Administrator's Guide

ATM Intellect 13.0 (english)

Last update 10/10/2022

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1 Administrator's Guide. Introduction

ATM-Intellect. Administrator's Guide is a reference and information guide that is designed for system administrators, installation and configuration engineers, users with the rights to administrate *ATM-Intellect*.

This guide contains the following information:

1. General characteristics of *ATM-Intellect*.
2. Hardware and software requirements.
3. Installation sequence for *ATM-Intellect*.
4. Configuring procedure for *ATM-Intellect*.

2 ATM-Intellect general description

2.1 ATM-Intellect purpose

ATM-Intellect is a video security system of ATM network (VSSoAN) designed for safe operating of bank ATM network.

ATM-Intellect VSSoAN is a part of the bank integrated security system.

ATM-Intellect VSSoAN purposes are:

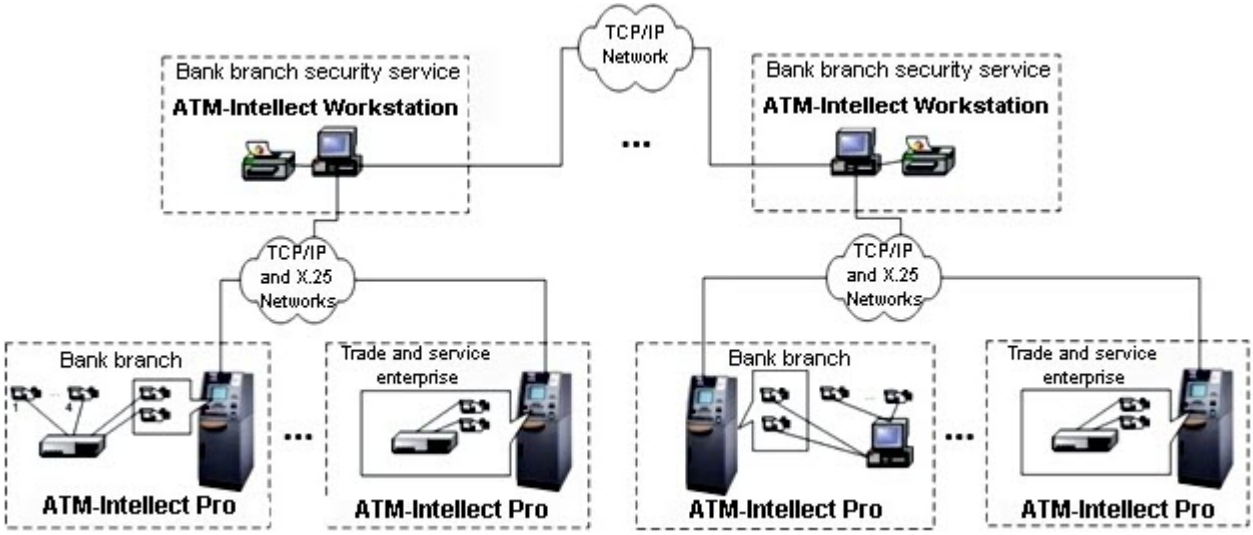
1. reduction of the bank's financial losses related to fraud while obtaining cash from an ATM;
2. reduction of the bank's financial losses related to the acts of vandalism against the ATMs.

VSSoAN is used for security of ATMs installed in bank branches, and in the trade and service enterprises.

2.2 ATM-Intellect description

ATM-Intellect is a territorially distributed system which consists of the following components:

1. Local ATM video security systems (*ATM-Intellect Pro*).
2. Remote video controllers for ATM groups (*ATM-Intellect Workstation*).



ATM-Intellect Pro is placed directly at the installation site of ATMs in bank branches or trade and service enterprises. *ATM-Intellect Pro* provides recording of the video coming from the camera into a local video archive, digital signal processing from discrete sensors installed on the ATM and transfer of alarm messages on *ATM-Intellect Workstation*.

ATM-Intellect Workstation is placed in the bank security departments. It combines a group of *ATM-Intellect Pro* on a territorial basis, and provides reception and visualization of alarm messages from *ATM-Intellect Pro*, and requests to video archives of *ATM-Intellect Pro*.

ATM-Intellect Workstation and *ATM-Intellect Pro* interaction is performed over TCP / IP or X.25 data network protocols using "regular" ATM link. The system also provides the option of direct interaction between *ATM-Intellect Workstation* and *ATM-Intellect Pro* without using "regular" ATM link.

When creating and developing VSSoAN of a bank, several *ATM-Intellect Workstation* are supposed to be installed, each of them interacts with a group of *ATM-Intellect Pro* combined on a territorial basis.

ATM-Intellect Pro interacts with the ATM host computer via the messaging communication channel using Ethernet 10/100Base-T controller or asynchronous RS-232 interface.

VSSoAN provides the transfer of information (images or video clips) into the external systems when the situations involving fraud or vandalism in the ATM network are discovered.

> **Note.**
>
> If there is no activation key, then *ATM-Intellect* software operates in the demo mode for 2 months from 8:00 am to 12:00 am.

2.3 ATM-Intellect Workstation functionality

ATM-Intellect Workstation is placed in the bank departments and provides the following functions:

1. receiving, recording and visualization of alarm messages from *ATM-Intellect Pro*;
2. receiving, recording and visualization of messages about the *ATM-Intellect Pro* components health and communication channels;
3. generating and transmitting video search requests to the *ATM-Intellect Pro* video archive, video search results reception;
4. generating and transmitting requests (based on video search results) to the *ATM-Intellect Pro* video archive, reception and archiving query results (images or clips);
5. viewing and printing query results (video frames);
6. creating the reports on registered events.

2.4 ATM-Intellect Pro functionality

ATM-Intellect Pro is placed in the location of ATM installation and generally provides the following functions:

1. recording the primary video coming from cameras mounted on site ATM in the video archive;
2. displaying video from Cameras and playback recordings on the *ATM-Intellect Pro* security post;
3. receiving, processing and registration messages from the ATM;
4. receiving, processing and registration of signals from sensors installed both inside and outside the ATM;
5. detection of skimming devices installation in the input card area in the ATM card reader;
6. transmission of alarm signal on ATM-Intellect Workstation, as well as frames and clips files in case of an "emergency" situations during the ATM operation (in the case of sensor triggers or skimming devices detection);
7. receiving and processing requests for information search in the video archive, generation and transfer of results (video parameters satisfying the query);
8. receiving and processing queries for video (by search results), formation and transfer of results of queries (video clips or video frames) on ATM-Intellect Workstation.

2.5 Additional workplace functionality

This is the *ATM-Intellect Workstation* version which is installed without additional components and connects to the existing database of the main *ATM-Intellect Workstation* while interface objects are created on the local computer. Before installing *Additional workplace*, install *Intellect* in **RAW** mode. *Intellect* distributed system configuration is not required for *Additional workplace* operation.

The **Additional workplace** object is to be specified in the "intellect.sec" license key that is located on *ATM-Intellect Workstation* in order to allow using the *Additional workplace* software.

2.6 ATM-Intellect restrictions

In the *ATM-Intellect* software package restrictions are imposed when creating video security system of an ATM network:

1. Maximal number of **ATM-Intellect Pro** objects that can be connected to an *ATM-Intellect Workstation* is 2000.
2. Maximal number of **Surveillance objects** being child objects for an **ATM-Intellect Pro** is 255.
3. Maximal number of cameras which a **Surveillance object** can handle is 64.
4. Maximal number of cameras which a **ATM-Intellect Pro** can handle is 320.

2.7 General information about ATM Intellect as a Service

ATM Intellect software, installed as a service (see Installing ATM-Intellect), is launched before user authorization in Windows OS and before launching Windows applications (including the Explorer, which is used to launch interfaces of both Windows OS and various applications installed on server).

When the active account is changed, the following *ATM Intellect* modules are restarted:

- On *ATM Intellect Pro* — videosrv.exe;
- On *ATM Intellect Workstation* — videosrv.exe and loadersstv.exe.

If *ATM Intellect* is installed as a service, and the connection to the database is established using Windows credentials, then to ensure the operation on any user account other than the one who installed *ATM Intellect*, the user should have the appropriate rights to SQL server.

3 Hardware and software requirements

On the page:

3.1 Installation environment and configuration

ATM-Intellect is implemented as executable modules and compatible with the operation systems supported by the *Intellect* software (see the Operating system requirements chapter in the Intellect: Administrator's Guide).

The standard OS settings do not need to be changed for installation. On Windows 7 or latest OS, you must disable UAC. In Windows 8, 8.1 and 10 it is necessary to configure security policies in order to entirely disable UAC (configuring security policies is described in the Intellect: Administrator's Guide).

For *ATM-Intellect Workstation* functioning a database server is necessary. When installing *Intellect* software on a clean (fresh) PC, MS SQL Server 2014 Express is installed as well.

ATM-Intellect software supports the following database servers:

1. MS SQL Server 2008 R2;
2. MS SQL Server 2012;
3. MS SQL Server 2014.

3.2 Hardware requirements

ATM-Intellect has the following minimum PC hardware requirements:

- CPU Intel Core i5 750;
- RAM 2 GB;
- HDD 200 GB;
- Network adapter;
- X.25 controller (if necessary);
- Uninterruptible power supply.

4 Installing ATM-Intellect

4.1 General description of ATM Intellect distribution kit

ATM Intellect is supplied as a software installation package (distribution kit). The current version of the distribution kit can be downloaded from the official AxxonSoft website.

The distribution kit contains all the necessary software components for installing the *ATM Intellect* software package on a base computer.

The distribution kit allows you to install, restore and remove the *ATM Intellect* software package.

Attention!

- Prior to installing, restoring or removing the *ATM Intellect* software package, the *Intellect* operation should be shut down.
- Administrator rights are required for installing, restoring or removing *ATM Intellect*.

4.2 Installation steps for ATM-Intellect Workstation

The *ATM Intellect* software is installed as a part of the *Intellect* software. Information about compatibility of the *Intellect* software versions and *ATM Intellect* is presented in the General information about product releases and versions compatibility section.

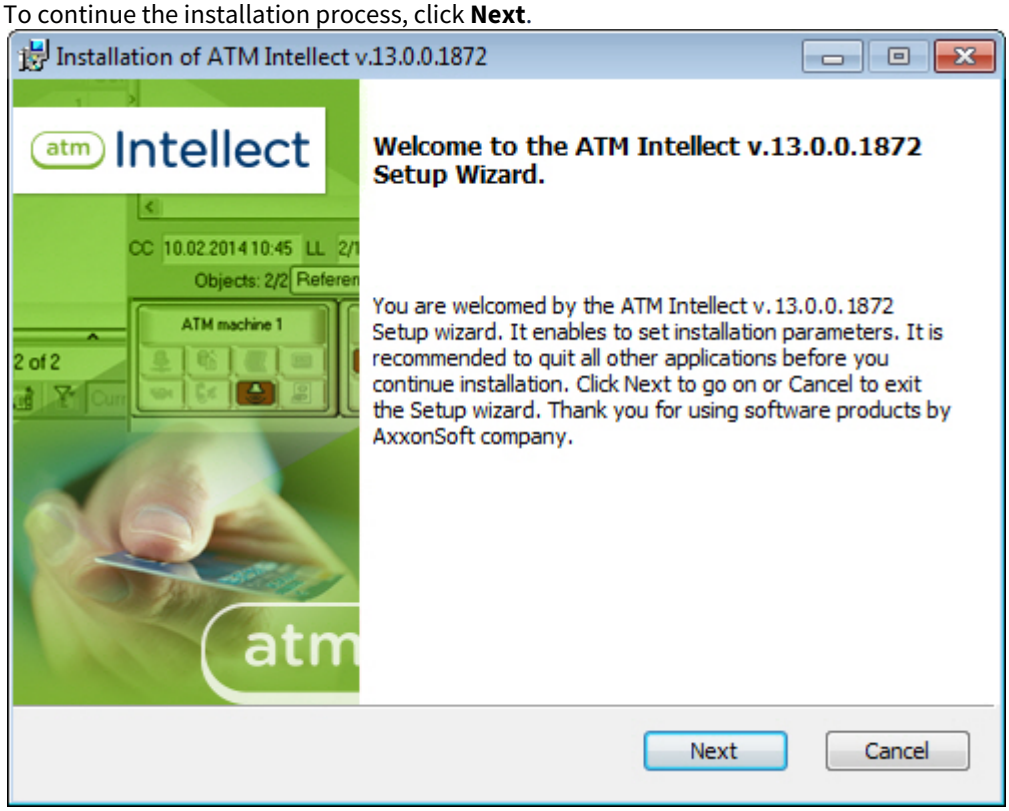
Attention!

The *ATM Intellect* software in the *ATM-Intellect Workstation* configuration should be installed on **Server/ Remote administrator workplace**. For details, see Intellect. Administrator's Guide.

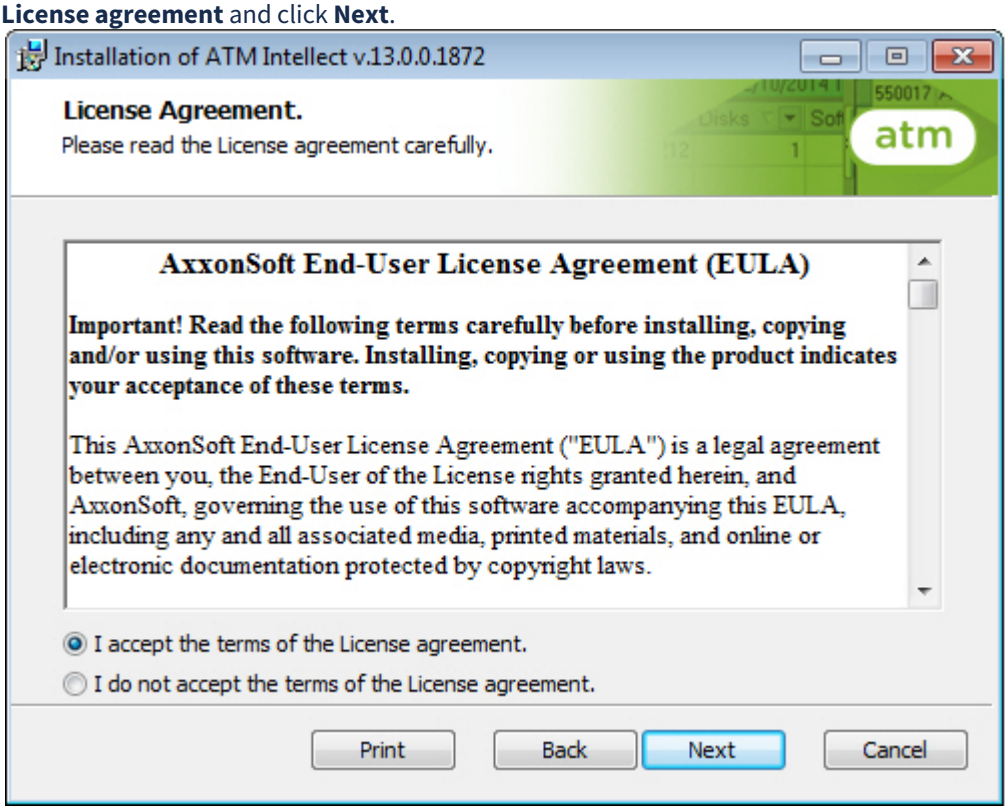
To install *ATM Intellect* software in the *ATM-Intellect Workstation* configuration, do the following:

1. In the root directory of the distribution package, run the setup.exe executable file.

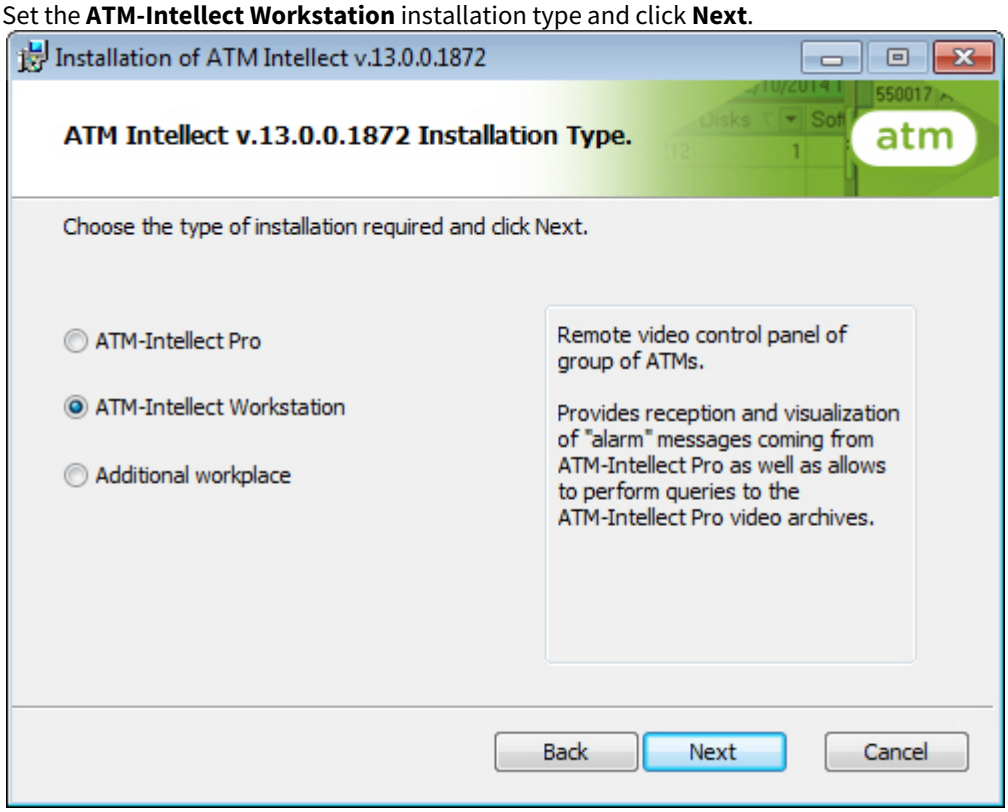
2. To continue the installation process, click **Next**.



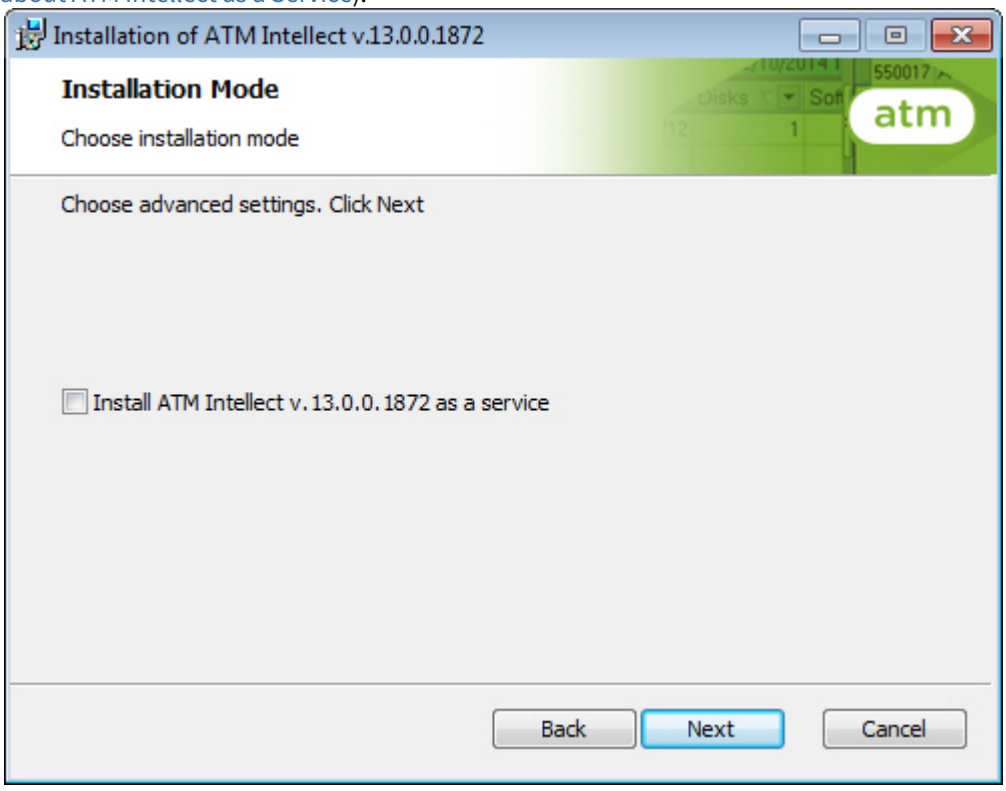
3. Read the terms of the license agreement carefully. Then set the radio button to **I accept the terms of the License agreement** and click **Next**.



4. Set the **ATM-Intellect Workstation** installation type and click **Next**.

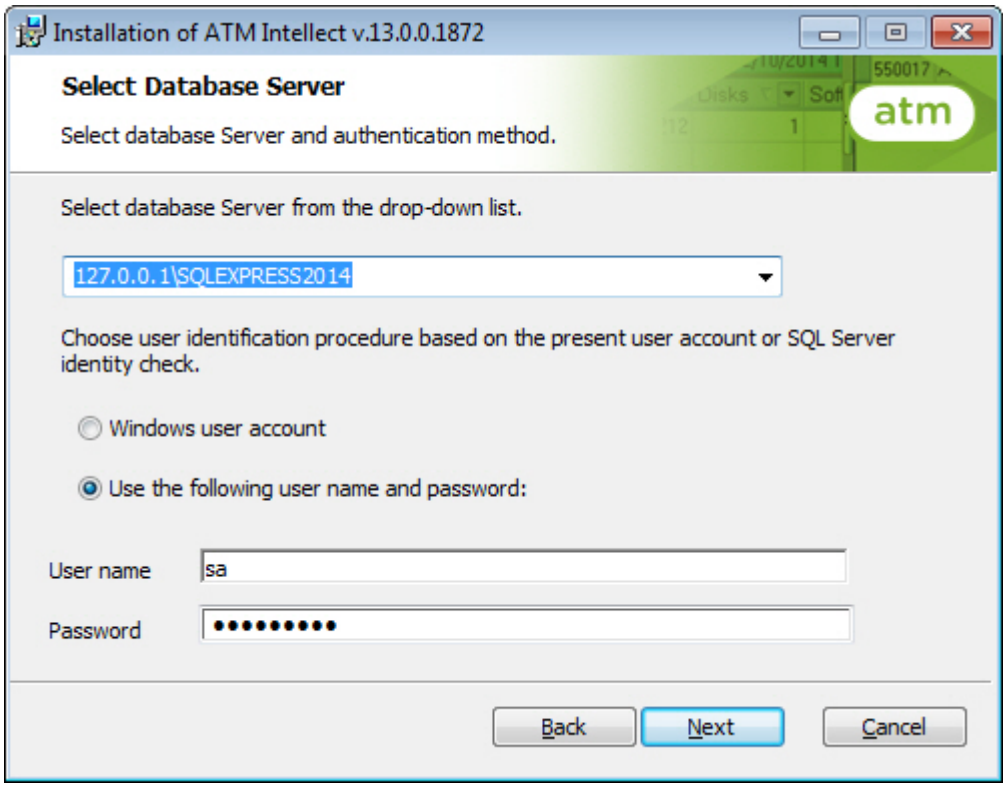


5. If *Intellect* software is installed as a service, and it is necessary that *ATM-Intellect* is also installed as a service, then set the **Install ATM Intellect as a service** checkbox and click **Next** (for details, see General information about ATM Intellect as a Service).



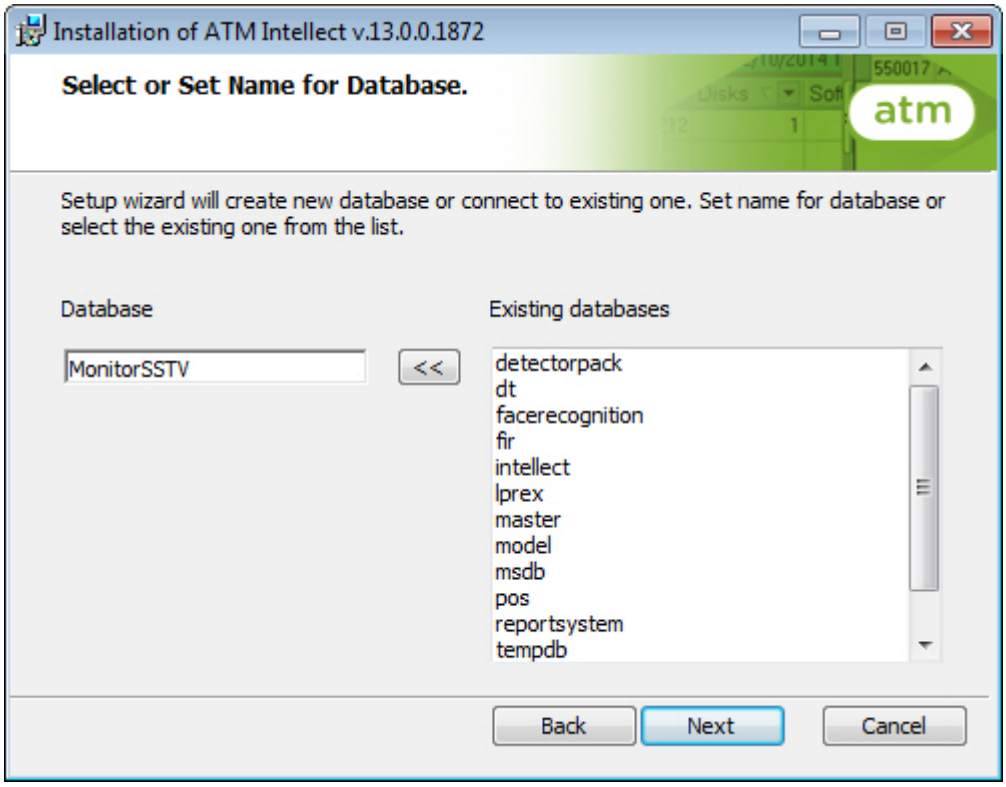
6. Select the database MS SQL Server and specify the authorization parameters for connection. For details, see Installation of INTELLECT™ software as a Server/Remote administrator workplace. To continue the installation process, click **Next**.

> **Note.**
>
> In the **Select database Server from the drop-down list** field specify the **127.0.0.1** value instead of computer name or "(local)" value, e.g. "127.0.0.1\SQLEXPRESS". Otherwise *ATM-Intellect Workstation* will lose connection with its local database when the network cable is disconnected.

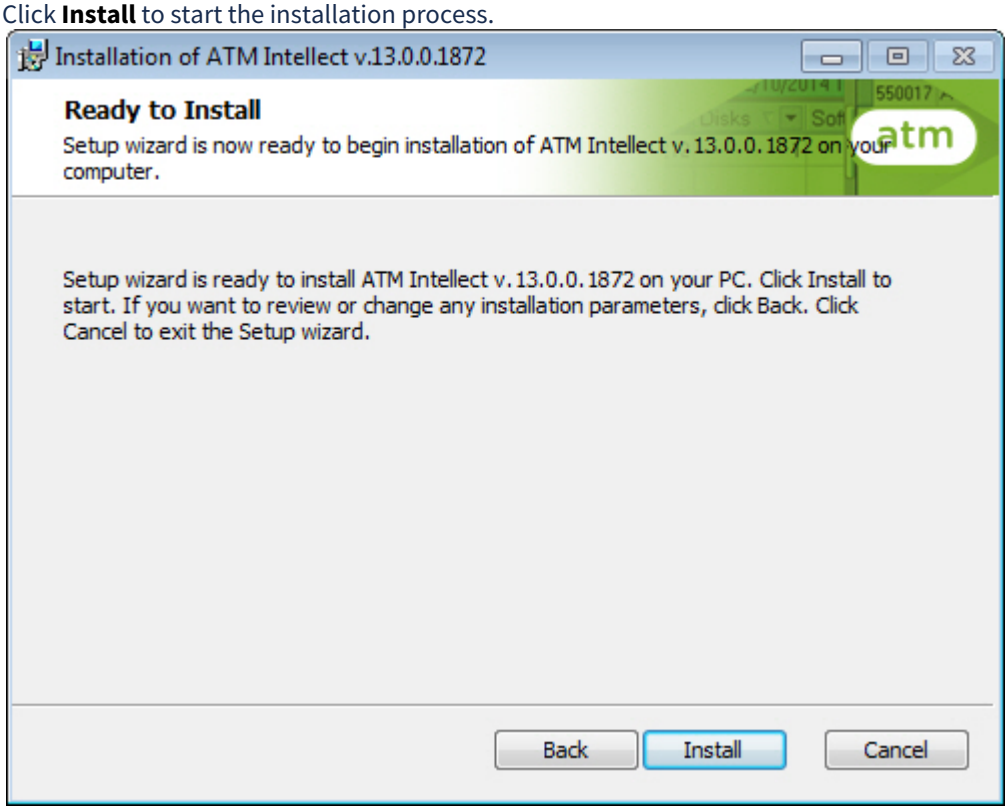


7. In the **Database** field specify the name of the database or select it on the right part of the window in the list of databases, which are created in the server, and click **<<**. Then click **Next**.

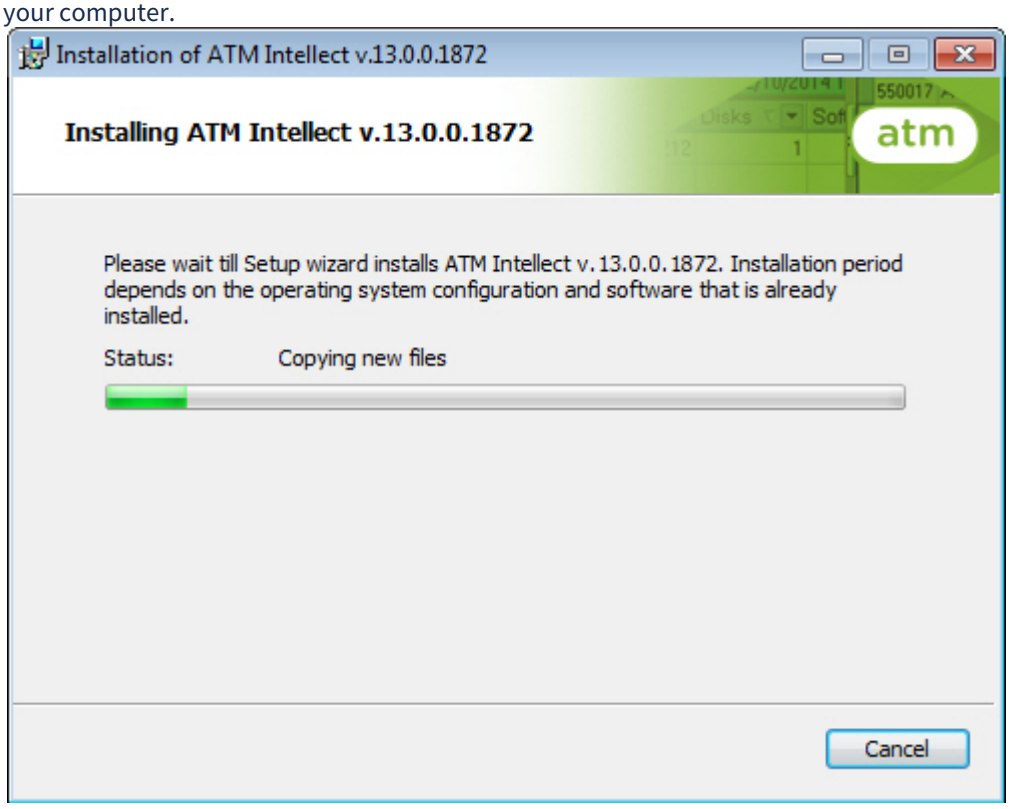
> **Note.**
>
> The default name of the database is MonitorSSTV and its files are located in the SQL Server folder.



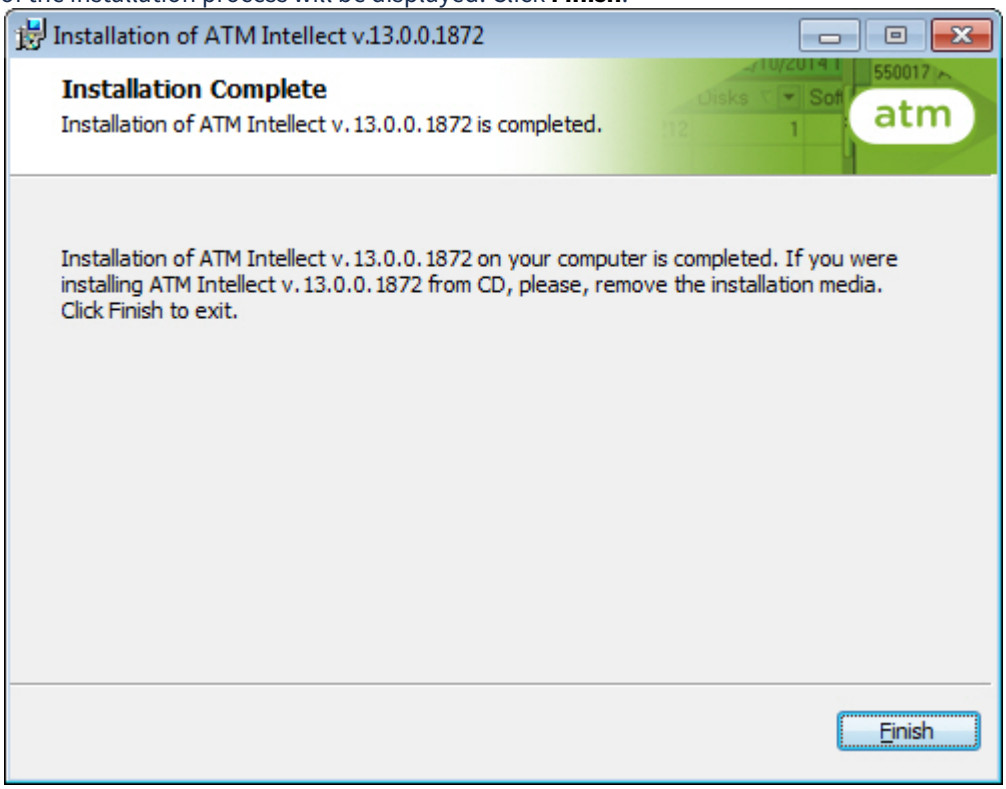
8. Click **Install** to start the installation process.



9. As a result, the necessary components of the *ATM Intellect* software package will be copied to hard drive of your computer.



10. After all software components are successfully copied on your hard drive, the message about the completion of the installation process will be displayed. Click **Finish**.



ATM-Intellect Workstation installation is completed.

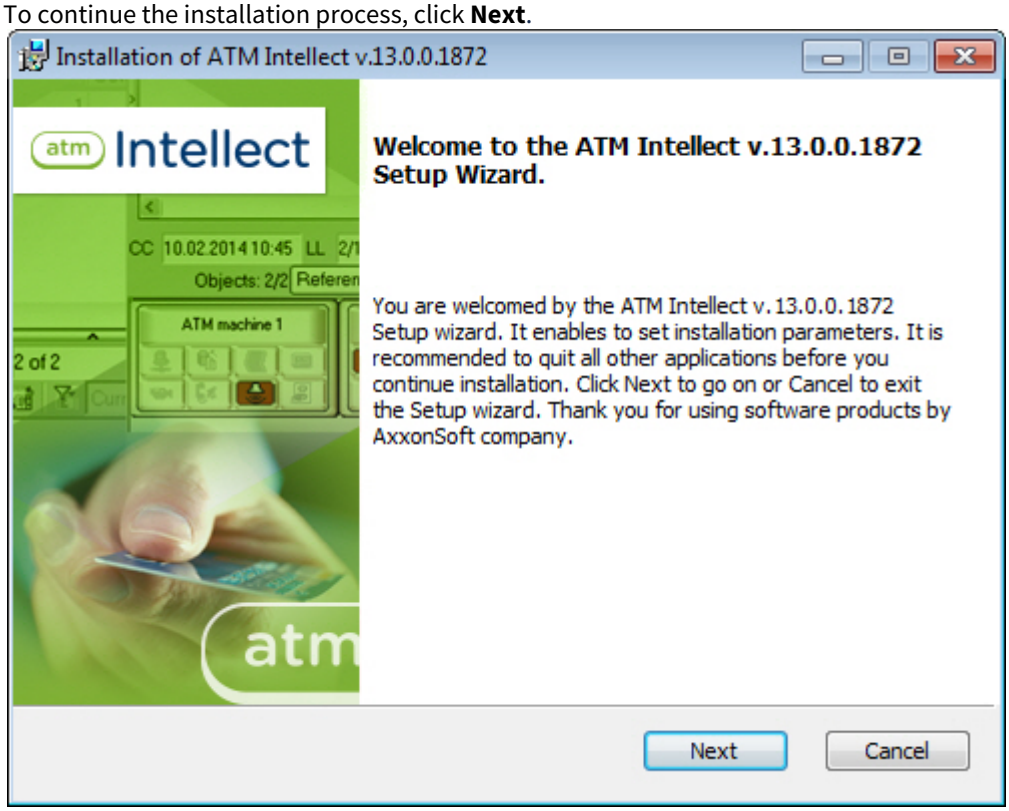
4.3 Installation steps for ATM-Intellect Pro

The *ATM Intellect* software is installed as a part of the *Intellect* software. Information about compatibility of the *Intellect* software versions and *ATM Intellect* is presented in the General information about product releases and versions compatibility section.

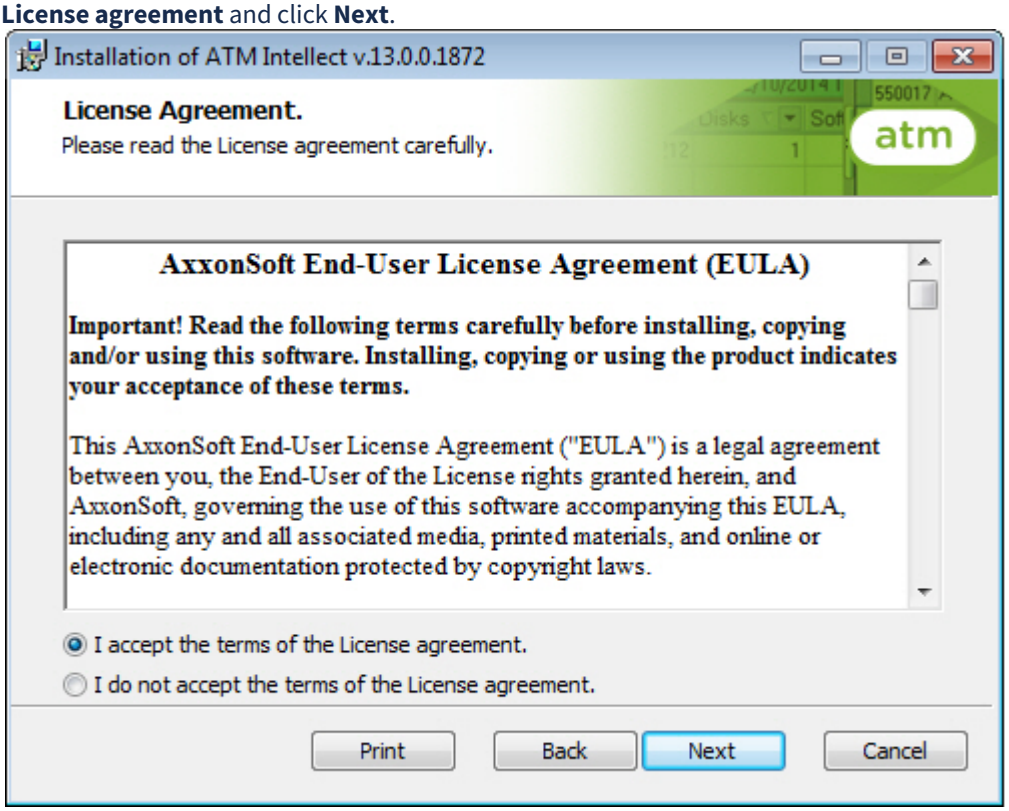
> **Attention!**
>
> The *ATM Intellect* software in the *ATM-Intellect Pro* configuration should be installed on **Server/Remote administrator workplace**. For details, see Intellect. Administrator's Guide.

