Operator's Guide

ATM Intellect 13.0 (english)

Last update 10/10/2022

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1 Operator's Guide. Introduction

On the page:

1.1 Purpose of ATM Intellect

ATM-Intellect automates the actions of staff at banks and service companies involved in operation of *Axxon Intellect-Enterprise* based video surveillance systems. Use of *ATM-Intellect* allows obtaining even greater results and efficiency from such video surveillance systems.

1.2 Purpose of the document

This Guide is designed for the Operators working with the *ATM-Intellect* software.

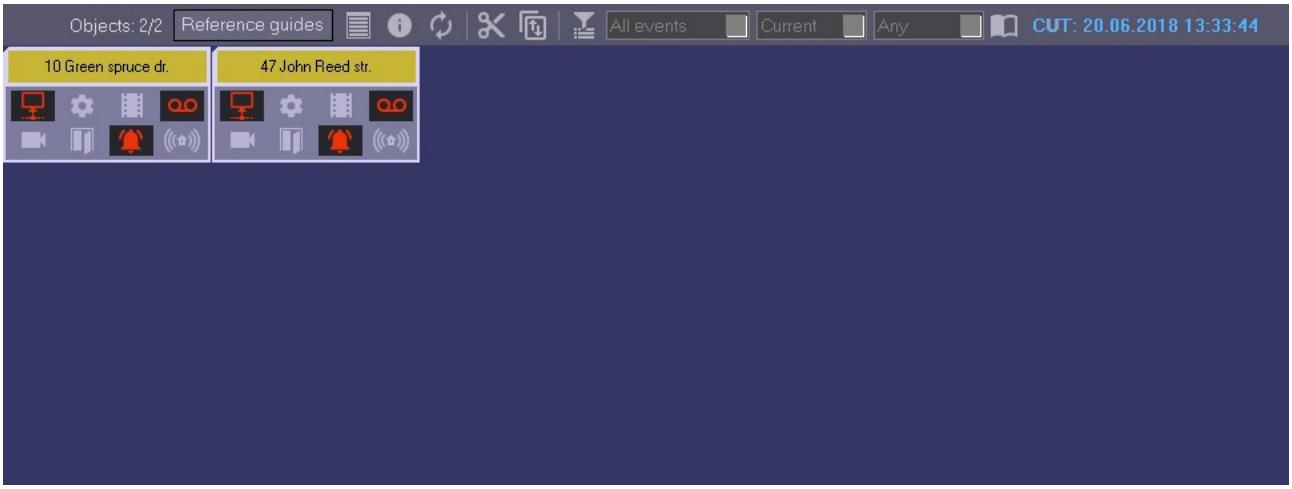
This Guide provides description of main *ATM-Intellect* software interface objects operation.

2 Control panel

2.1 Control panel interface

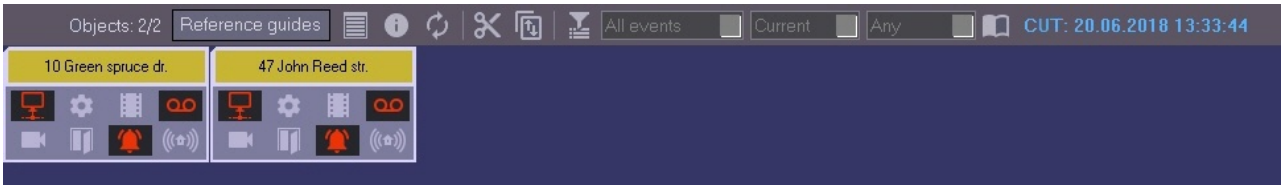
The Control panel is a part on **ATM Monitoring** interface window. This window configuration is performed on the setting panel of the **ATM Monitoring** interface object and is described in the ATM-Intellect. Administrator's guide.

Control panel general view is shown in the figure.



2.2 Control panel purpose

The control panel allows evaluating the current status of video surveillance components at a glance.



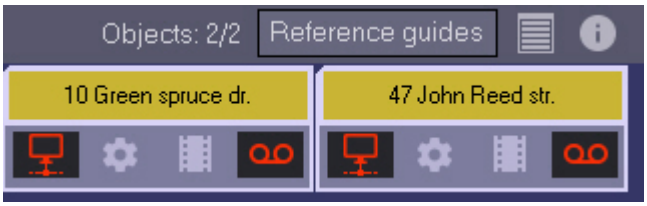
Each object corresponds to a rectangle that contains an object ID area (in the upper part) and a customizable number of clickable alarm indicator badges, which are grouped based on source type:

1. Communication Channel.
2. Hardware.
3. Video System Software.
4. Size of Archives.
5. Cameras.
6. ACS.
7. FSA.
8. Detection tools/Detectors.
9. Extra 1.
10. Extra 2.

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

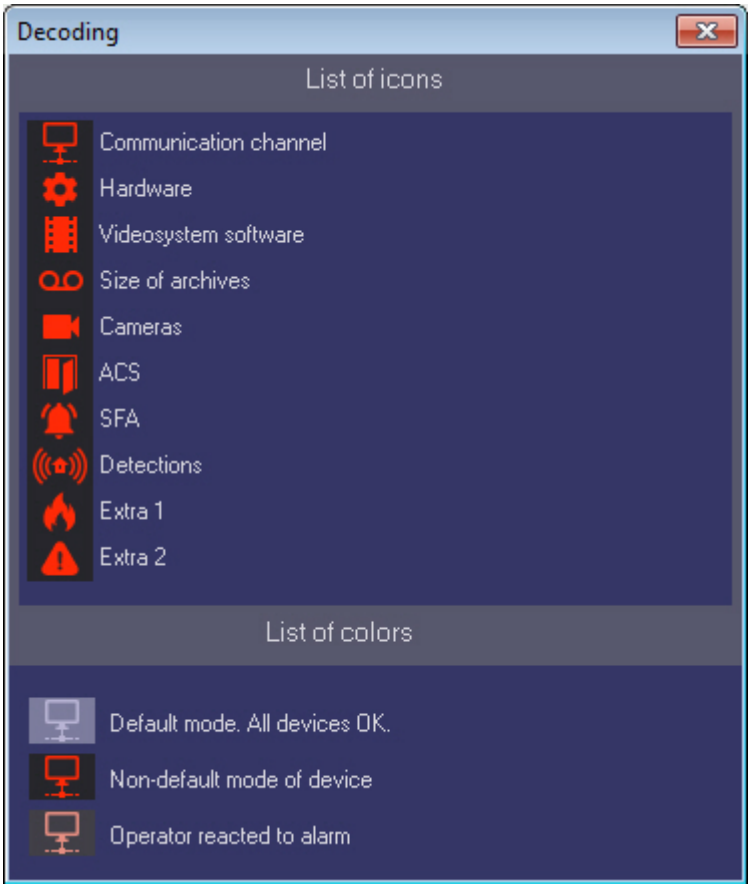
Depending on the configuration of the **ATM Monitoring** object in the **Interfaces** tab, the number of alarm groups shown can be changed to between 4 and 9.

Four alarm groups.



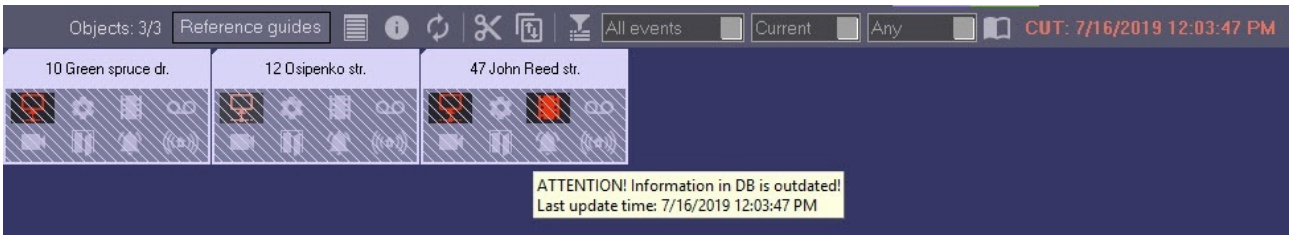
Nine alarm groups.

For information on what an icon means, click the button  (**Symbol Meanings**). A dialog box with information 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 *ATM-Intellect Workstation*, then on the *ATM-Intellect Workstation*, 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).



Note

To change the waiting time for updating the MonitorSSTV database, after which the corresponding indication on the *ATM-Intellect Workstation* 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).

2.3 Changing default icons for alarm groups

If you want to change the default icons, you can assign your own icons for each alarm group. To do so, you must replace the corresponding graphics files that are provided by default. These files are in the Bmp subfolder in the *ATM-Intellect* installation folder. By default, this is C:\Program Files\Intellect\VHost\Bmp. Therefore, in order to replace the icon for the Communication channel group, you must replace two files:

- Bmp\Active\01_net_active.bmp
- 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 ATM Monitoring 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 replacing the graphics files, quit and start Intellect again. If one or more files are missing in the Bmp folder, or a file is in an invalid format, the default icons are used.

2.4 Current Update Time

Information on the control panel is updated every time data is loaded from the database. The time of the most recent update, i.e. Current Update Time (CUT) is shown in the upper-right corner of the window.

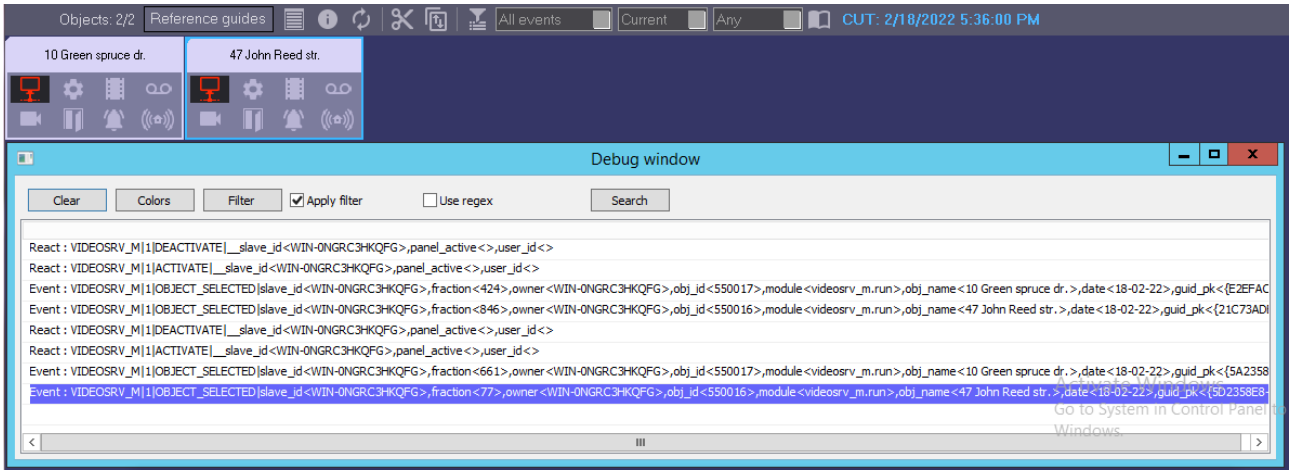
Data is loaded from the database with different periods for particular alarm types – see Appendix 1. Data update periods summary.

To get the most recent information, you can click the  button (**Refresh data**). This forces an update of the data. Any new data is then displayed.

2.5 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 *Intellect,* where **n** is the index number of the **ATM 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 *ATM Monitoring* interface object. In this scenario, the operator selects an object in the *ATM 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.

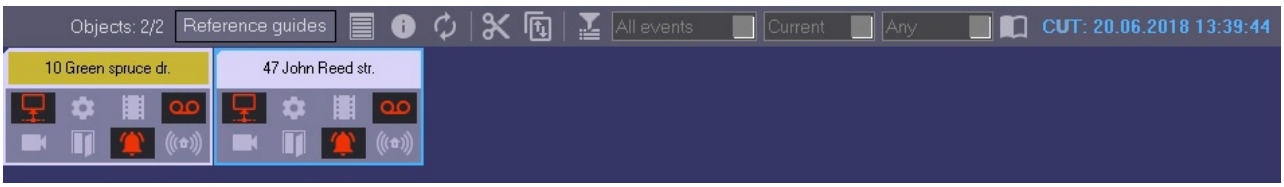
When you select an object on the **Log Panel** (see Selecting an object on the Log Panel), the event is sent to *Intellect* in the similar way.

2.6 Ignoring objects

Objects (i.e. their corresponding objects in the software) that do not currently require monitoring can be put in the "ignore list". These can include objects that are in the system but have not been made operational yet or are under maintenance.

Objects in the ignore list are not visualized on the control panel or the Log panel. These objects are ignored in system reports.

To add an object to the ignore list, hold the Shift key and left-click one or more objects. The objects are outlined in blue.



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

To view the ignore list, click the  button ("Show ignored objects"). To remove objects from the ignore list, use the same technique.

2.7 Processing alarms

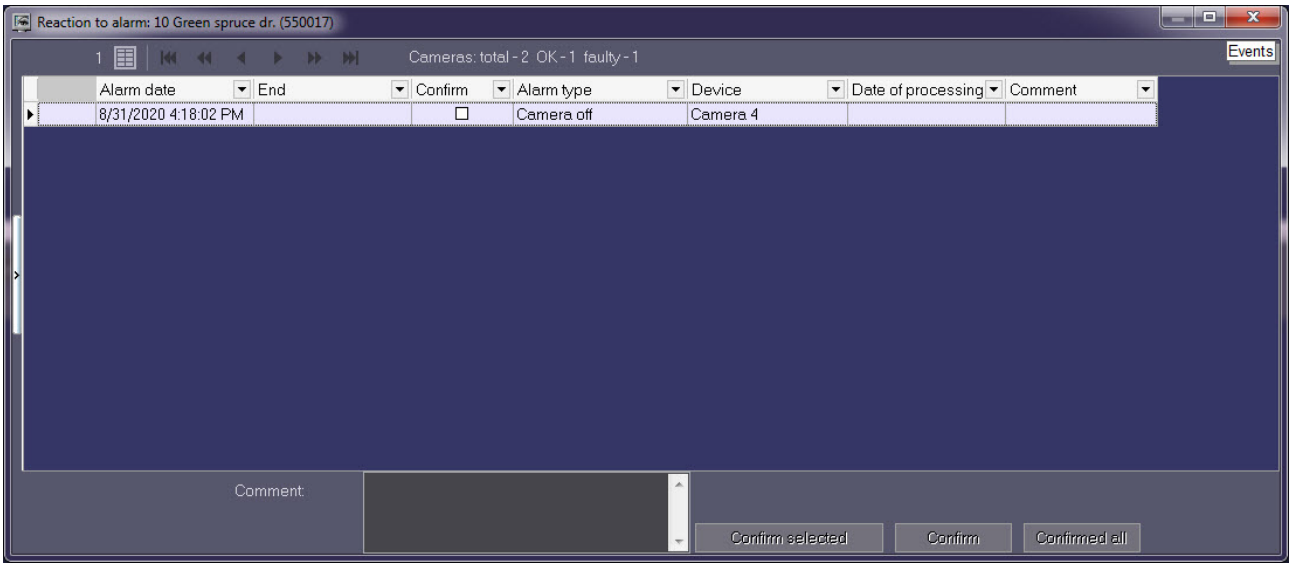
2.7.1 Accepting an alarm

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 detailed information about an alarm, click the corresponding graphic indicator. The **Reaction to alarm** window opens. The title bar of the window contains the name of the object and its ID number.



In the **Alarm date** field there is the time when *ATM-Intellect Workstation* had recorded the alarm from *ATM-Intellect Pro* into the database. This is not the time when the alarm appeared on the *ATM-Intellect Pro*. More info see on data transmission as given in section Appendix 1. Data update periods summary

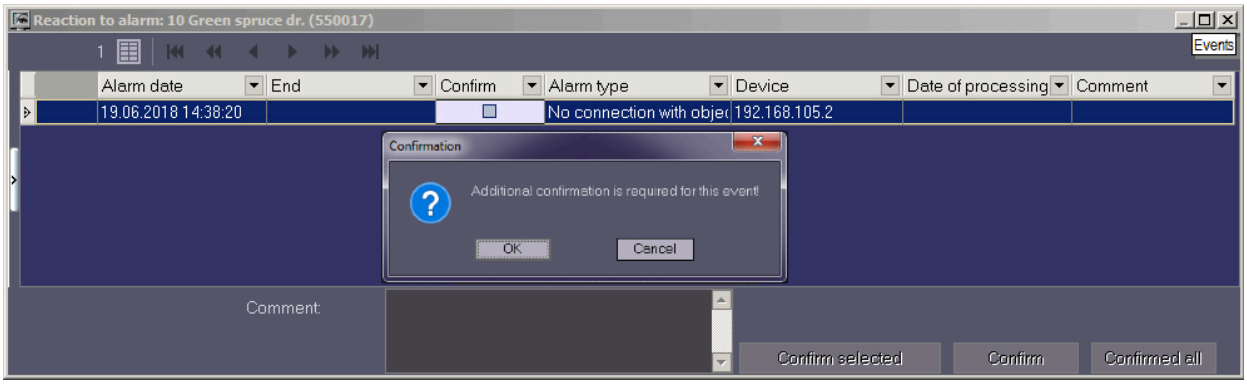
The **Alarm type** field contains the name of the alarm situation. The **Device** field details the device or event.

If you select the **Confirm** check box in the **Reaction to alarm** window, the background of the indicator on the control panel changes from red to orange and a value is automatically added to the **Processing date** column.

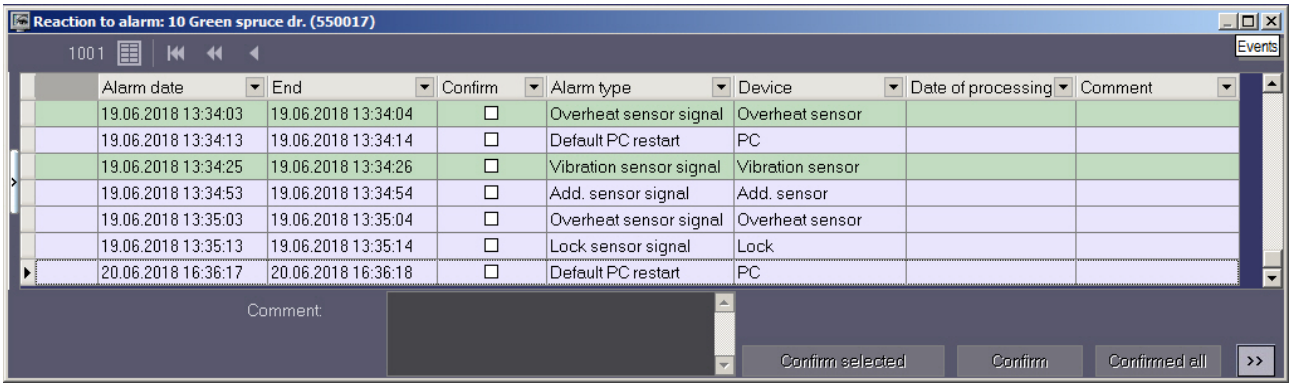
Note that the **Processing date** column will contain not the current computer time, but the current update time (see the Current Update Time section) stored in the database. This ensures that the operator cannot roll back the system time to confirm the alarm with a different time.

> **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 the **Non-empty Comment field** option is enabled in the settings of the **ATM Monitoring** object, an alarm situation is not closed until the operator leaves a comment on the alarm situation and/or the operator's actions. The alarm is automatically closed if the alarm cause goes away, such as if the connection was disrupted and then restored.



If there are many alarms, the **Reaction to alarm** window displays only up to 10,000. To view the remaining events, use the navigation buttons in the upper-right corner.



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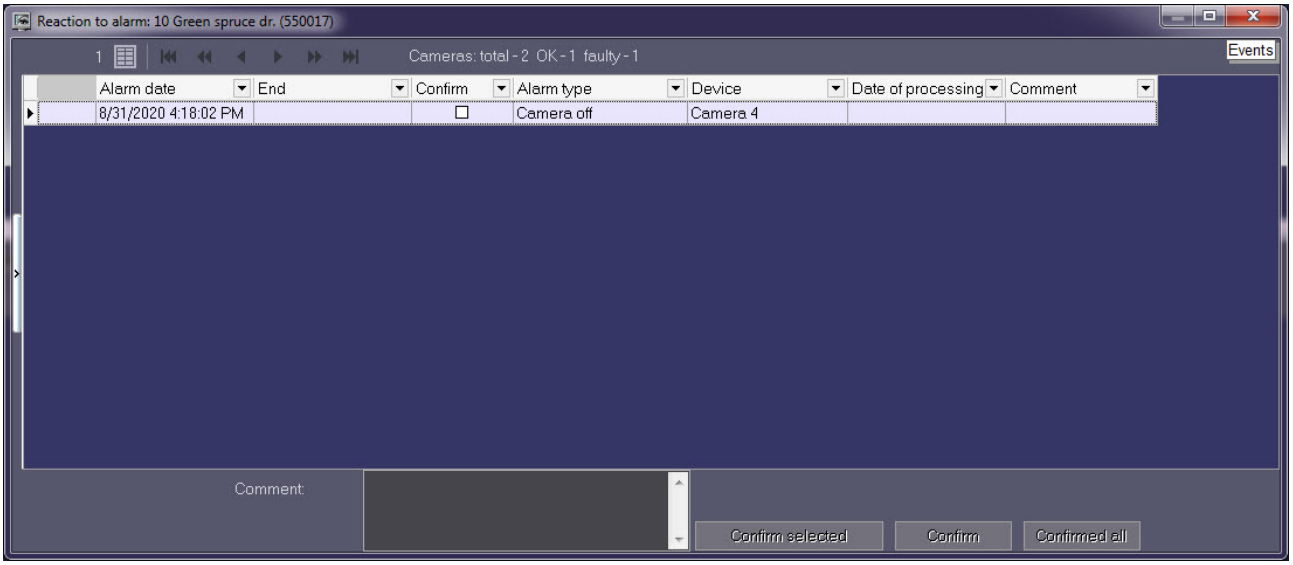

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Note that the **Processing date** column will contain not the current computer time, but the current update time (see the Current Update Time section) stored in the database. This ensures that the operator cannot roll back the system time to confirm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

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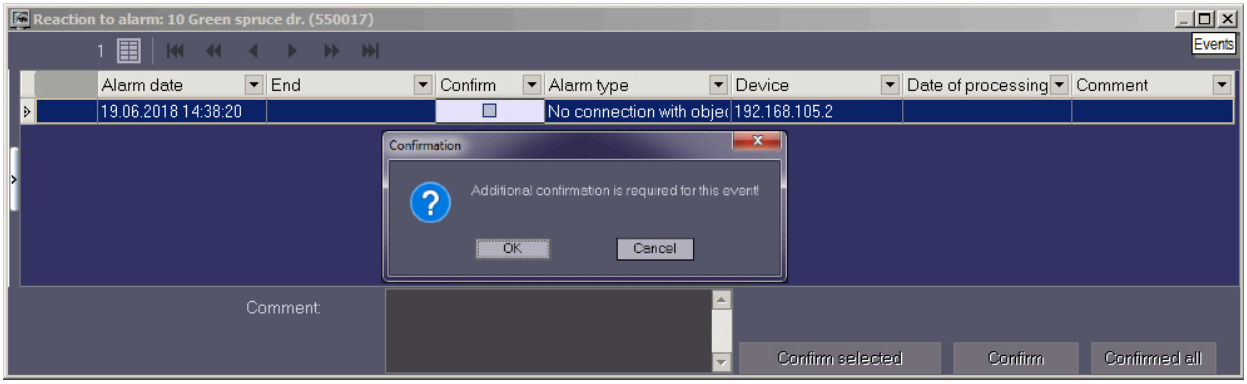
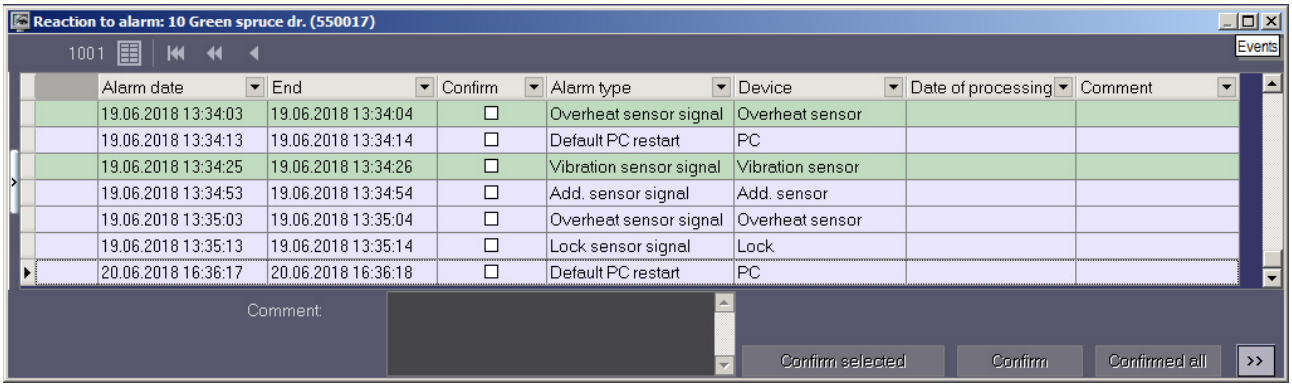


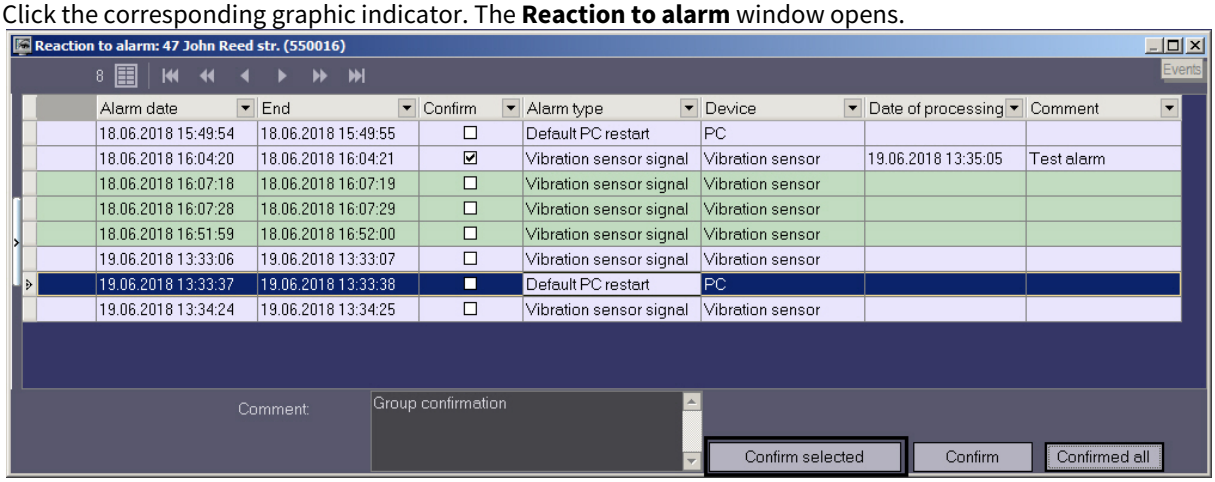
The **Reaction to alarm** window displays no more than 10,000 alarm events; to view other events, use the navigation buttons in the lower right corner.



2.7.2 Accepting several similar alarms

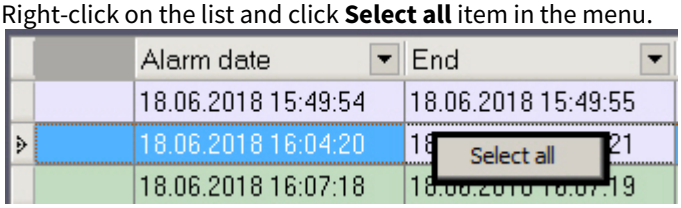
To accept several alarms, or all alarms of an object, or all alarms of all objects, simultaneously, do the following:

1. Click the corresponding graphic indicator. 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.

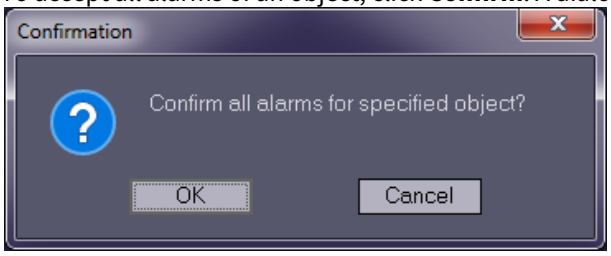
ii. Right-click on the list and click **Select all** item in the menu.



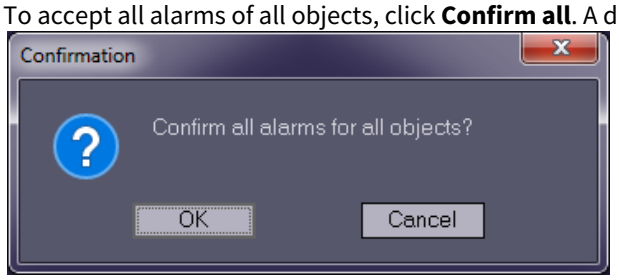
b. Fill in the **Comment** field if it is required

c. Click the **Confirm selected** button.

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**.



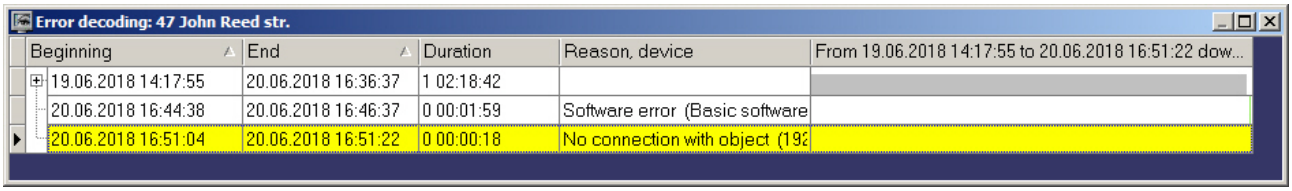
> **Note.**
>
> If comment is required but the **Comment** field is empty, the **Confirm selected, Confirm** and **Confirm all** buttons are inactive.

Accepting several alarms is completed.

2.7.3 Additional information on alarms

For more information on current alarms for an object, left-click the object name.

The **Error decoding** window opens.



Alarms that occur for different reasons can overlap and form overall alarm periods at the object. They are shown in the table in gray. If the alarm is still ongoing, the **End** column is empty.

If there are many alarms, the **Error decoding** window displays up to 200 alarm situations. To view the remaining events, use the navigation elements and **View events after** option in the lower-right corner.

2.7.4 Types of alarms

The table lists all types of alarms that are registered by the monitoring system by default. For the **Communication channel** alarm group, if *ATM Intellect Pro* connects to *ATM Intellect Workstation* over TCP/IP and has connected at least once, the **Device** field displays the IP address of the object.

Alarm group	Alarm type	Device	Comments
Communication channel	No connection with object	Communication channel	*ATM Intellect Pro* connects to *ATM Intellect Workstation* in client mode.
	No connection with monitoring agent	Local video system	*ATM Intellect Pro* connects to *ATM Intellect Workstation* in server mode.
Device	Disk failure	101: Disk name	The *Intellect* settings specify the disks to which the video archive is written. This alarm occurs when one of these disks does not exist or has an invalid type. Valid disk types include internal and external disks, removable disks, and network disks.
		102: Disk size	Error calculating free disk space.
		103: VIDEO folder	No VIDEO folder.
		104: Number of disks=0	There are no disks selected in the *Intellect* settings for video archive recording.
		105: Disk error	An unknown disk error from *ATM Intellect Pro*.

Alarm group	Alarm type	Device	Comments
	UPS signal	1000: PowerChute started 1001: PowerChute stopped 1002: Connection restored 1003: Power restored 1004: Self-test passed 1005: Administrative shutdown 1006: Shutdown cancelled 1007: Battery discharged 1009: Battery replaced 1013: Allowable restart 1014: RTC started 1015: RTC finished 1016: Shutdown in progress 1102: Normal temperature 2000: Power turned off 2001: Shutdown completed 2002: Low power 2003: Low battery 2004: RTC aborted 2007: High power 3000: Connection lost 3001: Restart 3002: Self-test failed 3003: Battery discharged 3004: Battery connection lost 3016: Replace battery 3107: High temperature	
Video system software	Software error	Basic software	intellect.exe process terminated.
		Basic software (Video)	video.run process terminated or frozen.

Alarm group	Alarm type	Device	Comments
		Registry	Registry does not have data required for *ATM Intellect Pro* to function.
		Database	Error connecting to *Intellect* database.
Archive size	Archive size too small	Archive 1 … Archive N	Storage capacity requirements are not met for camera (see Info on archives).
Cameras	Camera off	Camera 1 … Camera N	Camera is not working: there is no signal from camera or the connection is lost
Fire and security alarms	Vibration sensor signal	Vibration sensor	Four sensors (relays), whose names cannot be changed in *ATM Intellect Pro*: they should be used in accordance with their names ("Vibration Sensor", "Lock", etc.)
	Signal from sensor Lock	Lock	
	Signal from overheat sensor	Overheat sensor	
	Signal from additional sensor	Additional sensor	
	Signal from additional sensor	EXP. SENSOR. SENSOR	12 sensors (relays), whose names can and should be customized in *ATM Intellect Pro*, since this name is displayed in the **Device** column. By default, the string "EXP. SENSOR" is displayed in this column.
	Scheduled computer restart	Computer	Windows was properly exited before computer restart.
	Unscheduled computer restart	Computer	Windows was not properly exited before the computer was restarted (power was interrupted).

