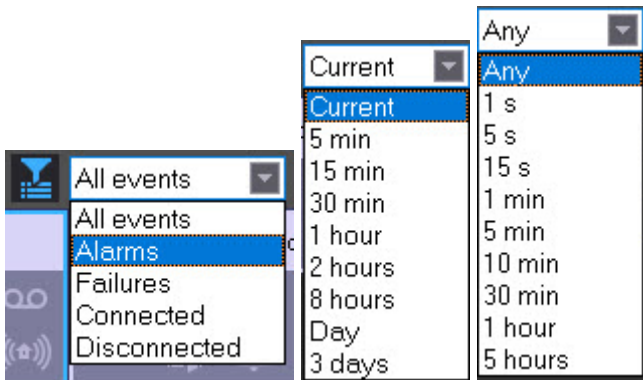
2.6.5 Defining user alarm types


For the **ACS** and **Detections** alarm groups, by default no data is sent from *Agent of Control*. These alarm groups, as well as **Hardware** and **SFA**, can be used for designating their respective alarm types. For how to define user alarm groups, see the document [Monitoring PSIM. Administrator's Guide](#).

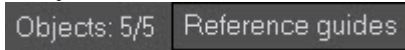
2.6.6 Configuring the displayed number of alarms

The number of objects shown in the **Control panel** is defined by the current filter. You must enable the filter by clicking the button  (**Turn filter on/off**). The first drop-down list defines condition for filtering by alarms,

failures, presence or absence of connection; the second drop-down list defines the condition "Show only objects with errors for last..." and the third one defines the condition "Show only objects with errors lasting longer than...".



In the window's upper-left corner, you can see the two numbers: 1) the total number of objects and 2) the number of objects shown in the **Control panel** after you click the  button.



2.7 Viewing video data on alarms

2.7.1 Indication of video data presence

In *Monitoring PSIM* software, the alarms can be followed by video data, such as video clips and video frames.

If there are loaded but not viewed yet video data, the name of the object on the **Control panel** is colored in yellow.

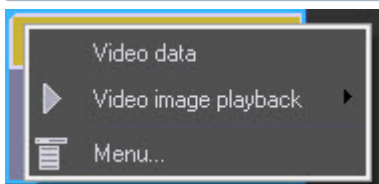


2.7.2 Viewing video data

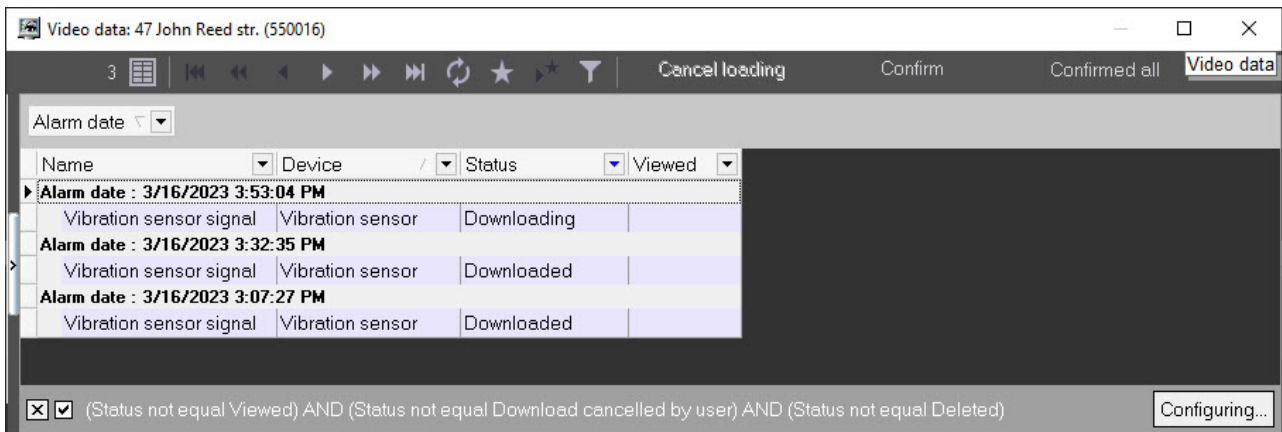
To view all received video data, select the **Video data** item in the object context menu.


Note.

By selecting the appropriate *Monitoring PSIM* settings (see [Configuring reaction to snapshots and videos](#)), snapshots and videos can be automatically opened as soon as they are received.

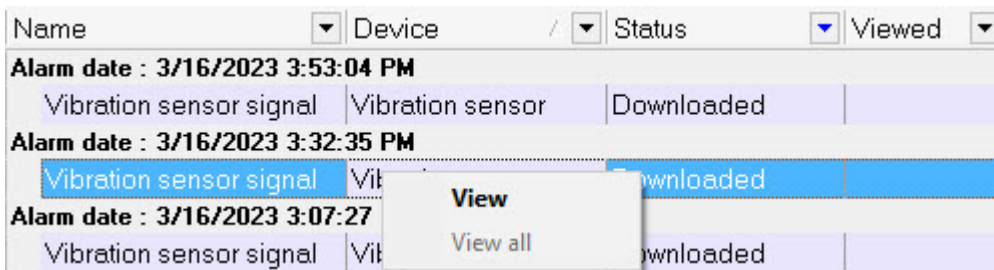


The **Video data** dialog box opens. The information on video data is displayed in this dialog box. This dialog box also provides function to cancel data downloading, if it has not been completed yet, using the **Cancel loading** button.



To force an update of the information in the **Video data** dialog box, click the .

To open the loaded video data right-click in the row corresponding to required data and select the **View** item. If the data download is not completed, this item is inactive.



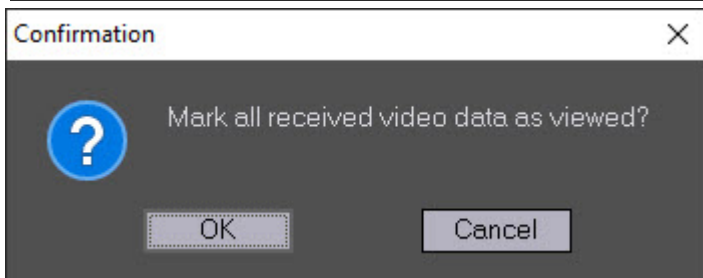
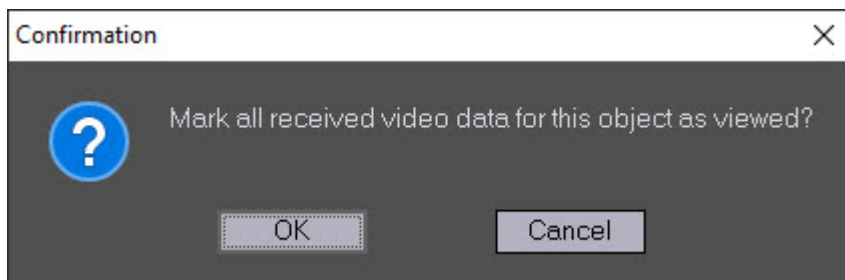
When the **View** item is selected, a video frame is opened with the *<Axxon PSIM installation directory>\Vhost\SYSTEM\JPEGViewer.exe* utility, and a video clip is opened with *Axxon Player* utility. Video data status changes to **Data viewed** and in the **Viewed** column the date of viewing is displayed.

If video data export fails, then there is the **Archive export error** message in the **Status** column.

Name	Device	Status	Viewed
Alarm date : 3/16/2023 4:43:55 PM			
Detections	Detection triggered	Archive export error	
Alarm date : 3/16/2023 4:41:49 PM			
Detections	Detection triggered	Downloaded	

To cancel download of **Downloading** or **Archive export error** data, click **Cancel loading**. After that, the status of the video data becomes **Download cancelled by user** and it is not displayed in the list if default filter is enabled (see [Setting video data list filter](#)).

To mark all object's video data as viewed, click **Confirm**. To mark all video data of all objects as viewed, click **Confirmed all**. A dialog box for action confirmation for one or all objects is shown. Click **OK** to confirm.

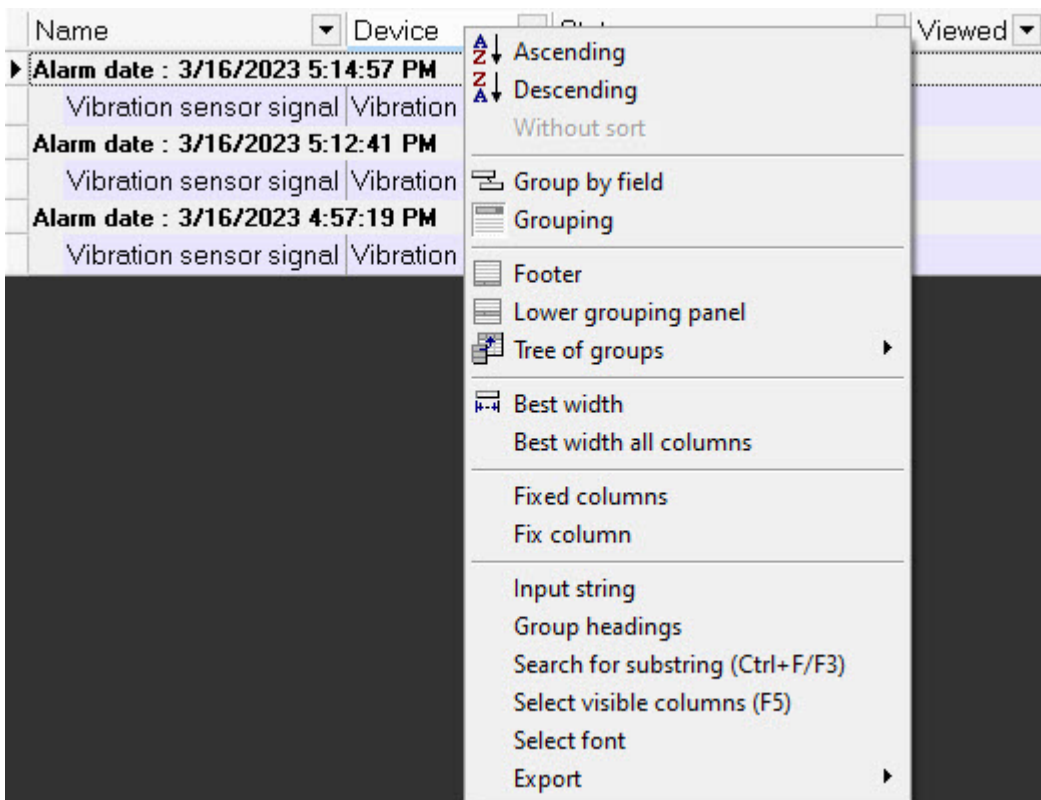


As a result, the name of the object stops being of yellow color. Status of all video data changes as follows and they are not displayed in the list of video data if the default filter is enabled (see [Setting video data list filter](#)).

- **Downloaded** to **Viewed**
- **Archive export error** to **Download cancelled by user**.

2.7.3 Video data grouping setup

By default, video data are grouped by alarm time. If necessary, it is possible to set video data grouping by other parameters. To do so, in the context menu of a column, by which one need to group the data, select **Group by field**.



Data will be grouped by selected field. In the upper part of the dialog box the fields by which the video data are grouped are displayed - a grouping area. To view this area one can also select the **Grouping** item in a column context menu.

Name /	Alarm date	Device	Status	Viewed
▶ Name : Vibration sensor signal				
	3/16/2023 5:14:57 PM	Vibration sensor	Downloaded	
	3/16/2023 5:12:41 PM	Vibration sensor	Downloaded	
	3/16/2023 4:57:19 PM	Vibration sensor	Downloaded	

To cancel grouping by a field, right-click on it and select **Remove from grouping**.

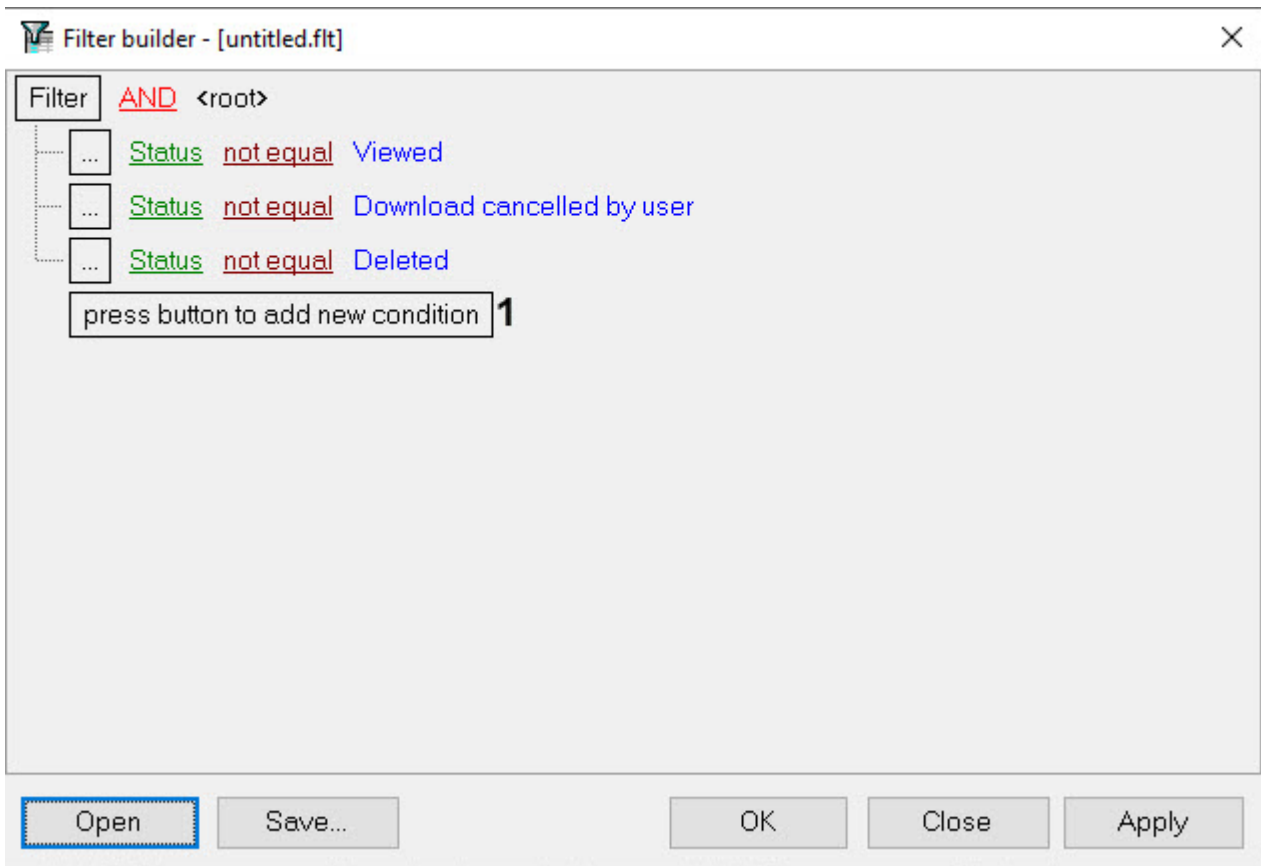
Name /	Alarm date	Device	Status	Viewed
▶ Name :				
	3/16,		Downloaded	
	3/16,		Downloaded	
	3/16,		Downloaded	

Context Menu				
Ascending				
Descending				
Without sort				
Remove from grouping				
Grouping				
Footer				
Lower grouping panel				
Tree of groups				
Best width				
Best width all columns				
Fixed columns				
Fix column				
Input string				
Group headings				
Search for substring (Ctrl+F/F3)				
Select visible columns (F5)				
Select font				
Export				

2.7.4 Setting video data list filter

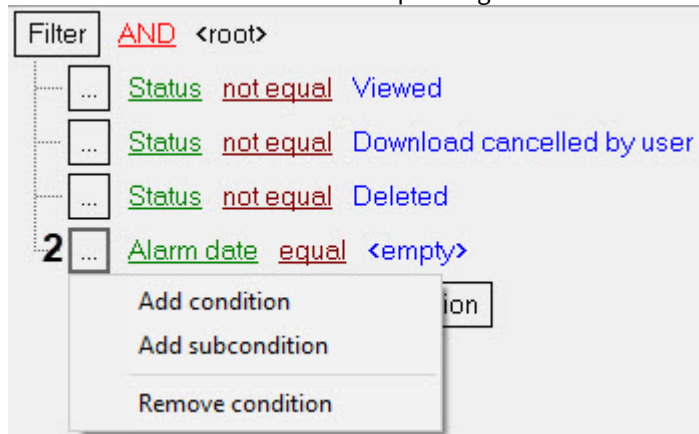
By default, in the **Video data** dialog box the data are not displayed, which has been viewed or for which downloading has been canceled by a user. To display all the video data, unset the check box in the lower left corner of the **Video data** window.

It is also possible to setup the filter for video data displaying. To open the filter setup dialog box, in the **Video data** dialog box click **Configuration...** or **Filter builder** dialog box opens.



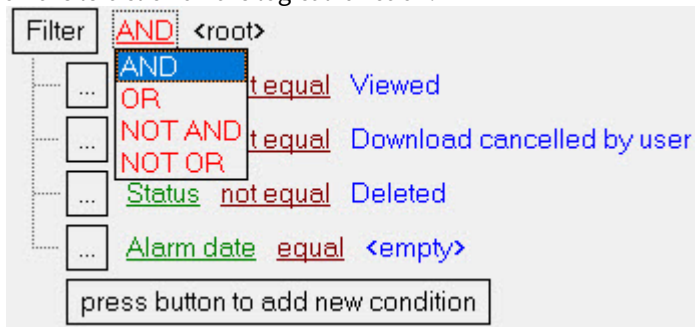
When configuring the filter, one may need to perform the following operations:

1. Add a condition or subcondition. To add a condition click the **press button to add new condition** button (**1**) or in the filter menu click the corresponding item. The condition menu opens by clicking the **...** or **Filter** (**2**).

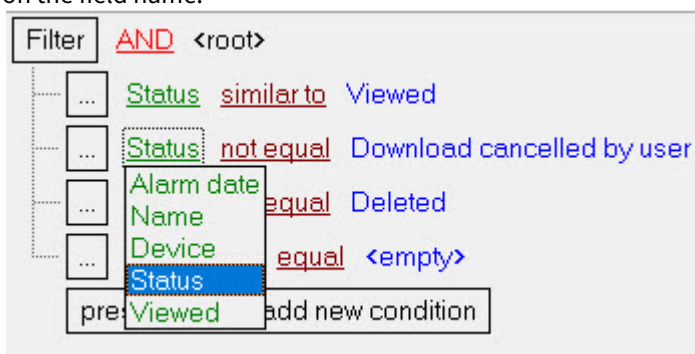


2. Remove a condition. To remove a condition, click the corresponding item in the condition menu.

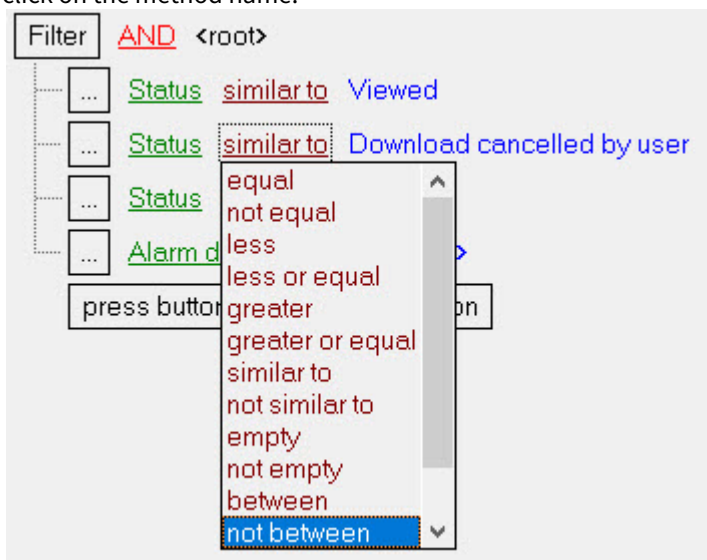
3. Select a logical function for combining conditions. A drop-down list for selecting the logical function opens on the left-click on the logical function.



4. Select a field for comparison. A drop-down list for selecting the field for comparison opens on the left-click on the field name.



5. Select a method of comparing. A drop-down list for selecting the method of comparing opens on the left-click on the method name.



6. Select a value for comparing with. A way to select the value depends on the field type. For example, a date can be set using a calendar, a name can be entered in a field, etc.

The screenshot shows a filter configuration window with the following conditions:

- Filter: **AND** <root>
- Condition 1: Status similar to Viewed
- Condition 2: Status similar to Download cancelled by user
- Condition 3: Status not equal Deleted
- Condition 4: Alarm date equal [dropdown]

A calendar is open, showing March 2023. The date 10 is selected. The calendar includes navigation arrows, a header with the month and year, a grid of days, and 'Today' and 'Clear' buttons.

Below the calendar, a button labeled 'press button to add new' is visible.


The second screenshot shows the filter configuration after the date is set:

- Filter: **AND** <root>
- Condition 1: Status similar to Viewed
- Condition 2: Name similar to [input field]
- Condition 3: Status not equal Deleted
- Condition 4: Alarm date equal <empty>
- Condition 5: Name similar to <empty>

A button labeled 'press button to add new condition' is visible at the bottom.

After completing settings, the filter can be saved to a file with the .flt extension by clicking the **Save...** button. This file can then be opened using the **Open** button.

2.8 Event log

To view all the events registered in *Monitoring PSIM*, click the button  (**Event log**). The **Event log** window opens. You can sort and filter this table by any column. By default, it is sorted by **Alarm date** descending, i.e. the newest events are in the top of the list.

The screenshot shows the 'Event log' window with a table of events and search filters. The table has columns for Alarm date, End, Name, ID, Region, District, City, Confirm, Alarm type, Device, Date of processing, Comment, and User. Two events are visible, both confirmed by Admin.

Alarm date	End	Name	ID	Region	District	City	Confirm	Alarm type	Device	Date of processing	Comment	User
3/9/2023 11:53		18 Alexar	5500				<input checked="" type="checkbox"/>	No connector	Communic	3/9/2023 3:13:20 PM	Yes	Admin
3/9/2023 11:53		10 Green	5500				<input checked="" type="checkbox"/>	No connector	Communic	3/9/2023 2:56:17 PM	Yes	Admin

Below the table, there is a search section with 'Date/Time' filters. The 'from' field is set to '3/9/2023 10:49:00 AM' and the 'to' field is set to '3/10/2023 10:49:00 AM'. A 'Search' button is present.

Note.

If the **Owners panel** is in use, then events from the objects that belong to the owner selected on the **Owners panel** are displayed in the **Event log** window. To view the events from all system objects, call this window on the **Owners panel** – see [Viewing Event log for all objects](#).

2.8.1 Viewing comments

If an operator enters a multi-line comment when he closes an alarm, only the first line is shown in the **Comment** column in the **Event log** window.

To view the entire comment, left-click the "up" and "down" arrows in the cell.

This close-up shows the 'Date of processing' and 'Comment' columns. The second row is highlighted in blue, and the 'Comment' cell contains a small up and down arrow icon, indicating that the comment can be expanded.

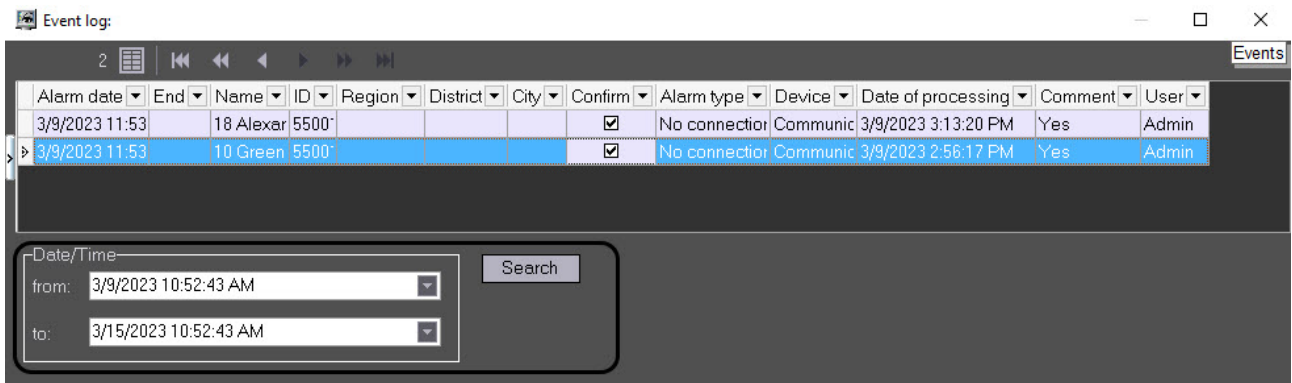
Date of processing	Comment
3/9/2023 3:13:20 PM	Yes
3/9/2023 2:56:17 PM	Yes

2.8.2 User that confirmed an alarm

By default, all the alarms confirmed by an operator are registered by the Admin user. However, a user with certain privileges can be created in the **Users** tab. Then, when an operator starts *Axxon PSIM* using this user's account, all the confirmed events are registered using this user.

2.8.3 Event display period

By default, the alarms for the last 24 hours are shown. To view events for any other period, set **from** and **to** date and time in the **Date/Time** group, then click **Search**.



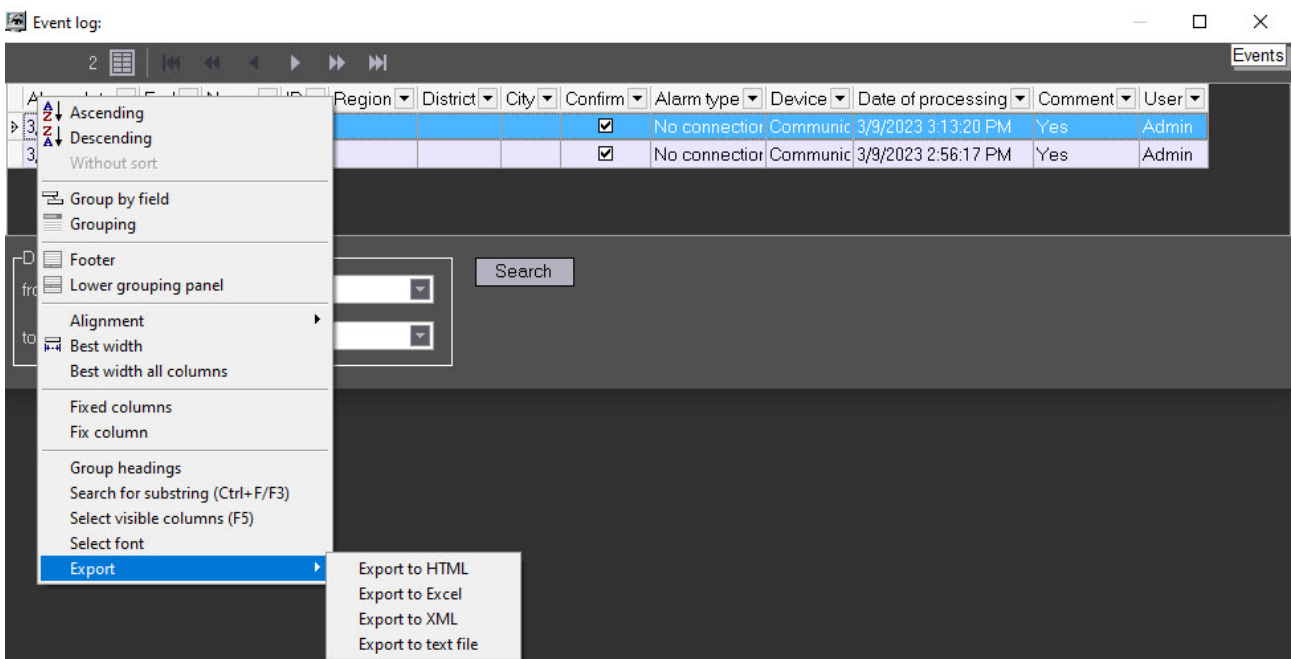
If the number of events exceeds 10000, use the navigation buttons for viewing.

Note.

You can change the maximum number of events displayed in the **Event log** without navigation buttons using the **MAXRECORDSONPAGE** registry key (see [Registry keys reference guide](#)).

2.8.4 Exporting the event log

To export the event log, open the context menu for a column of the table in the **Event log** window.



2.8.5 Configuring the position of the event log's columns

The columns' context menu contains the **Best width all columns** command. Select this command to set such a width for each column that fits all the column's content.

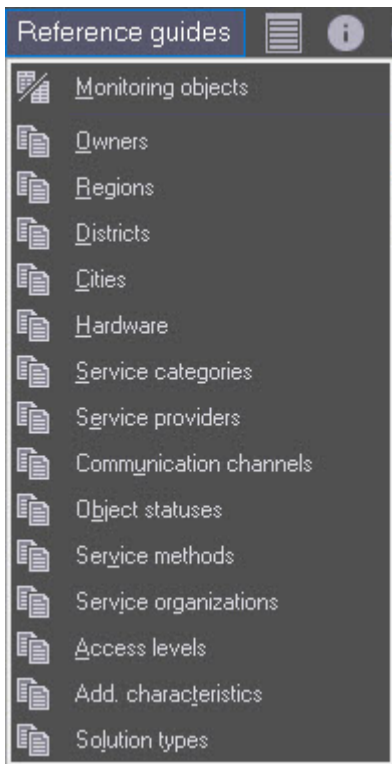
If not all the columns are visible in the **Event log** window, a scrolling GUI element appears. When you scroll, the columns that must be visible all the time (for example, **Alarm date**, **Date of processing**) are moved. To lock the position of such columns, use the **Fix column** command from the same context menu.

You change the position of the columns. To do that, click on the heading of the column that you want to move and drag it to another place.

2.9 Regulatory and reference information

2.9.1 Viewing regulatory and reference information

Monitoring PSIM keeps regulatory and reference information for all objects. To view this information, click **Reference guides** and select the **Monitoring objects** menu item.



The **Monitoring objects** window opens. It contains all the objects created in the system.

 A screenshot of the 'Monitoring objects' window. The window title is 'Monitoring objects'. It features a toolbar with various icons for navigation and filtering. Below the toolbar is a table with the following columns: Object code, ID, Name, Location, Region, District, City, Object, Entered, Removed, Status, Owner, and Access. The table contains several rows of data.

Object code	ID	Name	Location	Region	District	City	Object	Entered	Removed	Status	Owner	Access
4	5500	10 Green	10 Green sp					3/9/2023 11				
5	5500	18 Alexar	18 Alexand					3/9/2023 11				
3	5500	47 John F	47 John Re					2/14/2023 3				
1	1	Partition	Partition Of					2/13/2023 1				
2	2	Partition	Partition Of					2/13/2023 1				

2.9.2 Editing regulatory and reference information

If you double click on a record, a form opens. Here you can fill in regulatory and reference information for the object.

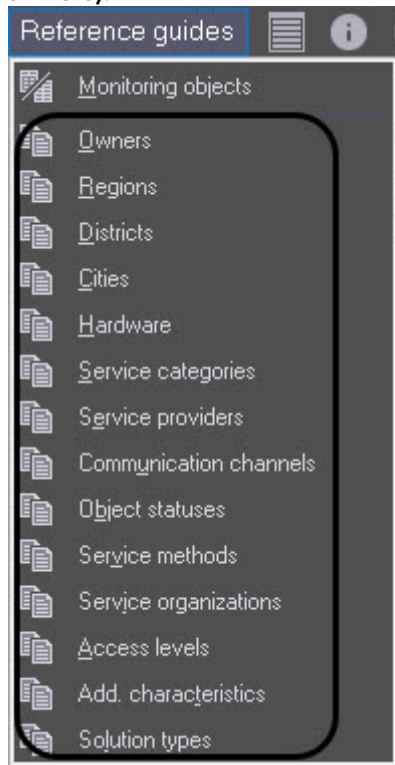
Record	
Object code	4
Name	10 Green spruce dr.
ID	550017
Location	10 Green spruce dr.
Region	
District	
City	
Object	
Entered	3/9/2023 11:42:34 AM
Removed	
Access	
Add. characteristic	
Solution type	
Type of connection with object	
Service provider	
Owner	
Hardware	
Status	
Service category	
Service method	
Service company	

Some fields offer default values and some do not. This means that the corresponding reference book is empty and it must be filled out (see the [Filling out reference books](#) section).