To install *ATM Intellect* software in the *ATM-Intellect Pro* configuration, do the following:

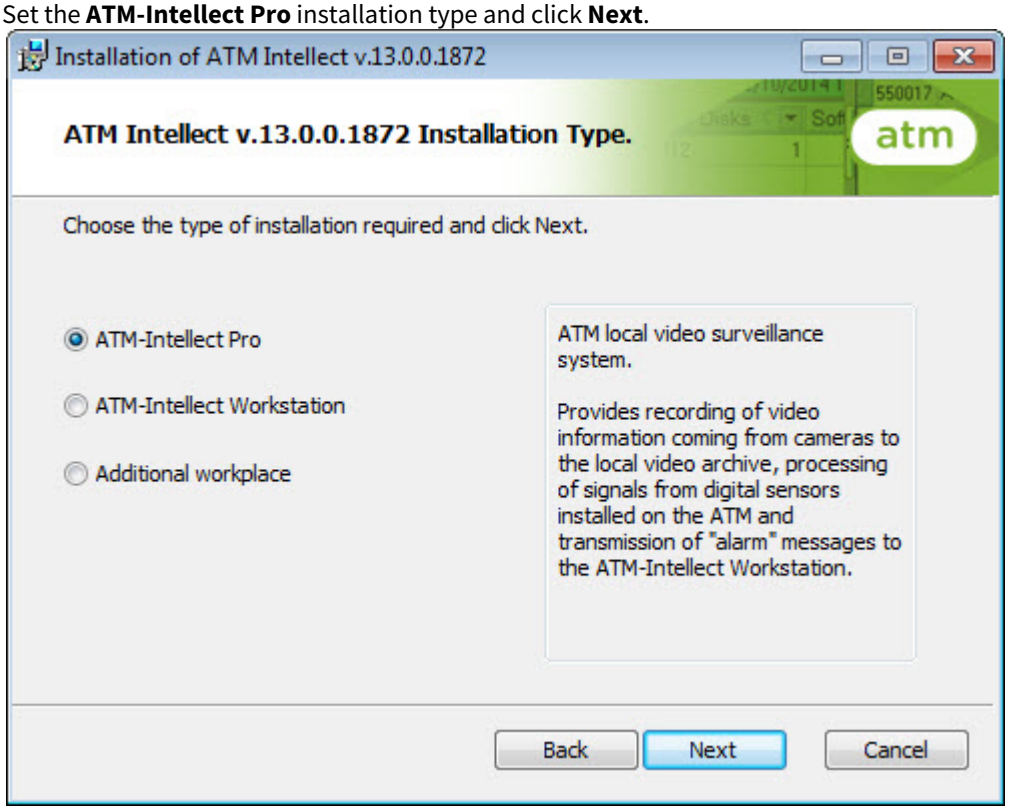
1. In the root directory of the distribution package, run the setup.exe executable file.
2. To continue the installation process, click **Next**.



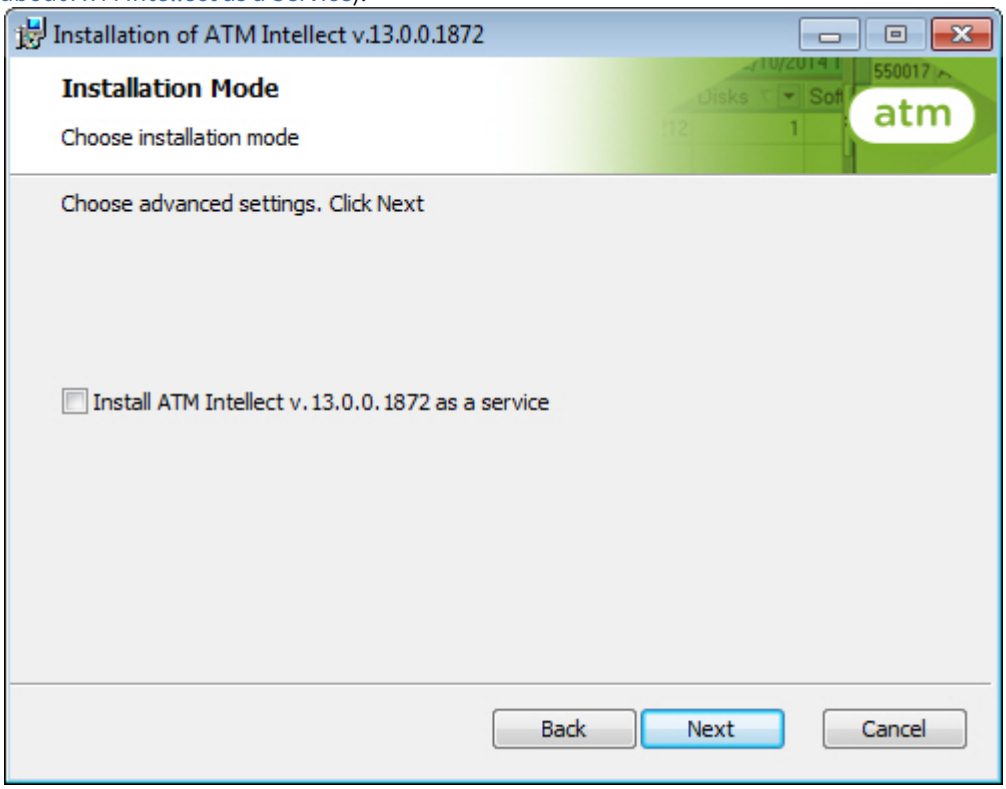
3. Read the terms of the license agreement carefully. Then set the radio button to **I accept the terms of the License agreement** and click **Next**.



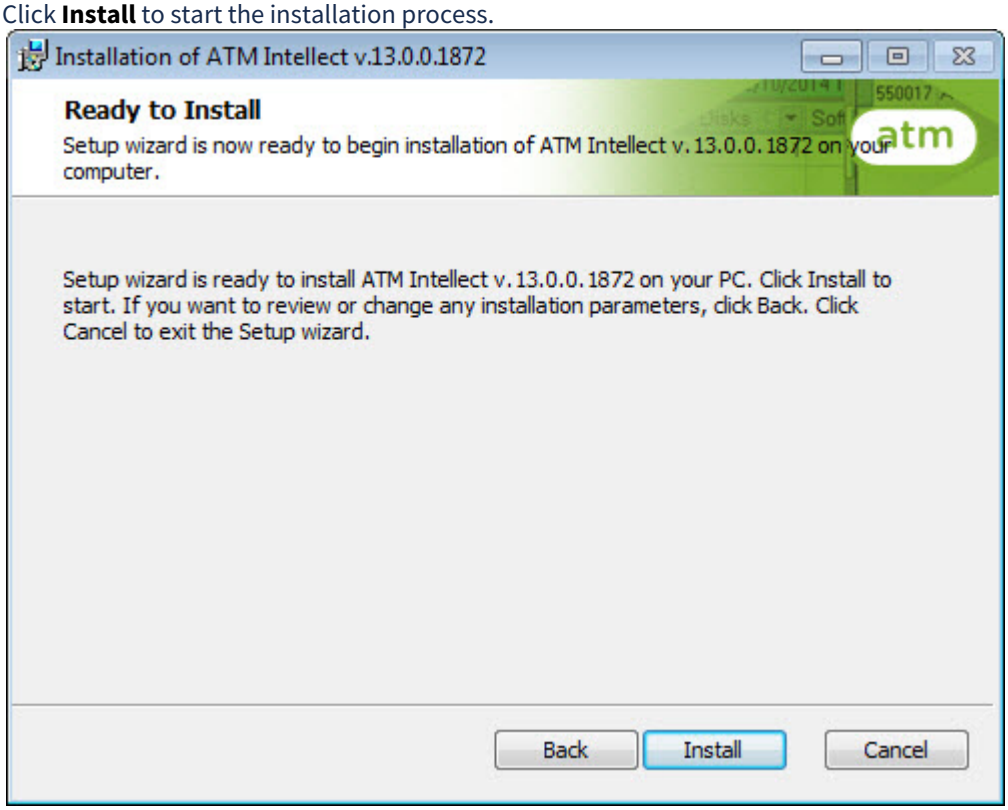
4. Set the **ATM-Intellect Pro** installation type and click **Next**.



5. If *Intellect* software is installed as a service, and it is necessary that *ATM-Intellect* is also installed as a service, then set the **Install ATM Intellect as a service** checkbox and click **Next** (for details, see General information about ATM Intellect as a Service).



6. Click **Install** to start the installation process.



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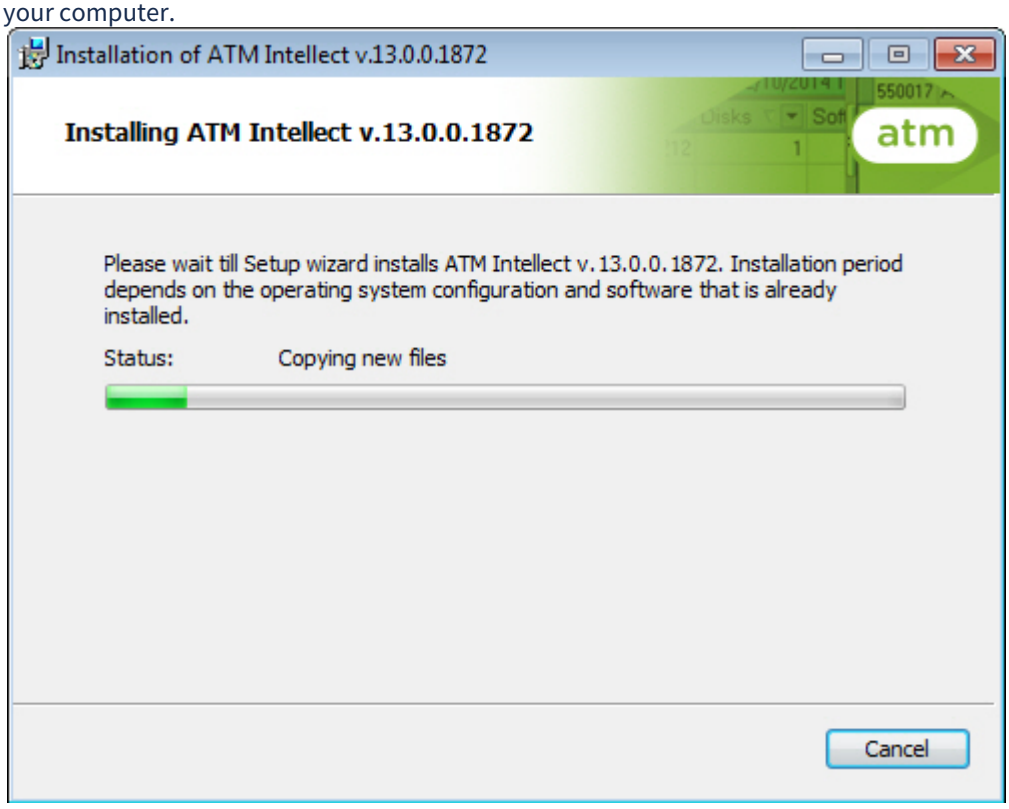
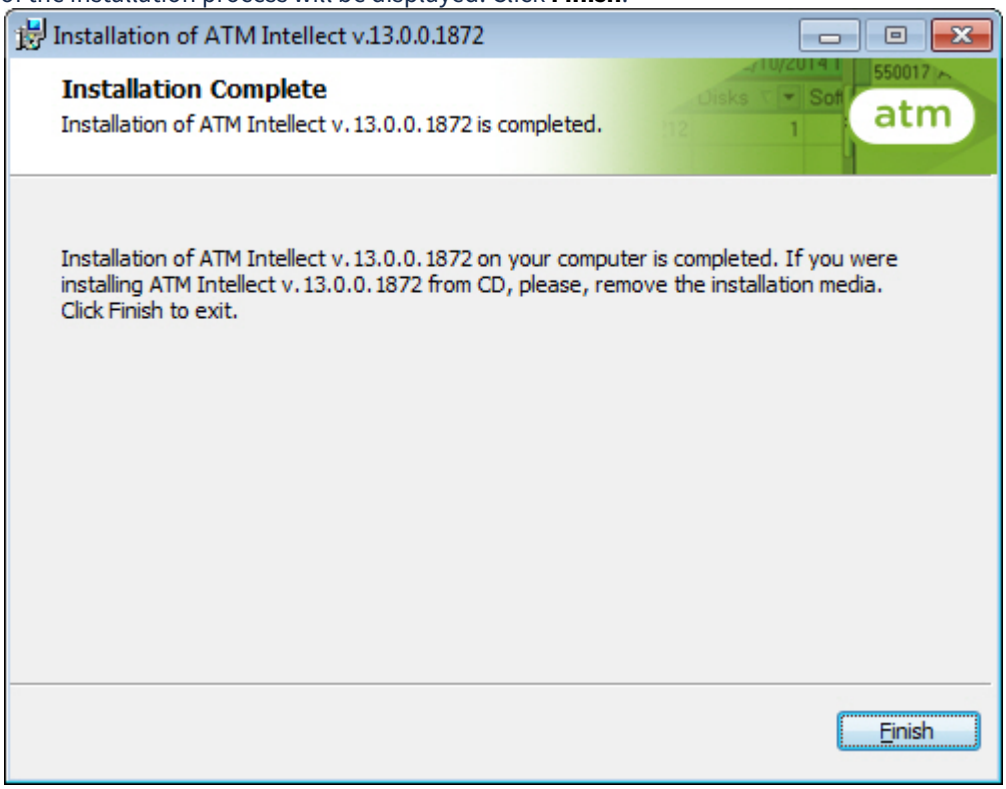


8. After all software components are successfully copied on your hard drive, the message about the completion of the installation process will be displayed. Click **Finish**.



ATM-Intellect Pro installation is completed.

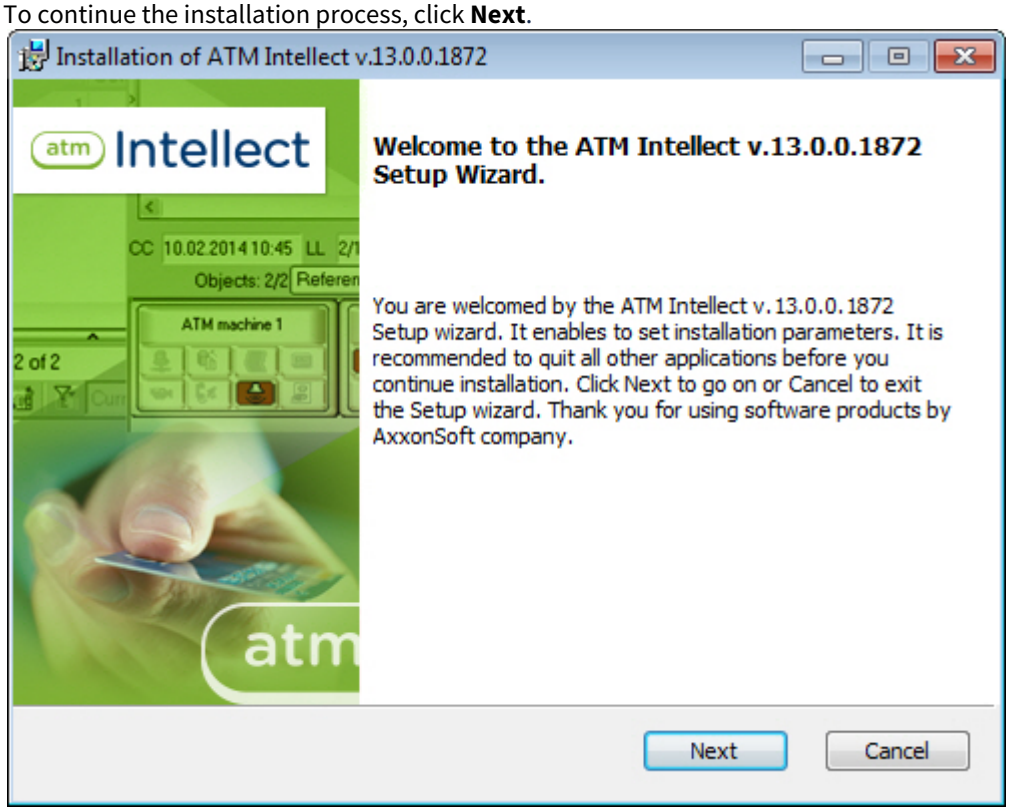
4.4 Installation steps for Additional workplace

The *ATM Intellect* software is installed as a part of the *Intellect* software. Information about compatibility of the *Intellect* software versions and *ATM Intellect* is presented in the General information about product releases and versions compatibility section.

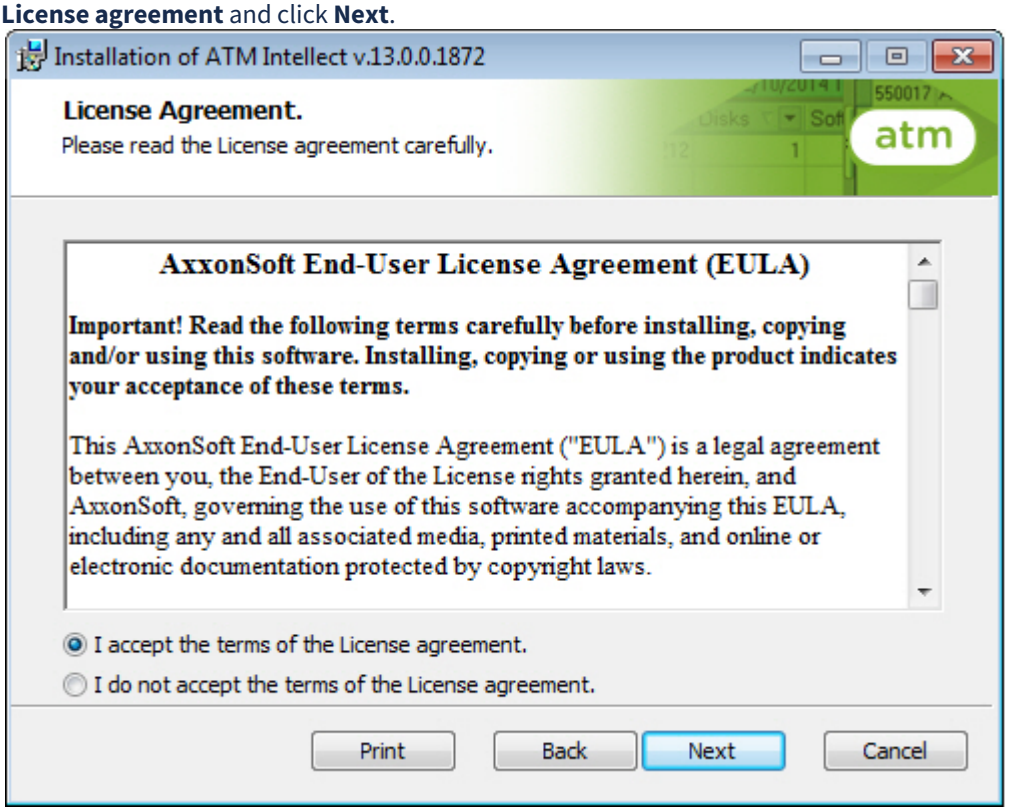
> **Attention!**
>
> The *ATM Intellect* software in the *Additional workplace* configuration should be installed on **Server/ Remote administrator workplace**. For details, see Intellect. Administrator's Guide.

To install *ATM Intellect* software in the *Additional workplace* configuration, do the following:

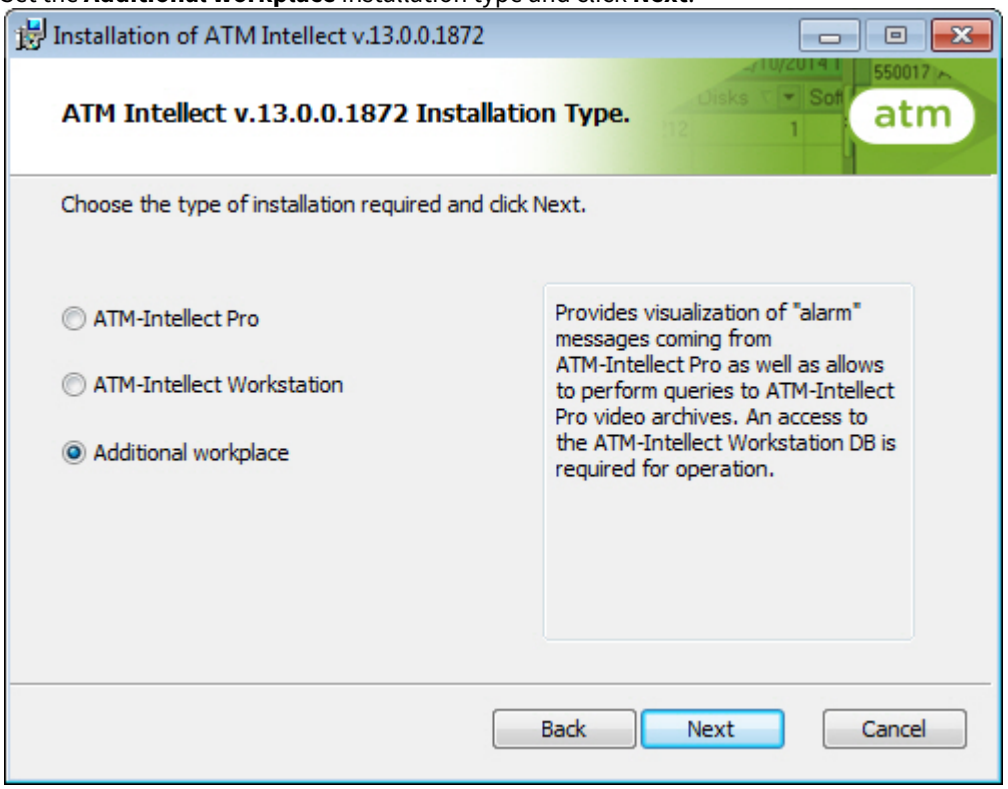
1. In the root directory of the distribution package, run the setup.exe executable file.
2. To continue the installation process, click **Next**.



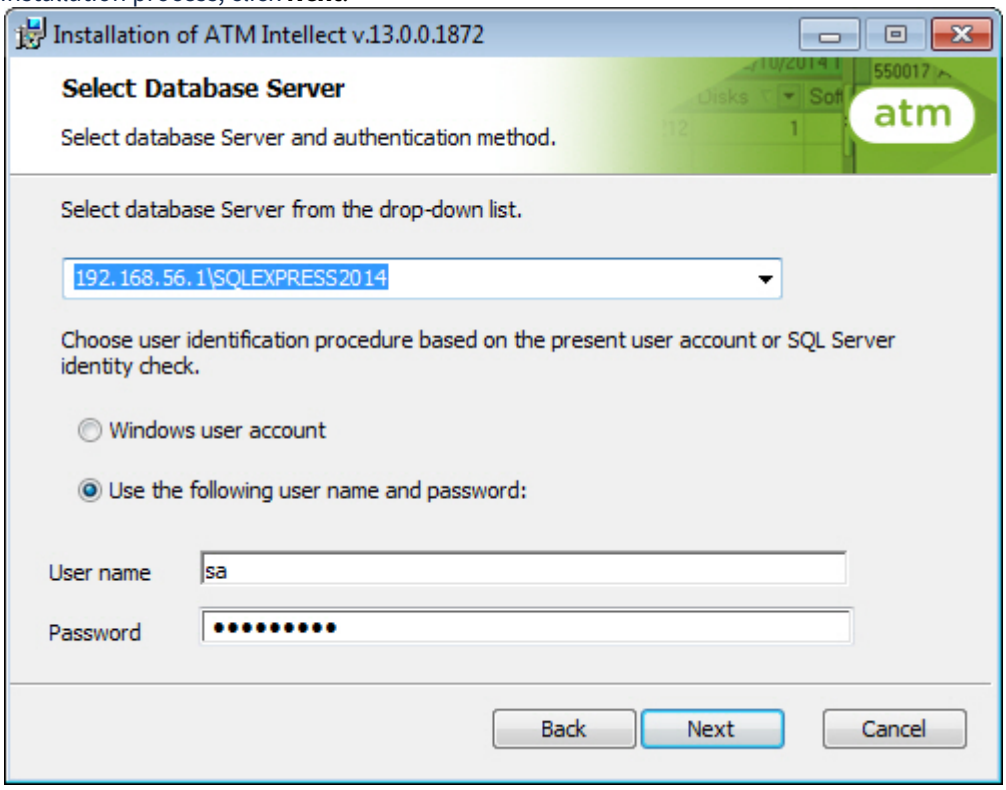
3. Read the terms of the license agreement carefully. Then set the radio button to **I accept the terms of the License agreement** and click **Next**.



4. Set the **Additional workplace** installation type and click **Next**.

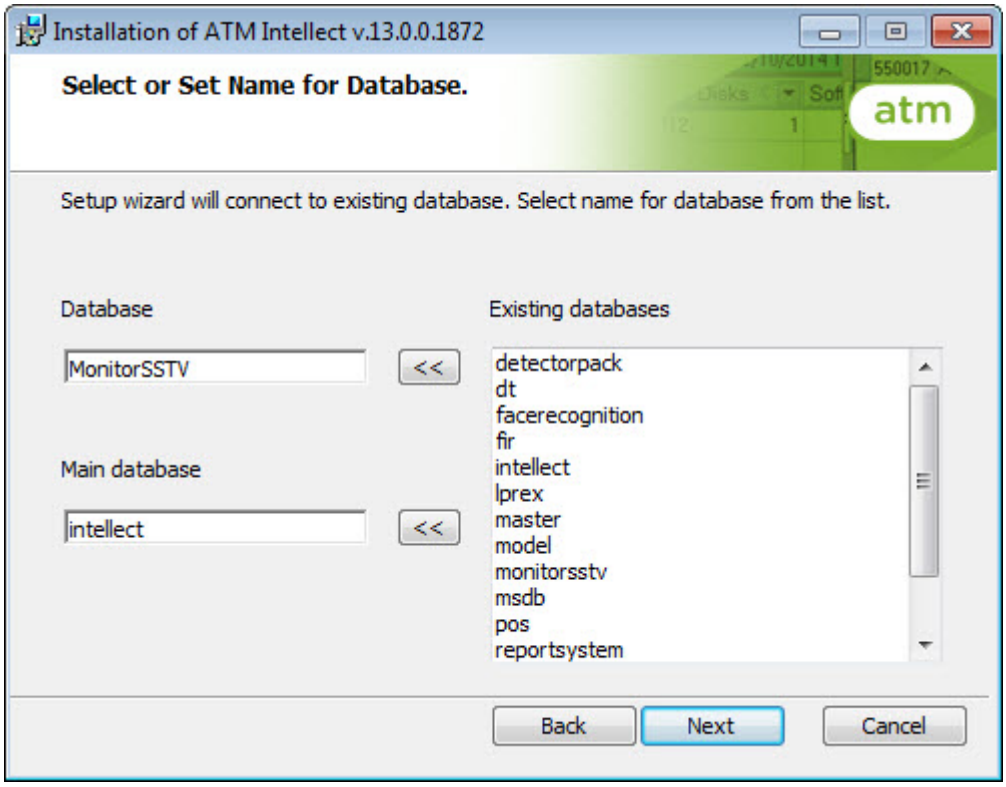


5. Select the database MS SQL Server and specify the authorization parameters for connection. For details, see Installation of INTELLECT™ software as a Server/Remote administrator workplace. To continue the installation process, click **Next**.

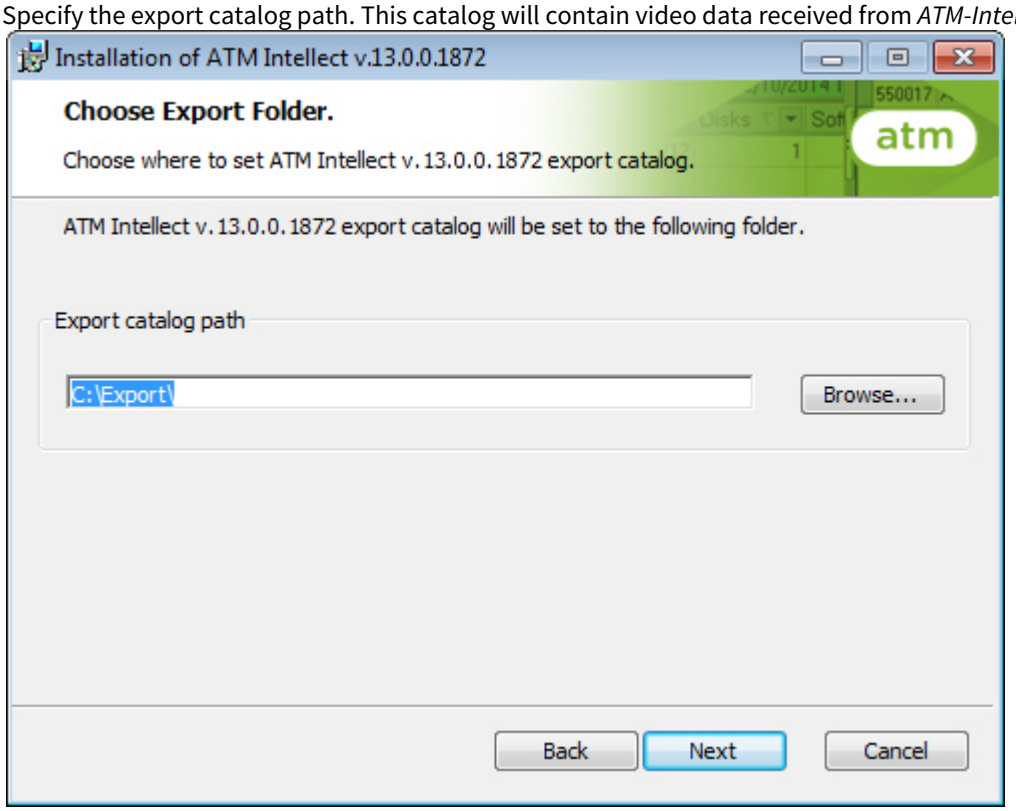


6. In the **Database** field specify the name of the database or select it on the right part of the window in the list of databases, which are created in the server, and click **<<**. Then click **Next**.

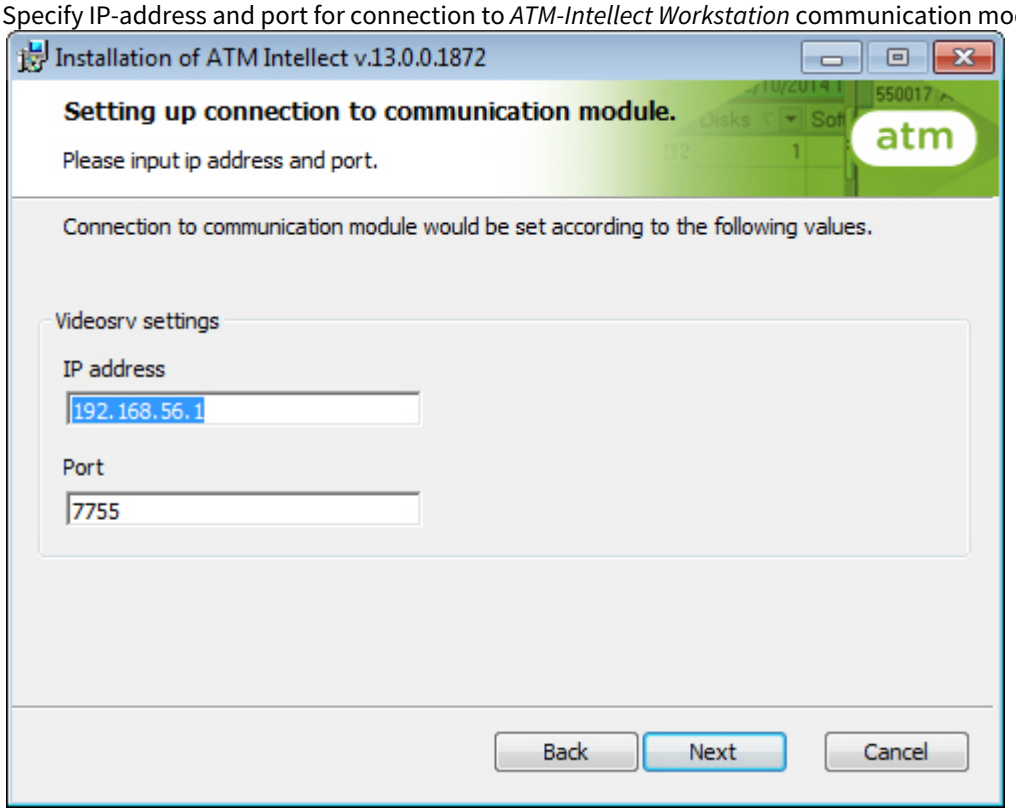
> **Note**
>
> The default name of the database is MonitorSSTV.



7. Specify the export catalog path. This catalog will contain video data received from *ATM-Intellect Pro*.



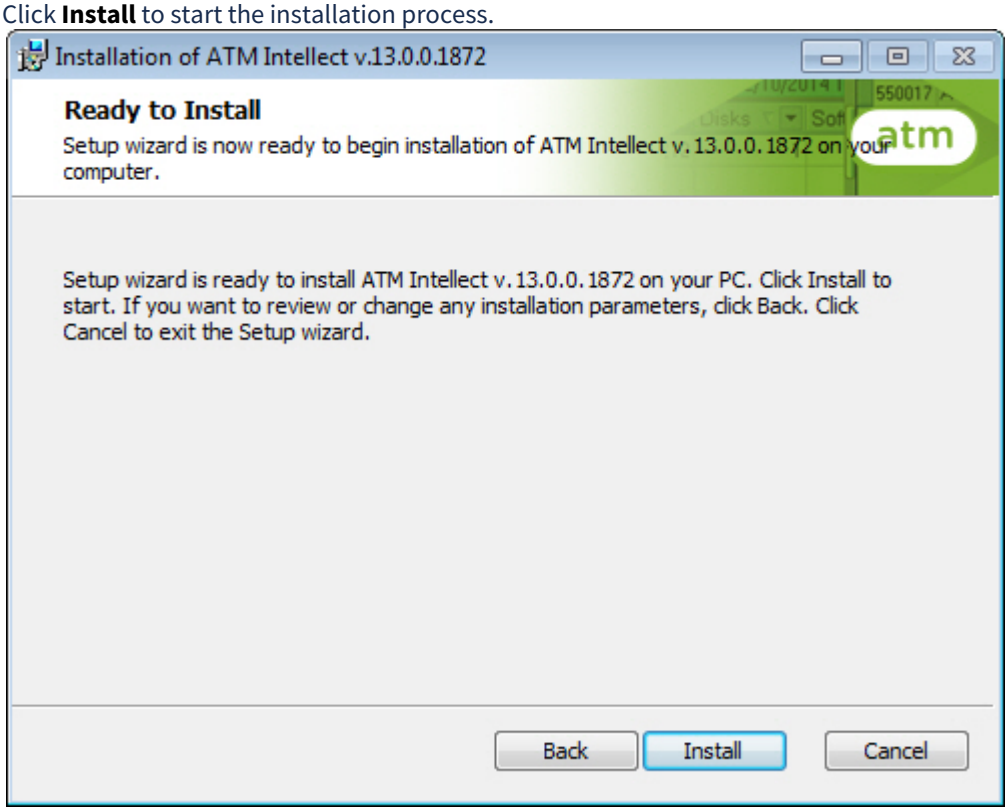
8. Specify IP-address and port for connection to *ATM-Intellect Workstation* communication module videosrv.



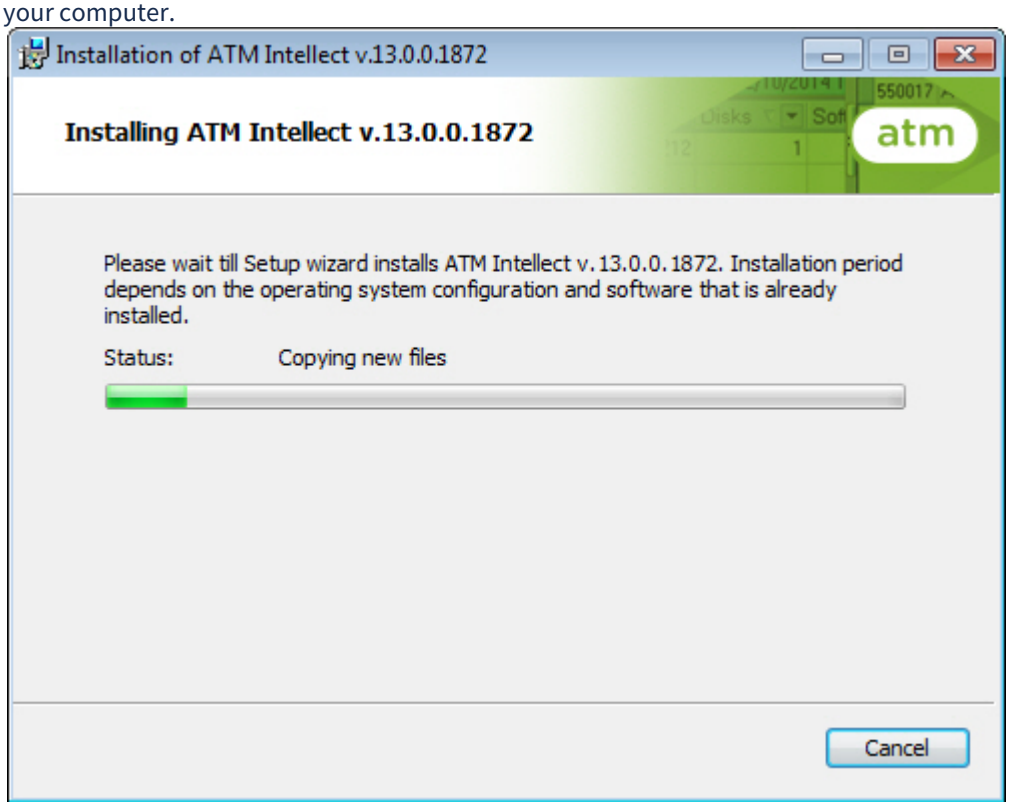
Note.

It is strongly recommended to change default **Export catalog path** and **IP address** on steps 6-7. Otherwise, after the installation is completed, it will be necessary to configure Additional workplace (see Additional workplace configuration).

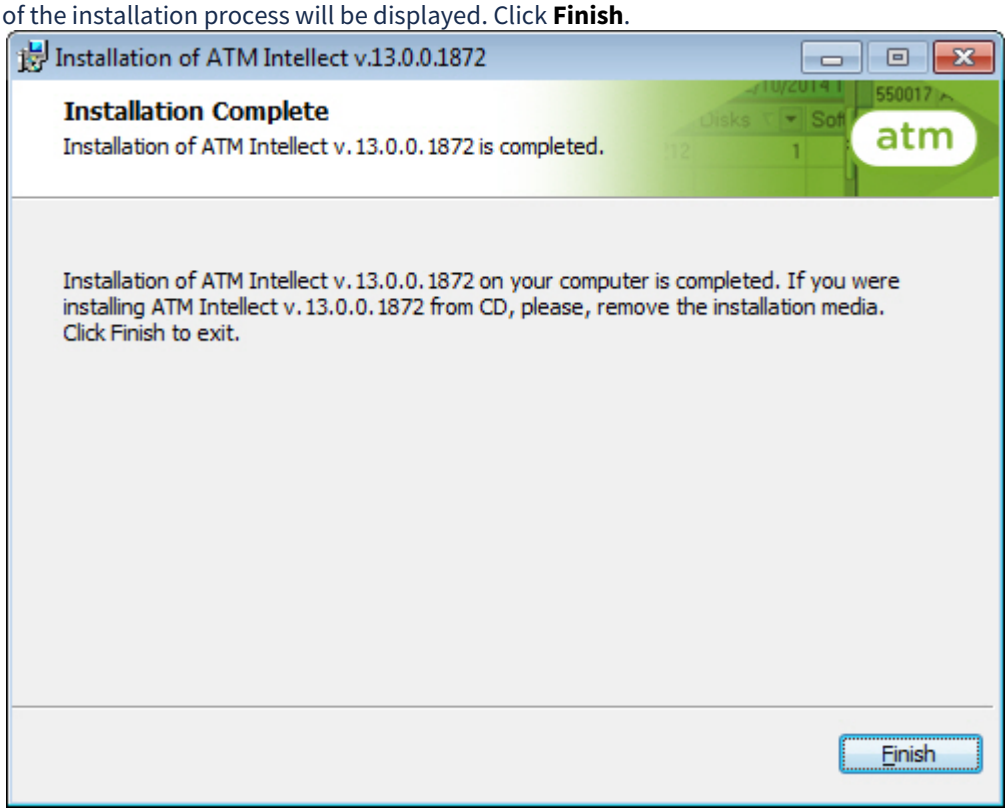
9. Click **Install** to start the installation process.



10. As a result, the necessary components of the *ATM Intellect* software package will be copied to hard drive of your computer.



11. After all software components are successfully copied on your hard drive, the message about the completion of the installation process will be displayed. Click **Finish**.



Additional workplace installation is completed.