Note.

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

For the **Access Control** and **Detectors alarm** groups, no data is sent from *ATM Intellect Pro*.

There are two types of alarms that are tracked by the monitoring system by default:

1. **Long;**
2. **Short.**

Long alarms have a beginning and an end: "Camera off"/"Camera on", "No connection with object"/"Connected to object".

Short alarms do not have a duration. They only inform about an event, for example, "Vibration sensor triggered" or "Scheduled computer restart", and are not included in the quality measurements for the system.

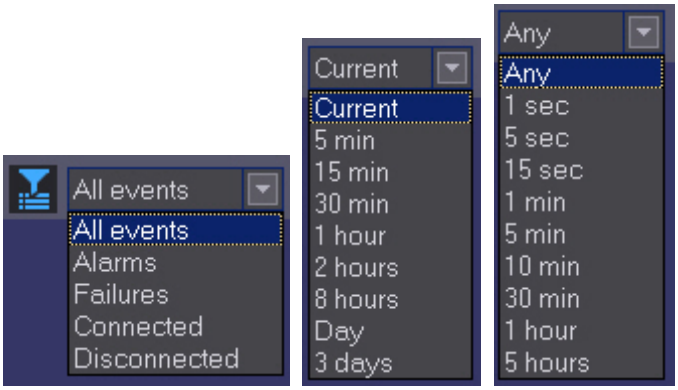
For short alarms, the **End** field is immediately filled with the time of the alarm plus one second. Confirmed short alarms are displayed on the control panel for ten minutes.

The following types of alarms are **long**:

1. No connection with object.
2. No connection with monitoring agent.
3. Disk failure.
4. Software error.
5. Archive size too small.
6. Camera off.

2.7.5 The number of alarms displayed

The number of objects displayed on the Control Panel is determined by the current filter if it is activated by clicking the filtering button  ("Enable/disable filter"). The first combo box sets condition for filtering by alarms, failures, presence or absence of connection; the second combo box sets the condition to "Show only objects that have errors in the last..."; the third combo box sets the condition "Only objects with errors lasting longer than...".



The upper-left corner contains information about the number of objects, out of the total number, that are displayed on the Control Panel after clicking the filtering button.

Note.

If **Alarms**, **Failures** or **Disconnected** filter is enabled, rates are not calculated – see also Status bar.

2.8 Viewing video data on alarms

2.8.1 Indication of video data presence

In *ATM-Intellect* software, the alarms from sensors can be followed by video data, such as video clips and video frames.

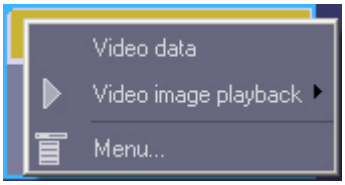
If there are video data loaded, but not viewed yet, the name of the object on the Control panel is colored in yellow.

2.8.2 Viewing video data

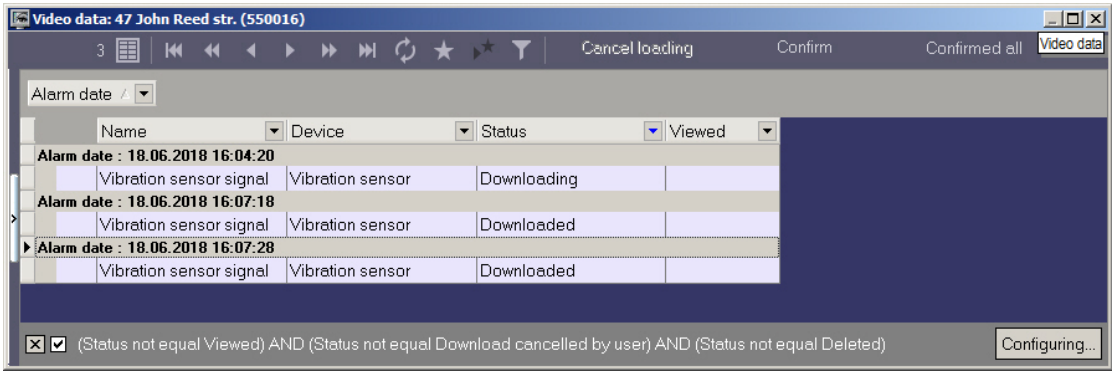
To view all received video data, select the **Video data** item in the object context menu.

Note.

By selecting the appropriate *ATM-Intellect* settings (see Setting up the reaction on receiving images and clips), snapshots and videos can be automatically opened as soon as they are received.

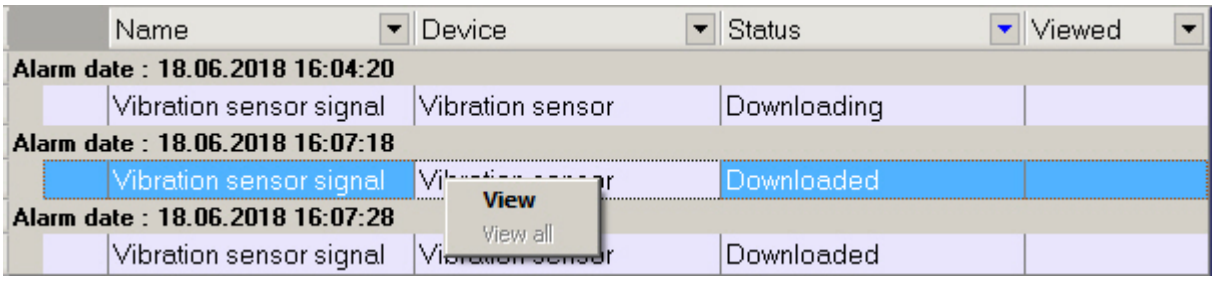


The **Video data** dialog box opens. The information on video data is displayed in this dialog box. This dialog box also provides function to cancel data downloading, if it is has not been completed yet, using he **Cancel loading** button.



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.

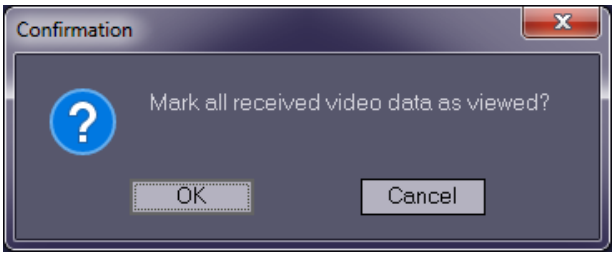


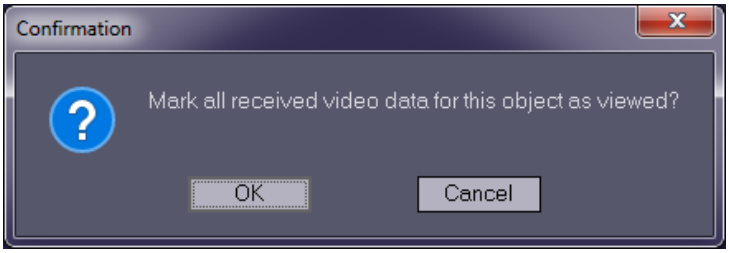
When the **View** item is selected, a video frame is opened with the *<Intellect installation directory>\Vhost\SYSTEM\JPEGViewer.exe* utility, and a video clip is opened with *Axxon Player* utility. Video data status changes to **Data viewed** and in the **Viewed** column the date of viewing is displayed.

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

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 up 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.



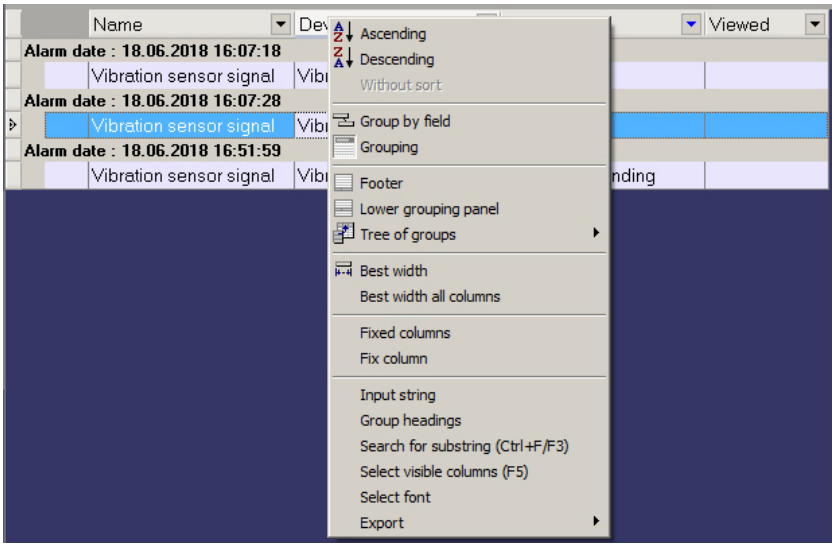


As a result, the name of the object stops being of yellow color. Status of all video data changes as follows and they are not displayed in the list of video data if the default filter is enabled (see Setting up video data list filter).

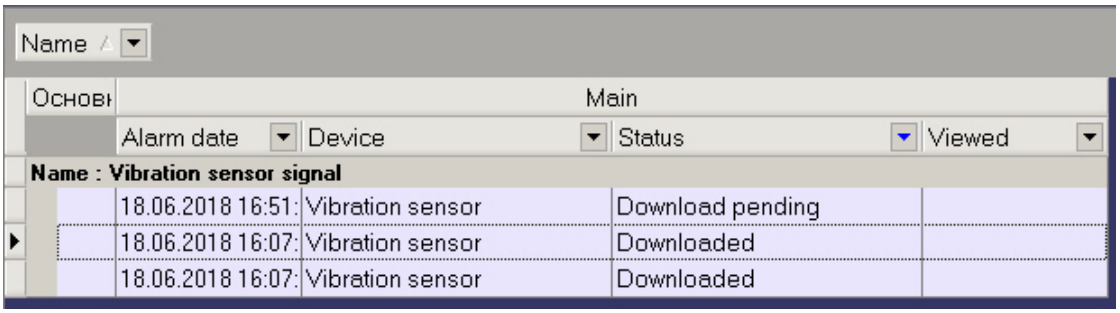
- **Downloaded** to **Viewed**
- **Archive export error** to **Download cancelled by user**

2.8.3 Video data grouping setup

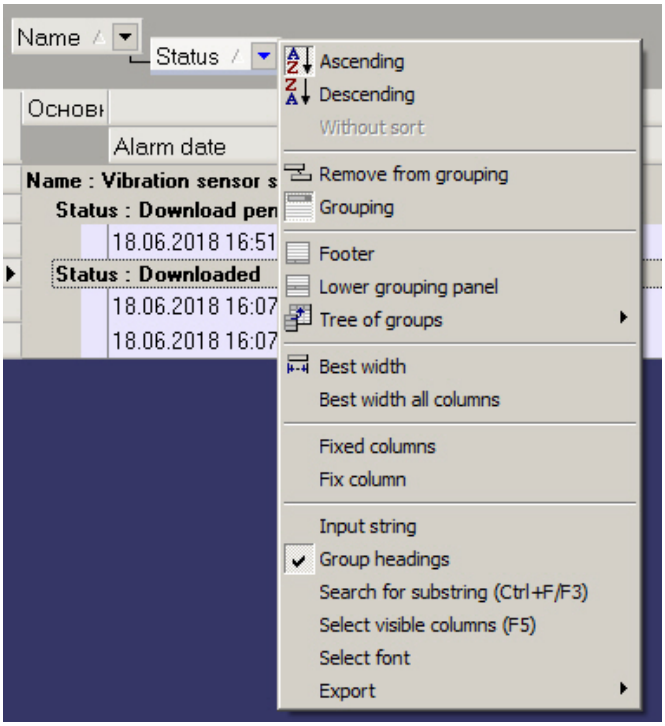
By default, video data are grouped by alarm time. If necessary, it is possible to set video data grouping by other parameters. To do so, in the context menu of a column, by which one need to group the data, select **Group by field**.



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.



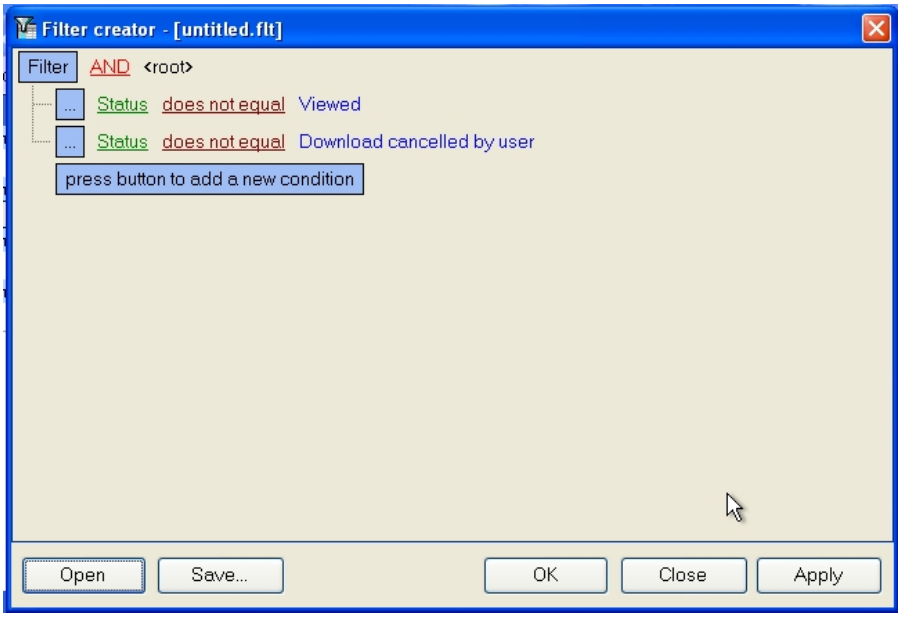
To cancel grouping by a field, right-click on it and select **Remove from grouping**.



2.8.4 Setting up video data list filter

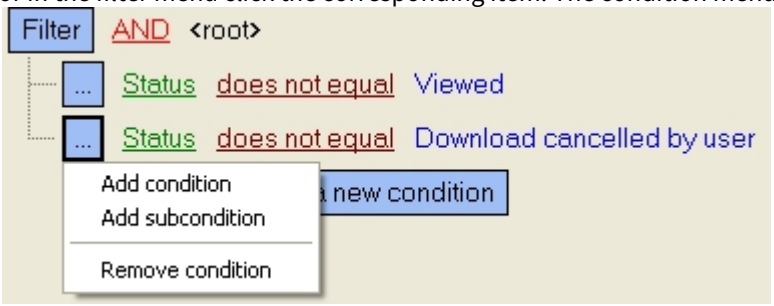
By default, in the **Video data** dialog box the data are not displayed, which has been viewed or for which downloading has been canceled by a user. To display all the video data, unset the checkbox in the lower left corner of the **Video data** window.

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 . The filter creator dialog box opens.

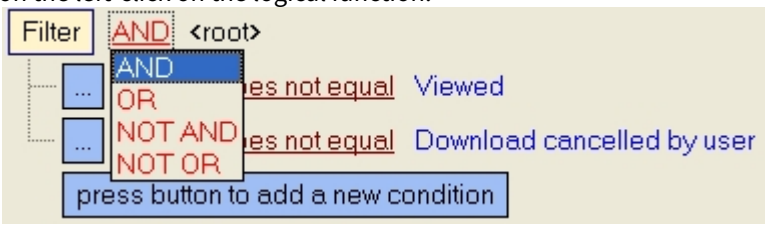


When configuring the filter, one may need to perform the following operations:

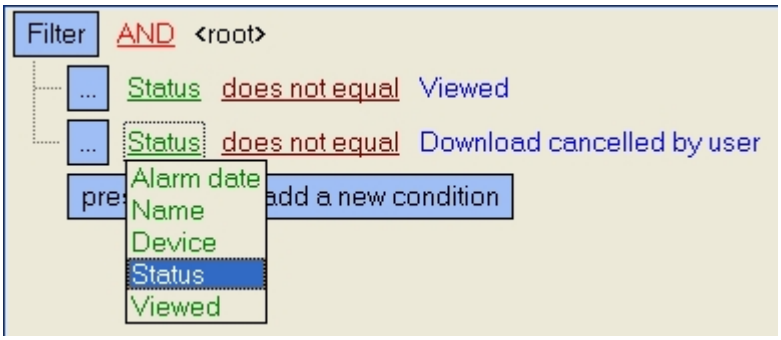
1. Add a condition or subcondition. To add a condition click the **press button to add a new condition** button or in the filter menu click the corresponding item. The condition menu opens by clicking the **...** or **Filter**.



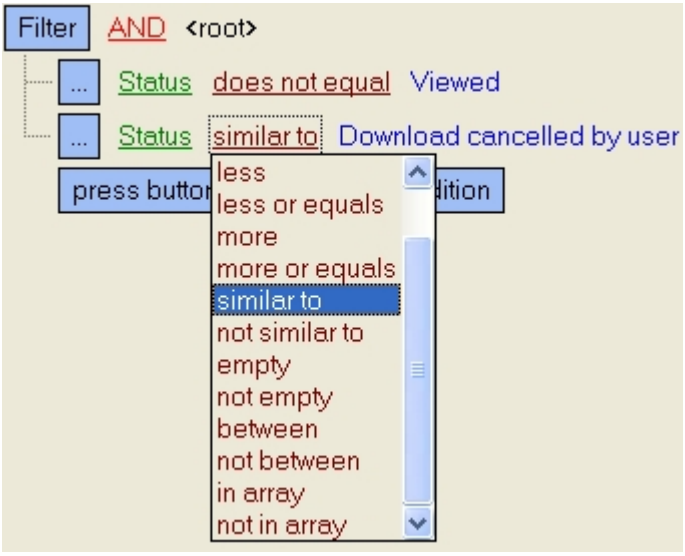
2. Remove a condition. To remove a condition, click the corresponding item in the condition menu.
3. Select a logical function for combining conditions. A drop-down list for selecting the logical function opens on the left-click on the logical function.



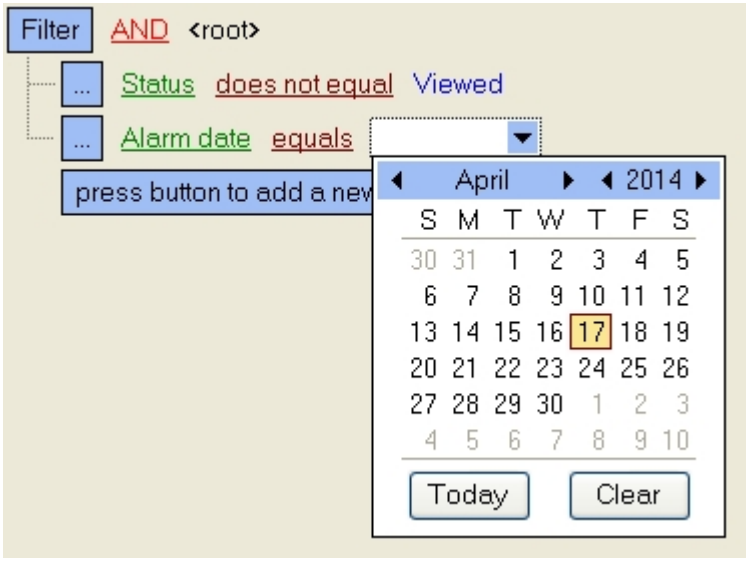
4. Select a field for comparison. A drop-down list for selecting the field for comparison opens on the left-click on the field name.

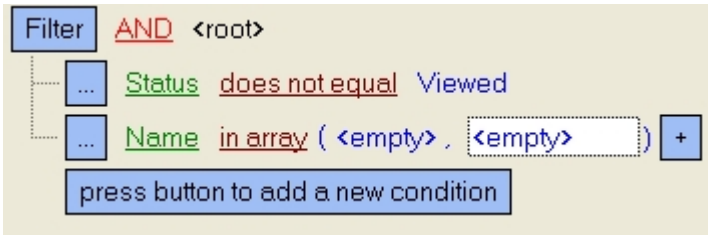


5. Select a method of comparing. A drop-down list for selecting the method of comparing opens on the left-click on the method name.



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.

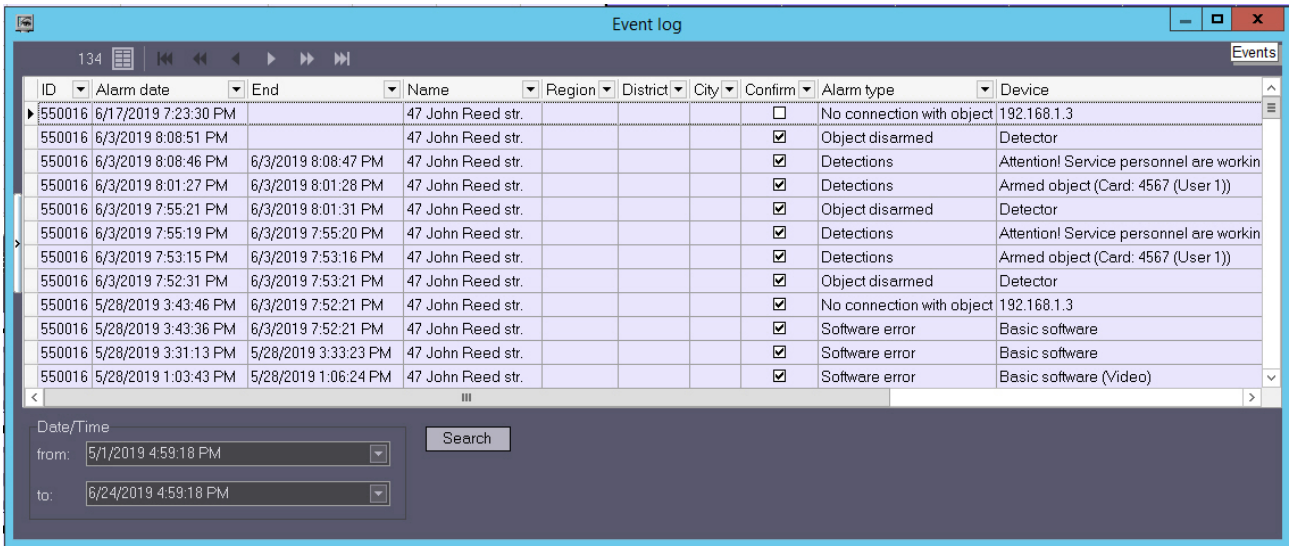




After completing settings, the filter can be saved to a file with the .flt extension by clicking the **Save...** button. This file can then be opened using the **Open** button.

2.9 Event log

To view all events recorded in *ATM-Intellect*, click the  button (**Event log**). The **Event log** window opens.



Note.

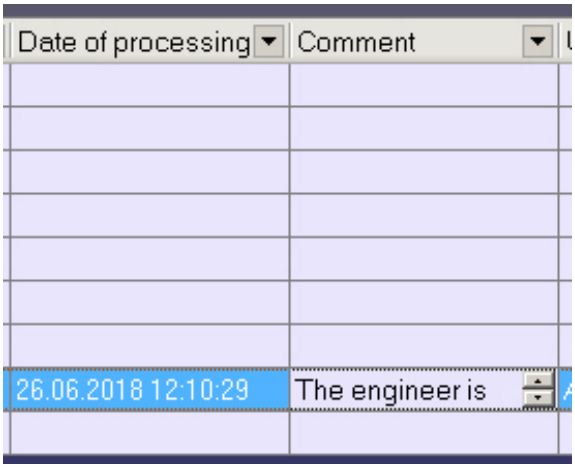
If the Owner Panel is in use, then events from the objects that belong to the owner selected on the Owner Panel are displayed in the **Event log** window. To view the events from all system objects, call this window on the Owner Panel – see Viewing Event log for all objects.

You can sort the table by any column or filter any column. By default, it is sorted by Alarm date descending, i.e. the newest events are in the top of the list.

2.9.1 Viewing comments

If an operator left a multiline comment when closing an alarm, only the first line will be visible in the **Event log** window, in the **Comment** column.

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

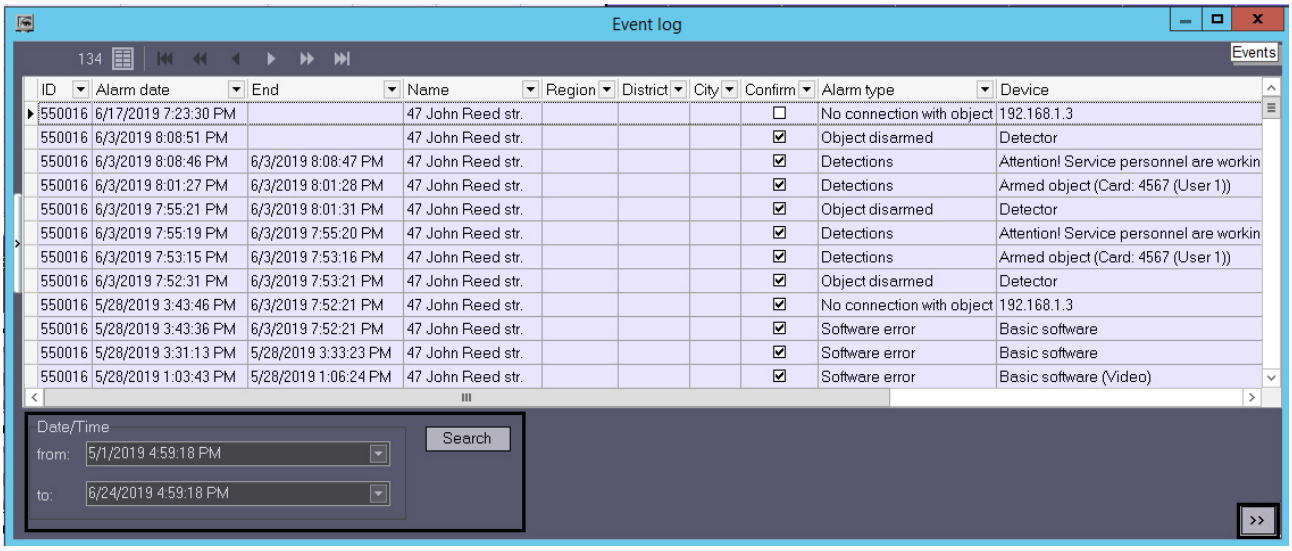


2.9.2 User who accepted alarm

By default, all alarms accepted by the operator are recorded under the Admin user. If there is a user created in the *Intellect* settings panel, in the **Users** tab, who has certain rights, when the operator starts *Intellect* under this user's account all confirmed alarms will be recorded under the user's name.

2.9.3 Period of events viewing

By default, alarm situations for the last 24 hours are displayed. To view events for any other period, set **from** and **to** date and time in the **Date/Time** group, then click **Search**. If there are more than 10000 events, use the navigation buttons to view them.

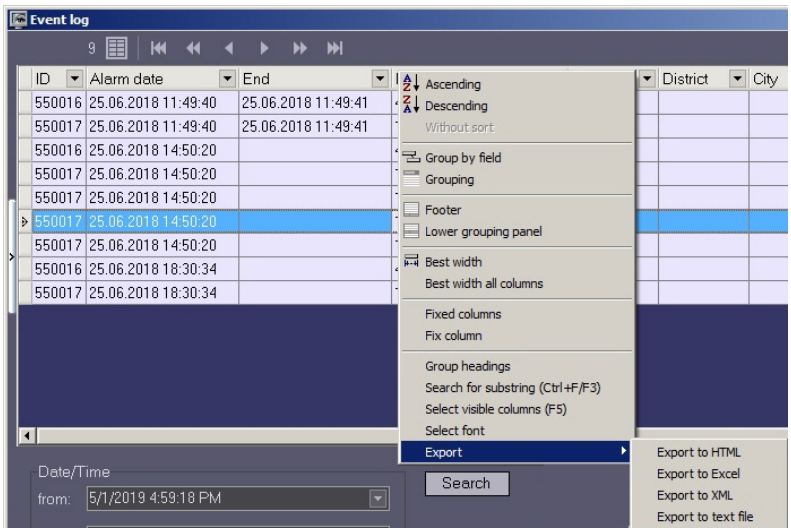


Note.

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).

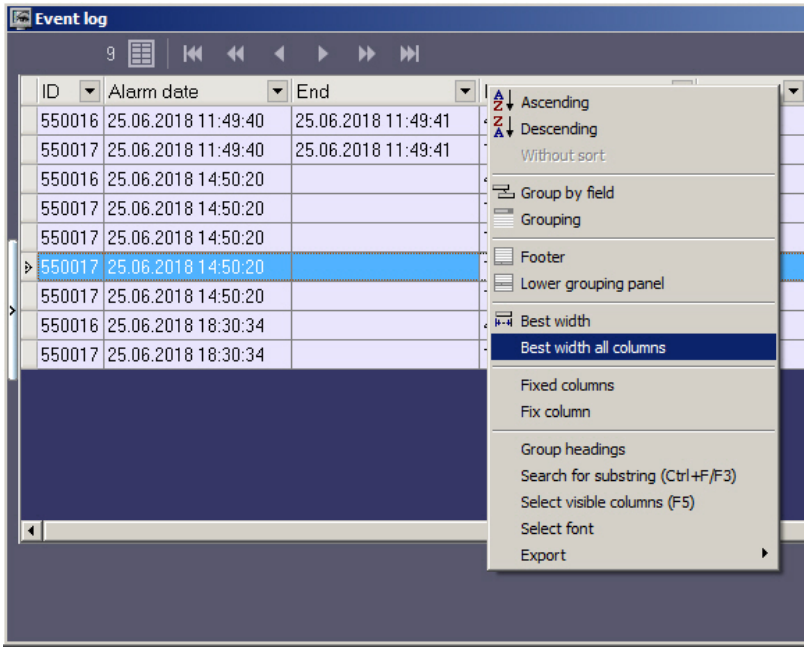
2.9.4 Event log export

To save the contents of the Event log to a file in a particular format, right-click the header of any column in the **Event log** window and select the corresponding item in a context menu.



2.9.5 Configuring the event log columns position

You can select the **Best width all columns** command in a context menu. When chosen, this command sets the width of all columns to the minimum necessary to display the longest entry in the column.



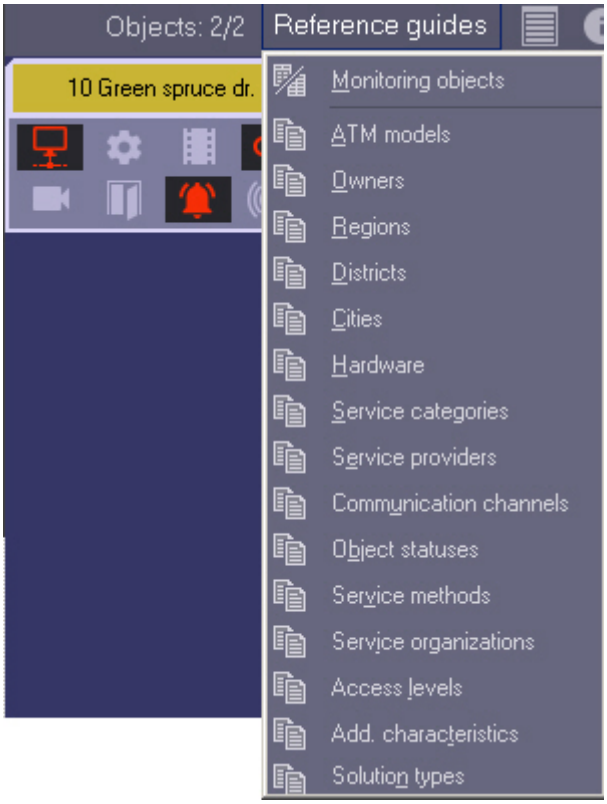
If not all columns fit in the visible area of the **Event log** window, a scrollbar becomes available. During scrolling, some columns that should always remain visible (such as alarm date and processing date) are shifted. To fix these columns, in the context menu, select **Fix column**.

The order of columns in the **Event log** can be changed as well. To do so, left-click the header of the column that you want to move and drag it to the new location.