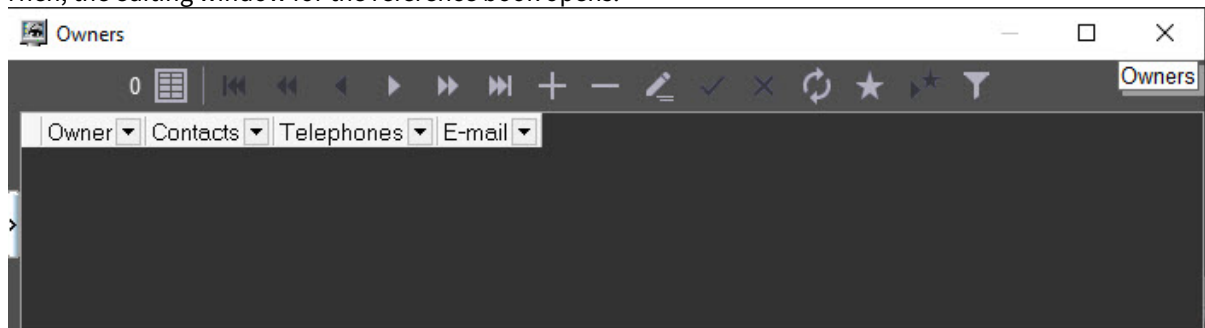
2.9.3 Filling out reference books

To fill out a reference book:

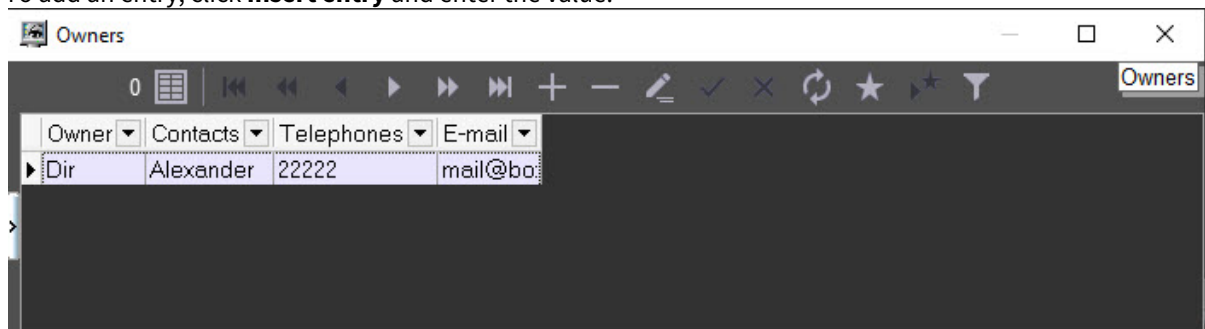
1. Click **Reference guides**. A window opens. In the window, select the required reference book (for example, **Owners**).



2. Then, the editing window for the reference book opens.



3. To add an entry, click **Insert entry** and enter the value.

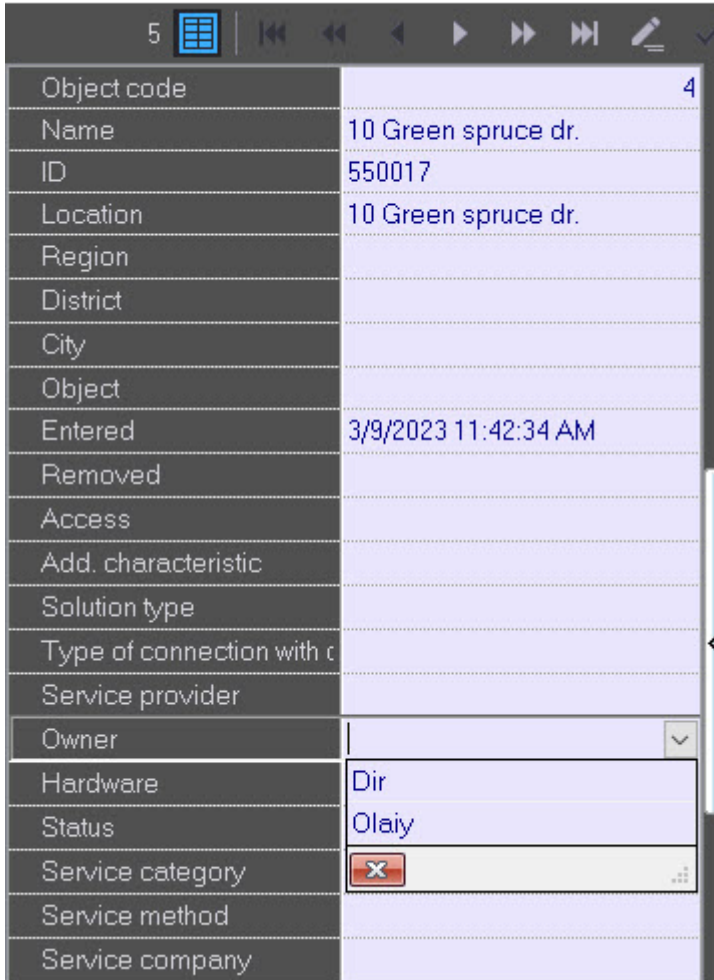



4. Click **Save**.

You can edit any reference book like this.

After you add a value to a reference book, you can use it for filling in the corresponding field for regulatory and reference information.

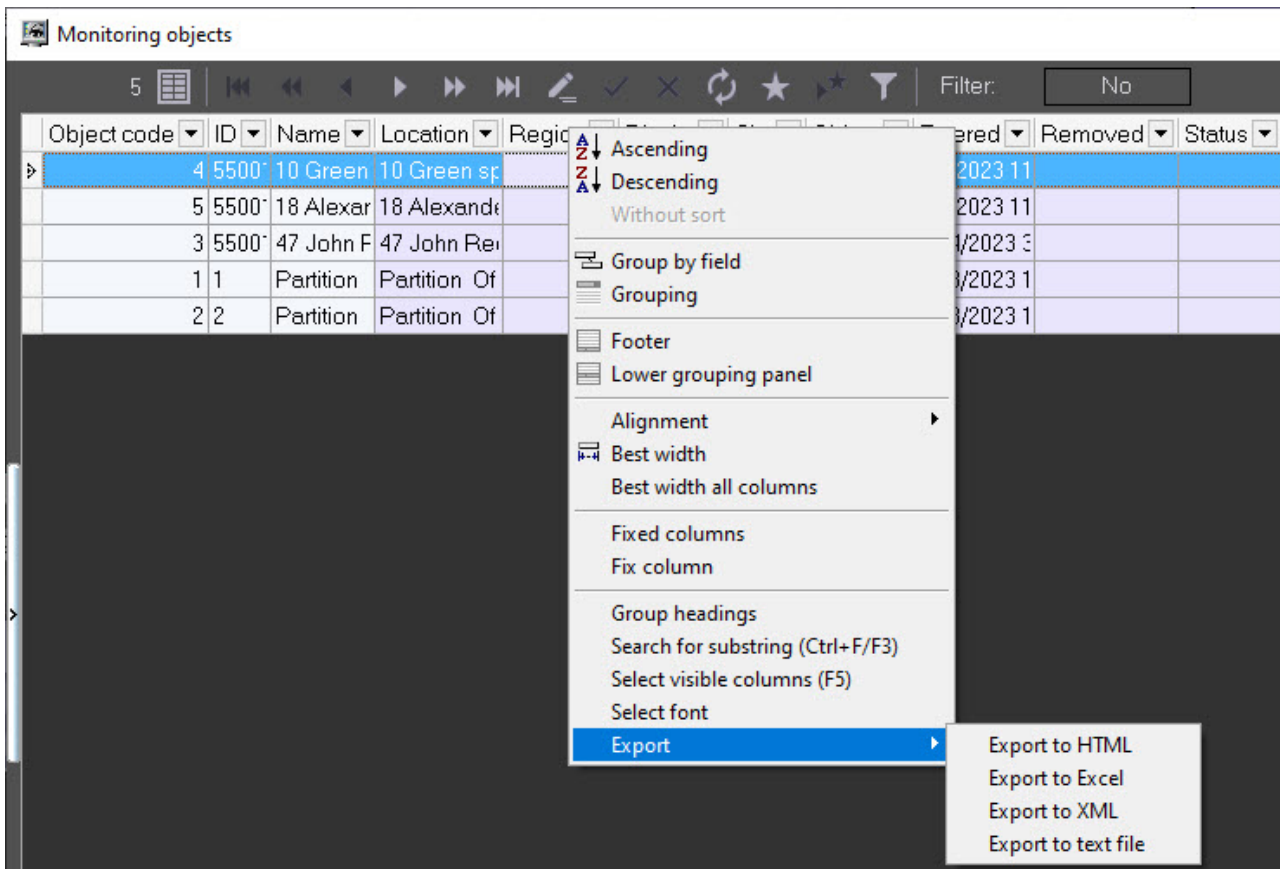
Monitoring objects



Object code	4
Name	10 Green spruce dr.
ID	550017
Location	10 Green spruce dr.
Region	
District	
City	
Object	
Entered	3/9/2023 11:42:34 AM
Removed	
Access	
Add. characteristic	
Solution type	
Type of connection with c	
Service provider	
Owner	
Hardware	Dir
Status	Olaiy
Service category	
Service method	
Service company	

2.9.4 Column context menu in the Monitoring objects window

Right-click on the heading of any column in the **Monitoring objects** window. A context menu opens. You can use this menu for different actions, in a way similar to the actions with the event log (see [Exporting the event log](#) and [Configuring the position of the event log's columns](#)).



2.10 Viewing objects' live video and archives

You can view both live video and archives from objects:

1. Viewing video from a specific camera.
2. Viewing video from all cameras created at the *Agent of Control*.
3. Viewing video from all cameras of the selected partition of control.
4. Creating user layouts and playing back video from selected cameras added to the partition of control.

Note.

Information on how to select cameras for live video and archives playback on the **Control panel** can be found in [Configuring the camera list](#) section.

To select the mode for playing back live video and archive, right-click the area with object name.

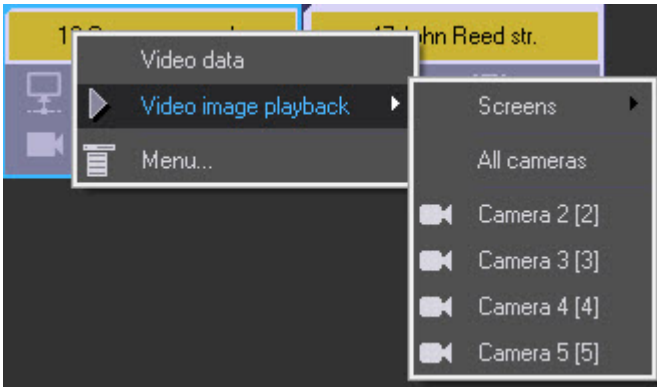
A context menu will appear with the **Video image playback** item, in which you can select:

- Camera name for viewing video from a separate camera;
- **All cameras** to view video from all cameras created on the *Agent of Control* side;
- **All cameras of partition of control** to view video from all cameras of the selected partition of control;
- **Screens** to select a user layout.

Find more details on how to view video image in the corresponding sections.

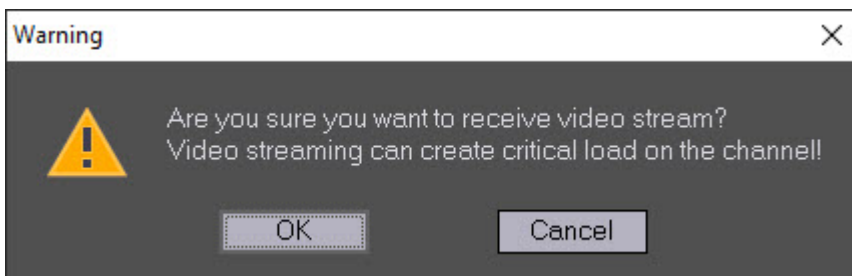
Note

- The **All cameras** menu item is available if the user has no restrictions on viewing some cameras — see [Configuring the Monitoring interface object](#).
- The **All cameras of partition of control** menu item is available if the **Viewing live video from all cameras (add.)** option is enabled in the **Monitoring** interface object setting.
- The **Video image playback** menu item becomes available only after the object connects to *Monitoring PSIM* software for the first time. Before that, this menu item may not be displayed.



The list of cameras corresponds to the list of cameras specified when configuring the **Partition Of Control** object. Camera names in the context menu as well as IDs specified in the square brackets correspond to those on the *Agent of Control*.

If the *Monitoring PSIM* software have the corresponding setting, then when the camera is selected for viewing live video the warning will be displayed saying that transmission of video can create critical load on the channel. If it is really necessary to view live video, click **OK** in the **Warning** dialog box. To cancel viewing live video, click **Cancel**.

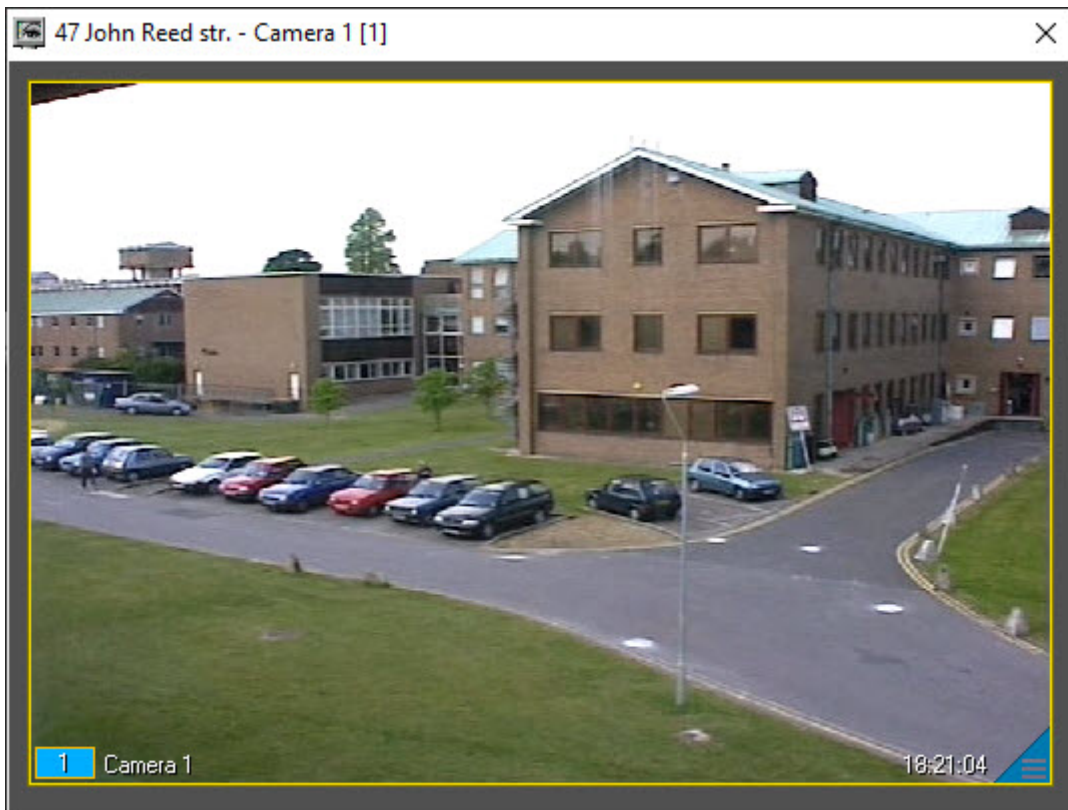
**Attention!**

It is possible to restrict the Operator's access to the camera's functional menu and its items, to the **CamMonitor** buttons, and to the **CamMonitor** control via the keyboard and mouse (for details, see [Registry keys reference guide](#). for details about working with the registry, see [Working with Windows OS registry](#)).

2.10.1 Playing back live video and archive from a specific camera

To play back live video and archive from a specific camera select the name of corresponding camera in the **Video image playback** menu (see [Viewing objects' live video and archives](#)).

After you select a camera, a dialog box opens. Wait for several seconds for the video to start.



The window's title shows the description of the object, the camera sequence number, and the camera ID in brackets. The archive is accessed using *Axxon PSIM* standard method.

Note

- To view live video in the full screen mode, double-click on it. To exit the full screen mode and restore video mode, double right-click on the video. For details on working with surveillance windows and archives, see the document, see the [Axxon PSIM software package. Operator's Guide](#).
- When viewing live video, the frame rate can be limited by the settings of the **Monitoring** interface object (**Video stream speed** parameter) – see [Configuring the Monitoring interface object](#).

Note

- By default, the video clips are exported to the <Axxon PSIM installation directory>\export folder. To change the folder for the exported video clips, specify the required path in the **StreamViewerExportPath** registry key (for details, see [Registry keys reference guide](#). For details on working with the registry, see [Working with Windows OS registry](#)).
- By default, the StreamViewer live video viewer runs with normal (medium) priority. To lower the priority, change the value of the **StreamViewerLowestPriority** registry key (for details, see [Registry keys reference guide](#). For details on working with the registry, see [Working with Windows OS registry](#)).



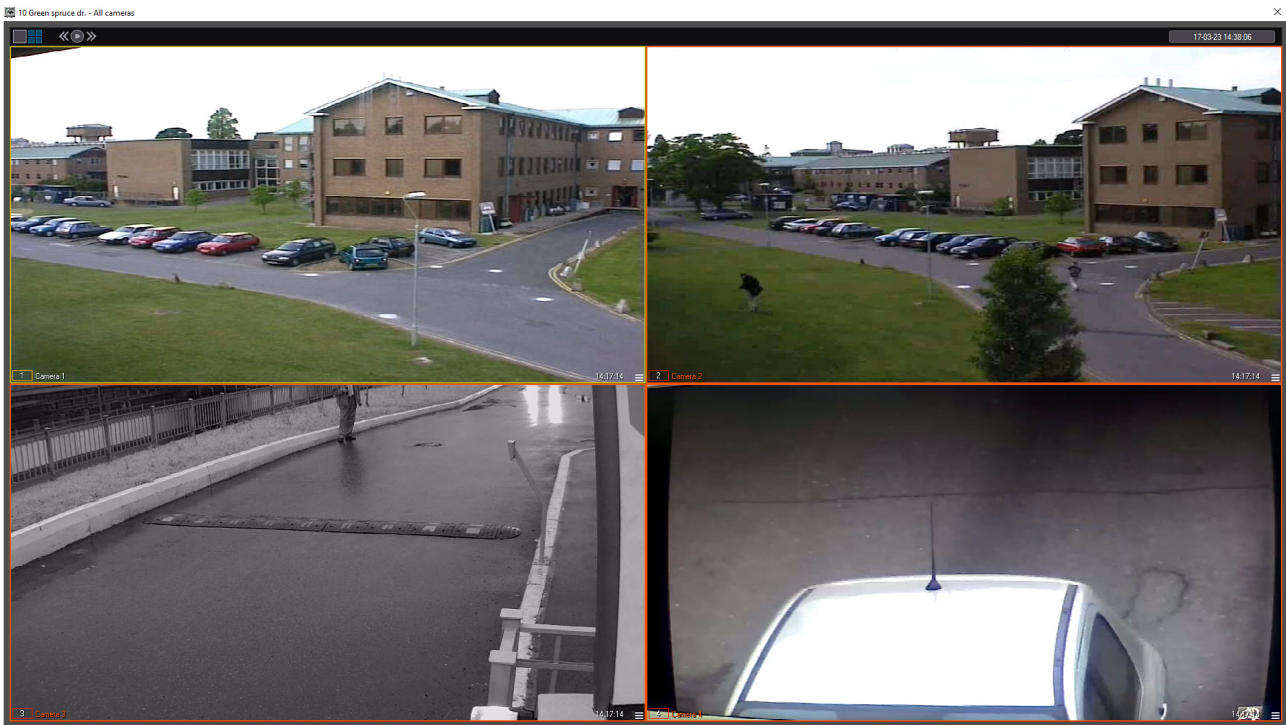
2.10.2 Viewing live video and archive from all cameras created on the Agent of Control



To play back live video and archive from all cameras created at the *Agent of Control*, select the **All cameras** item in the **Video image playback** menu (see [Viewing objects' live video and archives](#)).

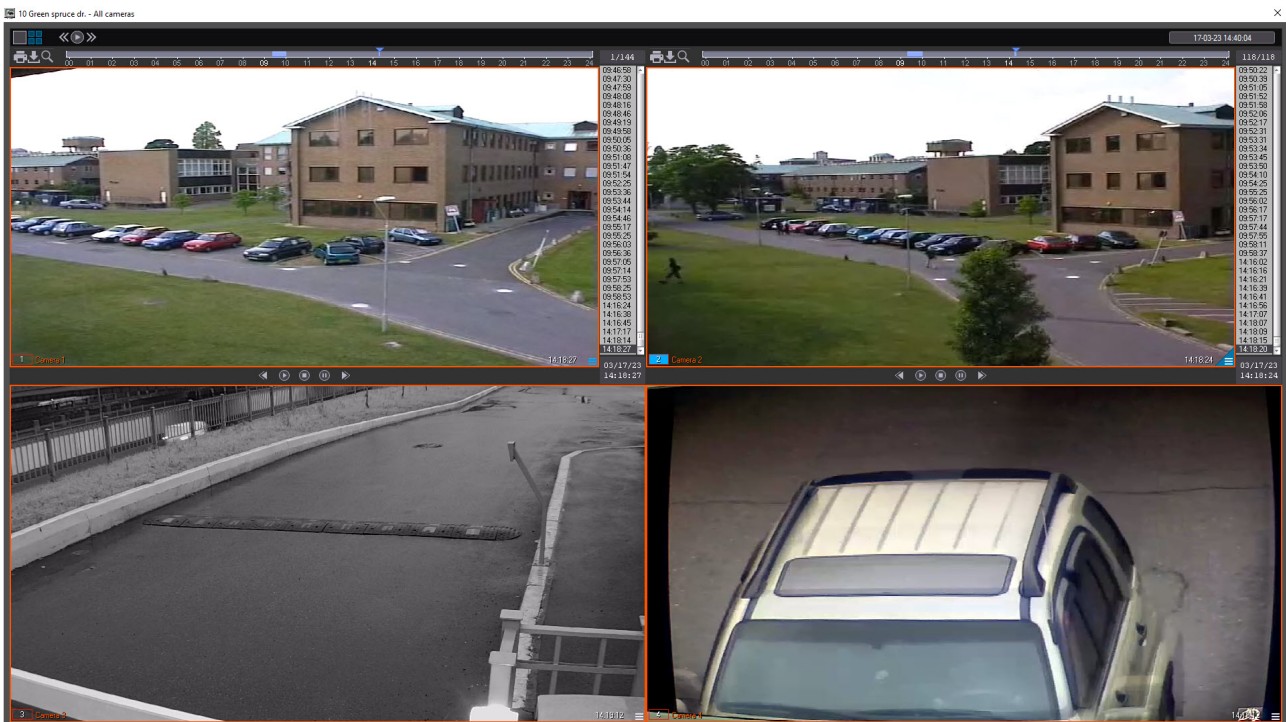
Note

The **All cameras** menu item is available if the user has no restrictions on viewing some cameras — see [Configuring the Monitoring interface object](#).

As a result the dialog box with viewing tiles for all cameras created at the *Agent of Control*.



Use the  button in the bottom right corner of the viewing tile to enter the archive mode and the  button to exit the archive mode.



Live video and archive playback control functions are the same that those used in the Video monitor in *Axxon PSIM*. One can switch between viewing tiles as well as start manual and auto paging. Find details on these functions in

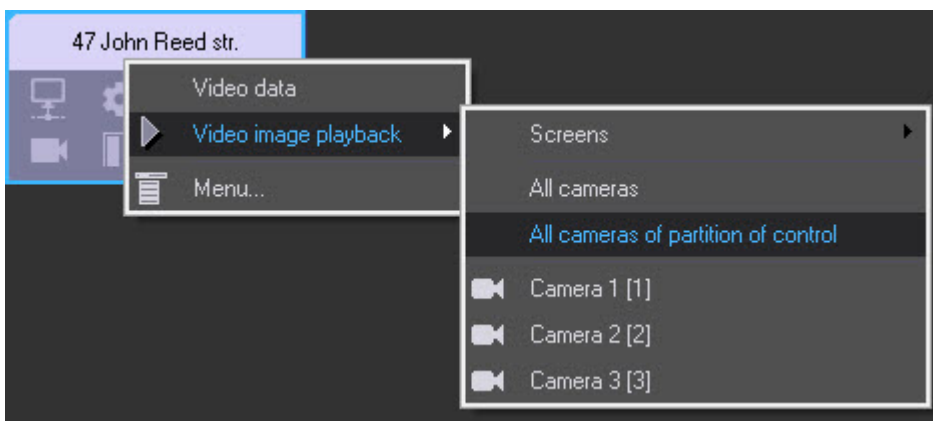
Axon PSIM software package. Operator's Guide. The latest version of this document is available in [AxonSoft documentation repository](#).

2.10.3 Viewing video from all cameras of the selected partition of control

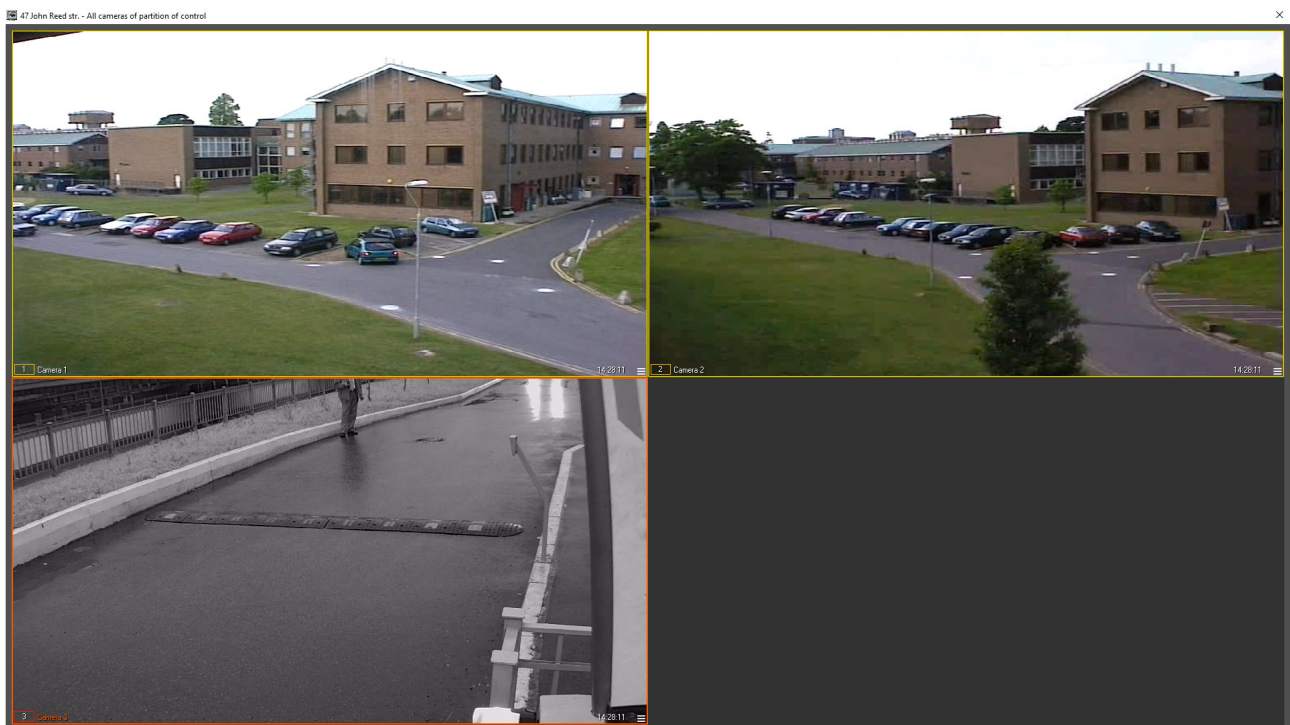
⚠ Important!



To be able to view video from all cameras of the selected partition of control, it is necessary to set the **Viewing live video from all cameras (add.)** check box when configuring the **Monitoring** interface object (for details, see [Configuring the Monitoring interface object](#)).

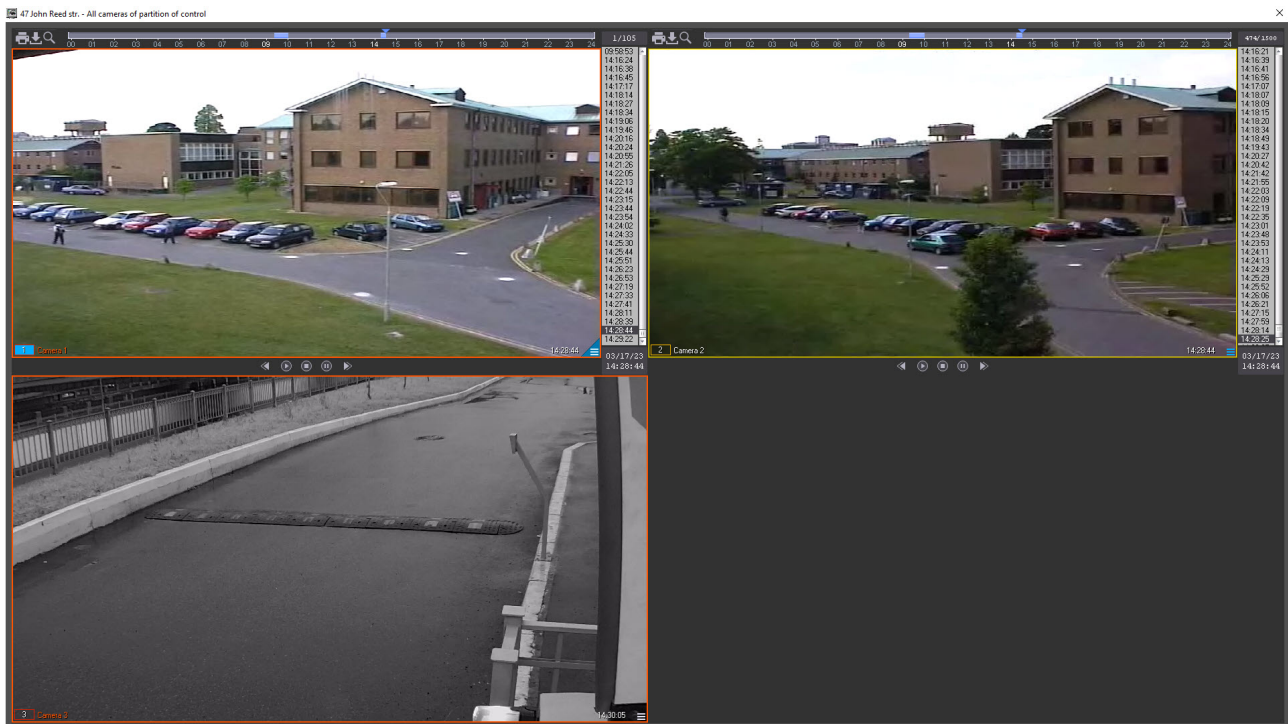
To view video from all cameras, it is necessary to select the **All cameras of partition of control** item in the object's **Video image playback** context menu (see [Viewing objects' live video and archives](#)).



As a result the dialog box with viewing tiles for all cameras of the selected partition of control will be displayed.



Use the  button in the bottom right corner of the viewing tile to enter the archive mode and the  button to exit the archive mode.



Live video and archive playback control functions are similar with the ones used in the Video monitor in *Axxon PSIM*, except it is not possible to switch between viewing tiles and start manual and auto paging. Find details on these functions in *Axxon PSIM software package. Operator's Guide*. The latest version of this document is available in [AxxonSoft documentation repository](#).

2.10.4 Playing back live video and archive from selected cameras

Creating, editing and deleting layouts

On the page:

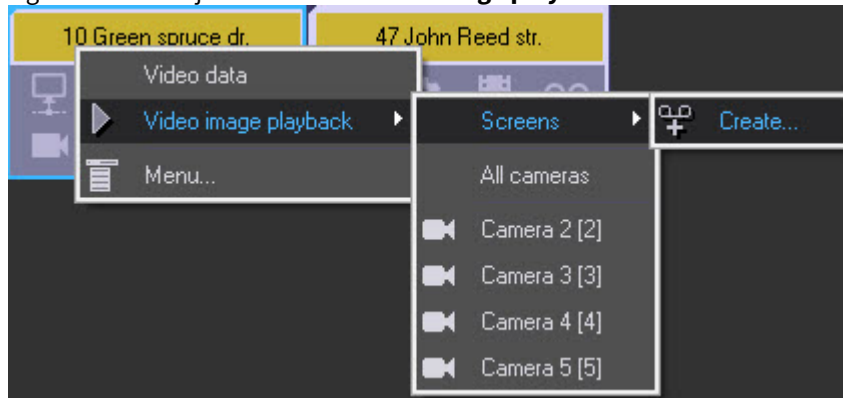
- [Creating layout](#)
- [Adding camera to layout](#)
- [Deleting layout](#)

Layout represents the list of cameras the user can select in order to play back live video and archive (see [Viewing objects' live video and archives](#)).