5 ATM-Intellect Workstation configuration

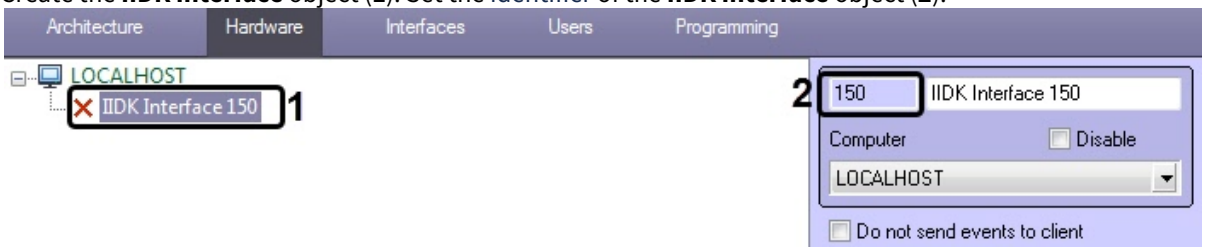
ATM-Intellect Workstation configuration is performed in the **System settings** dialog box. Operation in it described in the Intellect Software Package. Administrator's Guide.

5.1 Creating ATM-Intellect Workstation objects in the hardware tree

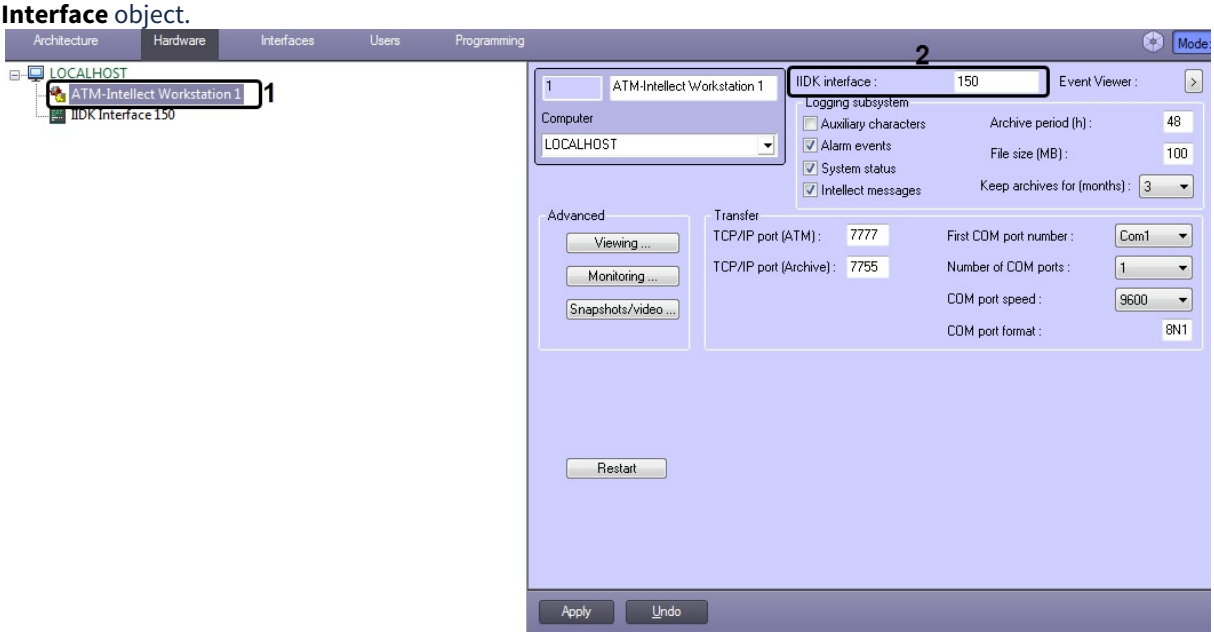
> **Note**
>
> *ATM-Intellect* components (*ATM-Intellect Pro* and *ATM-Intellect Workstation*) can work in a distributed configuration, while all the listed objects see where each of them is installed and can be configured.

To create necessary *ATM-Intellect Workstation* objects, do the following:

1. Go to the **Hardware** tab of the **System settings** dialog box.
2. Create the **IIDK Interface** object (**1**). Set the identifier of the **IIDK Interface** object (**2**).



3. Create the **ATM-Intellect Workstation** object on the basis of the **Computer** object (**1**). On the settings panel of this object, in the **IIDK interface** field (**2**), enter the identifier of the previously created **IIDK Interface** object.



4. Create the required number of child **Surveillance Object** objects (**1**) on the basis of the **ATM-Intellect Workstation** object. When you create these objects, specify the same ID (**2**) as in the **ID** field on the settings

panel of the corresponding **Surveillance object** object created on the basis of the **ATM-Intellect Pro** object.

> **Note**
>
> It is not necessary to manually create the **Surveillance Object** objects based on the **ATM-Intellect Workstation** object. They will be created automatically upon successful configuration of the communication between the *ATM-Intellect Pro* and the *ATM-Intellect Workstation* with the name and identifier specified on the *ATM-Intellect Pro* side (see Setting up a connection between ATM Intellect Pro and ATM Intellect Workstation).

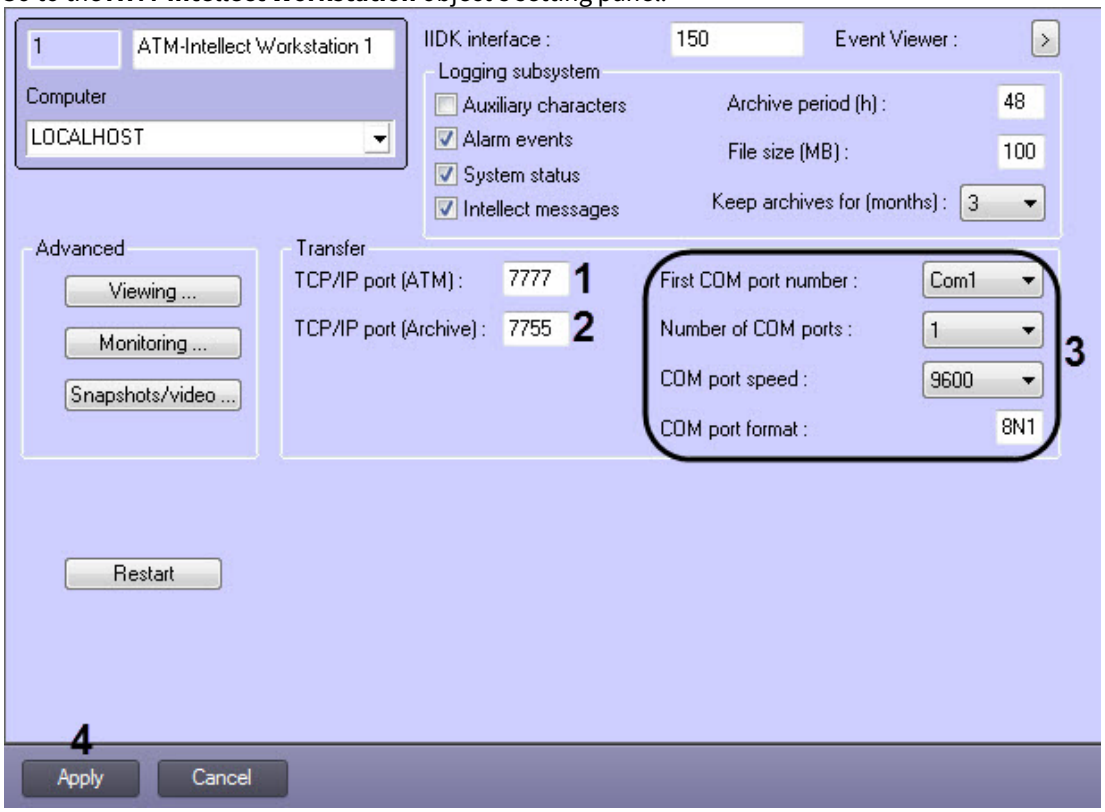
Objects creation is completed.

5.2 Setting the ATM-Intellect Workstation connection parameters

ATM-Intellect Workstation supports simultaneous operations with objects via the TCP/IP protocol and the RS232 protocol.

Setting up a connection is performed as follows:

1. Go to the **ATM-Intellect Workstation** object's setting panel.



2. In the **TCP/IP port (ATM)** field, enter the port number for TCP/IP communication with remote objects (**1**).

3. In the **TCP/IP port (Archive)** field, enter the port number for TCP/IP communication with the *Search in archive* module (**2**).

> **Note**
>
> The default value of the **TCP/IP port (Archive)** is **7755**. After you change the port number, it is necessary to also change the **IPPort** registry key value to the new port number (for details, see Registry keys reference guide, for more information about working with the registry, see Working with Windows OS registry).

4. For operations via the RS232 protocol, the following parameters are configured: **First COM port number, Number of COM ports, COM port speed, COM port format** (**3**).
5. Click **Apply** (**4**).

Setting up the connection is completed.

5.3 Specifying ATM-Intellect Workstation information for the Event Viewer

To specify information to view in the Event viewer interface window, do the following:

1. Go to the **ATM-Intellect Workstation** setting panel.

2. Click the **Viewing** (**1**) button. You will see the dialog box to specify information which will be viewed in the **Event Viewer** window of *Intellect* software.

3. Check the required events.

4. Click **OK**.
5. Click **Apply** (**2**) to save the changes.

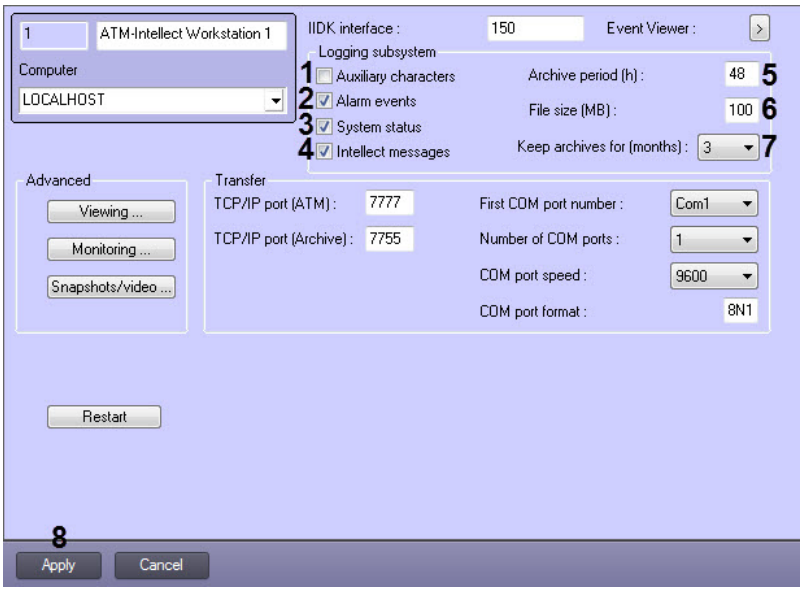
Specifying information for Event Viewer window is completed.

5.4 Setting up ATM-Intellect Workstation logging subsystem

The logging subsystem enables configuration of the logging level of *ATM-Intellect Workstation*.

The main log file is stored in the <Intellect software installation folder>\VHost in the file vsrvYYMMDD.log, where YY is the year, MM is the month and DD is the day

To configure the logging subsystem set up the following parameters on the *ATM-Intellect Workstation* object setting panel:

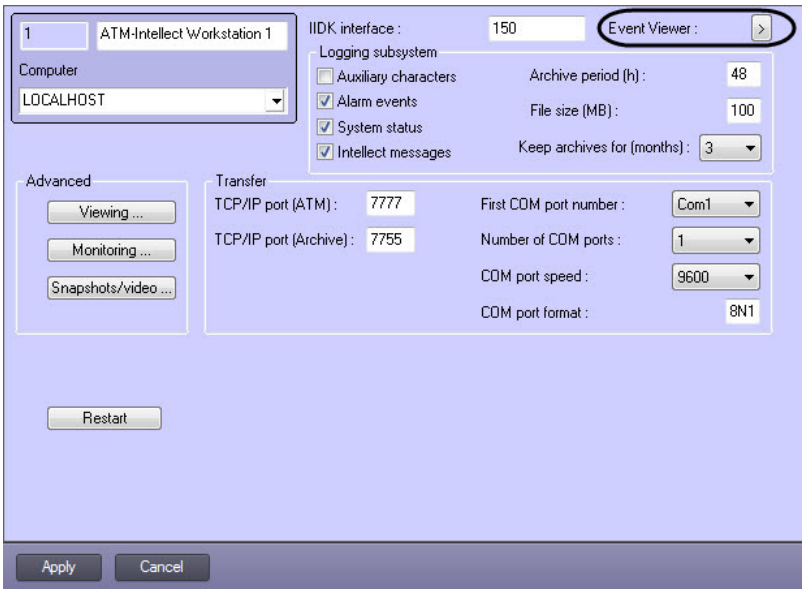


1. **Auxiliary characters.** Set the checkbox to log special characters of the transmitting level.
2. **Alarm events.** Set the checkbox to log alarm events (triggering of the vibration sensor, temperature sensor and opening lock under duress sensor).
3. **System status.** Set the checkbox to log events related to the system status.
4. **Intellect messages.** Set the checkbox to log messages from Intellect. The information is kept in the installation folder of the software in the file video.log.
5. **Archive period (h)**. Enter the time period for archiving the log file (in hours). Archives are saved in the DATA subfolder, in the following format: namelog_yymmddhhmmss.gz, where
    a. namelog is the name of the archived log file;
    b. yy is the year of archive creation;
    c. mm is the month of archive creation;
    d. dd is the day of archive creation;
    e. hh is the hour of archive creation;
    f. mm is the minute of archive creation;
    g. ss is the second of archive creation.
6. **File size (MB)**. Enter the size of the log file (in megabytes) after which the file will be archived. This setting overrides the value in the **Archiving period (h)** field.
7. **Keep archives for (months)**. Select from the list the term of storage for the archived log file, in months (from 1 to 24). After this term expires, the archives are deleted.
8. Click **Apply** (**8**) to save the changes.

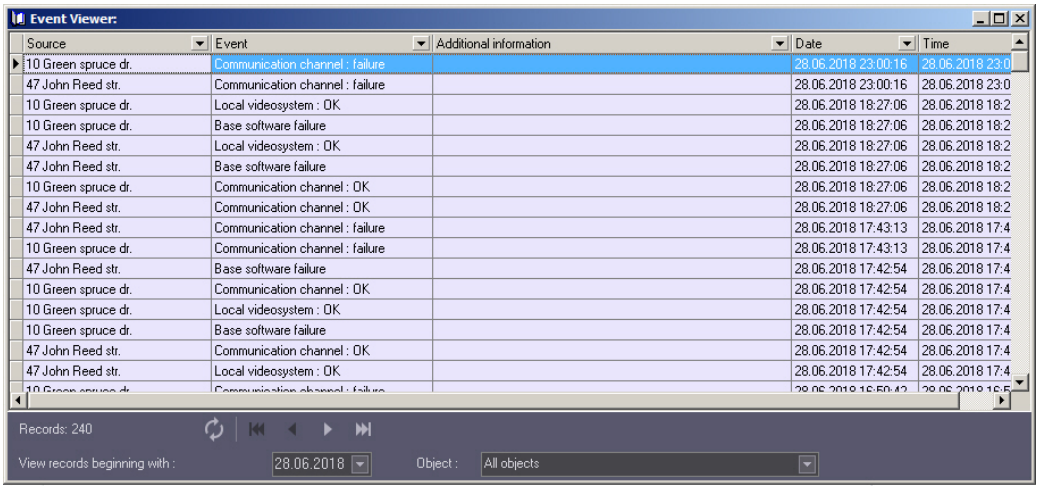
5.4.1 ATM-Intellect Workstation. The Event Viewer utility

The disadvantage of viewing information via the *Event Viewer* is clearing the screen on each *Intellect* restart. It is impossible to see what was on before the system restart. The additional *Event Viewer* utility is required in such cases. This utility operates the database directly and allows viewing information from the whole length of time used to keep the event log in the database.

To start the *Event Viewer* utility, click the **Event Viewer** button on the **ATM-Intellect Workstation** settings panel.



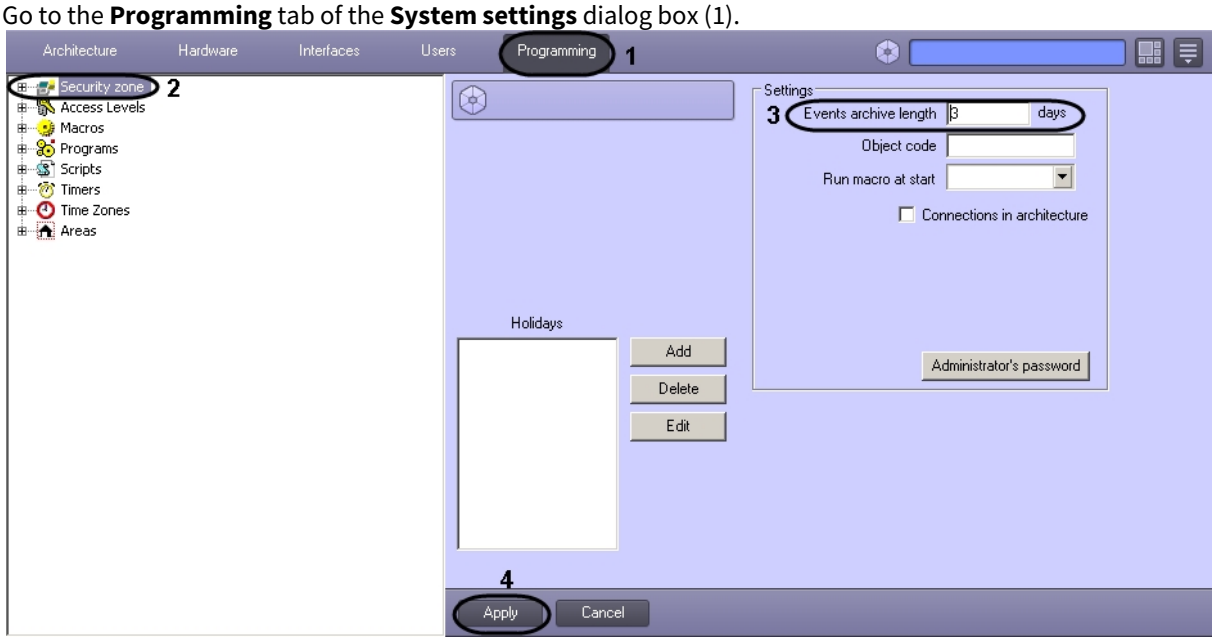
The *Event Viewer* utility allows sorting and filtering data.



5.4.2 Specifying storage time for ATM-Intellect Workstation event log

To specify the term of keeping the event log in the database do the following:

1. Go to the **Programming** tab of the **System settings** dialog box (1).



2. Go to the **Security zone** object setting panel (2).
3. Specify the term of keeping the event log in the **Event archive length** field (3).
4. Click **Apply** (4).

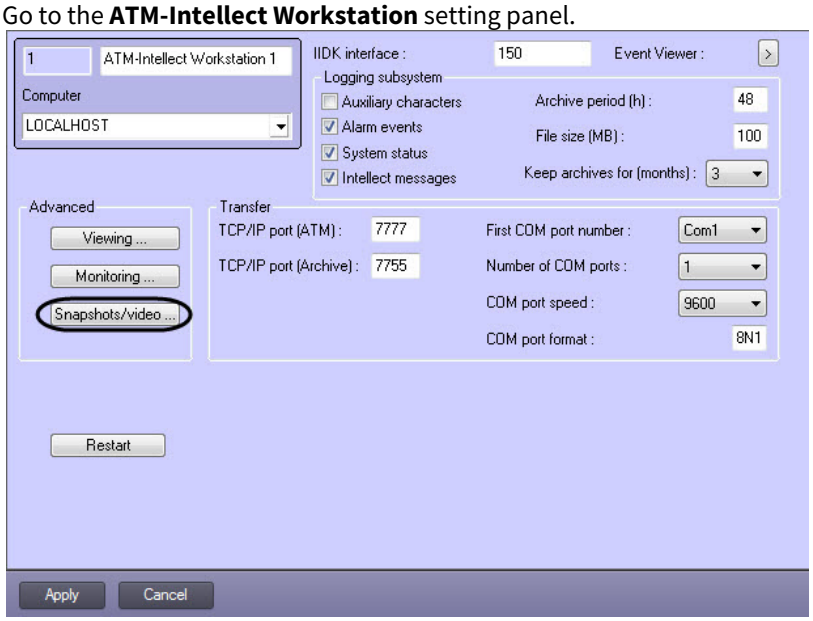
Specifying the term of keeping the event log is completed.

5.5 Setting up the reaction on receiving images and clips

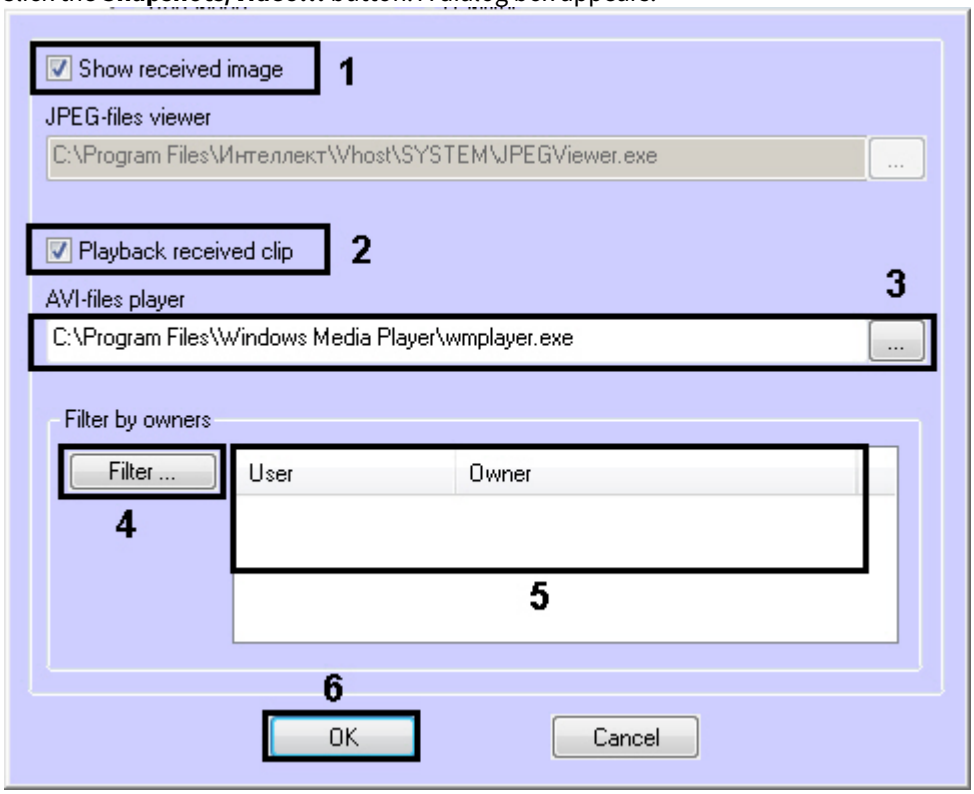
To configure visualization of snapshots or video clips received with alarms on sensors (see Operator's Guide, section Viewing video data on alarms), do the following:

> **Note.**
>
> This setting does not affect the reception of the video data by **Search in archive** interface object, except for the **AVI-files player** parameter (see Video query).

1. Go to the **ATM-Intellect Workstation** setting panel.

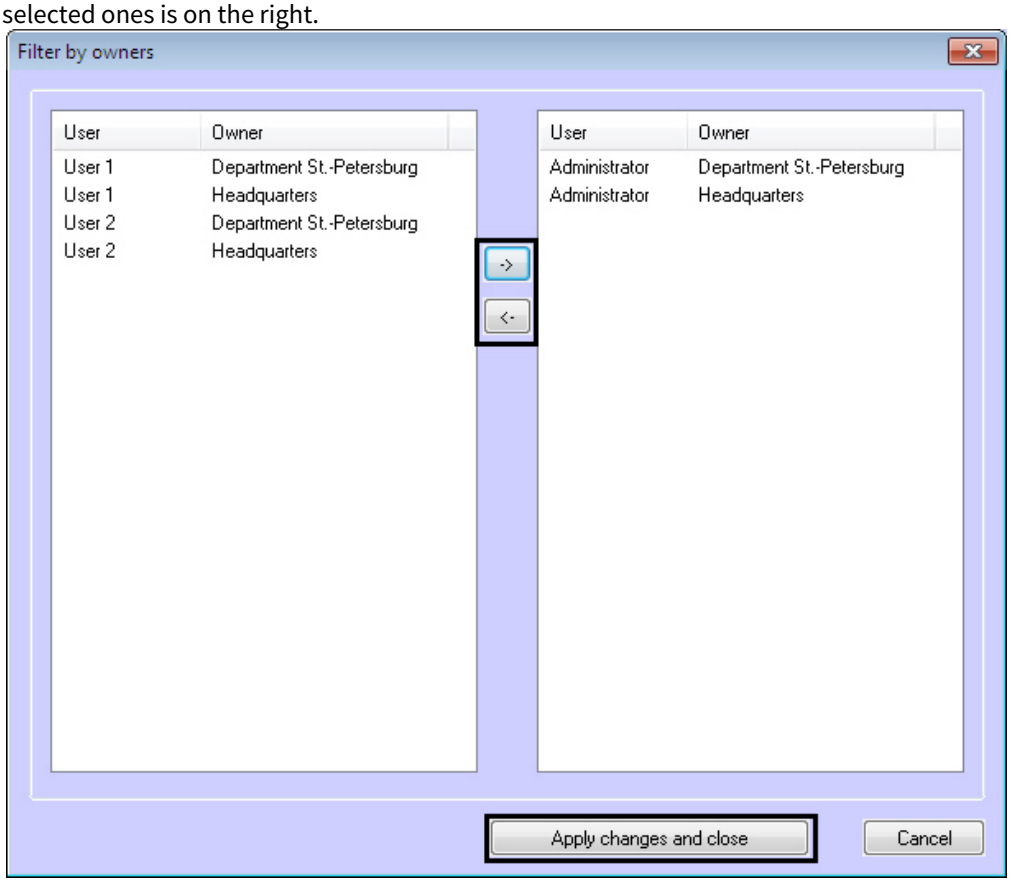


2. Click the **Snapshots/video…** button. A dialog box appears.



3. If you need to open received image set the following parameters:
    a. Set the **Show received image** checkbox (**1**).
4. If you need to open received video clip set the following parameters:
    a. Set the **Playback received clip** checkbox (**2**).
    b. In the **AVI-files player** field, specify the path to the program used to playback the AVI files (**3**).
5. If snapshots and videos only from sites belonging to specific owners are to be available for specific users, then set the filter by owners:
    a. Click the **Filter…** button (**4**).

b. The **Filter by owners** window appears. The list of available user-owner pairs is on the left, the list of selected ones is on the right.



> **Note.**
>
> The list of owners is set on the Control Panel (see Owner Panel).
> Users and their rights are configured in the **Users** tab of the **System settings** dialog box (see Configuring the ATM Monitoring object).

c. Move the pairs between the lists using the <- and ->buttons.
d. When the list of user-owner pairs is formed, click the **Apply changes and close** button.

6. Selected pairs of users and owners are displayed in the table (**5**).
7. Press **OK** (**6**).

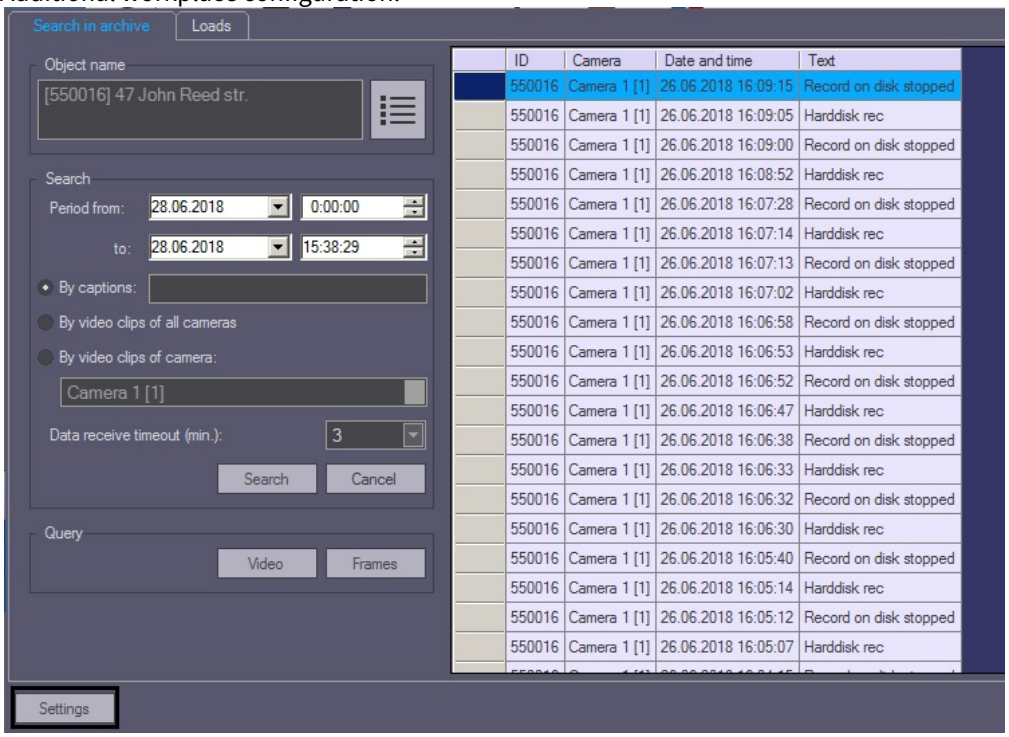
Configuring the program for cases when snapshots or video clips are received is completed.

5.6 List of Additional workplaces

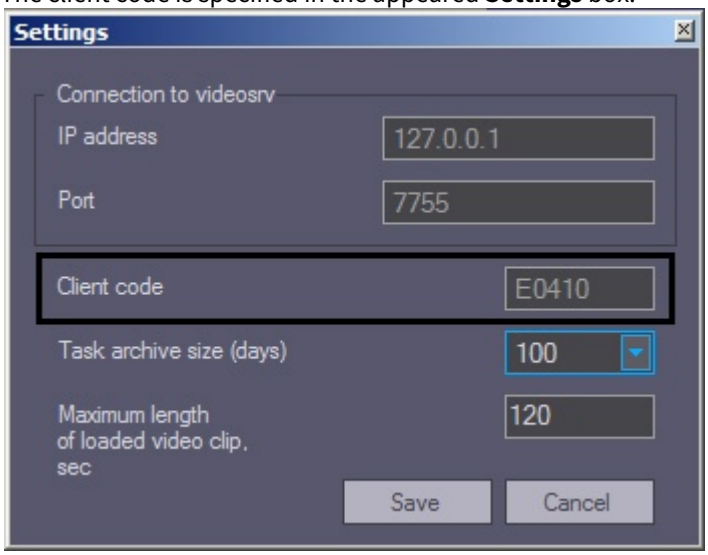
For the *Additional workplaces* software operation, it is necessary to configure the list of additional workplaces in the *ATM-Intellect Workstation*, and specify the computer name and client code for each of them.

The client code is bound to the computer hardware. You can find it out as follows:

1. On the computer with installed *ATM-Intellect* software, open the **Search in archive** interface in the Additional workplace configuration.

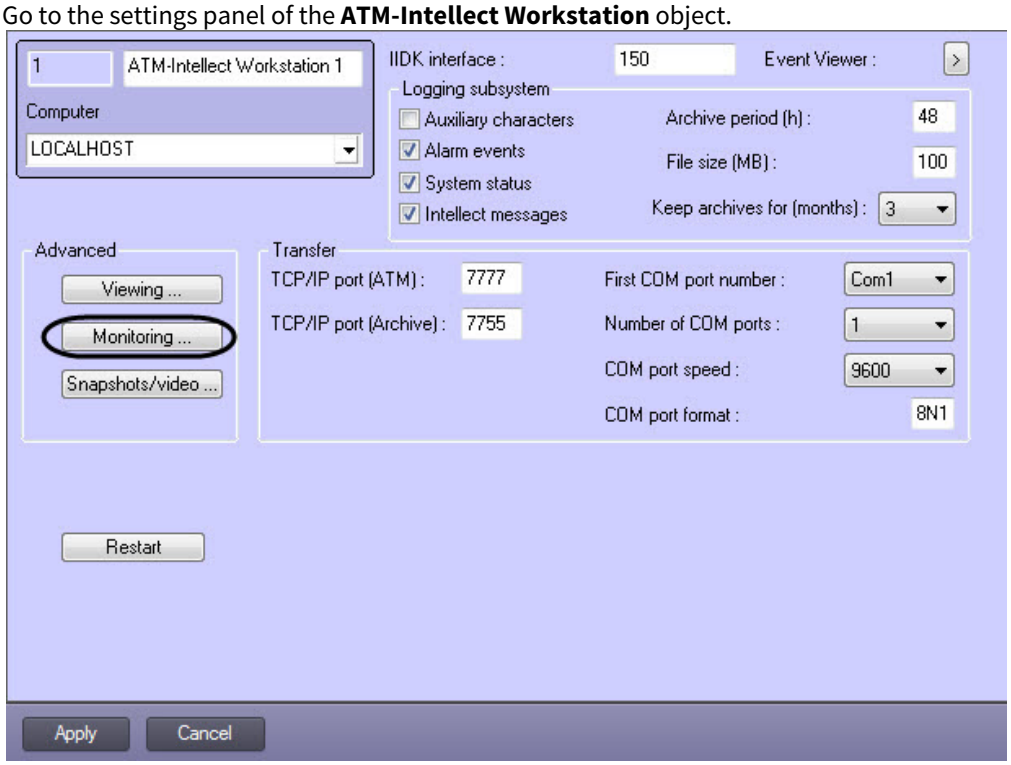


2. Click the **Settings** button in the bottom left corner.
3. The client code is specified in the appeared **Settings** box.

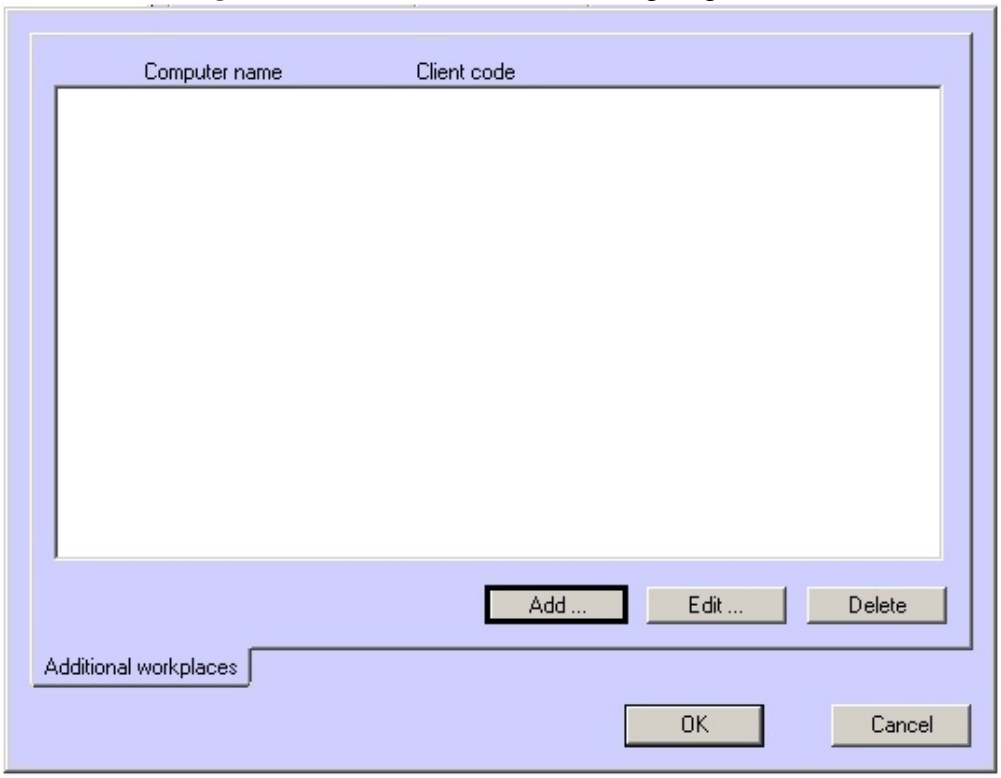


The list of Additional workplaces that can be connected to the *ATM-Intellect Workstation* is configured as follows:

1. Go to the settings panel of the **ATM-Intellect Workstation** object.

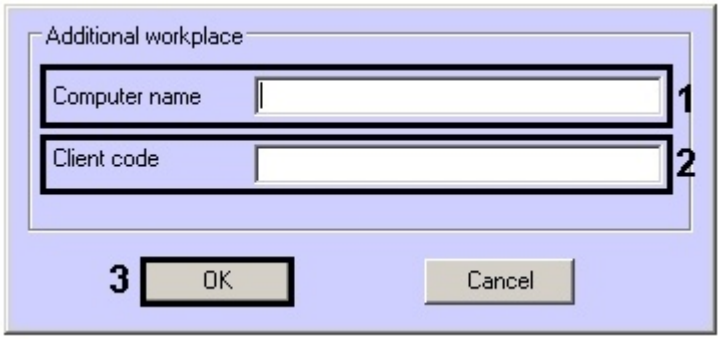


2. Click the **Monitoring…** button. As a result, the box of configuring the list of Additional workplaces appears.



3. To add an Additional workplace to the list click the **Add…** button.

4. In the appeared box specify the computer name on which the Additional workplace is installed (**1**).



5. Specify the client code in the **Client code** field (**2**).
6. Click the **OK** button (**3**).
7. Repeat steps 3-6 for all Additional workplaces that will be connected to this *ATM-Intellect Workstation*.

> **Note.**
>
> To edit specified settings select the Additional workplace in the list and click the **Edit...** button.
> To delete the Additional workplace in the list select it in the list and click the **Delete** button.

8. Click the **OK** button.
9. Click the **Apply** button.

The list of Additional workplaces is now configured.

5.7 Working with ATM-Intellect Workstation without Windows administration rights

To allow the user not added to the Administrators group in the Windows operating system to work correctly with *ATM-Intellect Workstation*, make sure the following conditions are fulfilled:

1. The user must have full access to the *ATM-Intellect Workstation* registry section:
   HKEY_LOCAL_MACHINE\Software\BitSoft for 32-bit system
   (HKEY_LOCAL_MACHINE\Software\Wow6432Node\BitSoft for 64-bit).
2. The user must have full right on the **Export** folder. The path to this folder is stored in the ExportPath parameter in the following registry section:
   HKEY_LOCAL_MACHINE\Software\BitSoft\VHOST\VHostService for 32-bit system
   (HKEY_LOCAL_MACHINE\Software\Wow6432Node\BitSoft\VHOST\VHostService for 64-bit).

5.8 Configuring sound notification at ATM-Intellect Workstation

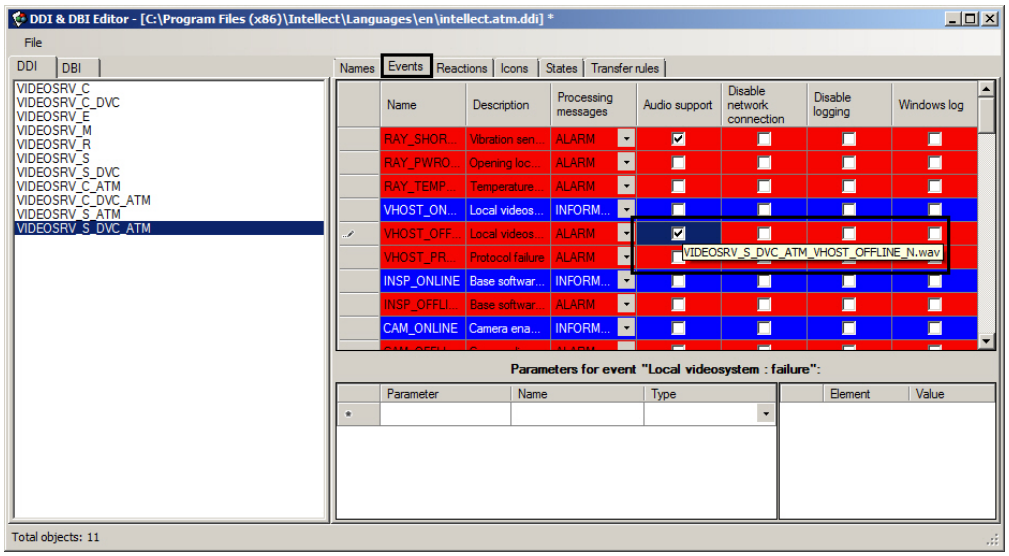
The *ATM-Intellect* software allows configuring audio feedback for alarms received from an *ATM-Intellect Pro*. For this do the following:

> **Note.**
>
> This function is not supported for the Additional Workplace in non-distributed configuration.