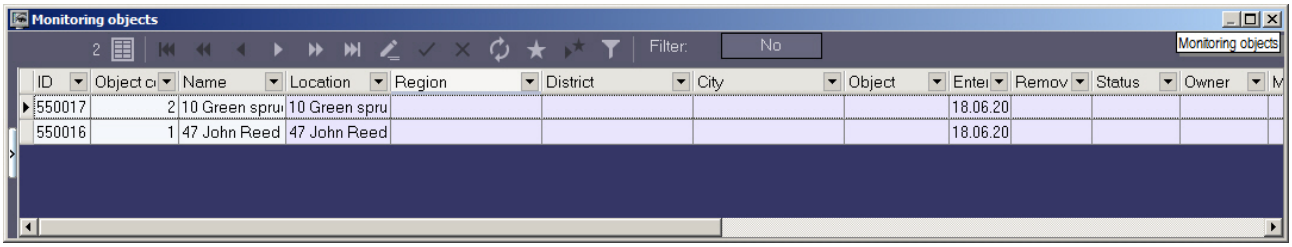
2.10 Reference information

2.10.1 Viewing reference information

ATM Intellect maintains reference information about all objects. To view this information, click the **Reference guides** button and select the **Monitoring objects** menu item.

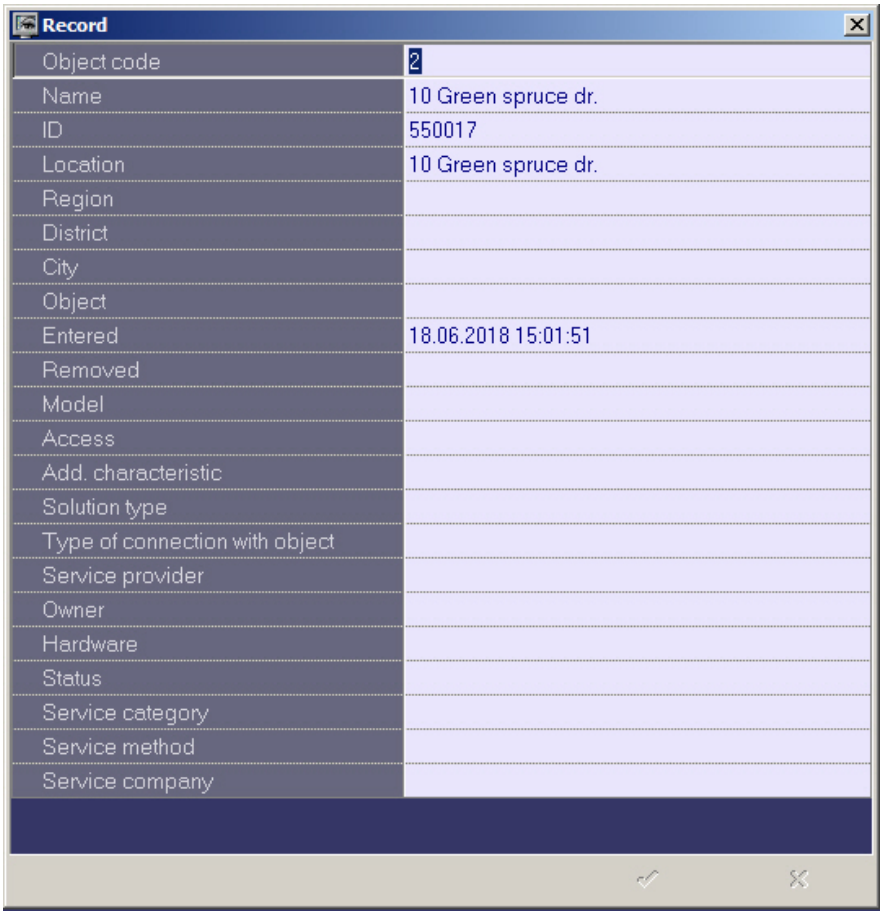


The **Monitoring objects** window opens, with a list of all objects in the system.

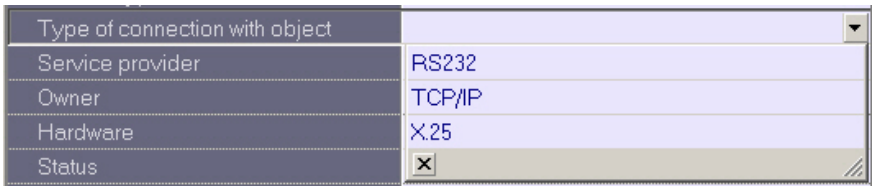


2.10.2 Editing reference information

Double-clicking an entry opens a **Record** dialog box, in which you can enter reference information for the object.

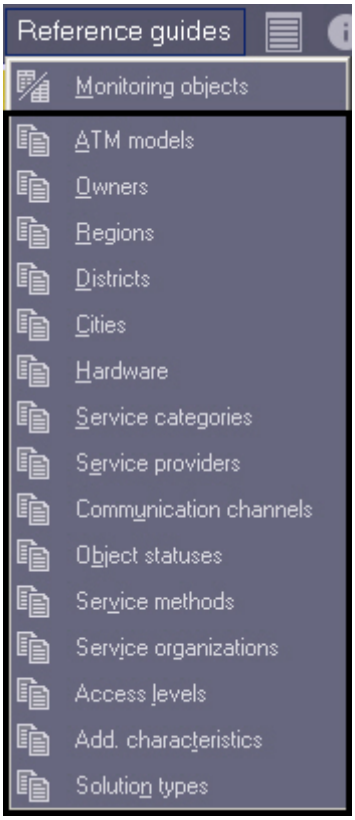


Values are offered for some of the fields but not for others. This means that the reference is empty and must be filled in (see Filling in reference information).

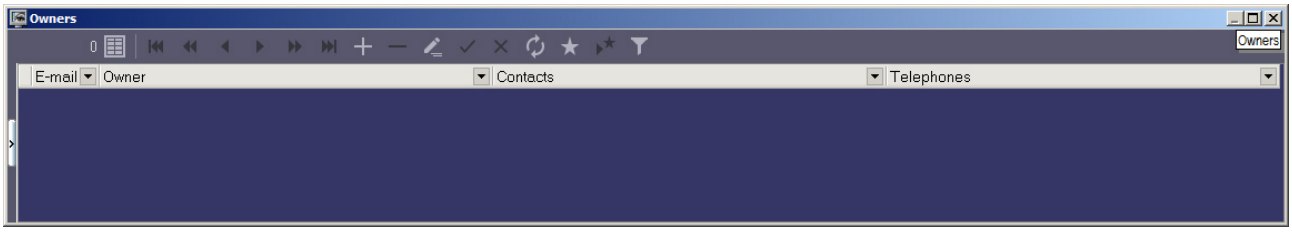


2.10.3 Filling in reference information

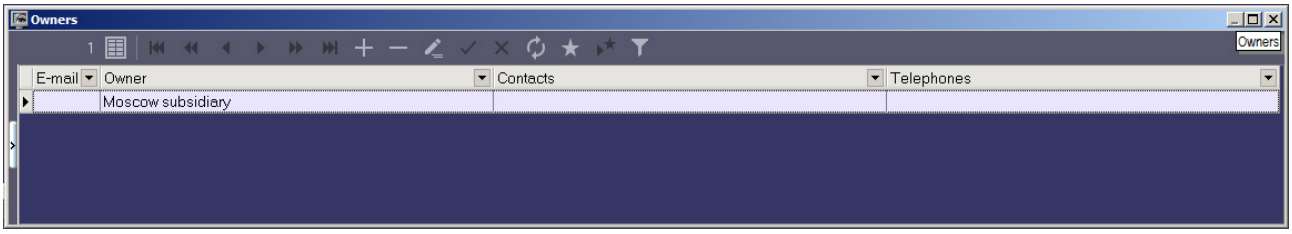
To fill in reference information, click the **Reference guides** button and, in the window that opens, select the corresponding reference: for example, **Owners**.



The window to edit the guide opens.

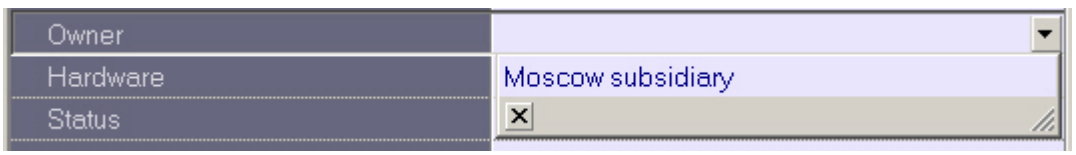


To add an entry, click the **Insert record** button and enter a value. Then click the **Save** button.



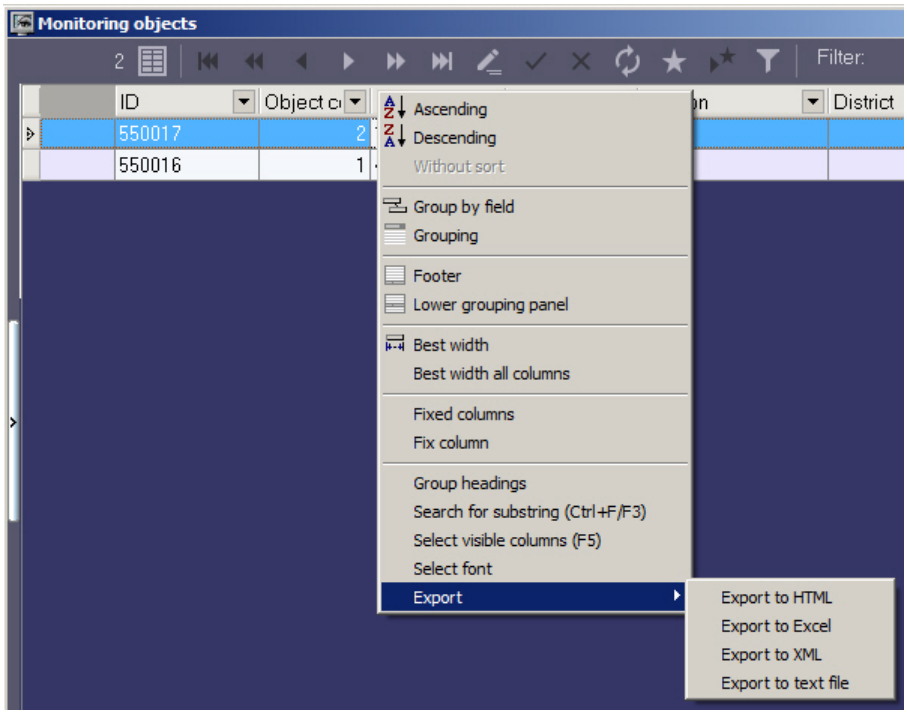
Any reference can be edited in a similar manner.

You can then fill in the corresponding field with new value.



2.10.4 Column context menu in the Monitoring objects window

If you right-click the header of any column in the **Monitoring objects** window, a context menu appears, which allows performing various actions similar to the ones for the Event log (see Event log export and Configuring the event log columns position).



2.11 Viewing live and archive video from objects

You can view both live video and archives from objects on the Control Panel:

1. Viewing video from a specific camera.
2. Viewing video from all cameras created at the *ATM-Intellect Pro*.
3. Viewing video from all cameras of the selected Surveillance Object.
4. Creating user layouts and playing back video from selected cameras added to the **Surveillance Object**.

> **Note.**
>
> Information on how to select cameras for live video and archives playback on the **Control Panel** can be found in Configuring video cameras list section.

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

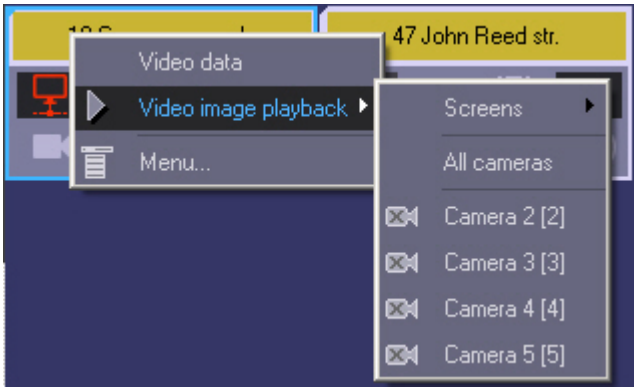
A context menu will appear with the **Video image playback** item, in which you can select:

- Camera name for viewing video from a separate camera;
- **All cameras** to view video from all cameras created on the *ATM-Intellect Pro* side;
- **All cameras of Surveillance Object** to view video from all cameras of the selected *Surveillance Object*;
- **Displays** to select a user layout.

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

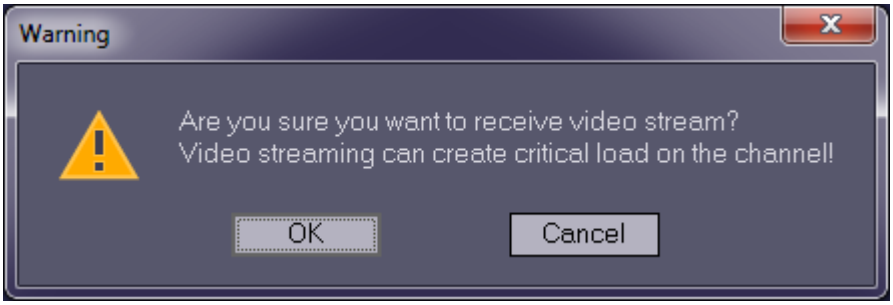
Note

- The **All cameras** menu item is available if the user has no restrictions on viewing some cameras — see Configuring the ATM Monitoring object.
- The **All cameras of Surveillance Object** menu item is available if the **Viewing live video from all cameras (add.)** option is enabled in the **ATM Monitoring** interface object setting.
- The **Video image playback** menu item is available only for objects that have connected to *ATM Intellect Workstation* software for the first time. Before that, this menu item may not be displayed.



The list of cameras will match the list of cameras enabled in the settings for the object. Camera names in the context menu as well as IDs specified in the square brackets correspond to those on the *ATM-Intellect Pro*.

If the *ATM-Intellect Workstation* 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**.



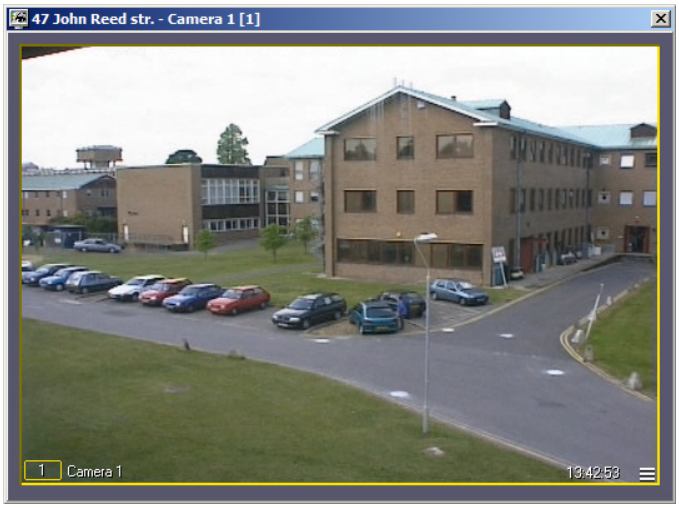
Attention!

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).

2.11.1 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 of the Control Panel or Log Panel (e.g. see Viewing live and archive video from objects).

After you select a camera, a dialog box appears; video should appear in it after a few seconds.



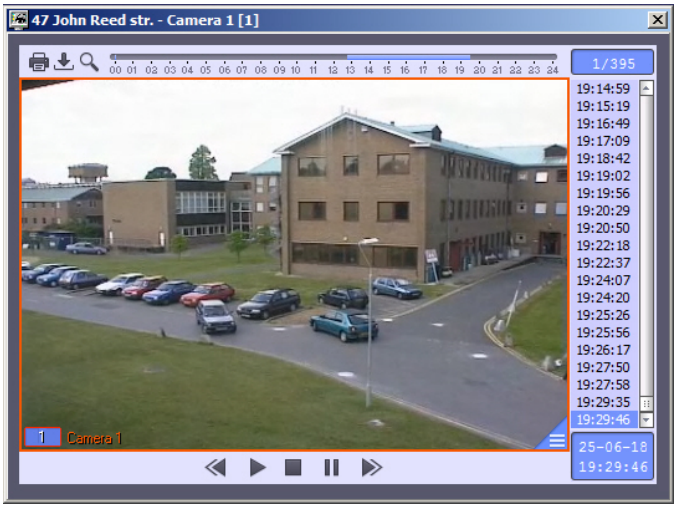
The title bar displays a description of the object, camera number, and camera ID in brackets. Archive access is available through the usual methods used in *Intellect*.

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 Intellect software package. Operator's Guide.
- When viewing live video, the frame rate can be limited by the settings of the **ATM Monitoring** interface object (**Video stream speed** parameter) – see Configuring the ATM Monitoring object.

Note

- By default, the video clips are exported to the <*Intellect* 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).



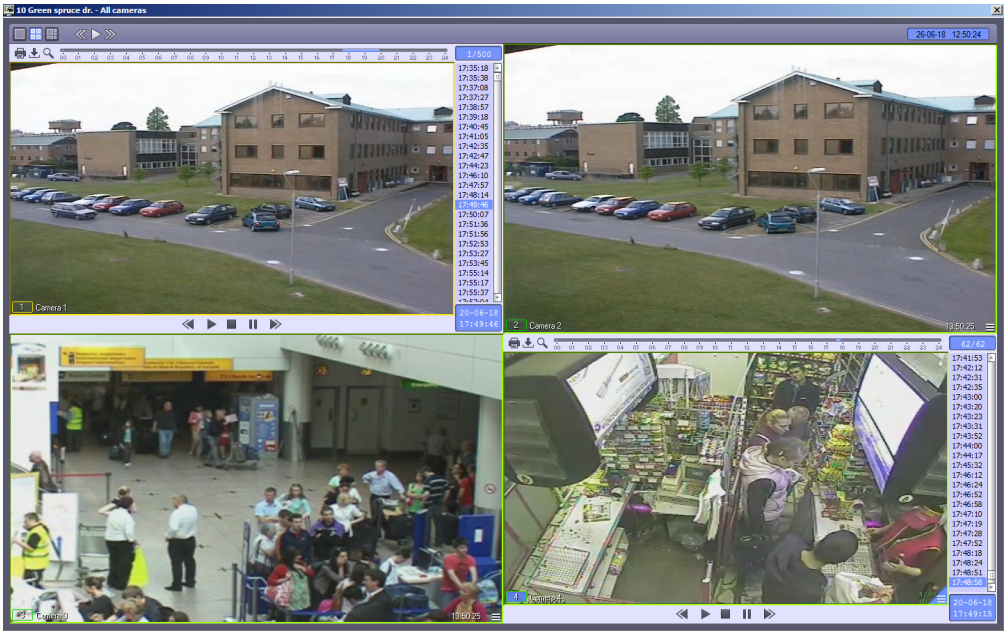
2.11.2 Viewing live video and archive from all cameras created at the ATM-Intellect Pro

To play back live video and archive from all cameras created at the *ATM-Intellect Pro* select the **All cameras** item in the **Video image playback** menu (see Viewing live and archive video from objects).

> **Note**
>
> The **All cameras** menu item is available if the user has no restrictions on viewing some cameras — see Configuring the ATM Monitoring object.

As a result the dialog box with viewing tiles for all cameras created on *ATM-Intellect Pro* appears.

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.

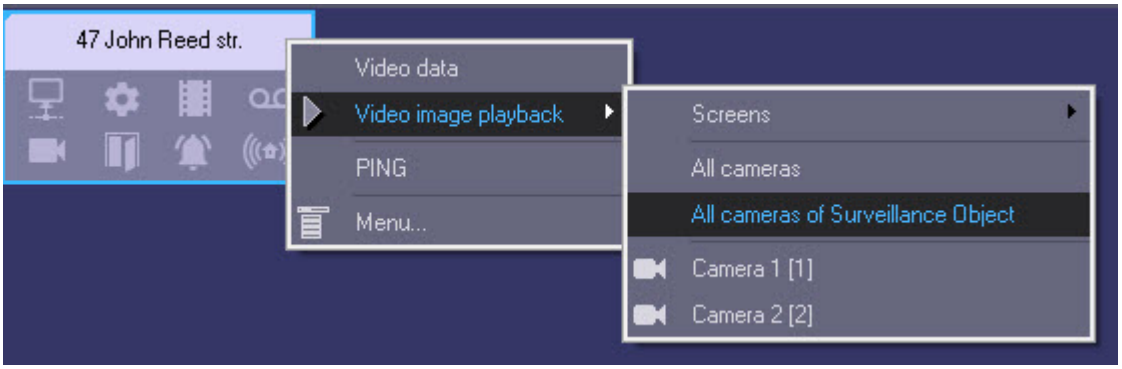


Live video and archive playback control functions are the same that those used in the Video monitor in *Intellect*. One can switch between viewing tiles as well as start manual and auto paging. Find details on these functions in *Intellect software package. Operator's Guide*. The latest version of this document is available in AxxonSoft documentation repository.

2.11.3 Viewing video from all cameras of the selected Surveillance Object

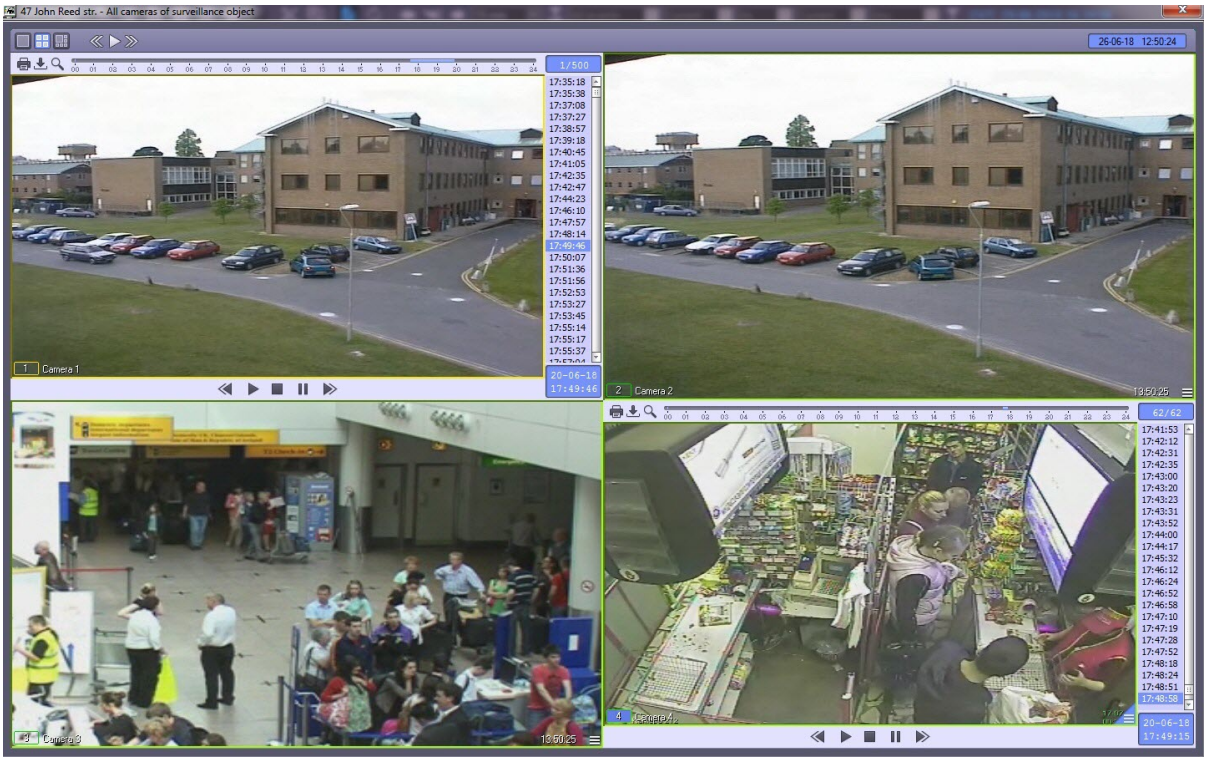
> **Important!**
>
> To be able to view video from all cameras of the selected Surveillance Object, it is necessary to set the **Viewing live video from all cameras (add.)** checkbox when configuring the **ATM Monitoring** interface object (for details, see Configuring the ATM Monitoring interface object).

To view video from all cameras, it is necesary to select the **All cameras of Surveillance Object** item in the object's **Video image playback** context menu (see Viewing live and archive video from objects).



As a result the dialog box with viewing tiles for all cameras of the selected Surveillance Object 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 *Intellect,* except it is not possible to switch between viewing tiles and start manual and auto paging. Find details on these functions in *Intellect software package. Operator's Guide*. The latest version of this document is available in AxxonSoft documentation repository.

2.11.4 Playing back live video and archive from selected cameras

Creating, editing and deleting layouts

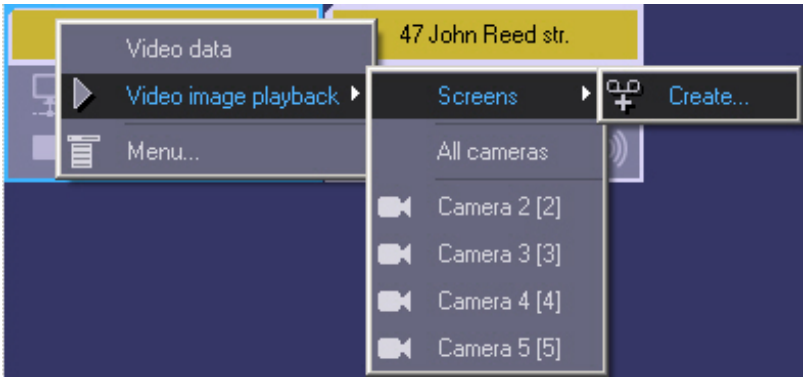
On the page:

Layout represents the list of cameras the user can select on the Control Panel or Log Panel in order to play back live video and archive (see Viewing live and archive video from objects).

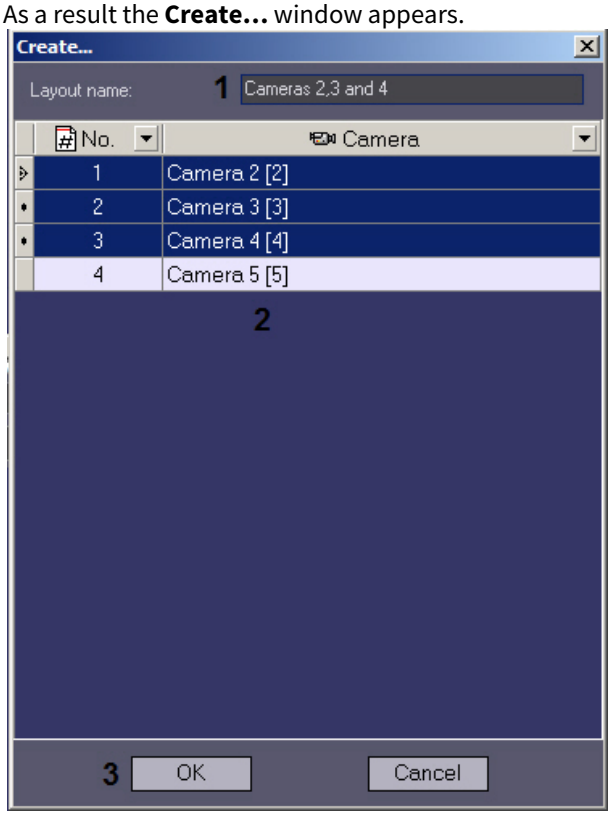
Creating layout

Create a layout as follows:

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

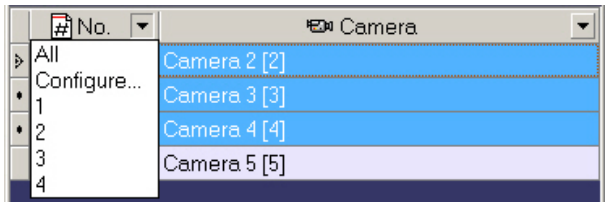


2. As a result the **Create…** window appears.



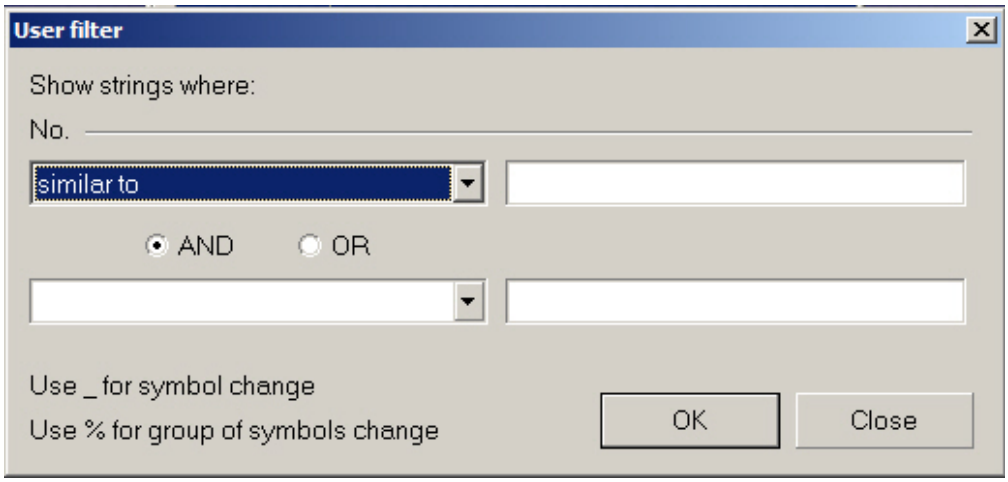
3. Specify the **Layout name** (1).
4. Select one or several cameras to be added to the layout. To select several cameras left click the corresponding lines in the table and hold down the Ctrl key on the keyboard (2).

   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.



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

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

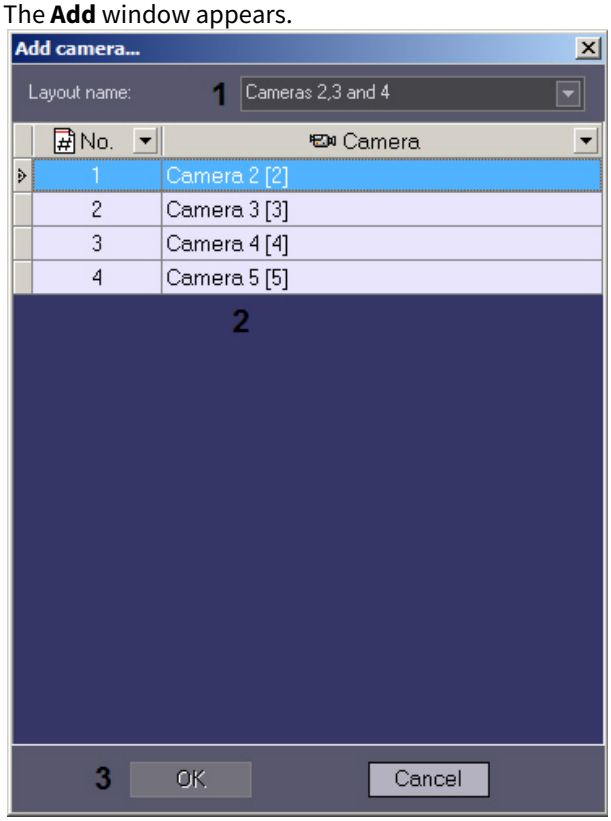
The layout is now created.

Adding camera to layout

Add a camera to the layout as follows:

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

2. The **Add** 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.

5. Click the **OK** button.

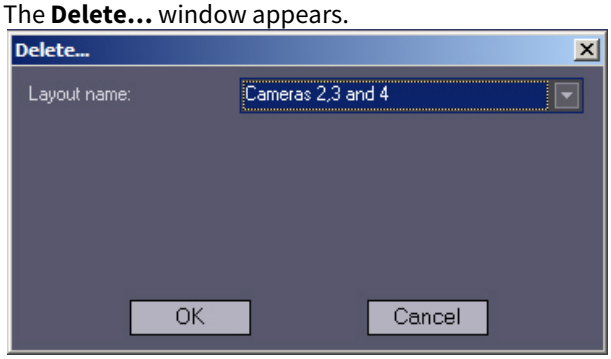
Cameras are now added to the layout.

Deleting layout

Delete the layout as follows:

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

2. The **Delete...** window appears.



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

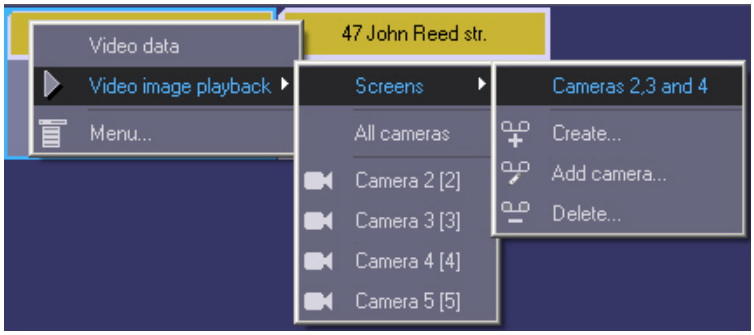
The layout is deleted.