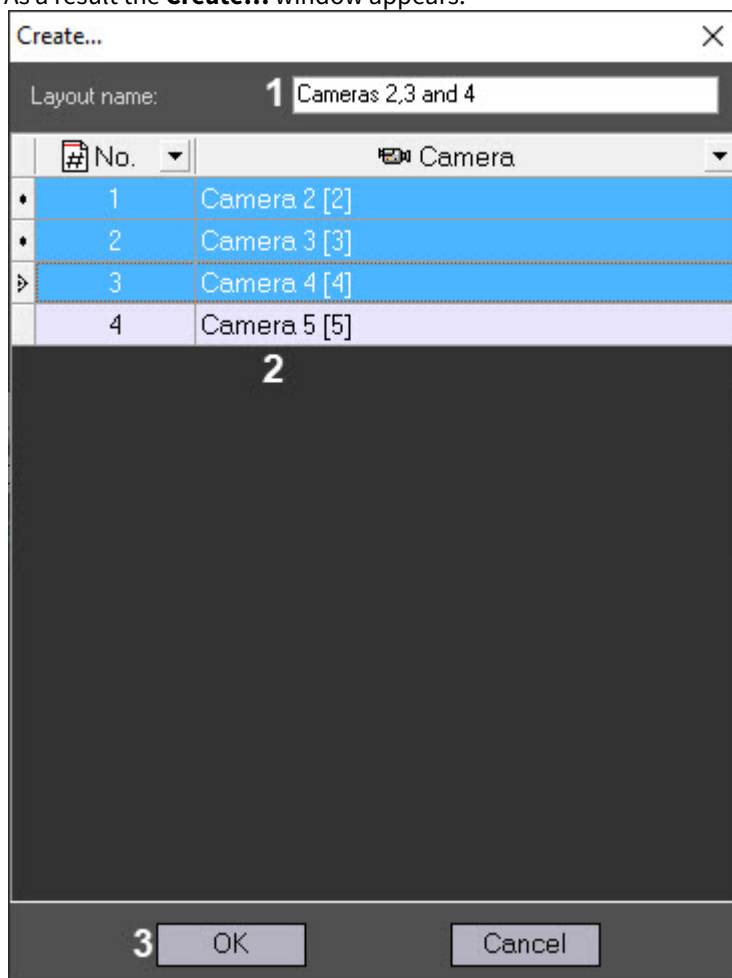
Creating layout

Create a layout as follows:


1. Right click the object and select **Video image playback -> Screens -> Create...** in the context menu.

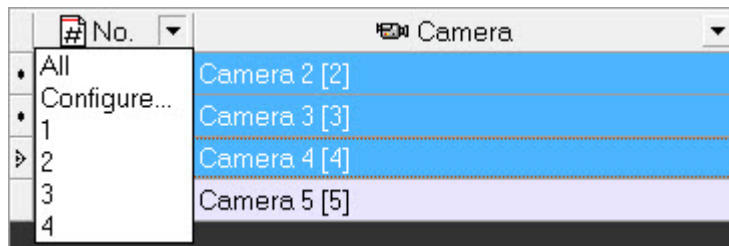


2. As a result the **Create...** window appears.

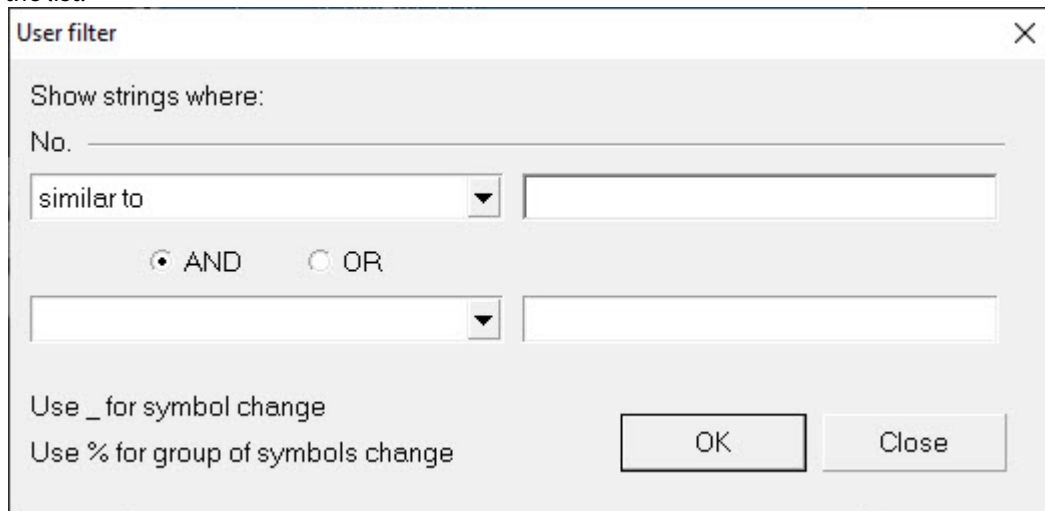


3. Specify the **Layout name** (1).
4. Select one or several cameras to be added to the layout. To select several cameras left click the corresponding lines in the table and hold down the Ctrl key on the keyboard (2).

The filter can be applied to the camera list. Click the  button in the column title and select the filter values:

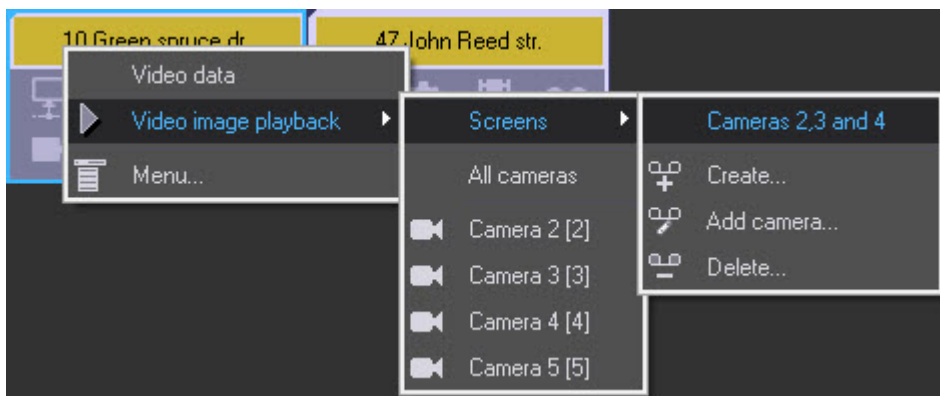


The **User filter** box appears when selecting the **Configure** item – one can set conditions to show cameras in the list.



- Click the **OK** button (3).

As a result the created layout is available in the **Video image playback -> Screens** menu.

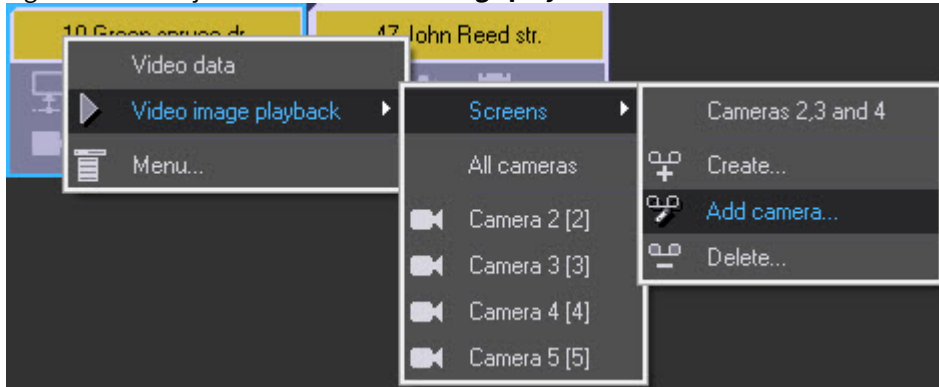


The layout is now created.

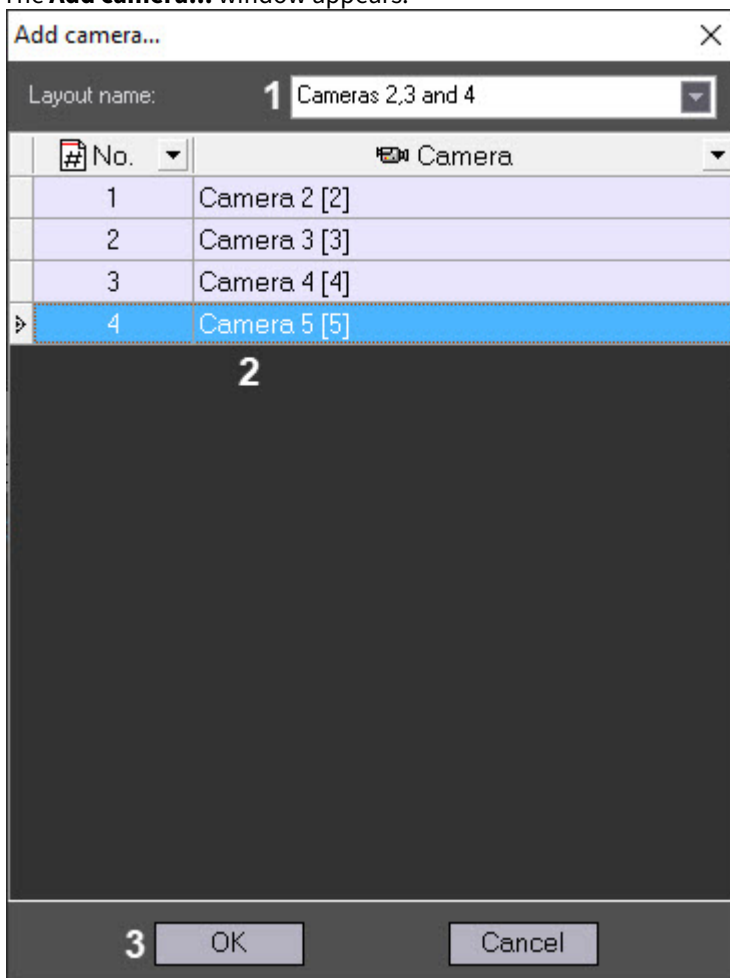
Adding camera to layout

Add a camera to the layout as follows:

1. Right click the object and select **Video image playback -> Screens -> Add camera...** in the context menu.



2. The **Add camera...** window appears.



3. In the **Layout name** dropdown list select the layout the cameras are to be added to (1).
4. Select one or several cameras to be added to the layout. To select several cameras left click the corresponding lines in the table and hold down the Ctrl key on the keyboard (2).

Note

The camera list filter can be applied the same way as when creating the layout – see [Creating layout](#) above.

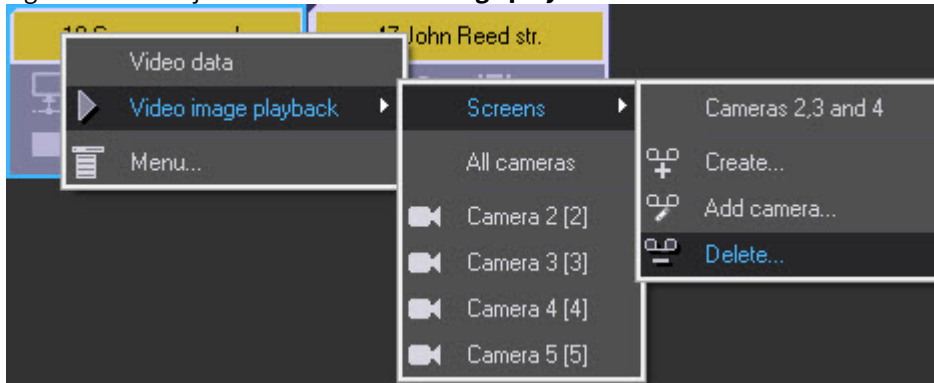
- Click the **OK** button (3).

Cameras are now added to the layout.

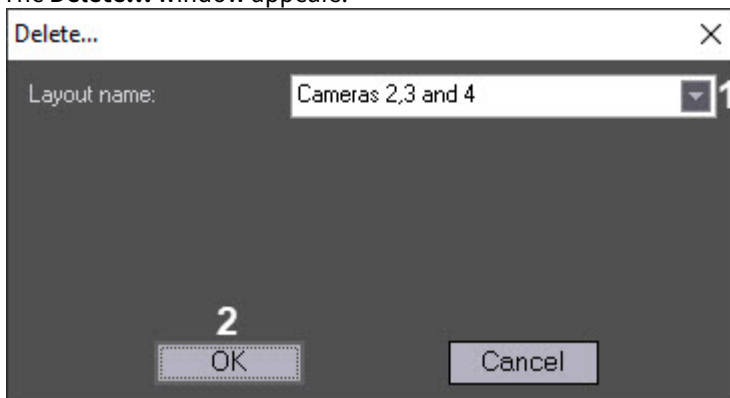
Deleting layout

Delete the layout as follows:

- Right click the object and select **Video image playback -> Screens -> Delete...** in the context menu.



- The **Delete...** window appears.



- In the **Layout name** dropdown list select the layout that is to be deleted (1).
- Click the **OK** button (2).

The layout is deleted.

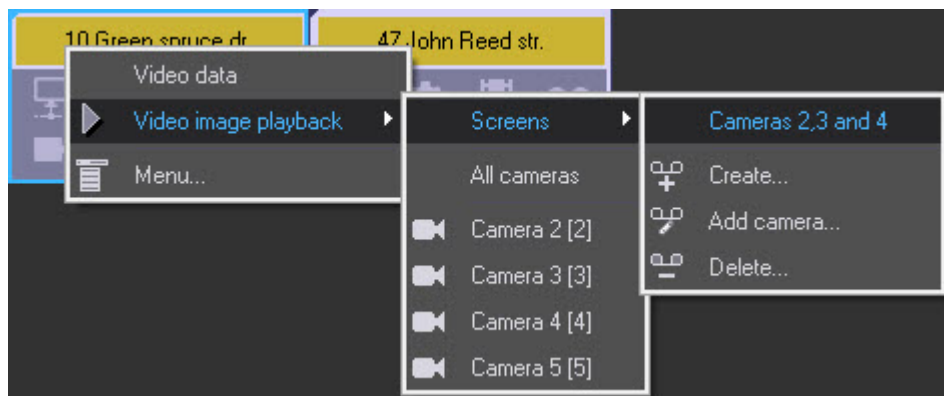
Selecting layout for display

Select the layout that is to be displayed as follows

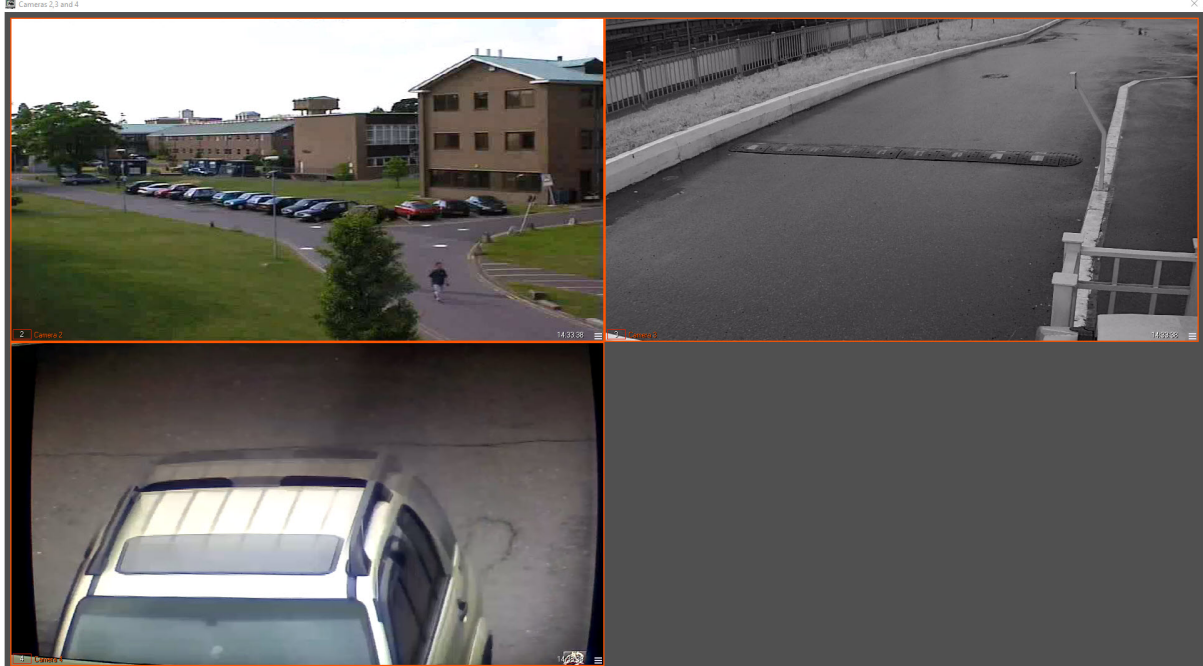
- Right click the object on the control panel, select **Video image playback -> Screens** in the context menu and select the name of the required layout in the menu.

Note.

If there is no layout in the list, then create one – see [Creating, editing and deleting layouts](#).



- As a result the window to play back live video and archive from cameras added to the layout appears.





The camera control functions on the layout are the same as those used in the Video surveillance monitor. In particular, it is possible to change the position of the Video surveillance windows on the layout by dragging with the left mouse button. Such changes will be saved after the layout is closed and displayed when it is opened again.

In addition, the function of gradually increasing the Video surveillance window by double clicking with the left mouse button is supported. For more information, see *Altering the number of windows in the Axxon PSIM software package. Operator's Guide*. The most current version of this document is available in the [AxxonSoft documentation repository](#).

Example

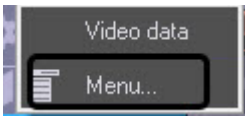
For example, there is a layout of 9 cameras (3x3). When you double-left-click the upper left camera, its image will not increase to the full screen, but will take the position of the nearest right and lower camera. If you double-left-click again, the image will be expanded to the entire Video Surveillance Monitor window.

Use the  button in the bottom right corner of the viewing tile to enter the archive mode and the  button to exit the archive mode.

Archive playback control functions are the same that those used in the Video monitor in *Axxon PSIM*. Find details on these functions in *Axxon PSIM software package. Operator's Guide*. The latest version of this document is available in [AxxonSoft documentation repository](#).

2.11 Starting external applications from the Control panel

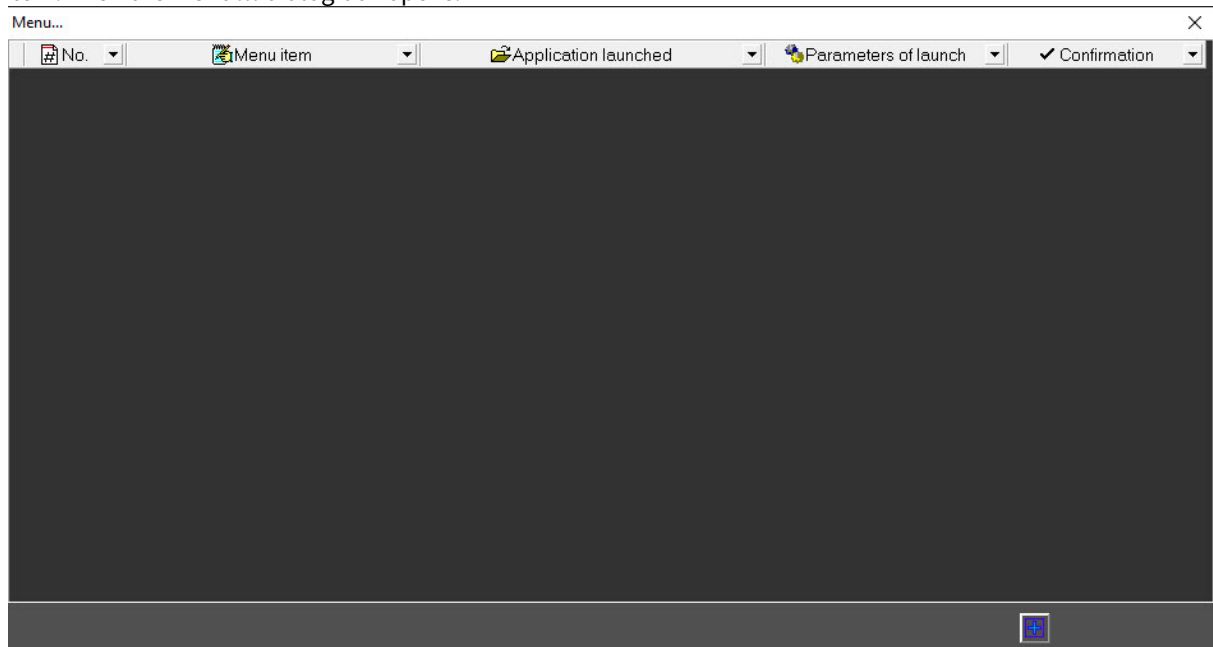
You can use the **Menu...** item of the context menu to launch external applications from the **Control panel**.



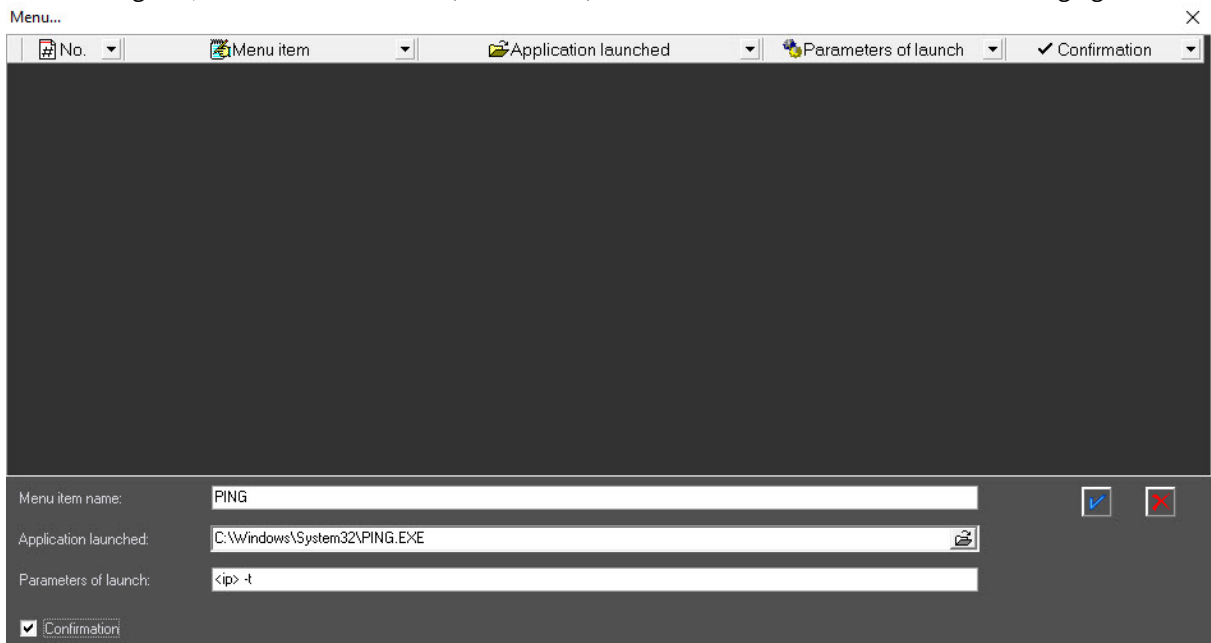
You use the IP address of any object.

For example, if you want to ping any object, follow these steps:

1. Right-click the area that contains the object's name. The context menu opens. Select the **Menu...** menu item. Then the **Menu...** dialog box opens.



2. In this dialog box, click the button  (**Add record**) and enter values as shown in the following figure.



Menu...

No. | Menu item | Application launched | Parameters of launch | Confirmation


Menu item name: PING

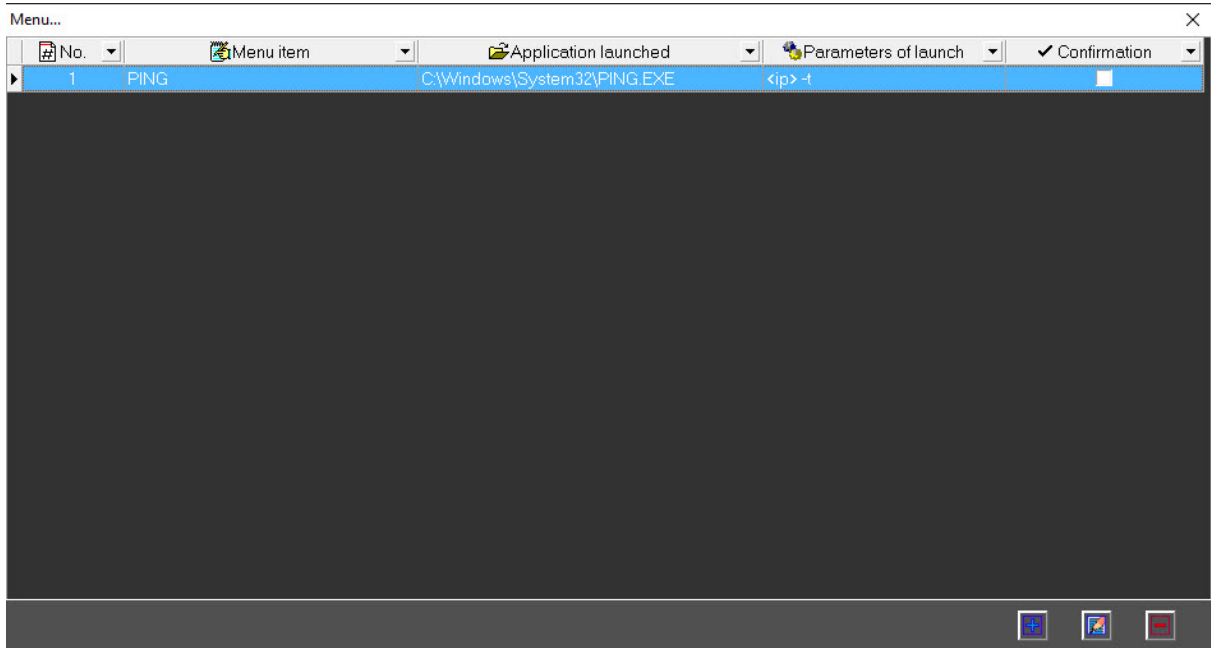
Application launched: C:\Windows\System32\PING.EXE

Parameters of launch: <ip> -t

Confirmation

The **<ip>** string is a reserved expression. When application is called, the real IP address is inserted. Type this string in lowercase.

3. Click the button  (**OK**). The **Menu...** window shows a new entry that describes the new context menu item.



Menu...

No. | Menu item | Application launched | Parameters of launch | Confirmation

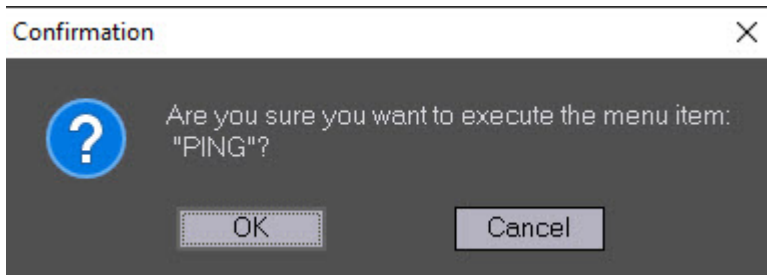
1	PING	C:\Windows\System32\PING.EXE	<ip> -t	<input type="checkbox"/>
---	------	------------------------------	---------	--------------------------

Now, when you right-click on the area with the object name, a context menu will appear with the newly

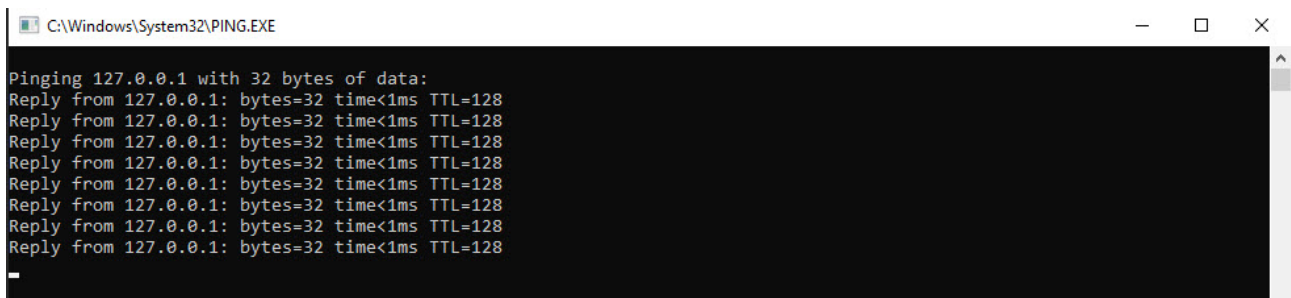
created **PING** item.



If the **Confirmation** checkbox was set, the dialog box opens to confirm the command execution when you select this menu item. Click **OK** to confirm or **Cancel** if you do not want to execute the action.



After confirmation, the **PING.EXE** program is started in a separate window.



For objects that connect to *Monitoring PSIM* via RS-232 or objects that never connected to it yet, the 127.0.0.1 value will be used instead of **<ip>**.

The same way you can create menu items that start other external applications (such as Radmin, etc.).

2.12 Executing ad hoc command on the Agent of Control by the operator of Server of Control

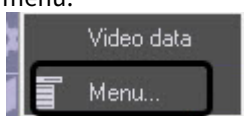
Ad hoc commands can be executed on the *Agent of Control* using the **Menu...** context menu item on the **Control panel**.

i Important!

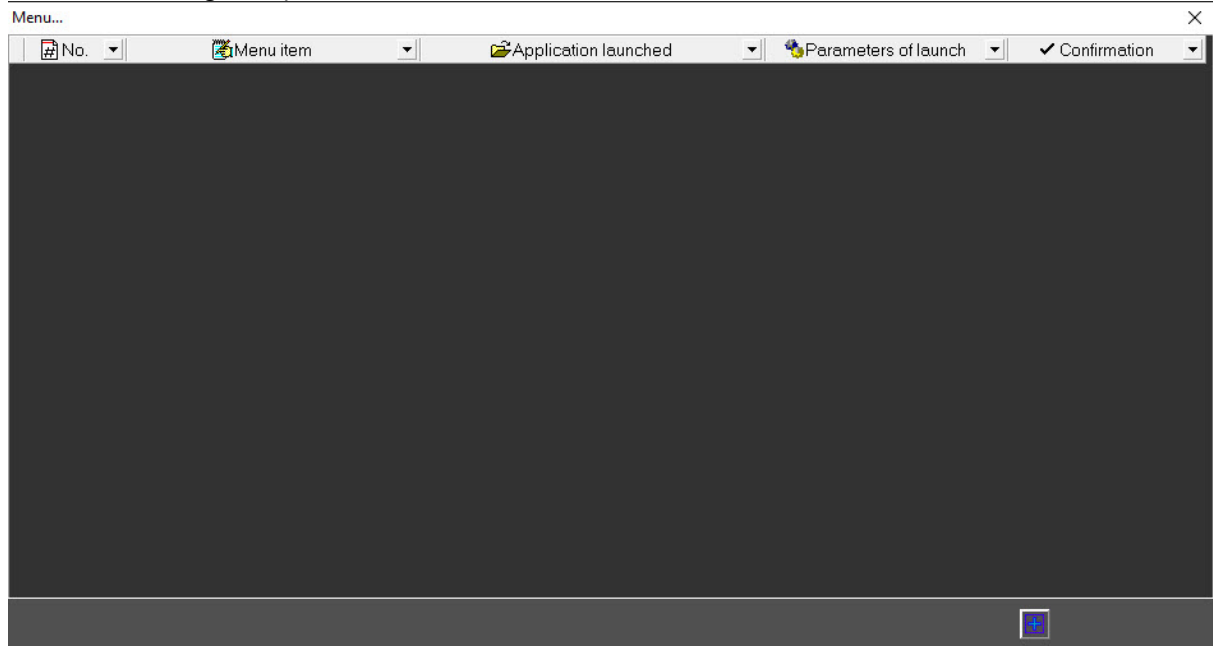
Scripts to process incoming commands are to be created on the *Agent of Control*. See [Sample script for processing Server of Control command on Agent of Control](#) section of [Administrator's Guide](#).