1. Create a **Display** object in the **Interfaces** tab.
2. Create an **Audio player** object on the base of the **Display** object.
3. Run the *System configuration* utility (ddi.exe).

> **Note.**
>
> Detailed info on using this utility is given in the *Intellect software. Administrator's Guide*. The most relevant version of this document is available in AxxonSoft documentation repository.

4. Open the intellect.atm.ddi file.
5. Select the VIDEOSRV_S_DVC_ATM (**Surveillance object**) object.
6. Go to the **Events** tab.



7. In the **Audio support** column set checkboxes for all events that have to be followed by an audio signal.
   A screentip shows the required name of the wav file.
   N is an ID of the VIDEOSRV_S_DVC_ATM object.
8. Create corresponding files and put them to the <*Intellect* installation>\Wav folder.

Configuration of sound notification at *ATM-Intellect Workstation* is completed.

5.9 Creating and configuring Data gateway

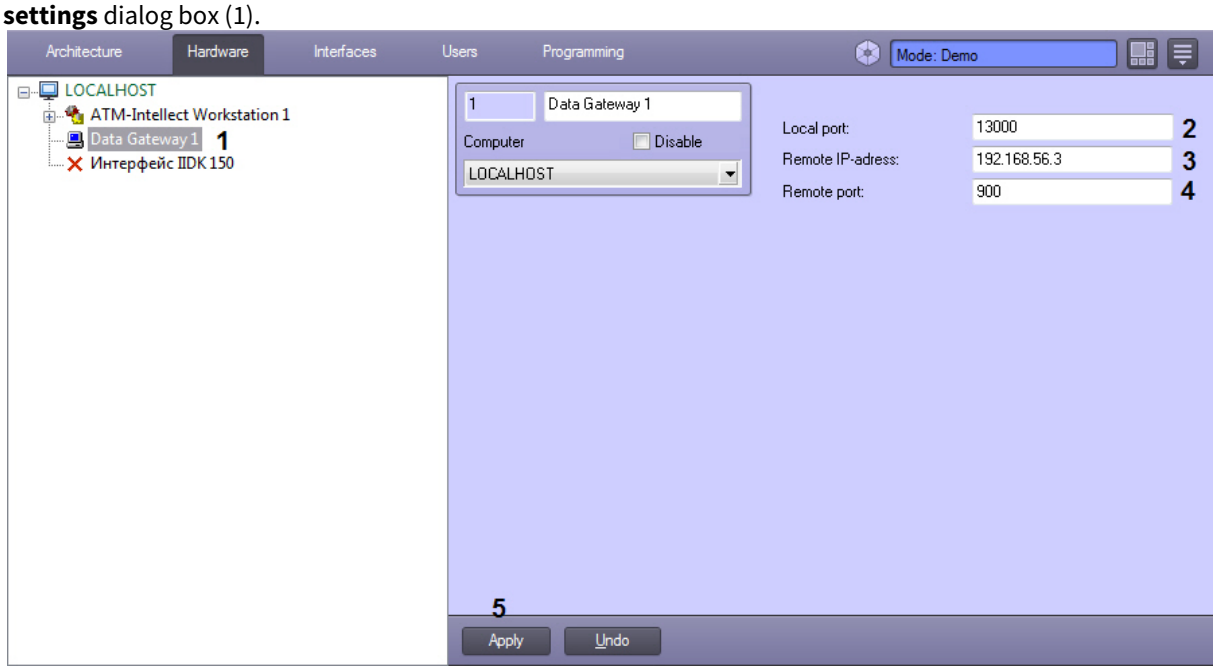
Data gateway is needed when live video is transmitted from *ATM-Intellect Pro* to Additional workplace in another subnet and *ATM-Intellect* software components are not united in the distributed video surveillance system, as so as in this case **Video gate** object cannot be used.

The **Data gateway** objects are created on the computers with *ATM-Intellect Workstation* installed. The number of the **Data gateway** objects must be equal to the number of *ATM-Intellect Pro* to receive live video from. For example, if there are 10 **ATM-Intellect Pro**, then create 10 **Data Gateways** with **Local port** and **Remote IP-address** corresponding to those *ATM-Intellect Pro*.

In this section, the description of **Data gateway** configuration is given. By default, this module is not enabled for live video transmitting to Additional workplaces. In order to enable Data gateway, set the **View live video through the gate** in the **ATM Monitoring** interface object settings panel – see Configuring the ATM Monitoring object.

Data gateway object configuration is performed as follows:

1. Create the **Data gateway** object based on the **Computer** object on the **Hardware** tab of the **System settings** dialog box (1).



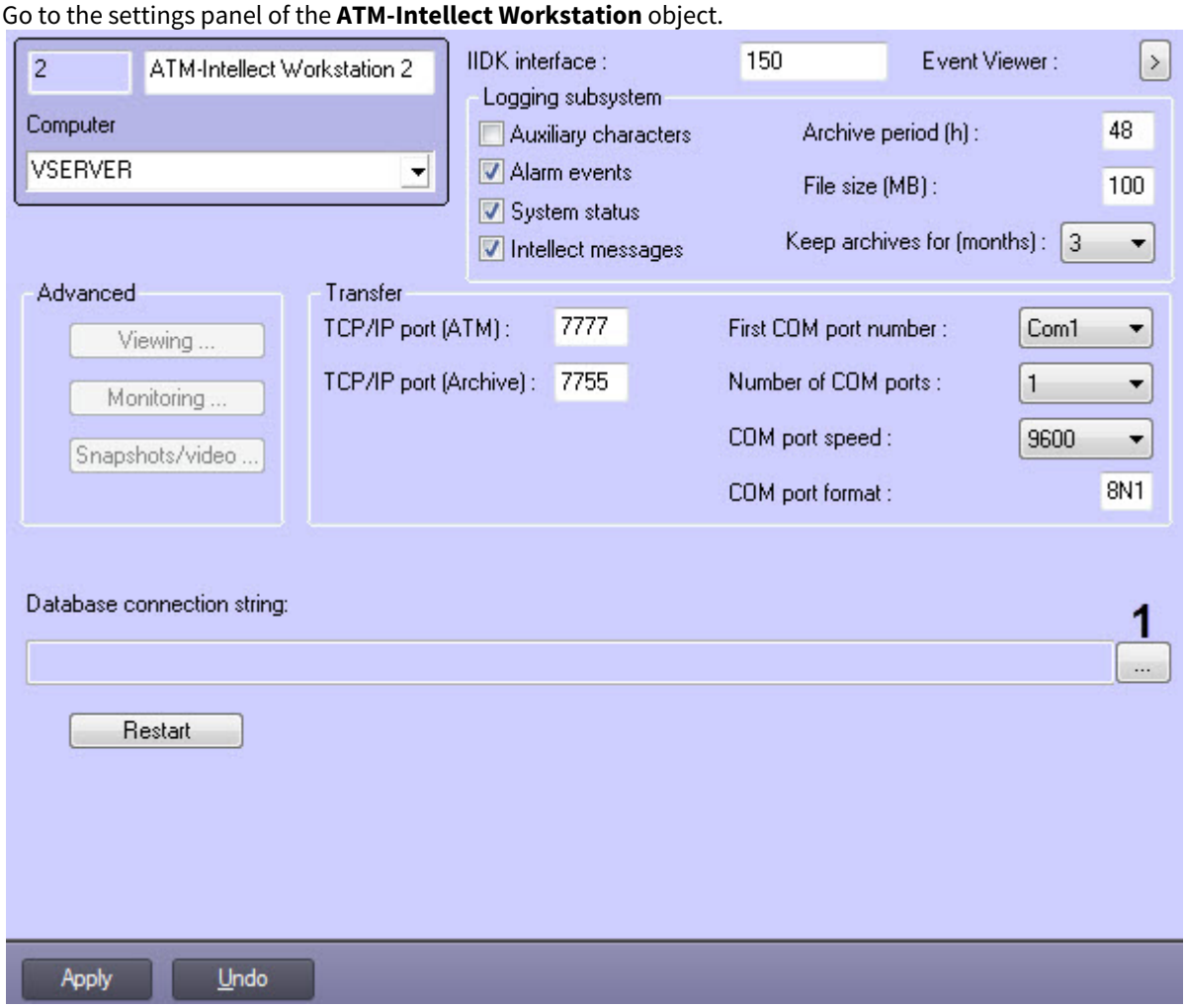
2. In the **Local port** field enter the number of the port in the system for connection of *Additional Workplaces* (2).
3. In the **Remote IP-address** field enter IP-address of the *ATM-Intellect Pro* (3).
4. In the **Remote port** field enter the standard port of the *ATM-Intellect Pro* (4). Do not change the default value in most cases. It is to be changed only if by some reason the system uses intermediate server with port forwarding.
5. Click **Apply** (5).

Data gateway object configuration is completed.

5.10 Configuring the ATM-Intellect Workstation from another server in a distributed configuration

To configure the *ATM-Intellect Workstation* from another server in a distributed configuration, do the following:

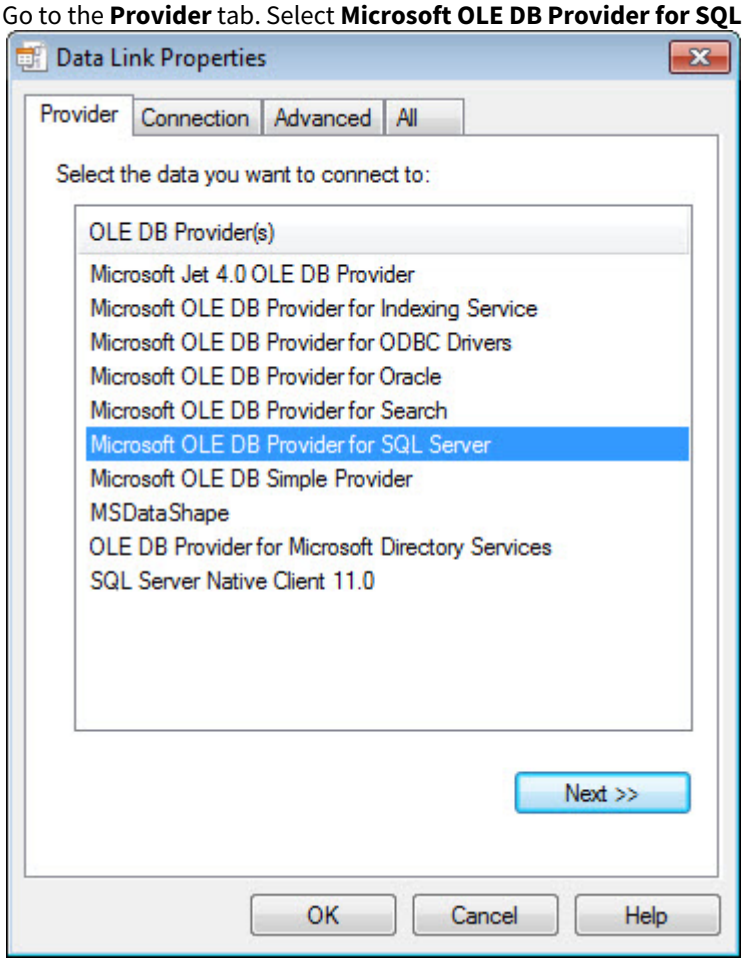
1. Go to the settings panel of the **ATM-Intellect Workstation** object.



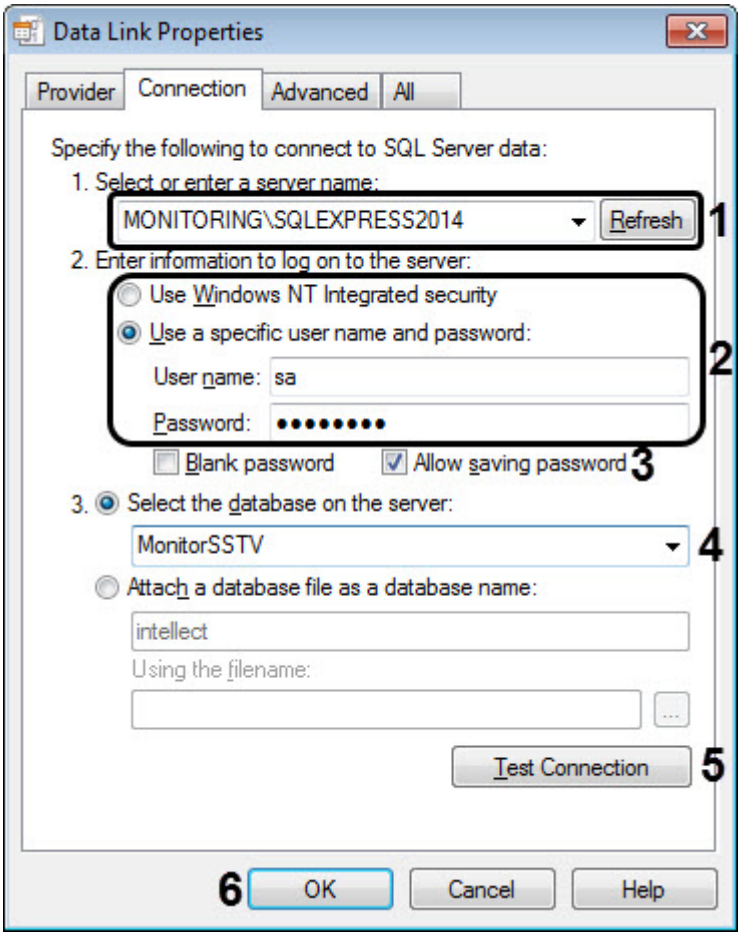
2. Click the ... button (**1**). The **Data Link Properties** window opens. Configure the connection to the remote *ATM-Intellect Workstation* database as follows:

> **Note**
>
> The **Database connection string** parameter is displayed only if the *ATM-Intellect Workstation* is configured from another server in a distributed configuration.

a. Go to the **Provider** tab. Select **Microsoft OLE DB Provider for SQL Server**.

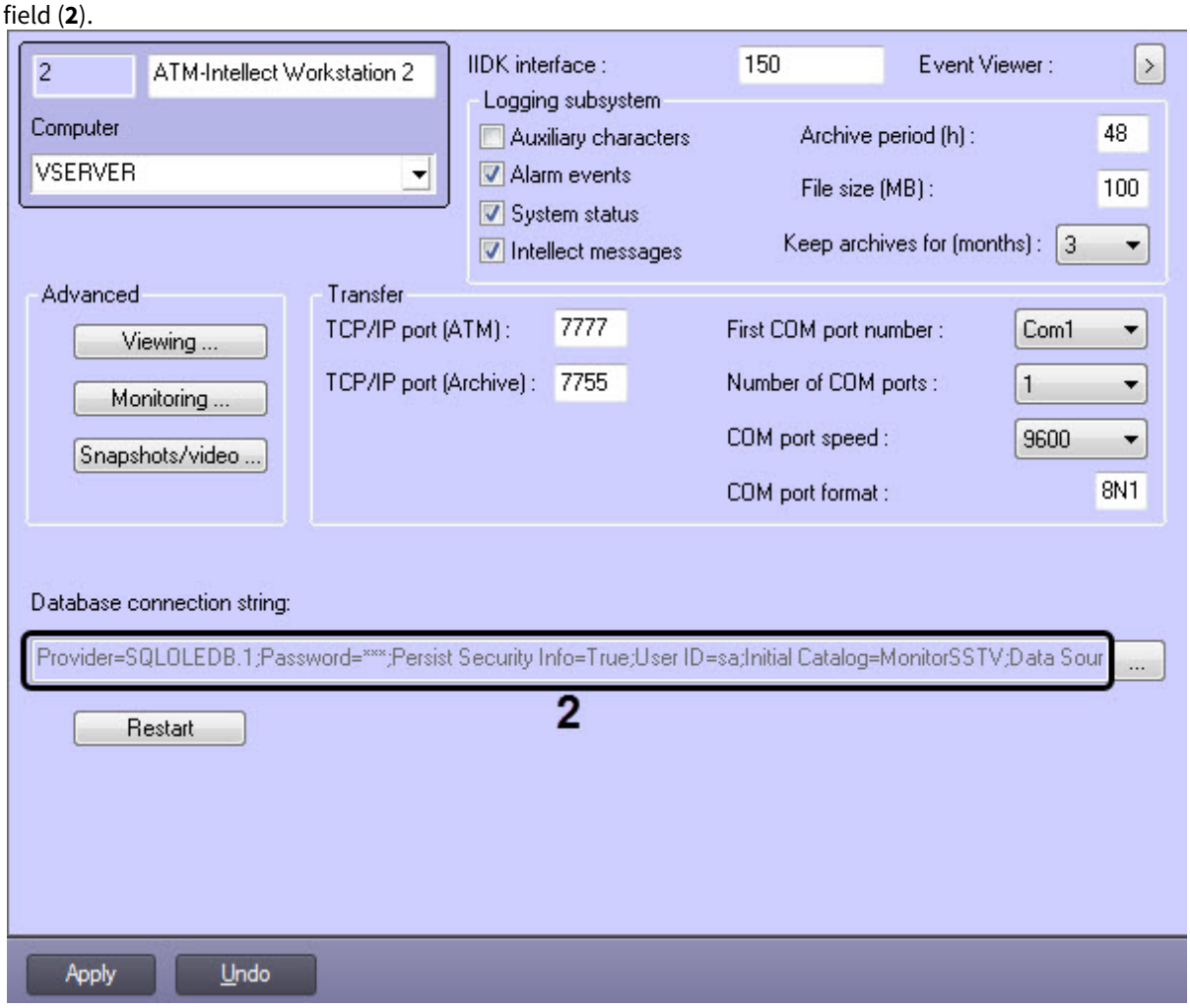


b. Go to the **Connection** tab. From the **1. Select or enter a server name** drop-down list, select the name of the database server that stores the *ATM-Intellect Workstation* database (**1**).



c. Set the **2. Enter information to log on to the server** switch to the **Use a specific user name and password** position and enter the name and password to connect to the MS SQL Server (**2**).
d. Set the **Allow saving password** checkbox (**3**).
e. From the **Select the database on the server** drop-down list, select the name of the *ATM-Intellect Workstation* database (MonitorSSTV by default) (**4**).
f. Click the **Test Connection** button (**5**). If the connection data is correct, a window with the message "Connection check completed" will be displayed.
g. Click **OK** (**6**).

3. The configured string of connection to the *ATM-Intellect Workstation* database will be displayed in the text field (**2**).



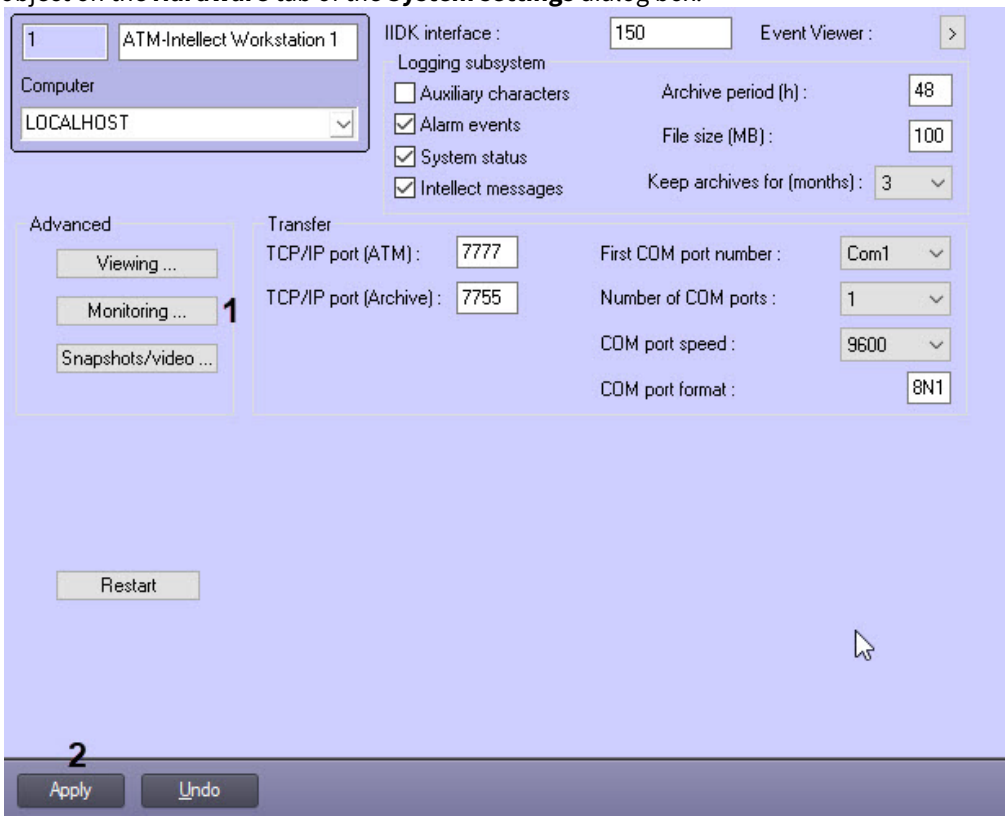
4. As a result, you can start configuring the *ATM-Intellect Workstation* (see ATM-Intellect Workstation configuration).

Configuring the *ATM-Intellect Workstation* from another server in a distributed configuration is now complete.

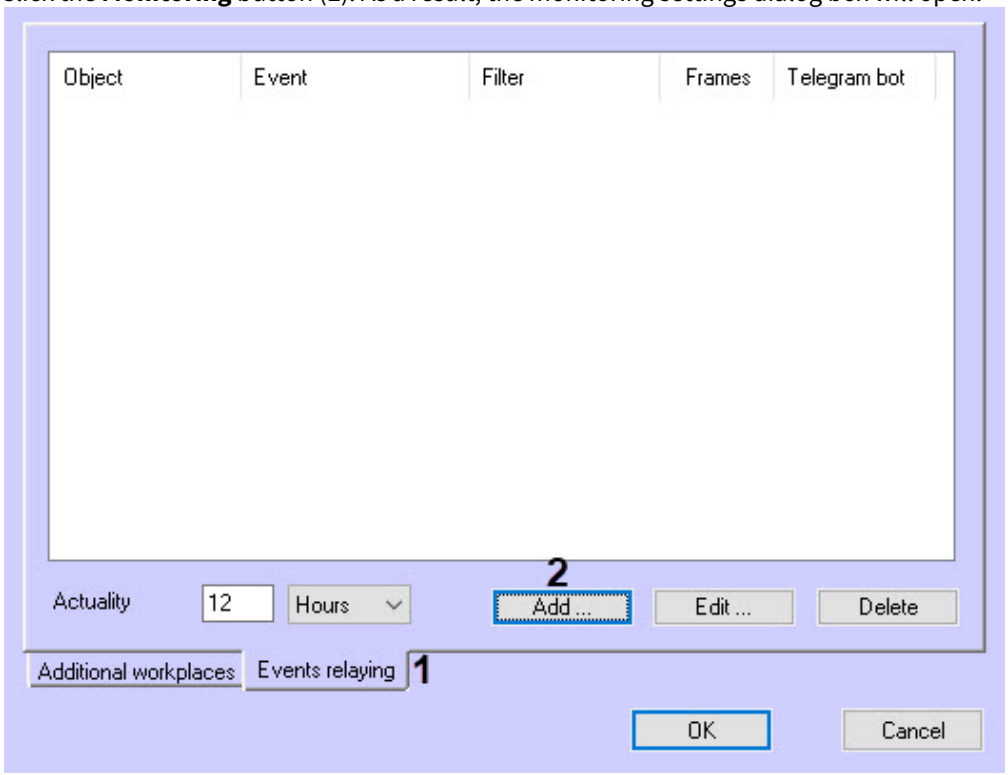
5.11 Sending alarm events via Telegram bot

Configure the sending of alarm events via **Telegram bot** as follows:

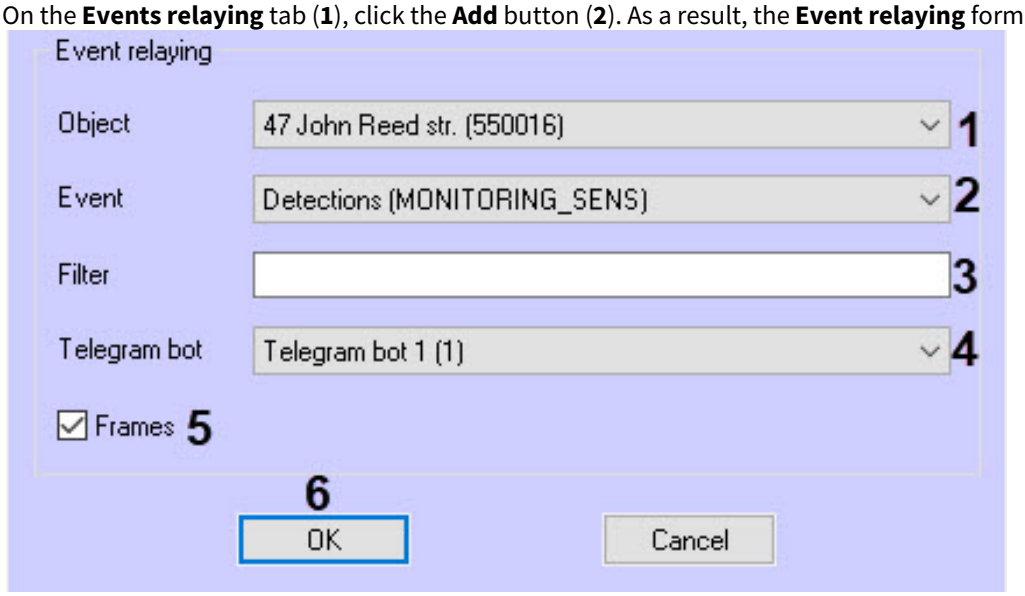
1. Go to the settings panel of the **ATM-Intellect Workstation** object created on the basis of the **Computer** object on the **Hardware** tab of the **System settings** dialog box.



2. Click the **Monitoring** button (**1**). As a result, the monitoring settings dialog box will open:



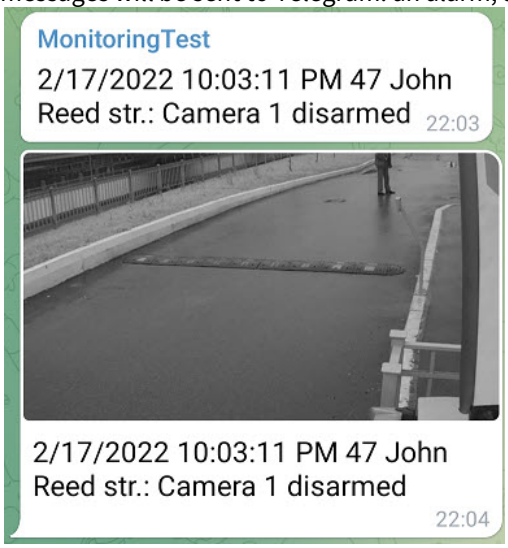
3. On the **Events relaying** tab (**1**), click the **Add** button (**2**). As a result, the **Event relaying** form will open:



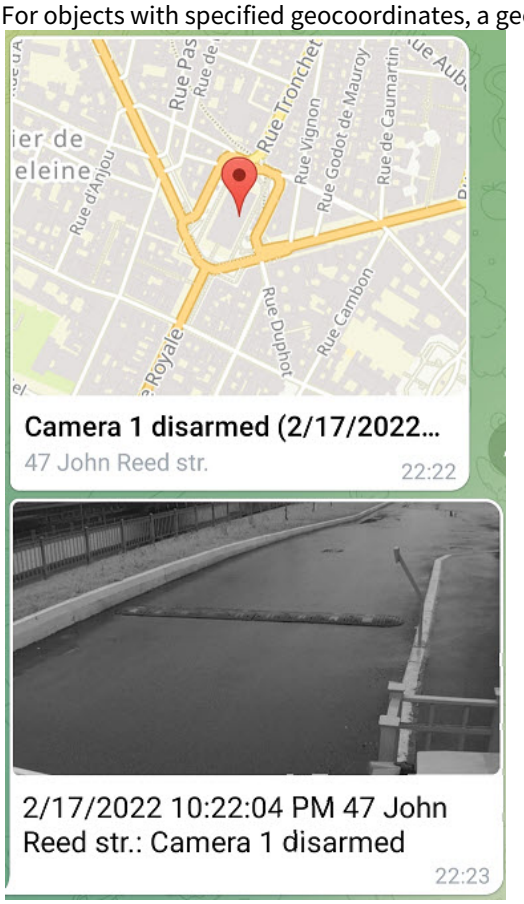
4. From the **Object** drop-down list (**1**), select the object which events should be sent via **Telegram bot**. The field is empty by default; if you leave it blank, events from all objects will be relayed.
5. From the **Event** drop-down list (**2**), select an event to send via **Telegram bot**. The field is empty by default; if you leave it blank, all events of the selected object will be relayed.
6. The **Filter** field (**3**) is not used for **ATM-Intellect**.
7. From the **Telegram bot** drop-down list (**4**), select the bot via which the events will be relayed.

> **Note**
>
> The **Telegram bot** object should be created and configured beforehand (see Setting up messaging via Telegram bot).

8. Set the **Frames** checkbox (**5**) to relay the jpeg frame linked to the event. When the checkbox is set, 2 messages will be sent to Telegram: an alarm, and then a frame:

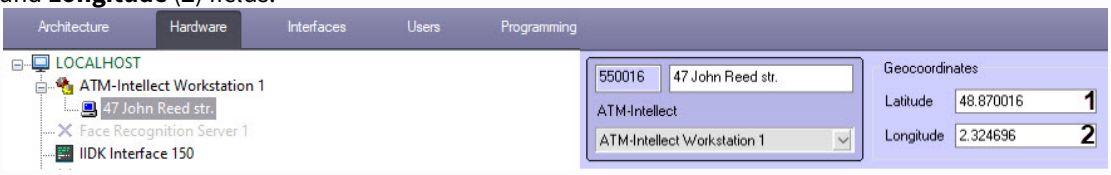


For objects with specified geocoordinates, a geo-link will be sent in the message:

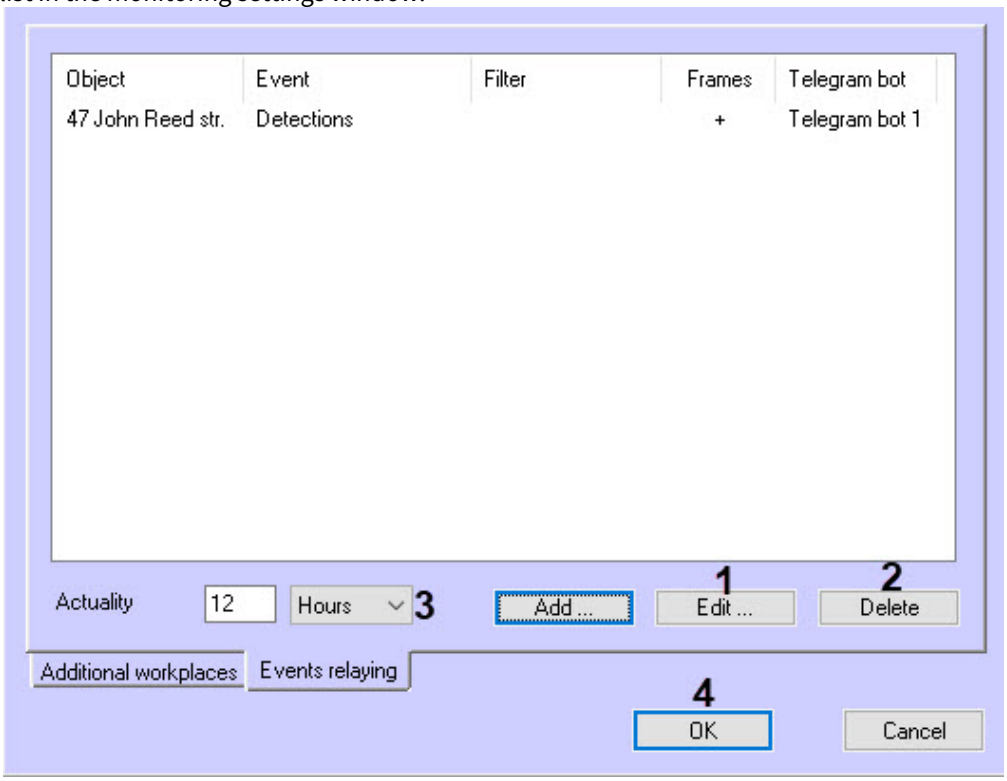


Note

To specify the **Geocoordinates**, go to the settings panel of the **Surveillance Object** (see Creating ATM-Intellect Workstation objects in the hardware tree) and enter the values in the **Latitude** (**1**) and **Longitude** (**2**) fields:



9. Click the **OK** button (**6**). As a result, the **Event relaying** form will be closed and a new entry will appear in the list in the monitoring settings window:



10. In the monitoring settings window, click the **Edit** button (**1**) to change an existing entry, or the **Delete** button (**2**) to remove an entry from the list.
11. Fill in the **Actuality** field (**3**). To do this, enter a value in the numeric field and select **Hours** or **Minutes** from the drop-down list of measurement units. The default value is 12 hours. This setting is used to filter out non-relevant alarms. For example, **ATM-Intellect Pro** was disconnected for several days. After the connection is established, the old alarms that occurred during this time will be sent. To prevent old alarms from being relayed to Telegram, you can set their actuality in hours or minutes.
12. Click the **OK** button (**4**). As a result, the monitoring settings window will be closed and you will return to the settings panel of the **ATM-Intellect Workstation** object.
13. To save the changes, click the **Apply** button (**2**) on the settings panel of the **ATM-Intellect Workstation** object.

Configuring the sending of alarm messages via the **Telegram bot** is now complete.

6 ATM-Intellect Pro configuration

ATM-Intellect Pro configuration is performed in the **System settings** dialog box. Operation in it is described in the Intellect Software Package. Administrator's Guide..

6.1 Creating necessary ATM-Intellect Pro objects

Attention!

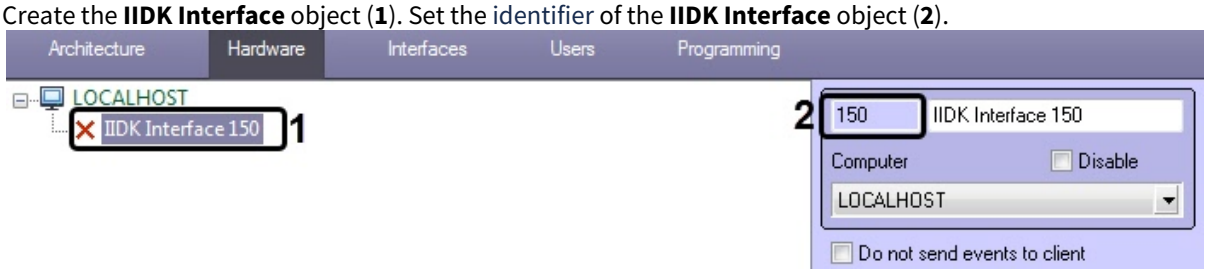
Every time when *ATM-Intellect Pro* starts, it checks for a **Backup** folder at the root of the disk on which *Intellect* software is installed. This folder is created if it does not exist already. It is forbidden to delete this folder.

Note

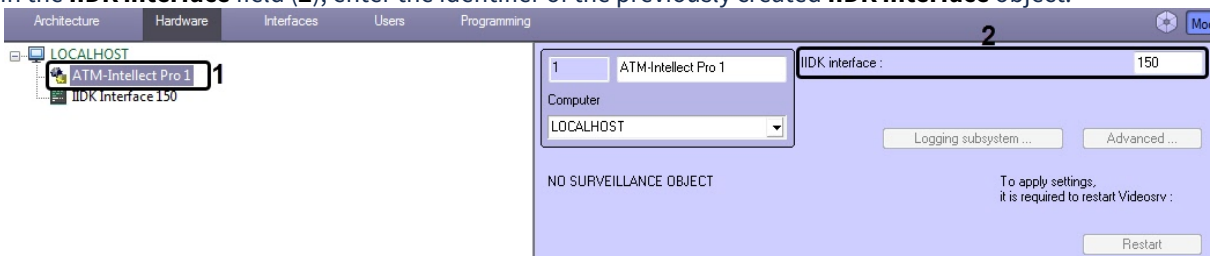
ATM-Intellect components (*ATM-Intellect Pro* and *ATM-Intellect Workstation*) can work in a distributed configuration, while all the listed objects see where each of them is installed and can be configured.

To create necessary *ATM-Intellect Pro* objects, do the following:

1. Go to the **Hardware** tab of the **System settings** dialog box.
2. Create the **IIDK Interface** object (**1**). Set the identifier of the **IIDK Interface** object (**2**).



3. Create the **ATM-Intellect Pro** object based on the **Computer** object (**1**). On the settings panel of this object, in the **IIDK interface** field (**2**), enter the identifier of the previously created **IIDK Interface** object.



4. Create the required number of child **Surveillance Object** objects on the basis of the **ATM-Intellect Pro** object.

> **Note**
>
> The **Surveillance Object** object name cannot contain the following characters: underscore "_", backslash "\", angle brackets "**>**" and "**<**", single quote "'".

You also need to create **Video Capture Device**, **Camera** and **Sensor** objects corresponding to the connected equipment. Creation and configuration of these objects is described in the INTELLECT Software Package. Installing and configuring security system components.

Objects creation is completed.

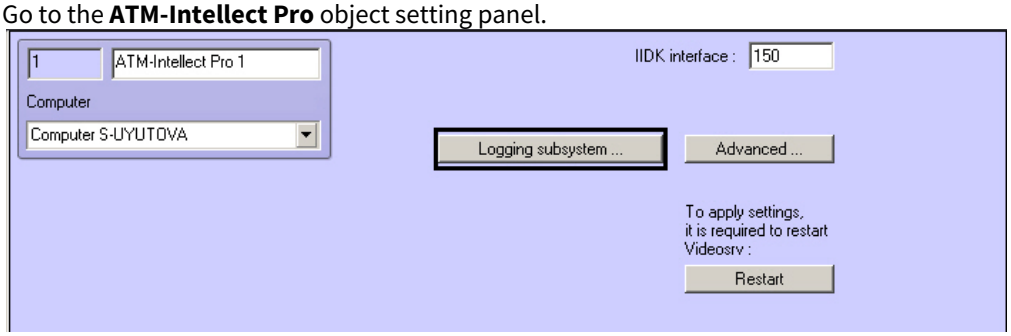
6.2 Configuration of the ATM-Intellect Pro object

6.2.1 Setting up ATM-Intellect Pro logging subsystem

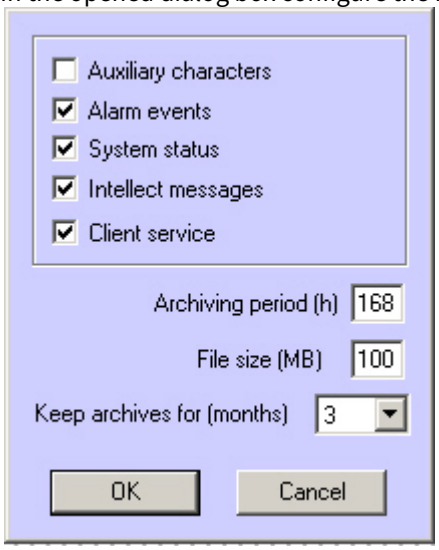
The logging subsystem enables configuration of the logging level of *ATM-Intellect Pro*.

To configure the logging subsystem proceed as follows:

1. Go to the **ATM-Intellect Pro** object setting panel.



2. Click the **Logging subsystem...** button.
3. In the opened dialog box configure the following parameters:



   a. **Auxiliary characters**. Set the checkbox to log auxiliary characters on the transport level.
   b. **Alarm events**. Set the checkbox to log alarm events (activation of vibration sensor, temperature sensor, or forceable lock opening).
   c. **System status**. Set the checkbox to log events related to the system status.

d. **Intellect messages**. Set the checkbox to logs system health messages from Intellect. The information is saved in a folder inside the software installation folder, in the file video.log.
e. **Client service**. Set the checkbox to log the performance of financial transactions on the ATM.
f. **Archiving period (h).** Allows archiving the log file over the given time period (in hours). Archives are saved in the DATA subfolder, in the following format: namelog_yymmddhhmmss.gz, where
    i. namelog is the name of the archived log file;
    ii. yy is the year of archive creation;
    iii. mm is the month of archive creation;
    iv. dd is the day of archive creation;
    v. hh is the hour of archive creation;
    vi. mm is the minute of archive creation;
    vii. ss is the second of archive creation.
g. **File size (MB).** Sets the size of the log file (in megabytes) after which the file will be archived. This setting overrides the value in the **Archiving period (h)** field.
h. **Keep archives for (months)**. Sets the term of storage for the archived log file, in months (from 1 to 24). After this term expires, the archives are deleted.