Selecting layout for display

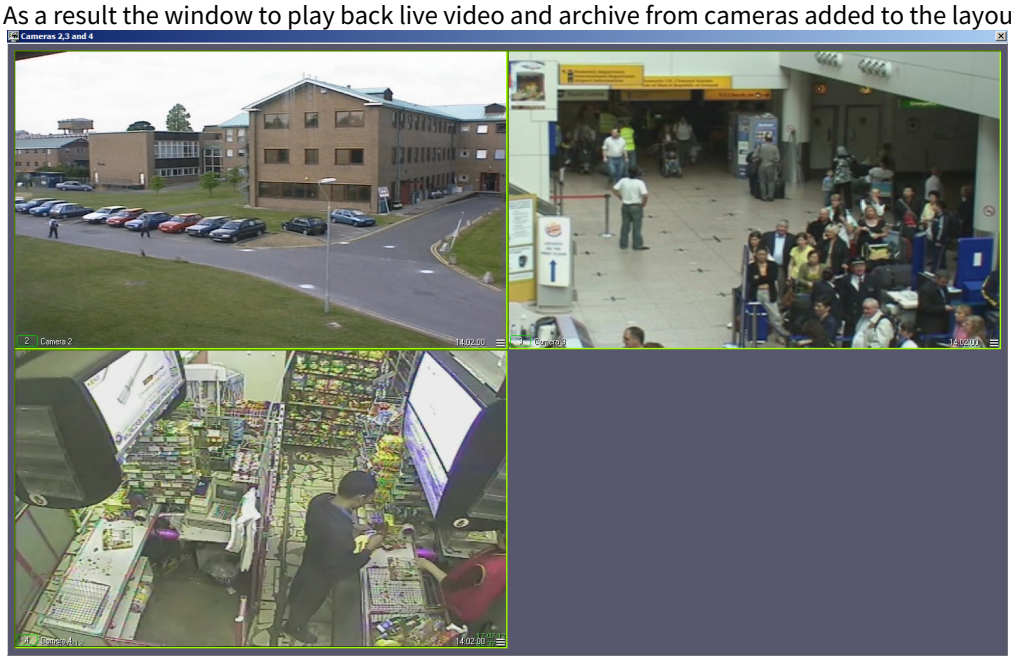
Select the layout that is to be displayed as follows

1. Right click the object on the control panel, select **Video image playback -> Displays** 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.



2. 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 *Intellect software package. Operator's Guide*. The most current version of this document is available in the AxxonSoft documentation repository.

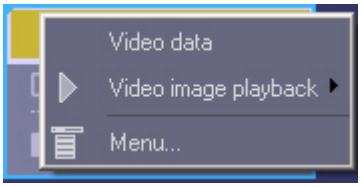
> **Example**
>
> For example, there is a layout of 9 cameras (3x3). When you double-left-click the upper left camera, its image will not increase to the full screen, but will take the position of the nearest right and lower camera. If you double-left-click again, the image will be expanded to the entire 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 *Intellect*. Find details on these functions in *Intellect software package. Operator's Guide*. The latest version of this document is available in AxxonSoft documentation repository.

2.12 Running external applications from the Control Panel

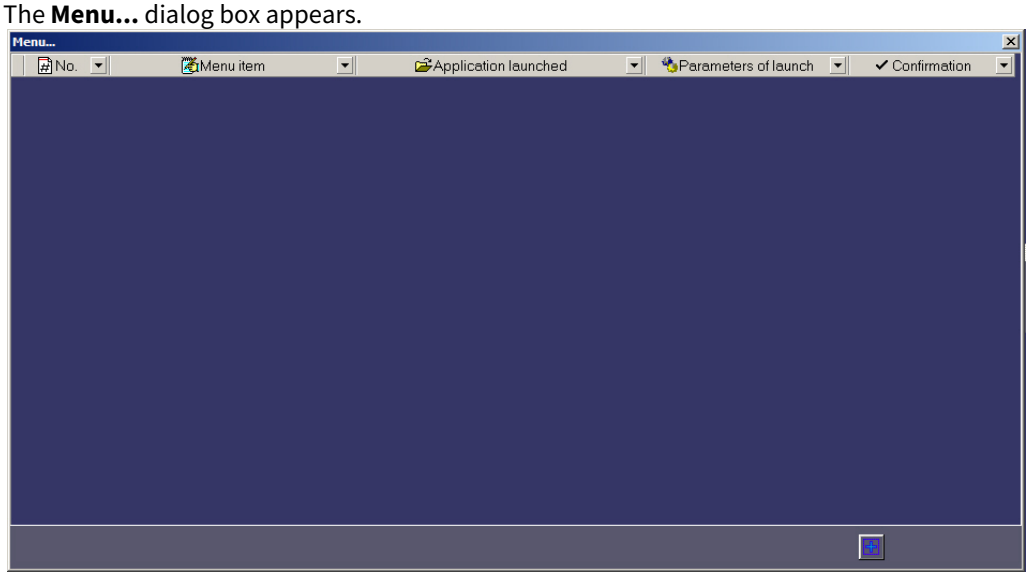
By using the **Menu** context menu you can start external applications from the **Control Panel**.



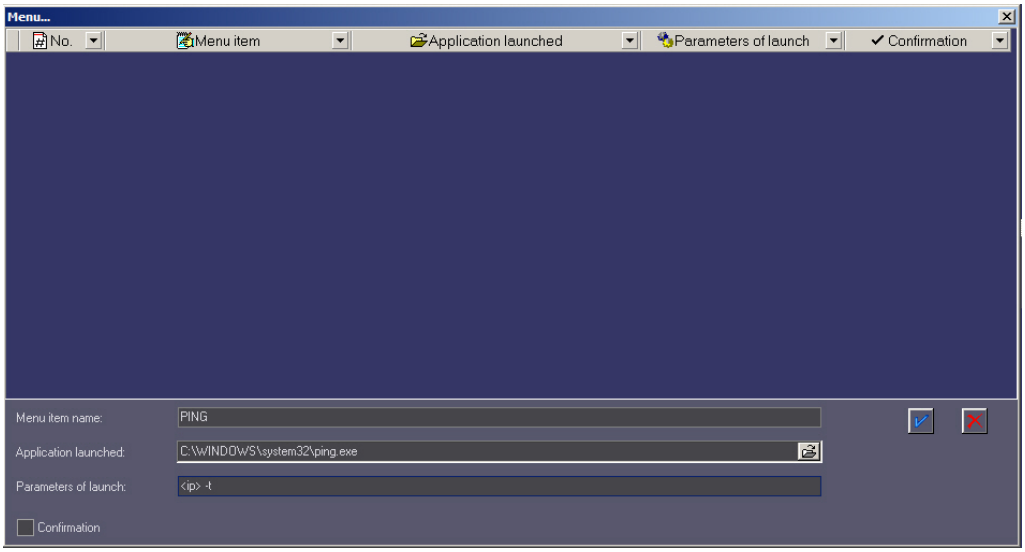
You can pass an object's IP address as a parameter when starting applications in this manner.

For example, if you want to quickly ping an object, do the following:

1. Right-click the area with the object name and, in the context menu that appears, select **Menu...** .
2. The **Menu...** dialog box appears.

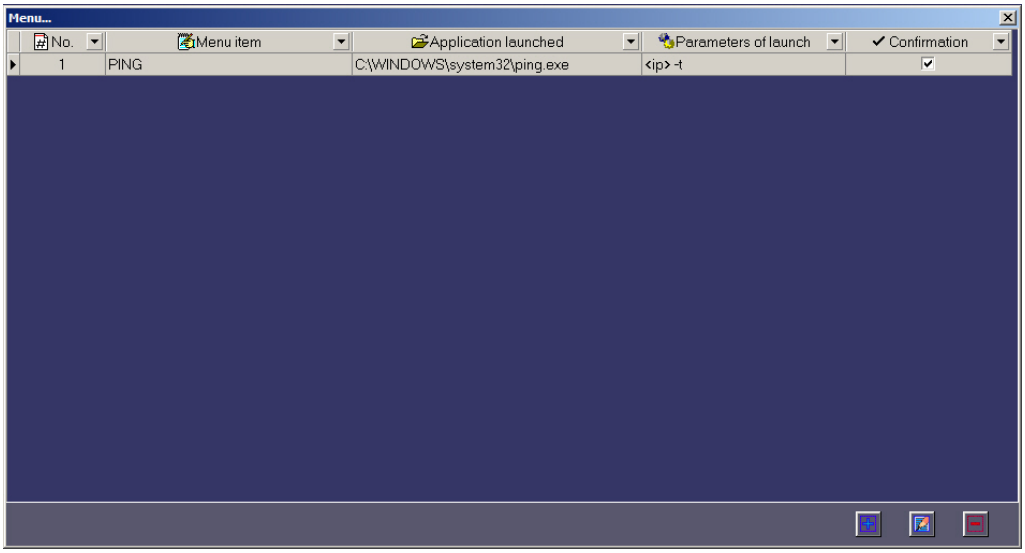


3. In the dialog box, click the **Add record...** button. In the fields that appear, enter the values as shown in the figure.

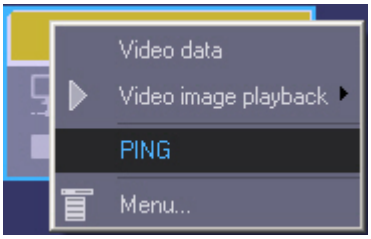


The string **<ip>** is a reserved expression: the real IP address of the object will be "swapped in" here when the application is called. This string must be entered in lower-case letters.

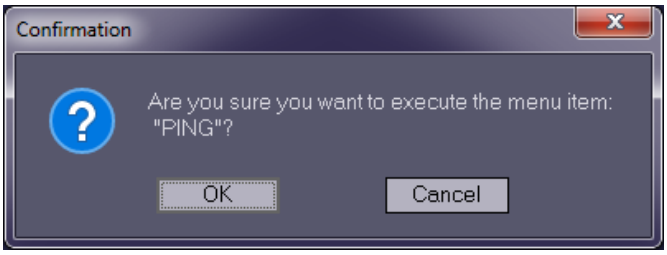
After you click the **Apply** button, a new entry appears, with a description of the new item in the context menu.



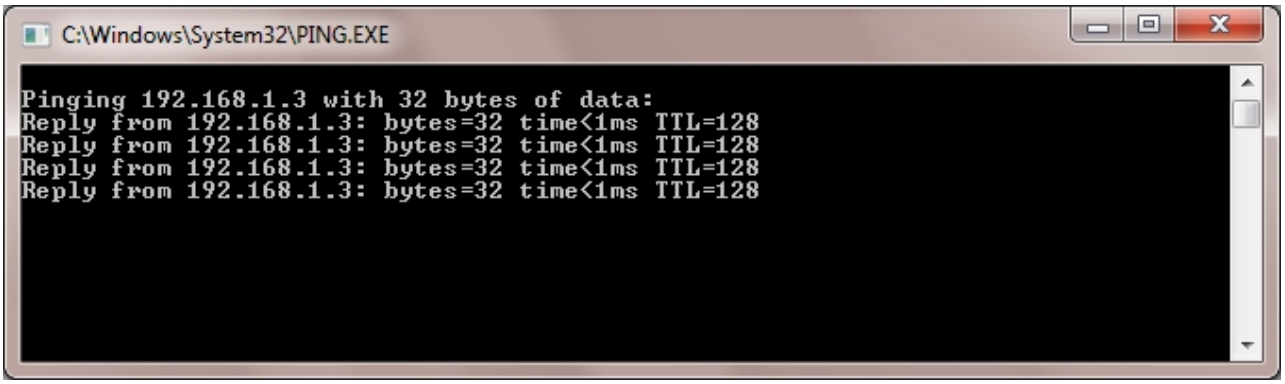
Now, when you right-click on the area with the object name, a context menu will appear with the newly created **PING** item.



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 connecting to *ATM-Intellect Workstation* via RS-232, as well as for objects that have never connected to *ATM-Intellect Workstation*, the value 127.0.0.1 is substituted for **<ip>**.

The same method can be used to start other external applications, such as Radmin, etc.

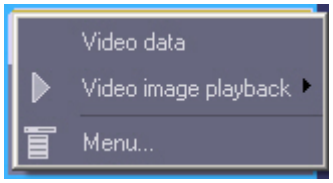
2.13 Executing ad hoc command on the ATM-Intellect Pro by the operator of ATM-Intellect Workstation

Ad hoc commands can be executed on the *ATM-Intellect Pro* using the **Menu...** context menu item on the Control Panel.

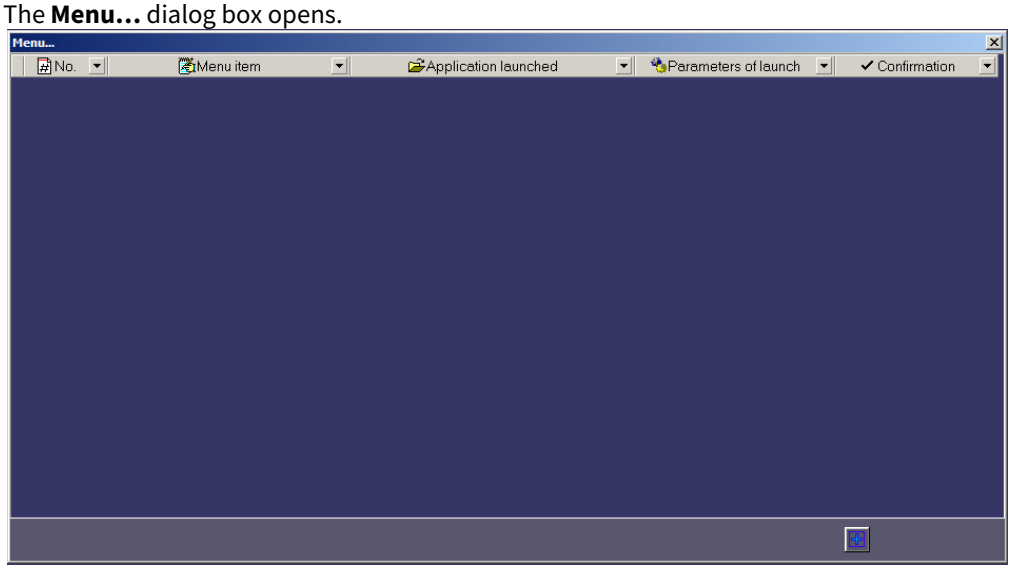
> **Important!**
>
> Scripts to process incoming commands are to be created on the *ATM-Intellect Pro*. See Sample script for processing ATM-Intellect Workstation command on ATM-Intellect Pro section of Administrator's Guide.

Configure command sending on the *ATM-Intellect Workstation* as follows:

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

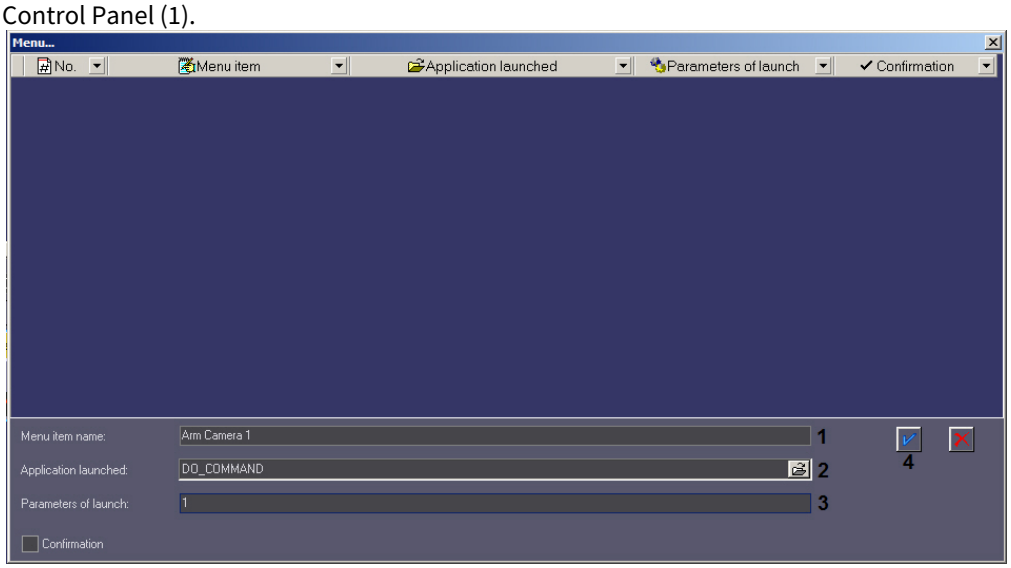


2. The **Menu...** dialog box opens.

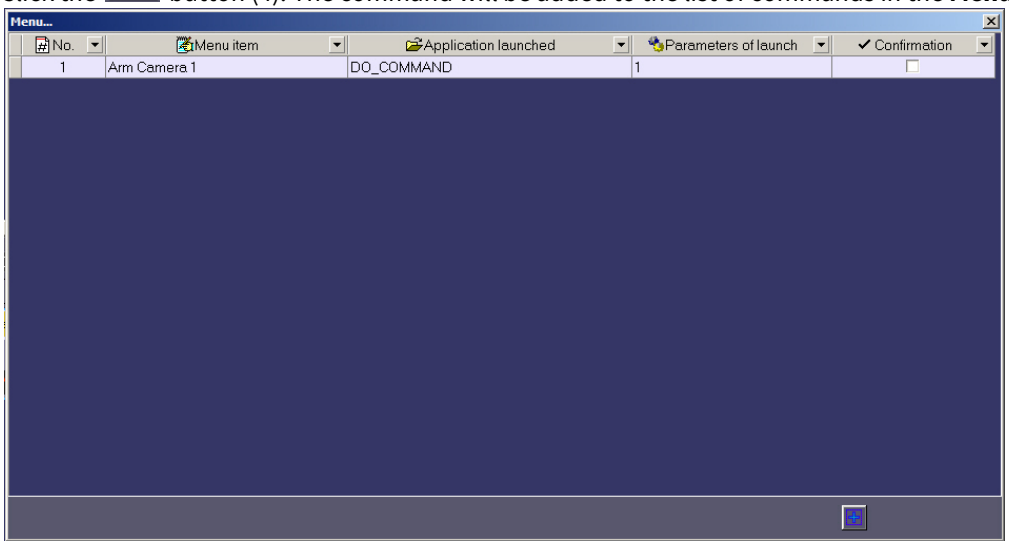


3. Click the  button to add a new men item. The fields used to configure menu item will be displayed.

4. In the **Menu item name** field enter the menu item name that will be displayed in the context menu on the Control Panel (1).

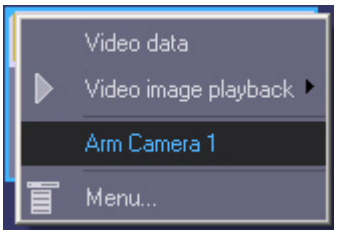


5. Enter DO_COMMAND in the **Application being launched** field (2).
6. Enter the value for param0<> parameter in the **Launch parameters** field (3). Using the value of this parameter in the script created on the *ATM-Intellect Pro* one can find out what command is to be executed.
7. Click the  button (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.



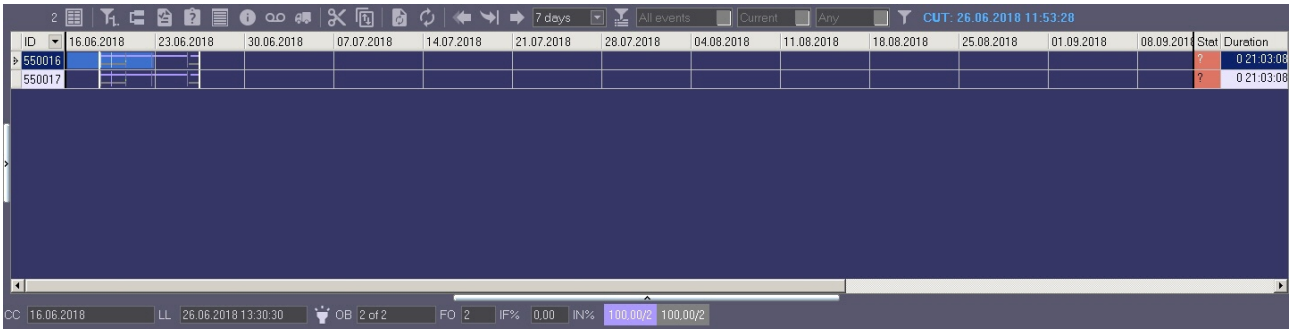
Command sending is now configured on the *ATM-Intellect Workstation*.

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).

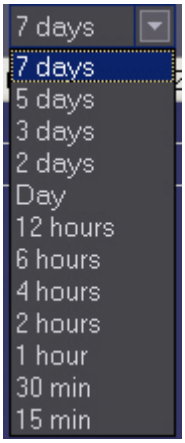
3.1.1 Alarms color code

Alarm situations in the Log panel are shown in a table with colored rows. The color of each alarm corresponds to the alarm type. The color assignments can be viewed by clicking the  button (**Information about symbols**). The information window opens.

Vertical bars correspond to short alarms; horizontal bars correspond to long alarms (device operability).

> **Note.**
>
> Alarm types are described in the Types of alarms section.

The length of bars is determined by the beginning and end (duration) of the alarm, in accordance with the selected scale. The scale is measured as the time interval for a single column.



3.1.2 Alarm list navigation

The column header always shows the beginning of the time period displayed by the column. Using the left and right keys and horizontal scrollbar, the user can go to any date within the data loaded. To quickly move to a date and time of interest, click the  button (**Go to date**). To jump to the end of the data, click the  button (**To end**). To jump to the date on which an error began, click the  button (**To beginning of current error**).

Since data is loaded into the system continuously, it is necessary to automatically refresh the on-screen data display. The  button serves this purpose (**Auto update**). Clicking this button checks for new alarm data in the database. If such data exist, the display is refreshed and jumps to the end of the displayed 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 not clicked, the displayed data may become out of date: data was last loaded after the CUT. If this happens, a lightbulb appears in the status panel.

The lightbulb indicates that the current display is out of date and can be refreshed by clicking the  button (**Update data**). A refresh is performed during jumps to the end, selection and application of filters, and many other actions.

3.1.3 Ignoring objects

"Ignored" objects are never shown in the form on screen. Operations with ignored objects is described in the detail in the Ignoring objects section.

3.1.4 Status bar

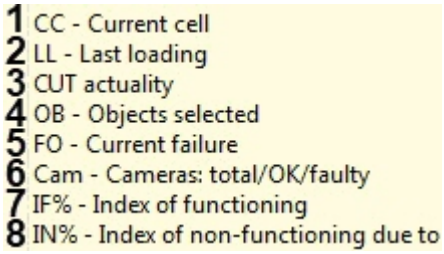
On page:

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.



Important!

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

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 The number of alarms displayed on the Log panel).

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

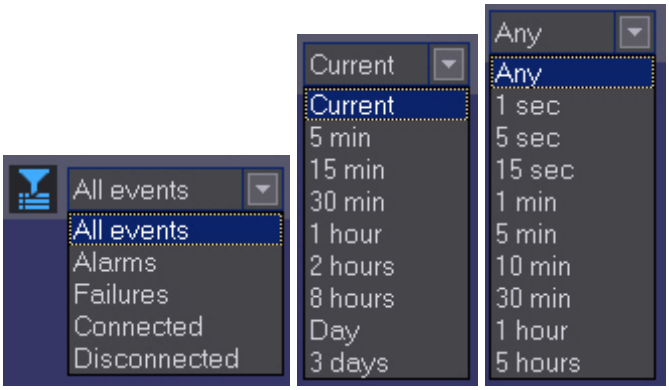
The non-functioning rate (**IN%**) for a particular reason is calculated according to the following formula:

(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 The number of alarms displayed on the Log panel

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  (**Turn filter on/off**).



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  (**Calculate rates and cameras only for filtered table lines**). If **Alarms**, **Failures** or **Disconnected** filter is enabled, rates are not calculated.

3.3 Object status

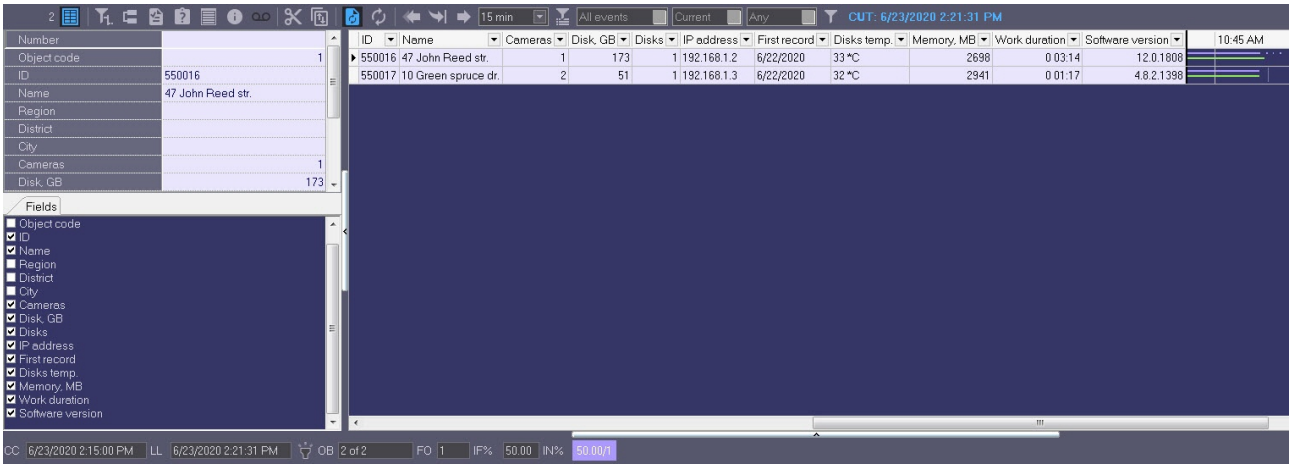
The object status is shown in the "Status" column. Its color and contents are explained in the Explanation Panel (see Alarms color code). Note that in the Log panel, the **Status** column is shown in red only if the subject has at least one long ongoing alarm.

3.4 Alarm duration

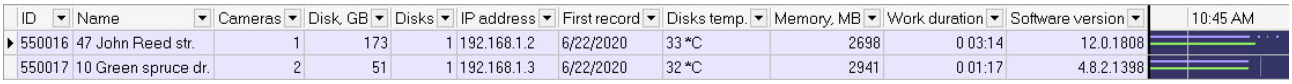
Duration, the last column of the table, shows the duration of the current alarm for the object, in the format "number of days hh:mm:ss".

3.5 Information on the object

Click the  button (**Show Inspector Ctrl+I**) to view a special area; the upper part of it shows brief information about the selected object.

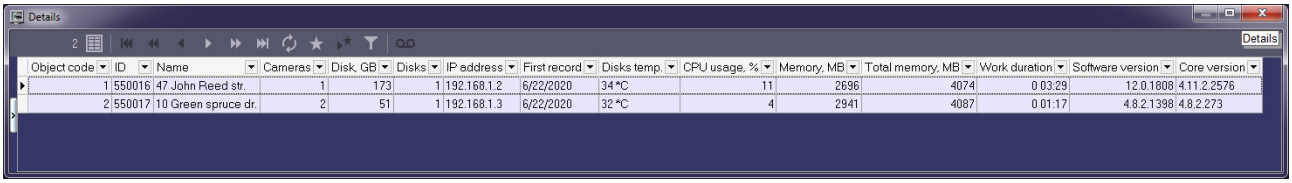


The lower part contains the **Fields** tab. Information on selected options is shown as columns in the main list of the Log panel workspace.

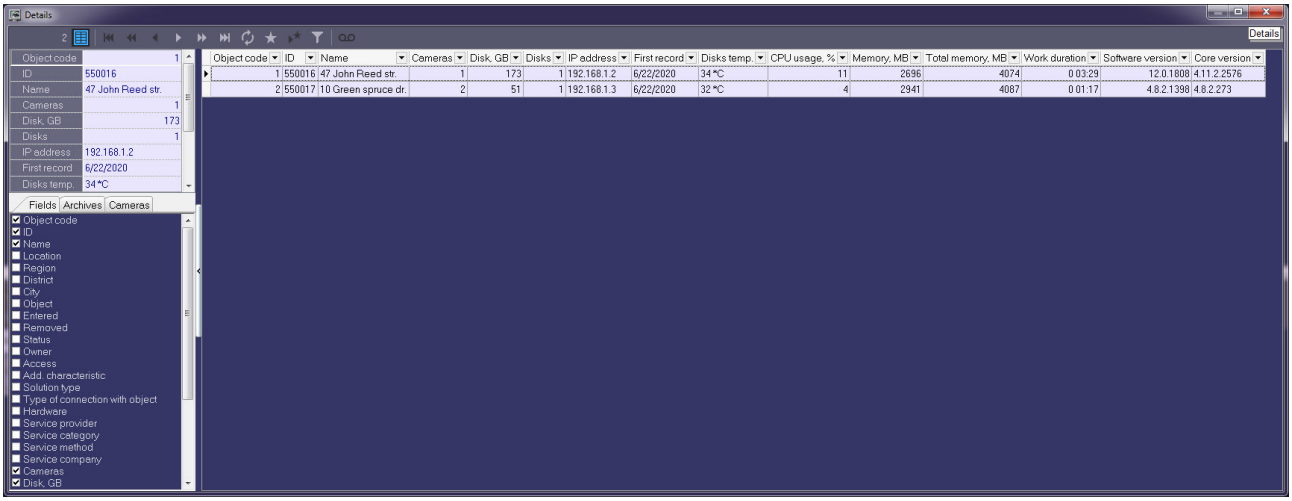


ID	Name	Cameras	Disk, GB	Disks	IP address	First record	Disks temp.	Memory, MB	Work duration	Software version
550016	47 John Reed str.	1	173	1	192.168.1.2	6/22/2020	33 °C	2698	0 03:14	12.0.1808
550017	10 Green spruce dr.	2	51	1	192.168.1.3	6/22/2020	32 °C	2941	0 01:17	4.8.2.1398

To receive detailed information about object click it in the **Log panel** and click the  button (**Show detailed information**). The **Details** window will display.



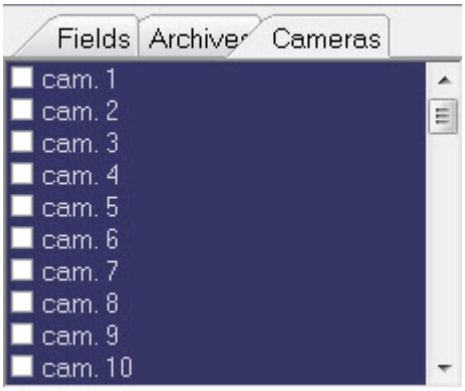
Click the  button (**Show inspector Ctrl+I**) in the **Details** window to display the special area in the top part of which the information about the selected object is listed.



Note.

If the Owner Panel is in use, then information about only the objects that belong to the owner selected on the Owner Panel is displayed in the **Details** window. To view the details about all system objects, call this window on the Owner Panel – see Viewing details on alarms for all system objects.

In the bottom part there are 3 tabs: **Fields**, **Archives** and **Cameras**.



Information on selected options will be displayed in view of columns in the main list of **Details** window.

Data in the **Cameras**, **Disk**, **GB**, **Disks**, **Software version**, and all fields in the **Archives** and in **Columns** tabs, are filled in automatically when packets about technical status are received from objects. If these fields are not filled in for the object, a connection has never been established with the object.

The **Camera** field shows the number of video cameras at the site.

The **Disk**, **GB** field shows the maximum amount of free space on all logical disks to which archive video is recorded.

The **Disks** field shows the number of logical disks to which archive video is recorded.

The **Software version** field shows the version of *ATM-Intellect Pro* 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 **Camera** 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 **Disk temp.** shows the temperature of the hard drives separated by a comma if there are several disks.

The **CPU Load,%** 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 load calculation;
> - For older operating systems, the **% Processor Time** counter is used.

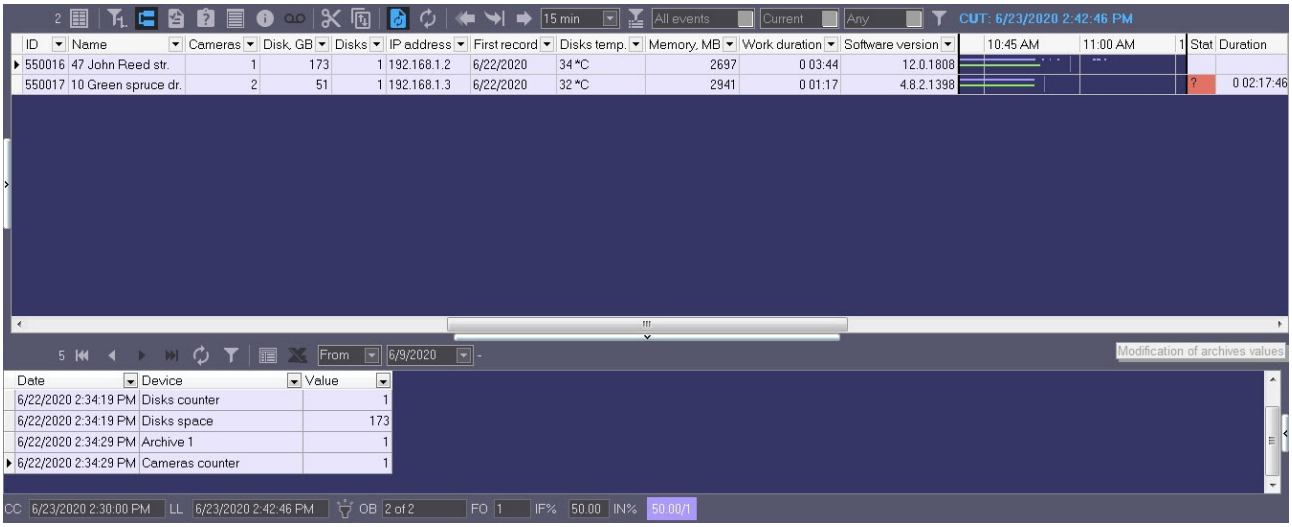
The **Memory, MB** field shows the amount of available physical memory in MB.