Configure command sending on the *Server of Control* as follows:

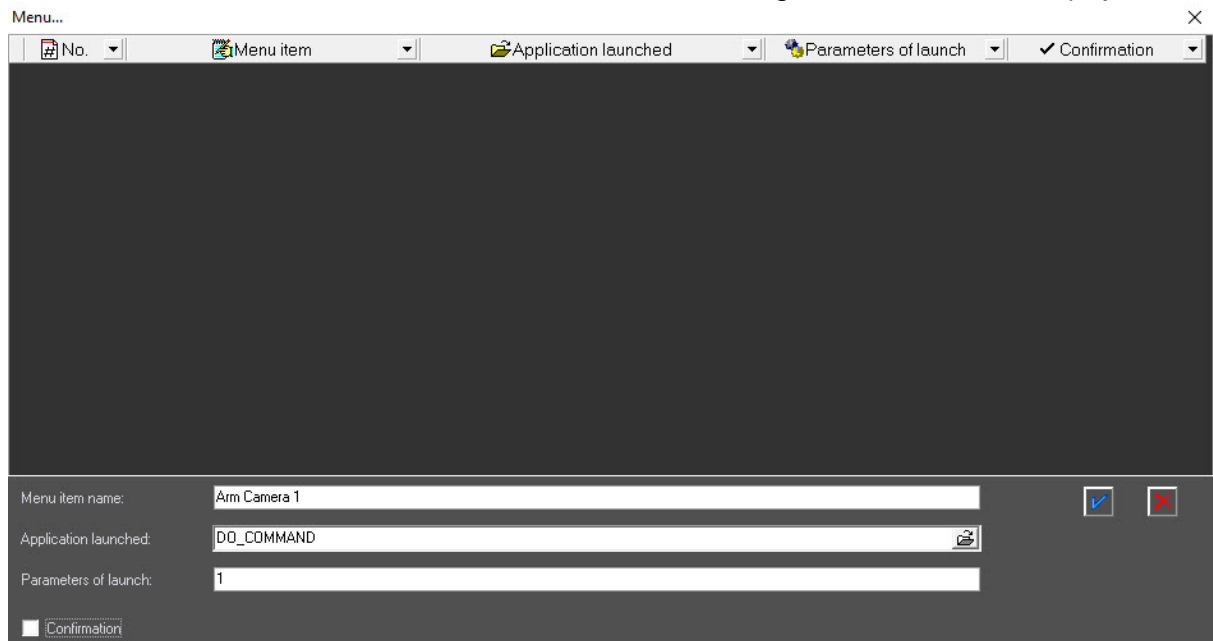
1. Right-click the area that contains the object's name and select the **Menu...** item in the appeared context menu.




- The **Menu...** dialog box opens.

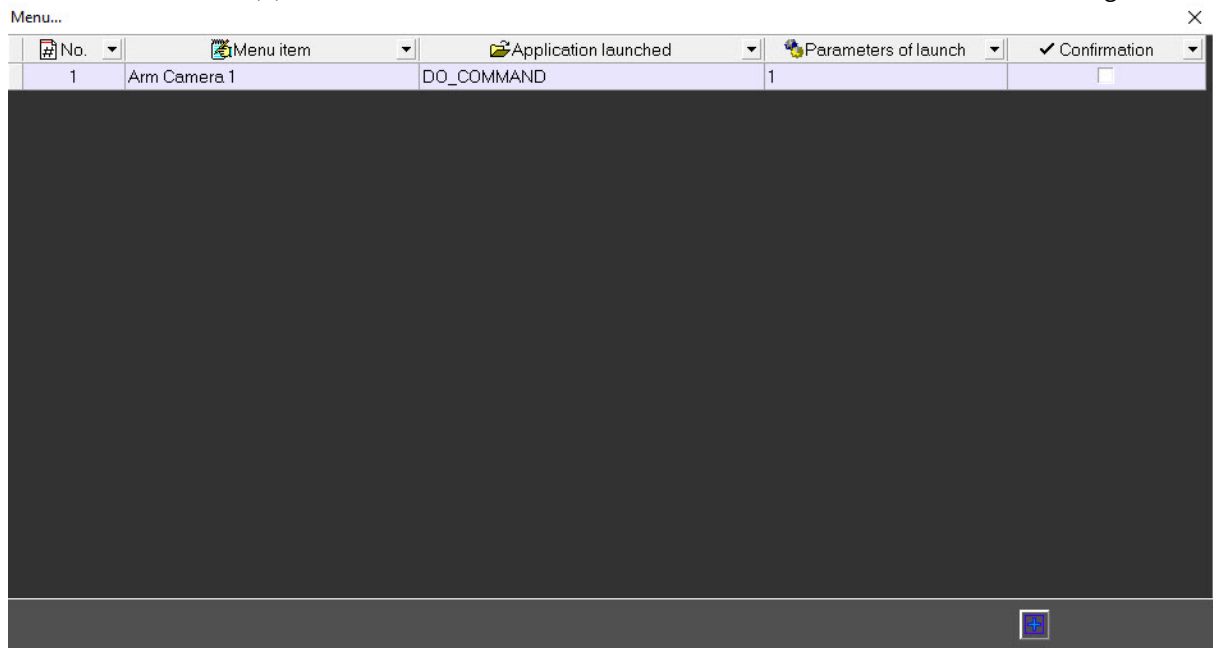


- Click the  button to add a new men item. The fields used to configure menu item will be displayed.



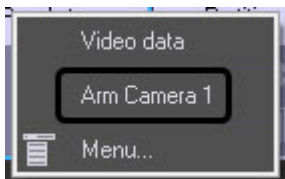
- In the **Menu item name** field enter the menu item name that will be displayed in the context menu on the **Control panel (1)**.
- Enter DO_COMMAND in the **Application launched** field (2).
- Enter the value for param0<> parameter in the **Parameters of launch** field (3). Using the value of this parameter in the script created on the *Agent of Control* one can find out what command is to be executed.

7. Click the  button (4). The command will be added to the list of commands in the **Menu...** dialog box.



8. Repeat steps 3-7 for all required commands and parameters.
9. Close the **Menu...** dialog box.

The added commands will be displayed in the context menu on the **Control panel**.



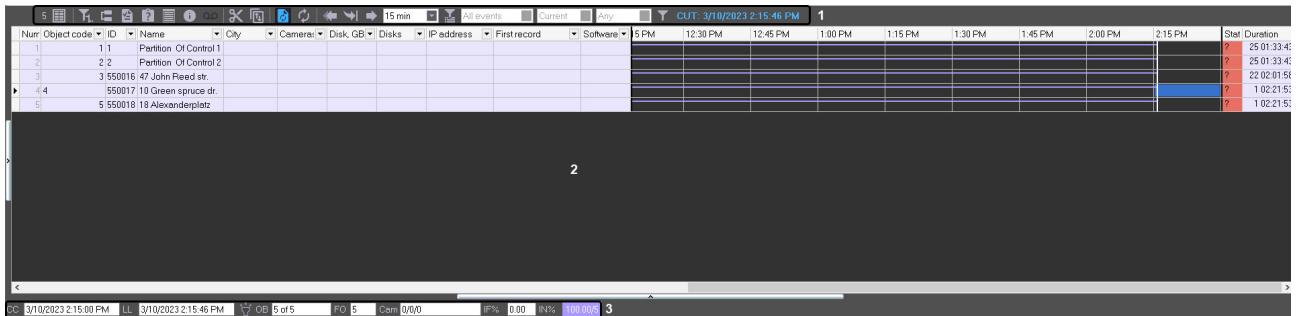
Command sending is now configured on the *Server of Control*.

3 Log panel

3.1 Log panel interface

The **Log panel** has three main parts:


1. Control buttons panel.
2. Working area.
3. Status bar.

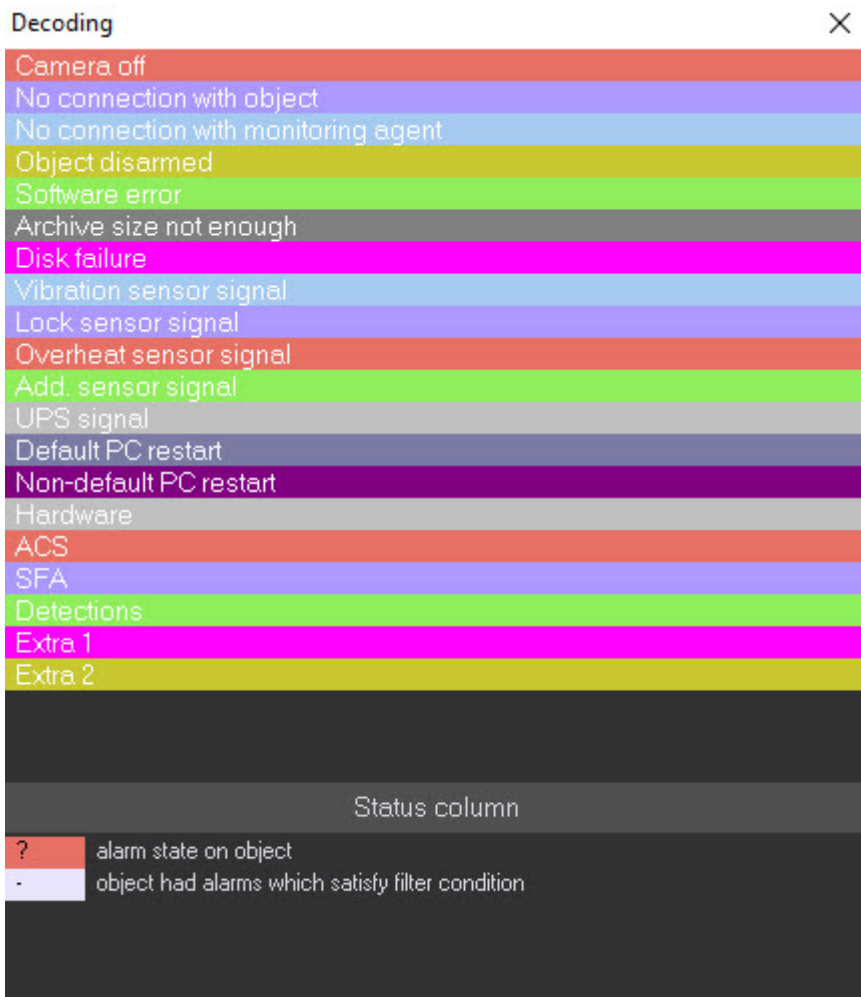


Note

By default, the dark interface theme is set for the **Log panel**. To set the light interface theme, change the **OldLogPanel** parameter value to **1** (for details on this parameter, see [Registry keys reference guide](#). For details on working with the registry, see [Working with Windows OS registry](#)).

3.1.1 Color definitions for events

In the **Log panel**, alarms are shown as color stripes in a table. Each alarm type has its own color. You can learn the meaning of the colors by clicking the button  (**Information about symbols**). When you click this button, the information window opens.

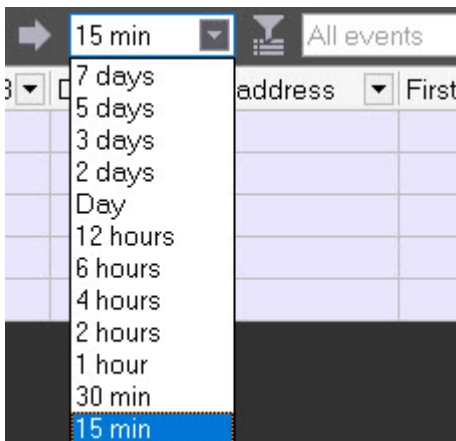


Vertical stripes mean short-term errors and horizontal stripes mean long-term errors (hardware failure).

Note.




Alarm types are described in the [Alarm types](#) section.


The length of a stripe shows the alarm's duration in accordance with the selected scale. The scale is a time period for one column.



3.1.2 Moving through the list of alarms

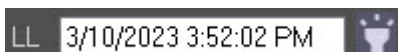
Each column's heading always contains the start time for the column's time period. Use the Left and Right keys and the horizontal scrollbar to move to any date within the loaded data.


To quickly move to the required date and time, use the button  (**Go to date**). Use the button  (**To end**) if you want to move to the end time of the last download. Use the button  (**To beginning of current error**) if you want to move to the start of the current error.

The data is loaded to the system at certain times only, so there is a need to refresh the data shown on the screen automatically. For that, you can use the button  (**Auto update**). If this button is in the pressed state, new alarm data is searched in the database. If such data is found, the view is refreshed and you can see the end of the shown data.

The date and time of the last update of the data displayed on the screen are indicated in the upper right corner of the window in the current update time (**CUT**) field (for more information on **CUT**, see [Current Update Time](#)).

If the **Auto update** button is in the unpressed state, the current view can get outdated. In this case, the date of the last download exceeds the **CUT**. To show this, a "bulb" flashes in the status bar.



The "bulb" shows that the current view is outdated and that you can refresh it with the button  (**Update date**). The list is also refreshed when you move to the end, select and apply a filter, and in many other cases.

3.1.3 Ignoring objects

Ignored objects are never shown on the screen. For how to work with ignored objects, see the [Ignoring objects](#) section.

3.1.4 Status bar

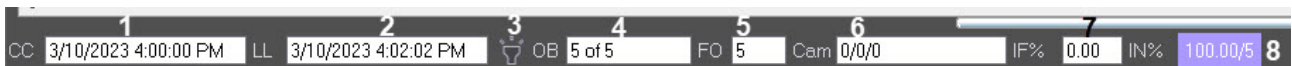
On this page:

- [General information](#)
- [Functioning and non-functioning rates](#)

General information

The status bar displays:


- **CC** - the start of the displayed period for the current cell column.
- **LL** - the time when the data was last loaded into the database.
- **OB** - the total number of "not ignored" objects.
- **FO** - the number of objects with hardware problems displayed at a given time.
- **Cam** - the camera statistics: total number of cameras at the facilities/number of working cameras/number of faulty cameras.
- **IF%** - the video surveillance system functioning rate.
- **IN%** - the video surveillance system non-functioning rate by reasons.



You can hover the mouse cursor directly over the status bar to display a tooltip.

- 1 CC - Current cell
- 2 LL - Last loading
- 3 CUT actuality
- 4 OB - Objects selected
- 5 FO - Current failure
- 6 Cam - Cameras: total/OK/faulty
- 7 IF% - Index of functioning
- 8 IN% - Index of non-functioning due to

⚠ Attention!

If filtering is enabled, then in order to calculate rates (**IF%** and **IN%**) and camera statistics (**Cam**) only for filtered objects, click  (**Count indexes and cameras only in filtered table strings**).

Functioning and non-functioning rates

Note

Functioning (**IF%**) and non-functioning (**IN%**) rates are calculated only for “not ignored” objects. For “ignored” objects, rates are not calculated and the filter is never used (see [Ignoring objects](#)). Zero values of non-functioning rates are not shown on the status bar. Rates (**IF%** and **IN%**) are not calculated if **Alarms**, **Failures** or **Disconnected** filter is enabled (see [Number of alarms displayed](#)).

Functioning rate (**IF%**) is calculated according to the following formula:

(1-Nnf/Na)*100, where

- **Nnf** is the number of objects that do not function properly;
- **Na** is the total number of objects.

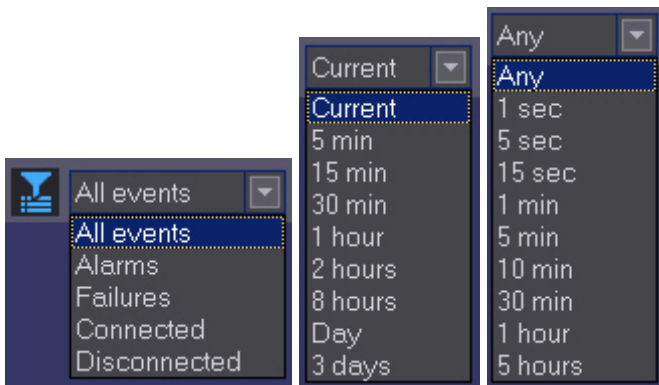
The non-functioning rate (**IN%**) for a particular reason is calculated according to the following formula:

(Nnfbr/Na)*100, where


- **Nnfbr** is the number of objects that do not function properly for this particular reason;
- **Na** is the total number of objects.

3.2 Number of alarms displayed

The number of objects shown in the **Log panel** or **Control panel** is defined by the current filter if it is enabled with the filtering button  (**Enable/disable filteres**).



The left list allows to show objects with alarms of failures only, the connected or disconnected objects only. The middle list shows time periods. If there was an alarm during the selected period, it is included on the list. The right list shows the alarm durations that trigger the filter. For example, if you set the filter to "Current - 1 minute", only those objects are shown that are currently in the alarm state and that have already been in this state for 1 minute or more. If you set the filter to "Day- 5 hours", only those objects are shown that have at least once been in the alarm state in the last 24 hours and that were in this state for at least 5 hours.

To calculate rates (**IF%** and **IN%**) and camera statistics (**Cam**) only for filtered objects, click  (**Count indexes and cameras only in filtered table strings**). If **Alarms**, **Failures** or **Disconnected** filter is enabled, rates are not calculated.


3.3 Object status

The **Status** column shows the objects' status. Its color and contents are explained in the **Information about symbols** panel (see the [Color definitions for events](#) section). Note that the **Status** column in the **Log panel** is shown in red only if there is at least one current long-term alarm.

3.4 Alarm duration

The table's last column (**Duration**) shows the duration of the current alarm for an object in days hh:mm:ss format.

3.5 Information about an object


Click  (**Show Inspector Ctrl+I**). A special area appears. This area contains short information about the selected object. The lower part contains the **Fields** tab.

The screenshot shows the Log panel interface. On the left, there is a sidebar with a tree view of object details for object 3 (ID 550016, Name 47 John Reed str.). The main area displays a table of objects with columns: Number, Object, ID, Name, City, Cameras, Disk, GB, Disks, IP address, First record, Software version, and a time column (8:45 AM). The table contains five rows of data.

Number	Object	ID	Name	City	Cameras	Disk, GB	Disks	IP address	First record	Software version	
1	1	1	Partition Of Control 1								
2	2	2	Partition Of Control 2								
3	3	550016	47 John Reed str.								
4	4	550017	10 Green spruce dr.								
5	5	550018	18 Alexanderplatz								


The information is shown (according to the options selected) as columns in the main list of the **Log panel**.

Number	Object	ID	Name	City	Cameras	Disk, GB	Disks	IP address	First record	Software version	
1	1	1	Partition Of Control 1								8:45 AM
2	2	2	Partition Of Control 2								
3	3	550016	47 John Reed str.								
4	4	550017	10 Green spruce dr.								
5	5	550018	18 Alexanderplatz								

To get more detailed information about an object, select it in the **Log panel** and click  (**Show details**). The **Details** window opens.

The screenshot shows the Details window. It contains a table with columns: Object code, ID, Name, Cameras, Disk, GB, Disks, IP address, First record, Disks temp., CPU usage, %, Memory, MB, Total memory, MB, Work duration, Software version, and Core version. The table lists five objects, with object 3 (ID 550016, Name 47 John Reed str.) selected.

Object code	ID	Name	Cameras	Disk, GB	Disks	IP address	First record	Disks temp.	CPU usage, %	Memory, MB	Total memory, MB	Work duration	Software version	Core version
1	1	Partition Of Control 1												
2	2	Partition Of Control 2												
3	550016	47 John Reed str.												
4	550017	10 Green spruce dr.												
5	550018	18 Alexanderplatz												

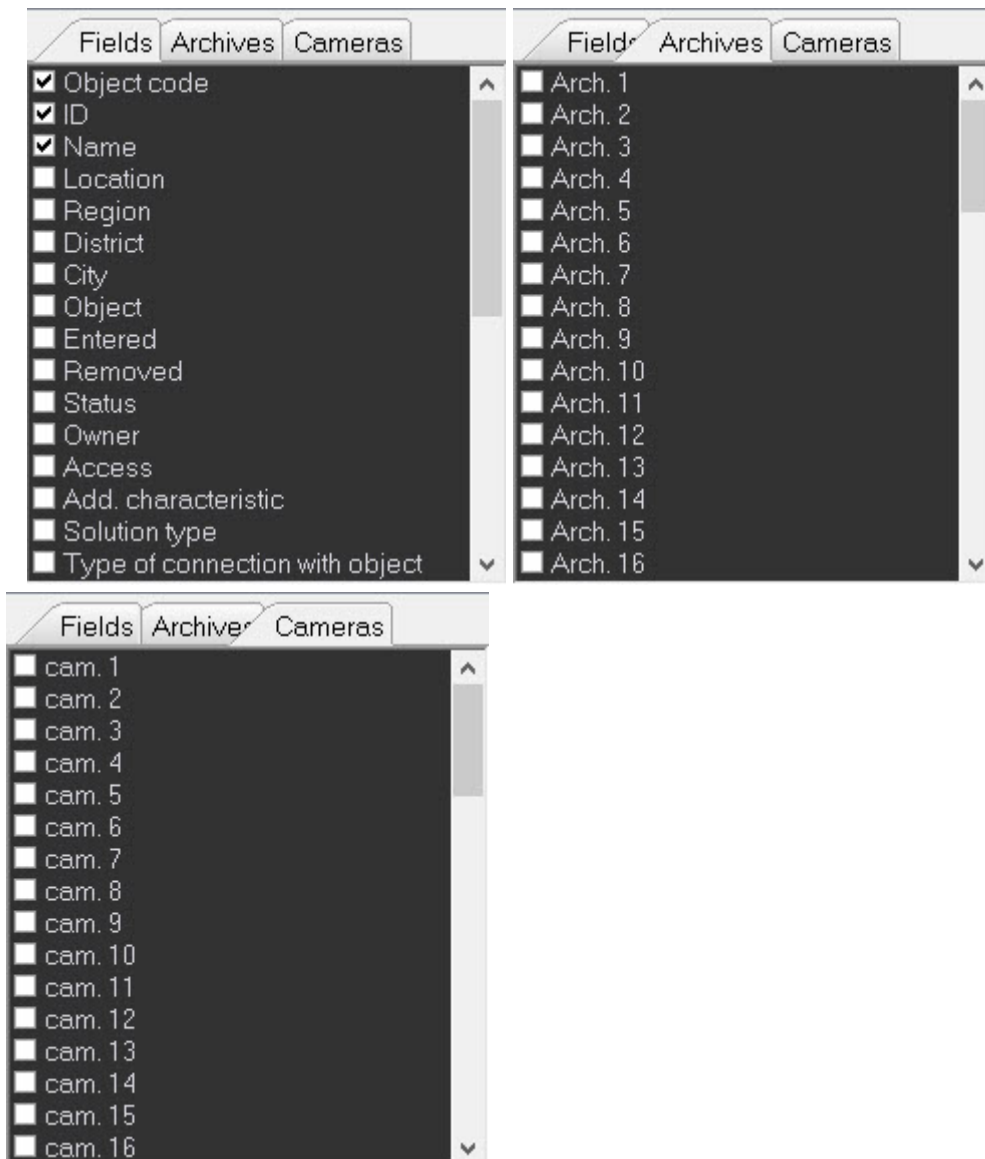
In the **Details** window, click  (**Show Inspector Ctrl+I**). A special area appears. The upper part of this area contains information about the selected object.

The screenshot shows the Details window with the Inspector panel open on the left. The Inspector panel displays detailed information for the selected object (ID 550016, Name 47 John Reed str.), including fields like Cameras, Disk, GB, Disks, IP address, First record, Disks temp., CPU usage, %, Memory, MB, Total memory, MB, Work duration, Software version, and Core version. The main table in the background shows the same five objects as in the previous screenshot.

 **Note.**

If the **Owners panel** is in use, then information about only the objects that belong to the owner selected on the **Owners panel** is displayed in the **Details** window. To view the details about all system objects, call this window on the **Owners panel** – see [Viewing details on alarms for all system objects](#).

The lower part of the area contains three tabs: **Fields**, **Archives**, and **Cameras**. The information is shown (according to the options selected) as columns in the main list of the **Details** window.



The data in the **Cameras**, **Disk**, **GB**, **Disks**, and **Software version** fields and in all the fields in the **Archives** and **Cameras** tabs are filled in automatically when packets with technical information are received from the objects. If these fields are empty for an object, it means that the object never connected yet.

The **Cameras** field shows the number of cameras for the object.

The **Disk**, **GB** field shows the maximum free space for all the logical disks where recording is performed.

The **Disks** field shows the number of logical disks where recording is performed.

The **Software version** field shows the version of *Agent of Control* installed at the site.

The fields in the **Archives** tab show the current depth of the video archive in days for each camera.

Note

For detailed information on the archives of the selected object, see [Info on archives](#).

The fields in the **Cameras** tab show the current status of each camera (**on/off**).

The **IP address** field displays the IP address of the object.

The **First record** field shows the date of the very first entry in the video archive from all cameras.

Field **Disks temp.** shows the temperature of the hard drives separated by a comma if there are several disks.

The **CPU usage,%** field shows the CPU load as a percentage (updated every 15 minutes).

Note

Starting with Windows 8, the calculation of CPU load in the task manager has changed:


- For Windows 8 and newer OS, the **% Processor Utility** counter is used for the CPU usage calculation;
- For older operating systems, the **% Processor Time** counter is used.

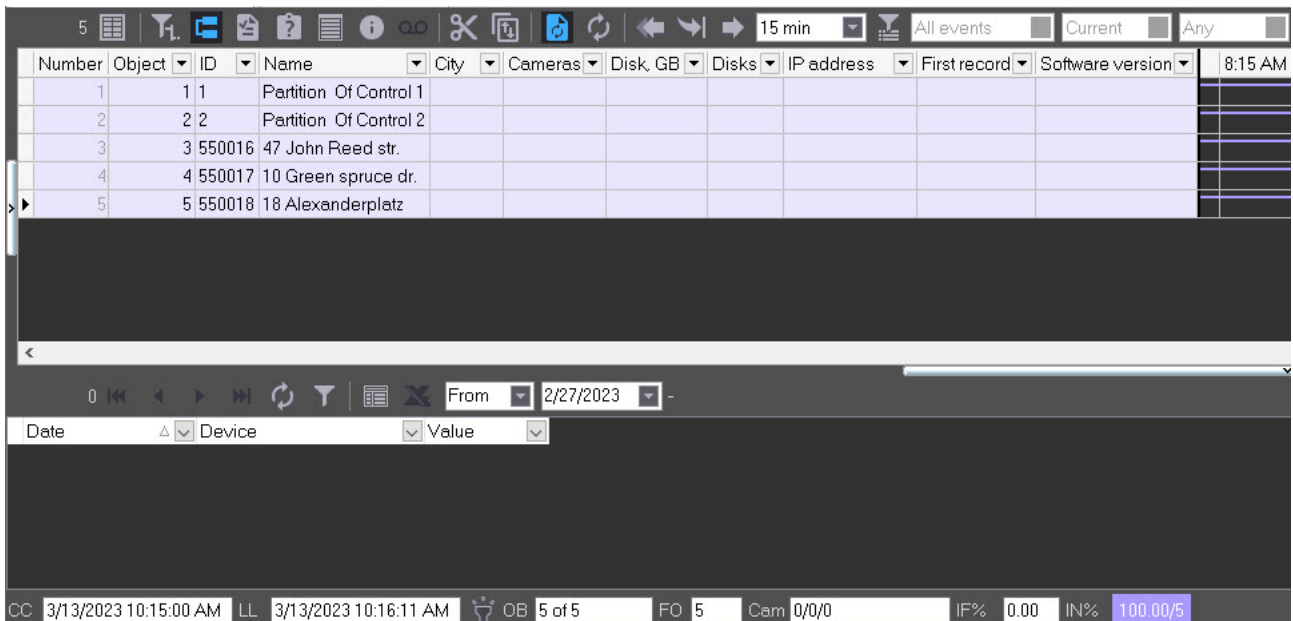
The **Memory, MB** field shows the amount of available physical memory in MB.

The **Work duration** field shows the time of continuous operation of the psim.exe\psim64.exe process on the object in the format "d hh:mm", where "d" - day "hh" - hours "mm" - minutes.

The **Total memory, MB** field shows the total size of physical memory in MB.

The **Core version** field shows the base *Axxon PSIM* version at the site.

Click the button  (**Show characteristics of devices**). A special area appears. There you can see changes for these values (**Cameras, Disk, GB, Disks, Software version** and others).



Number	Object	ID	Name	City	Cameras	Disk, GB	Disks	IP address	First record	Software version	
1	1	1	Partition Of Control 1								8:15 AM
2	2	2	Partition Of Control 2								
3	3	550016	47 John Reed str.								
4	4	550017	10 Green spruce dr.								
5	5	550018	18 Alexanderplatz								

Date	Device	Value
3/13/2023 10:15:00 AM	LL	3/13/2023 10:16:11 AM
	OB	5 of 5
	FO	5
	Cam	0/0/0
	IF%	0.00
	IN%	100.00/5

3.6 Selecting an object on the Log panel

When you select an object on the **Log panel**, the **VIDEOSRV_M|n|OBJECT_SELECTED|obj_id<id>,obj_name<name>** event is sent to *Axxon PSIM*, where **n** is the index number of the **Monitoring** interface object, **id** is the object identifier, **name** is the object name.

You can view the event in the **Debug window** (see [Enabling the Debug window](#)).

The screenshot shows the Monitoring interface with a table of objects. The table has columns: Number, Object code, ID, Name, City, Cameras, Disk, GB, Disks, IP address, First record, Software version, and Time. The third row is selected, showing ID 550016 and Name 47 John Reed str. Below the table is a Debug window with a search bar and a list of events. The selected event is: Event : VIDEOSRV_M|1|OBJECT_SELECTED|slave_id<WIN-ONGRC3HKQFG>,fraction<810>,owner<WIN-ONGRC3HKQFG>,obj_id<550017>,module<videosrv_m.run>,obj_name<10 Green spruce dr. >. The event text is highlighted in blue.

This feature can be used to create various scenarios using scripts, for example, to display an object scheme when it is selected in the **Monitoring** interface object. In this scenario, the operator selects an object in the *Monitoring PSIM* interface, and a pre-created diagram or map of the selected object is displayed on another monitor. Objects are visualized using scripts; for this, the **OBJECT_SELECTED** event from the **VIDEOSRV_M** object is processed.

When you select an object on the **Control panel** (see [Selecting an object on the Control panel](#)), the event is sent to *Axxon PSIM* in the similar way.



3.7 Exceeding the allowed number of failures

If the number of failures for a displayed object exceeds 500, then alarms for the object have no details and its background gets pink.

The screenshot shows the Monitoring interface with a table of failures. The table has columns: ID, 6:15 AM, 6:30 AM, 6:45 AM, 7:00 AM, 7:15 AM, 7:30 AM, 7:45 AM, and 8:00 AM. The third row is selected, showing ID 550016. The background of the selected row is pink, indicating that the number of failures has exceeded the allowed limit.

The number of failures is calculated not for each interval, but for a range of intervals. Consider the case depicted in the figure. Here, the calculation is performed for eight columns of 15 minutes. Even if the maximum number of failures is exceeded in three columns, the background of all eight columns gets pink.

3.8 Forcing the confirmation of alarms

Sometimes an alarm must not be considered as an alarm. To close the alarm forcibly, click the button  (**Close error forcibly**). To see the list of errors closed in such a way, click the button  (**Show closed errors**). An additional table in the right part of the screen.

From	2/11/2023	-
Name	Beginning	Closed on
Partition Of Cont	2/13/2023 12:42:03	3/13/2023 1:36:0
10 Green spruce	3/9/2023 11:53:53	3/13/2023 1:45:0

You can double click on an entry in the alarm display area to see the dialog box with an explanation for the errors for the time period of this cell.

The screenshot shows the PSIM monitoring interface. At the top, there is a table of alarms with columns for Name, Beginning, and Closed on. Below this, a detailed error dialog box is open, titled 'Error decoding: 47 John Reed str.'. The dialog box contains a table with columns for Beginning, End, Duration, Reason, and device. The data in the dialog box is as follows:

Beginning	End	Duration	Reason	device
3/16/2023 12:13:48 PM		25 01:35:37	No connection with object (Communicatio	

The dialog box also includes a summary line: 'From 2/16/2023 12:13:48 PM to 3/13/2023 1:49:25 PM downtimes: 1'. The background shows a grid of time slots and a list of objects on the left.

You can double click the area with regulatory and reference information to open the dialog form with a short description of device data.

The screenshot shows the PSIM interface with a table of objects and a detailed 'Record' window for object 3.