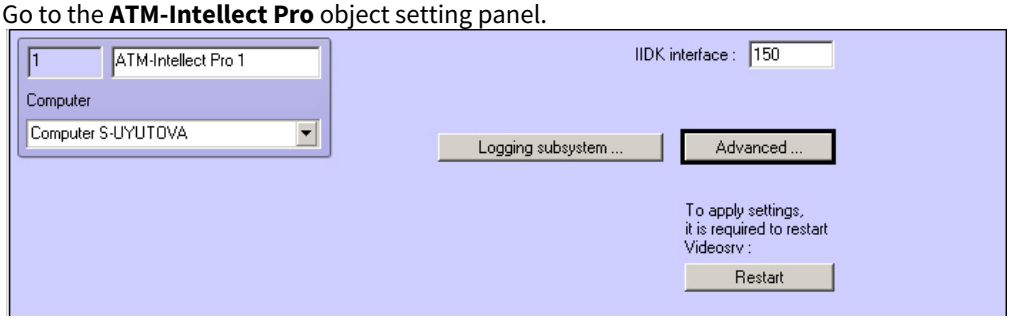
The main log file is stored in the folder in which the software was installed, in the file vsrvYYMMDD.log, where YY is the year, MM is the month and DD is the day.

Setting up logging subsystem is completed.

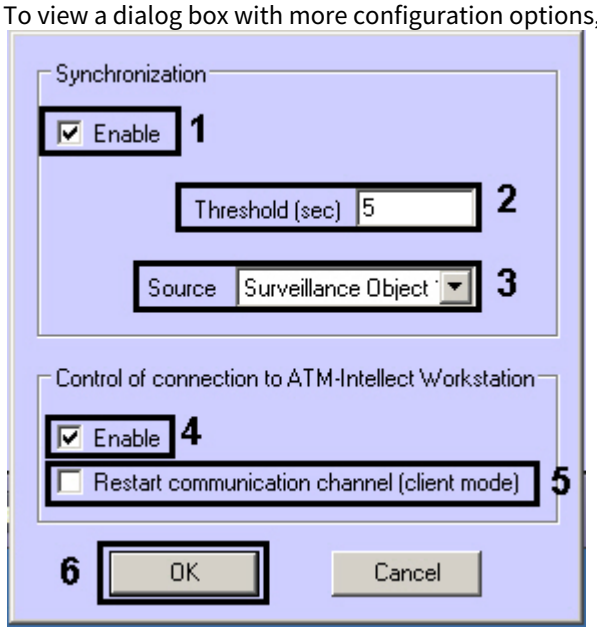
6.2.2 Configuring time synchronization and control of connection

To configure time synchronization and control of connection with *ATM-Intellect Workstation* proceed as follows:

1. Go to the **ATM-Intellect Pro** object setting panel.



2. To view a dialog box with more configuration options, click the **Advanced ...** button.



3. Configure synchronization in the following way:
    a. Set the **Enable** checkbox (1) if it's necessary for *ATM Intellect Pro* to synchronize its local time with the time on the specified source (ATM, self-service terminal, or any other protected object).
    b. Fill in the **Threshold (sec)** field if in case the local time in *ATM Intellect Pro* varies from the time on the source by more than the amount indicated, the time to be synchronized (2). ATMs made by Smart Card Service can send commands to *ATM Intellect Pro* to force synchronization (in which case the threshold value is ignored).
    c. If *ATM Intellect Pro* is used for multiple objects, select in the **Source** drop-down list which **Surveillance Object** will serve as the synchronization source (3).
4. Configure control of connection to *ATM-Intellect Workstation*:
    a. Set the **Enable** checkbox if it is necessary for *ATM Intellect Pro* to ping *ATM Intellect Workstation* i.e. to include a command inside a technical status packet to confirm receipt of the packet (4). If *ATM Intellect Workstation* does not respond to four test messages in a row, the software decides that there are problems in the data link between *ATM Intellect Pro* and *ATM Intellect Workstation*. The actions that the software takes based on this decision depend on the **Restart communication channel (client mode)** setting.
    b. Set the **Restart communication channel (client mode)** checkbox (5) if when *ATM Intellect Workstation* does not respond to four technical status packets in a row, the problematic data link are to be restarted, unless this task is reassigned to other software (such as the module IP2X25.exe).
5. Press **OK** (6).
6. Click **Restart** button on the **ATM Intellect Pro** settings panel to apply the settings.

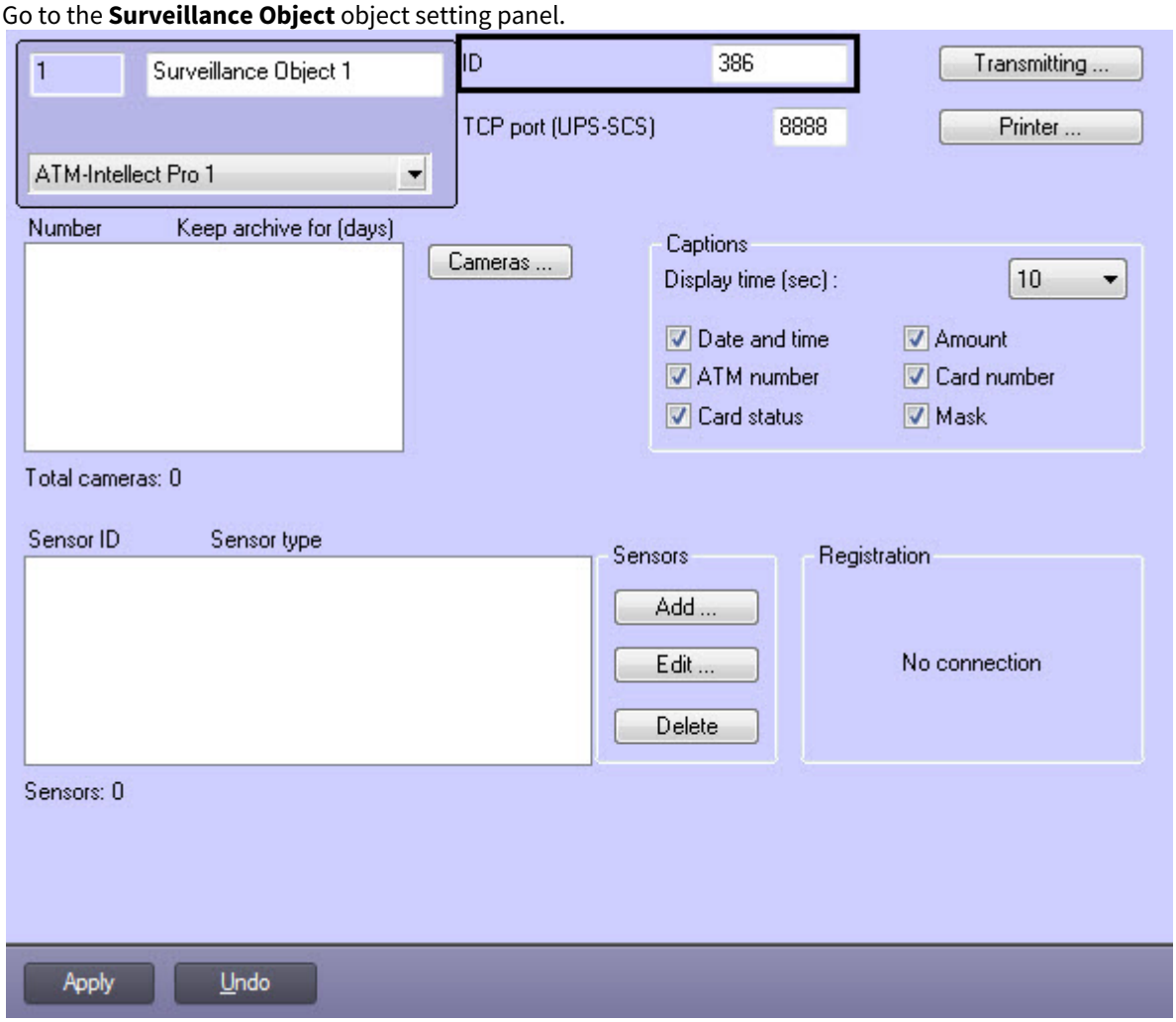
Configuring time synchronization and control of connection is completed.

6.3 Configuration of the Surveillance Object object

6.3.1 Setting Surveillance Object ID

To set the Surveillance Object ID, do the following:

1. Go to the **Surveillance Object** object setting panel.



2. In the **ID** field enter the unique ID number of the object on which *ATM Intellect Pro* is installed. May contain 1 to 9 characters.

> **Note**
>
> The ID cannot contain the following characters: space " ", underscore "_", backslash "\" and single quote "'".

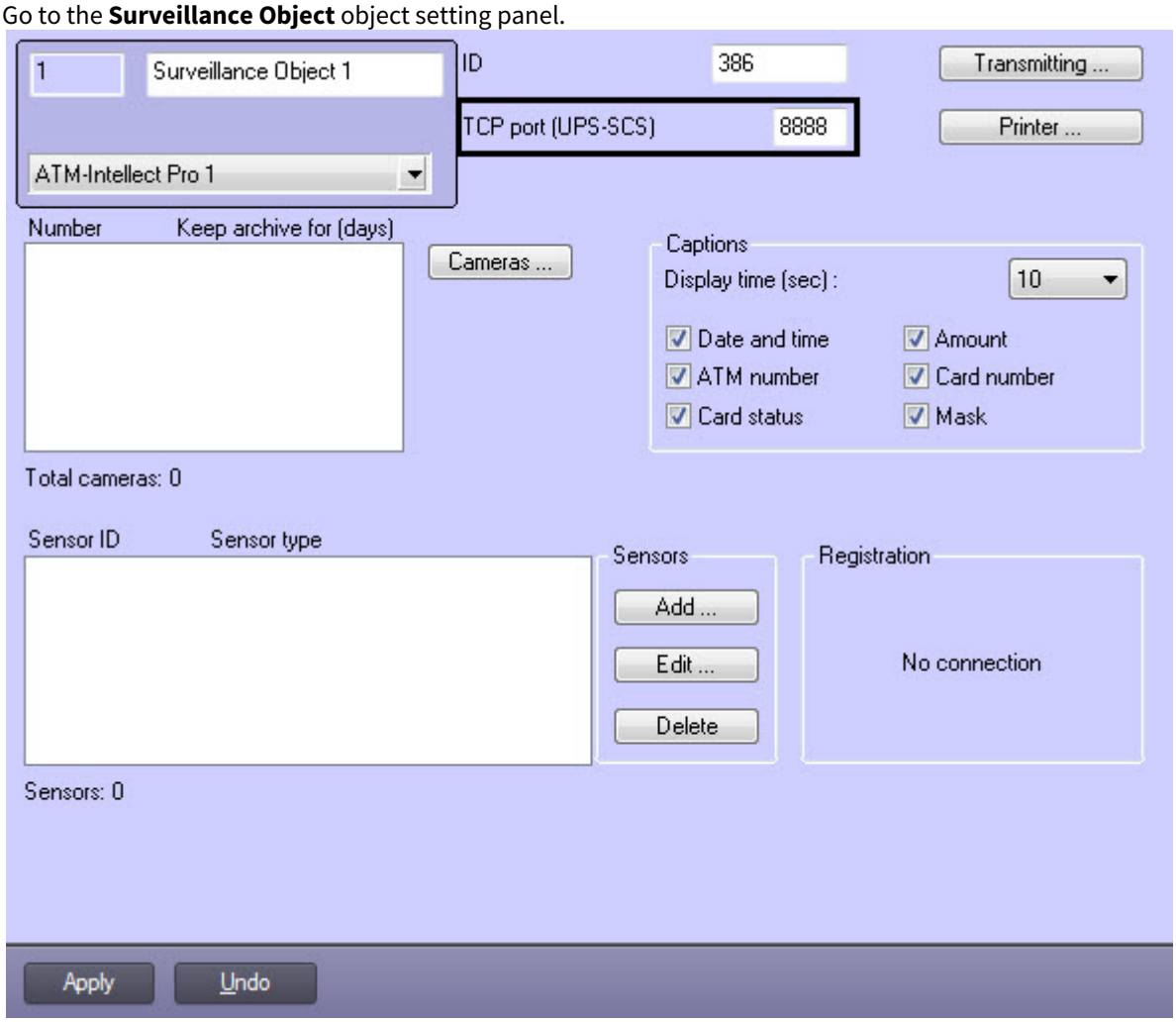
3. Click **Apply** to save changes.

Setting Surveillance Object ID is completed.

6.3.2 Setting the port used to listen for messages from the UPS and Smart Card Service ATMs

To set the port used to listen for messages from the UPS and “Smart Card Service” ATMs do the following:

1. Go to the **Surveillance Object** object setting panel.



2. In the **TCP port (UPS-SCS)** field enter the port used to listen for messages from the UPS and ATMs made by Smart Card Service.
3. Click **Apply** to save changes.

Setting the port used to listen for messages from the UPS and “Smart Card Service” ATM is completed.

6.3.3 Setting up a connection between ATM Intellect Pro and ATM Intellect Workstation

Note.

If the network where *ATM-Intellect* components operate uses a firewall protection and access control system, then VPipe complex should be used to pass-through packages exchange between *ATM-Intellect Pro* and *ATM-Intellect Workstation* - see the Features of operation within the firewall protection and access control systems section.

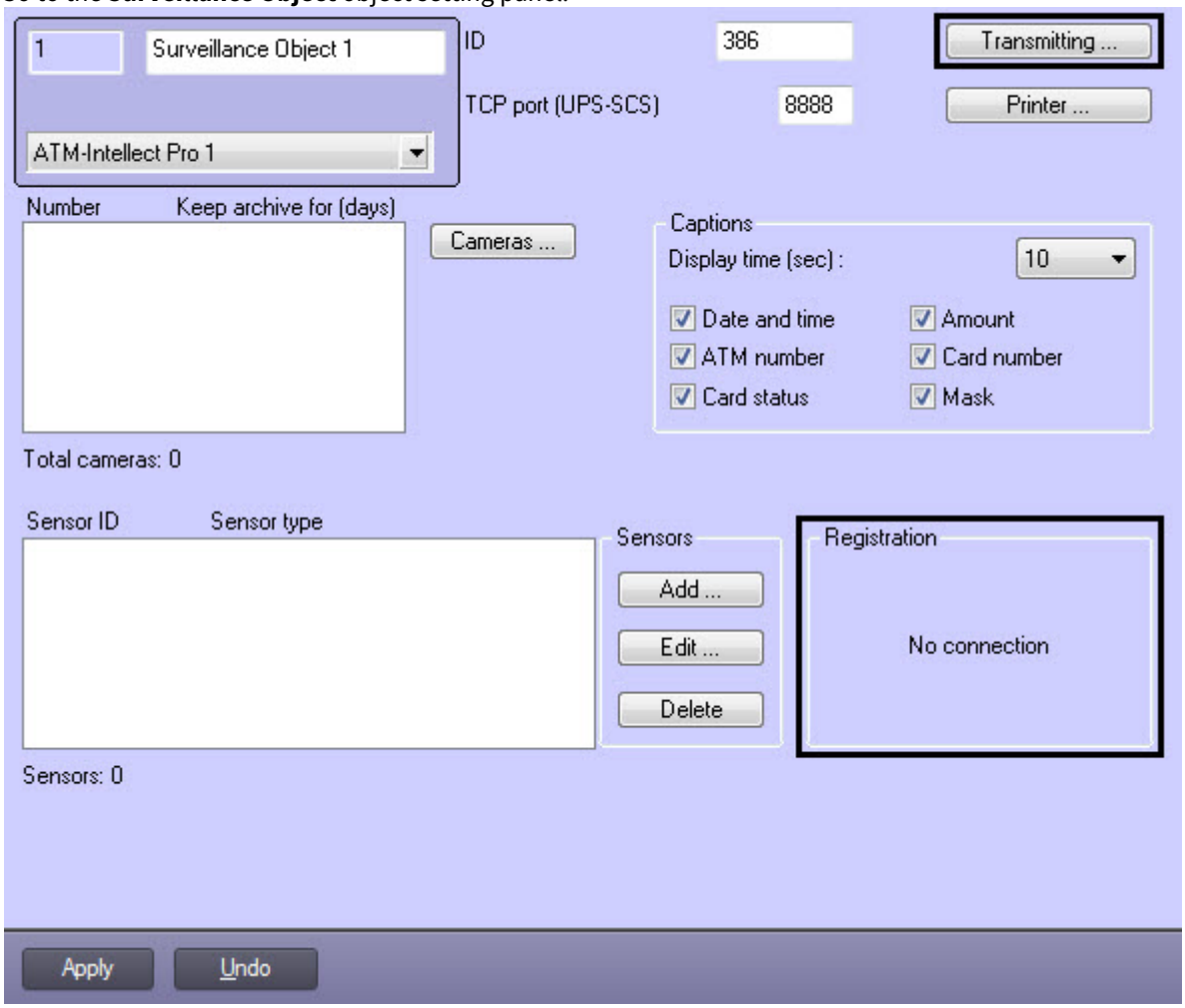
Note

Before you configure the interaction between the *ATM-Intellect Pro* and the *ATM-Intellect Workstation*, it is recommended to make sure that the name and identifier of the **Surveillance Object** object being configured are specified correctly, since upon the successful connection to the *ATM-Intellect Workstation*, if an object with this identifier is absent, the **Surveillance Object** object with the name and identifier of the object being configured will be automatically created on it. If the interaction between the *ATM-Intellect Pro* and the *ATM-Intellect Workstation* is configured successfully, the **Registration completed** message will be displayed in the **Registration** area. This means that the *ATM-Intellect Pro* can transmit alarms and data on the technical state of this Surveillance Object to the *ATM-Intellect Workstation*.
If the **Surveillance Object** object could not be created on the *ATM-Intellect Workstation*, the reason will be indicated in the **Registration** area, for example:

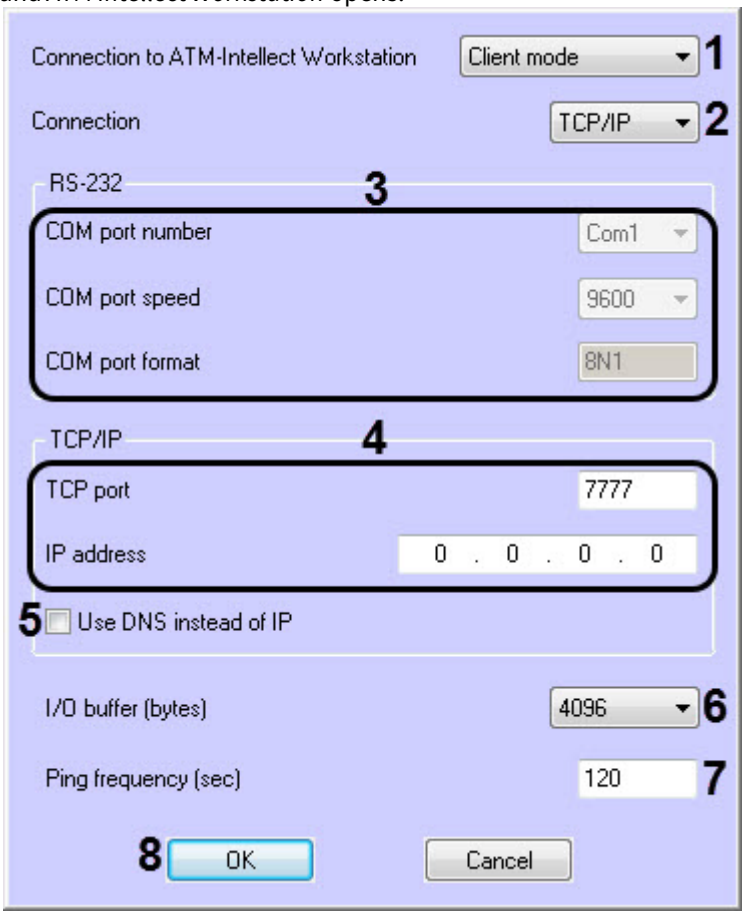
- **The base software is not loaded**;
- **Change the object name** (an object with the same name already exists on the *ATM-Intellect Workstation*);
- An object on the *ATM-Intellect Workstation* will also not be created if the user does not have rights to administer the *ATM-Intellect Workstation* object (see Rights administration).

Setting up a connection between *ATM-Intellect Pro* and *ATM-Intellect Workstation* is performed in the following way:

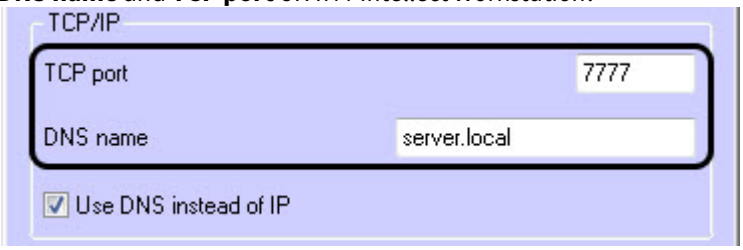
1. Go to the **Surveillance Object** object setting panel.



2. Click the **Transmitting ...** button. A dialog box for selecting the interface method between *ATM Intellect Pro* and *ATM Intellect Workstation* opens.



3. From the **Connection to ATM-Intellect Workstation** drop-down list select one of the two available methods for connecting *ATM-Intellect Pro* to *ATM-Intellect Workstation* will be used: **Server mode** or **Client mode** (**1**).
4. From the **Connection** drop-down list, select the value for the transport level. Possible values - **TCP/IP** or **RS232** (**2**).
5. If **RS232** connection type is selected, then specify the **COM port number, COM port speed**, and **COM port format** parameters (**3**).
6. If **TCP/IP** connection type is selected, then indicate the parameters for connection to *ATM-Intellect Workstation* in this dialog box:
    a. If an IP-address is used for connection, ensure the **Use DNS instead of IP** checkbox is not set (**5**) and indicate the **IP address** and **TCP port** of *ATM-Intellect Workstation* (**4**).
    b. If a domain name is used for connection, set the **Use DNS instead of IP** checkbox (**5**) and indicate the **DNS name** and **TCP port** of *ATM-Intellect Workstation*.



Note.

> The use of domain name for connection allows to avoid *ATM-Intellect Pro* resetting in case of *ATM-Intellect Workstation* IP-address change.

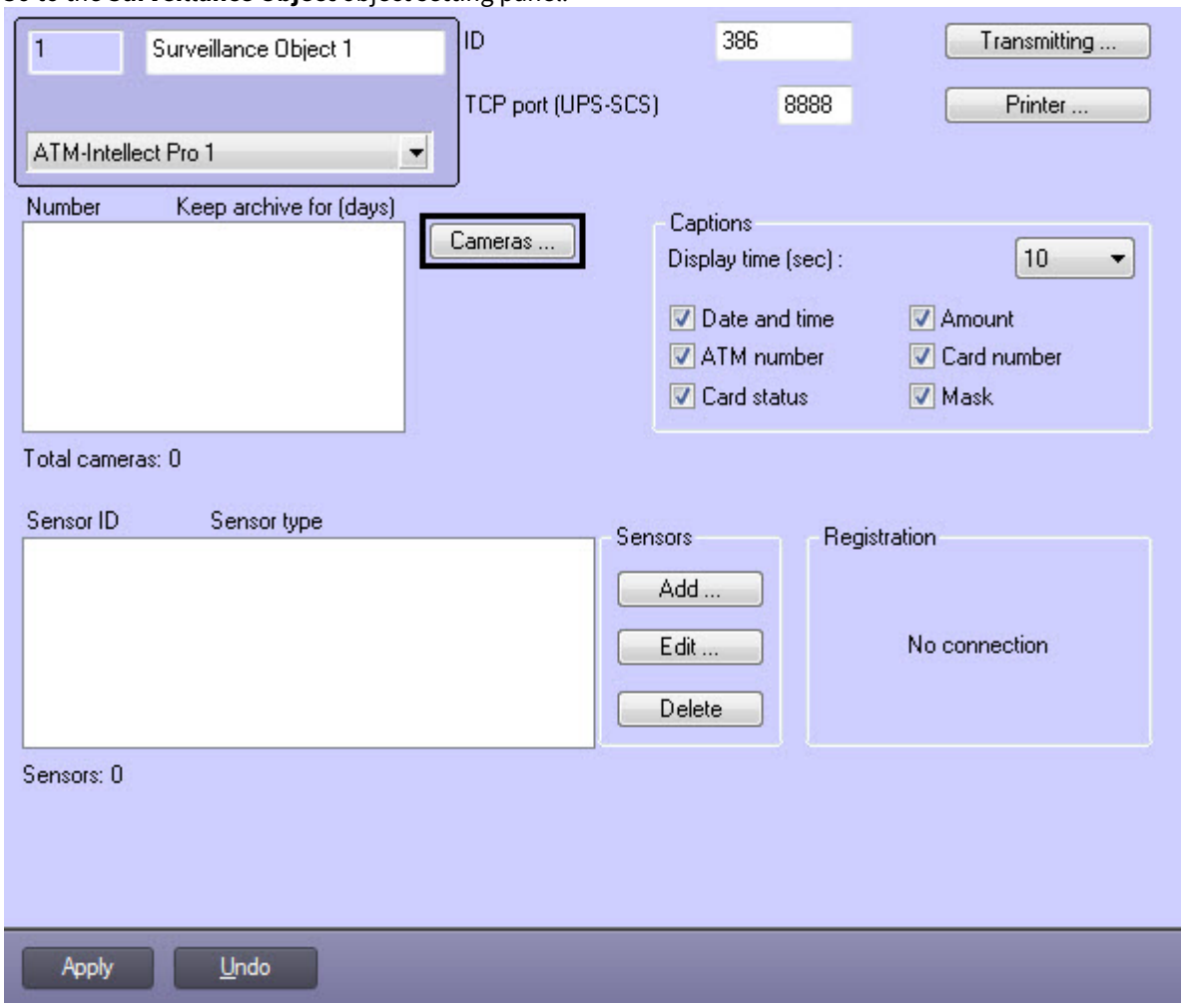
7. The sending of frames and clips on *ATM-Intellect Workstation* is performed by packets. The **I/O buffer (bytes)** field sets the packet size (**6**). For maximum transmission speed, use 4096. It is recommended to use value 800 for bad connection links, for example when the GSM-modem is in use.
8. If **Client mode** is selected, in the **Ping frequency (sec)** field (**7**) enter the frequency at which *ATM-Intellect Pro* sends ping test messages about its technical status to *ATM-Intellect Workstation*. Minimal possible value is 10 sec. This value does not affect short-term alarms. Messages about short-term alarms are transmitted to *ATM-Intellect Workstation* immediately after corresponding sensors triggering. Some long-term alarms can also be an exception: for more info, see the document ATM-Intellect. Operator's Guide, section Appendix 1. Data update periods summary
9. Click **OK** (**8**).
10. Click **Apply** to save the changes.

Setting up a connection between *ATM-Intellect Pro* and *ATM-Intellect Workstation* is completed.

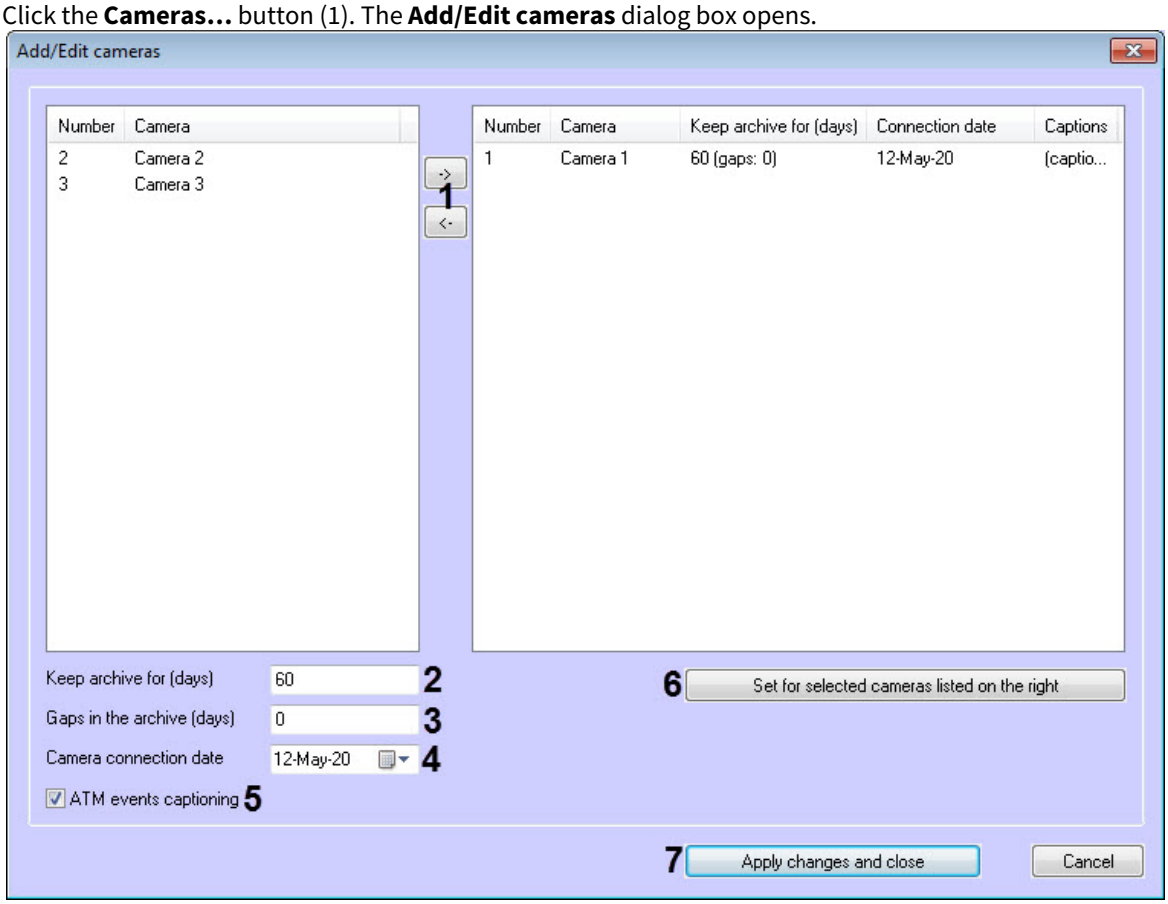
6.3.4 Configuring video cameras list

To configure list of used video cameras do the following:

1. Go to the **Surveillance Object** object setting panel.



2. Click the **Cameras...** button (1). The **Add/Edit cameras** dialog box opens.



3. Move cameras from the list on the left to the list on the right with -> and <- buttons (**1**).
4. Select cameras in the list on the right.
5. In the **Keep archive for (days)** field, specify the storage time of the video archive in days (**2**).
6. In the **Gaps in the archive (days)** field, specify the number of days on which the video archive is not recorded, because non-working days are taken into account in the working schedule (**3**).
7. In the **Camera connection date** field, specify the date the camera was connected to the system (**4**).
8. If titles displaying is required, set the **ATM events captioning** checkbox (**5**).
9. Click the **Set for selected cameras listed on the right** button (**6**).
10. Click **Apply changes and close** button (**7**). The selected cameras will be added to the list on the configuration panel of the **Surveillance Object** object.
11. Click the **Apply** button on the configuration panel of the **Surveillance Object** object.

Note.

Video camera and Captioner ID numbers must be whole integers.

Note

Cameras will be automatically removed from the list in the following cases:

- The **Camera** object or its parent **Video Capture Device** object is removed from the *Intellect* hardware list;
- The **Camera** object or its parent **Video Capture Device** object is set to **Disabled** mode;

- In a distributed configuration, the **Camera** object is moved to a **Video Capture Device** object located on another computer;
- In a distributed configuration, the **Video Capture Device** object, which the **Camera** object belongs to, is moved to another computer.

Configuring cameras list is completed.

6.3.5 Setting up sensors

A system can include four fixed sensor types (vibration sensor, lock sensor, temperature sensor, extra sensor) as well as 12 extension sensors.

Note.

Before configuring the sensors list, create and configure all required **Sensor** objects in the Intellect software. Connecting, creating and configuring of sensors are described in the document Installing and configuring security system components guide.

Attention!

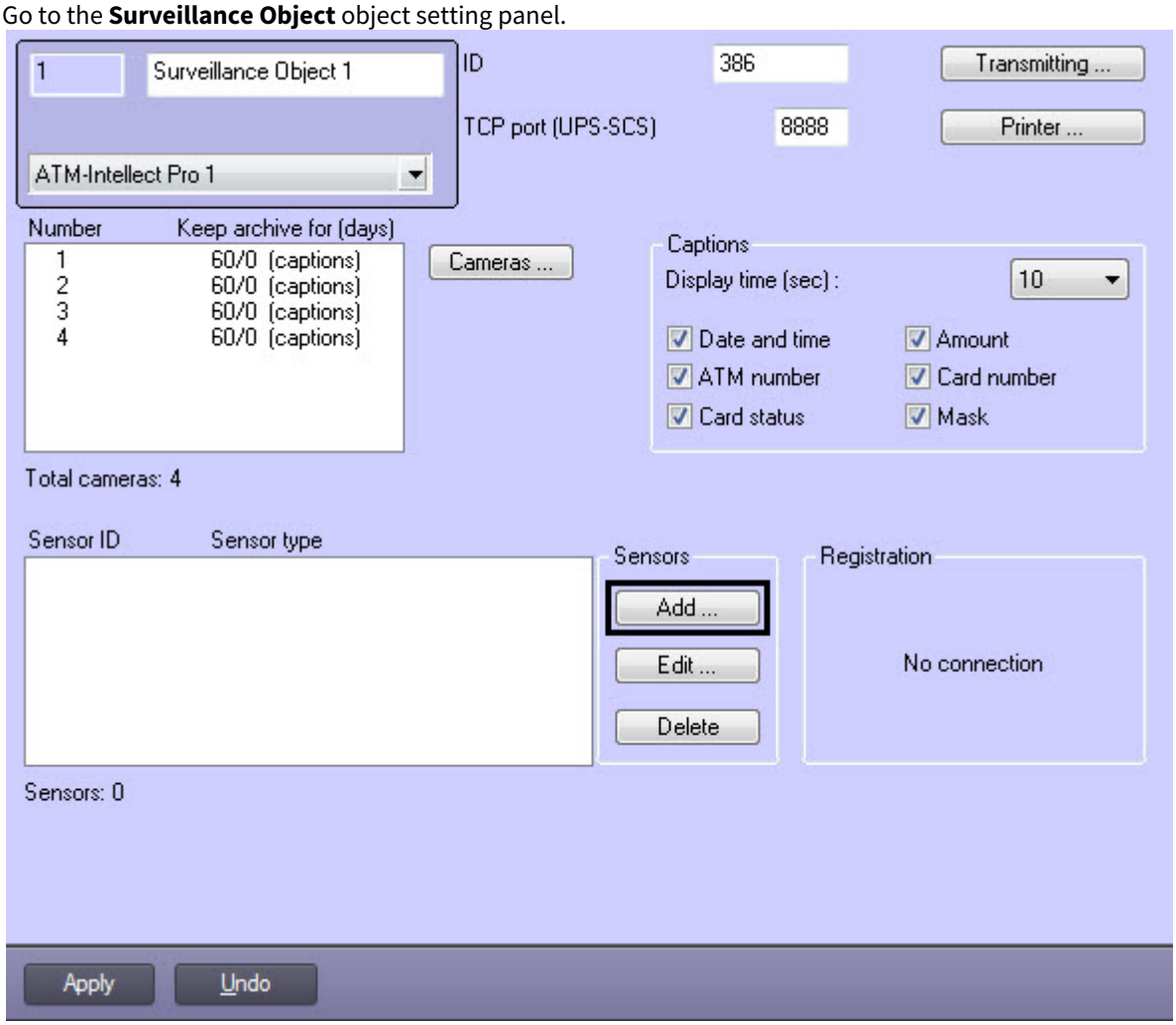
The ID numbers for these sensors must be whole integers.

Note

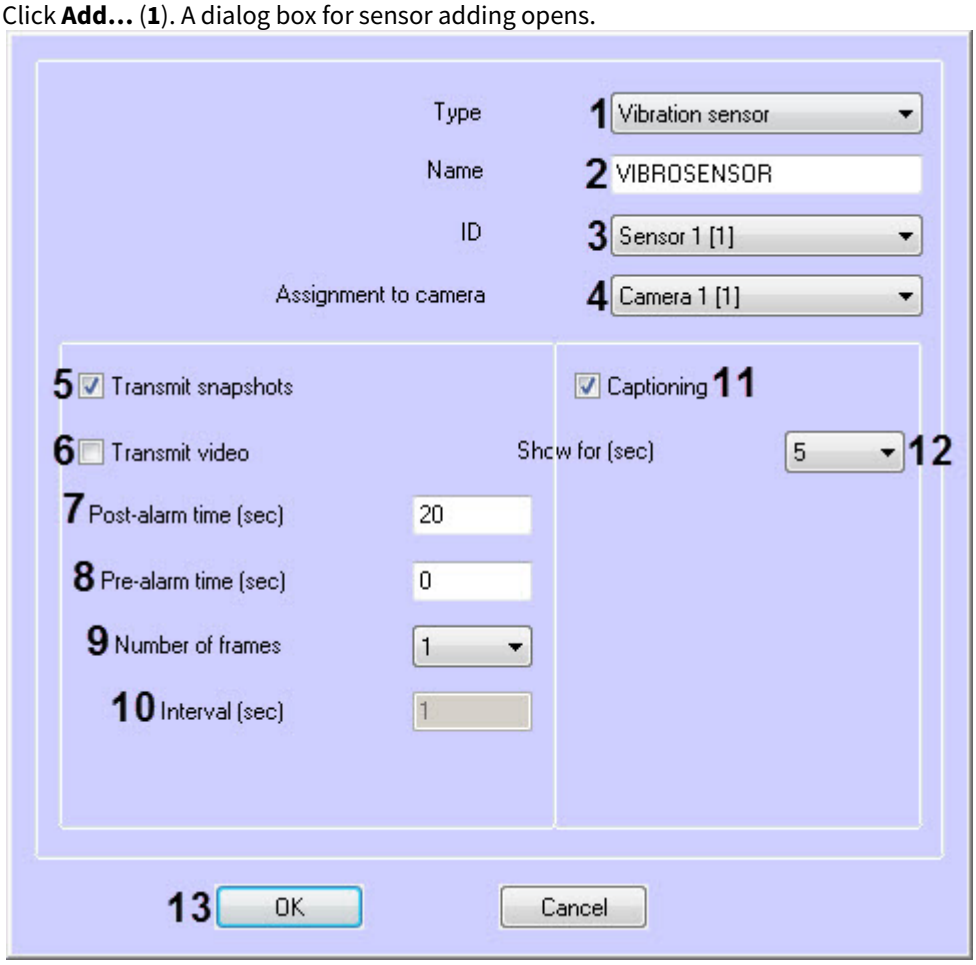
If video data (i.e. clips or snapshots) are attached to the alarms, it is necessary to create a script for stopping recording on camera (see Example of script to suspend recording on camera).

To configure the list of used sensors, do the following:

1. Go to the **Surveillance Object** object setting panel.



2. Click **Add...** (**1**). A dialog box for sensor adding opens.



3. In the **Type** drop-down list select a type of sensor from the 16 types described previously (**1**).
4. In the **Name** field enter the text which will be sent to *ATM Intellect Workstation* together with an alarm message (**2**). This text will be overlaid on the video camera image during the subtitling process.
5. In the **ID** drop-down list select the **Sensor** object that has been previously created in *Intellect* (**3**).
6. In the **Attach to camera** drop-down list select a video camera from which the video frames or video clips should be requested (**4**).
7. Set the **Transmit snapshots** checkbox to send video frames to *ATM Intellect Workstation* when the sensor is activated, select this check box (**5**).
8. Set the **Transmit video** checkbox to send video to *ATM Intellect Workstation* when the sensor is activated, select this check box (**6**).
9. In the **Post-alarm time (sec)** field enter amount of delay between when a sensor is activated and when the video archive is triggered, in seconds (**7**). The default value is 20 seconds.
10. In the **Pre-alarm time (sec)** enter the duration of time for which you want to include "pre-recorded" imagery from before the sensor was activated, in seconds (**8**). This option allows viewing frames or video captured a short time before the alarm event, in addition to those captured at the start of the event itself.
11. If the **Transmit snapshots** check box was selected:
    a. In the **Number of frames** drop-down list select the number of video fragment frames to send when a sensor is activated (**9**).
    b. In the **Interval (sec)** field enter the interval, in seconds, between video frames if more than one frame is being transmitted (**10**). This means that when an alarm occurs, *ATM Intellect Workstation* can receive a whole series of frames that are dispersed over time, which increases the likelihood of getting a high-quality still-image frame.