The **Work duration** field shows the time of continuous operation of the Intellect.exe\Intellect64.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 *Intellect* version at the site.

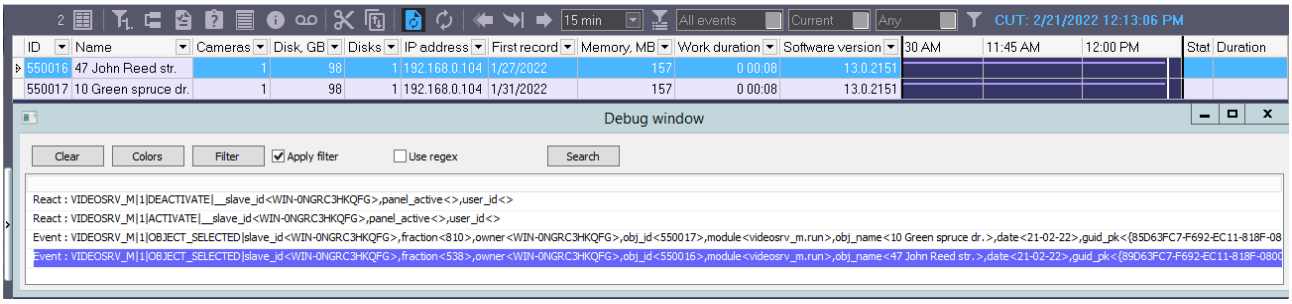
Click the  button (**Show characteristics of devices**) to view a special area that describes changes to the indicated fields over time (**Camera**, **Disk GB**, **Disks**, **Software version**, etc.).



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 *Intellect,* where **n** is the index number of the **ATM 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).

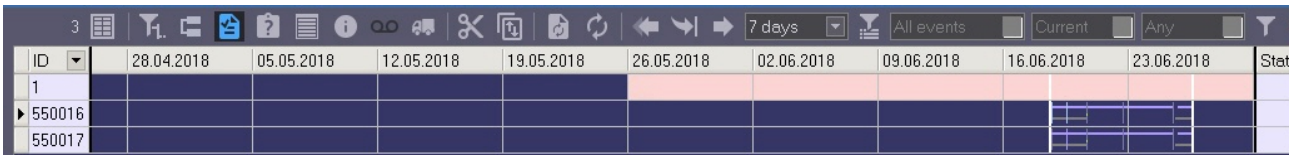


This feature can be used to create various scenarios using scripts, for example, to display an object scheme when it is selected in the *ATM Monitoring* interface object. In this scenario, the operator selects an object in the *ATM Monitoring* interface, and a pre-created diagram or map of the selected 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 **Control Panel** (see Selecting an object on the Control Panel), the event is sent to *Intellect* in the similar way.

3.7 Exceeding the permissible number of failures

If there are more than 500 faults in the visible part of the timeline for the displayed object, alerts are not shown in detail for the object, and the background color becomes pink.

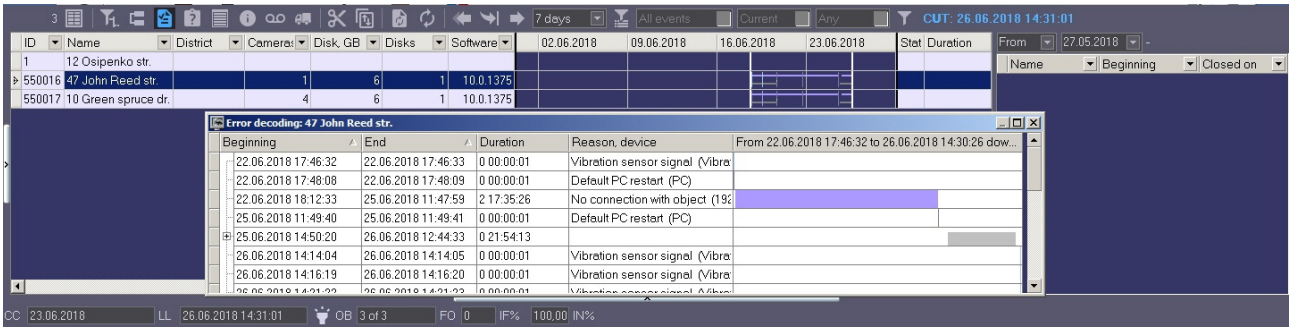


Faults are calculated for a range of intervals, not for each interval. In the case shown, they are counted for ten columns from 3:30 PM to 6:00 PM and for one column from 6:00 PM to 6:15 PM. Even if the maximum number of faults is exceeded only in three columns, all ten columns will become pink.

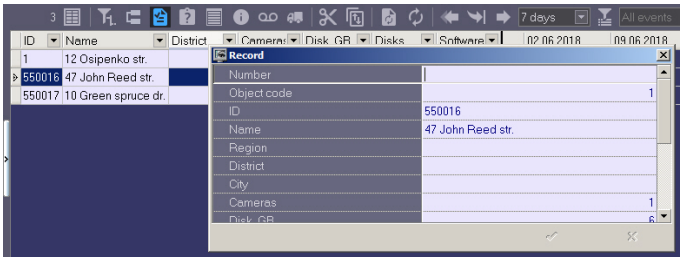
3.8 Forcibly closing alarm

Sometimes an alarm must not be considered as an alarm. To close the alarm forcibly, click the button (**Close error forcibly**). A list of the errors closed in this way can be seen by clicking the button (**Show closed errors**). An additional table is shown on the right.

Left-clicking an entry in the alarm situation display area twice opens a dialog box, which explains the errors in the period of time described by the cell.



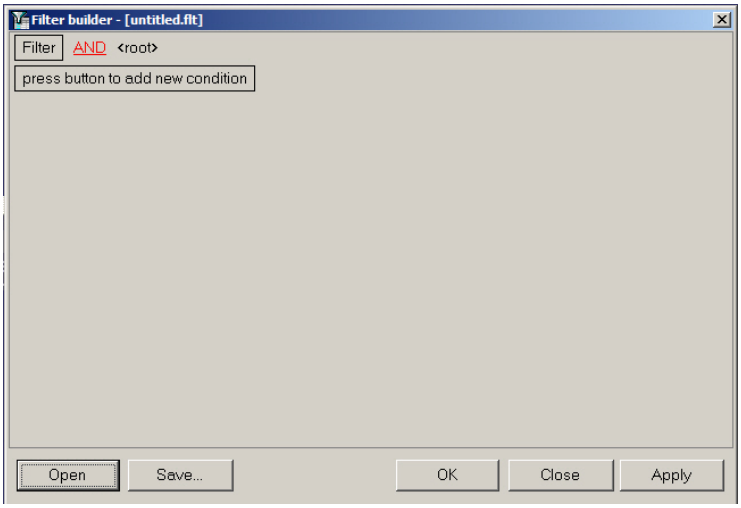
Left-clicking an entry in the reference information area twice opens a dialog box, which contains a full description of object properties.



3.9 Custom filter in the Log Panel

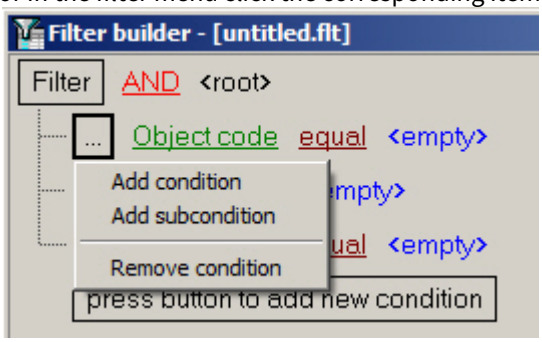
In addition to the basic filters by the time of registration and the duration of the alarms (see The number of alarms displayed on the Log panel), it is possible to configure a custom filter to display certain alarms depending on the conditions. This filter is applied to both the Log Panel and the Control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

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

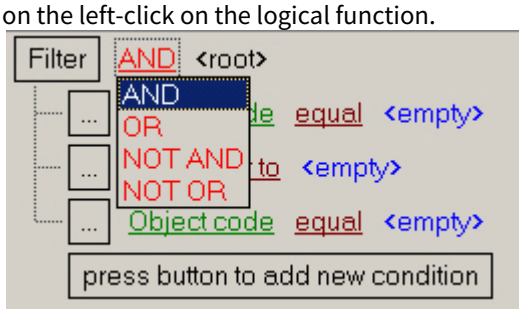


The following operations can be required for setting the filter:

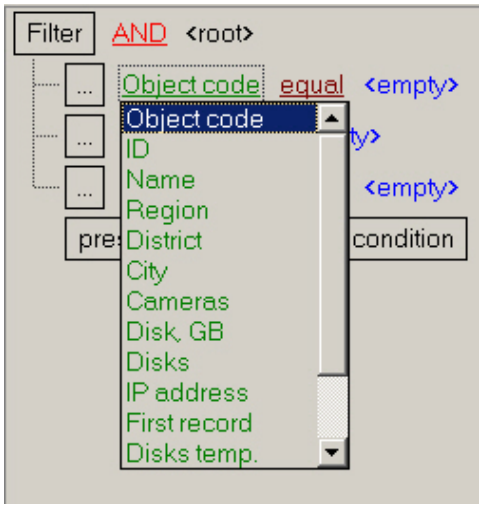
1. Add a condition or subcondition. To add a condition click the **press button to add a new condition** button or in the filter menu click the corresponding item. The condition menu opens by clicking the **...** or **Filter**.



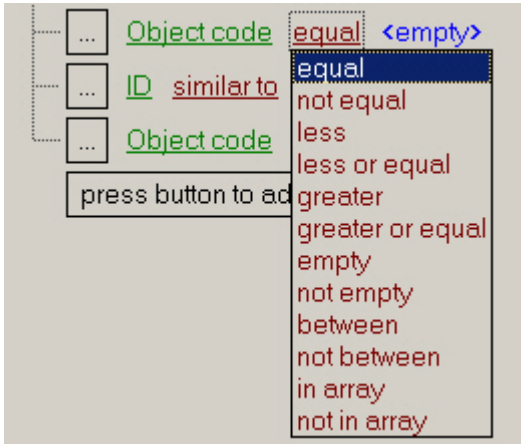
2. Remove a condition. To remove a condition, click the corresponding item in the condition menu.
3. Select a logical function for combining conditions. A drop-down list for selecting the logical function opens on the left-click on the logical function.



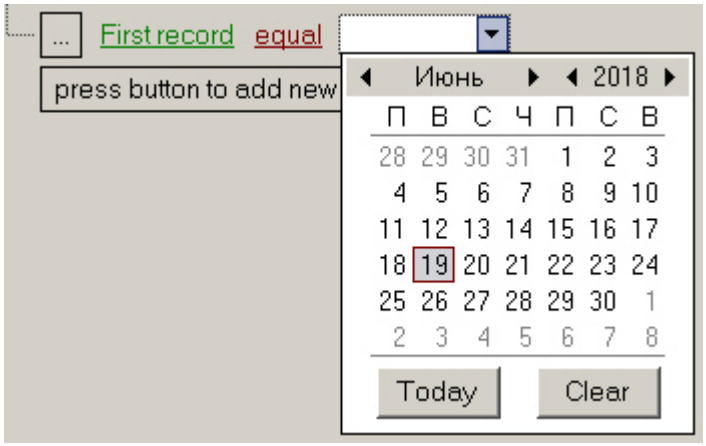
4. Select a field for comparison. A drop-down list for selecting the field for comparison opens on the left-click on the field name.



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.
Data selection:



An array of values:

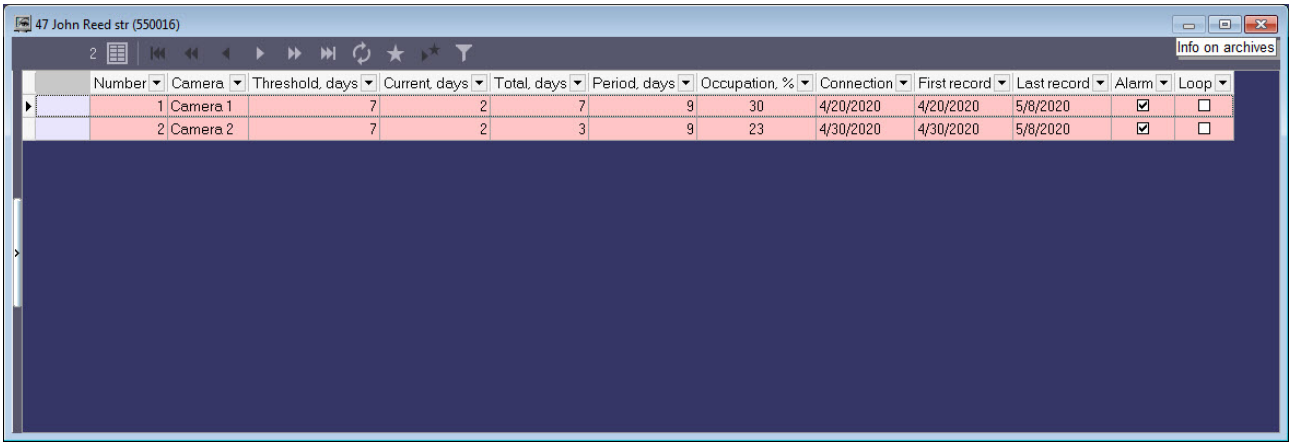
After completing settings, the filter can be saved to a file with the .flt extension by clicking the **Save...** button. This file can then be opened using the **Open** button.

The custom filter on the Log Panel can be set by a script – see ATM-Intellect 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	☑	☐
2	Camera 2	7	2	3	9	23	4/30/2020	4/30/2020	5/8/2020	☑	☐

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 *ATM-Intellect Pro* 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 *ATM-Intellect Pro*), 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. If the *ATM-Intellect Pro* is installed in *Intellect* software, which does not support loop recording at the video camera level (the *Intellect* version earlier than 4.9.0), then the corresponding checkbox in the table is gray.

The *ATM-Intellect Pro* 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" were set when the list of cameras was configured (see Configuring video cameras 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:

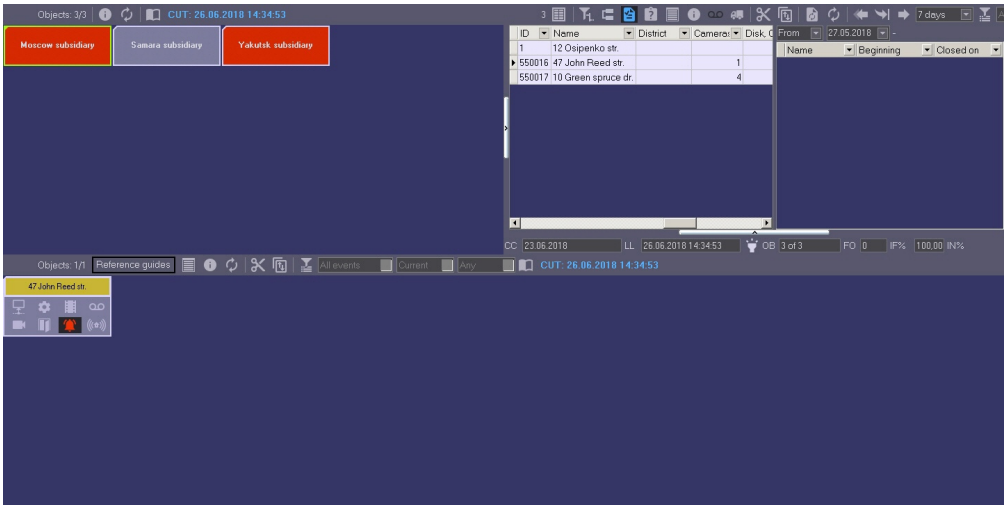
- In the date range from (Current date - X) to Current date, the search is performed for days on which the archive was recorded, where X is the number of days = **Keep archive for (days)** + **Gaps in the archive (days)** + 1. In the current example X = 7 + 1 + 1 = 9 (the **Period, days** column).
- 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 Owner Panel

4.1 Owner Panel interface

The Owner Panel always operates along with the Control Panel. The Owner 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).

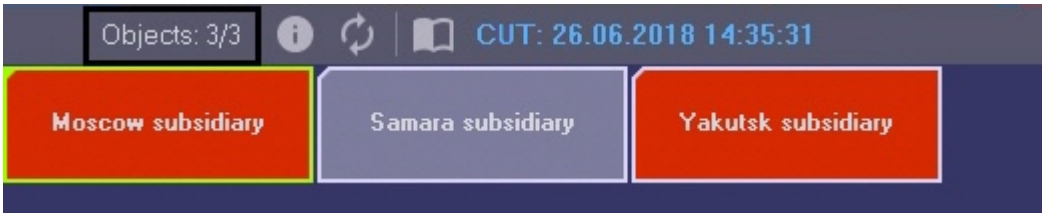
Left-click the owner, the rectangular is framed blue and only those objects that belong to the owner are shown on the Control Panel.

Information on the Owner Panel is updated after every data loading from the database. Current time of data update on the Owner Panel is shown in the CUT field.

To update display data click the  button. If there are new data in the database, they will be displayed on the Owner Panel.

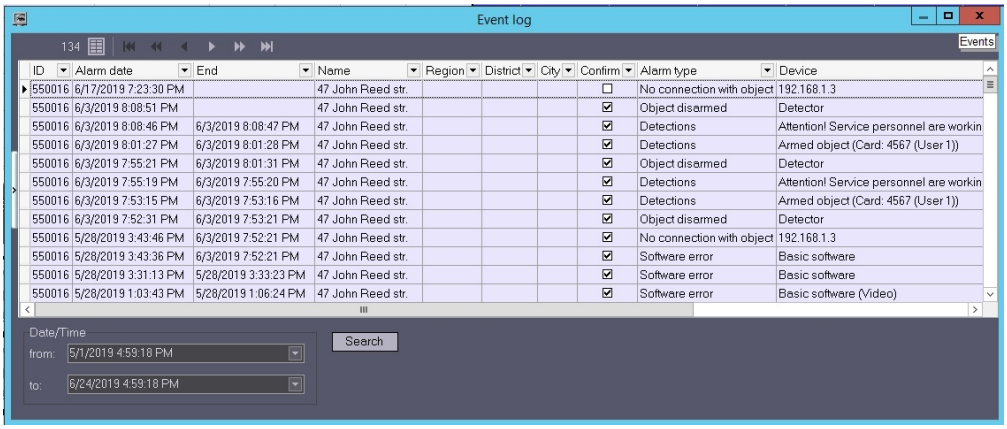
4.2 Objects displayed on the Owner Panel

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



4.3 Viewing Event log for all objects

To view all the events logged in the *ATM-Intellect* software package click the  (**Event log**) button on the Owner Panel. The **Event log** window appears. This table can be sorted by any column or the column can be filtered.

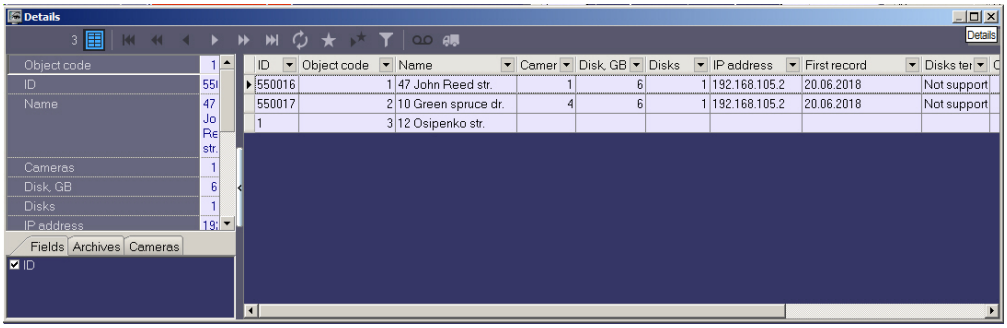


> **Note.**
>
> To view all the events logged for objects that belong to the selected owner, call the **Event log** window on the Control Panel – see Event log.

Use the **Event log** window in the same way as you use it on the Control Panel – see Event log.

4.4 Viewing details on alarms for all system objects

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



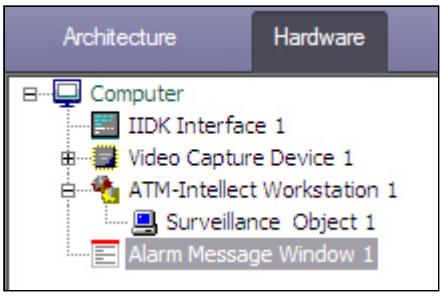
> **Note.**

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

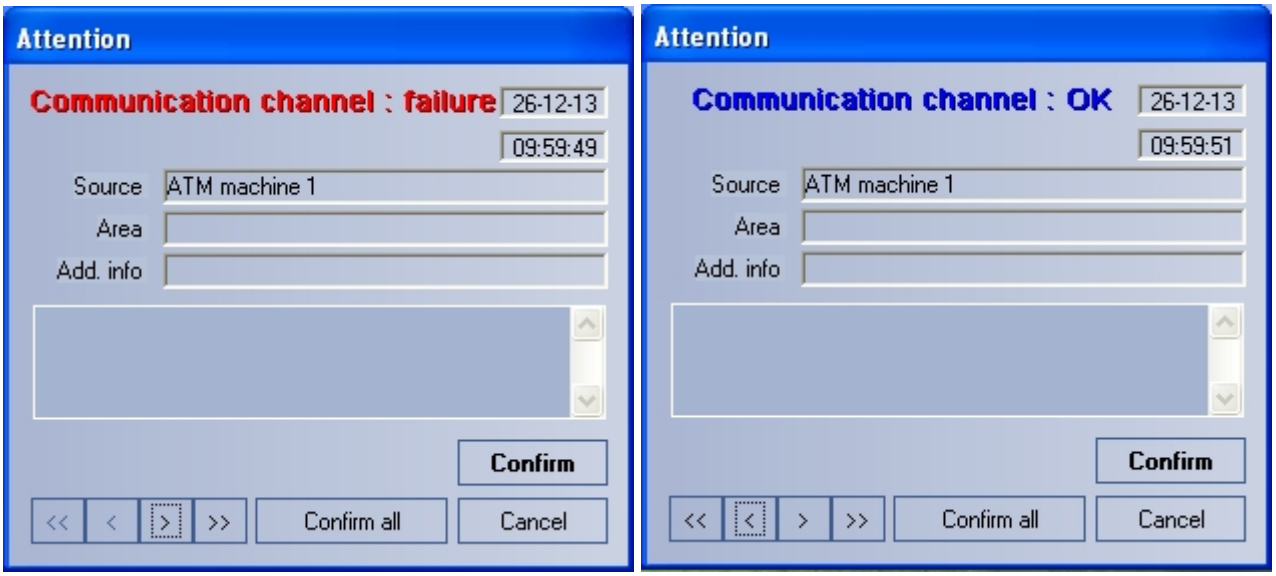
Use the **Details** window in the same way as you use it on the Control Panel and Log Panel – see Information on the object .

5 Alarm message window

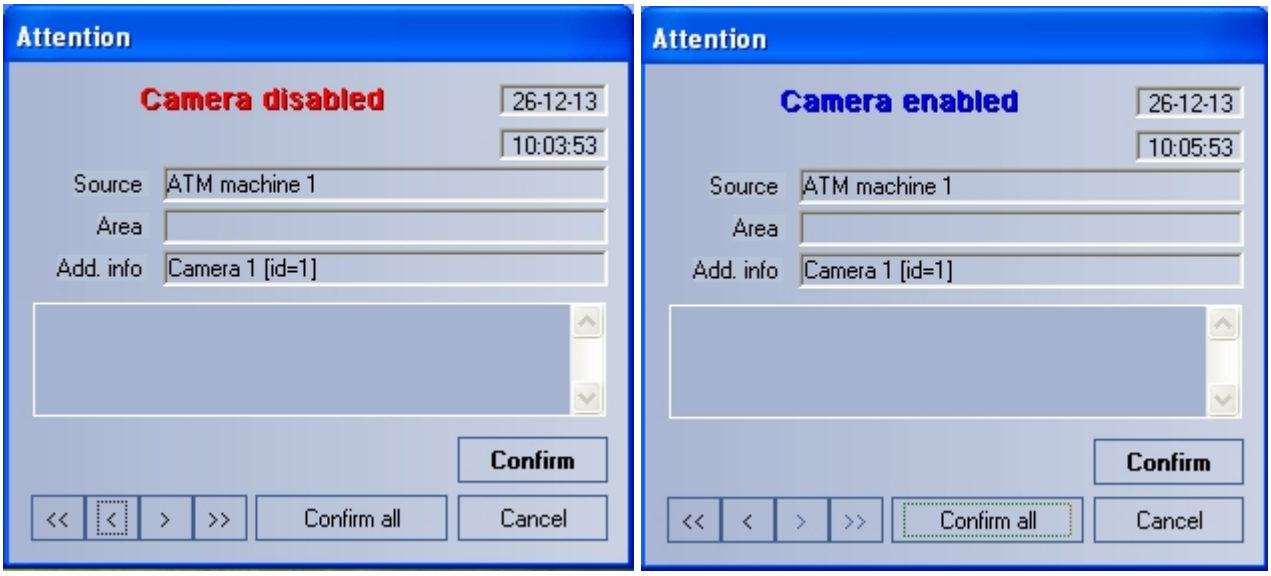
To attract the extra attention to alarm situations use the **Alarm messages window** object.



If there is the **Alarm messages window** object in the settings tree of *Intellect* 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

6 Search in archive

6.1 Search in archive purpose

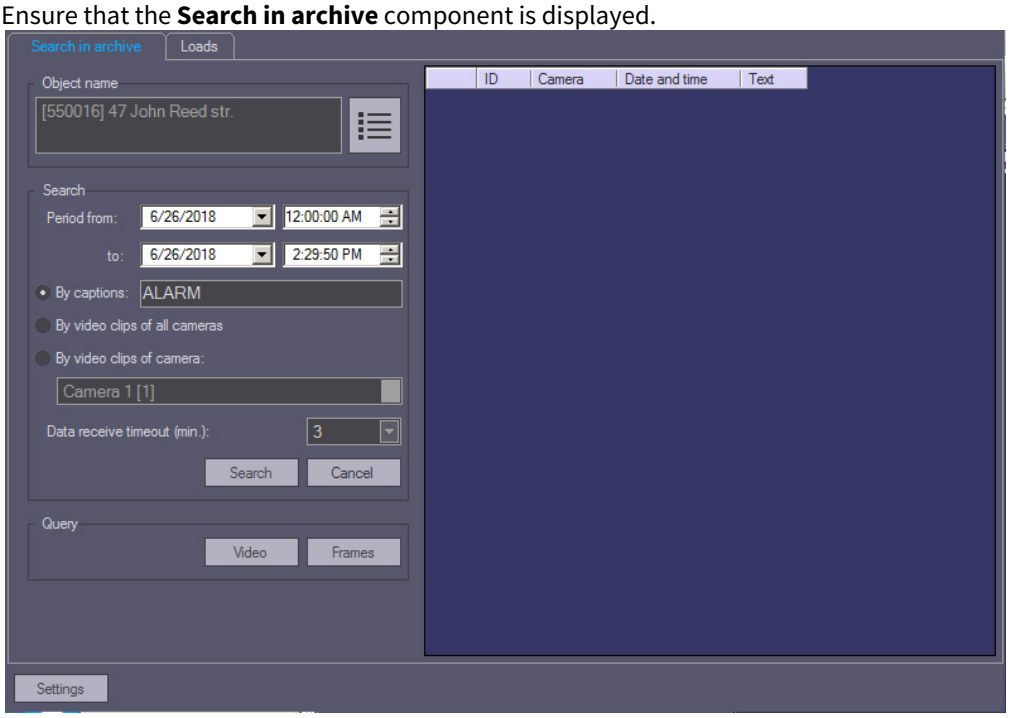
The Search in archive component does the following:

1. Generates and sends search queries for captioned videos, and receives video info search results.
2. Generates and sends search queries for video frames, both captioned or uncaptioned, and receives video info search results.
3. Generates and sends search queries (based on video info search) to the video archive for an object, and receives and visualizes the search results (frames or fragments).
4. Views and prints search results (frames or fragments).

6.2 Video archive search request for captions

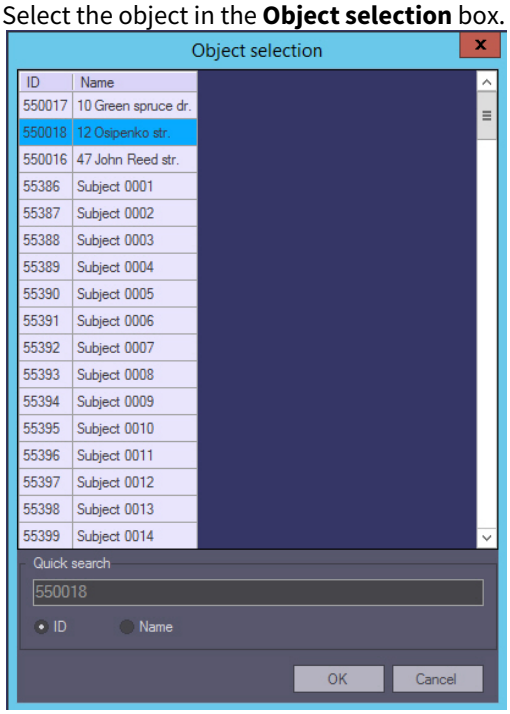
To create and send a video archive search request (**By captions** mode), you must do the following:

1. Ensure that the **Search in archive** component is displayed.



2. Select an object as follows:
   a. Click  in the **Object name** group.

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



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.

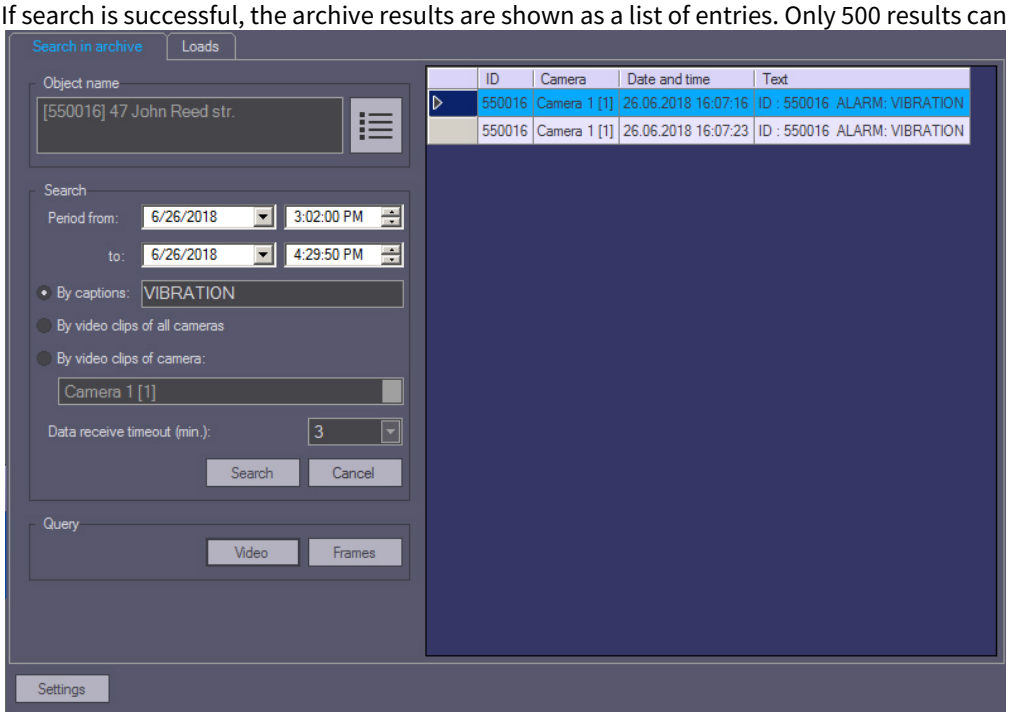
3. Create a search query for the archive, using the following parameters:
   a. Set date and time of search period beginning in the **Period from:** field.
   b. Set date and time of search period ending in the **to:** field.
   c. Set the switch into **By captions** position.
   d. Specify any keyword (available only in **By captions** mode).

> **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.
> - If *ATM-Intellect Pro* software is installed with *Intellect* 4.10.0 or later versions, it is possible to use the * symbol while searching by titles to search for any number of any characters, for example: card*.
> - If *ATM-Intellect Pro* software is installed with *Intellect* 4.9.8 or previous versions, each word is implicitly framed in *.