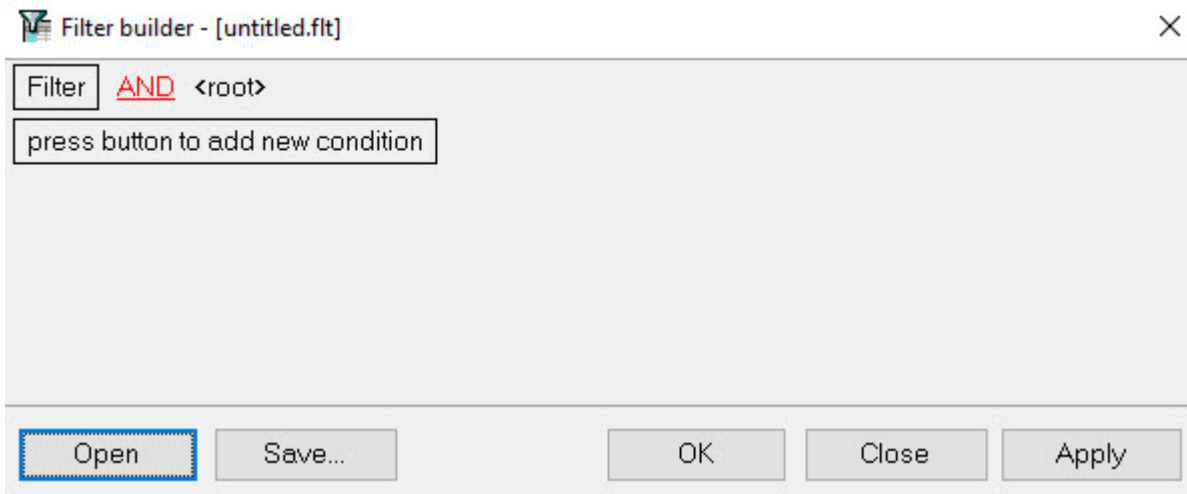
Number	Object code	ID	Name	City	Cameras	Disk, C
1		1 1	Partition Of Control 1			
2		2 2	Partition Of Control 2			
3		3 550016	47 John Reed str.			
4		4 550017	10 Green spruce dr.			
5		5 550018	18 Alexanderplatz			

Record	
Number	
Object code	3
ID	550016
Name	47 John Reed str.
Region	
District	
City	
Cameras	
Disk, GB	
Disks	
IP address	
First record	
Disks temp.	
Memory, MB	
Work duration	
Software version	


3.9 Custom filter in the Log panel

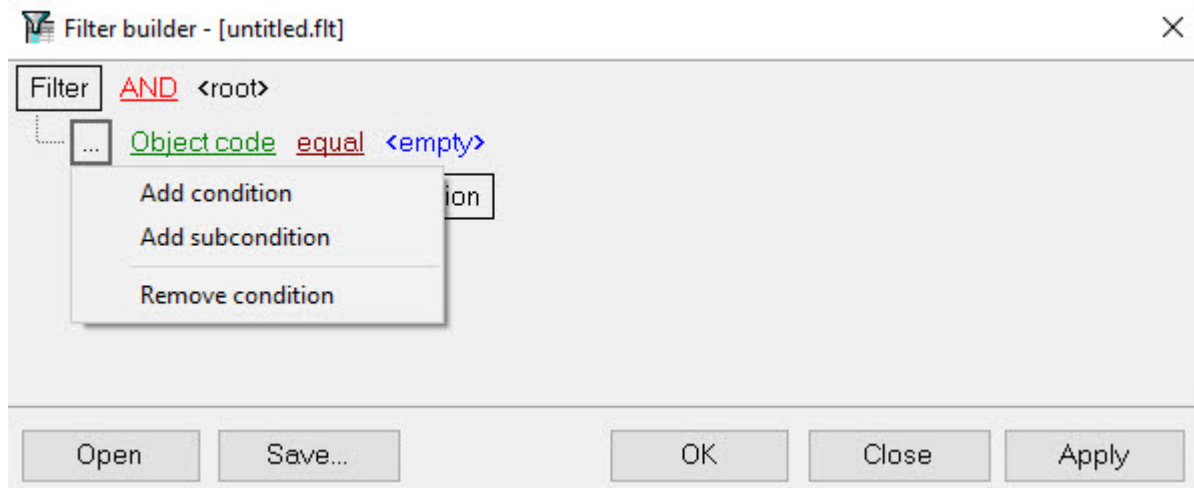
In addition to the basic filters by the time of registration and the duration of the alarms (see [Number of alarms displayed](#)), it is possible to configure a custom filter to display certain alarms depending on the conditions. This filter is applied to both the **Log panel** and the **Control panel**.

Click  to set up the custom filter. The **Filter builder** dialog opens.



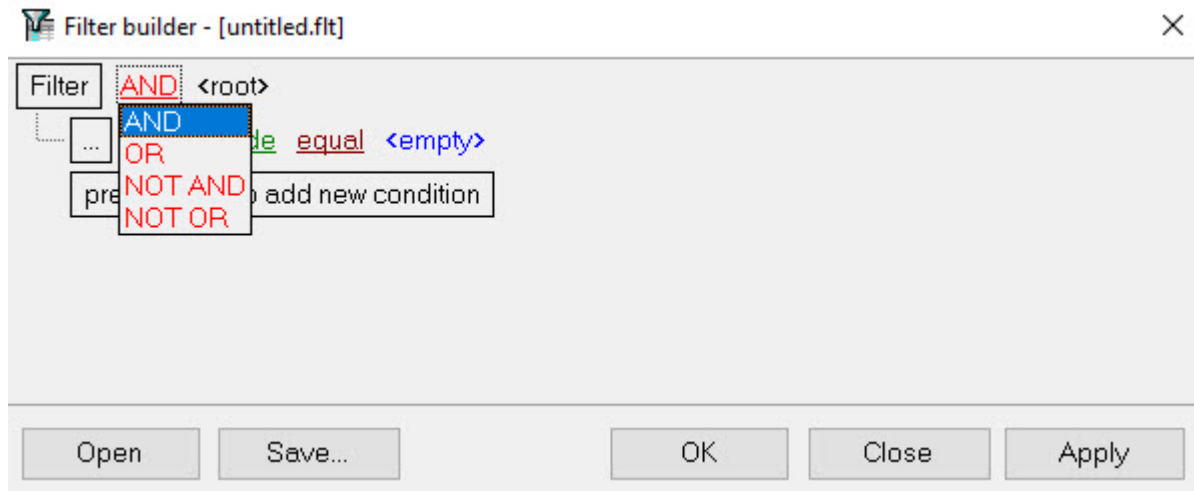
The following operations can be required for setting the filter:

1. Add a condition or subcondition. To add a condition click the **press button to add new condition** button or in the filter menu click the corresponding item. The condition menu opens by clicking the  or **Filter** button.

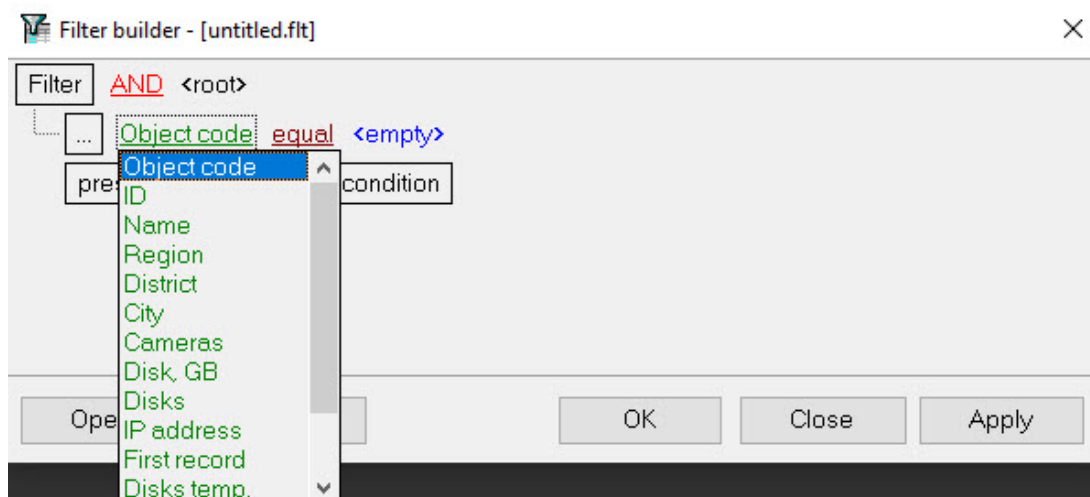


2. Remove a condition. To remove a condition, click the corresponding item in the condition menu.

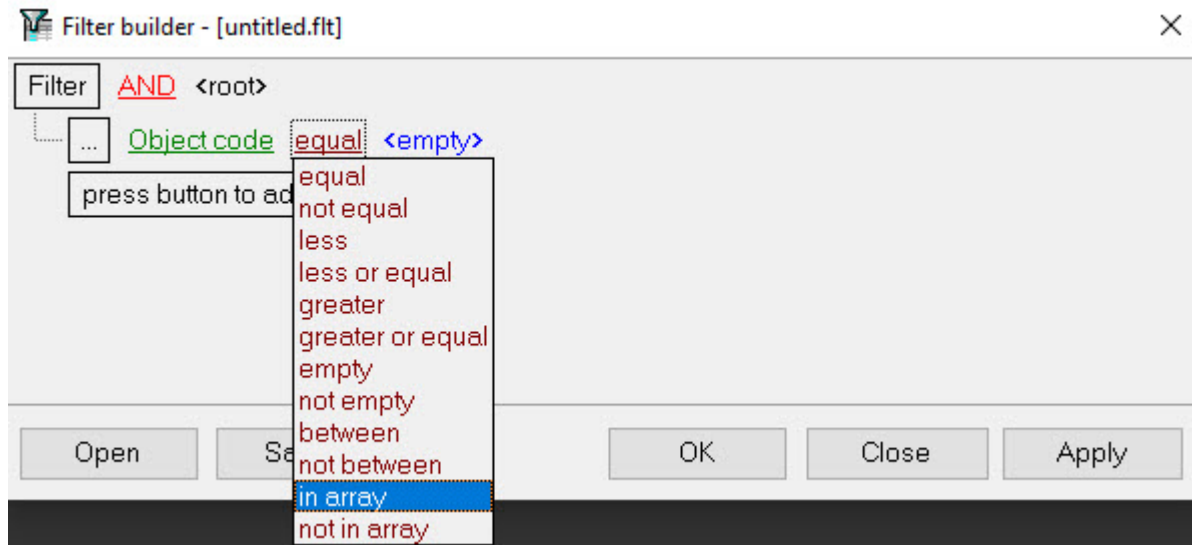
3. Select a logical function for combining conditions. A drop-down list for selecting the logical function opens on the left-click on the logical function.



4. Select a field for comparison. A drop-down list for selecting the field for comparison opens on the left-click on the field name.

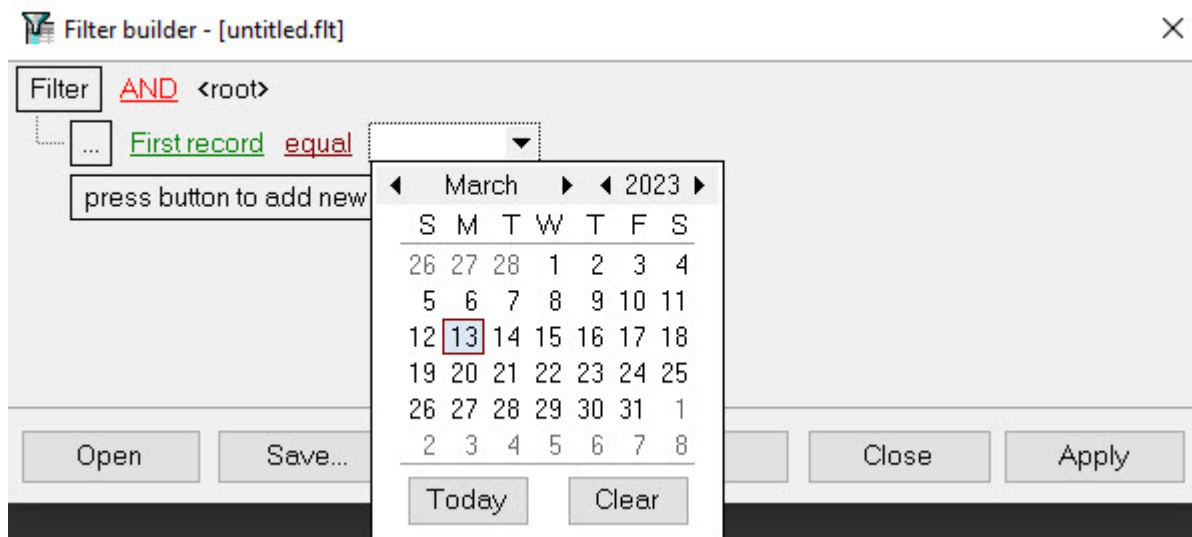


- Select a method of comparing. A drop-down list for selecting the method of comparing opens on the left-click on the method name.

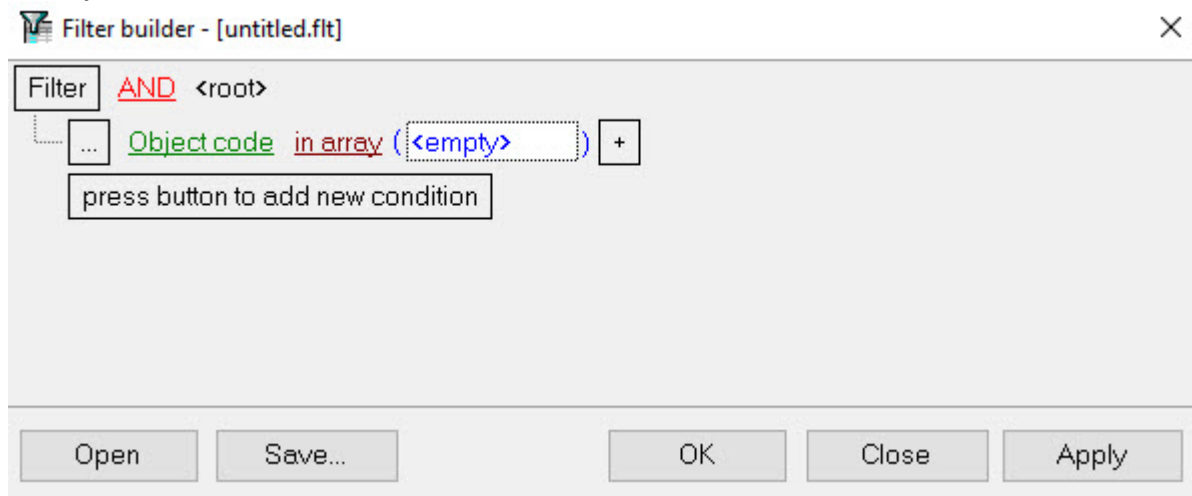


- Select a value for comparing with. A way to select the value depends on the field type. For example, a date can be set using a calendar, a name can be entered in a field, etc.

Data selection:



An array of values:



After completing settings, the filter can be saved to a file with the .flt extension by clicking the **Save...** button. This file can then be opened using the **Open** button.

The custom filter on the **Log panel** can be set by a script – see [Monitoring PSIM Administrator's Guide](#), section [Sample script for setting custom filter in the Log panel](#).

3.10 Info on archives

To display information on archives, select an object and click the  (**Info on archives**) button.

As a result, the information on the archives of all cameras of the selected object will be displayed in a new window.

Number	Camera	Threshold, days	Current, days	Total, days	Period, days	Occupation, %	Connection	First record	Last record	Alarm	Loop
1	Camera 1	7	2	7	9	30	4/20/2020	4/20/2020	5/8/2020	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2	Camera 2	7	2	3	9	23	4/30/2020	4/30/2020	5/8/2020	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The information on archives includes:

Number — video camera number.

Camera — video camera name.

Threshold, days — required archive depth on video camera. This is the **Keep archive for (days)** parameter specified in the *Partition of Control* settings.

Current, days — current archive depth.

Total, days — total archive size for all time.

Period, days — the period for which the archive is monitored. If the archive is monitored for all time (the default setting of *Agent of Control*), then this value equals to **0**.

Occupation, % — fullness of the archive in percent. The parameter is calculated by the formula: the number of days from the oldest archive entry to the current date, in which the archive exists, divided by the number of days from the oldest archive entry to the current date, and multiplied by 100.

If the archive was not recorded at all, then the parameter **Occupation, %** = 0. If this value is close to 100%, then there is no empty space in the archive.

Connection — video camera connection date.

First record — the date of the earliest record in the archive.

Last record — the date of the latest entry in the archive.

Alarm — indication that the current archive depth does not meet the requirements. If the archive is in an alarm state, then it is highlighted in red.

An archive alarm is generated when the following two conditions are met simultaneously:

- Current video archive depth (**Current, days** column) < **Keep archive for (days)**;
- ("Current date" - "Camera connection date" (**Connection** column)) > **Keep archive for (days)**.

Loop — a sign that the camera is recording on the loop.

The *Agent of Control* calculates the size of the video archive depth for each video camera every 15 minutes.

Note

An example of calculating the current video archive depth:

Suppose that the following parameters for **Camera 1** object were set when the list of cameras was configured (see [Configuring the camera list](#)):

- **Keep archive for (days)** = 7
- **Gaps in the archive (days)** = 1
- **Camera connection date** = 04/20/2020

Suppose that at the time of the current date 05/10/2020, the video was recorded to the archive on the following days: 04/20, 04/21, 04/22, 04/28, 04/30, 05/07, 05/08. That is, the total archive size = 7 days (the **Total, days** column).

The size of the current video archive depth (the **Current, days** column) is calculated as follows:

- In the date range from (Current date - X) to Current date, the search is performed for days on which the archive was recorded, where X is the number of days = **Keep archive for (days)** + **Gaps in the archive (days)** + 1. In the current example X = 7 + 1 + 1 = 9 (the **Period, days** column).
- In the date range 05/02/2020 - 05/10/2020 (for the last 9 days), the archive is present only on 05/07/2020 and 05/08/2020.

Thus, the video archive depth for the **Camera 1** object = 2 days (the **Current, days** column).

Size of the current archive occupancy (**Occupation, %** column) for the **Camera 1** object is calculated as follows:

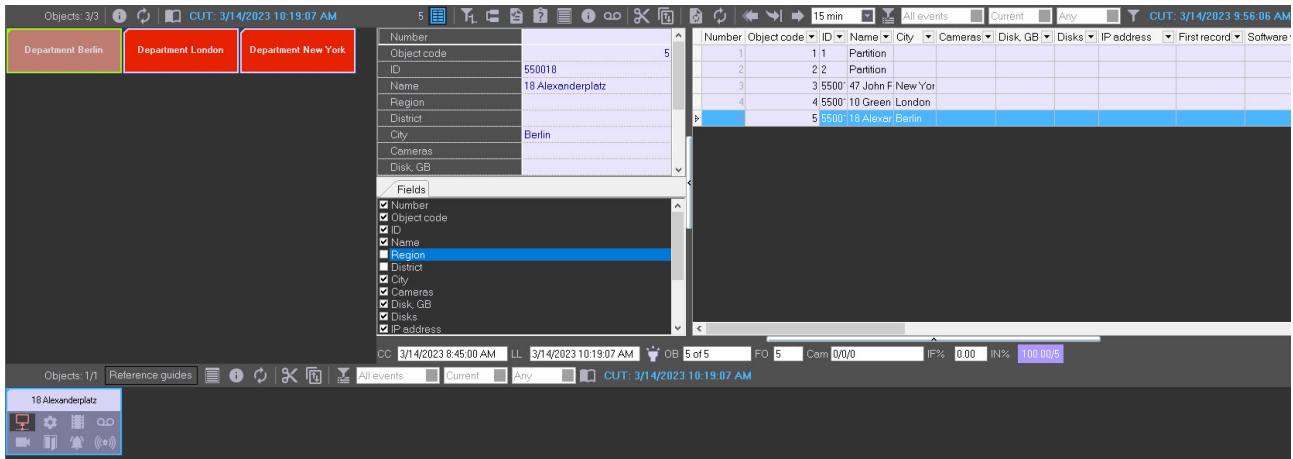
Total, days * 100 / (Current date - **First record** + 1).

7 * 100 / 21 = 33%.

4 Owners panel

4.1 Owners panel interface

The **Owners panel** always operates along with the **Control panel**. The **Owners panel** interface is shown on the figure.




Owners are represented on the panel as rectangles. The color of the rectangle indicates whether there are alarms on the objects that belong to the owner:

1. White (there are no errors on the objects that belong to the owner);
2. Red (on the objects that belong to the owner there are errors and alarms that are not confirmed by the operator);
3. Pink (on the objects that belong to the owner there are errors that are confirmed by the operator).

Left-click the owner, the rectangular is framed blue and only those objects that belong to the owner are shown on the **Control panel**.

Depending on the rights of the current user specified during the system setup (see the [Configuring the Monitoring interface object](#) section of the [Administrator's Guide](#)), not all owners registered in the system may be displayed on the **Owners panel**. The information on the displayed and total number of owners is presented in the upper left part of the **Owners panel**.

Information on the **Owners panel** is updated after every data loading from the database. The date and time of the last update of the data displayed on the screen is indicated in the upper right corner of the window in the Current

Update Time (**CUT**) field. To update the displayed data, click the  button. If there are new data in the database, they will be displayed on the **Owners panel**.

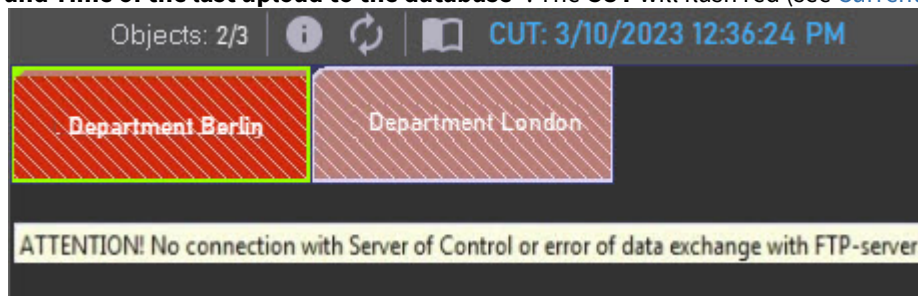
According to the user rights set at the stage of system configuration (see [Configuring the Monitoring interface object](#) section of [Administrator's Guide](#)), not all the owners registered in the system can be displayed on the **Owners panel**. Information on the displayed and total number of owners is shown in the upper-left of the **Owners panel**.

CUT: 3/14/2023 9:56:06 AM

By default, if the **MonitorSSTV** database has not been updated for more than 30 minutes, for example, due to a *Data Loader* malfunction or if the communication module (license restrictions) has stopped working on the *Server of Control*, then:

1. On the *Server of Control*, all owners will be covered with diagonal lines. When you hover over such an owner, a contextual prompt will appear: **ATTENTION! Information in DB is outdated! Last update time: <Date**

and Time of the last upload to the database>. The **CUT** will flash red (see [Current Update Time](#)).

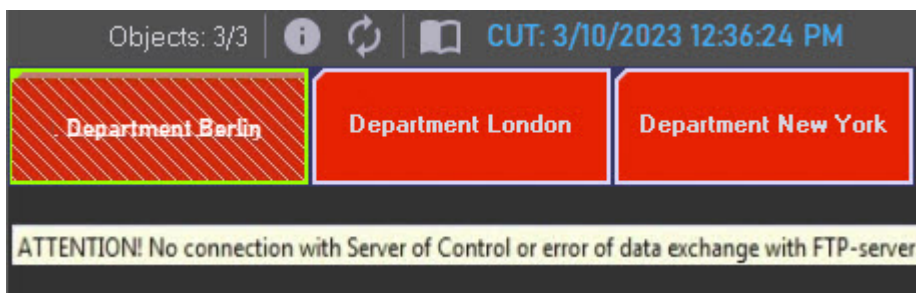


2. On the *Central Server of Control*, only the *Servers of Control* with outdated info will be covered with diagonal lines. When you hover over such an owner, a similar contextual prompt will appear. However, the **CUT** will remain blue and will not flash.


Note

To change the waiting time for updating the **MonitorSSTV** database, after which the corresponding indication on the *Server of Control/CSC* will appear, it is necessary to set the required time value in minutes for the **LastLoadThreshold** registry key (for details, see [Registry keys reference guide](#), for more information about working with the registry, see [Working with Windows OS registry](#)).

If there is no connection between the *Central Server of Control* and the *Server of Control*, or if there is a problem in data exchanging with the FTP server (for example, an incorrect password), then only the *Servers of Control* with this problem will be covered with diagonal lines. When you hover over such an owner, a contextual prompt will appear: **ATTENTION! No connection with Server of Control or error of data exchange with FTP server!** The **CUT** will remain blue and will not flash.



4.2 Viewing Event log for all objects

To view all the events logged in the *Monitoring PSIM* software package click the  (**Event log**) button on the **Owners panel**. The **Event log** window appears. This table can be sorted by any column or the column can be filtered.




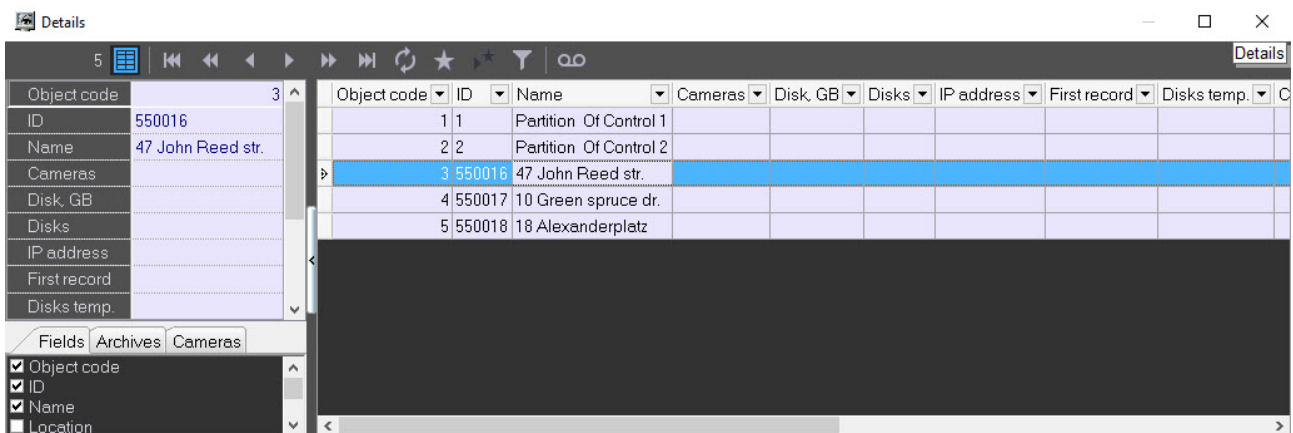
Note.

To view all the events logged for objects that belong to the selected owner, call the **Event log** window on the **Control panel** – see [Event log](#).

Use the **Event log** window in the same way as you use it on the **Control panel** – see [Event log](#).

4.3 Viewing details on alarms for all system objects

To view the details about all system objects click the  button on the **Owners panel**. The **Details** window appears.



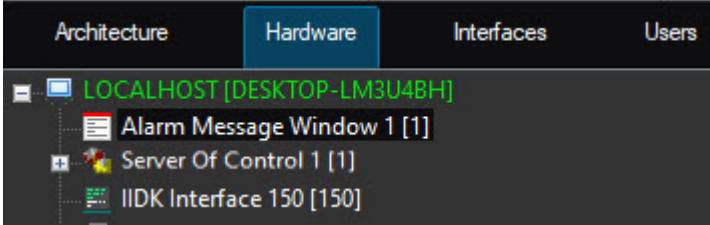
Note.

To view all the events logged for objects that belong to the selected owner, call the **Details** window on the **Control panel**.

Use the **Details** window in the same way as you use it on the **Control panel** and **Log panel** – see [Information about an object](#).

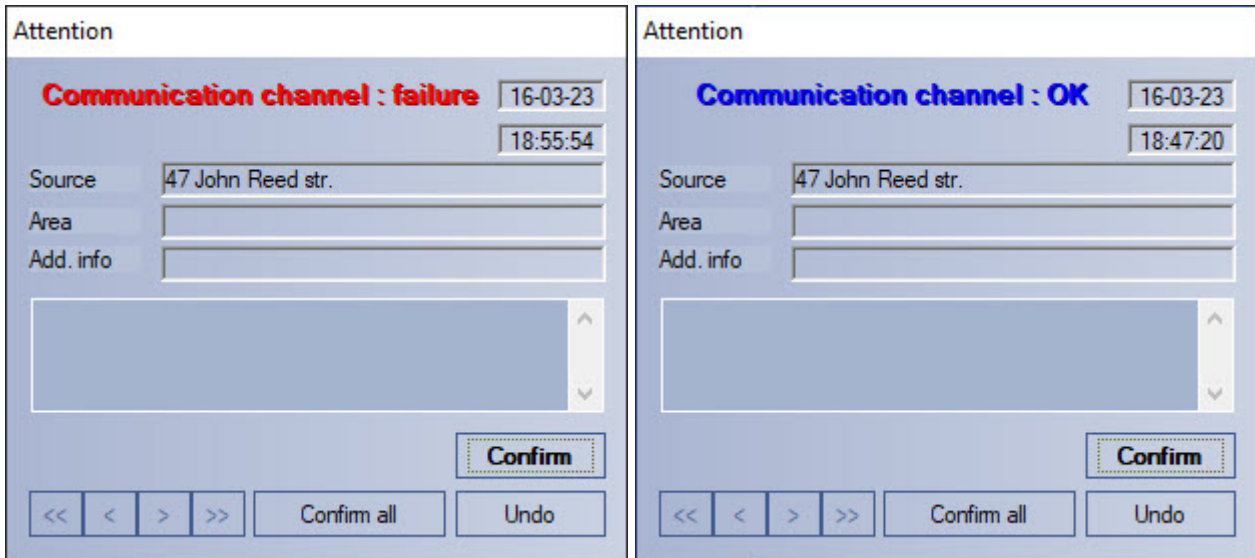
5 Alarm message window

To attract the extra attention to alarm situations use the **Alarm Messages Window** object.



If there is the **Alarm Message Window** object in the settings tree of *Axxon PSIM* software, the alarm situations will be displayed in the **Control panel** and **Log panel** interface objects and in the separate pop-up window. Examples of such pop-up windows are displayed in figures.

Alarm messages for Communication channel:



Alarm messages for camera enabling and disabling:

Attention

Camera disabled 16-03-23 18:56:22

Source 47 John Reed str.

Area

Add. info Camera 1 [id=1]

Confirm

<< < > >> Confirm all Undo

Attention

Camera enabled 16-03-23 18:48:21

Source 47 John Reed str.

Area

Add. info Camera 1 [id=1]

Confirm

<< < > >> Confirm all Undo

6 Search in archive

6.1 Purpose of the Search in archive component

The **Search in archive** component allows you to do the following:

1. Make and send requests for searching video frames with subtitles and receive video search results.
2. Make and send requests for video frames with or without subtitles and receive video search results.
3. Make and send requests (based on video search results) to an object's video archive, receive and view request results (video frames or video clips).
4. View and prints request results (video frames or video clips).

6.2 Request to a video archive by subtitles

To send a request to a video archive by subtitles (**By captions** mode), follow these steps:

1. Open the **Search in archive** component.

Search in archive Loads

Object name
[550016] 47 John Reed str.

Search

Period from: 3/ 6/2023 12:00:00 AM
to: 3/ 7/2023 5:25:23 PM

By captions: rec
 By video clips of all cameras
 By video clips of camera:

Data receive timeout (min.): 3

Search Cancel

Query
Video Frames

Settings

ID	Camera	Date and time	Text
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2. Select an object as follows:

- a. Click  in the **Object name** group.

- b. Select the object in the **Object selection** box.

ID	Name
550017	10 Green spruce dr.
550018	18 Alexanderplatz
550016	47 John Reed str.
1	Partition Of Control 1
2	Partition Of Control 2

Quick search

550016

ID Name

OK Cancel

- c. For quick search by object identification number, set the switch in the bottom of the box to **ID** and enter the number in the **Quick search** field. The match, if found, is displayed in the **Quick search** field while the corresponding object is automatically selected in the list.
- d. For quick search by object name, set the switch in the bottom of the box to **Name** and enter part or full name in the **Quick search** field. The match, if found, is displayed in the **Quick search** field while the corresponding object is automatically selected in the list.
3. Make a request for archive search by using the following parameters:
- In the **Period from:** field, set the date and time for the start of the search period.
 - In the **to:** field, set the date and time for the end of the search period.
 - Click the **By captions** option button.
 - Enter any keyword (available only if you click **By captions**).

 **Note**

- The **By captions** field is auto-filled. Each keyword entered in this field will be stored in the database and will be automatically inserted into the field upon retyping.
- To use the * symbol while searching by titles to search for any number of any characters, for example: card*.

- Set the waiting time by using the **Data receive timeout (min.)** field.
- Click **Search**.

Note

You can cancel the search at any moment by clicking **Cancel**.

- If the search completes successfully, the search result is displayed as a list of lines. The number of lines in that list is limited to 500.