Attention!

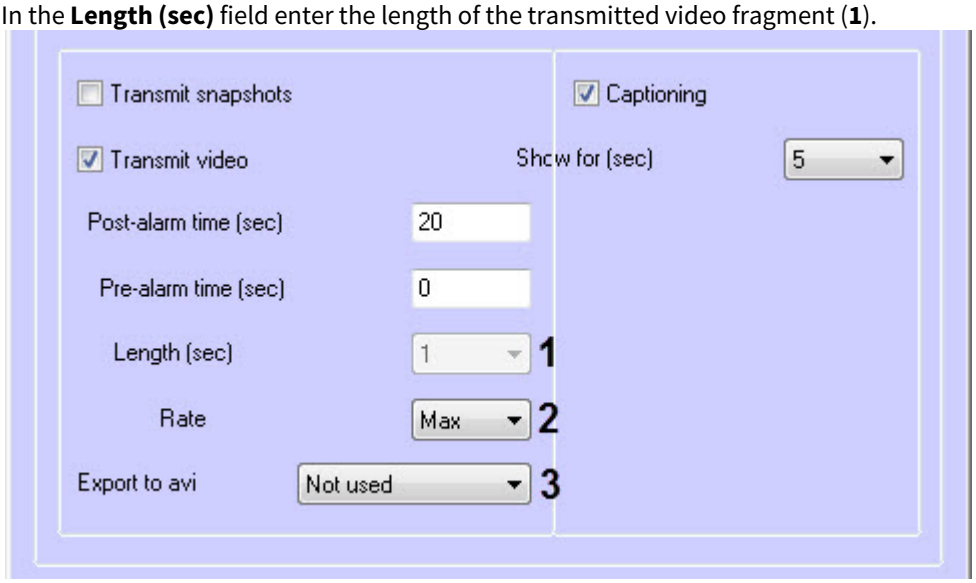
For snapshots transmitting more, as well as for video clips transmitting, it is necessary to create a script for stopping video recording on camera (see Example of script to suspend recording on camera)

Attention!

When configuring the **Pre-alarm time**, **Number of frames**, and **Interval** settings, you are advised to keep in mind the configuration of the video camera from which the imagery will be sent (specifically, the **Pre-alarm record** setting).

12. If the **Transmit video** check box was selected:

a. In the **Length (sec)** field enter the length of the transmitted video fragment (**1**).



> **Attention!**
>
> If the **Not used** value is selected in the **Export to avi** parameter (**3**), then the **Length (sec.)** parameter will be unavailable. In this case, the length will be determined by the size of the video fragment file in the video archive. To limit the length of the video fragment to be sent, use a script to stop recording on the camera (a sample script is given in Example of script to suspend recording on camera).

b. In the **Rate** field enter the speed of transmission of the video fragment (**2**).

c. The **Export to avi** parameter (**3**) allows you to select the format and codec of the requested video clip:

- **Not used** - the video clip will be exported as an archive with a set of directories and files from the VIDEO folder.
- **Original** - the video clip will be exported to an avi-file without transcoding.
- **Xvid** - the video clip will be exported to an avi-file with the Xvid codec.
- **DivX** - the video clip will be exported to an avi-file with the DivX codec.
- **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.

13. Set the **Captioning** check box if captions are to be superimposed on the video image when a sensor is activated (**11**). In the **Attach to camera** field, indicate the video camera on whose video you want to overlay captions (**4**).

14. From the **Show for (sec)** drop-down list, select the duration of display of captions on the video image, in seconds (**12**).
15. Click **OK** (**13**).

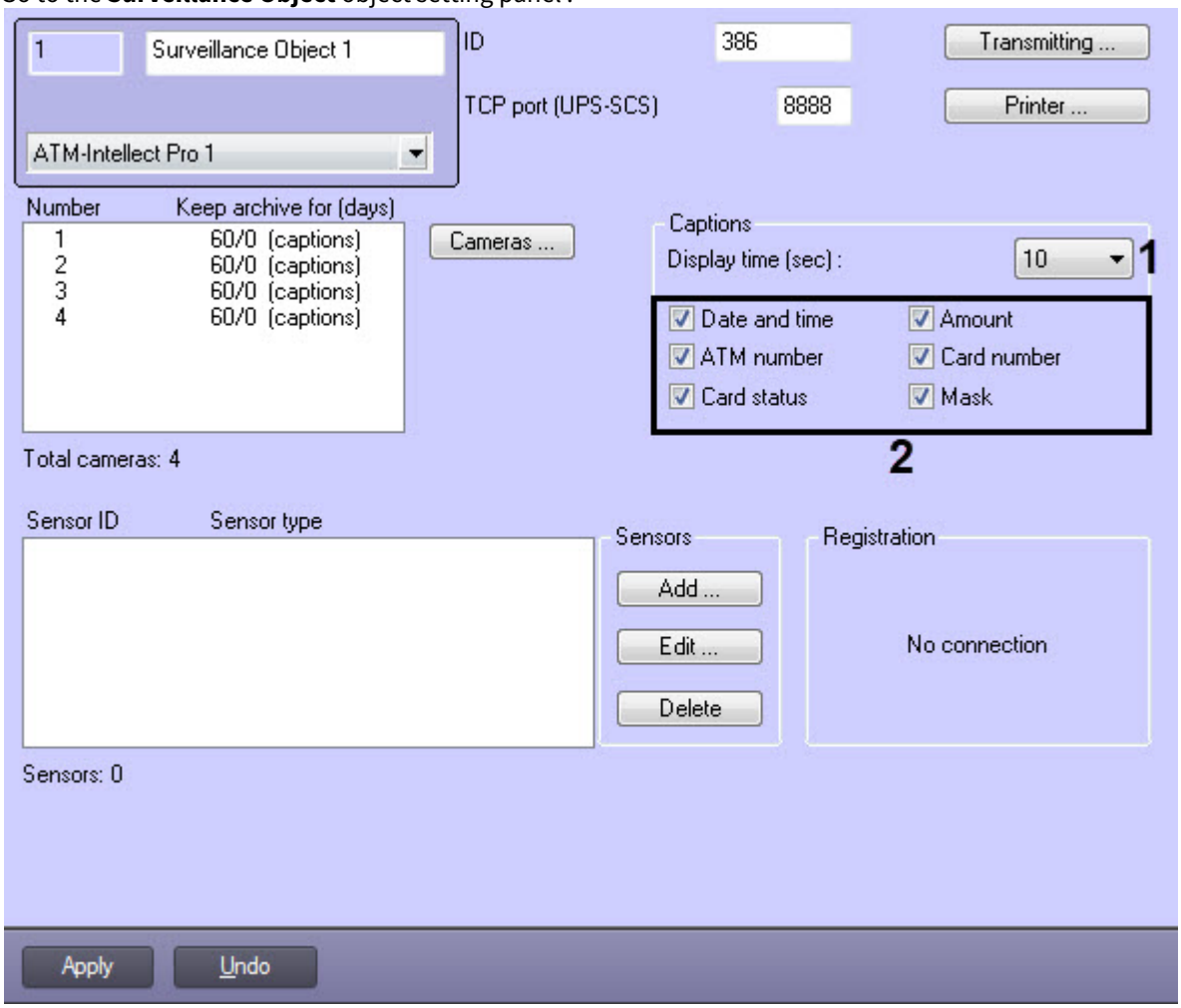
Configuring the list of used sensors is completed.

6.3.6 Configuring captioning

Setting information contained in captions

To set information which should be displayed in captions, as well as time of captions displaying do the following:

1. Go to the **Surveillance Object** object setting panel .



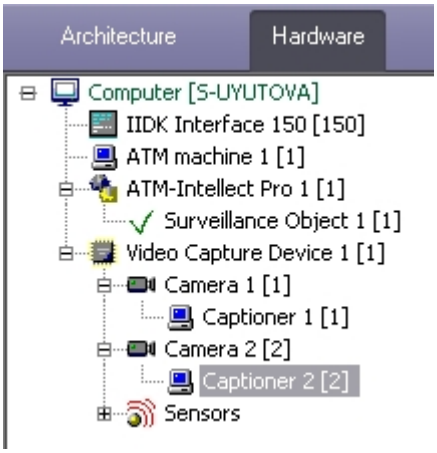
2. In the **Display time (sec)** field set the length of time, in seconds, for which captions are displayed on the video image after the corresponding event occurs at the protected object (ATM) - (**1**).
3. Set the checkboxes in front of information which should displayed in captions (**2**). The **Mask** checkbox is to be set when the card number is to be displayed but all the digits in it except 4 in the beginning and 4 in the end are to be hidden.
4. Click **Apply** to save settings.

Setting information contained in captions is completed.

Setting up the Captioner object

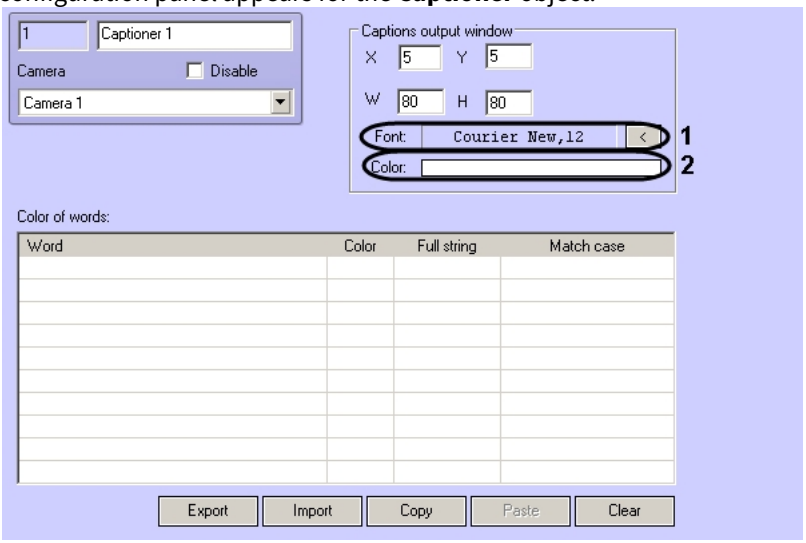
To configure captions, you must create a **Captioner** object for each camera on which you want to overlay captions.

> **Attention!**
>
> If multiple **Captioner** have been created for a single camera, *ATM Intellect Pro* will use the **Captioner** that has the lowest ID number.

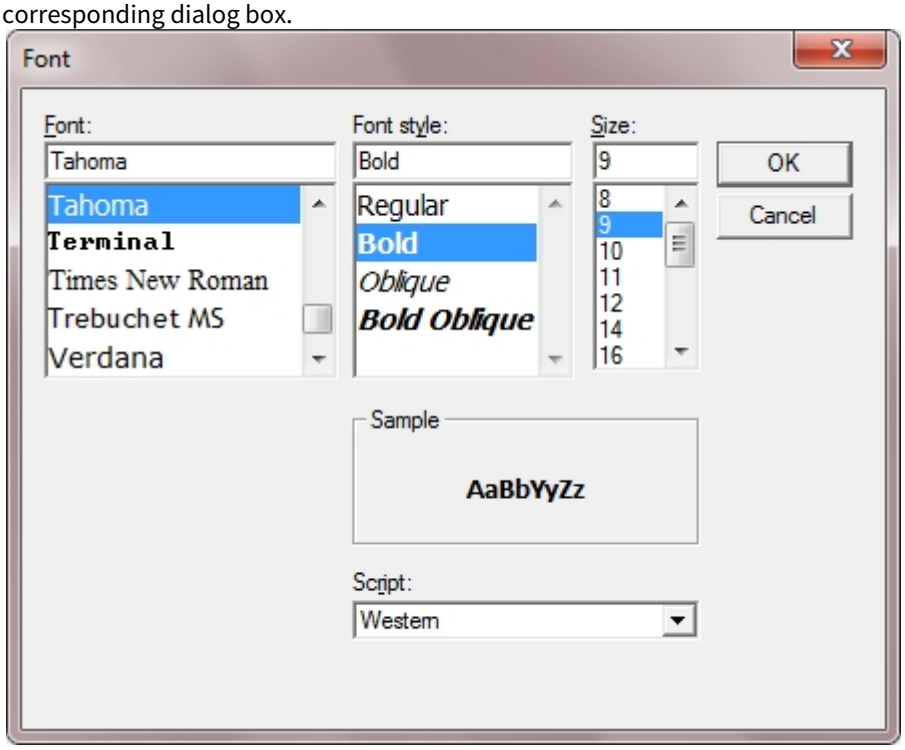


To configure the font and location of captions on the screen do the following:

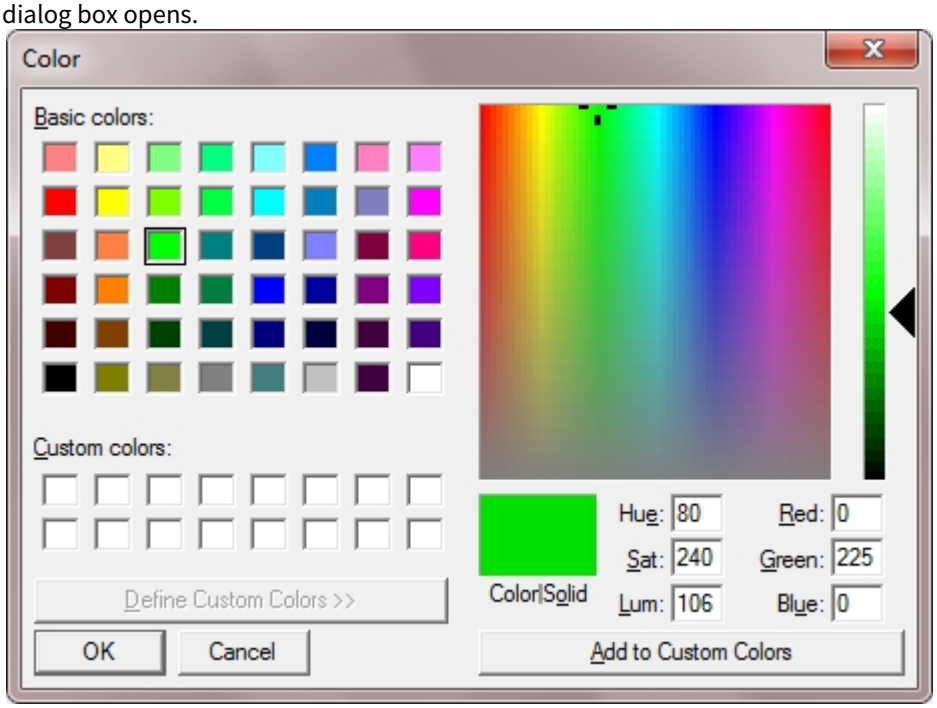
1. In the settings tree, left-click the corresponding **Captioner** object. On the right side of the screen, a configuration panel appears for the **Captioner** object.



2. To configure the font face and font size, click the button to the right of the **Font** line (1) to open the corresponding dialog box.



3. To configure the color of captions, double-click the area to the right of the **Color** line (2). The color selection dialog box opens.



Setting up ATM receipts captioning

If a receipt printer is connected to a computer with *ATM-Intellect Pro* installed, then ATM receipts can be placed as captions over the camera video image.

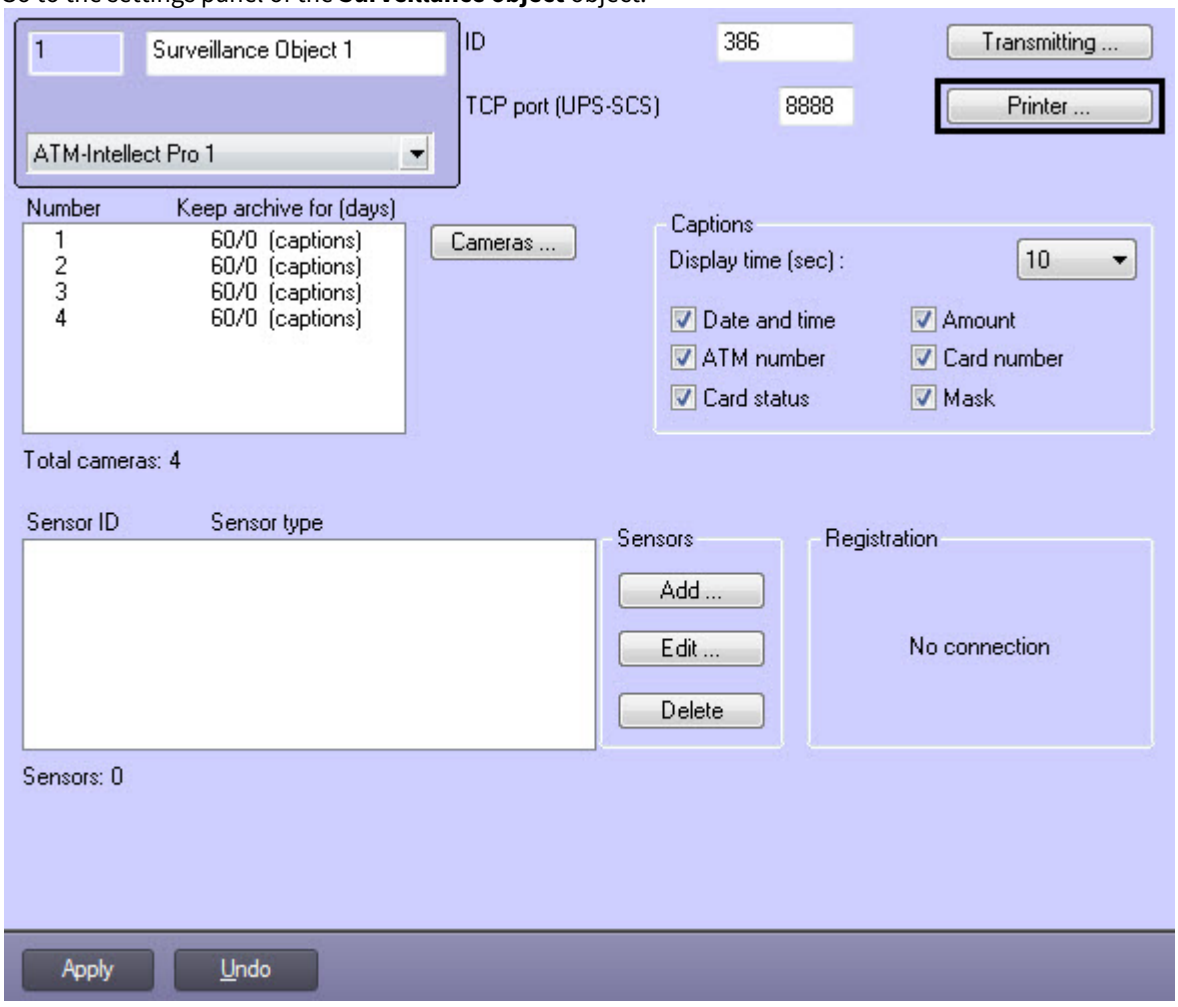
> **Note.**
>
> ATM receipts captioning is supported for the following receipt printers: CUSTOM VKP-80II-UE-EM00041.

Each surveillance object can interact with a separate receipt printer while several surveillance objects can interact with corresponding receipt printers simultaneously.

> **Note.**
>
> The **Surveillance object** transfers to the *Intellect* core the **Receipt print start** or **Receipt print stop** events when the receipt printout is started or stopped, correspondingly.

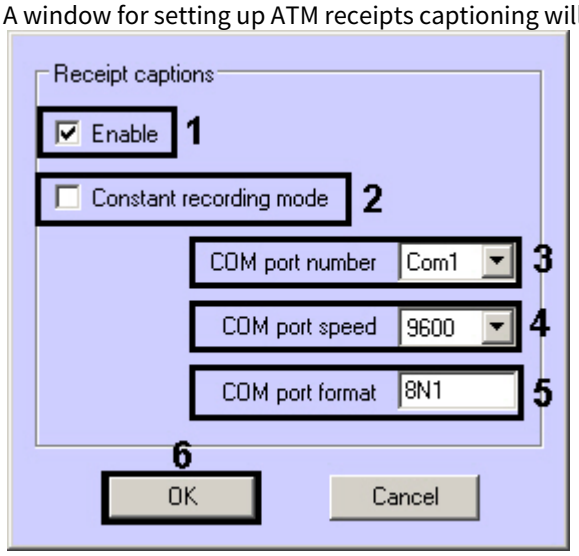
ATM receipts captioning is configured as follows:

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



2. Click **Printer...**.

3. A window for setting up ATM receipts captioning will be opened.



4. Set the **Enable** checkbox (**1**).
5. Configure starting recording on camera depending on the recording mode:

1. If cameras binded to the Surveillance object operate in continuous recording mode, set the **Constant recording mode** checkbox (**2**). In this case captioning will be performed in the following order:
   - When the receipt beginning is detected, captions are placed over the video for all cameras for which ATM events captioning is enabled.
   - 2 seconds after the receipt ending is detected, captioning stops and the screen is cleared of captions.
2. If cameras binded to the Surveillance object do not operate in continuous recording mode, uncheck the **Constant recording mode** checkbox (**2**). In this case captioning will be performed in the following order:
   - When the receipt beginning is detected, recording starts for all cameras for which ATM events captioning is enabled.
   - Captions are placed over the video for all of these cameras.
   - 2 seconds after the receipt ending is detected, captioning stops and the screen is cleared of captions.
   - Recording for all of these cameras stops.

- Select the COM port number from the **COM port number** dropdown list (**3**).
- Select speed for data exchange over COM port from the **COM port speed** dropdown list (**4**).
- In the **COM port format** field specify the COM port format (**5**):

1. first digit: 5 to 9 data bits;
2. second letter: **N** (No parity) – no parity bit, **E** (Even parity) – even parity bit, **O** (Odd parity) – odd parity bit;
3. third digit: 1 or 2 stop bits.

- Click **OK** (**6**). A window for setting up ATM receipts captioning will be closed.
- Click **Apply**.

ATM receipts captioning is now configured.

6.4 Integration with UPS units

If your computer is equipped with a UPS unit from the Smart-UPS series made by APC, the UPS can send messages to *ATM-Intellect Workstation*.

Configuring of operation with UPS unit is performed in the following order:

1. Install StateUPS utility.
2. Configure PowerChute plus utility.

6.4.1 StateUPS utility setup

StateUPS utility (exe-file and ini-file) is installed with *ATM-Intellect Pro* and placed to the <Intellect software installation>/Vhost/UPS/.

> **Note.**
>
> Files from the <Intellect software installation>/Vhost/UPS/Ext directory will look for the ini settings file in the same directory as the StateUPS utility.

Configure the file StateUPS.ini, which is located in this directory:

1. *Address* – IP address of the computer on which *ATM Intellect Pro* is installed. The default value is 127.0.0.1. If you are installing StateUPS on the same computer on which *ATM Intellect Pro* is installed, you do not need to change this setting.
2. *Port* – the TCP port on which StateUPS sends messages from the UPS. The value of this setting must match the corresponding setting in *ATM Intellect Pro*, **TCP port (UPS-SCS)** (see Setting the port used to listen for messages from the UPS and Smart Card Service ATMs).

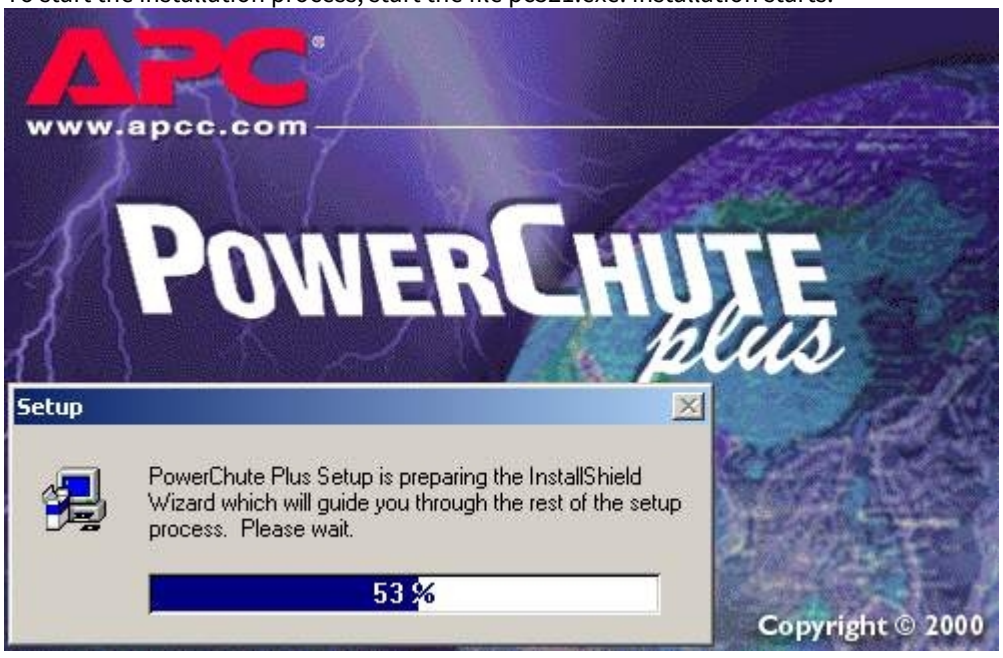
If the StateUPS utility is to be used on another computer, do the following:

1. Create "HKLM\SOFTWARE\BitSoft\VHOST\VHostService" section for 32-bit OS ("HKLM\SOFTWARE\Wow6432Node\BitSoft\VHOST\VHostService" for 64-bit) in the registry on this computer.
2. In this section, create the "FolderLog" parameter. In the "FolderLog" parameter specify the path where the UPS folder will be created containing ini-file. For example, if the folder is C:\EVUPS, then "FolderLog" = "C:\EVUPS\"
3. In the specified folder, for example, C:\EVUPS, create the UPS sub-folder and copy the StateUPS.ini into it.

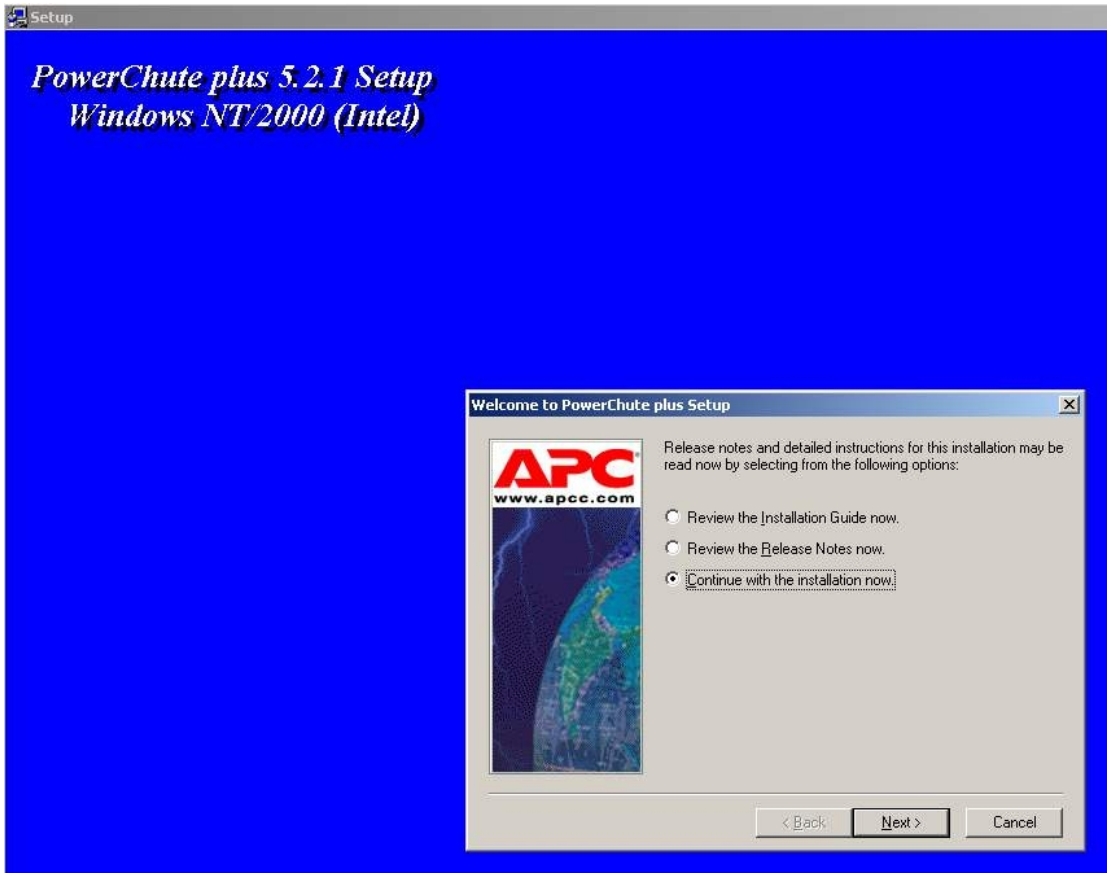
6.4.2 Installation of software supplied by the UPS vendor

After the StateUPS utility is set up, install the software supplied by the UPS vendor. Before beginning installation, make sure that the interface cable is connected to the UPS:

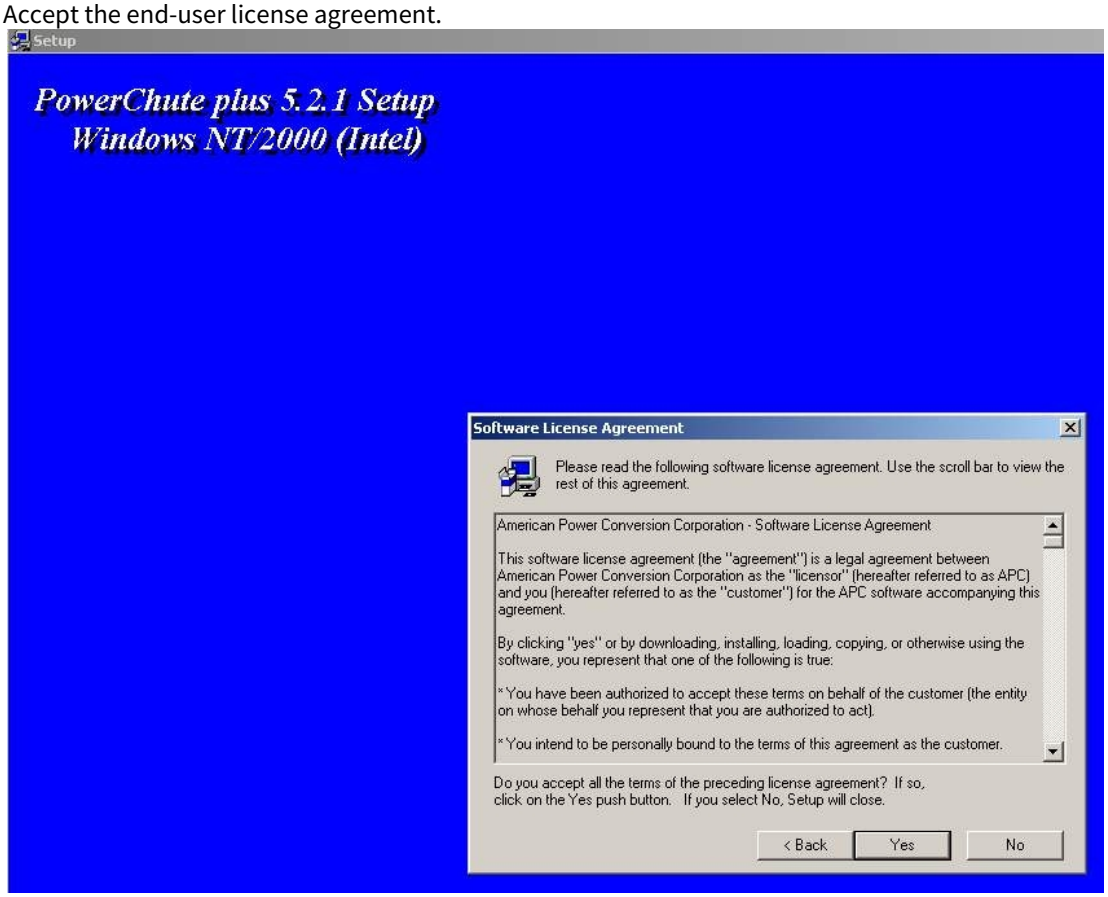
1. To start the installation process, start the file pc521.exe. Installation starts.



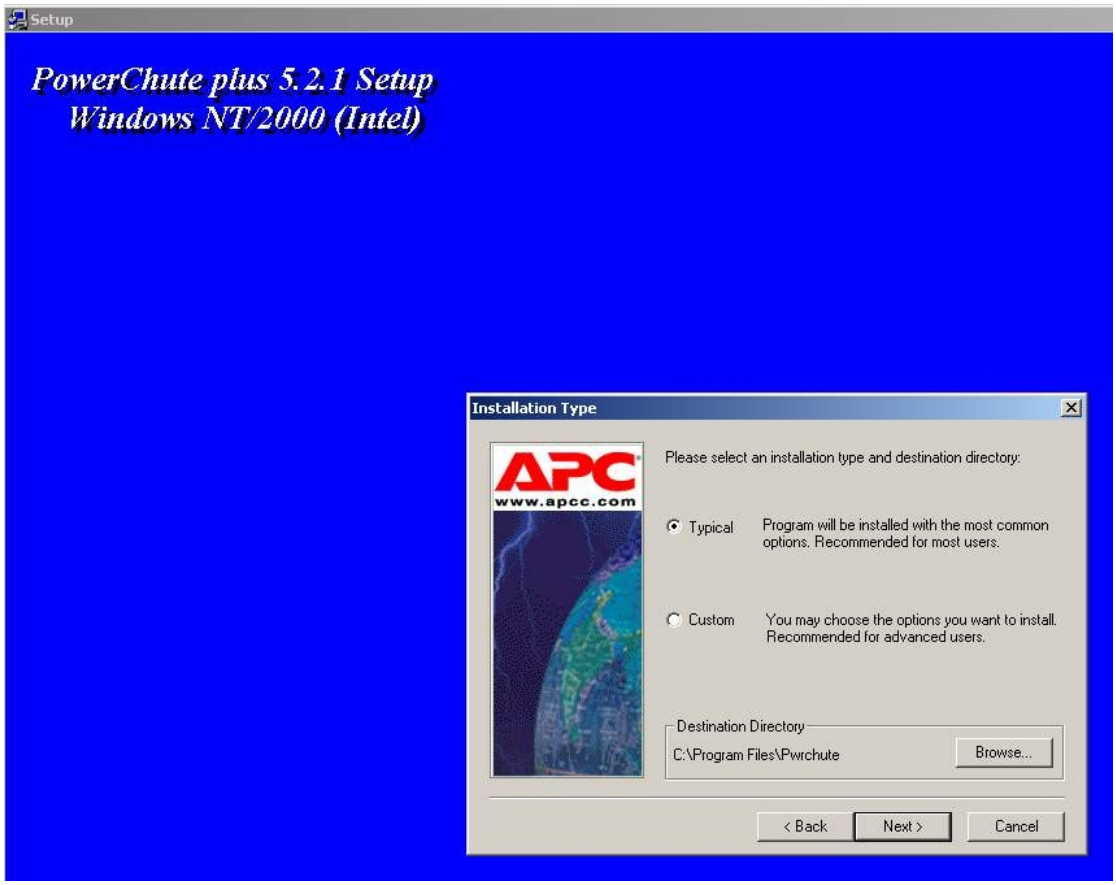
2. On the following wizard page, select the option **Continue with the installation now** and click the **Next** button.



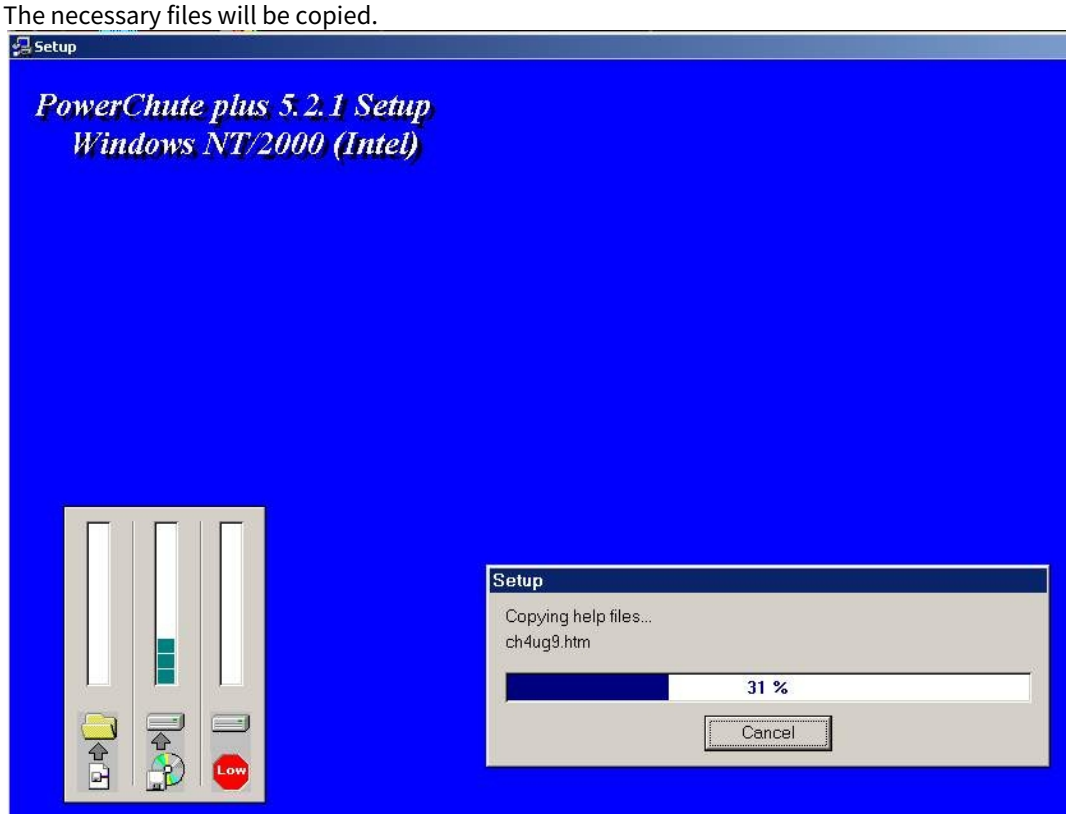
3. Accept the end-user license agreement.



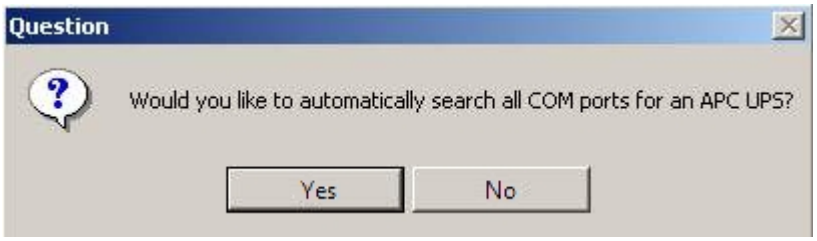
4. On the following page of the wizard select the **Typical** installation type and indicate the path at which you want to install the software.



5. The necessary files will be copied.

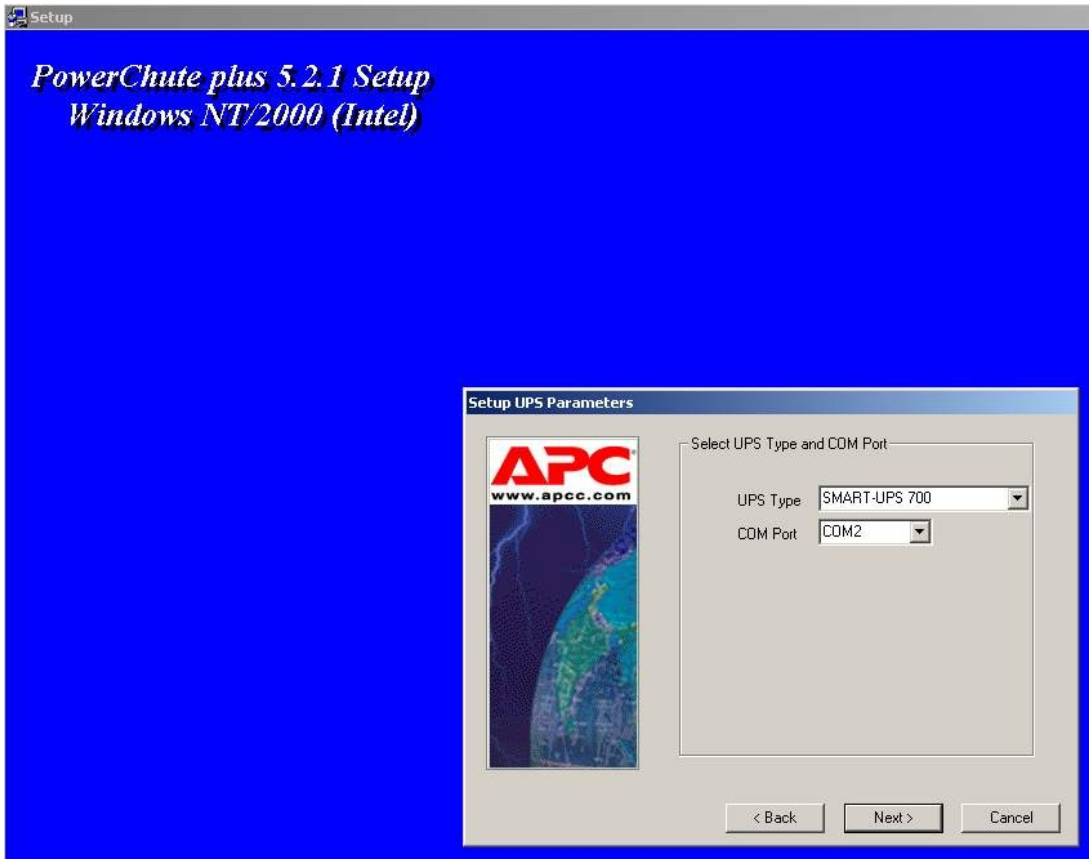


6. You are asked whether you want the program to automatically detect the COM port on which the UPS is located. Click the **Yes** button.