4. Search timeout is specified in the **Data receive timeout (min)** list.
5. Select an object in the object description list and click the **Search** button.

> **Note.**
>
> You can stop searching at any time, by clicking the **Cancel** button.

6. If search is successful, the archive results are shown as a list of entries. Only 500 results can be displayed.



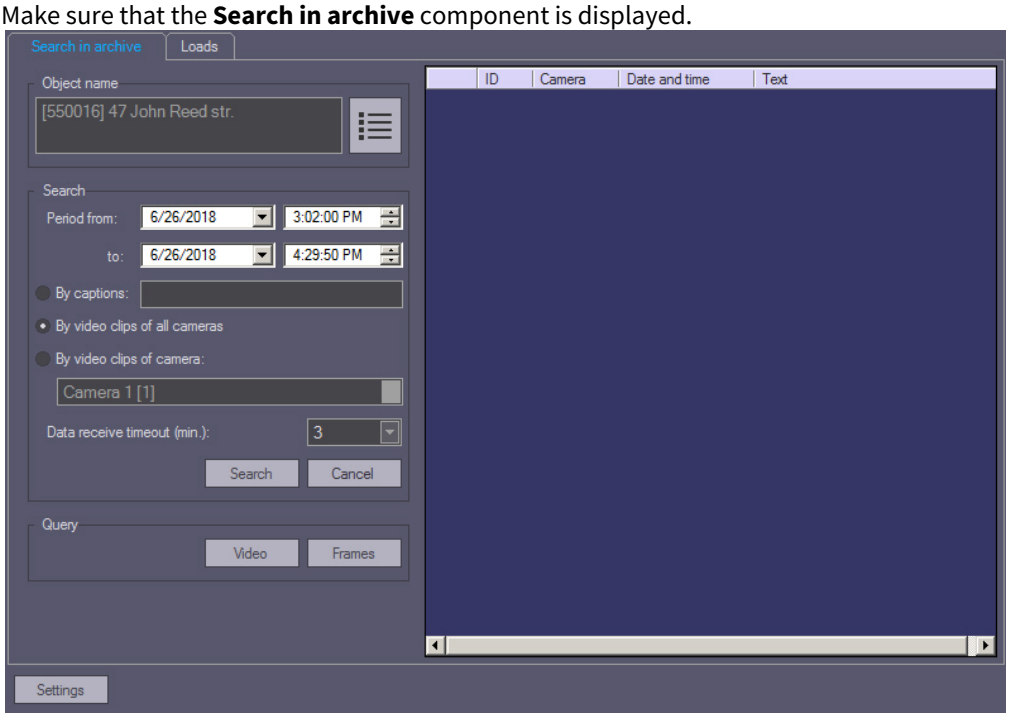
Attention!

These data are taken from the *Intellect* database at the object. Data retention time is configured in the **Programming** tab, in the **Security zone** object settings panel, under the **Events archive length** option (measured in days).

6.3 Video archive search request for video fragments

To create and send a request to the video archive (**By video clips of all cameras** mode), you must do the following:

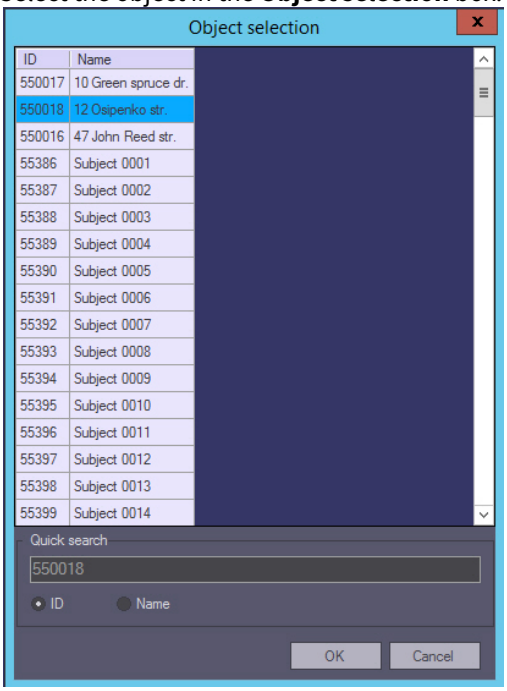
1. Make sure that the **Search in archive** component is displayed.



2. Select an object as follows:

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

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



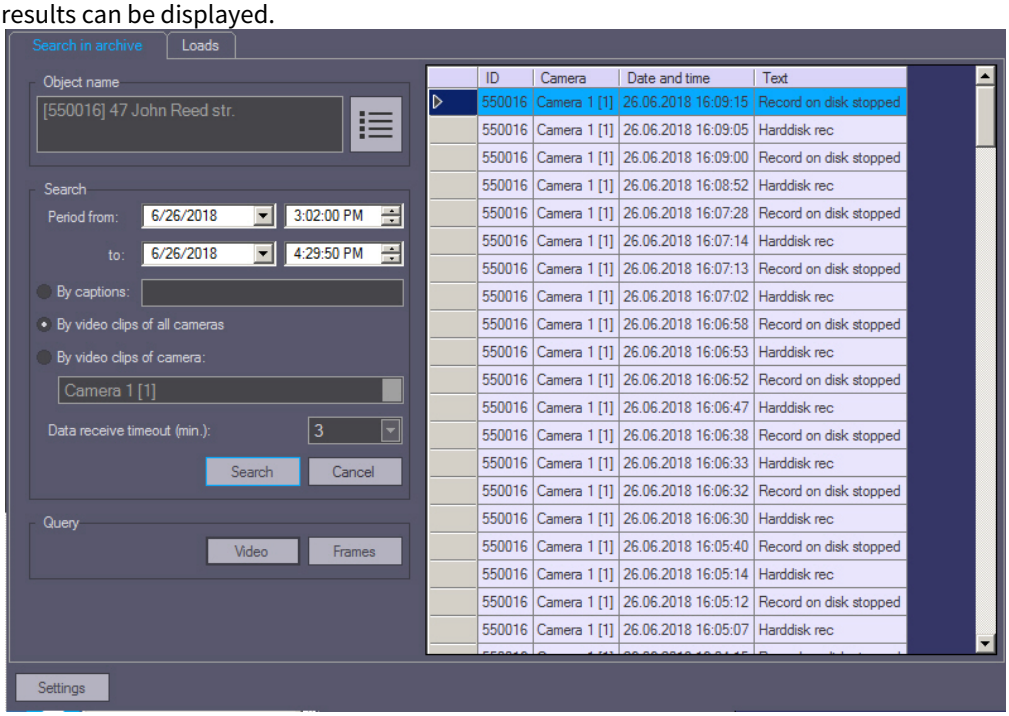
   c. For quick search by object identification number, set the switch in the bottom of the box to **ID** and enter the number in the **Quick search** field. The match, if found, is displayed in the **Quick search** field while the corresponding object is automatically selected in the list.

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. Generate an archive search query, using the following parameters:
   a. Set date and time of search period beginning in the **Period from:** field.
   b. Set date and time of search period ending in the **to:** field.
   c. Set the switch into the **By video clips of all cameras** mode.

> **Note.**
>
> To search by video fragments of a specific camera set the switch into the **By video clips of camera** mode and specify the camera in the drop-down list.

4. Click the **Search** button. If search is successful, the archive results are shown as a list of entries. Only 500 results can be displayed.



5. The data so obtained can be used to generate an archive query (see Video query).

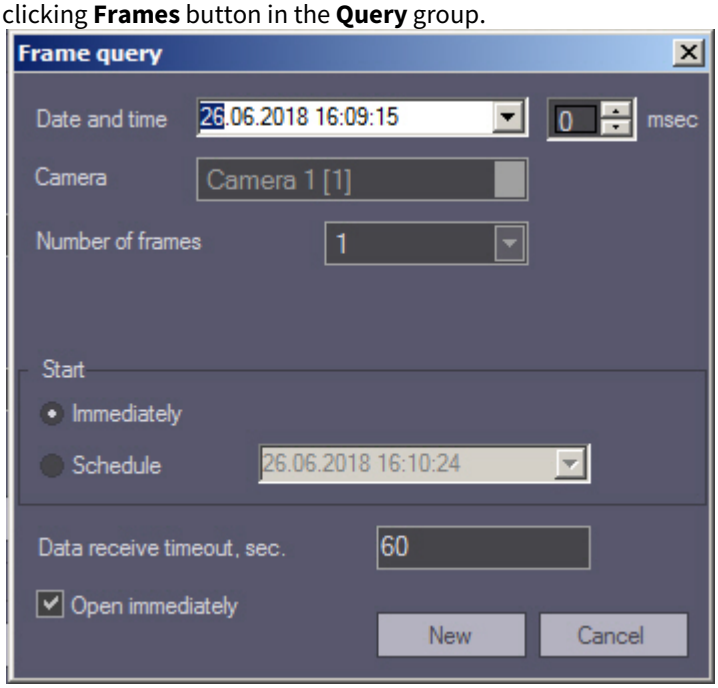
> **Attention!**
>
> These data are taken from the *Intellect* database at the object. Data retention time is configured in the **Programming** tab, in the **Security zone** object settings panel, under the **Events archive length** option (measured in days).

6.4 Frame query

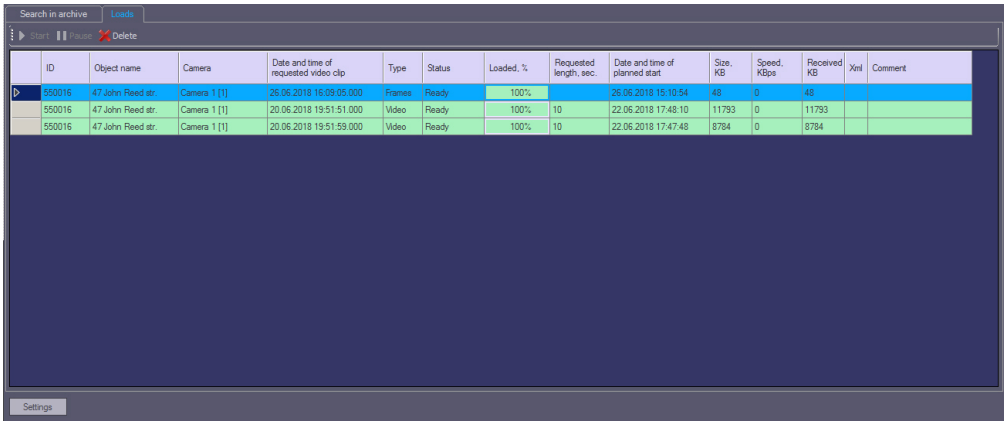
The Search in archive component allows querying video frames from an object. To do that, proceed as follows:

1. Perform video search by captions or by clips as described in the corresponding sections.
2. Search results are displayer as a list. Click the right mouse button on a field of interest in the list of results. The menu with **Video query** and **Frame query** items is displayed.

3. If **Frame query** item is selected, the **Frame query** dialog box appears. You can also call this dialog box by clicking **Frames** button in the **Query** group.

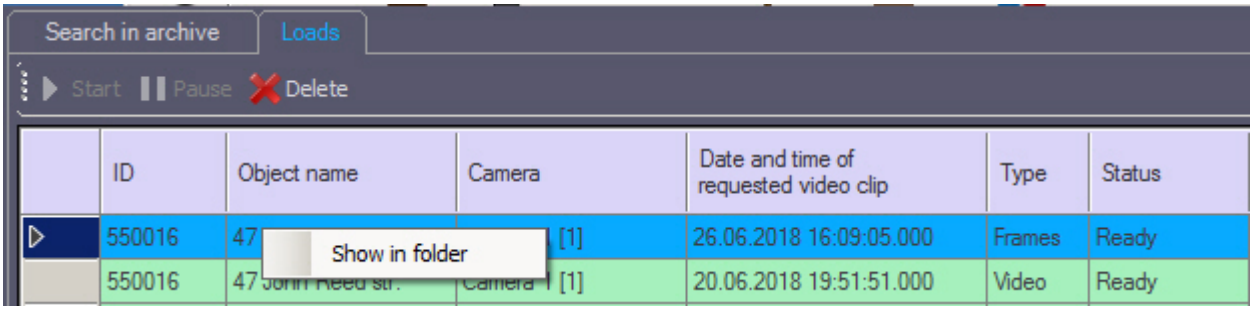


4. The **Date and time** and **Camera** fields are automatically filled.
5. The **msec.** field allows specifying the query time to the millisecond.
6. If number of frames is more than one, the **Interval between frames** field appears. Interval between frames is specified with millisecond precision.
7. In the **Start** area select time to perform request: **Immediately** or **Schedule**.
8. Timeout of frame receiving is set in the **Data receive timeout, sec** field.
9. If the **Open immediately** checkbox is set, then after data download completed they will be placed into the archive and visualized. Otherwise data will only be placed into the archive. To view such data you can use the **ATM Monitoring Reports** component.
10. After all fields values are specified, press **New**.
11. Task process is viewed on the **Downloads** tab. If data downloaded successfully and if the **Open immediately** checkbox was set, the downloaded frame will be displayed.



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 1:1. 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.

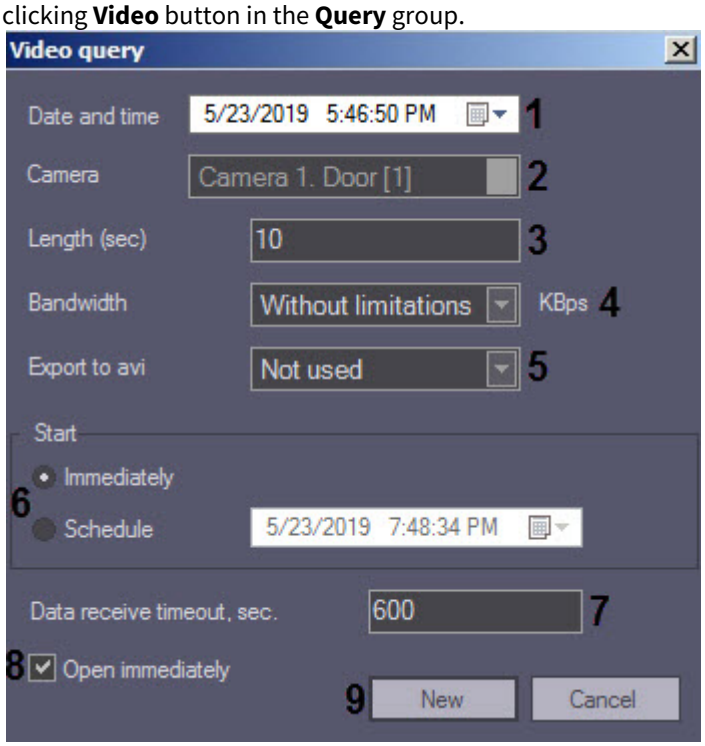


6.5 Video query

The Search in archive component also allows querying small video fragments from an object on the *ATM-Intellect Pro* side. To do so, proceed as follows:

1. Perform the search by captions or by video clips as described above.
2. The archive results are shown as a list of entries. Click the right mouse button on a field of interest in the list of results. The menu with **Video query** and **Frame query** items is displayed.

3. If **Video query** item is selected, the **Video query** dialog box appears. You can also call this dialog box by clicking **Video** button in the **Query** group.

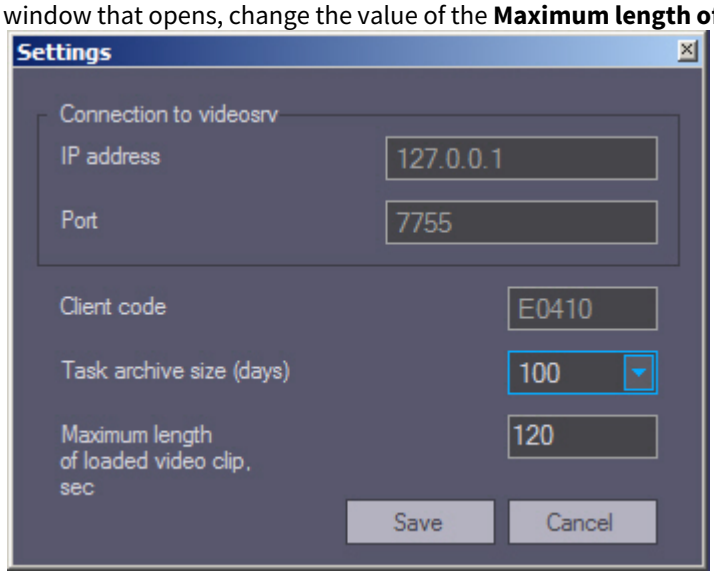


4. The **Date and time** (**1**) and **Camera** (**2**) fields are filled in automatically.
5. The **Length (sec)** field (**3**) allows specifying the received video fragment duration.

> **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 *ATM-Intellect Pro* 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 *ATM-Intellect Pro* side using the **AviExport.run** module. The **AviExport.run** module version used on the *ATM-Intellect Pro* should be no lower than 4.10.5.3776, and the required codec should be installed. Otherwise, an error **Frame or video clip is not found (archive export error)** will be received.

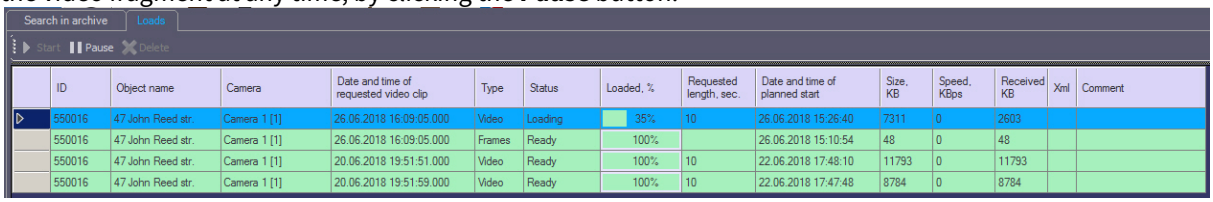
> **Note**
>
> If the *ATM-Intellect Pro* version is lower than 11.0.1520, then the value of the **Export to avi** parameter will be automatically set to **Not used** without the possibility of changing it.

8. In the **Start** area select time to perform request: **Immediately** or **Schedule** (**6**)**.**
9. Timeout of video receiving is set in the **Data receive timeout, sec** field (**7**).

> **Note**
>
> 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 *ATM-Intellect Pro* side.

10. If the **Open immediately** checkbox (**8**) is set, then after data downloaded completely they will be placed into the archive and visualized. Otherwise data will only be placed into the archive. To view such data you can use the **ATM Monitoring Reports** component.
11. After all fields values are specified, press **New**.

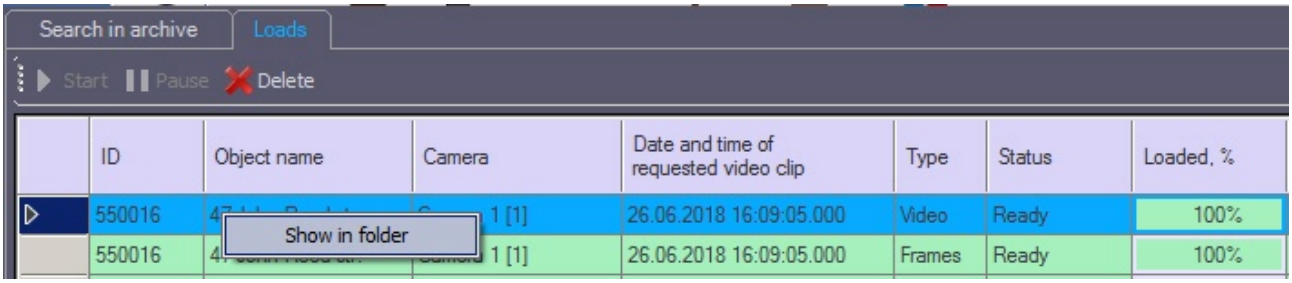
12. You will get to the **Downloads** tab where the task performance process is displayed. During receipt of a video fragment, the file's size, amount downloaded and transmission speed are shown. You can stop loading the video fragment at any time, by clicking the **Pause** button.



> **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.
>
> 
>

13. If the **Open immediately** checkbox was set, after it is loaded, the video fragment will be played in the following way:
    a. on the *ATM-Intellect Workstation* 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 *ATM-Intellect Workstation* using the program specified in the **AVI-files player** parameter (see Setting up the reaction on receiving images and clips), 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.

Successfully completed task is marked with green in the list. Double-click on such task to visualize received video fragment or frame. 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.



The *Search in archive* module supports broken download resume. If during the download the link with *ATM-Intellect Pro* was lost, after two minutes timeout the download status will be changed into **Network failure** and in the **Commentary** field the message will be displayed that no data transferring is performed in the moment. After ten seconds periodic attempts to resume data download will begin. Attempts period is one minute. After connection with *ATM-Intellect Pro* is reestablished, data download will continue from the position where it stopped. Broken download resume mechanism is implemented using temporary files that are stored on the *ATM-Intellect Pro* and *ATM-Intellect Workstation*. These files are stored for three days by default. After this time they are deleted. For

example, if you create a clip download task and while loading press "**Pause**" and resume the download in five days, the data will be downloaded from the beginning.

> **Note**
>
> To change the storage period for the temporary files, it is necesary 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.

The old tasks can be deleted from the list with **Delete** button on the **Downloads** tab. Tasks are stored for 100 days maximum. 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 the *Intellect* software shuts down, all download tasks with “Downloading” status are paused. To resume download start these tasks manually.

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	*Surveillance Object* 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* *Note. To be used if the Titles parameter is not set to 0*
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* *Note. If 0 is set for this parameter, the request is executed immediately.*

Cam	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. Example. There are 3 cameras on the *ATM-Intellect Pro*: 1. Number = "1". Name= "Camera 1. Door" 2. Number = "3". Name = "Window" 3. Number = "5". Name = "Arch" The cameras are added to the *Surveillance Object* in the following order: 1. "Camera 1. Door" 2. "Arch" 3. "Window" Cameras are displayed on *ATM-Intellect Workstation* in the corresponding order. Thus, to get a video from the camera "Arch", the parameter Cam should be equal to 2. *Note. If you specify 0, the video clips are downloaded from all object video cameras added while setting the ATM-Intellect Pro.*
Titles	A string to search by titles. The string should not be longer than 40 characters. If *ATM-Intellect Pro* is installed with Intellect version 4.10.0 or higher, use * to search for any number of characters, for example: • *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. If the *ATM-Intellect Pro* is installed with Intellect version 4.9.8 and below, all words beginning with the search string will be found, for example: • *sala* - the search by this strings returns all titles with words beginning with "sala", i.e. both "salad" and "salamander". *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.* *Note 2. If you specify an empty string, the search will be performed by any titles.* *Note 3. To use the characters in the search string as characters only, not as markup, use the CDATA section.*
OnlyWithTitles	Download video clip if titles found only. Possible values: 0 — video clip is downloaded 1 — video clip is not downloaded

DownloadSpeed	Download speed of the video in KB / sec. Possible values: 0 - 1000 *Note. If you specify a value of 0, then the download speed is not limited.*

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

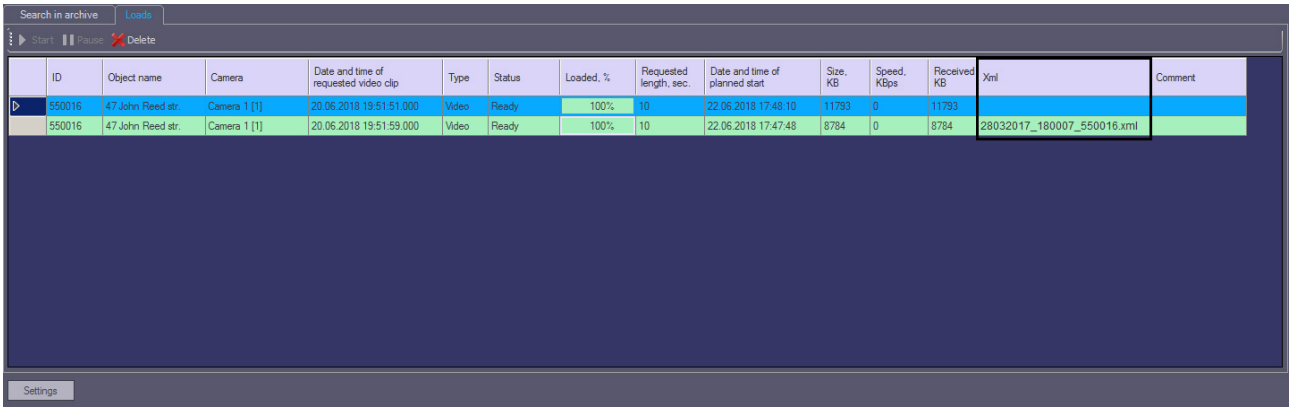
> **Note.**
>
> See Video clip request file for description of request file. See note in Configuring automated video clip loading for description of folders.

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 the 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 *Downloads* 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.


Search in archive
Loads
Start
Pause
Delete
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
Settings

7 Characteristics of video data transfer during the transaction

Video data transfer from the *ATM-Intellect Pro* to the *ATM-Intellect Workstation* is performed by request from the *Search in archive* module and when the alarm is detected. While performing the financial transaction on the ATM, the video data transfer is temporarily stopping. The following cases are possible:

1. Transaction starts during the video segments loading performed by the *Search in archive* module. In this case the loading stops (it is paused). In the **Comment** field the information is displayed that pause is due to transaction. Loading is continued after the transaction is completed.
2. Loading request from the *Search in archive* module is received during the transaction. Export of required video segment is performed on the *ATM-Intellect Pro*, but the data loading does not start. Loading is displayed as paused. In the **Comment** field the information is displayed that pause is due to transaction. Loading is continued after the transaction is completed.
3. Transaction starts during the alarm processing. In this case the loading stops (it is paused). While the transaction is not completed the list of “delayed” alarms for sending is created. After the transaction is completed the *ATM-Intellect Pro* starts sending the “delayed” data which contains alarms corresponding to alarms detected during the transaction in order reversed to their receiving. The last “delayed” delivery will be send first, as the most actual.
4. Alarm appears during the transaction. The *ATM-Intellect Pro* sends messages with description of detected alarm or failure with its description on the *ATM-Intellect Workstation* immediately, when the informational delivery is ready. Also, the message that loading of corresponding video data will be stopped is sent. While the transaction is not completed the list of “delayed” alarms for sending is created. After the transaction is completed the *ATM-Intellect Pro* starts sending of “delayed” data which contains alarms corresponding to alarms detected during the transaction in order reversed to their receiving. The last “delayed” delivery will be send first, as the most actual.

In case if ATM financial transactions and video data from *ATM-Intellect Pro* are transferred by different connection links and if the good connection link is in use, it is possible to allow loading of video data during transaction. To do so create the string parameter «stop_data_by_trx» with the «0» value in the HKEY_LOCAL_MACHINE\SOFTWARE\BITSoft\VHOST\VHostService registry section for 32-bit OS (HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\BITSoft\VHOST\VHostService for 64-bit).

8 ATM Monitoring reports

8.1 ATM Monitoring reports purpose

The **ATM Monitoring reports** component automates processing of statistics about system functioning. You can create the following types of reports:

1. Report on technical faults;
2. Report on alarm situations;
3. Video report;
4. Operator actions report;
5. Statistical report;
6. Statistical report by owner;
7. Vehicle LPs report.

Some reports can be hidden while configuring the system – see Configuration of the ATM Monitoring reports object.

General view of **ATM 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.

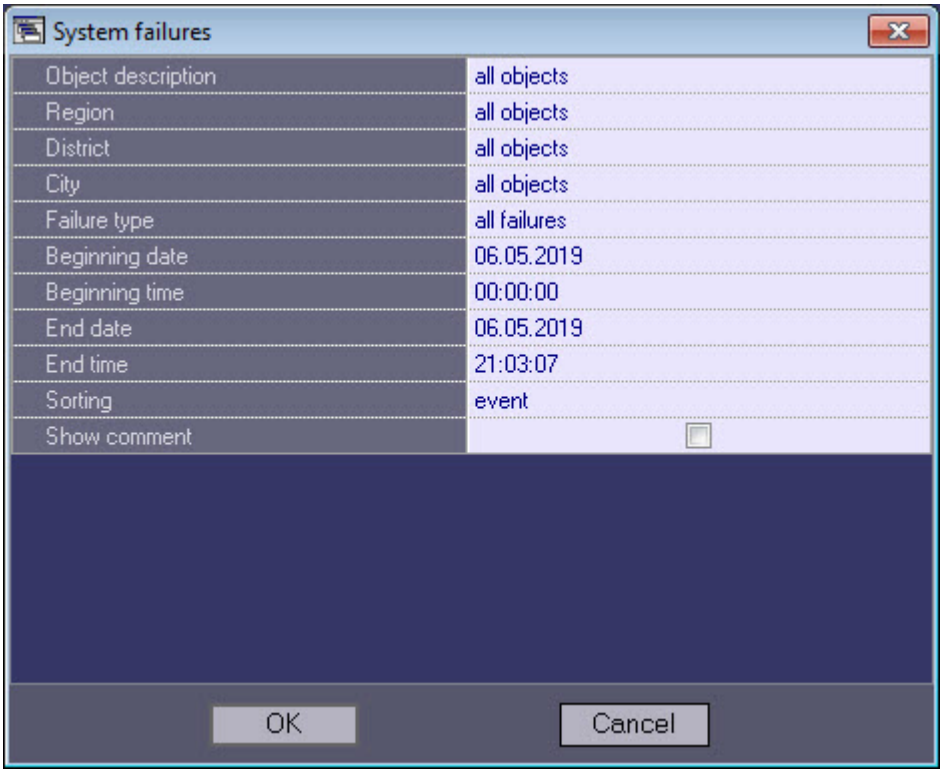
No.	Description
1	Scale
2	Open report
3	Save report
4	Print
5	Search for text in report

Here are some details on the **Save report** and **Open report** buttons. For example, if there is no printer at the place where the **ATM 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.

8.2 Report on technical faults

To start generating the report, click the **System faults** button  .

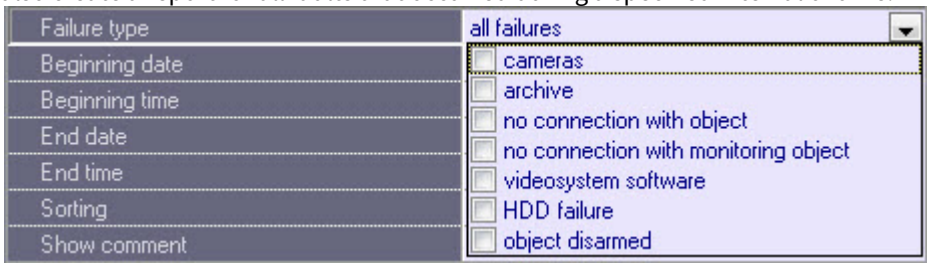
A dialog box then appears, with the parameters necessary for report generation.



This dialog box allows setting the following report parameters:

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

2. **Region**, **district** and **city** in which the objects are located. This information is configured on the Control panel - see Editing reference information. If a specific object is selected (see step 1), then these fields are hidden in the report settings window.
3. **Failure type**. This setting allows specifying the type of fault for which you want to generate a report. You can also create a report for all faults that occurred during a specified interval of time.



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**. A report can be sorted in one of two ways:
   a. By events (**Signal from vibration sensor**, **Signal from lock sensor**, etc.).
   b. By time of event start.

6. **Show comment**. Set this checkbox if it is necessary to display fault comments in the report (see Processing alarms).
7. After configuring all parameters, click **OK** 

. The report appears in a new window.