The screenshot shows the 'Search in archive' interface. On the left, there is a search panel with the following fields and options:

- Object name:** [550016] 47 John Reed str.
- Search:**
 - Period from: 3/ 6/2023 12:00:00 AM
 - to: 3/ 7/2023 5:25:23 PM
 - By captions: rec
 - By video clips of all cameras:
 - By video clips of camera: Camera 1 [1]
 - Data receive timeout (min.): 3
- Query:** Video Frames

On the right, a table displays the search results:

ID	Camera	Date and time	Text
550016	Camera 1 [1]	3/7/2023 2:44:39 PM	Harddisk rec
550016	Camera 1 [1]	3/7/2023 2:44:35 PM	Record on disk stopped
550016	Camera 1 [1]	3/7/2023 2:44:20 PM	Harddisk rec
550016	Camera 1 [1]	3/7/2023 2:44:16 PM	Record on disk stopped
550016	Camera 1 [1]	3/7/2023 2:44:04 PM	Harddisk rec
550016	Camera 1 [1]	3/7/2023 2:44:02 PM	Record on disk stopped
550016	Camera 1 [1]	3/7/2023 2:43:11 PM	Harddisk rec
550016	Camera 1 [1]	3/7/2023 2:43:07 PM	Record on disk stopped
550016	Camera 1 [1]	3/7/2023 2:42:36 PM	Harddisk rec
550016	Camera 1 [1]	3/7/2023 2:42:32 PM	Record on disk stopped
550016	Camera 1 [1]	3/7/2023 2:42:25 PM	Harddisk rec
550016	Camera 1 [1]	3/7/2023 2:42:13 PM	Record on disk stopped
550016	Camera 1 [1]	3/7/2023 2:41:14 PM	Harddisk rec
550016	Camera 1 [1]	3/7/2023 2:40:59 PM	Record on disk stopped
550016	Camera 1 [1]	3/7/2023 2:40:35 PM	Harddisk rec
550016	Camera 1 [1]	3/7/2023 2:40:32 PM	Record on disk stopped
550016	Camera 1 [1]	3/7/2023 2:40:24 PM	Harddisk rec
550016	Camera 1 [1]	3/7/2023 2:38:16 PM	Record on disk stopped
550016	Camera 1 [1]	3/7/2023 2:38:14 PM	Harddisk rec
550016	Camera 1 [1]	3/7/2023 2:38:07 PM	Record on disk stopped

You can also make a request to the archive based on received data (see [Request for video frames from an object](#)).

Attention!

This data is requested from *Axxon PSIM*'s database at the object. If you want to change how long this data is stored, set the **Events archive length** parameter at the **Security zone** section at the **Programming** tab.

6.3 Request to a video archive by video clips

To send a request to the video archive by clips, follow these steps:

1. Open the **Search in archive** component.

Search in archive Loads

Object name
[550016] 47 John Reed str.

Search

Period from: 3/ 6/2023 12:00:00 AM

to: 3/ 7/2023 5:25:23 PM

By captions:

By video clips of all cameras

By video clips of camera:

Data receive timeout (min.): 3

Search Cancel

Query

Video Frames

Settings

ID	Camera	Date and time	Text
----	--------	---------------	------

2. Select an object as follows:

- a. Click  in the **Object name** group.

- b. Select the object in the **Object selection** box.

ID	Name
550017	10 Green spruce dr.
550018	18 Alexanderplatz
550016	47 John Reed str.
1	Partition Of Control 1
2	Partition Of Control 2

Quick search

550016

ID Name

OK Cancel

- c. For quick search by object identification number, set the switch in the bottom of the box to **ID** and enter the number in the **Quick search** field. The match, if found, is displayed in the **Quick search** field while the corresponding object is automatically selected in the list.
- d. For quick search by object name, set the switch in the bottom of the box to **Name** and enter part or full name in the **Quick search** field. The match, if found, is displayed in the **Quick search** field while the corresponding object is automatically selected in the list.
3. Make a request for archive search by using the following parameters:
- In the **Period from:** fields, set the date and time for the start of the search period.
 - In the **to:** fields, set the date and time for the end of the search period.
 - Click the **By video clips on all cameras** option button.

Note.

To search by video clips on a certain camera, click the **By camera clips** option button. Then select the ID of the required camera from the drop-down list.

4. Click **Search**. If the search completes successfully, the search result is displayed as a list of lines. The number of lines in that list is limited to 500.

ID	Camera	Date and time	Text
550016	Camera 1 [1]	3/7/2023 2:44:39 PM	Harddisk rec
550016	Camera 1 [1]	3/7/2023 2:44:35 PM	Record on disk stopped
550016	Camera 1 [1]	3/7/2023 2:44:20 PM	Harddisk rec
550016	Camera 1 [1]	3/7/2023 2:44:16 PM	Record on disk stopped
550016	Camera 1 [1]	3/7/2023 2:44:04 PM	Harddisk rec
550016	Camera 1 [1]	3/7/2023 2:44:02 PM	Record on disk stopped
550016	Camera 1 [1]	3/7/2023 2:43:11 PM	Harddisk rec
550016	Camera 1 [1]	3/7/2023 2:43:07 PM	Record on disk stopped
550016	Camera 1 [1]	3/7/2023 2:42:36 PM	Harddisk rec
550016	Camera 1 [1]	3/7/2023 2:42:32 PM	Record on disk stopped
550016	Camera 1 [1]	3/7/2023 2:42:25 PM	Harddisk rec
550016	Camera 1 [1]	3/7/2023 2:42:13 PM	Record on disk stopped
550016	Camera 1 [1]	3/7/2023 2:41:14 PM	Harddisk rec
550016	Camera 1 [1]	3/7/2023 2:40:59 PM	Record on disk stopped
550016	Camera 1 [1]	3/7/2023 2:40:35 PM	Harddisk rec
550016	Camera 1 [1]	3/7/2023 2:40:32 PM	Record on disk stopped
550016	Camera 1 [1]	3/7/2023 2:40:24 PM	Harddisk rec
550016	Camera 1 [1]	3/7/2023 2:38:16 PM	Record on disk stopped
550016	Camera 1 [1]	3/7/2023 2:38:14 PM	Harddisk rec
550016	Camera 1 [1]	3/7/2023 2:38:07 PM	Record on disk stopped

You can also make a request to the archive based on received data (see [Request for video frames from an object](#)).

⚠ Attention!

This data is requested from *Axxon PSIM*'s database at the object. If you want to change how long this data is stored, set the **Events archive length** parameter at the **Security zone** section at the **Programming** tab.

6.4 Request for video frames from an object

You can use received data to request video frames from archives. To do this, follow these steps:

1. Search by titles or clips as described above.
2. The search results are shown as a list of entries. Right click on the required entry. A context menu opens. The menu has two items: **Video query** and **Frame query**.

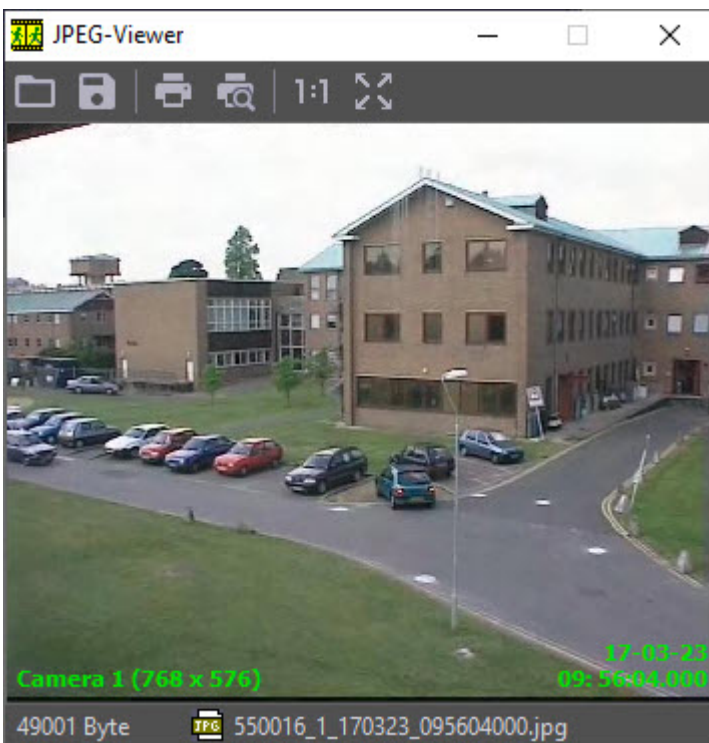
3. Select the **Frame query** item. The dialog form for the request opens. There is another way to open this form: select an entry from the list and click **Frames**.



4. The **Date and time** and **Camera** fields are filled in automatically.
5. If you want to make a request with millisecond accuracy, use the **msec** field.
6. If you select more than one frame, the parameter **Interval between frames** appears. Then enter the interval between frames (with millisecond accuracy).
7. In the **Start** area, select the time for sending the request: click either the **Immediately** option button or **Schedule** option button.
8. Set the waiting time by using the **Data receive timeout, sec.** field.
9. If the check box **Open immediately** is selected, the data is put into the video archive and shown immediately. Otherwise, the data is only sent to the archive. To view such data, use the **Monitoring reports** component.
10. After you fill in all the fields, click **New**.
11. You will get to the **Downloads** tab where the task performance process is displayed. If the data is loaded successfully and the **Open immediately** check box is selected, the loaded frame is shown on the screen.

Note.

In case data have stopped coming during the download, for example if connection with the object is lost, download will be restarted after a random time interval from 1 to 60 seconds. In case of the attempt failure, attempts will be made at intervals of 1 minute. Information on the time remaining to the restart is displayed in the **Comment** field. Any time you can restart loading manually using the **Start** button.

ID	Object name	Camera	Date and time of requested video clip	Type	Status	Loaded, %	Requested length, sec.	Date and time of planned start	Size, KB	Speed, KBps	Received KB	Xml	Comment
550016	47 John Reed str.	Camera 1 [1]	3/17/2023 9:56:04.000 AM	Frames	Ready	100%		3/17/2023 11:56:17 AM	47	0	47		
550016	47 John Reed str.	Camera 1 [1]	3/17/2023 9:55:25.000 AM	Video	Ready	100%	10	3/17/2023 11:55:40 AM	4560	0	4560		
550016	47 John Reed str.	Camera 1 [1]	3/17/2023 9:55:17.000 AM	Video	Ready	100%	10	3/17/2023 11:55:09 AM	5765	0	5765		



Irrespective of the frame size, it is displayed at 352x288 in the opened window. To view the image in the original resolution, click the **Original size** button . To view the image in full screen mode click the **Full screen** button .

If frames are downloaded correctly, it is possible to go to the folder with these frames. For this right-click the corresponding frame and select the **Show in folder** item.

Search in archive		Loads			
ID	Object name	Camera	Date and time of requested video clip	Type	Status
550016	47 Joh		3/17/2023 9:56:04.000 AM	Frames	Ready
550016	47 John	Camera 1 [1]	3/17/2023 9:55:25.000 AM	Video	Ready

6.5 Request for video clips from objects

The **Search in archive** component allows you to request small video clips from an object on the *Agent of Control* side. For that, follow these steps:

1. Search by titles or clips as described above.
2. The search results are shown as a list of entries. Right click on the required entry. A context menu opens. The menu has two items: **Video query** and **Frame query**.
3. Select the **Video query** menu item. A dialog form for the request opens. There is another way to open this form: select an entry from the list and click **Video**.

Video query ✕

Date and time 1

Camera 2

Length (sec) 3

Bandwidth KBps 4

Export to avi 5

Start

Immediately 6

Schedule 6

Data receive timeout, sec. 7

Open immediately 8

9

4. The **Date and time** (1) and **Camera** (2) fields are filled in automatically.
5. Use the **Length (sec)** field (3) to limit video clips.



Note.

If the **Not used** value is selected in the **Export to avi** parameter (5), then one or more clips will be exported which contain the specified time interval relative to the date and time. In the context of a single clip, it's impossible to request only a part of it.

If you try to set the value of the **Length (sec)** field to over 120, the value of 120 is offered. This is done to remind the user that such requests can export a big data file from a video archive on *Agent of Control* side. If you want to turn this limitation off, click **Settings** in the lower-left area of the **Search in archive** area. In the window that opens, change the value of the **Maximum length of loaded video clip, sec** field.

6. If you want to decrease network load, set the **Bandwidth __ KBps** field (4) to the appropriate value.
7. The **Export to avi** parameter (5) allows you to select the format and codec of the requested video clip:
 - a. **Not used** – the video clip will be exported as an archive with a set of directories and files from the VIDEO folder.
 - b. **Original** – the video clip will be exported to an avi-file without transcoding.
 - c. **Xvid** – the video clip will be exported to an avi-file with the Xvid codec.
 - d. **DivX** – the video clip will be exported to an avi-file with the DivX codec.
 - e. **x264** – the video clip will be exported to an avi-file with the x264 codec.

⚠ Attention!

The export to an avi-file with the specified codec is performed on the *Agent of Control* side using the **AviExport.run** module and the required codec should be installed. Otherwise, an error **Frame or video clip is not found (archive export error)** will be received.

8. In the **Start** area, select the time for sending the request: **Immediately** or **Schedule** (6).
9. Set the waiting time by using the **Data receive timeout, sec.** field (7).

⚠ Attention!

If you request a clip that is longer than one minute, you have to increase the value of the **Data receive timeout, sec.** parameter. It is necessary to do it, because it takes time to export a large video clip on the *Agent of Control* side.

10. If the **Open immediately** check box (8) is selected, the data is put into the video archive and shown immediately. Otherwise, the data is only sent to the archive. To view such data, use the **Monitoring reports** component.
11. After you fill in all the fields, click **New** (9).
12. You will get to the **Loads** tab where the task performance process is displayed. While the video clip is being downloaded, its file size, loaded size, and transfer rate are shown. You can pause the download at any

moment by clicking **Pause**.

ID	Object name	Camera	Date and time of requested video clip	Type	Status	Loaded, %	Requested length, sec.	Date and time of planned start	Size, KB	Speed, KBps	Received KB	Xnrl	Comment
550016	47 John Reed str.	Camera 1 [1]	3/17/2023 9:58:25.000 AM	Video	Ready	37%	10	3/17/2023 12:08:32 PM	1279	2141.7	473		
550016	47 John Reed str.	Camera 1 [1]	3/17/2023 9:56:04.000 AM	Frames	Ready	100%		3/17/2023 11:56:17 AM	47	0	47		
550016	47 John Reed str.	Camera 1 [1]	3/17/2023 9:55:25.000 AM	Video	Ready	100%	10	3/17/2023 11:55:40 AM	4560	0	4560		
550016	47 John Reed str.	Camera 1 [1]	3/17/2023 9:55:17.000 AM	Video	Ready	100%	10	3/17/2023 11:55:09 AM	5765	0	5765		

Note.

In case data have stopped coming during the download, for example if connection with the object is lost, download will be restarted after a random time interval from 1 to 60 seconds. In case of the attempt failure, attempts will be made at intervals of 1 minute. Information on the time remaining to the restart is displayed in the **Comment** field. Any time you can restart loading manually using the **Start** button.

Comment

[Auto-restart: 26 sec.] No connection with object

13. If the **Open immediately** check box was selected, then the downloaded clip will be played in the following way:
 - a. on the *Server of Control* and the *Additional workplace* using the *Axxon Player* utility, if the **Not used** value was selected in the **Export to avi** parameter.
 - b. on the *Server of Control* using the program specified in the **AVI-files player** parameter (see [Configuring reaction to snapshots and videos](#)), if a value other than **Not used** was selected in the **Export to avi** parameter.
 - c. on the *Additional workplace* using the program specified in the **AVI-files player** parameter (see [Interface of Additional workplace configuration tool](#)), if a value other than **Not used** was selected in the **Export to avi** parameter.

The successfully completed task is marked in green. Double click such entry to see the corresponding frame or play the corresponding video clip. It is also possible to go to the folder with downloaded videos. For this right-click the corresponding frame and select the **Show in folder** item.

ID	Object name	Camera	Date and time of requested video clip	Type	Status	Loaded, %
550016	47 John Reed str.	Camera 1 [1]	3/17/2023 9:58:25.000 AM	Video	Ready	100%
550016	47 John Reed str.	Camera 1 [1]	3/17/2023 9:56:04.000 AM	Frames	Ready	100%

The **Search in archive** component supports the download resume function. If the connection to **Agent Of Control** breaks during a download, the task status changes to **Network Error** after two minutes' time-out. The **Comment** field shows the information that the data is no longer being transferred. Ten seconds later the system start periodic attempts to resume the download. It tries to do it every minute. After the connection to **Agent Of Control** is reestablished, the data is downloaded not from the beginning, but from the point where the connection was lost. The download resume function uses temporary files. They are saved both on *Agent of Control* and on *Server of Control*. These files are stored for three days. After that, they are removed. For example, if you start a download, then click **Pause**, and resume the download five days later, the download starts from the beginning.

Note

To change the storage period for the temporary files, it is necessary to create the **StoreVideoFiles** string parameter in the Windows OS registry and set the required number of days as its value (for details, see [Registry keys reference guide](#), for more information about working with the registry, see [Working with Windows OS registry](#)). Then it is necessary to restart the Videosrv.exe module.

If you want to remove old tasks from the task list, go to **Loads** tab and click **Delete** button. Tasks are stored in the database for max. 100 days. If you want to limit the number of tasks that are shown in the **Loads** tab, use the **Task archive size (days)** parameter in the **Settings** window opened by **Settings** button in the lower left corner of the **Search in archive** screen (see step 5).

Attention!

If *Axxon PSIM* closes, all tasks with the **Loading** status are paused. Start these tasks manually to resume download.

6.6 Automated video clip loading

6.6.1 Video clip request file

The data source for loading video clips is the .xml text file. The uniqueness of the name of this file is provided by the third party system that forms this file.

The request file includes the following parameters:

Name	Description
ID	Partition Of Control object identification number.
DateTimeBegin	Date and time of recording start and search by titles start in the following format: DD-MM-YYYY hh:mm:ss
DateTimeEnd	Date and time of search by titles end in the following format: DD-MM-YYYY hh:mm:ss <i>Note. To be used if the Titles parameter is not set to 0</i>
Length	The length of the requested video clip. Possible values: 1-9999
DateTimeExecute	Date and time to execute the request of the video clip in the following format: DD-MM-YYYY hh:mm:ss <i>Note. If 0 is set for this parameter, the request is executed immediately.</i>

Cam	<p>Camera sequence number from top to bottom. The need to use the camera sequence number rather than the internal number is due to the fact that the internal camera number is not transmitted from older system versions.</p> <p>Example. There are 3 cameras on the <i>Agent of Control</i>:</p> <ol style="list-style-type: none"> 1. Number = "1". Name= "Camera 1. Door" 2. Number = "3". Name = "Window" 3. Number = "5". Name = "Arch" <p>The cameras are added to the Partition Of Control in the following order:</p> <ol style="list-style-type: none"> 1. "Camera 1. Door" 2. "Arch" 3. "Window" <p>Cameras are displayed on Server of Control in the corresponding order. Thus, to get a video from the camera "Arch", the parameter Cam should be equal to 2.</p> <p><i>Note. If you specify 0, the video clips are downloaded from all object video cameras added while setting the Agent of Control.</i></p>
Titles	<p>A string to search by titles. The string should not be longer than 40 characters.</p> <p>Use * to search for any number of characters, for example:</p> <ul style="list-style-type: none"> • sala* – the search by this strings returns all titles with words beginning with "sala", e.g. "salad", "salamander"; • salad – the search by this strings returns the titles with the word "salad" only; • sala – the search by this strings returns no titles unless they include exact match. <p><i>Note 1. If you specify a value of 0, no titles will be searched. Also, in this case, the parameters OnlyWithTitles and DateTimeEnd are shall not be used.</i></p> <p><i>Note 2. If you specify an empty string, the search will be performed by any titles.</i></p> <p><i>Note 3. To use the characters in the search string as characters only, not as markup, use the CDATA section.</i></p>
OnlyWithTitles	<p>Download video clip if titles found only. Possible values:</p> <p>0 – video clip is downloaded</p> <p>1 – video clip is not downloaded</p>
DownloadSpeed	<p>Download speed of the video in KB / sec. Possible values: 0-1000</p> <p><i>Note. If you specify a value of 0, then the download speed is not limited.</i></p>

See the example of the file on the picture below.

```
<?xml version="1.0" encoding="utf-8" ?>
<Settings>
  <ID>550016</ID>
  <DateTimeBegin>28-03-2017 12:00:00</DateTimeBegin>
  <DateTimeEnd>28-03-2017 19:00:00</DateTimeEnd>
  <Length>10</Length>
  <DateTimeExecute>0</DateTimeExecute>
  <Cam>1</Cam>
  <Titles><![CDATA[Vibro*]]></Titles>
  <OnlyWithTitles>1</OnlyWithTitles>
  <DownloadSpeed>0</DownloadSpeed>
</Settings>
```

6.6.2 Operating principle of automated video clip loading

Note.

See [Video clip request file](#) for description of request file. See note in [Configuring automated video clip loading](#) for description of folders.

The *Search in archive* module scans the **In** directory for the request files every 10 seconds. When the request file appears, the task is set up to load the video clip according to the contents of this file. At this point, the request file is moved to the **In\Work** directory. If the **Titles** parameter is set to a value other than 0, the query for finding titles in the specified time period from **DateTimeBegin** to **DateTimeEnd** is pre-executed. If the search is successful, a request is generated to load the video, in which the date and time of the first record in the title search results is specified as the date and time of the beginning of the export from the archive.

If the request file could not be read or the request file parameters are incorrect, then it is moved to the **OutError** directory. If the request was correctly generated, but the video was not downloaded for any reason, then the request file is transferred to the **OutFail** directory. If the video clip is successfully downloaded, the request file is moved to the **OutSuccess** directory.

During the creation of the task, the **query_M.log** text log file is created in the **In** directory for the request files, where **M** is the current month. This log file stores information about all the movement of request files and errors during their execution.

On the **Loads** tab in the interface of the *Search in archive* module, there is an **Xml** column. If the download task was generated based on the request file, this field will indicate the name of the file.

ID	Object name	Camera	Date and time of requested video clip	Type	Status	Loaded, %	Requested length, sec.	Date and time of planned start	Size, KB	Speed, Kbps	Received KB	Xml	Comment
550016	47 John Reed str.	Camera 1 (1)	20.06.2018 19:51:51.000	Video	Ready	100%	10	22.06.2018 17:48:10	11793	0	11793		
550016	47 John Reed str.	Camera 1 (1)	20.06.2018 19:51:59.000	Video	Ready	100%	10	22.06.2018 17:47:48	8784	0	8784	28032017_180007_550016.xml	

7 Monitoring reports

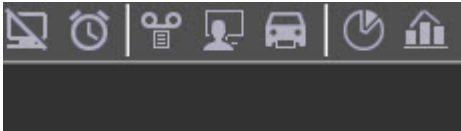
7.1 Purpose of Monitoring reports

Use the **Monitoring reports** component to automate the processing of statistical information on system performance. You can create reports of the following types:

1. System failures.
2. Alarms.
3. Video report.
4. Operator actions.
5. Statistics.
6. Statistics by owners.
7. Vehicle LPs.

Some reports can be hidden while configuring the system – see [Configuration of the Monitoring reports object](#).

General view of **Monitoring reports** window is shown in figure.



Note.

Format of date and time present in reports depends on system regional and language options.

Each report window contains a tool bar:




The toolbar items are described in the table below.

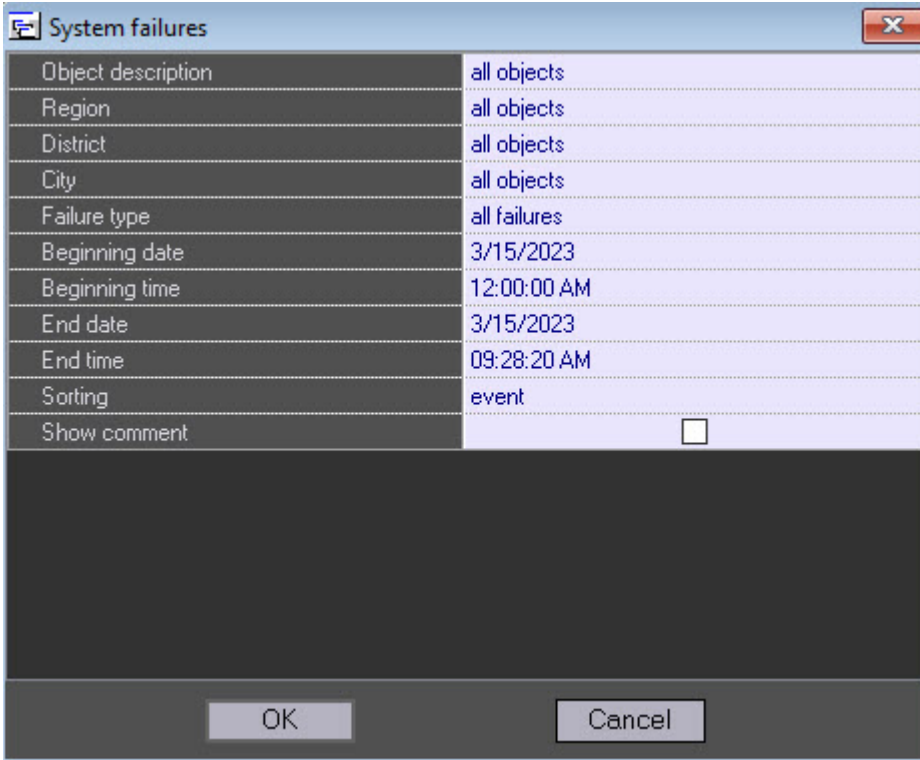
No.	Description
1	Zoom
2	Open report
3	Save report
4	Print report
5	Find text

Here are some details on the **Save report** and **Open report** buttons. For example, if there is no printer at the place where the **Monitoring reports** component is installed or if you want to save your report in electronic form to view it later, you can save the report as a FRP, XLS, XML, RTF, or HTML file. Then you can open the report on another computer.

7.2 System failures

To start creating a report, click .

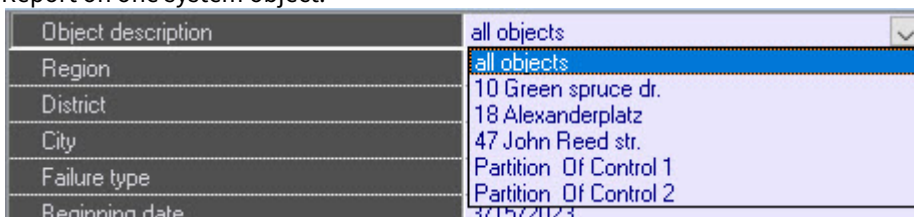
A modal window opens. In this window, you can set the parameters needed to create the report.



Object description	all objects
Region	all objects
District	all objects
City	all objects
Failure type	all failures
Beginning date	3/15/2023
Beginning time	12:00:00 AM
End date	3/15/2023
End time	09:28:20 AM
Sorting	event
Show comment	<input type="checkbox"/>

You can set the following report parameters:

1. **Object description.** You can use this field to choose between two report modes:
 - a. Report on all the system objects.
 - b. Report on one system object.



Object description	all objects
Region	all objects
District	10 Green spruce dr.
City	18 Alexanderplatz
Failure type	47 John Reed str.
Beginning date	Partition Of Control 1
	Partition Of Control 2

2. **Region, District and City** in which the objects are located. This information is configured on the **Control panel** – see [Editing regulatory and reference information](#). If a specific object is selected (see step 1), then these fields are hidden in the report settings window.


3. **Failure type.** You can use this field to specify the failure type for which to create the report. You can also create a report on all the failures within a certain time period.

Failure type	all failures
Beginning date	<input type="checkbox"/> cameras
Beginning time	<input type="checkbox"/> archive
End date	<input type="checkbox"/> no connection with object
End time	<input type="checkbox"/> no connection with monitoring object
Sorting	<input type="checkbox"/> videosystem software
Show comment	<input type="checkbox"/> HDD failure
	<input type="checkbox"/> object disarmed

4. **Beginning date, End date, Beginning time, and End time.** This setting is used for specifying the time range of the alarms by which the report will be generated.
5. **Sorting.** You can use two sorting modes when creating a report:
- Sort by events (**Vibration sensor signal, Lock sensor signal, etc.**).
 - Sort by event start time.

Sorting	event
Show comment	event
	time


6. **Show comment.** Set this check box if it is necessary to display failure comments in the report (see [Processing alarms](#)).

7. After you configure all the parameters, click the button  .
You can see the report in a separate window.

Report issue date: 3/15/2023 9:20:08 AM

Report - system failures			
Object:	all objects report		
Period::	from 3/15/2023 12:00:00 AM to 3/15/2023 9:19:58 AM		
Region:	all objects		
District:	all objects		
City:	all objects		
Failure type:	all failures		
Event	Beginning	End	Duration
Object: "10 Green spruce dr." (550017)			
No connection with object (Communication channel)	3/13/2023 1:49:24 PM	Continues	1d. 19h. 30m. 44s.
Object: "18 Alexanderplatz" (550018)			
No connection with object (Communication channel)	3/9/2023 11:53:53 AM	Continues	5d. 21h. 26m. 15s.
Object: "47 John Reed str." (550016)			
No connection with object (Communication channel)	2/16/2023 12:13:48 PM	Continues	26d. 21h. 06m. 20s.
Object: "Partition Of Control 1" (1)			
No connection with object (Communication channel)	3/13/2023 1:49:24 PM	Continues	1d. 19h. 30m. 44s.
Object: "Partition Of Control 2" (2)			
No connection with object (Communication channel)	2/13/2023 12:42:03 PM	Continues	29d. 20h. 38m. 05s.

7.3 Alarms

To start creating a report, click .

A dialog box then appears, with the parameters necessary for report generation.

Parameter	Value
Object description	all objects
Region	all objects
District	all objects
City	all objects
Alarm	all events
Filter (message)	
Beginning date	3/15/2023
Beginning time	12:00:00 AM
End date	3/15/2023
End time	11:59:59 PM
Sorting	event
Show comment	<input type="checkbox"/>

You can set the following report parameters:

1. **Object description.** This setting allows switching between the two report modes:
 - a. Report on all the system objects.
 - b. Report on one system object.

Object description	all objects
Region	
District	
City	
Alarm	
Filter (message)	

2. **Region, District and City** in which the objects are located. This information is configured on the **Control panel** – see [Editing regulatory and reference information](#). If a specific object is selected (see step 1), then these fields are hidden in the report settings window.

3. **Alarm.** This setting allows specifying the type of alarm event for which you want to generate a report. You can also create a report for all alarm events that occurred during a specified interval of time.

Alarm	all events
Filter (message)	<input type="checkbox"/> vibration sensor signal
Beginning date	<input type="checkbox"/> lock sensor signal
Beginning time	<input type="checkbox"/> overheat sensor signal
End date	<input type="checkbox"/> additional sensor signal
End time	<input type="checkbox"/> signal from UPS
Sorting	<input type="checkbox"/> default PC restart
Show comment	<input type="checkbox"/> non-default PC restart
	<input type="checkbox"/> hardware
	<input type="checkbox"/> ACS
	<input type="checkbox"/> sfa
	<input type="checkbox"/> detections
	<input type="checkbox"/> extra 1
	<input checked="" type="checkbox"/> extra 2

4. **Filter (message).** This parameter allows setting a text filter by the messages from the monitored alarms (see [Configuration for associating events with certain alarm groups](#)).

Filter (message)	Alarm
------------------	-------


Note

The **Filter (message)** field is auto-filled. Each text filter entered in this field will be stored in the database and will be automatically inserted into the field upon retyping.

5. **Beginning date, End date, Beginning time, and End time.** This setting is used for specifying the time range of the alarms by which the report will be generated.
6. **Sorting.** A report can be sorted in one of two ways:
- Sort by events (**Vibration sensor signal, Lock sensor signal, etc.**).
 - Sort by event start time.

Sorting	event
Show comment	<input checked="" type="checkbox"/> event
	<input type="checkbox"/> time

7. **Show comment.** Set this check box if it is necessary to display alarm comments in the report (see [Processing alarms](#)).

8. After configuring all parameters, click  .
The report appears in a new window.


Report issue date: 7/26/2019 3:18:01 PM

Report - alarms

Object: all objects report
Alarm: vibration sensor signal,non-default PC restart
Period: from 7/26/2019 12:00:00 AM to 7/26/2019 11:59:59 PM
Region: all objects
District: all objects
City: all objects

Event	Time
Object: "47 John Reed str." (550016)	
Vibration sensor signal	7/26/2019 2:16:57 PM
Comment:	
Vibration sensor signal	7/26/2019 2:21:42 PM
Comment:	
Vibration sensor signal	7/26/2019 2:36:19 PM
Comment:	
Vibration sensor signal	7/26/2019 3:11:04 PM
Comment:	
Non-default PC restart	7/26/2019 3:14:45 PM
Comment: Electricity shutdown	

7.4 Video report

To start creating a report, click  .

A window opens. In this window, you can set the parameters needed to create the report.