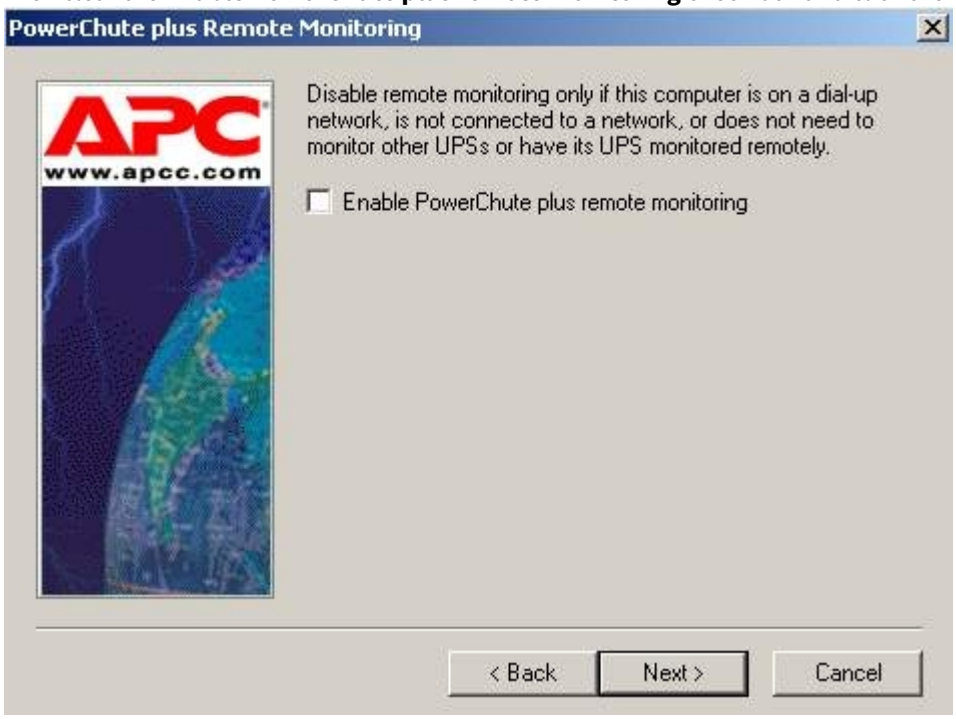


7. Search begins.

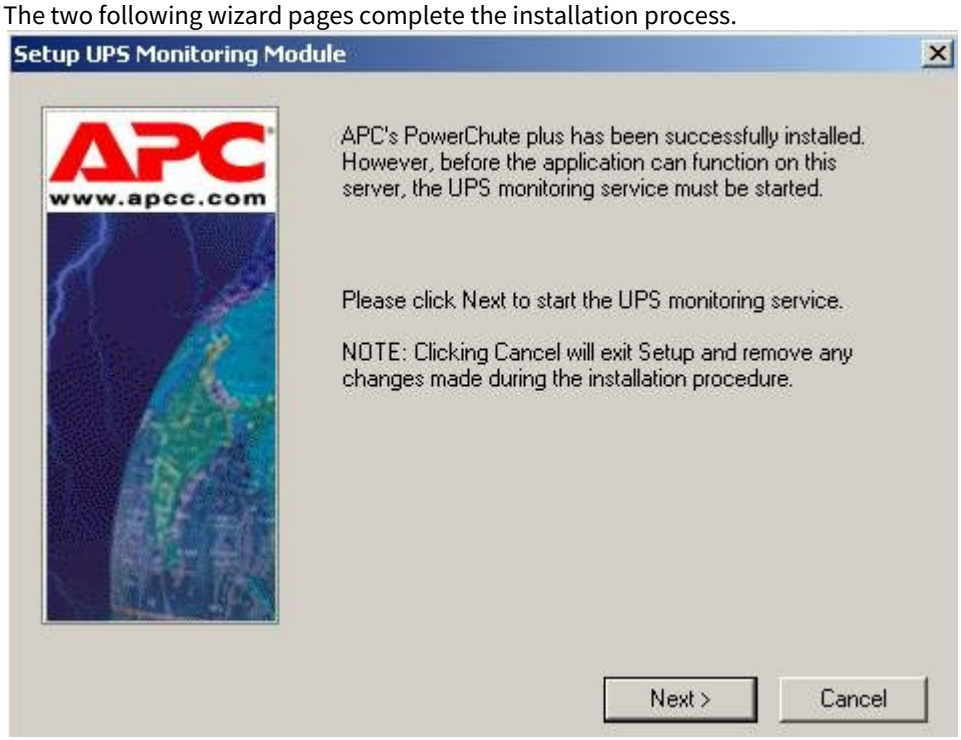
8. After the search ends, the program shows the type of UPS that it found and the corresponding COM port. Click the **Next** button.

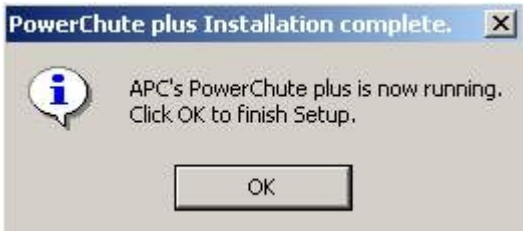


9. Then clear the **Enable PowerChute plus remote monitoring** check box and click the **Next** button.



10. The two following wizard pages complete the installation process.





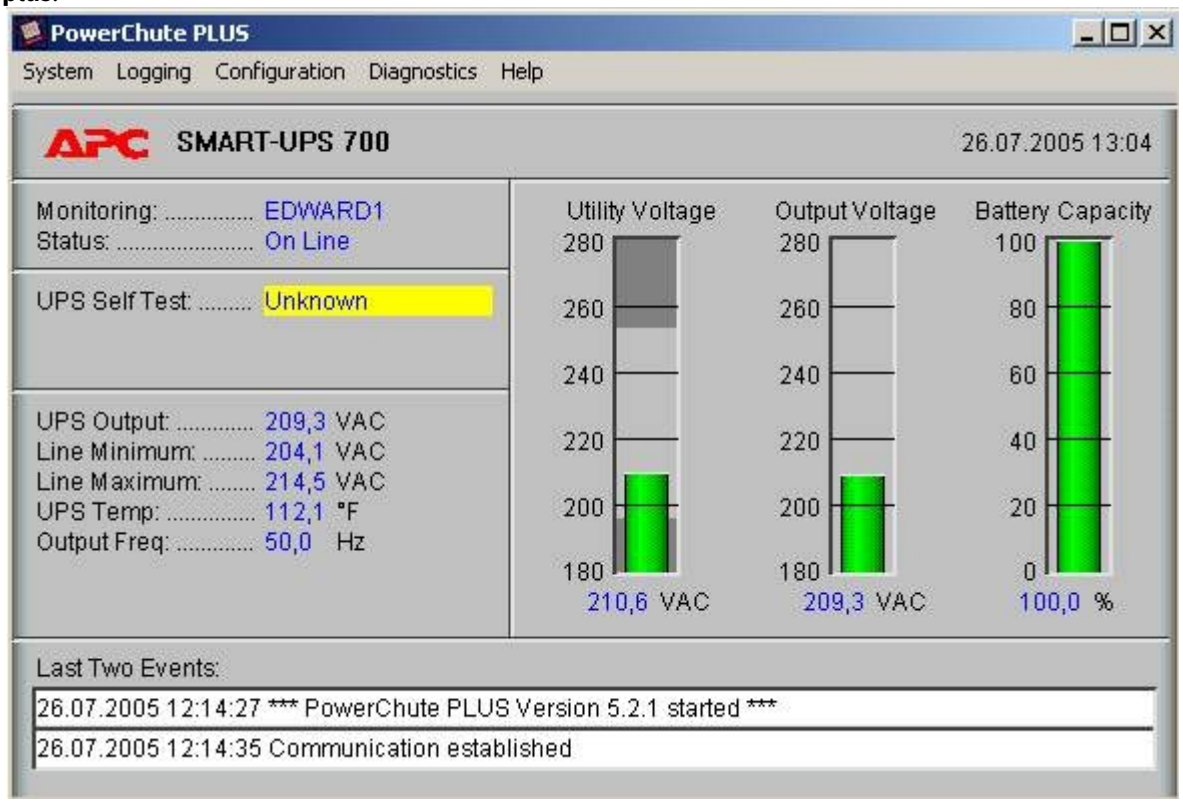
The StateUPS utility installation completed.

6.4.3 Configuring PowerChute plus utility

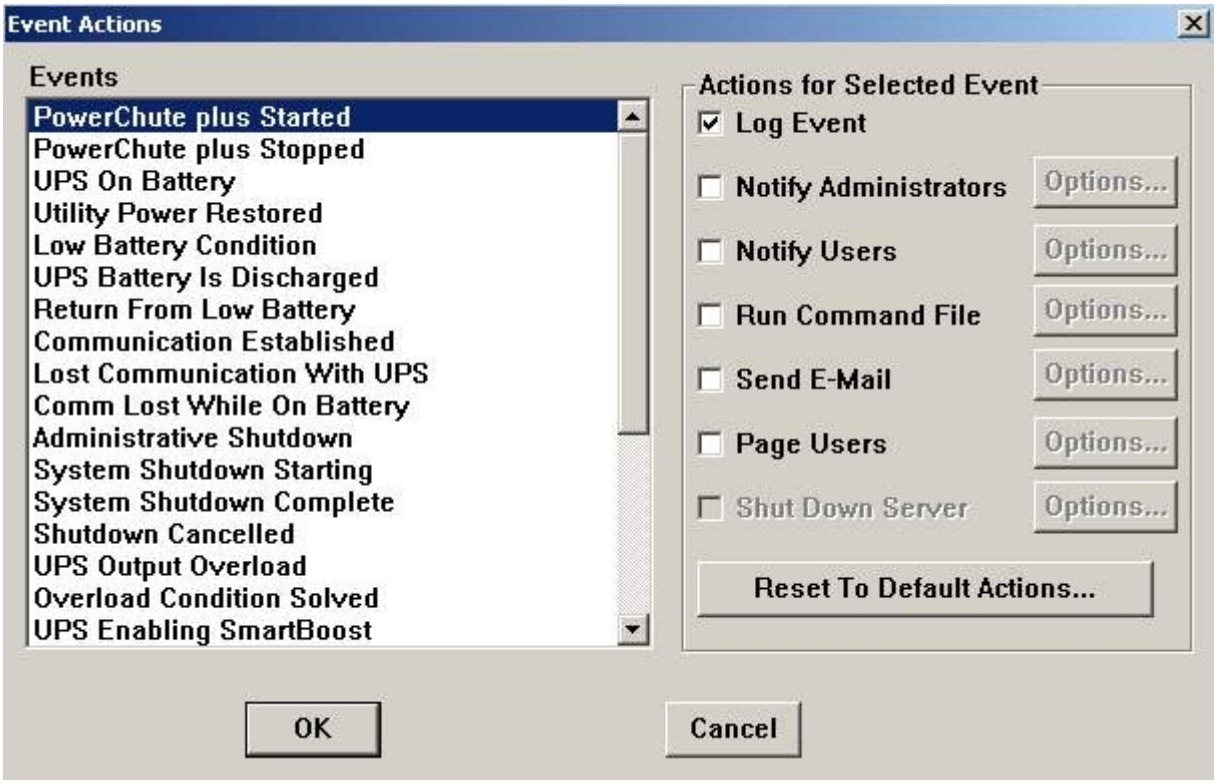
> **Note.**
>
> The PowerChute utility configuring process is given in this document as an example. Alternative software can have different settings.
> Alternative software must allow binding certain reactions with UPS events.

To configure PowerChute plus do the following:

1. Start configuration of PowerChute plus, by selecting **Start>Programs>PowerChute plus>PowerChute plus**.



2. Select the menu item **Configuration>Event Actions...**. In the dialog box that appears, in which events are listed on the left, you can set different reactions for event types, on the right side of the window.
3. You are advised to not disable the **Notify Users** option for all events; disable it only if you do not want to send messages on the entire domain on which the computer is located.



A more complete list of events is given in the table.

ID Code	Event Name	Description
1000	**PowerChute Started**	PowerChute service started
1001	**PowerChute Stopped**	PowerChute service stopped
1002	Communication Established	Communication established
1003	Utility Power Restored	Utility power restored
1004	UPS Self-Test Passed	Self-test passed
1005	Administrative Shutdown	Administrative shutdown
1006	Shutdown Cancelled	Shutdown cancelled
1007	Returned From Low Battery	Battery is out of power
1009	UPS Battery Replaced	Battery replaced

ID Code	Event Name	Description
1013	Overload Condition Solved	Overload condition is within normal limits
1014	Runtime Calibration Started	Runtime Calibration Started
1015	Runtime Calibration Finished	Runtime Calibration Finished
1016	System Shutdown Starting	System is shutting down
1102	UPS Internal Temperature In Bounds	Internal temperature is in normal range
2000	UPS On Battery	Electricity is off
2001	System Shutdown Complete	System has shut down
2002	UPS Enabling SmartBoost	Reduced voltage
2003	Low Battery Condition	Battery is low
2004	Runtime Calibration Aborted	Runtime calibration aborted
2007	UPS Enabling SmartTrim	Increased voltage
3000	Lost Communication With UPS	Communication lost
3001	UPS Output Overload	Overload
3002	UPS Self-Test Failed	Self-test failed
3003	UPS Battery Is Discharged	Battery discharged
3004	Comm Lost While On Battery	Comm Lost While On Battery
3016	Battery Needs Replacing	Battery must be replaced
3107	Maximum Internal Temperature Exceeded	High internal temperature

You can configure PowerChute plus to send any of the events to *ATM-Intellect Workstation* when they occur.

It is recommended that you allow events indicated in green to be sent to *ATM-Intellect Workstation*.

The <Intellect installation>\Vhost\UPS\Ext\ folder also includes three executable files that have been created for specific events:

- PowerOff.exe – electricity cut off
- PowerOn.exe – electricity restored
- BatDisch.exe – battery discharged

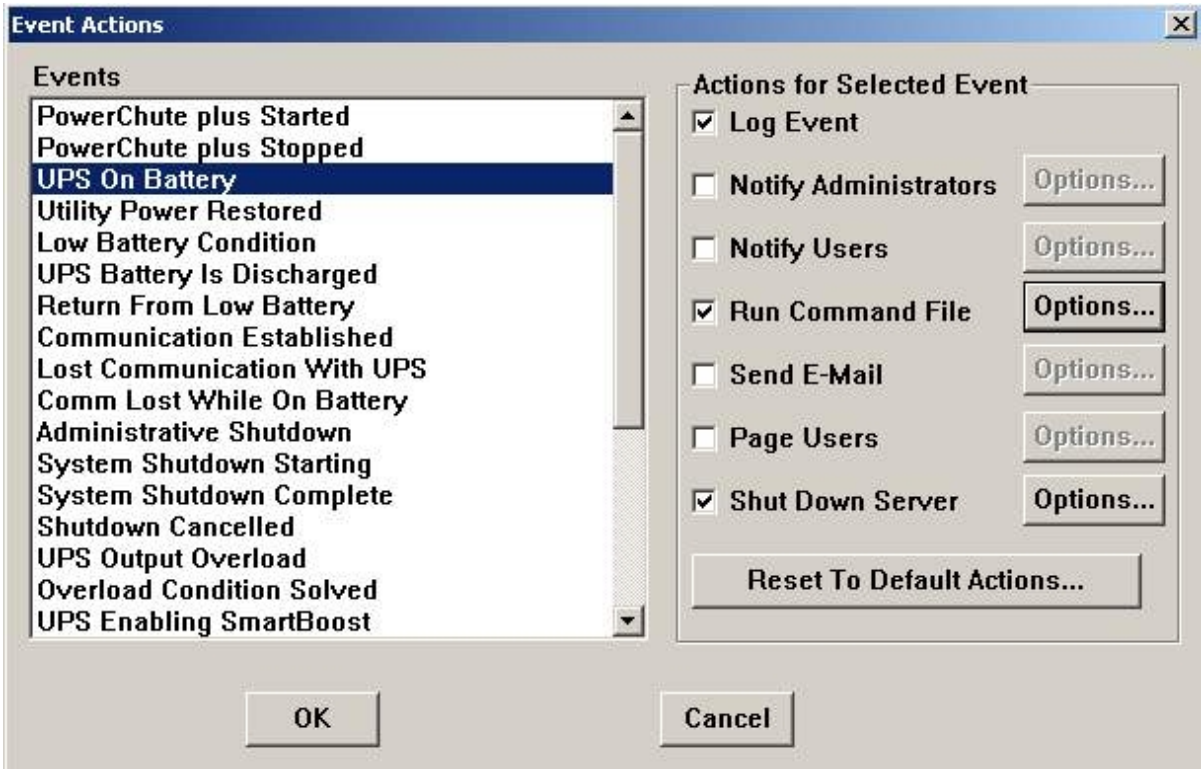
This basic set can be useful for Back-UPS product series that do not support invoking subprograms from the command line.

6.4.4 Example of configuring events notifying

Let us consider the following situation: electrical power supply has switched off and the UPS has switched to battery mode (ID Code = 2000), and electrical power supply has been restored a while later (ID Code = 1003).

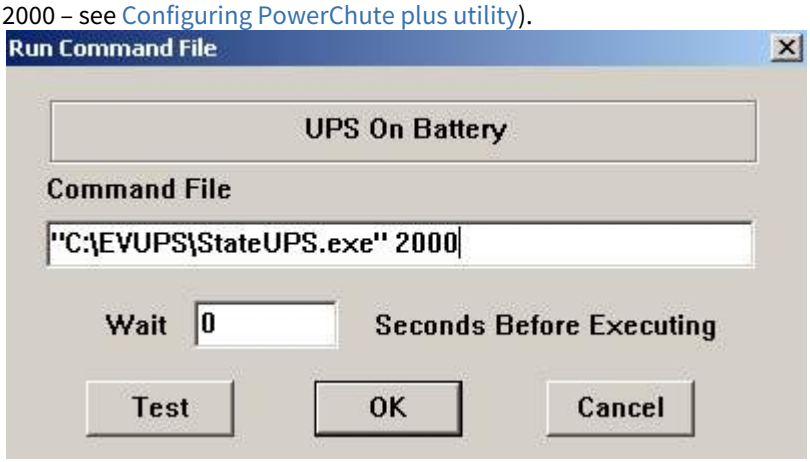
In this case to configure events notifying do the following:

1. In the list of events, select the **UPS On Battery** event and, for this event, enable the option **Run Command File**.

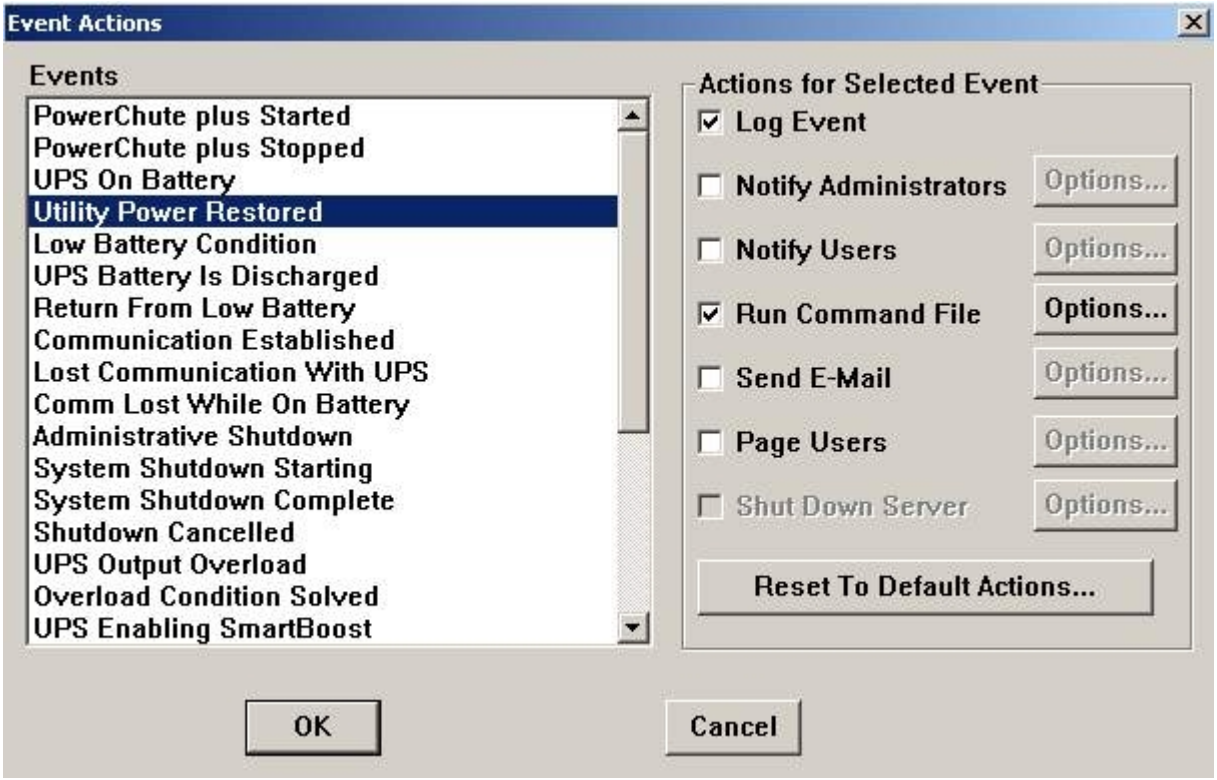


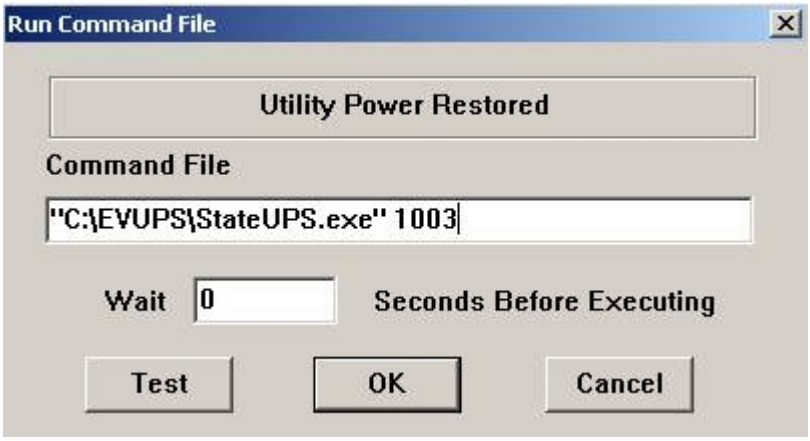
2. To the right of the **Run Command File** line, click the **Options...** button. In the dialog box that appears, indicate the full path to the StateUPS utility, which has to start whenever this event occurs. Enclose the path in double quotes. Type a space and then indicate the ID code for the UPS On Battery event (which is equal to

2000 – see Configuring PowerChute plus utility).



3. The equivalent actions for the **Utility Power Restored** event are shown in figures below.





Keep in mind that after utility power is restored, the UPS does not always generate the **Utility Power Restored** event; sometimes, it generates the **UPS Enabling SmartBoost** or **UPS Enabling SmartTrim** events instead. So in order to not "miss" when utility power is restored, you are also advised to configure notifications for the **UPS Enabling SmartBoost** or **UPS Enabling SmartTrim** events.

Every time the StateUPS utility is launched, a log file is created in the <*Intellect* installation>\Vhost\UPS folder, with a name resembling:

upslog_<state>_<date>_<time>.log

6.5 Integration with the Gold crown

On the page:

6.5.1 Setting up the vmon_itv.dll library

Use the «vmon_itv.dll» integration repository to get events from the ATM if it operates with the “Gold system” payment service provider. This repository is shipped separately.

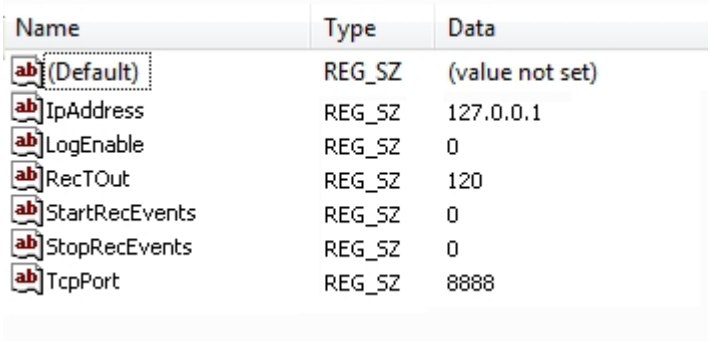
Presence of the «MS Visual C++ 2005 Redistributable» package in the system is essential to work with the «vmon_itv.dll» repository.

After the «vmon_itv.dll» repository is registered in the ATM software settings (in the videoMonEvents.in file), it is ought to configure it. Run the following file:

- vmon_itv_x86.reg for 32-bit OS
- vmon_itv_x64.reg for 64-bit OS

After running it, agree with saving changes in the registry.

With the help of the «regedit» utility configure parameters of the «vmon_itv.dll» repository in the «HKEY_LOCAL_MACHINE\SOFTWARE\ITV\AtmIntegration» registry section for 32-bit OS («HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\ITV\AtmIntegration» for 64-bit).



Name	Type	Data
(Default)	REG_SZ	(value not set)
IpAddress	REG_SZ	127.0.0.1
LogEnable	REG_SZ	0
RecTOut	REG_SZ	120
StartRecEvents	REG_SZ	0
StopRecEvents	REG_SZ	0
TcpPort	REG_SZ	8888

- *IpAddress, TcpPort* – parameters of connection to the *ATM-Intellect Pro*. If the *ATM-Intellect Pro* is installed on the ATM, don't change these parameters.
- *LogEnable* – enabling the «vmon_evt.log» log transaction. On default, the log transaction is disabled.

The other parameters are designed for configuring the mode of record by events:

- *StartRecEvents* – list of events on which the record is started (separated by commas). The value on default is 0.
- *StopRecEvents* – list of events on which the record is finished (separated by commas). The value on default is 0.
- *RecTOut* – total record time in the mode of record by events. The record will be continued for the time which is specified in this parameter if the stop event is not received after the start event. the value on default is 120.

The list of events is presented in the videoMonEvents.ini file.

For example, if StartRecEvents = 50 and StopRecEvents = 54, the record by cameras will start by the "Card inserted" event and will finish by the "Working with client is finished" event.

If only one of StartRecEvents or StopRecEvents parameters is equal 0, the record is performing in the normal mode.

6.5.2 Configuring interaction with vmon_itv.dll at the ATM

Make sure that the following conditions are fulfilled at the ATM side:

1. vmon_itv.dll is copied to the bin directory.
2. In the conf directory in the videoMonEvents.ini file, the name of dll performing events transferring to the video surveillance system is specified: dll=vmon_itv.dll.
3. In the app.xml there is parameter videoMon="vmon_proxy.dll".
4. In the ATM license file there is a "video surveillance" item.

6.6 Features of operation within the firewall protection and access control systems

When a firewall protection and access control system is in use a VPipe complex is used to organize a through channel between *ATM-Intellect Pro* and *ATM-Intellect Workstation* via ATM network resources.

The complex consist of two components:

1. VPipe server. Installation file is in the ATM-Intellect installation kit at SoftForATM folder and is called VPipeSrv.exe

2. VPipe client. Installation file is in the ATM-Intellect installation kit at SoftForATM folder and is called VPipeClient.exe

Installation files for VPipe complex are in the archive with intergation modules.

VPipe client is to be installed on the ATM. VPipe client is designed to create a communication channel between *ATM-Intellect Pro* and *ATM-Intellect Workstation*.

VPipe client operates as follows:

1. At start, VPipe client automatically establishes a connection with the specified port of VPipe server and subsequently supports the connection in an operable mode.
2. Establishes a connection with *ATM-Intellect Workstation*. Subsequently supports the channel in an operable mode.
3. VPipe client transmits packages received from *ATM-Intellect Pro* (through VPipe Server) to *ATM-Intellect Workstation*, and from *ATM-Intellect Workstation* to *ATM-Intellect Pro* without changes.

VPipe Server is to be installed at the *ATM-Intellect Pro*. VPipe server is designed to receive packages from *ATM-Intellect Pro* and transmit them to *ATM-Intellect Workstation*, as well as to receive packages from *ATM-Intellect Workstation* and transmit them to *ATM-Intellect Pro*.

VPipe server operates as follows:

1. At start, VPipe server opens a socket for *ATM-Intellect Pro* connection
2. VPipe server opens a socket for VPipe client connection (*ATM-Intellect Workstation*).
3. VPipe server transmits, without distortion, packages received from *ATM-Intellect Pro* into the VPipe client channel (*ATM-Intellect Workstation*) and back.

A connection is always initiated by VPipe client. At start, VPipe client establishes a connection with *ATM-Intellect Workstation* as well as with VPipe server (*ATM-Intellect Pro*). Connection between VPipe server and VPipe client is only possible when *ATM-Intellect Pro*, at its side, have established a connection to VPipe server.

VPipe complex is configured using Windows registry. The description of registry parameters required for configuring VPipe server and client is given below. It is also possible to set these parameters with the following files that can be found in an archive with integration modules:

- VPipe_x86.reg for 32-bit OS
- VPipe_x64.reg for 64-bit OS

VPipe client parameters description (registry section HKEY_LOCAL_MACHINE\SOFTWARE\BITSoft\VPipe\VPipeClient for 32-bit OS, HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\BITSoft\VPipe\VPipeClient for 64-bit) is given in the table.

Name	Type	Default value	Description
PortPDV	DWORD	7777	*ATM-Intellect Workstation* port to which VPipe client connects
PortLVOS	DWORD	8555	VPipe server port to which VPipe client connects
UsingDNS	String	0	Defines wether the AddressPDV parameter sets an IP address or DNS name of *ATM Intellect Workstation*

AddressPDV	String		If the UsingDNS = "0", the IP-address of *ATM-Intellect Workstation* is specified in the AddressPDV parameter If the UsingDNS = "1", the DNS-name of *ATM-Intellect Workstation* is specified in the AddressPDV parameter
AddressLVOS	String		IP-address of VPipe server
TmoConnectPDV	DWORD	5	Interval in seconds between attempts to connect to *ATM-Intellect Workstation*
TmoConnectLVOS	DWORD	5	Interval in seconds between attempts to connect to *ATM-Intellect Pro*
FolderLog	String	C:\VPipeClient\	Folder for storing module log files
LogPeriod	DWORD	1	Period of storage of the module log files in months
ExtLog	DWORD	0	If it is necessary to store contents of forwarded packages in the log
TerminalID	String		TerminalID of the ATM where VPipe client is installed
TmoPassiveLVOS	DWORD	120	Allowed time of inactivity on the socket with *ATM-IntellectPro* (sec.)
TmoPassivePDV	DWORD	120	Allowed time of inactivity on the socket with *ATM-Intellect Workstation* (sec.)
TmoMonitorTimer	DWORD	120	Interval between attempts to send the monitoring package to *ATM-Intellect Workstation* (sec.)

VPipe server parameters description (registry section HKEY_LOCAL_MACHINE\SOFTWARE\BITSoft\VPipe\VPipeSrv for 32-bit OS, HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\BITSoft\VPipe\VPipeSrv for 64-bit) is given in the table.

Name	**Type**	**Default value**	**Description**
PortATM	DWORD	8555	*ATM-Intellect Pro* port to which VPipe client connects

PortLVOS	DWORD	7777	VPipe server port to which *ATM-Intellect Pro* connects
FolderLog	String	C:\VPipeSrv\	Folder for storing module log files
LogPeriod	DWORD	1	Period of storage of the module log files in months
ExtLog	DWORD	0	If it is necessary to store contents of forwarded packages in the log
RunAsService	String	0	0 – VPipe server does not start as a service. 1 – if the VRecover module has started, it will run the VPipe server.

6.7 Transferring events from ATMs to the Intellect core

Events received by *ATM-Intellect Pro* from ATMs are then transferred into the Intellect core; that allows to create macros and scripts with these events, display alarm windows, etc. Creating scripts on JScript language is described in Intellect software. Programming Guide (JScript). Creating scripts on built-in Intellect programming language is described in *Intellect Software. Programming Guide*. Creating macros and their examples are described in Intellect software. Administrator's Guide.

Sources of ATM events for *ATM-Intellect Pro* are:

1. ATM integration through SKS software (TellMe.dll). In this case all possible events are transmitted to the *Intellect* core.
2. ATM integration through XFS (EventATM module – see section Appendix 3. ATM Event Capture utility). In this case all possible events are transmitted to the *Intellect* core.
3. ATM integration through CFT "Gold Crown" software (vmon_itv.dll). In this case only basic events are transmitted to the *Intellect* core, namely:

   50=Card inserted
   51=Card shown to client
   52=Card's withdrawal by client
   53=Card's withdrawal by ATM
   54=Work with the client is over
   60=Cash delivery
   61=Client took out the cash
   62=ATM took out the cash
   70=Cash deposit is selected
   71=Cash returned to client
   72=ATM took out the cash
   73=Cash reception finished
   101=PIN entered

When transferring ATM events to the Intellect core, the following parameters can be included in addition to the event identification:

param0<> – the masked client's card number, if it exists for the event. The parameter cab also be equal to "Unknown card".

param1<> – the ID of Surveillance object. If *ATM-Intellect Pro* has more than one **Surveillance object** child objects this will allow to differ them in scripts.

param2<> – local ATM time of the event. In particular cases *Intellect* software ant ATM software can be installed on different computers.

Full list of **Surveillance object** events can be obtained with the ddi.exe utility by opening the intellect.atm.ddi located in <Intellect installation>\Languages\en. More information on this utility is given in Intellect software. Administrator's Guide.

Example of a script using ATM events is given in Example of script with using of ATM events.

6.8 Working with ATM-Intellect Pro without Windows administration rights

To allow the user not added to the Administrators group in the Windows operating system to work correctly with *ATM-Intellect Pro*, make sure the following conditions are fulfilled:

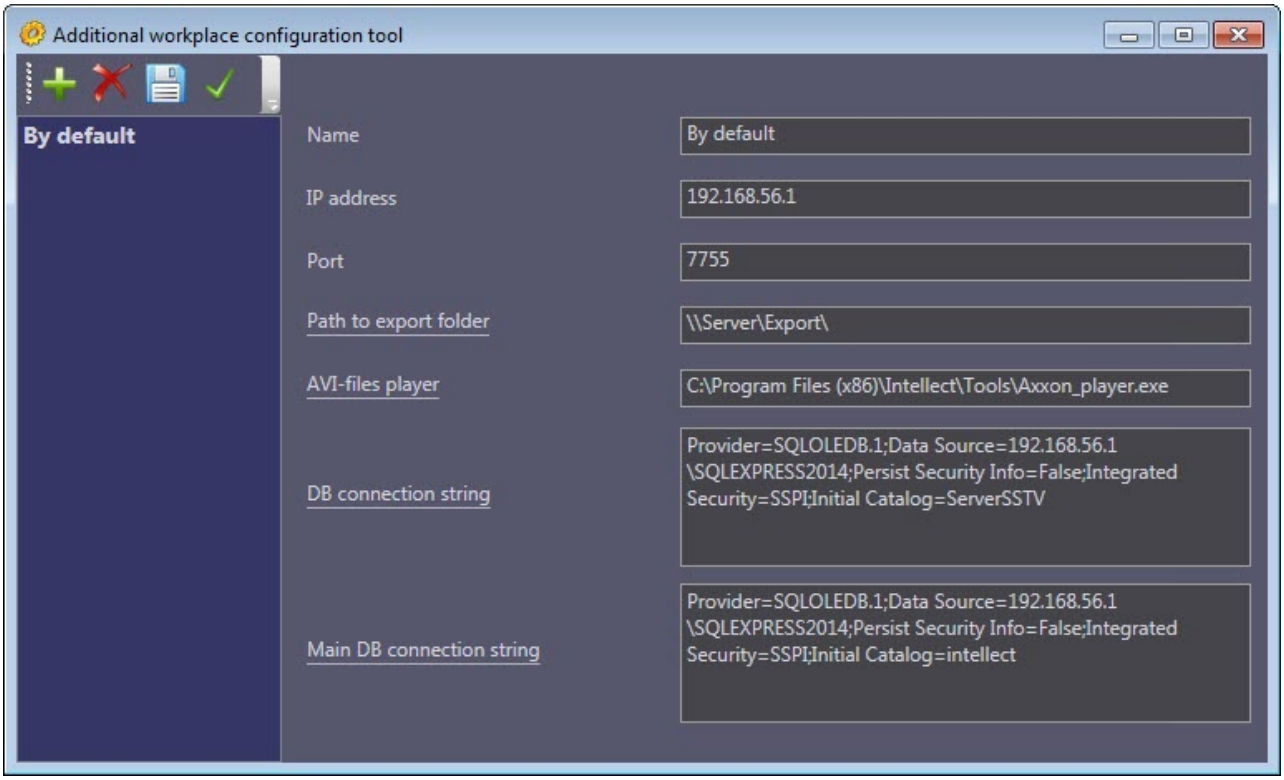
1. The user must have full access to the *ATM-Intellect Pro* registry section: HKEY_LOCAL_MACHINE\Software\BitSoft for 32-bit system (HKEY_LOCAL_MACHINE\Software\Wow6432Node\BitSoft for 64-bit).
2. The user must have full rights for the folder <DISK>:\Backup, where <DISK> is the logical disc where Intellect software is installed.

7 Additional workplace configuration

Additional workplace can operate with only one *ATM-Intellect Workstation* at a time. However, the list of available *ATM-Intellect Workstations* can be configured and the active *ATM-Intellect Workstation* can be selected. For this use the Additional workplace configuration tool. The tool can be run as follows:

1. Click **Start -> All Programs -> Intellect > ATMIntellect -> Additional workplace configuration tool**.
2. Use the ARMSelector.exe executable file, located in the <Intellect installation directory>\VHost\SYSTEM\ folder.