Report issue date: 5/15/2019 4:03:39 PM

Report - system failures

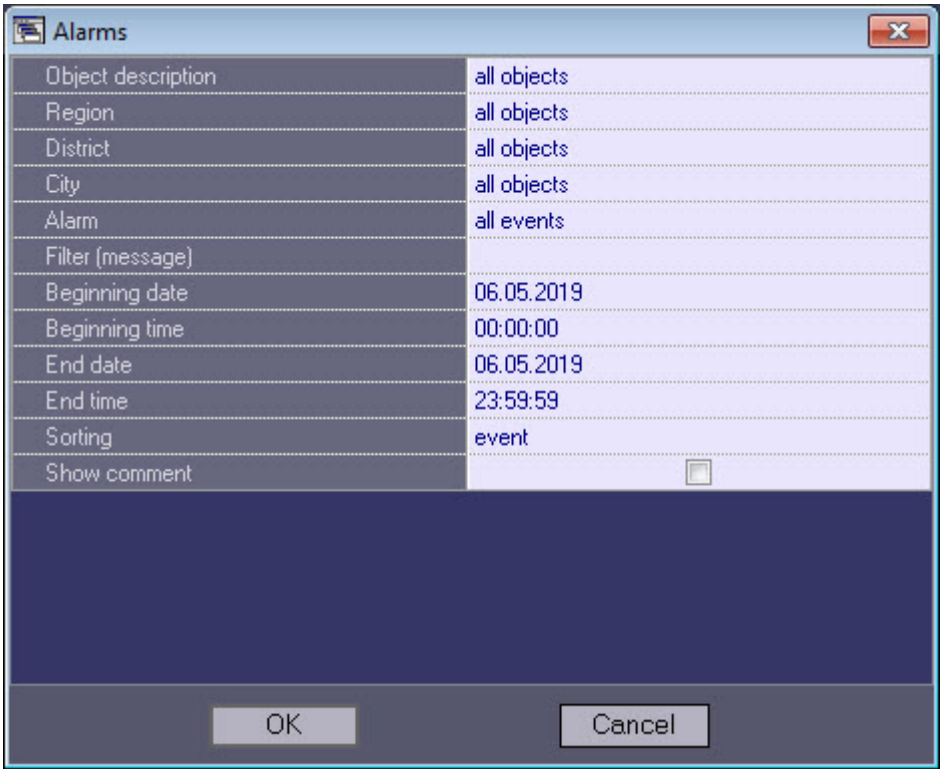
Object:	all objects report
Failure type:	all failures
Period:	from 5/15/2019 12:00:00 AM to 5/15/2019 4:03:11 PM
Region:	all objects
District:	all objects
City:	all objects

Event	Beginning	End	Duration
Object: "10 Green spruce dr." (550017)			
No connection with object (Communication channel)	5/14/2019 6:38:28 PM	Continues	0d. 21h. 25m. 11s.
Comment:			
Object: "12 Osipenko str." (550018)			
No connection with object (Communication channel)	5/14/2019 6:38:28 PM	Continues	0d. 21h. 25m. 11s.
Comment: Repair work			
Object: "47 John Reed str." (550016)			
Camera off (Camera 1. Door)	5/15/2019 3:29:51 PM	5/15/2019 3:32:11 PM	0d. 00h. 02m. 20s.
Comment:			
Software error (Basic software)	5/15/2019 1:07:12 PM	5/15/2019 1:08:33 PM	0d. 00h. 01m. 21s.
Comment:			
Software error (Basic software)	5/15/2019 3:25:22 PM	5/15/2019 3:27:32 PM	0d. 00h. 02m. 10s.
Comment:			

8.3 Report on alarm situations

To begin generating the report, click the **Alarms** button 
.

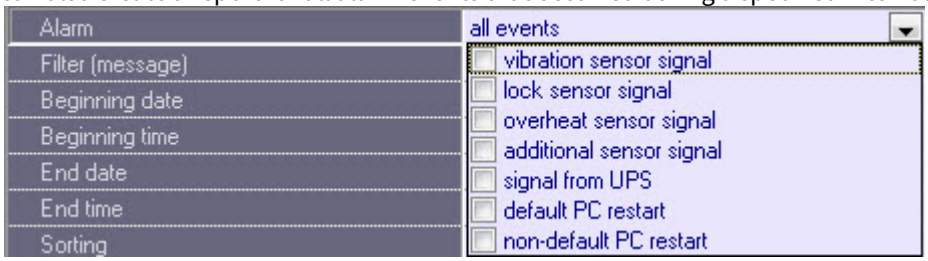
A dialog box then appears, with the parameters necessary for report generation.



This dialog box allows setting the following report parameters:

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

2. **Region**, **district** and **city** in which the objects are located. This information is configured on the Control panel - see Editing 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.



4. **Filter (message)**. This parameter allows setting a text filter by the messages from the monitored alarms.

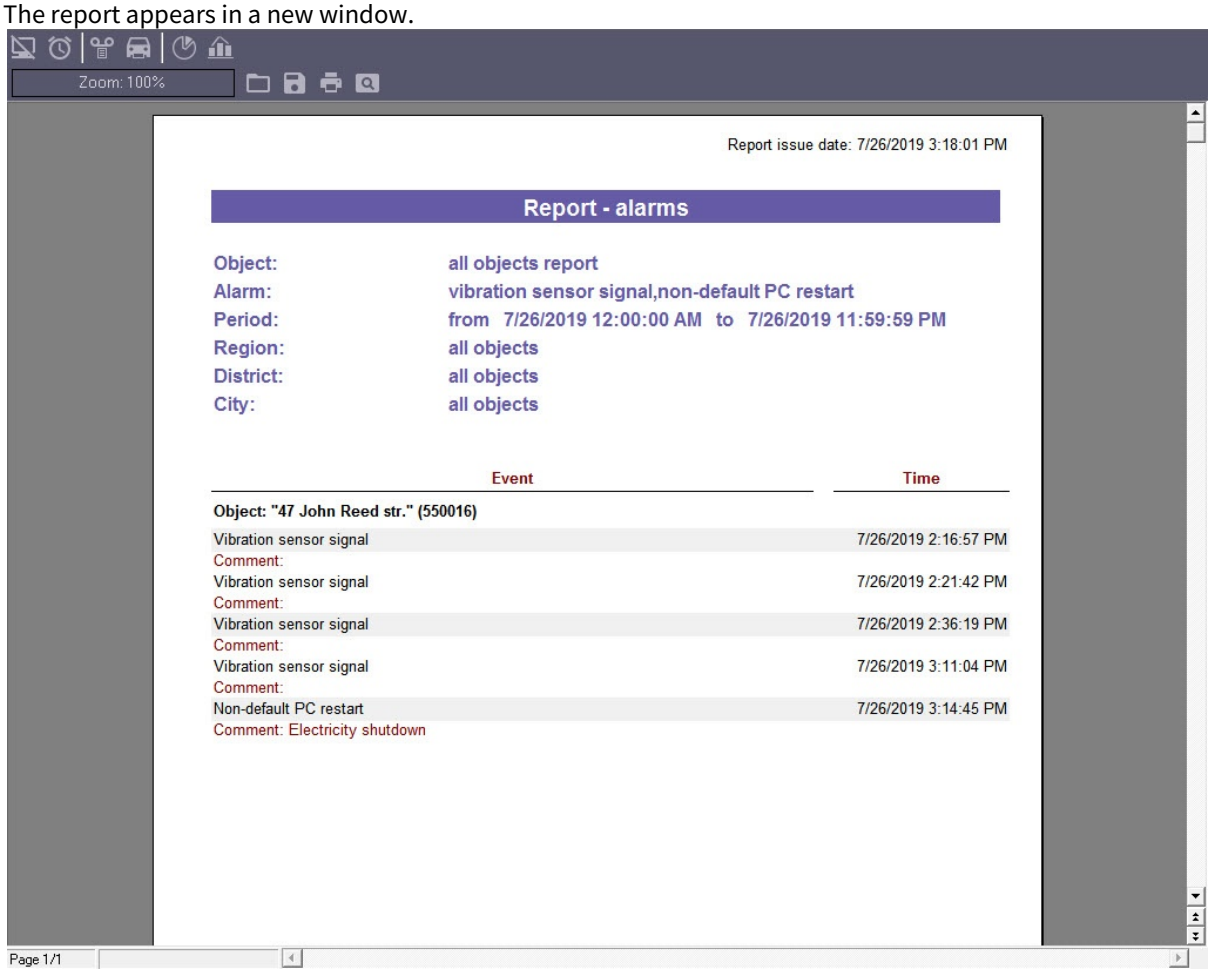
> **Note**
>
> This parameter is used if the *Agent Of Control* is connected to *ATM-Intellect Workstation* (see Configuring alarm groups).

> **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:
   a. By event (**Signal from vibration sensor**, **Signal from lock sensor**, etc.)
   b. By time of event start

7. **Show comment**. Set this checkbox if it is necessary to display alarm comments in the report (see Processing alarms).
8. After configuring all parameters, click **OK** 

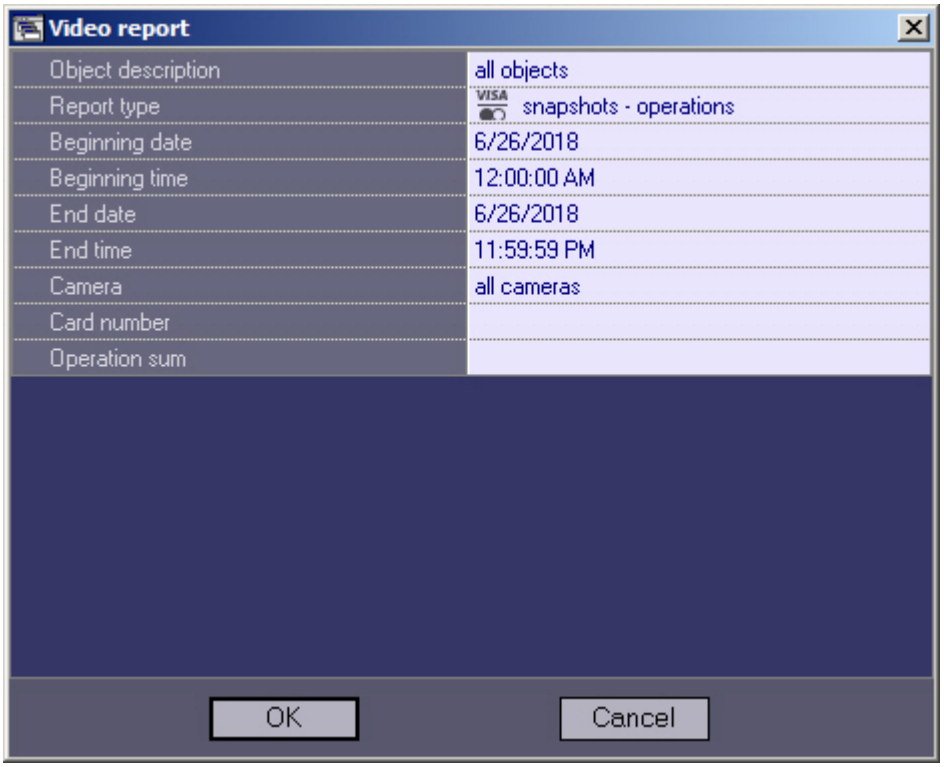
.
The report appears in a new window.



8.4 Video report

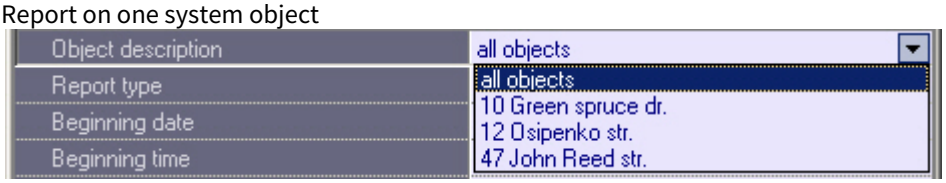
To start generating the report, click the **Video report** button.

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



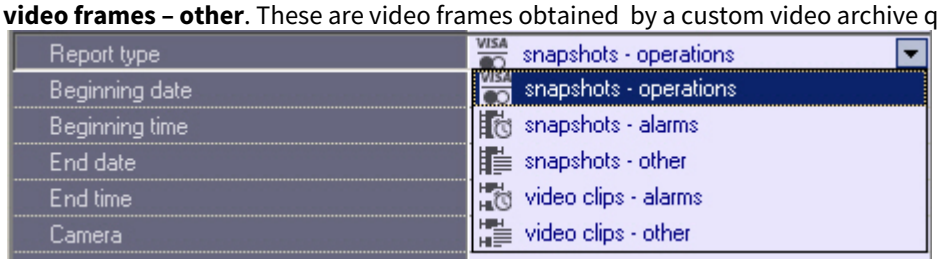
This dialog box allows setting the following report parameters:

1. Time period for the report. Use the **Beginning date**, **Beginning time**, **End date**, and **End time** parameters for this.
2. **Object description**. This setting allows switching between the two report modes:
    a. Report on all system objects
    b. Report on one system object

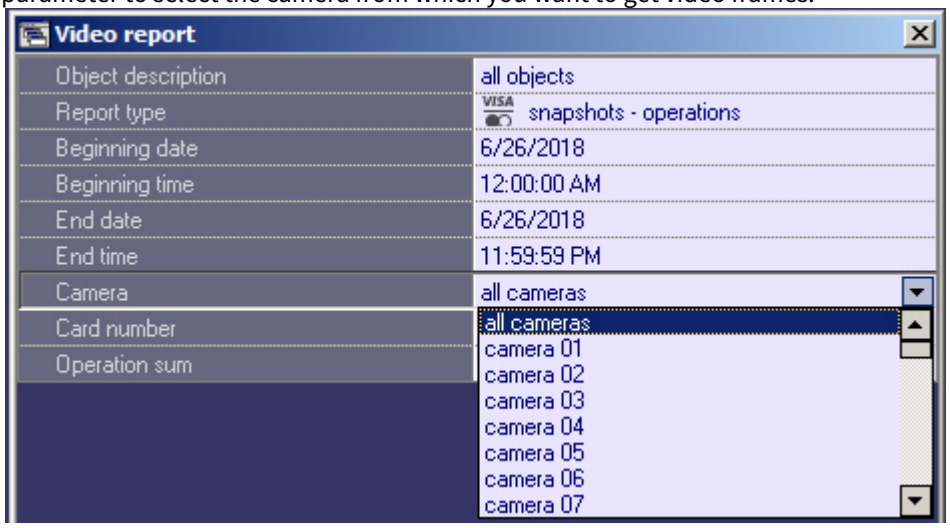


3. **Report type**. This setting allows switching between the five available reports:
    a. **snapshots – operations**. These are snapshots during the time when bank card transactions were being performed at the ATM.
    b. **snapshots – alarms**. These are snapshots after an alarm sensor was triggered at the object ("Vibration sensor", "Lock open sensor", etc.).
    c. **snapshots – other**. These are snapshots obtained by a custom video archive query.
    d. **video frames – alarms**. These are video frames obtained after an alarm sensor is triggered at the object.

e. **video frames – other**. These are video frames obtained by a custom video archive query.



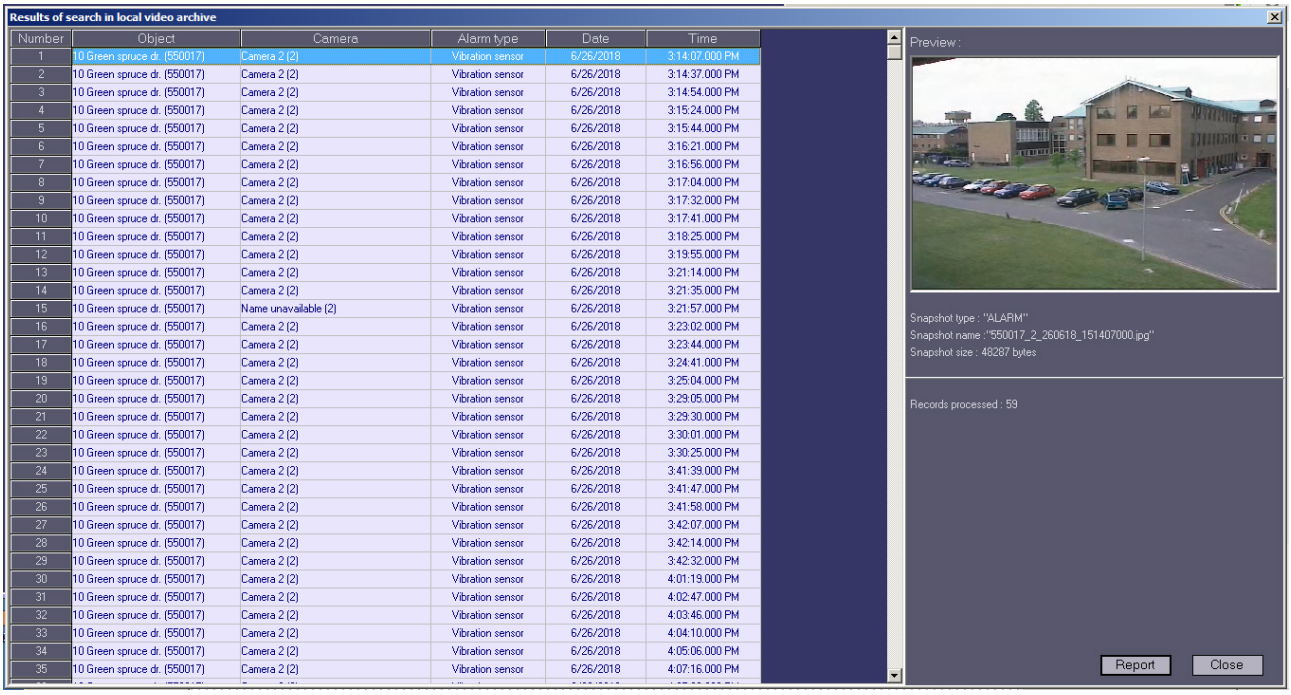
4. If you select **Video frames – Others** report type, the **Camera** parameter becomes available. Use this parameter to select the camera from which you want to get video frames.



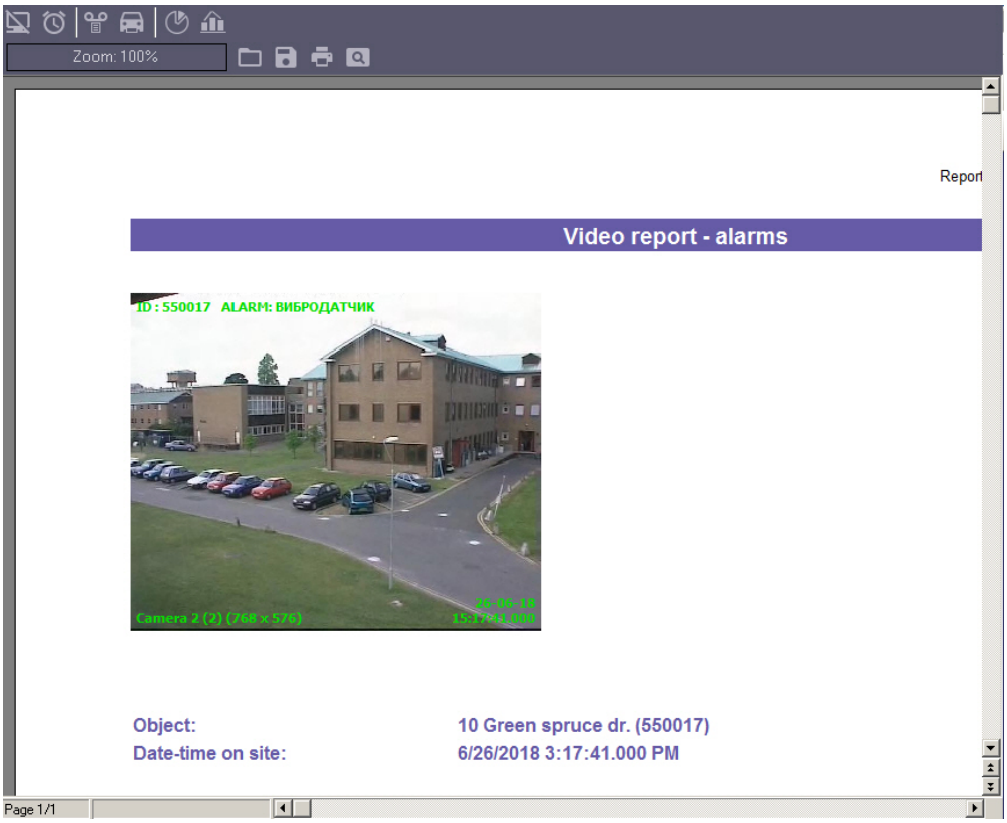
5. If you select **snapshots – operations** report type, the **Camera**, **Card number**, and **Operation sum** parameters become available.

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

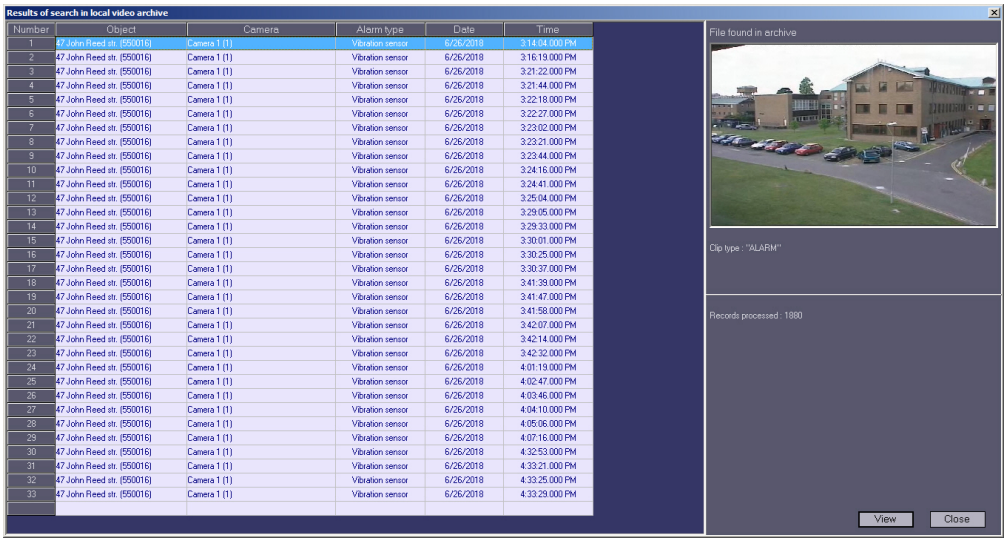
After configuring all parameters, click **OK**. A separate window displays the results of search for snapshots for the specified criterion.

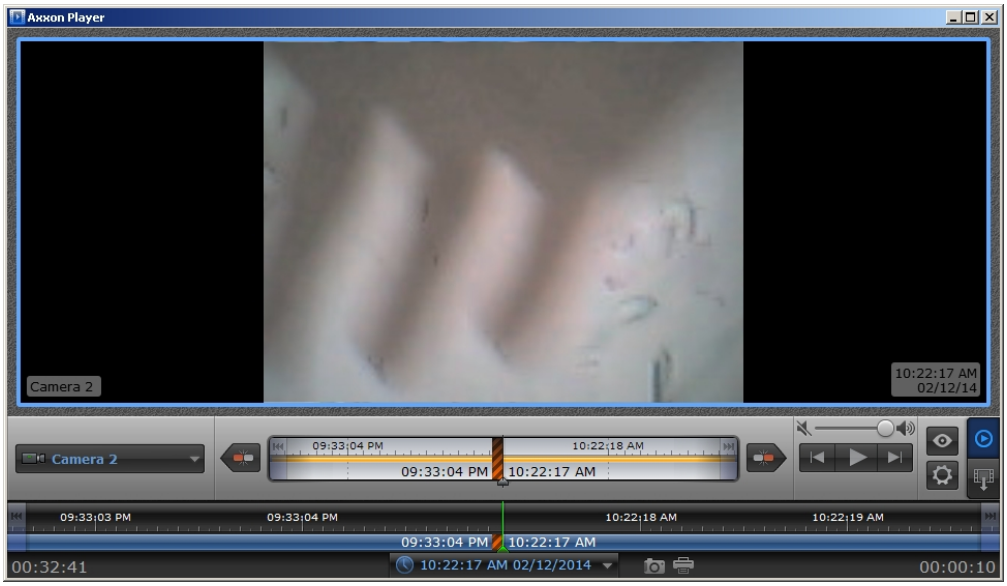


Select a record and click the Report button. A windows opens, containing the report.



Based on the results of video fragment search, you can select any entry and view the fragment by clicking the **View** button. The video fragment will be played back in Axxon Player.



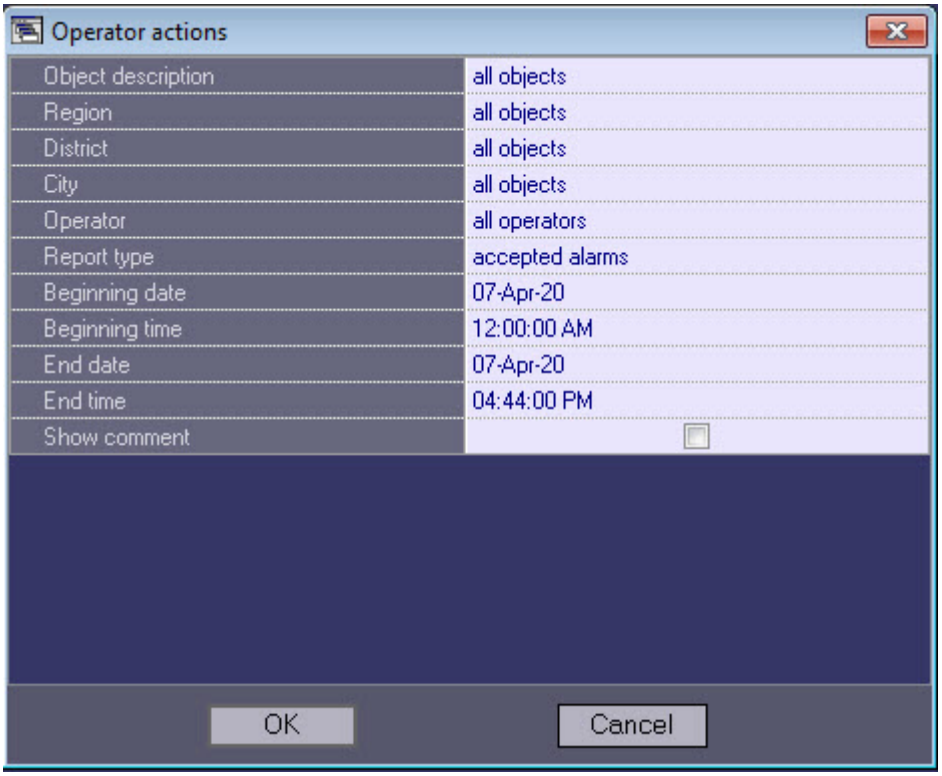


Note that searching for frames and fragments is limited to the files that have been loaded by the Search in archive component. This search is performed based on archive time, not the time at which the files were downloaded to the computer.

8.5 Operator actions report

To start creating a report, click **Operator actions**  .

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



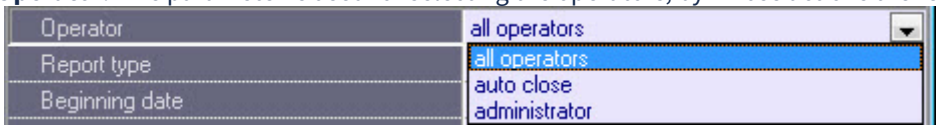
You can set the following report parameters:

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.

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

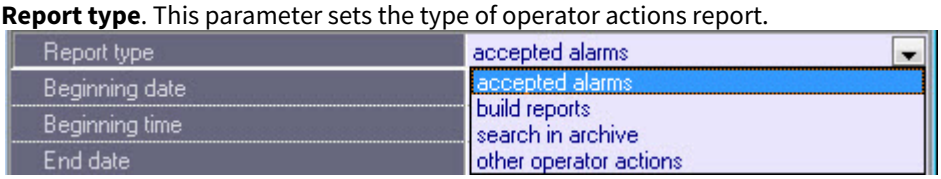
> **Note**
>
> These parameters are available only when the **accepted alarms** report type is selected.

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

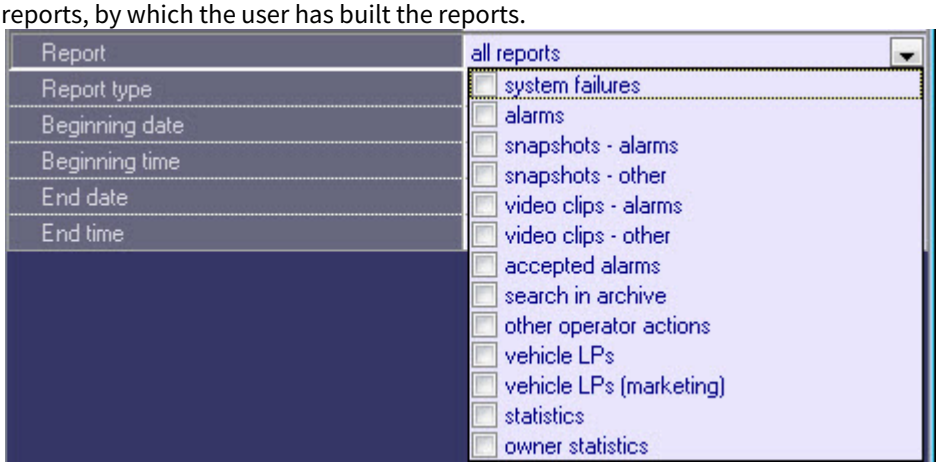


   a. report by the actions of all operators;
   b. auto close - automatic closure of an alarm (available only when the **accepted alarms** report type is selected);
   c. administrator.

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 checkbox 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 **OK** 

.

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

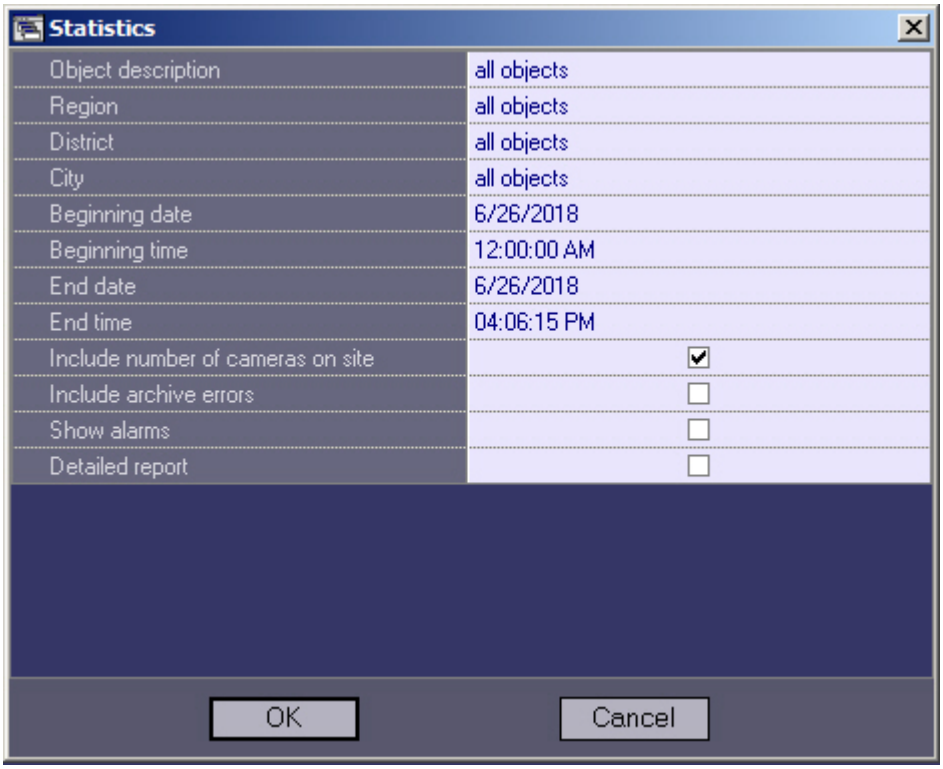
Object:	all objects report
Operator:	all operators
Period::	from 4/7/2020 12:00:00 AM to 4/7/2020 5:26:42 PM
Region:	all objects
District:	all objects
City:	all objects

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

8.6 Statistical report

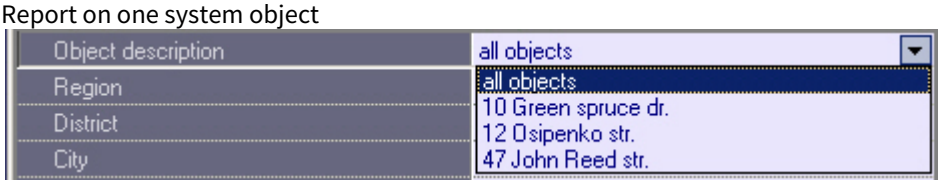
To start generating the report, click the **Statistics** button.