Object description	all objects
Report type	snapshots - other
Beginning date	3/15/2023
Beginning time	12:00:00 AM
End date	3/15/2023
End time	11:59:59 PM
Camera	all cameras

You can set the following report parameters:

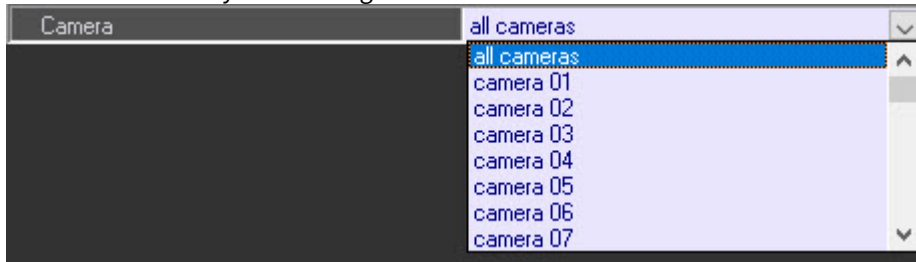
1. The time range of the report. Use the **Beginning date**, **Beginning time**, **End date**, and **End time** fields.
2. **Object description**. You can use this field to choose between two report modes:
 - a. Report on all the system objects.
 - b. Report on one system object.

Object description	all objects
Report type	all objects
Beginning date	10 Green spruce dr.
Beginning time	18 Alexanderplatz
End date	47 John Reed str.
End time	Partition Of Control 1
	Partition Of Control 2

3. **Report type**. You can use this field to select one of the four report types:
 - a. **snapshots – alarms**. These are video clips received after an alarm sensor goes off at the object;
 - b. **snapshots – other**. These are video clips received during an arbitrary request to the video archive.
 - c. **video clips – alarms**. These are video frames received after an alarm sensor goes off at the object (**Vibration sensor signal**, **Lock sensor signal**, etc.);
 - d. **video clips – other**. These are video frames received during an arbitrary request to the video archive.

Report type	video clips - other
Beginning date	snapshots - alarms
Beginning time	snapshots - other
End date	video clips - alarms
End time	video clips - other

- If you select **video clips – other**, the **Camera** parameter becomes available. Use this parameter to select the camera from which you want to get video frames.



After you configure all the parameters, click **OK**. You can see the results of the search by the specified criteria in the separate window.

The screenshot shows a window titled 'Results of search in local video archive'. It contains a table with columns for Number, Object, Camera, Alarm type, Date, and Time. The table lists 30 records of detections. To the right of the table is a 'Preview' section showing a video frame of a building and parking lot. Below the preview, it displays metadata: 'Snapshot type: "/>

Number	Object	Camera	Alarm type	Date	Time
1	47 John Reed str. (950016)	Camera 1 (1)	Detections	3/16/2023	4:20:57.000 PM
2	10 Green spruce dr. (950017)	Camera 2 (2)	Detections	3/16/2023	5:53:29.000 PM
3	47 John Reed str. (950016)	Camera 1 (1)	Detections	3/17/2023	3:20:21.000 PM
4	47 John Reed str. (950016)	Camera 1 (1)	Detections	3/17/2023	3:20:49.000 PM
5	47 John Reed str. (950016)	Camera 1 (1)	Detections	3/17/2023	3:21:43.000 PM
6	47 John Reed str. (950016)	Camera 1 (1)	Detections	3/17/2023	3:22:11.000 PM
7	47 John Reed str. (950016)	Camera 1 (1)	Detections	3/17/2023	3:22:53.000 PM
8	47 John Reed str. (950016)	Camera 1 (1)	Detections	3/17/2023	3:23:43.000 PM
9	47 John Reed str. (950016)	Camera 1 (1)	Detections	3/17/2023	3:24:09.000 PM
10	47 John Reed str. (950016)	Camera 1 (1)	Detections	3/17/2023	3:31:04.000 PM
11	47 John Reed str. (950016)	Camera 1 (1)	Detections	3/17/2023	3:33:51.000 PM
12	47 John Reed str. (950016)	Camera 1 (1)	Detections	3/17/2023	3:34:29.000 PM
13	47 John Reed str. (950016)	Camera 1 (1)	Detections	3/17/2023	3:35:28.000 PM
14	47 John Reed str. (950016)	Camera 1 (1)	Detections	3/17/2023	3:48:42.000 PM
15	47 John Reed str. (950016)	Camera 1 (1)	Detections	3/17/2023	3:49:22.000 PM
16	47 John Reed str. (950016)	Camera 1 (1)	Detections	3/17/2023	3:50:04.000 PM
17	47 John Reed str. (950016)	Camera 1 (1)	Detections	3/17/2023	3:50:37.000 PM
18	47 John Reed str. (950016)	Camera 1 (1)	Detections	3/17/2023	3:55:47.000 PM
19	47 John Reed str. (950016)	Camera 1 (1)	Detections	3/17/2023	3:56:26.000 PM
20	47 John Reed str. (950016)	Camera 1 (1)	Detections	3/17/2023	3:57:06.000 PM
21	47 John Reed str. (950016)	Camera 1 (1)	Detections	3/17/2023	4:01:58.000 PM
22	47 John Reed str. (950016)	Camera 1 (1)	Detections	3/17/2023	4:02:36.000 PM
23	47 John Reed str. (950016)	Camera 1 (1)	Detections	3/17/2023	4:03:11.000 PM
24	47 John Reed str. (950016)	Camera 1 (1)	Detections	3/17/2023	4:03:42.000 PM
25	47 John Reed str. (950016)	Camera 1 (1)	Detections	3/17/2023	4:04:10.000 PM
26	47 John Reed str. (950016)	Camera 1 (1)	Detections	3/17/2023	4:05:57.000 PM
27	47 John Reed str. (950016)	Camera 1 (1)	Detections	3/17/2023	4:06:26.000 PM
28	47 John Reed str. (950016)	Camera 1 (1)	Detections	3/17/2023	4:06:52.000 PM
29	47 John Reed str. (950016)	Camera 1 (1)	Detections	3/17/2023	4:07:25.000 PM
30	47 John Reed str. (950016)	Camera 1 (1)	Detections	3/17/2023	4:08:00.000 PM

Records processed: 184

Buttons: Report, Close

After you select a frame, click **Report**. The report window opens.

Zoom: 100%

Report issue date: 3/17/2023 4:32:15 PM

Video report - alarms

ID: 550016 ALARM: Detection triggered




Object: 47 John Reed str. (550016)
Date-time on site: 3/17/2023 4:08:00.000 PM

After you search for video clips, you can select any entry and play a clip by clicking **View**. The video clip is played with Axxon Player.

Results of search in local video archive

Number	Object	Camera	Alarm type	Date	Time
1	47 John Reed str. (550016)	Camera 1 (1)	Vibration sensor	3/16/2023	2:42:36.000 PM
2	47 John Reed str. (550016)	Camera 1 (1)	Vibration sensor	3/16/2023	3:11:44.000 PM
3	47 John Reed str. (550016)	Camera 1 (1)	Vibration sensor	3/16/2023	3:32:12.000 PM
4	47 John Reed str. (550016)	Camera 1 (1)	Vibration sensor	3/16/2023	4:38:28.000 PM
5	47 John Reed str. (550016)	Camera 1 (1)	Vibration sensor	3/16/2023	4:51:49.000 PM
6	47 John Reed str. (550016)	Camera 1 (1)	Vibration sensor	3/16/2023	4:54:06.000 PM
7	47 John Reed str. (550016)	Camera 1 (1)	Vibration sensor	3/16/2023	6:30:21.000 PM

File found in archive



Clip type: "ALARM"

Records processed: 152

View Close

Axxon Player

ID : 550016 ALARM: VIBROSENSOR



6:30:21 PM
3/16/2023

1


6:30:22 PM 6:30:23

6:30:22 PM 6:30:23 6:30:24

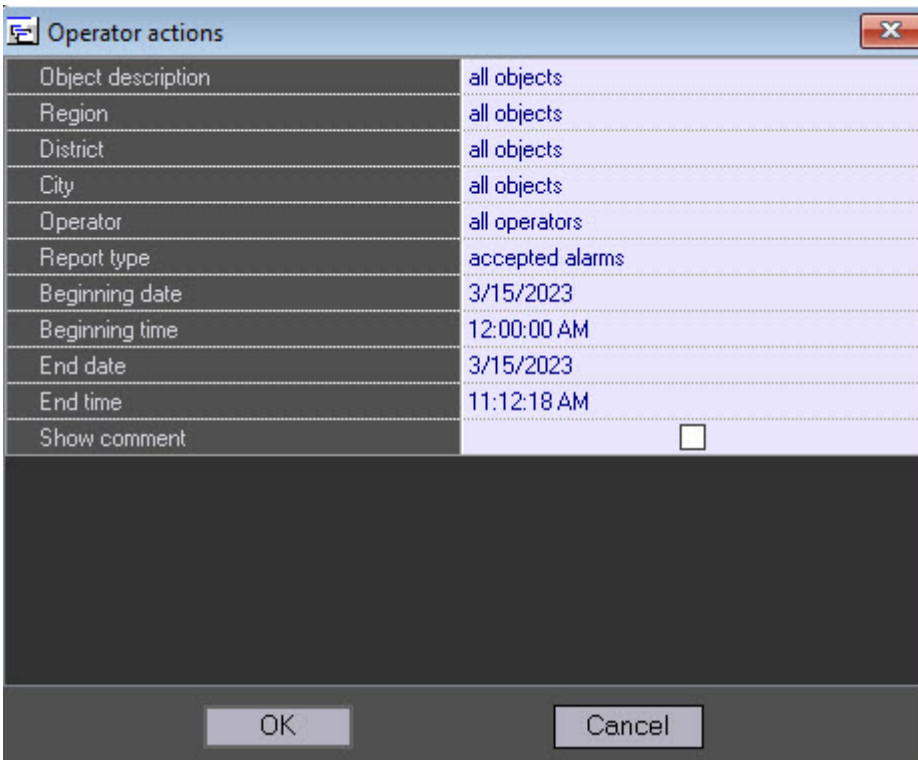
00:00:00 06:30:21 PM 16/03/2023 00:00:05

Searching for snapshots and videos is performed through files that have been downloaded using the **Search in archive** component or received with alarms. This search is performed by archive time, but not by download time.

7.5 Operator actions

To start creating a report, click .

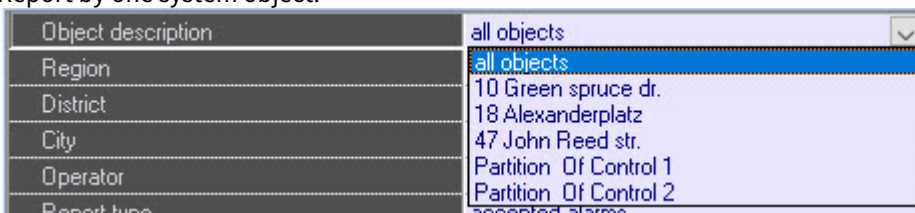
A dialog box will open, with the parameters necessary for the report generation.



Parameter	Value
Object description	all objects
Region	all objects
District	all objects
City	all objects
Operator	all operators
Report type	accepted alarms
Beginning date	3/15/2023
Beginning time	12:00:00 AM
End date	3/15/2023
End time	11:12:18 AM
Show comment	<input type="checkbox"/>

You can set the following report parameters:

1. **Object description.** This setting allows switching between the two report modes:
 - a. Report by all the system objects.
 - b. Report by one system object.



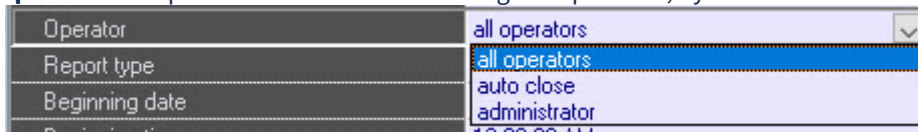
Object description	all objects
Region	all objects
District	10 Green spruce dr.
City	18 Alexanderplatz
Operator	47 John Reed str.
Report type	Partition Of Control 1
	Partition Of Control 2
	accepted alarms

2. **Region, District and City** in which the objects are located. This information is configured on the **Control panel** – see [Editing regulatory and reference information](#). If a specific object is selected (see step 1), then these fields are hidden in the report settings window.

Note

These parameters are available only when the **accepted alarms** report type is selected.

3. **Operator.** This parameter is used for selecting the operators, by whose actions the report will be generated.

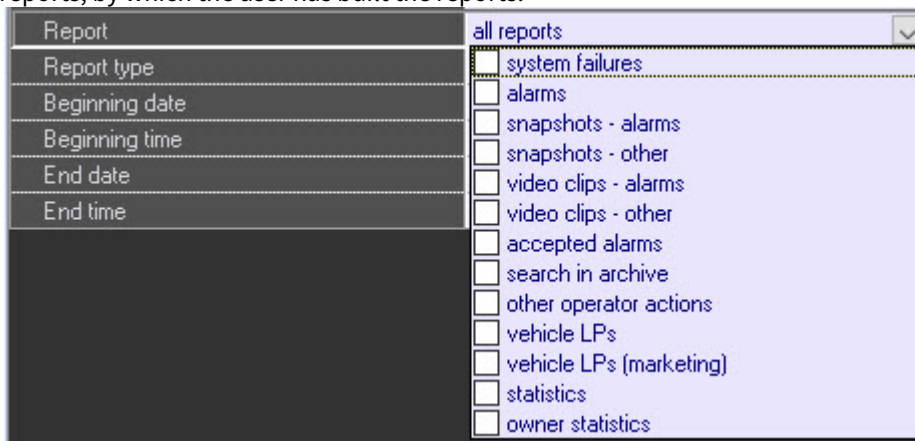


- a. report by the actions of all operators;
- b. auto close - automatic closure of an alarm (available only when the **accepted alarms** report type is selected);
- c. administrator.

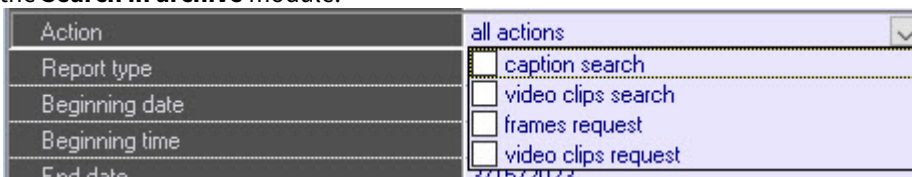
4. **Report type.** This parameter sets the type of operator actions report.



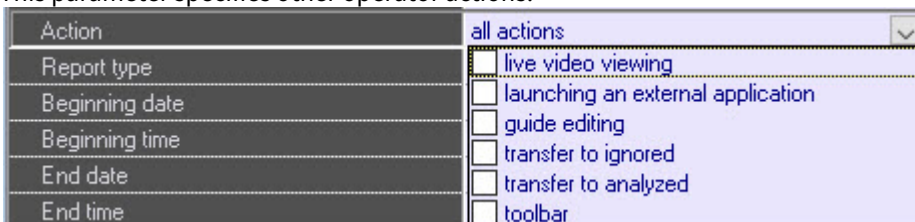
- a. **accepted alarms** displays the information about when and which user accepted an alarm or group of alarms, and the specified comments.
- b. **build reports** displays the information about when and which user has built the reports indicating the report type. The **Report** option appears. This parameter is used to set the parameters of the reports, by which the user has built the reports.



- c. **search in archive** displays the information about when and which user has searched the archive. The **Action** option appears. This parameter is used to set the parameters of the operator's actions with the **Search in archive** module.




- d. **other operator actions** displays the information about when and which user has performed any other actions (clicking buttons, working with cameras, archives, etc.). The **Action** option appears. This parameter specifies other operator actions.



5. **Beginning date, End date, Beginning time, and End time.** This setting is used for specifying the time range of the alarms by which the report will be generated.
6. **Show comment.** Set this check box if it is necessary to display alarm comments in the report (see [Processing alarms](#)).

 **Note**

This parameter is available only when the **accepted alarms** report type is selected.

7. After configuring all parameters, click .
8. The report appears in a new window.

An example of a report on operator actions of the **accepted alarms** type:


Report issue date: 4/7/2020 5:36:51 PM

Report - accepted alarms

Object: all objects report
Operator: all operators
Period: from 4/7/2020 12:00:00 AM to 4/7/2020 5:26:42 PM
Region: all objects
District: all objects
City: all objects

Event	Beginning	Accepted	Reaction time	Operator
Object: "47 John Reed str." (550016)				
Default PC restart	4/7/2020 5:21:15 PM	4/7/2020 5:21:27 PM	0d. 00h. 00m. 12s.	administrator
Software error (Basic software (Video))	4/7/2020 5:19:35 PM	4/7/2020 5:21:16 PM	0d. 00h. 01m. 41s.	auto close
No connection with object (192.168.1.33)	4/7/2020 5:17:08 PM	4/7/2020 5:19:35 PM	0d. 00h. 02m. 27s.	auto close
Disk failure (104:Number of disks=0)	4/7/2020 5:13:19 PM	4/7/2020 5:15:22 PM	0d. 00h. 02m. 03s.	auto close

7.6 Statistics

To start creating a report, click .

A window opens. In this window, you can set the parameters needed to create the report.

Statistics			
Object description	all objects		
Region	all objects		
District	all objects		
City	all objects		
Beginning date	3/15/2023		
Beginning time	12:00:00 AM		
End date	3/15/2023		
End time	12:00:07 PM		
Include number of cameras on site		<input checked="" type="checkbox"/>	
Include archive errors		<input type="checkbox"/>	
Show alarms		<input type="checkbox"/>	
Detailed report		<input type="checkbox"/>	

You can set the following report parameters:

1. The time range of the report. Use the **Beginning date**, **Beginning time**, **End date**, and **End time** fields.
2. **Object description**. You can use this field to choose between two report modes:
 - a. Report on all the system objects.
 - b. Report on one system object.

Object description	all objects
Region	all objects
District	10 Green spruce dr.
City	18 Alexanderplatz
Beginning date	47 John Reed str.
Beginning time	Partition Of Control 1
	Partition Of Control 2
	12:00:00 AM

3. **Include number of cameras on site**. If you select this check box, the non-readiness rates for the cameras and archives are calculated taking into account all the cameras of the object.
4. **Include archive errors**. If you select this check box, the non-readiness rates for the the whole system are calculated taking into account the non-readiness rates for the archives.
5. **Show alarms**. If you select this check box, alarm information from the object(s) is added to the report.
6. If you set the **Object description** parameter to **All objects**, you can edit the **Detailed report** parameter. If you do NOT select this check box, a generalized statistical report on the system is created.
If you select the **Detailed report** check box, then **Sorting**, **Sort**, and **Availability factor threshold**

parameters become available. In this case, a detailed statistical report on the system is created.

Object description	all objects
Region	all objects
District	all objects
City	all objects
Beginning date	3/15/2023
Beginning time	12:00:00 AM
End date	3/15/2023
End time	12:00:07 PM
Include number of cameras on site	<input checked="" type="checkbox"/>
Include archive errors	<input type="checkbox"/>
Show alarms	<input type="checkbox"/>
Detailed report	<input checked="" type="checkbox"/>
Availability factor threshold	<input type="checkbox"/>
Sorting	without sorting
Sort	descending

7. **Sorting.** This field allows you to sort statistical data by certain criteria.

8. **Sort.** Use this field to set the sort order (**ascending** or **descending**).

9. If you select the **Availability factor threshold** check box, the **Threshold value, %** and **Condition** fields become available. Use these fields to sort objects by an additional condition, the threshold for the readiness rate.

Detailed report	<input checked="" type="checkbox"/>
Availability factor threshold	<input checked="" type="checkbox"/>
Threshold value, %	90
Condition	lower than threshold

10. **Threshold value, %.** Use this field to set a threshold (between 0 and 100 %).
11. **Condition.** Use this field to set an object filtering condition: **lower than threshold** or **higher than threshold**.
12. If you set the **Object description** field to a certain object, you can edit the **Provide info about alarms** and **Provide info about failures** parameters. Select these check boxes if you want to include detailed

information on failures and alarms in the report.

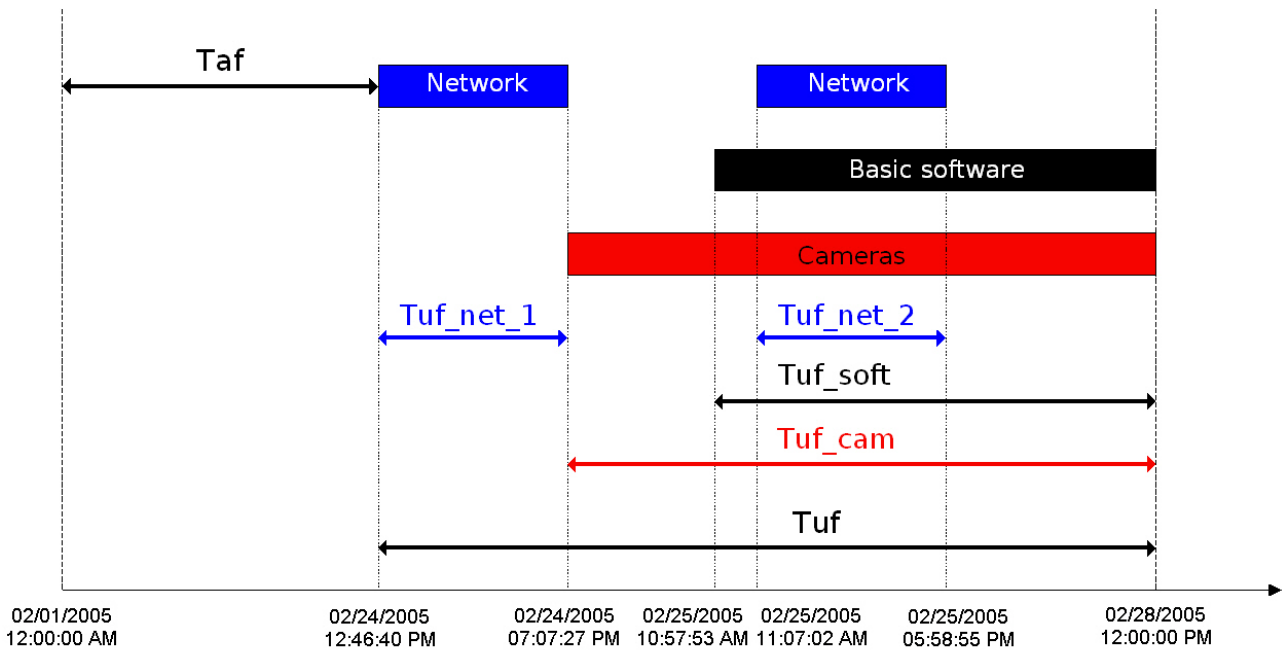
Statistics	
Object description	10 Green spruce dr. v
Beginning date	3/15/2023
Beginning time	12:00:00 AM
End date	3/15/2023
End time	12:00:07 PM
Include number of cameras on site	<input checked="" type="checkbox"/>
Include archive errors	<input type="checkbox"/>
Show alarms	<input type="checkbox"/>
Provide info about alarms	<input type="checkbox"/>
Provide info about failures	<input checked="" type="checkbox"/>

After you configure all the parameters, click **OK**.

The following figure shows a sample report on one object.

Report issue date: 3/15/2023 12:21:46 PM																					
Object statistics																					
<p>Object: 10 Green spruce dr. (550017)</p> <p>Period:: from 3/15/2023 12:00:00 AM to 3/15/2023 12:21:32 PM</p> <p>Region:</p> <p>District:</p> <p>City: London</p> <p>Period length: 0d. 12h. 21m. 32s.</p> <p>Exploitation length: 0d. 12h. 21m. 32s.</p>																					
<p>Number and duration of failures:</p> <table style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td style="padding-left: 20px;">Camera failures:</td> <td style="text-align: right;">(0d. 00h. 00m. 00s.)</td> <td style="text-align: right;">0</td> </tr> <tr> <td style="padding-left: 20px;">Connection lost (communication channel):</td> <td style="text-align: right;">(0d. 12h. 21m. 32s.)</td> <td style="text-align: right;">1</td> </tr> <tr> <td style="padding-left: 20px;">Connection lost (agent):</td> <td style="text-align: right;">(0d. 00h. 00m. 00s.)</td> <td style="text-align: right;">0</td> </tr> <tr> <td style="padding-left: 20px;">Videosystem software failure:</td> <td style="text-align: right;">(0d. 00h. 00m. 00s.)</td> <td style="text-align: right;">0</td> </tr> <tr> <td style="padding-left: 20px;">Insufficient archive size:</td> <td style="text-align: right;">(0d. 00h. 00m. 00s.)</td> <td style="text-align: right;">0</td> </tr> <tr> <td style="padding-left: 20px;">HDD failure:</td> <td style="text-align: right;">(0d. 00h. 00m. 00s.)</td> <td style="text-align: right;">0</td> </tr> <tr> <td style="padding-left: 20px;">Total:</td> <td></td> <td style="text-align: right;">1</td> </tr> </tbody> </table>	Camera failures:	(0d. 00h. 00m. 00s.)	0	Connection lost (communication channel):	(0d. 12h. 21m. 32s.)	1	Connection lost (agent):	(0d. 00h. 00m. 00s.)	0	Videosystem software failure:	(0d. 00h. 00m. 00s.)	0	Insufficient archive size:	(0d. 00h. 00m. 00s.)	0	HDD failure:	(0d. 00h. 00m. 00s.)	0	Total:		1
Camera failures:	(0d. 00h. 00m. 00s.)	0																			
Connection lost (communication channel):	(0d. 12h. 21m. 32s.)	1																			
Connection lost (agent):	(0d. 00h. 00m. 00s.)	0																			
Videosystem software failure:	(0d. 00h. 00m. 00s.)	0																			
Insufficient archive size:	(0d. 00h. 00m. 00s.)	0																			
HDD failure:	(0d. 00h. 00m. 00s.)	0																			
Total:		1																			
<table style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td style="padding-left: 20px;">Object availability factor:</td> <td style="text-align: right;">0.0 %</td> </tr> <tr> <td style="padding-left: 20px;">Object unavailability factor (communication:communication channel):</td> <td style="text-align: right;">100.0 %</td> </tr> <tr> <td style="padding-left: 20px;">Object unavailability factor (communication:agent):</td> <td style="text-align: right;">0.0 %</td> </tr> <tr> <td style="padding-left: 20px;">Object unavailability factor (software):</td> <td style="text-align: right;">0.0 %</td> </tr> <tr> <td style="padding-left: 20px;">Object unavailability factor (camera):</td> <td style="text-align: right;">0.0 %</td> </tr> <tr> <td style="padding-left: 20px;">Object unavailability factor (HDD):</td> <td style="text-align: right;">0.0 %</td> </tr> </tbody> </table>	Object availability factor:	0.0 %	Object unavailability factor (communication:communication channel):	100.0 %	Object unavailability factor (communication:agent):	0.0 %	Object unavailability factor (software):	0.0 %	Object unavailability factor (camera):	0.0 %	Object unavailability factor (HDD):	0.0 %									
Object availability factor:	0.0 %																				
Object unavailability factor (communication:communication channel):	100.0 %																				
Object unavailability factor (communication:agent):	0.0 %																				
Object unavailability factor (software):	0.0 %																				
Object unavailability factor (camera):	0.0 %																				
Object unavailability factor (HDD):	0.0 %																				
Page 1/2																					

The following figure shows an example of different failures at an object. Then readiness and non-readiness rates are calculated.



This example uses the time period from 12 a.m. on February 1, 2005, to 12 p.m. on February 28, 2005, to create a statistical report. The readiness rate of an object is calculated as a ratio between the duration of the time period when the object was functioning and the duration of the time period used for the report:

$$Rr = \text{Taf} / (\text{Taf} + \text{Tuf})$$

The following types of failure are used for reports:

- Connection
- Core software
- Cameras

The non-readiness rates of the object in our example are calculated according to the below formulas.

Connection non-readiness:

$$Rn_c = (\text{Tuf_net_1} + \text{Tuf_net_2}) / (\text{Taf} + \text{Tuf})$$

Software non-readiness:

$$Rn_{sw} = \text{Tuf_soft} / \text{Taf} + \text{Tuf}$$

Camera non-readiness:

$$Rn_{cam} = \text{Tuf_cam} / \text{Taf} + \text{Tuf}$$

Generally, in this model, the non-readiness rate Rn is not equal to the sum of all the non-readiness rates for all failures.

The following figure shows a sample general report for the entire system. The readiness and non-readiness rates in the report are calculated as the arithmetic mean.

Report issue date: 3/15/2023 12:19:16 PM

System statistics

Number of objects: 5
Period:: from 3/15/2023 12:00:00 AM to 3/15/2023 12:00:07 PM
Region: all objects
District: all objects
City: all objects
Period length: 0d. 12h. 00m. 07s.

Number of failures:

Camera failures:	0
Connection lost (communication channel):	5
Connection lost (agent):	0
Videosystem software failure:	0
Insufficient archive size:	0
HDD failure:	0
Total:	5

System availability factor:	0.0 %
System unavailability factor (communication:communication channel):	100.0 %
System unavailability factor (communication:agent):	0.0 %
System unavailability factor (software):	0.0 %
System unavailability factor (camera):	0.0 %
System unavailability factor (HDD):	0.0 %

When you create a detailed report for the entire system, in addition to the general information page, you get a table that contains detailed data for each object.


Object	Number of failures						RC, %	UF_com (chan.), %	UF_com (agent), %	UF_sw, %	UF_cam, %	UF_hdd, %
	Cameras	Com. (chan.)	Com. (agent)	Software	Archive	HDD						
Partition Of Control 1	0	5	0	4	0	0	19,9	77,1	0	5,4	0	0

If you select the **Availability factor threshold** check box when you create a detailed report for entire system, the first page looks as shown in the following figure.

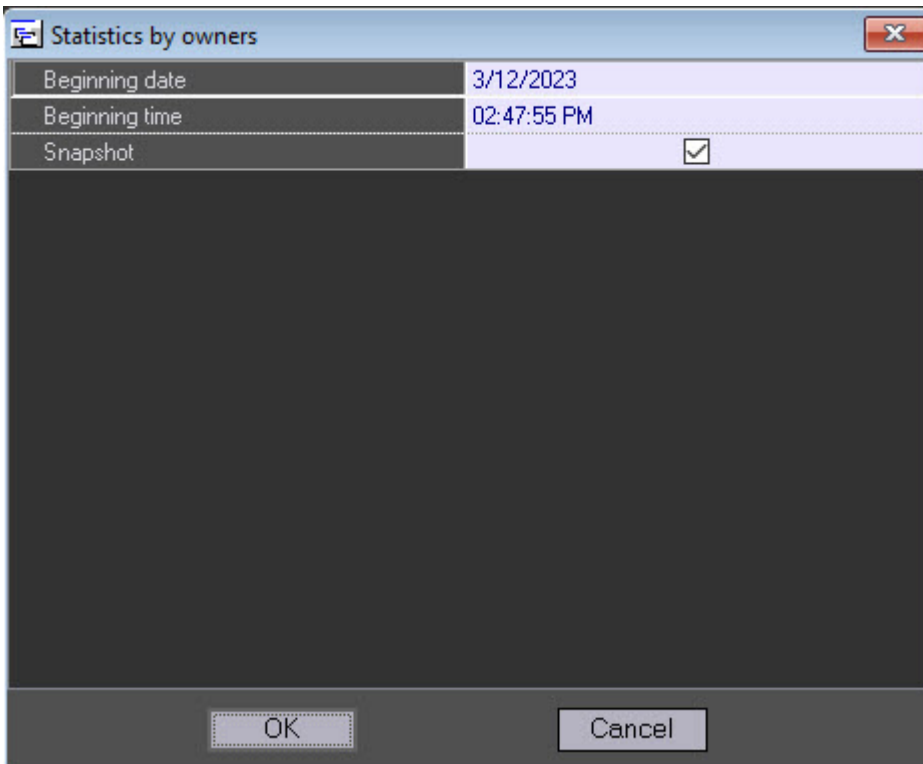
Attention!

If you create a statistical report on all the objects and a number of failures for the specified period exceeds 1000 for a particular object, then such object is excluded from the report. In this case, a list of such objects is shown.

7.7 Statistics by owners

This type of report uses only objects for which the **Owner** field is filled in in the **Monitoring objects** reference book (see the [Filling out reference books](#) section). To start creating a report, click .

A window opens. In this window, you can set the parameters needed to create the report.



Beginning date	3/12/2023
Beginning time	02:47:55 PM
Snapshot	<input checked="" type="checkbox"/>

You can set the following report parameters:

1. The time range of the report. Use the **Beginning date** and **Beginning time** fields.
2. **Snapshot**. If you select this checkbox, the report is created for the specified date and time. Otherwise, the report is created for the entire day specified in the **Beginning date** field.


The following figure shows a sample statistical report by owners.

Report issue date: 3/15/2023 2:48:07 PM

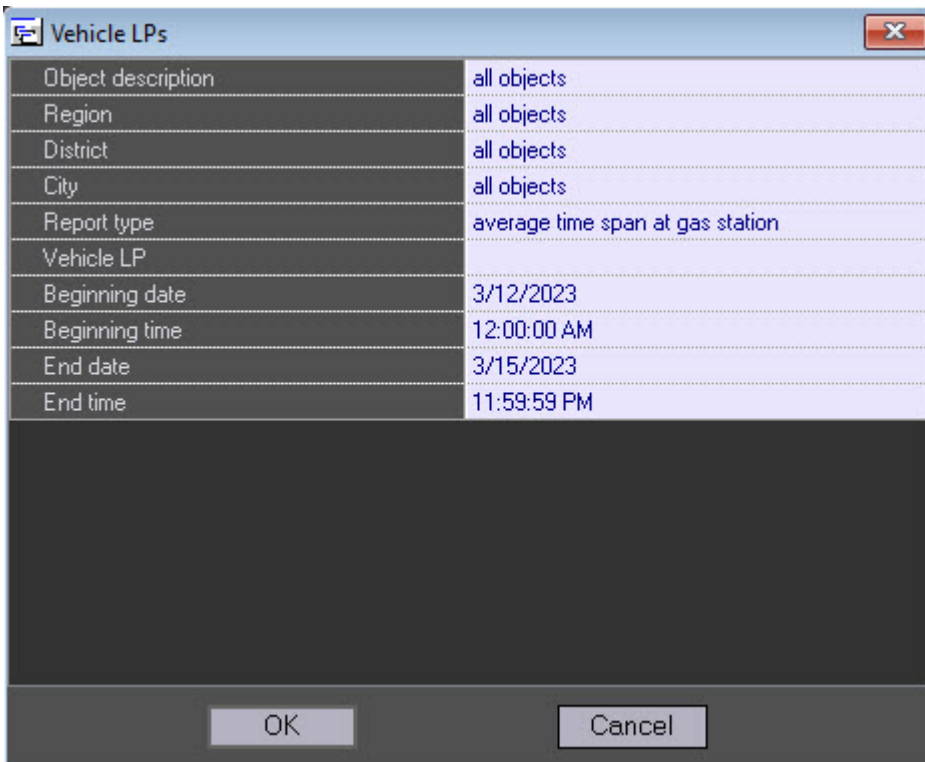
Statistics by owners (from 3/12/2023 2:47:55 PM to 3/12/2023 2:47:56 PM)

	Owner name	Total objects (total with errors)	General availability factor, %	Unavailability factor in % (number)					
				Cameras	Connection with object	Connection with monitoring agent	Software error	Archive	HDD error
1	Department Berlin	1 (1)	0.0	0.0 (0)	100.0 (1)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)
2	Department London	1 (1)	0.0	0.0 (0)	100.0 (1)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)
3	Department New York	1 (1)	0.0	0.0 (0)	100.0 (1)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)
	TOTAL :	3 (3)	0.0	0.0 (0)	100.0 (3)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)

7.8 Vehicle LPs report

To start creating a report, click .

A modal window opens. In this window, you can set the parameters needed to create the report.



Field	Value
Object description	all objects
Region	all objects
District	all objects
City	all objects
Report type	average time span at gas station
Vehicle LP	
Beginning date	3/12/2023
Beginning time	12:00:00 AM
End date	3/15/2023
End time	11:59:59 PM

You can set the following report parameters:

1. The time range of the report. Use the **Beginning date**, **Beginning time**, **End date**, and **End time** fields.
2. **Object description**. You can use this field to choose between two report modes:
 - a. Report on all the system objects.

b. Report on one or several system objects.

Object description	all objects
Region	all objects
District	10 Green spruce dr. 18 Alexanderplatz
City	47 John Reed str.
Report type	Partition Of Control 1 Partition Of Control 2
Vehicle LP	

3. **Region.** Select one or more regions.

Region	all objects
District	<input type="checkbox"/> Union
City	<input type="checkbox"/> United

4. **District.** Select one or more districts.

District	all objects
City	<input type="checkbox"/> First
Report type	<input type="checkbox"/> Second

5. **City.** Select one or more cities.

City	all objects
Report type	<input type="checkbox"/> Berlin
Vehicle LP	<input type="checkbox"/> London
Beginning date	<input type="checkbox"/> New York

6. **Report type:**

- a. average time span at gas station
- b. number of vehicles
- c. list of LPs

Report type	average time span at gas station
Vehicle LP	average time span at gas station
Beginning date	number of vehicles
	list of LPs

7. **Vehicle LP** number. With this parameter, you can specify the LP number of the vehicle, the information about which should be included in the report. The LP number can be specified in full or with a mask containing the following symbols:

- % to replace several symbols. For example, if you specify **T4%**, the report includes information on vehicles with LP starting with **T4**.
- _ to replace one symbol.

Note.

The **Vehicle LP** field is auto-filled. Each LP number entered in this field will be stored in the database and will be automatically inserted into the field upon retyping.

Vehicle LP	
------------	--

8. After setup of all parameters, click **OK**. The report is displayed in a separate window.

8 Special operation mode joint with Auto PSIM

In the special operation mode joint with *Auto PSIM*, *Agent of Control* intercepts the **LP recognized** event and transfers information on this event to the *Server of Control*. This information is NOT visualized as an alarm but is saved in the *Server of Control* database. The **Info on vehicle license plates** button also becomes available to open **License plate search** window (see [Viewing recognized LPs](#)). This allows searching external plates databases.


8.1 Interface of the License plates search window

See appearance of the **License plates search** window on the picture below.

ID	Name	Region	District	City	Date	Date of recognition	Vehicle license plate	Recognizer	Camera	Recognition location	Note	Comment
550016	47 John Reed str.				3/20/2023 5:04:18 PM	3/20/2023 4:43:23 PM	LO4930S	LPR channel 2	Camera 4		Exit	
550016	47 John Reed str.				3/20/2023 5:04:11 PM	3/20/2023 4:43:17 PM	5208CSD	LPR channel 1	Camera 3		Entry	
550016	47 John Reed str.				3/20/2023 5:04:11 PM	3/20/2023 4:43:17 PM	5208CSD	LPR channel 2	Camera 4		Exit	
550016	47 John Reed str.				3/20/2023 5:04:08 PM	3/20/2023 4:43:14 PM	6866DKZ	LPR channel 2	Camera 4		Exit	
550016	47 John Reed str.				3/20/2023 5:04:08 PM	3/20/2023 4:43:14 PM	6866DKZ	LPR channel 1	Camera 3		Entry	
550016	47 John Reed str.				3/20/2023 5:04:05 PM	3/20/2023 4:43:12 PM	6866DK	LPR channel 2	Camera 4		Exit	
550016	47 John Reed str.				3/20/2023 5:04:05 PM	3/20/2023 4:43:11 PM	6866DK	LPR channel 1	Camera 3		Entry	
550016	47 John Reed str.				3/20/2023 5:04:05 PM	3/20/2023 4:43:11 PM	FA6140AT	LPR channel 2	Camera 4		Exit	
550016	47 John Reed str.				3/20/2023 5:04:05 PM	3/20/2023 4:43:11 PM	FA6140AT	LPR channel 1	Camera 3		Entry	
550016	47 John Reed str.				3/20/2023 5:04:00 PM	3/20/2023 4:43:05 PM	MA4250D	LPR channel 1	Camera 3		Entry	
550016	47 John Reed str.				3/20/2023 5:04:00 PM	3/20/2023 4:43:05 PM	MA4250D	LPR channel 2	Camera 4		Exit	
550016	47 John Reed str.				3/20/2023 5:03:57 PM	3/20/2023 4:43:02 PM	LO2926F	LPR channel 2	Camera 4		Exit	
550016	47 John Reed str.				3/20/2023 5:03:57 PM	3/20/2023 4:43:02 PM	LO2926F	LPR channel 1	Camera 3		Entry	
550016	47 John Reed str.				3/20/2023 5:03:54 PM	3/20/2023 4:43:00 PM	1234CZX	LPR channel 2	Camera 4		Exit	

Search panel: Searching: AND, from: 3/19/2023 5:04:58 PM, to: 3/20/2023 5:04:58 PM, Search, Load frame

Description of the **License plates search** window interface:

1	The button similar to  (Show inspector Ctrl+I) in the license plates search panel. Opens custom information panel. Information on the selected event is shown in the top of this panel
2	Unique object ID is shown in the ID column (see Configuring Agent of Control and Configuring Server of Control)
3	Partition of control name is displayed in the Name column
4	The area where the object is installed is displayed in the Region column
5	The district where the object is installed is shown in the District column
6	The city where the object is installed is displayed in the City column
7	The date of alarm is displayed in the Date column (see also Data loading to the database)
8	Date when the frame from the camera was recognized is shown in the Date of recognition column

9	Vehicle LP is shown in the Vehicle license plate column
10	Name of the recognition module is shown in the Recognizer column
11	Name of the camera from which the frame was received is shown in the Camera column
12	Recognition point (entrance or exit) is shown in the Recognition location column
13	Name of the External Plates DB object is shown in the Note column
14	In the Comment column, the additional information for the LP is shown, if it was specified while adding the LP to the External Plates DB
15	License plates search panel (see Interface of the License plates search panel)
16	The Vehicle license plates area is intended to search for LPs by a known LP number or by mask with search conditions
17	The Date/Time area allows searching events for a specified period of time
18	Click Search button to run the search
19	The Load frame button is for downloading the frame on which the LP was recognized

8.2 Interface of the License plates search panel

See appearance of the **License plates search** panel on the picture below.



Description of the buttons on the **License plates search** panel:



(Show Inspector Ctrl+I): when this button is pressed, a special area is displayed, at the top of which a brief information about the currently selected record is listed.



(First record): when this button is pressed, the first registered event records are displayed.




Previous page): when this button is pressed, the previous page with event records is displayed if present.





(Previous record): when this button is pressed, the previous event record is selected relative to the currently selected record.





(Next record): when this button is pressed, the next event record is selected relative to the currently selected record.

 (**Next page**): when this button is pressed, the next page with event records is displayed if present.

 (**Last record**): when this button is pressed, the last registered event records are displayed.


 (**Update data**): when this button is pressed, the displayed data are updated.

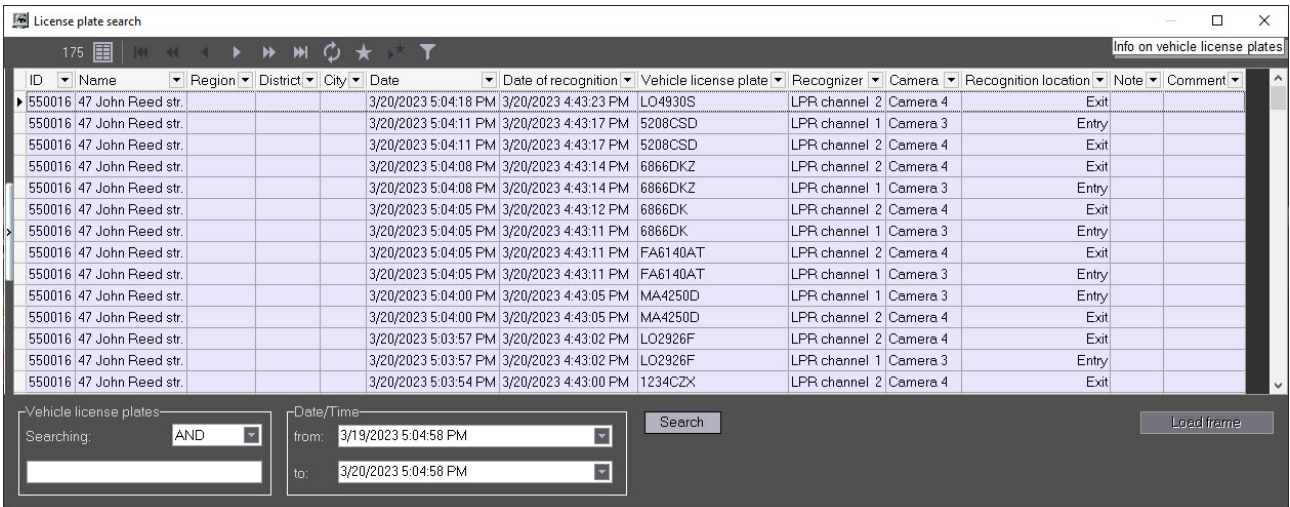
 (**Define bookmark**): when this button is pressed, the current page with event records is added to the bookmark, which you can access later with the button (**Go to bookmark**).

 (**Go to bookmark**): when this button is pressed, the page with event records that was previously added to the bookmark is opened.

 (**Filter constructor**): when this button is pressed, the **Filter builder** window is opened (see [Custom filter in the Log panel](#)).

8.3 Viewing recognized LPs

In order to view details on recognized license plates, click the **Info on vehicle license plates**  button on the **Log panel** or in the **Details** window in the **Monitoring** interface. The **License plates search** window opens.

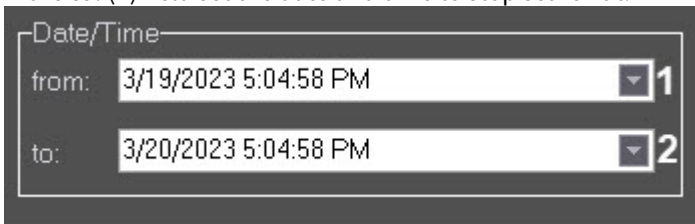


The screenshot shows the "License plate search" window with a table of results and search filters. The table has columns for ID, Name, Region, District, City, Date, Date of recognition, Vehicle license plate, Recognizer, Camera, Recognition location, Note, and Comment. The search filters include "Vehicle license plates" (searching: AND), "Date/Time" (from: 3/19/2023 5:04:58 PM, to: 3/20/2023 5:04:58 PM), and a "Search" button.

ID	Name	Region	District	City	Date	Date of recognition	Vehicle license plate	Recognizer	Camera	Recognition location	Note	Comment
550016	47 John Reed str.				3/20/2023 5:04:18 PM	3/20/2023 4:43:23 PM	LO4930S	LPR channel 2	Camera 4		Exit	
550016	47 John Reed str.				3/20/2023 5:04:11 PM	3/20/2023 4:43:17 PM	5208CSD	LPR channel 1	Camera 3		Entry	
550016	47 John Reed str.				3/20/2023 5:04:11 PM	3/20/2023 4:43:17 PM	5208CSD	LPR channel 2	Camera 4		Exit	
550016	47 John Reed str.				3/20/2023 5:04:08 PM	3/20/2023 4:43:14 PM	6866DKZ	LPR channel 2	Camera 4		Exit	
550016	47 John Reed str.				3/20/2023 5:04:08 PM	3/20/2023 4:43:14 PM	6866DKZ	LPR channel 1	Camera 3		Entry	
550016	47 John Reed str.				3/20/2023 5:04:05 PM	3/20/2023 4:43:12 PM	6866DK	LPR channel 2	Camera 4		Exit	
550016	47 John Reed str.				3/20/2023 5:04:05 PM	3/20/2023 4:43:11 PM	6866DK	LPR channel 1	Camera 3		Entry	
550016	47 John Reed str.				3/20/2023 5:04:05 PM	3/20/2023 4:43:11 PM	FA6140AT	LPR channel 2	Camera 4		Exit	
550016	47 John Reed str.				3/20/2023 5:04:05 PM	3/20/2023 4:43:11 PM	FA6140AT	LPR channel 1	Camera 3		Entry	
550016	47 John Reed str.				3/20/2023 5:04:00 PM	3/20/2023 4:43:05 PM	MA4250D	LPR channel 1	Camera 3		Entry	
550016	47 John Reed str.				3/20/2023 5:04:00 PM	3/20/2023 4:43:05 PM	MA4250D	LPR channel 2	Camera 4		Exit	
550016	47 John Reed str.				3/20/2023 5:03:57 PM	3/20/2023 4:43:02 PM	LO2926F	LPR channel 2	Camera 4		Exit	
550016	47 John Reed str.				3/20/2023 5:03:57 PM	3/20/2023 4:43:02 PM	LO2926F	LPR channel 1	Camera 3		Entry	
550016	47 John Reed str.				3/20/2023 5:03:54 PM	3/20/2023 4:43:00 PM	1234CZX	LPR channel 2	Camera 4		Exit	

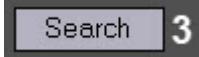
In the **Date/Time** area in this window, the period to search LPs in can be specified. For this:

1. In the **from: (1)** field set the date and time to start search from.
2. In the **to: (2)** field set the date and time to stop search at.



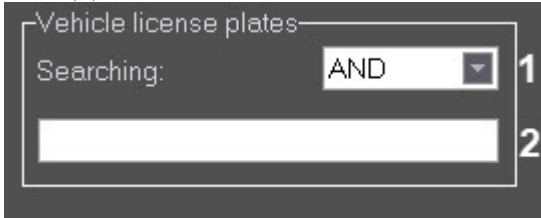
The screenshot shows the "Date/Time" search filter fields. The "from:" field is set to "3/19/2023 5:04:58 PM" and is labeled with a circled "1". The "to:" field is set to "3/20/2023 5:04:58 PM" and is labeled with a circled "2".

3. Click **Search (3)** to run the search.



In the **Vehicle license plates** area, the search by a known LP number or by mask with search conditions can be performed. For this:

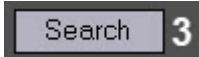
1. In the **Searching** field (1) choose the search condition: **AND** or **OR**.
2. In the (2) field enter the fill LP number or use the following mask symbols:



- % – to replace several characters;;
- _ – to replace one character.

Note.
For example, when **T4%** is entered, the report is built for vehicles with LP starting from **T4**.

- Click **Search (3)** to run the search.



The frame on which the LP number was recognized can be downloaded. For that, select the record in the list and click **Load frame (1)**. The frame is downloaded and displayed (2).

ID	Name	Region	District	City	Date	Date of recognition	Vehicle license plate	Recognizer	Camera	Recognition location	Note	Comment
550016	47 John Reed str.				3/20/2023 5:04:18 PM	3/20/2023 4:43:23 PM	LO4930S	LPR channel 2	Camera 4			
550016	47 John Reed str.				3/20/2023 5:04:11 PM	3/20/2023 4:43:17 PM	5208CSD	LP				
550016	47 John Reed str.				3/20/2023 5:04:11 PM	3/20/2023 4:43:17 PM	5208CSD	LP				
550016	47 John Reed str.				3/20/2023 5:04:08 PM	3/20/2023 4:43:14 PM	6866DKZ	LP				
550016	47 John Reed str.				3/20/2023 5:04:08 PM	3/20/2023 4:43:14 PM	6866DKZ	LP				
550016	47 John Reed str.				3/20/2023 5:04:05 PM	3/20/2023 4:43:12 PM	6866DK	LP				
550016	47 John Reed str.				3/20/2023 5:04:05 PM	3/20/2023 4:43:11 PM	6866DK	LP				
550016	47 John Reed str.				3/20/2023 5:04:05 PM	3/20/2023 4:43:11 PM	FA6140AT	LP				
550016	47 John Reed str.				3/20/2023 5:04:05 PM	3/20/2023 4:43:11 PM	FA6140AT	LP				
550016	47 John Reed str.				3/20/2023 5:04:00 PM	3/20/2023 4:43:05 PM	MA4250D	LP				
550016	47 John Reed str.				3/20/2023 5:04:00 PM	3/20/2023 4:43:05 PM	MA4250D	LP				
550016	47 John Reed str.				3/20/2023 5:03:57 PM	3/20/2023 4:43:02 PM	LO2926F	LP				
550016	47 John Reed str.				3/20/2023 5:03:57 PM	3/20/2023 4:43:02 PM	LO2926F	LP				
550016	47 John Reed str.				3/20/2023 5:03:54 PM	3/20/2023 4:43:00 PM	1234CZX	LP				

Important!
The **Search in archive** object on the **Interfaces** tab must be created to load frames from the **License plates search** window.

Records with frames already downloaded are highlighted in bold. These frames can be viewed any time by double clicking the record.

ID	Name	Region	District	City	Date	Date of recognition	Vehicle license plate	Recognizer	Camera	Recognition location	Note	Comment
550016	47 John Reed str.				3/20/2023 5:04:18 PM	3/20/2023 4:43:23 PM	LO4930S	LPR channel 2	Camera 4		Exit	
550016	47 John Reed str.				3/20/2023 5:04:11 PM	3/20/2023 4:43:17 PM	5208CSD	LPR channel 1	Camera 3		Exit	
550016	47 John Reed str.				3/20/2023 5:04:11 PM	3/20/2023 4:43:17 PM	5208CSD	LPR channel 2	Camera 4		Exit	
550016	47 John Reed str.				3/20/2023 5:04:08 PM	3/20/2023 4:43:14 PM	6866DKZ	LPR channel 2	Camera 4		Exit	
550011	47 John Reed str.				3/20/2023 5:04:08 PM	3/20/2023 4:43:14 PM	6866DKZ	LPR channel 1	Camera 3		Entry	
550016	47 John Reed str.				3/20/2023 5:04:05 PM	3/20/2023 4:43:12 PM	6866DK	LPR channel 2	Camera 4		Exit	
550016	47 John Reed str.				3/20/2023 5:04:05 PM	3/20/2023 4:43:11 PM	6866DK	LPR channel 1	Camera 3		Entry	
550016	47 John Reed str.				3/20/2023 5:04:05 PM	3/20/2023 4:43:11 PM	FA6140AT	LPR channel 2	Camera 4		Exit	
550016	47 John Reed str.				3/20/2023 5:04:05 PM	3/20/2023 4:43:11 PM	FA6140AT	LPR channel 1	Camera 3		Entry	
550016	47 John Reed str.				3/20/2023 5:04:00 PM	3/20/2023 4:43:05 PM	MA4250D	LPR channel 1	Camera 3		Entry	
550016	47 John Reed str.				3/20/2023 5:04:00 PM	3/20/2023 4:43:05 PM	MA4250D	LPR channel 2	Camera 4		Exit	
550016	47 John Reed str.				3/20/2023 5:03:57 PM	3/20/2023 4:43:02 PM	LO2926F	LPR channel 2	Camera 4		Exit	
550016	47 John Reed str.				3/20/2023 5:03:57 PM	3/20/2023 4:43:02 PM	LO2926F	LPR channel 1	Camera 3		Entry	
550016	47 John Reed str.				3/20/2023 5:03:54 PM	3/20/2023 4:43:00 PM	1234CZX	LPR channel 2	Camera 4		Exit	

Note

Information about frames downloading can be found in the **Search in archive** request log.

ID	Object name	Camera	Date and time of requested video clip	Type	Status	Loaded, %	Requested length, sec.	Date and time of planned start	Size, KB	Speed, KBps	Received, KB	Xml	Comment
550016	47 John Reed str.	Camera 3 [3]	3/20/2023 4:43:14.150 PM	Frames	Ready	100%		3/20/2023 5:11:59 PM	25	0	25		

Upon receiving an event about the recognized number, *Server of Control* can search for a number in one or more external databases. An alarm is generated on *Server of Control* if the LP is found in the External DB. The alarm is sent to the *Agent of Control*.

Note.

The **Alarm Messages Window** object is to be created on the **Hardware** tab to visualize the alarm in a pop-up window (see [Alarm message window](#)).

Reaction to alarm: 47 John Reed str. (550016)

Alarm date: 3/20/2023 7:43:48 PM | End: 3/20/2023 7:43:49 PM | Confirm: | Alarm type: Detections | Device: License plate found in database (6866DKZ VIP-minister)

Attention

LP found in DB [20-03-23] [19:22:54]

Source: 47 John Reed str.

Area:

Add info: 6866DKZ (VIP-minister)

Confirm

Confirm all | Undo

Comment:

Confirm selected | Confirm | Confirmed all

The records of LPs found in an external DB are highlighted in red in the **License plates search** window. Name of the **External Plates DB** object is shown in the **Note** column. In the **Comment** column, the additional information for the LP is shown, if it was specified while adding the LP to the **External Plates DB**.

License plate search

371

Info on vehicle license plates

ID	Name	Region	District	City	Date	Date of recognition	Vehicle license plate	Recognizer	Camera	Recognition location	Note	Comment
550016	47 John Reed str.				3/20/2023 5:04:18 PM	3/20/2023 4:43:23 PM	LO4930S	LPR channel 2	Camera 4		Exit	
550016	47 John Reed str.				3/20/2023 5:04:11 PM	3/20/2023 4:43:17 PM	5208CSD	LPR channel 1	Camera 3		Entry	
550016	47 John Reed str.				3/20/2023 5:04:11 PM	3/20/2023 4:43:17 PM	5208CSD	LPR channel 2	Camera 4		Exit	
550016	47 John Reed str.				3/20/2023 5:04:08 PM	3/20/2023 4:43:14 PM	6866DKZ	LPR channel 2	Camera 4		Exit	VIP minister
550011	47 John Reed str.				3/20/2023 5:04:08 PM	3/20/2023 4:43:14 PM	6866DKZ	LPR channel	Camera 3		Entry	VIP minister
550016	47 John Reed str.				3/20/2023 5:04:05 PM	3/20/2023 4:43:12 PM	6866DK	LPR channel 2	Camera 4		Exit	

Vehicle license plates: Searching: AND

Date/Time: from: 3/19/2023 7:59:08 PM to: 3/20/2023 7:59:08 PM

Search Load frame

Note.

If connection is lost between *Server of Control* and *Agent of Control*, the *Agent of Control* stores the information on the recognized vehicle LPs locally. When the connection is restored, the *Agent of Control* sends saved LPs to *Server of Control*.


9 Appendix 1. Data update periods summary

9.1 Data loading from database to the interface objects

Information on **Control panel** and **Log panel** is updated every time data is loaded from the database. The time of the last download from the database is shown in the **CUT** field.

Periods of data updating are different for **Control panel** and **Log panel**:

1. **Control panel.**
 - a. Data are updated from the database once a minute (by timer).
 - b. At receiving of a command from *Data loader* to forcibly update information, which can appear after a new load to the database.
2. **Log panel.** Data are updated from the database once a minute (by timer).

To get the latest database information, click the button  (**Update data**). This forces the data to load.

9.2 Data loading to the database

The date of last load of data to the database (see section [Moving through the list of alarms](#)) is refreshed when changes in the database appear.

If there is no any change in the database in 5 minutes, the **CUT** field is forcibly updated and then is updated once a minute. At the same time there will be a gap from the current system time by 5 minutes. After coming of new information from any of the *Agent of Control*, the **CUT** become equal to the current system time of the computer.

Loading data to the database is performed by the *Data loader* for *Monitoring* module.

If files with technical information are received from *Agents of Control* (e.g. camera enabled), these files are loaded to the database with a period specified while configuring *Data loader* in the **Loading period (sec)** parameter, 10 seconds by default. If files with information on alarms are received from *Agents of Control* (e.g. vibration sensor triggered), this information is loaded to the database immediately.

After each load to the database, a message is sent to the **Control panel** interface component to update the information.

If, after receiving files with technical condition, *Server of Control* determines that object state has not changed, then nothing is loaded to the database. This is why the timer is used to forcibly update interfaces (see section [Data loading from database to the interface objects](#)).

In the **Alarm date** field in the interface objects, the time of alarm information load to the database after receiving it from the *Agent of Control* is displayed, not the time of alarm appearing at the site.

Note.

To enable alarm registration with the time it emerged on site, create the TimeAlarmFromAgent key in the Windows registry and set it to 1 (see [Registry keys reference guide](#) for more details on the key and the [Working with Windows OS registry](#) section of *Axxon PSIM* software. Administrator's Guide for more details on how to operate registry keys).

9.3 Sending data from Agent of Control to Server of Control

Agent of Control sends to *Server of Control* packages with its technical condition with a period set while setting the **Partition Of Control** object at the *Agent of Control* side using the **Ping frequency (s)** parameter (see *Monitoring*

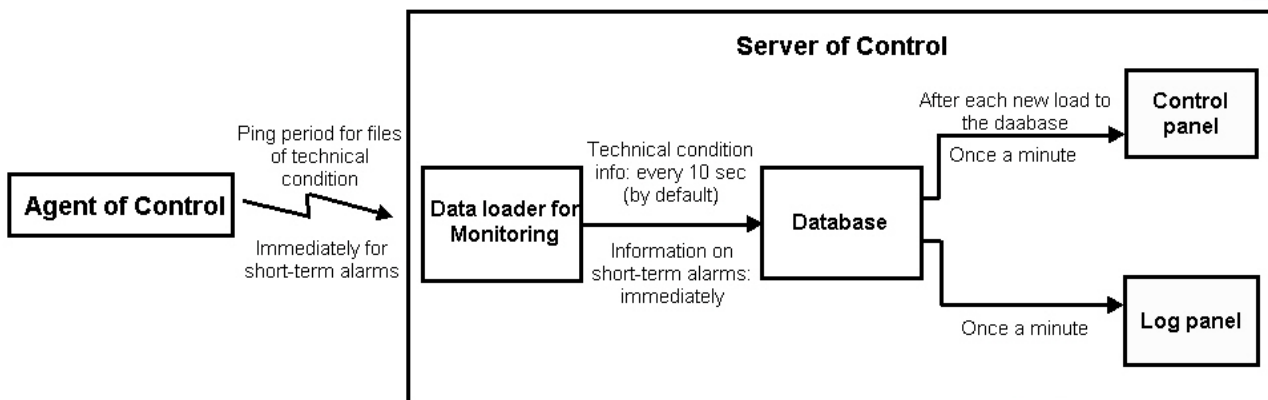
PSIM. Administrator's Guide, section [Configuring communication between Agent of Control and Server of Control](#)). The default ping frequency is 2 minutes (120 seconds).

Information on long-term alarms comes to the *Server of Control* from *Agent of Control* together with the information on technical condition, with the ping period.

Information about short-term alarms comes to the *Server of Control* immediately after they have appeared at the *Agent of Control*.

9.4 Data transmission scheme

The picture gives a general scheme of data transferring from *Agent of Control* to *Server of Control*.



9.5 Features of displaying information on short-term and long-term alarms

Information about long-term alarm can be not recorded into the *Monitoring PSIM* database and not displayed in its interfaces in the following cases:

1. If a long-term alarm had started and ended within two polls of *Agent of Control* (within the **Ping frequency (s)** interval, see *Monitoring PSIM. Administrator's Guide*, section [Configuring communication between Agent of Control and Server of Control](#)).
2. If a long-term alarm had started and ended when the connection between *Agent of Control* and *Server of Control* was lost.

When there is no connection with *Server of Control*, the short-term alarms are stored in the "holding" data files on the *Agent of Control*. When connection with *Server of Control* is restored, they are transferred to the *Server of Control*, stored in the *Monitoring PSIM* database and displayed in its interfaces.

9.6 Agent of Control technical condition data collection periods

Agent of Control technical condition data collection periods are given below:

1. Information on disk failures (the Disk failure alarm type) and its restoring is updated in the following cases:
 - a. at *Agent of Control* startup and then every 15 minutes.
 - b. at receiving local message SLAVE|NO_DISC (No disk for archive storage) from *Axxon PSIM* core.
 - c. at receiving local message DISC_EXIST (Disk for archive storage found) from *Axxon PSIM* core.
 - d. at receiving local message DISC_UNMOUNT (Disk unmounted) from *Axxon PSIM* core.
 - e. at receiving local message DISC_MOUNT (Disk mounted) from *Axxon PSIM* core.

2. Information on archive size (the Small archive size alarm type) is updated at *Agent of Control* startup and then every 15 minutes.
3. Information on the computer normal and abnormal restarts is displayed in the interface within 5 minutes.
4. Information on free disk space is updated every 1 hour.
5. *Agent of Control* initiates the connection with *Server of Control* and once in a ping period (2 minutes by default) sends a package with technical data to the *Server of Control*. If *Server of Control* haven't been receiving any data from *Agent of Control* for 6 minutes, the **No connection** error is displayed for such object.

 **Note**

The waiting timeout for receiving the packets with the technical state of *Agent of Control* can be adjusted. To do this:

- a. On the *Agent of Control* side, in the settings panel of the *Partition of Control*, add a one-character postfix to the identifier of this object (for example, if the *Partition of Control* has an identifier equal to **123**, then the identifier with the postfix will look like **123X**, where **X** is the specified postfix).
 - b. On the *Agent of Control* side, it is recommended to adjust the *Server of Control* polling period so that it does not exceed the waiting timeout for receiving the packets with the *Agent of Control* technical condition (see [Configuring communication between Agent of Control and Server of Control](#)).
 - c. On the *Server of Control* side, delete the existing *Partition of Control* with a **123** identifier.
 - d. On the *Server of Control* side, create a new *Partition of Control* with a **123X** identifier.
 - e. On the *Server of Control* side, for the **PostfixForTimeOut** registry key, set the value equal to the previously specified postfix. For the **TimeoutForPostfix** registry key, set the timeout value in minutes (for details, see [Registry keys reference guide](#), for more information about working with the registry, see [Working with Windows OS registry](#)).
6. The video.run process status (hangup) is checked at startup of Videosrv.exe module and then every 15 minutes, and besides that each time the Videosrv.exe module reconnects with the *Axxon PSIM* software, i.e. if the *Axxon PSIM* software was shut down and started again.
 7. Availability of running processes psim.exe and Video.run is checked every 10 seconds.