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

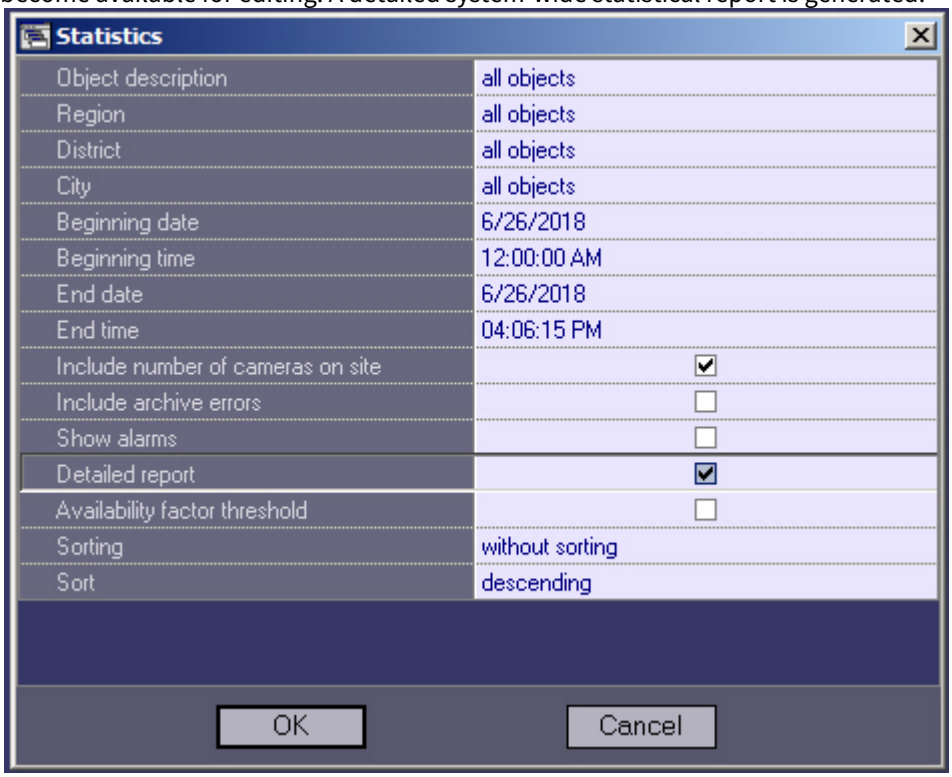


This dialog box allows setting the following report parameters:

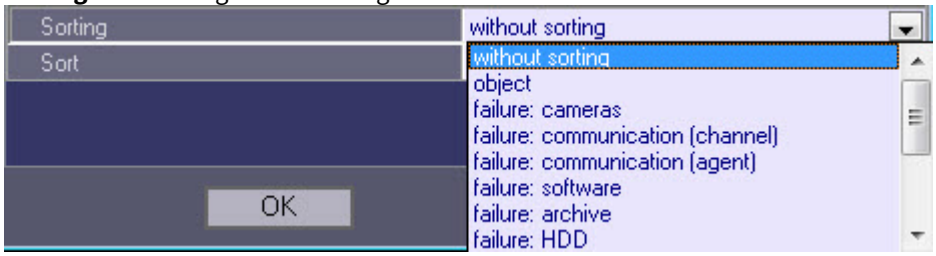
1. Time period for the report. Use the **Beginning date**, **Beginning time**, **End date**, and **End time** parameters for this.
2. **Object description**. This setting allows switching between the two report modes:
    a. Report on all system objects
    b. Report on one system object



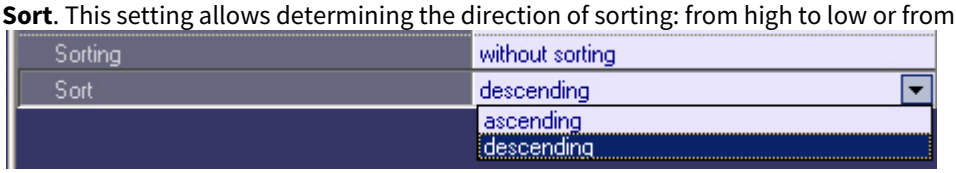
3. **Include number of cameras on object**. If this option is selected, calculation of unavailability factor for cameras and archives is performed based on the total number of cameras at the object.
4. **Include archive errors**. If this option is selected, the calculation of unavailability factor for archives is performed based on the availability factor for the whole system.
5. **Show alarms**. If this option is selected, information about alarm situations at system objects is added to the report.
6. If the all objects value is chosen for the **Object description** setting, the **Detailed report setting** becomes available. If this option is disabled, a system-wide statistical report is generated.
7. If the **Detailed report** option is enabled, the **Sorting**, **Sort**, and **Availability factor threshold** settings become available for editing. A detailed system-wide statistical report is generated.



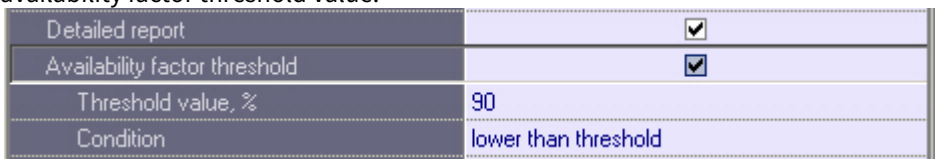
8. **Sorting**. This setting allows sorting data based on a defined criterion.



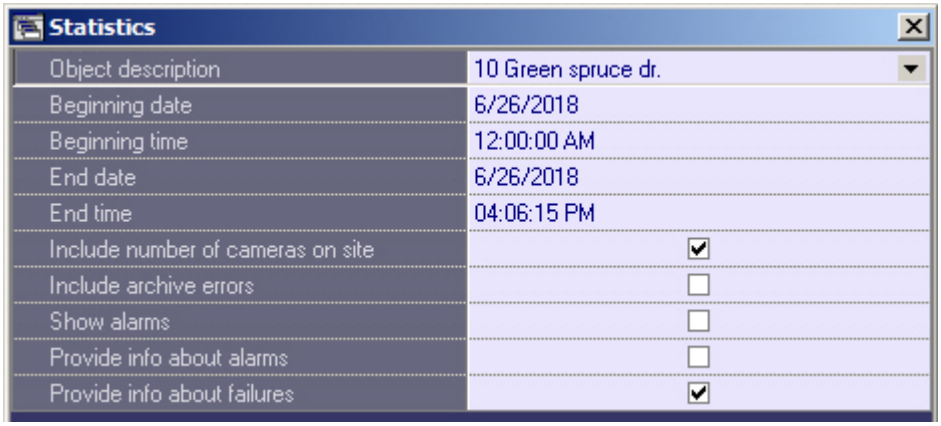
9. **Sort**. This setting allows determining the direction of sorting: from high to low or from low to high.



10. If the **Availability factor threshold** option is enabled, the **Threshold value, %** and **Condition parameters** become available for editing. These settings allow filtering objects by an additional condition: the availability factor threshold value.



11. **Threshold value, %**. Indicates the threshold level, from 0 to 100.
12. **Condition**. This parameter allows specifying a condition for filtering objects: less than threshold or greater than threshold.
13. If a specific object is chosen as the **Object description** parameter, the **Provide info about alarms** and **Provide info about failures** parameters become available for editing. This allows including detailed information about faults and alarms at the object in the statistical report for the object.



After configuring all parameters, click **OK**.

A sample report for a single object is shown in the figure.

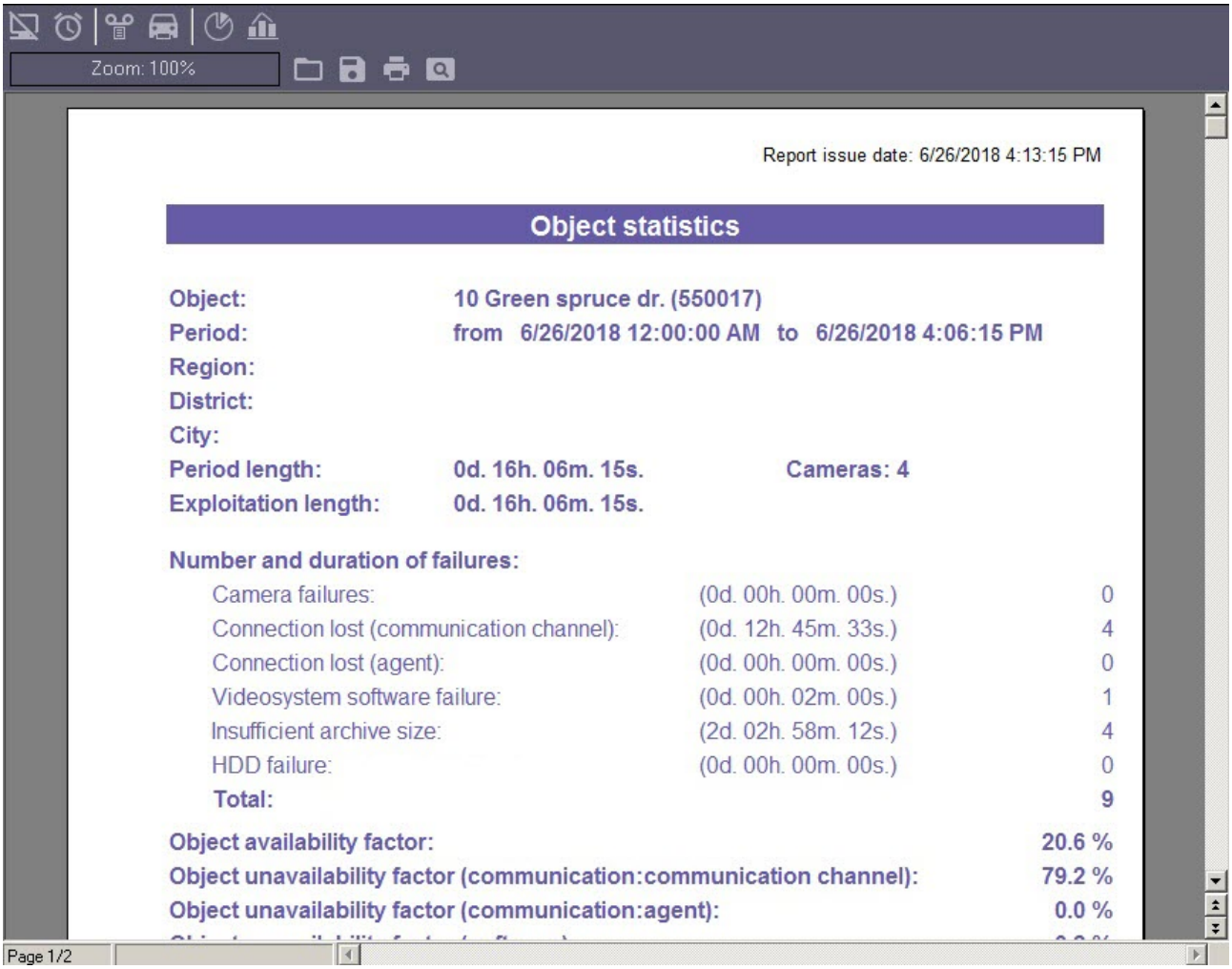
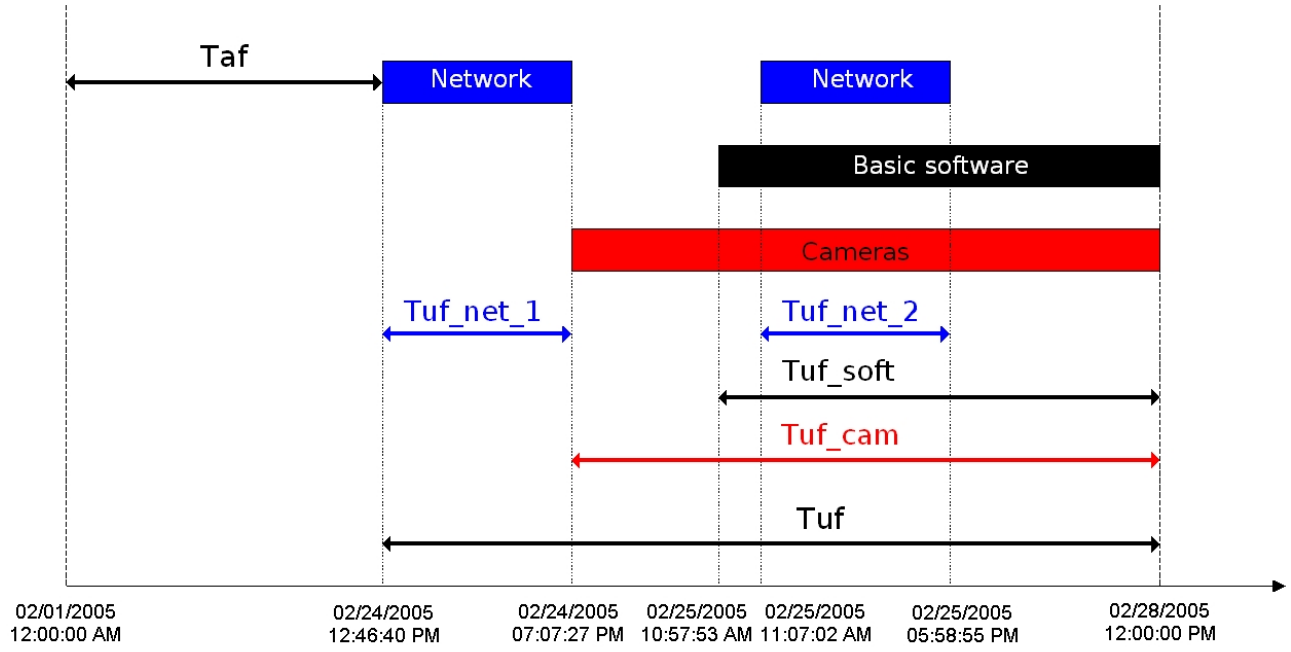


Figure below gives an example with various faults at the object; an availability factor and unavailability factors are given below.



In this example for generating a statistical report, the time period 02/01/2005 12:00:00 AM to 02/28/2005 12:00:00 AM is used. The availability factor of an object is calculated as the ratio of object availability to the overall time period in the report in question.

AF = Taf/(Taf+Tuf)

The following significant malfunctions are included in the calculation:

- Network
- Basic software
- Cameras

The unavailability factors of an object for these malfunctions in the example here are calculated as follows:

Object unavailability factor (network):

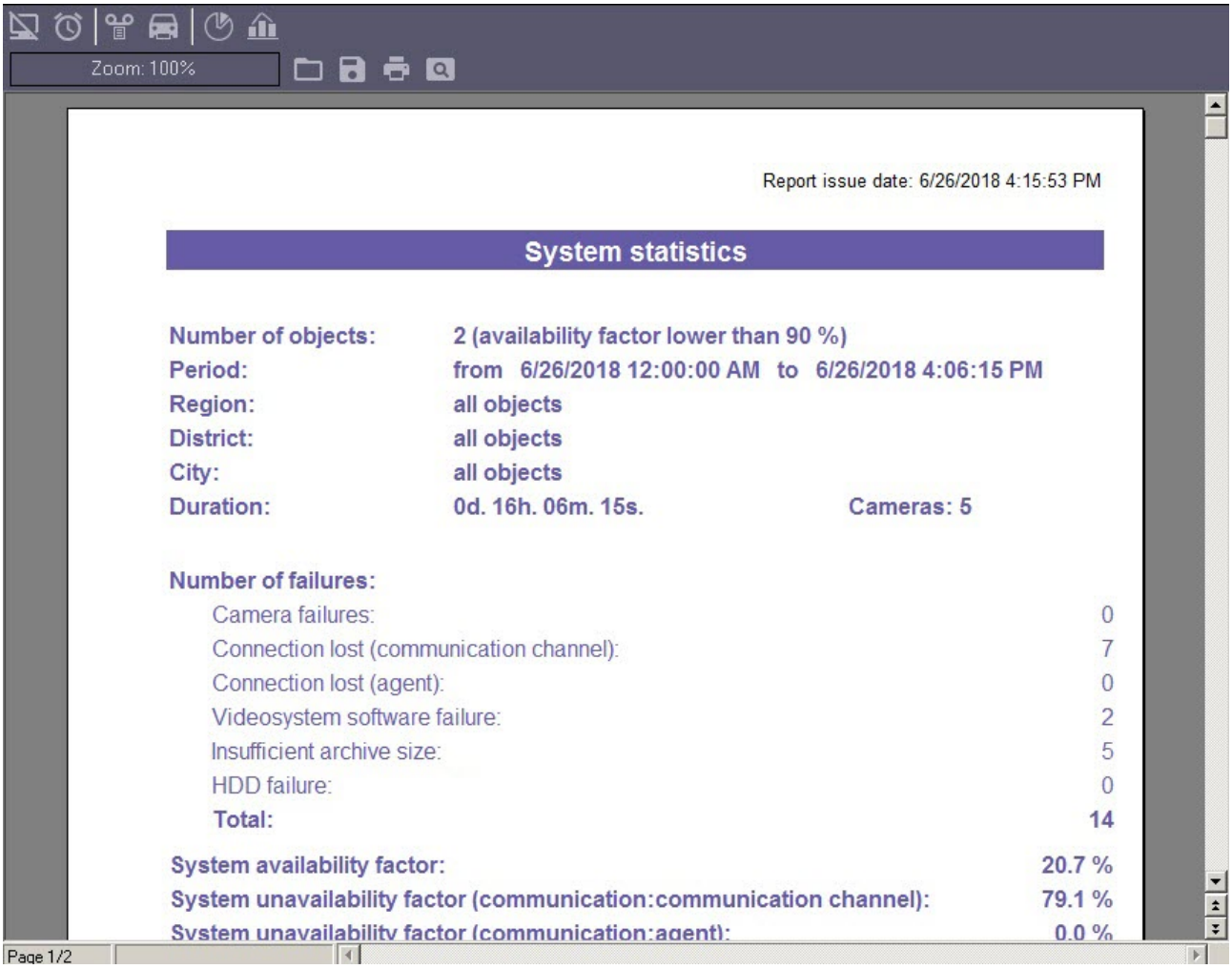
UF_net = (Tuf_net_1 + Tuf_net_2)/(Taf+Tuf)

Object unavailability factor (software): **UF_soft = Tuf_soft/Taf+Tuf**

Object unavailability factor (cameras): **UF_cam = Tuf_cam/Taf+Tuf**

Note that generally in the model used, the total object availability factor will not equal the sum of the unavailability factors for specific malfunction types.

A sample overall report for the entire system is shown in the figure. The availability and unavailability factors in the report are calculated by arithmetic averaging.



When generating a detailed report for the entire system, besides the page with general information, a table with detailed data for each object is displayed.

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						
ATM machine 1	0	5	0	4	0	0	19,9	77,1	0	5,4	0	0

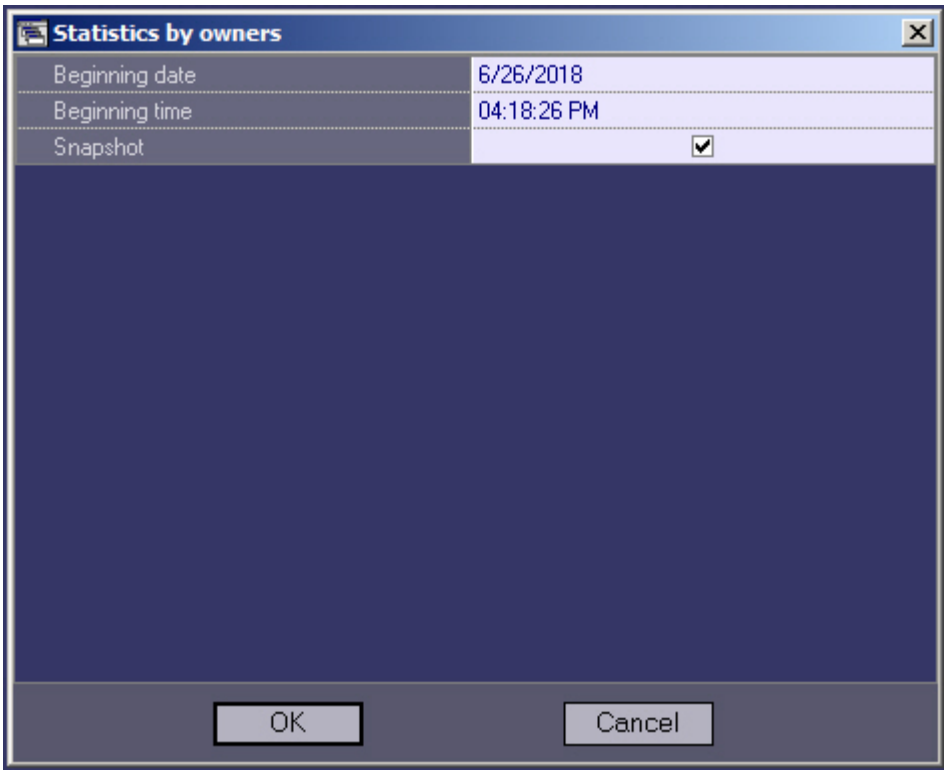
Attention!

While creating the statistical report by all objects in case of the number of failures for the specified period exceeds 1000 for some object, this object eliminates from the statistical report.

8.7 Statistical report by owner

This report includes only objects that have a non-blank **Owner** field in the Monitoring objects reference (see Reference information). To start generating the report, click the **Statistics by owner** button.

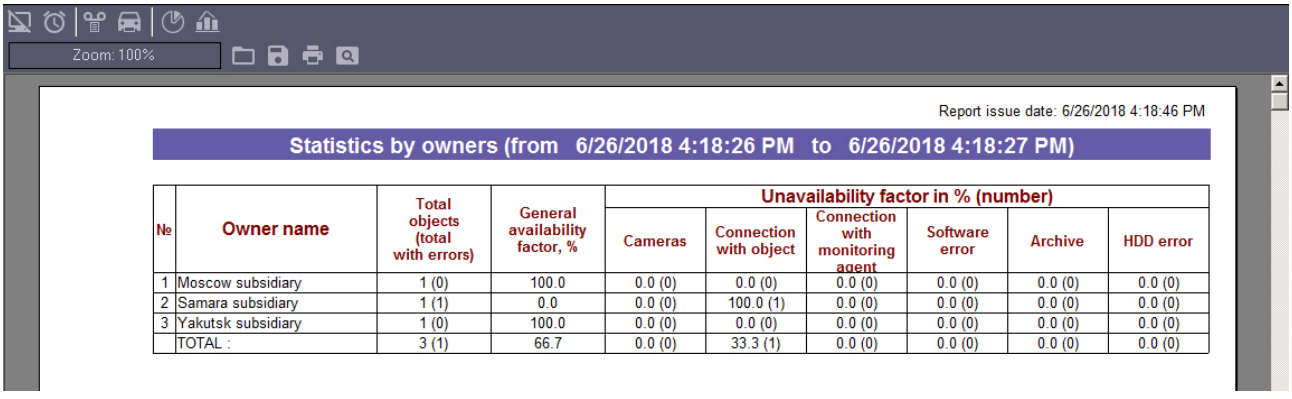
A dialog box then appears, with the parameters necessary for report generation.



This dialog box allows setting the following report parameters:

1. Time period for the report. The **Beginning date** and **Beginning time** settings are used to set the period.
2. **Snapshot**. If this option is selected, a report as of a selected date and time is generated. Otherwise, a report is generated for the entire day specified in the **Beginning date** field.

An example of generating this report is shown in the figure.

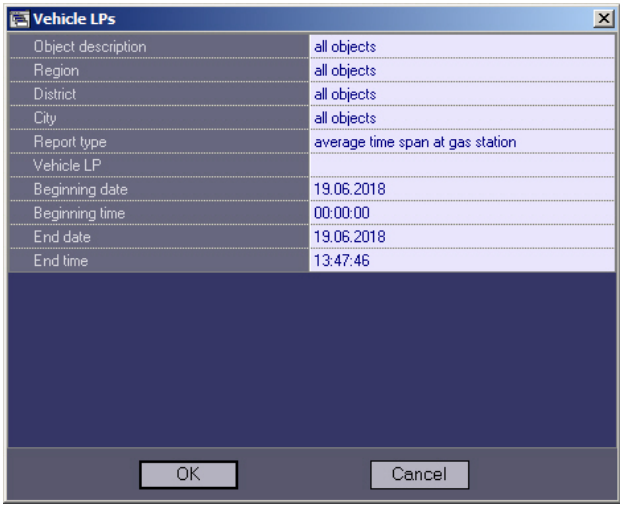


№	Owner name	Total objects (total with errors)	General availability factor, %	Unavailability factor in % (number)					
				Cameras	Connection with object	Connection with monitoring agent	Software error	Archive	HDD error
1	Moscow subsidiary	1 (0)	100.0	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)
2	Samara subsidiary	1 (1)	0.0	0.0 (0)	100.0 (1)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)
3	Yakutsk subsidiary	1 (0)	100.0	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)
	TOTAL :	3 (1)	66.7	0.0 (0)	33.3 (1)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)

8.8 Vehicle LPs report

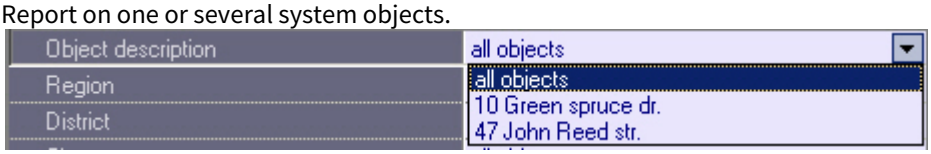
To start creating a report, click **Vehicle LPs**.

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

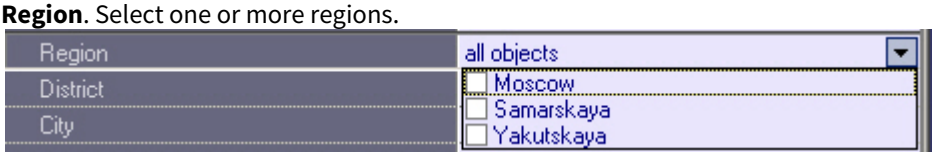


You can set the following report parameters:

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.



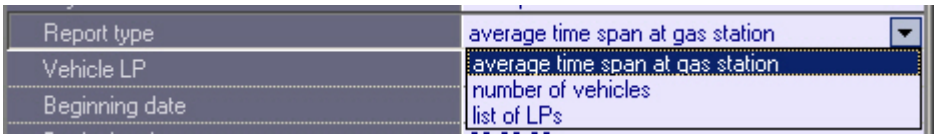
3. **Region**. Select one or more regions.



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

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

6. **Report type**:
    a. average time span at gas station
    b. number of vehicles
    c. 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.

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

9 Monitoring unadded objects

If an object tries to connect but has not been added in the oblect settings in *ATM Intellect Workstation* (the **Hardware** tab in *Intellect*), a dialog box opens, with a warning to the operator that there is an unadded object.

10 Appendix 1. Data update periods summary

On the page:

10.1 Data loading from database to the interface objects

The 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 (**Refresh data**). This forces the data to load.

10.2 Data loading to the database

The date of last load of data **to** the database (see section Alarm list navigation) is refreshed when changes in the database appear.

If there was no change in the database for 5 minutes, the CUT field is forcibly updated and then updates once a minute. This will cause a gap from the current system time by 5 minutes. After coming of new information from any *ATM-Intellect Pro*, the CUT becomes 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 *ATM-Intellect Pro* (e.g. camera enabled), these files are loaded to the database with a period specified while configuring *Data loader* in the **Loading period** parameter (10 seconds by default). If files with information on alarms are received from *ATM-Intellect Pro* (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, *ATM-Intellect Workstation* 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.

In the **Alarm date** field in the interface objects, the time of alarm information load to the database after receiving it from the *ATM-Intellect Pro* 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 Intellect software. Administrator's Guide for more details on how to operate registry keys).

10.3 Sending data from ATM-Intellect Pro to ATM-Intellect Workstation

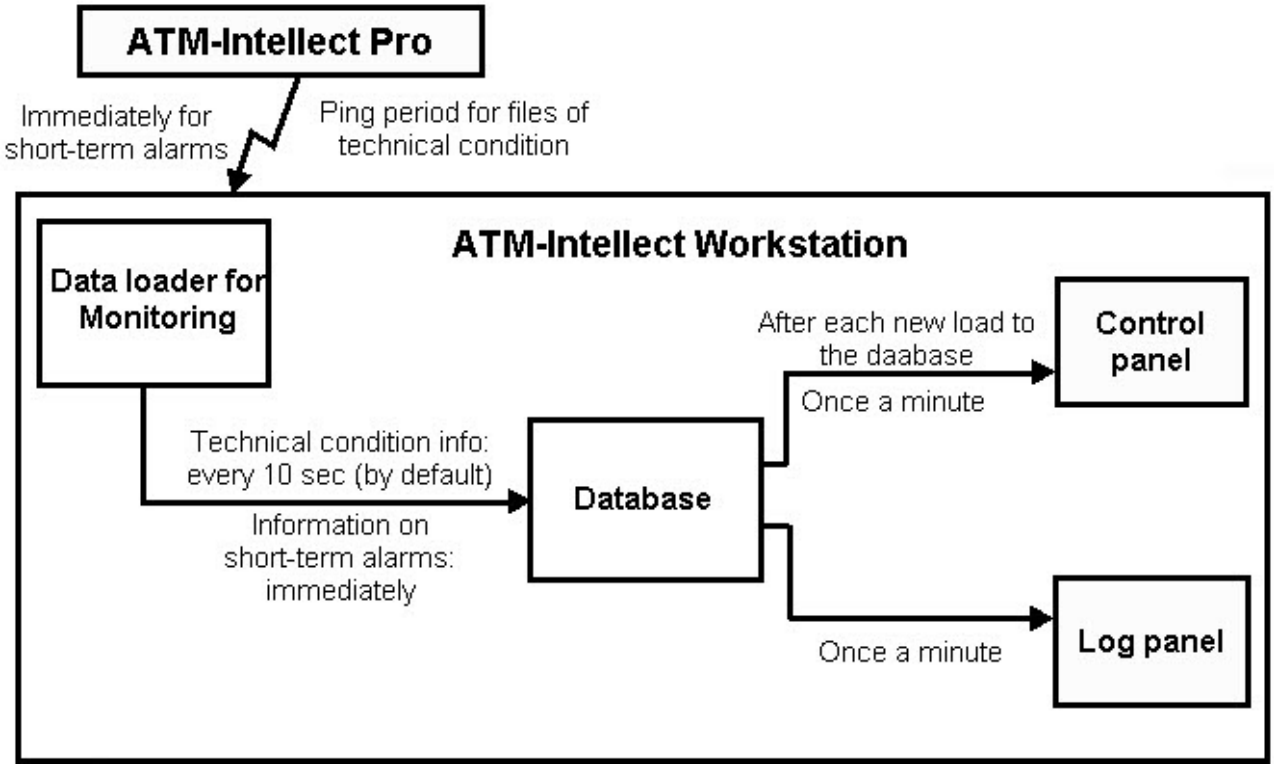
ATM-Intellect Pro sends to *ATM-Intellect Workstation* packages with its technical condition with a period set while setting up the **Partition of Control** object at the *ATM-Intellect Pro* side using the **Ping frequency** parameter (see ATM-Intellect. Administrator's Guide, section Configuring connection between ATM-Intellect Pro and ATM-Intellect Workstation). The default ping frequency is 2 minutes (120 seconds).

Information on long-term alarms comes to the *ATM-Intellect Workstation* from *ATM-Intellect Pro* together with the information on technical condition once in the ping period.

Information about short-term alarms comes to the *ATM-Intellect Workstation* immediately after they have appeared at the *ATM-Intellect Pro*.

10.4 Data transmission scheme

The picture gives a general scheme of data transferring from the *ATM-Intellect Pro* to the *ATM-Intellect Workstation*.



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

Information about long-term alarm can be not recorded into the Monitoring 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 *ATM-Intellect Pro* (within the **Ping frequency** interval, see ATM-Intellect. Administrator's Guide*).*
2. If a long-term alarm had started and ended when the connection between *ATM-Intellect Pro* and *ATM-Intellect Workstation* was lost.

When there is no connection with *ATM-Intellect Workstation*, the short-term alarms are stored in the “holding” data files on the *ATM-Intellect Pro*. When connection with *ATM-Intellect Workstation* is restored, they are transferred to the *ATM-Intellect Workstation*, stored in the Monitoring database and displayed in its interfaces.

10.6 ATM-Intellect Pro technical condition data collection periods

ATM-Intellect Pro technical condition data collection periods are given below:

1. Information on disk failures (the **Disk failure** alarm type) and its re storing is updated in the following cases:
   a. at *ATM-Intellect Pro* startup and then every 15 minutes.
   b. at receiving local message SLAVE|NO_DISC (No disk for archive storage) from *Intellect* core.
   c. at receiving local message DISC_EXIST (Disk for archive storage found) from *Intellect* core.
   d. at receiving local message DISC_UNMOUNT (Disk unmounted) from Intellect core.
   e. at receiving local message DISC_MOUNT (Disk mounted) from Intellect core.
2. Information on archive size (the **Archive size too small** alarm type) is updated at *ATM-Intellect Pro* startup and then every 15 minutes.

3. Information on the computer normal and abnormal restarts is displayed in the interface in 5 minutes.
4. Information on free disk space is updated every 1 hour.
5. *ATM-Intellect Pro* initiates the connection with *ATM-Intellect Workstation* and once in a ping period (2 minutes by default) sends a package with technical data to the *ATM-Intellect Workstation*. If *ATM-Intellect Workstation* have not been receiving any data from *ATM-Intellect Pro* within 6 minutes, the “No connection” error is displayed for such object.

   Note

   The waiting timeout for receiving the packets with the technical state of *ATM-Intellect Pro* can be adjusted. To do this:

   a. On the *ATM-Intellect Pro* side, in the settings panel of the *Surveillance Object*, add a one-character postfix to the identifier of this object (for example, if the *Surveillance Object* 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 *ATM-Intellect Pro* side, it is recommended to adjust the *ATM-Intellect Workstation* polling period so that it does not exceed the waiting timeout for receiving the packets with the *ATM-Intellect Pro* technical condition (see Setting up a connection between ATM Intellect Pro and ATM Intellect Workstation).
   c. On the *ATM-Intellect Workstation* side, delete the existing *Surveillance Object* with a **123** identifier.
   d. On the *ATM-Intellect Workstation* side, create a new *Surveillance Object* with a **123X** identifier.
   e. On the *ATM-Intellect Workstation* 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 *Intellect* software, i.e. if the *Intellect* software was shut down and started again.
7. Availability of running processes "Intellect.exe" and "Video.run" is checked every 10 seconds.