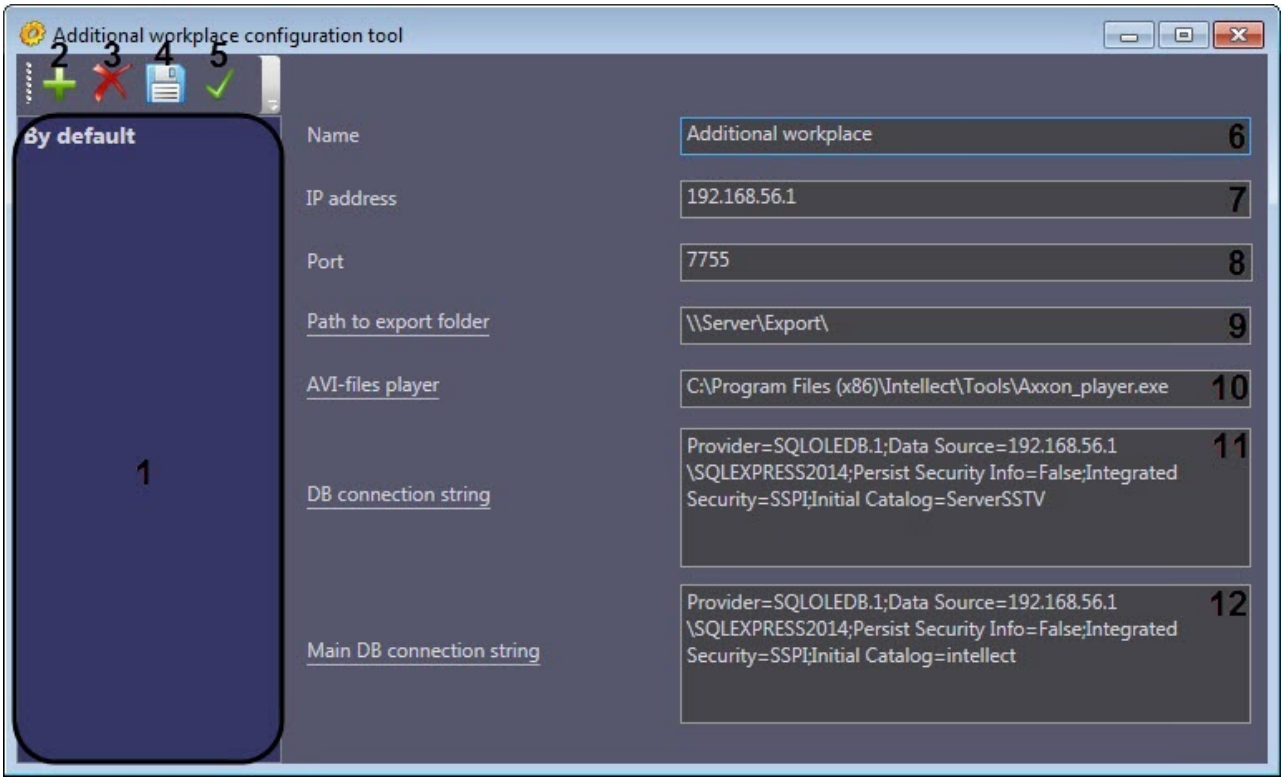
The tool is shown in the figure.



See Interface of Additional workplace configuration tool for parameters description.

7.1 Interface of Additional workplace configuration tool

Interface elements of *Additional workplace configuration tool* are described in the table.



#	Name	Method of setting the parameter value	Default value	Description
1	List of ATM-Intellect Workstations	The **Add**, **Remove** and **Set as active** buttons	By default there is the *ATM-Intellect Workstation* in the list. It is named **By default** and is created during installation.	Displays the list of existing *ATM-Intellect Workstations*. An active *ATM-Intellect Workstation* is highlighted in bold.
2	The **Add** button	Click the button	-	Adding a new *ATM-Intellect Workstation* to the list.
3	The **Delete** button	Click the button	-	Deleting a selected *ATM-Intellect Workstation* from the list.
4	The **Save** button	Click the button	-	Saving the changes
5	The **Set as active** button	Click the button	-	Setting an active *ATM-Intellect Workstation.*

6	The **Name** field	*Enter a value in the field*	See #1. When a new *ATM-Intellect Workstation* is added to the list it is named **New** by default.	Setting a name for *ATM-Intellect Workstation*. This name is used only in this tool.
7	The **IP address** field	*Enter a value in the field*	127.0.0.1 Important! The value of this parameter is to be changed according to the IP address of the *ATM-Intellect Workstation*.	Setting the IP address to connect to VideoSrv module.
8	The **Port** field	*Enter a value in the field*	7755	Setting a port to connect to VideoSrv module. To connect to the VideoSrv.exe module, it is necessary to specify the port that is selected in the **TCP/IP port (Archive)** field on the settings panel (see Setting the ATM-Intellect Workstation connection parameters).
9	The **Path to export folder** field	The **Path to export folder** link or enter a value in the field	-	Setting a path to the network folder on the *ATM-Intellect Workstation* where there are archive files requested from the ATM-Intellect Pro.
10	The **AVI-files player** field	The **Path to executable file** link or enter a value in the field	-	Setting the path to the executable file of the video player on the *Additional worksplace* used to playback the video clips requested from the *ATM-Intellect Pro* (see Video query).
11	The **DB connection string** field	The **DB connection string** link	-	Setting the *ATM-Intellect Workstation* DB connection string. The Data Link Properties box appears when clicking the **DB connection string** link.

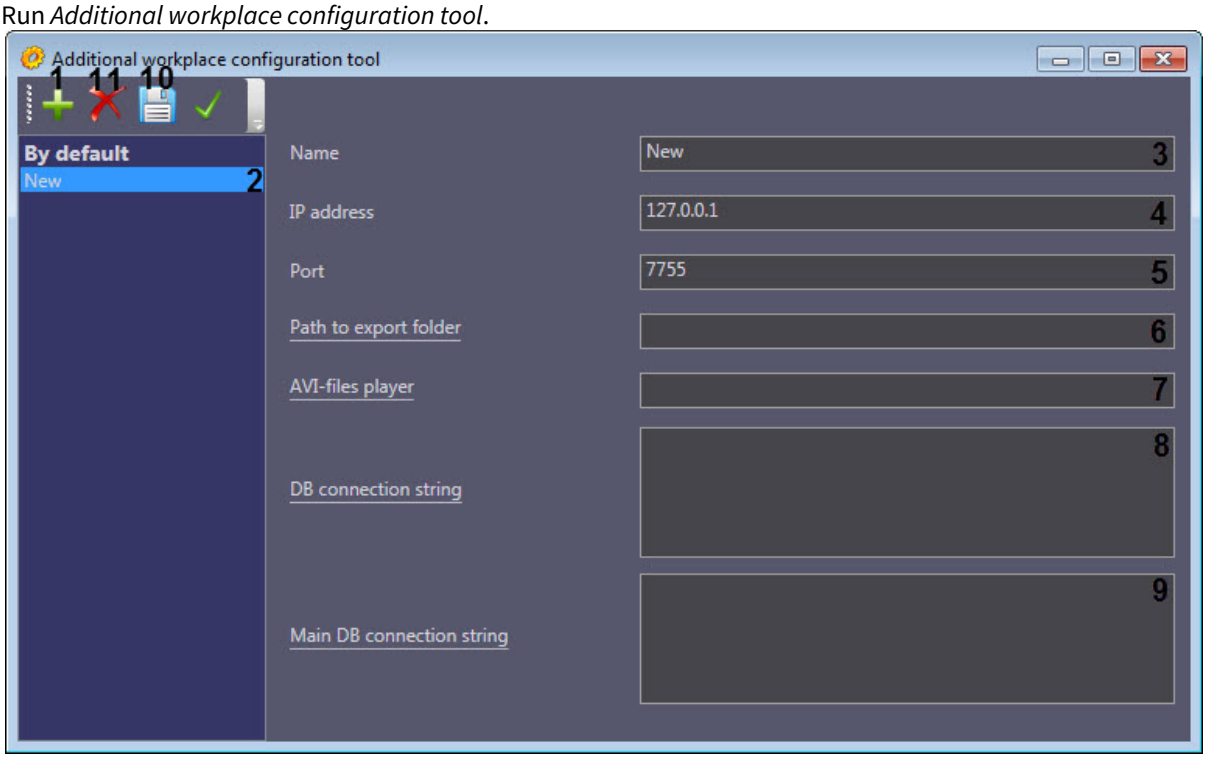
1 2	The **Main DB connection string** field	The **Main DB connection string** link	-	Setting the connection string to the base *Intellect* DB on the *ATM-Intellect Workstation*. The Data Link Properties box appears when clicking the **Main DB connection string** link.

7.2 Adding ATM-Intellect Workstation to the list

By default the *ATM-Intellect Workstation* (named “By default”) is added to Additional workplace configuration right after installation *of ATM-Intellect* software package. Its settings are the same as those specified during installation (see Installation steps for Additional workplace section).

Add a new *ATM-Intellect Workstation* to the list as follows:

1. Run *Additional workplace configuration tool*.



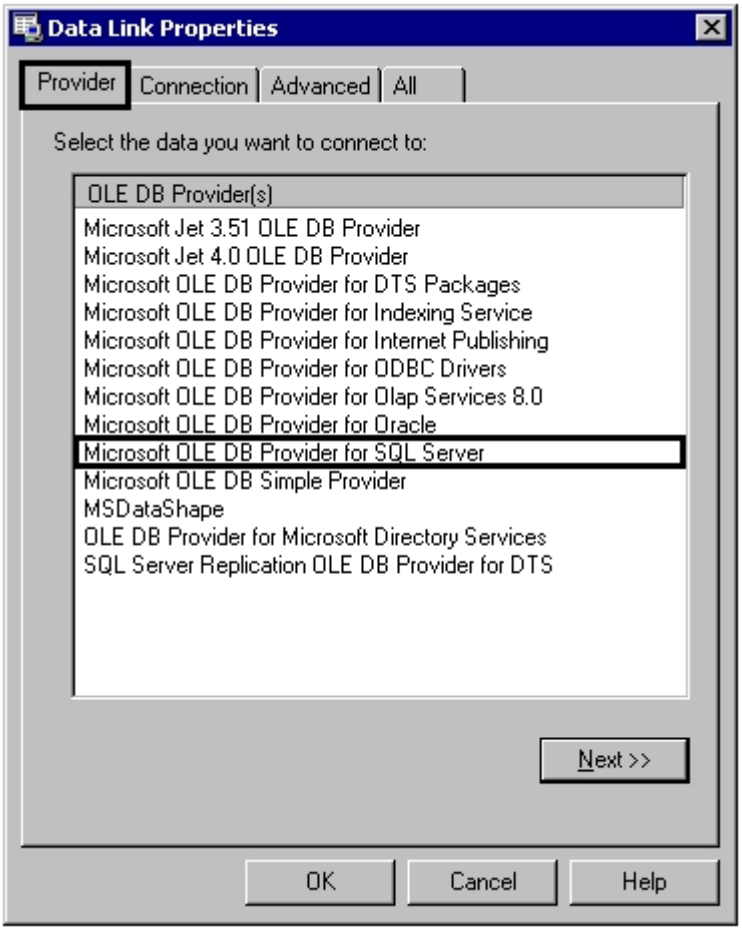
2. Click the  button (**1**).
3. A new ATM-Intellect Workstation named **New** is added to the list (**2**).
4. Rename the *ATM-Intellect Workstation* if necessary (**3**).

> **Note.**
>
> This name is used in the *Additional workplace configuration tool* only.

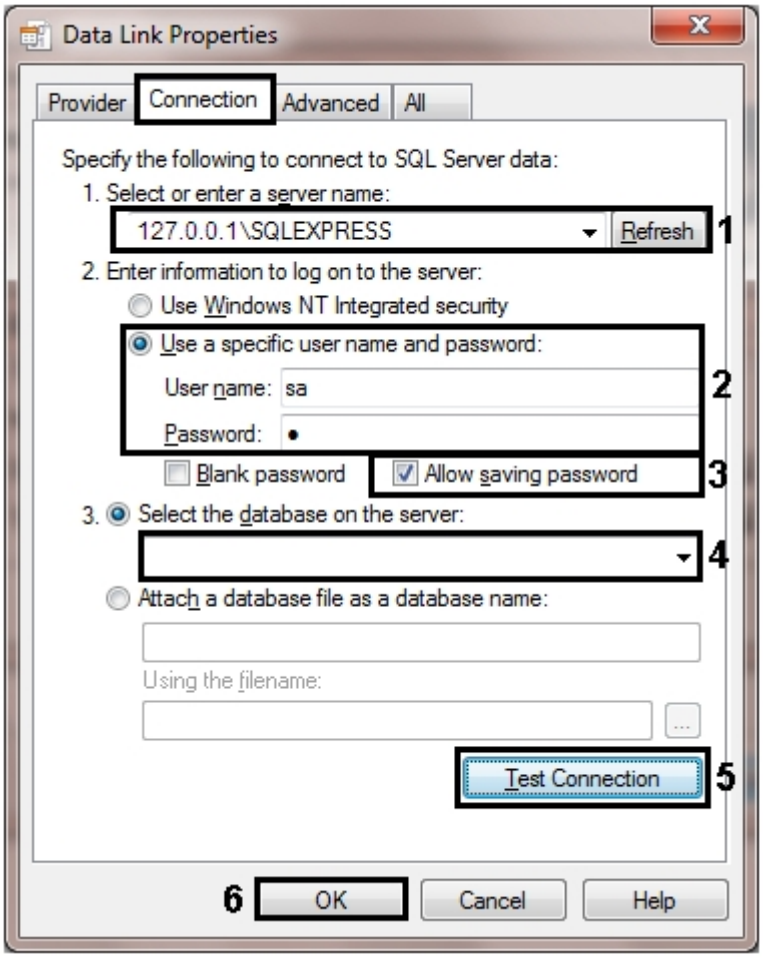
5. Specify the IP address of computer where VideoSrv module is run (**4**).
6. Specify the VideoSrv module connection port (**5**).

> **Note.**
>
> The port used by the *ATM-Intellect Workstation* is specified on the settings panel of the corresponding object when setting the *ATM-Intellect Workstation* – see Setting the ATM-Intellect Workstation connection parameters section.

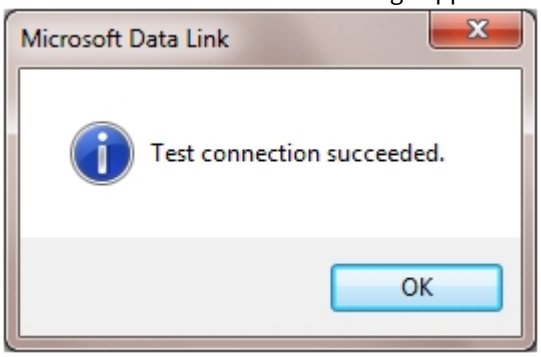
7. Specify the path to network folder on the *ATM-Intellect Workstation* where there are archive files requested from the *ATM-Intellect Pro* (**6**) (see Specifying the export directory). A standard **Browse for Folder** dialog box appears when clicking the **Path to export folder** link. Select a required folder.
8. Specify the path to the executable file of the video player on the *Additional workplace* used to playback the video clips requested from the *ATM-Intellect Pro* (see Video query) (**7**).
9. Click the **DB connection string** link (**8**). The **Data Link Properties** box appears. Configure DB connection to remote *ATM-Intellect Workstation* as follows:
    a. Go to the **Provider** tab. Select **Microsoft OLE DB Provider for SQL Server**.



b. Go to the **Connection** tab.



c. In the **1. Select or enter a server name:** dropdown list select a name of DB server where the *ATM-Intellect Workstation* DB is stored (**1**).
d. Set the **2.Enter information to log on to the sever**: to the **Use a specific user name and password**: position and specify the user name and password to connect to MS SQL Server (**2**).
e. Select the **Allow saving password** check box (**3**).
f. In the **Select the database on the server**: dropdown list select the name of the *ATM-Intellect Workstation* DB (**4**).
g. Click the **Test Connection** button (**5**). If connection data is specified correctly, then the box with the **Test connection succeeded** message appears.



> **Note.**
>
> If there is the **Connection failed** message, then check if there is connection to the *ATM-Intellect Workstation* computer and if the server DB is configured correctly and then repeat steps 9.a-9.g.

10. Click the **OK** button (**6**).
11. The configured connection string is displayed in the text field (**8**).
12. Click the **Main DB connection string** link (**9**). The **Data Link Properties** box appears. Configure DB connection to the base *Intellect* DB similarly to the *ATM-Intellect Workstation* (see steps 9.a-9.h). The configured connection string is displayed in the text field.
13. Click the  button to save the changes (**10**).

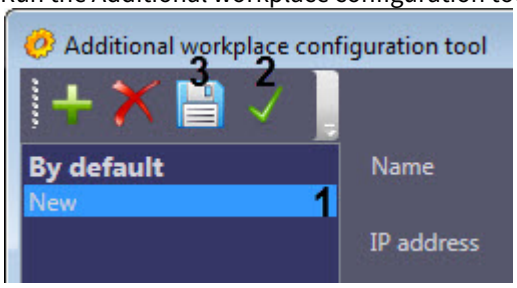
> **Note.**
>
> To remove *ATM-Intellect Workstation* in the list select it and click the  button (**11**).

ATM-Intellect Workstation is now added to the list.

7.3 Selecting active ATM-Intellect Workstation

Select an active *ATM-Intellect Workstation* used by the Additional workplace as follows:

1. Run the Additional workplace configuration tool.



2. Select the required *ATM-Intellect Workstation* in the list (1).
3. Click the  button (2).
4. Click the  button (3).

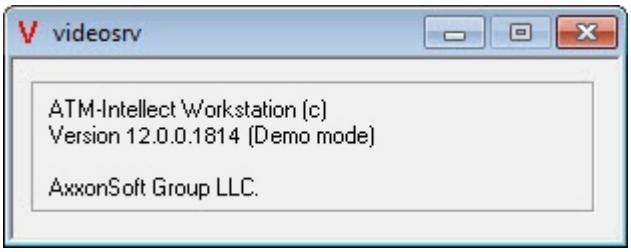
Active *ATM-Intellect Workstation* is now selected.

8 Data loader for Monitoring

8.1 The Videosrv communication module

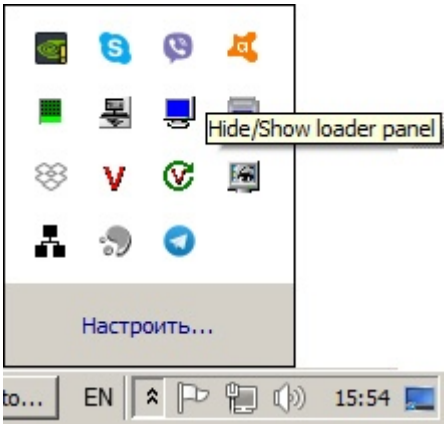
The communication module that obtains information from objects is named Videosrv. A red checkmark representing this module is in the toolbar, in the lower-right corner of the screen.

Double-click the checkmark to open the window shown in the figure.

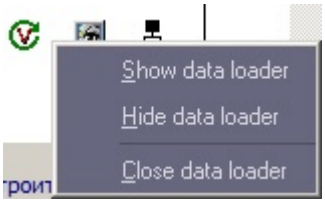


8.2 Data loader for Monitoring module

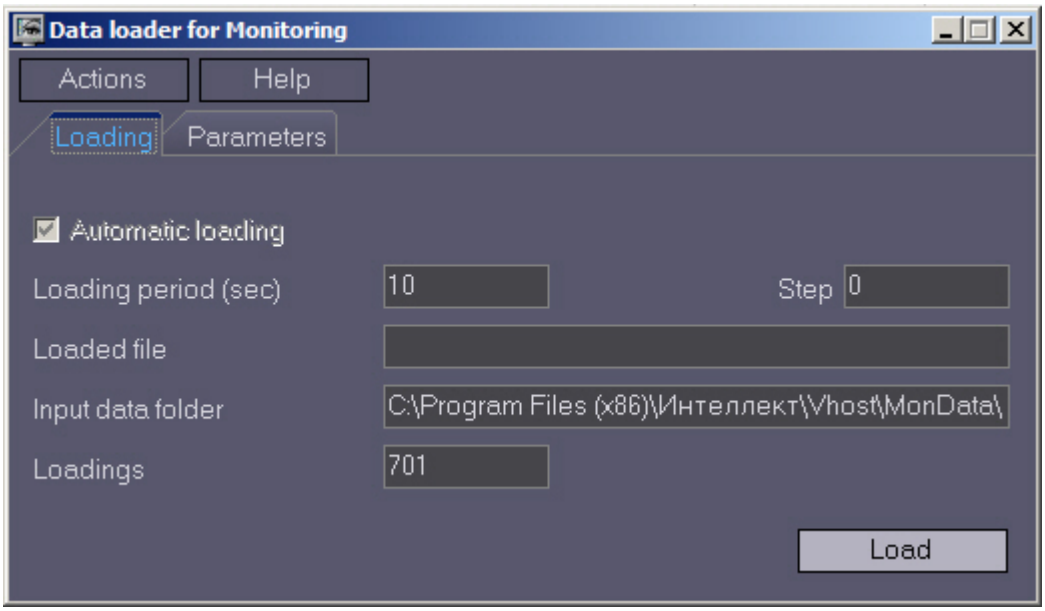
Data loader for Monitoring generates a badge representing this module is in the toolbar, in the lower-right corner of the screen.



Right-click the badge to open a context menu.



When you select **Show data loader** in the menu, the **Data loader for Monitoring** window opens.

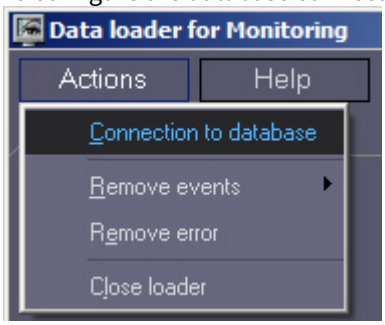


You can specify the following parameters in this window:

1. **Input data folder**: the path to the folder that contains incoming files from Videosrv.
2. **Loading period**: the interval at which files from Videosrv are loaded into the database; this does not apply to alarm messages, which are recorded immediately. Every time data is loaded into the database, a message is sent to the Control Panel interface component to update the information displayed. The Log panel refreshes information from the database every minute.
3. **Automatic loading**: if specified, this is the interval at which file loading is performed. If no value is given, loading can be performed only by clicking the Load button.
4. **Loaded file**: this file displays the name of the currently processed file or error text, if an error occurred during download.
5. Message files from Videosrv are processed in several steps. The **Step** field indicates the current step of processing.

8.3 Database connection

To configure the database connection string, select the **Connection to database** item in the **Actions** menu.

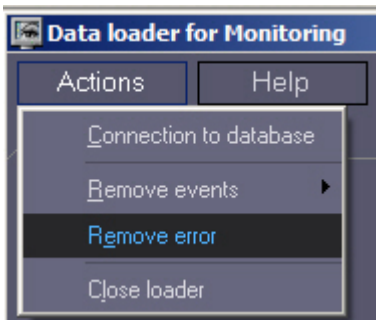


Attention!

If the location of the MonitorSSTV database changes from local to remote, then it is necessary to set the **0** value for the **UseBulkInsert** registry, if it changes from remote to local, then set the **1** value (for details, see Registry keys reference guide, for more information about working with the registry, see Working with Windows OS registry).

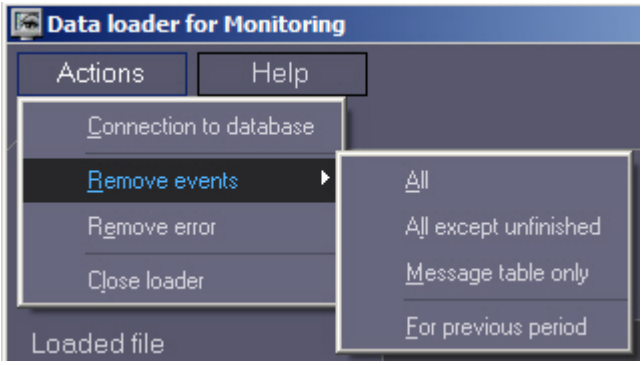
8.4 Removing error

If a fault occurred during the load process, the program cannot be closed since the data loading process cannot be interrupted. To close the program, remove the error by selecting the Remove error menu item.



8.5 Removing events

The **Remove events** menu item allows clearing the database to various degrees:

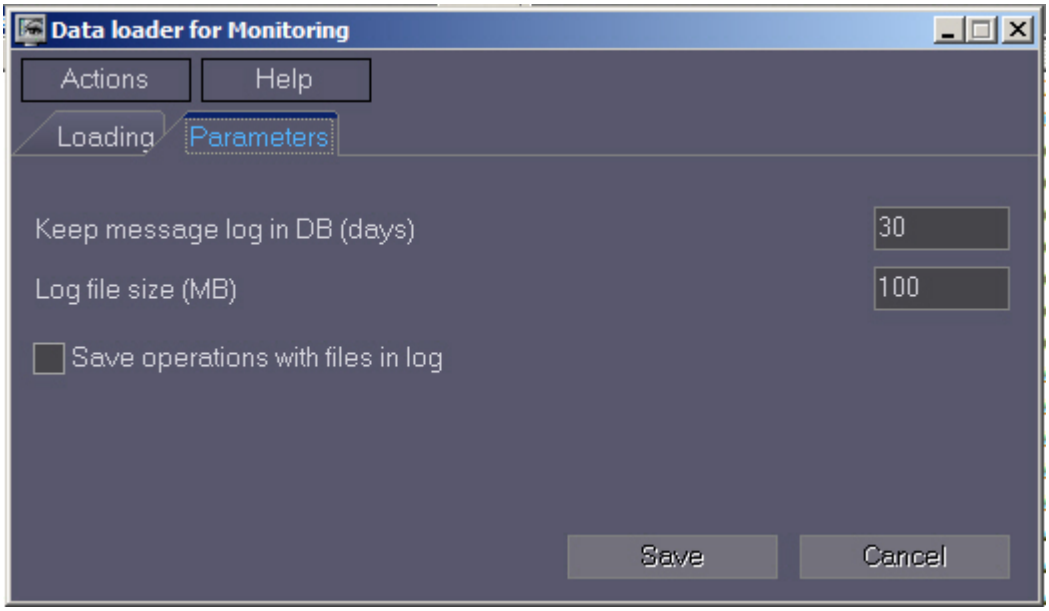


1. **All** – completely clear all alarm data
2. **All except unfinished** – completely clear events but leave information about the beginning of alarms that are ongoing (long alarms)
3. **Message table only** – clear the message log. Allows reducing the size of the database. The duration of time for which the message log is saved in the database can be configured – see Specifying the duration of the message log storing
4. **For previous period** – clear data for the specified period.

8.6 Specifying the duration of the message log storing

The **Parameters** tab allows specifying the duration of time for which the *Data loader for Monitoring* messages are kept in the log (event log).

The data loader's event log is stored in the <Intellect software installation folder>VHost\MONITOR\LOADER\LoaderSSTV_L_M.log, where M is a month.



1. **Keep message log in DB (days)**: You can specify for how long will the data be kept in the MonitorSSTV database tables.
2. **Log file size (MB)** *:* the size (in megabytes) of the event log file of the Data loader for Monitoring; when this value is exceeded, the file is archived.
3. **Save operations with files in log***:* gives details of file operations by the Data loader for Monitoring in the event log.

8.7 Configuring automated video clip loading

To enable automated video clip loading, set the **FileQueryEnable** key in the Windows registry to 1 and specify folder to share data with third party system in the **FileQueryPath** key (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). Restart the computer to ensure the changes applied.

Note.

The **C:\Query** folder is set by **FileQueryPath** key by default.

Important!

Specify different folders in **FileQueryPath** key if automated video clip loading is enabled both on *ATM-Intellect Workstation* and *Additional workplace* simultaneously.

Note.

When *videosrv.exe communication module* starts at the *ATM-Intellect Workstation,* the folder specified in the **FileQueryPath** key is automatically created with the following subfolders:
In – the folder for request files;
In\Work – the service folder for request files;
OutSuccess – the folder to place request files in after successful load of the video clips;
OutError – the folder for incorrect request files or request files with absent mandatory parameters;
OutFail – the folder to place correct request files in if video clip could not be loaded for some reason.

Important!

At *Additional workplace*, create the folder specified in the **FileQueryPath** key with all subfolders described above manually.

8.8 Specifying the export directory

An export directory is automatically created on the *ATM-Intellect Workstation* to save all requested frames and video fragments. By default, the export directory is located at *DISK:**Export*\, where DISK is the drive on which the operating system is installed. You can change the path to this directory using the **ExportPath** registry key (see Registry keys reference guide).

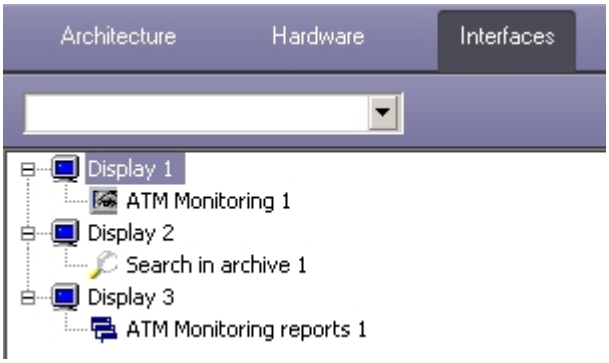
9 ATM-Intellect interface configuration

Interface objects are available at the *ATM-Intellect Workstation* and *Additional workplace* installation types.

ATM-Intellect interface includes the following objects:

1. **ATM Monitoring**.
2. **Search in archive**.
3. **ATM Monitoring reports**.

These objects are created under the **Display** object on the Interfaces tab. It is recommended to create each of the objects under its own **Display**.



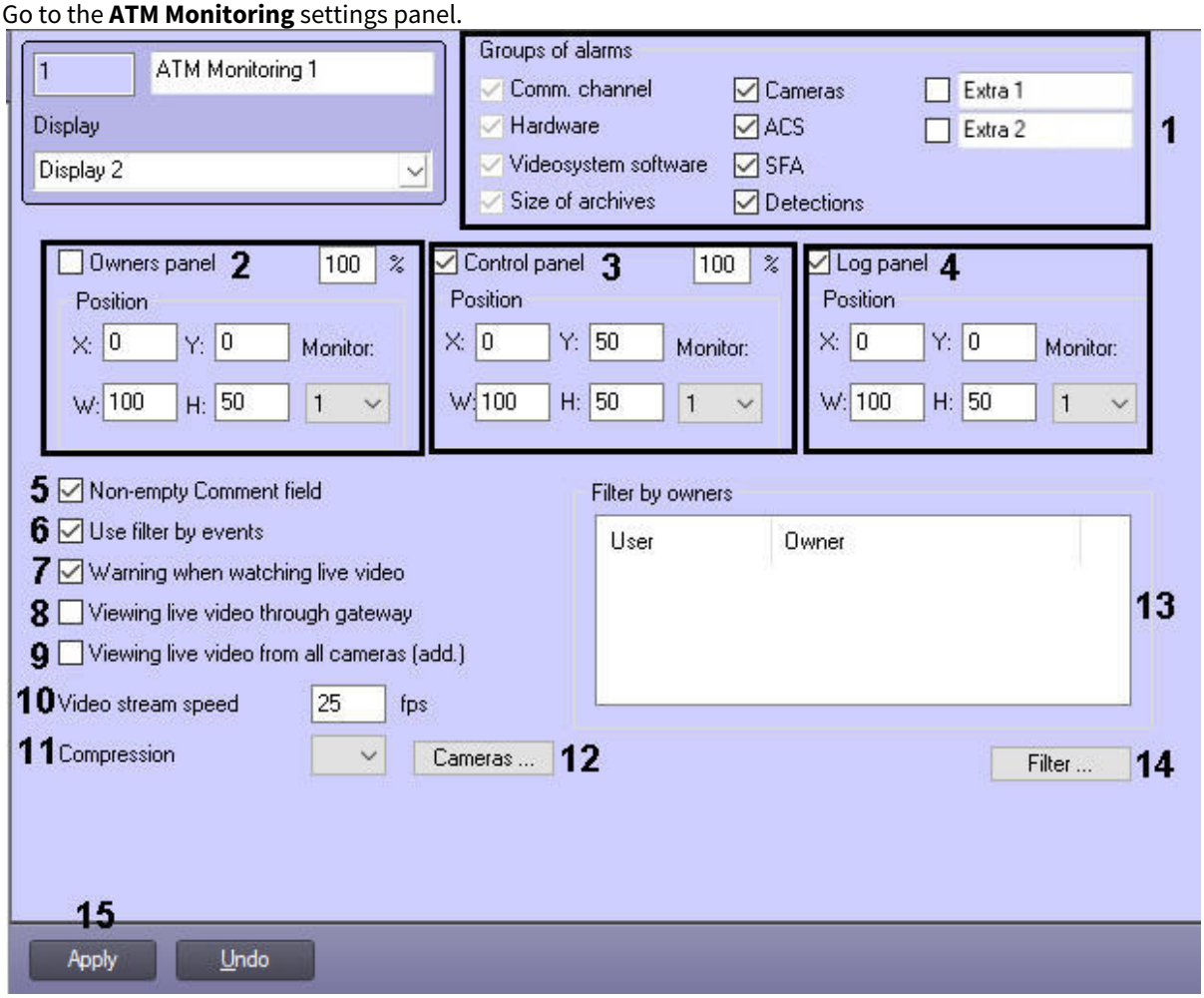
Operations with interface objects are given in the ATM-Intellect software. Operator's Guide document.

9.1 Configuring the ATM Monitoring object

> **Important!**
>
> Before creating the **ATM Monitoring** object, create and configure the **ATM-Intellect Workstation** object depending on the installation type (see Creating ATM-Intellect Workstation objects in the hardware tree).

To configure the **ATM Monitoring** object proceed as follows:

1. Go to the **ATM Monitoring** settings panel.



2. Set the check boxes next to the alarm groups that should be visualized (**1**). The **Extra 1** and **Extra 2** groups of alarms can be renamed.
3. If it is necessary to display the **Owners panel** component on the screen, set the **Owners panel** check box and specify the component position coordinates on the monitor screen. Also, from the **Monitor** drop-down list, select the number of the physical monitor, which coordinates should be specified (**2**). You can also set the scaling of objects from 100% to 500%.

> **Note**
>
> If the scaling parameter exceeds 110%, then the high resolution icons will be displayed on the object, and the Courier New font will be used for the text in the object title, otherwise — MS Sans Serif.

4. If it is necessary to display the **Control panel** component on the screen, set the **Control panel** checkbox and specify the component position coordinates on the monitor screen. Also, from the **Monitor** drop-down list, select the number of the physical monitor, which coordinates should be specified (**3**). You can also set the scaling of objects from 100% to 500%.

> **Note**

If the scaling parameter exceeds 110%, then the high resolution icons will be displayed on the object, and the Courier New font will be used for the text in the object title, otherwise — MS Sans Serif.

5. If it is necessary to display the **Log panel** component on the screen, set the **Log panel** checkbox and specify the component position coordinates on the monitor screen. Also, from the **Monitor** drop-down list, select the number of the physical monitor, which coordinates should be specified (**4**).
6. Set the **Non-empty Comment field** checkbox, if it is necessary for the operator to comment on this alarm and/or their actions, when accepting the alarm (**5**). This comment can be viewed later in the event log, as well as the name of the operator who received the alarm.
7. By default, objects can be filtered by **Alarm** and **Failure** events as well as by **Connected** and **Disconnected** states. Uncheck the **Use filter by events** box to disable this feature (**6**). As a result, the corresponding drop-down list becomes disabled.
8. If when live video is attempted to be viewed it is necessary to display a warning that it can create the critical load per channel, set the **Warning when watching live video** checkbox (**7**).
9. If *ATM-Intellect Pros* and *Additional workplaces* are in different subnets and the *ATM-Intellect* components are not in a distributed system configuration in *Intellect* object tree and **Data gateway** is in use for transmission of live video to *Additional workplaces*, set the **Viewing live video through gateway** checkbox (**8**).

   Note

   For the details about the **Data gateway**, see Creating and configuring Data gateway.

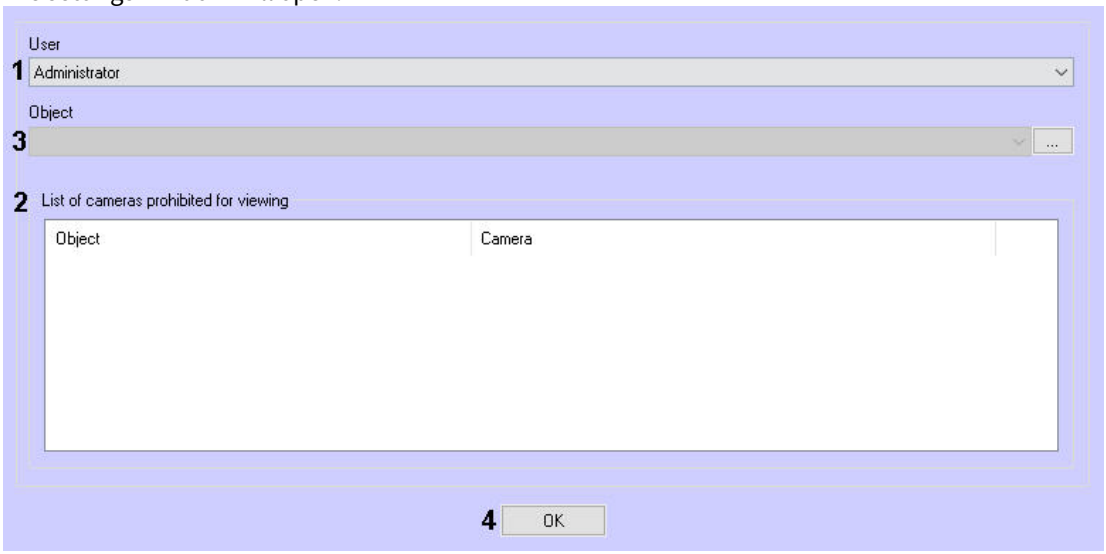
10. To add the "All cameras of Surveillance Object" item to the object's "Video image playback" context menu which enables viewing video from all cameras of the selected Surveillance Object, set the **Viewing live video from all cameras (add.)** checkbox (**9**).
11. In the **Video stream speed** field, enter the number of frames per second of the video image when viewing live or archive video (**10**). This parameter is used to limit the data flow between the *ATM Intellect Workstation* and the *ATM Intellect Pro* (for example, in case the communication channel has low bandwidth).

    Notes

    - The **Video stream speed** setting works for the archive video only with CamMonitor.ocx 4.11.0.1766 or later versions.
    - If the archive is recorded with the H.264 codec and the video stream speed is set to more than **0** frames per second, then the archive video will be played back only by reference frames.
    - If the value of the video stream speed is **0**, then the live and archive video will be played back without scaling.

12. Select the required compression rate for the live video in the **Compression** drop-down list (**11**).
13. If it is necessary to set the cameras for which the user should be prohibited from viewing live video, do the following:
    a. Click the **Cameras...** button (**12**).

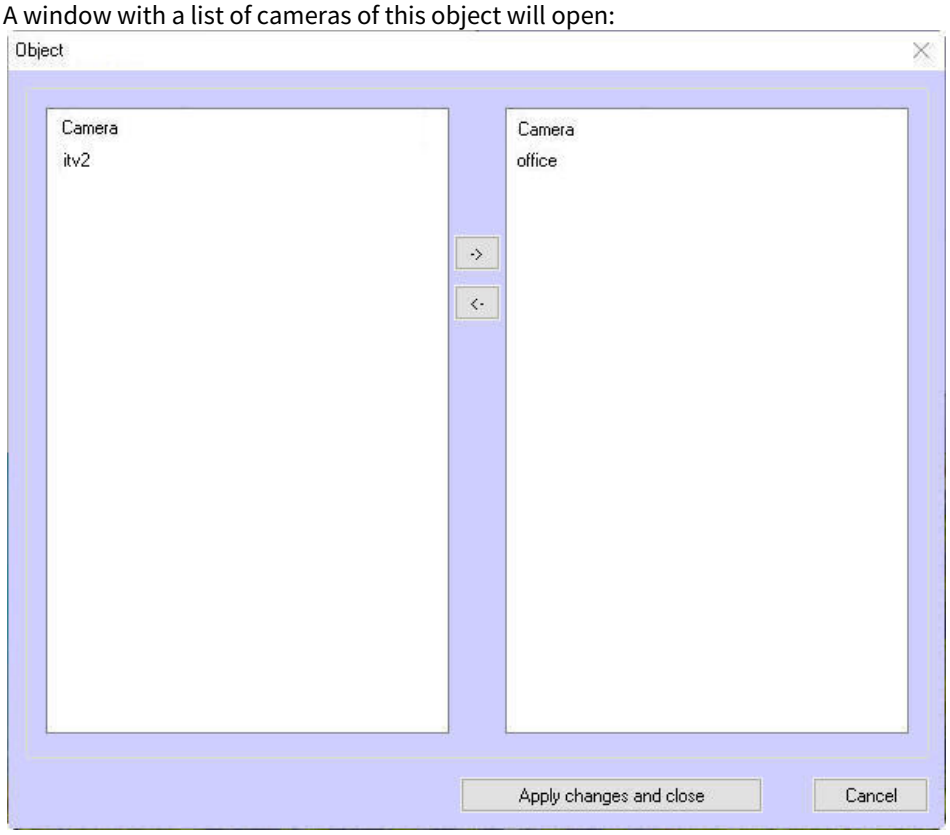
b. The settings window will open:



c. In the **User** drop-down list (**1**), select the user to whom the prohibition should be applied.
d. The **List of cameras prohibited for viewing** field (**2**) displays the cameras prohibited from viewing for the selected user. To add a camera to the list, select the required object from the **Object** drop-down list (**3**) and click the  button.

> **Note**
>
> The **Object** list contains only those objects that have cameras.

e. A window with a list of cameras of this object will open:



f. In the left part of the window, select the cameras that should be prohibited from viewing, and move them to the right part of the window using the  button. Then click **Apply changes and close**.

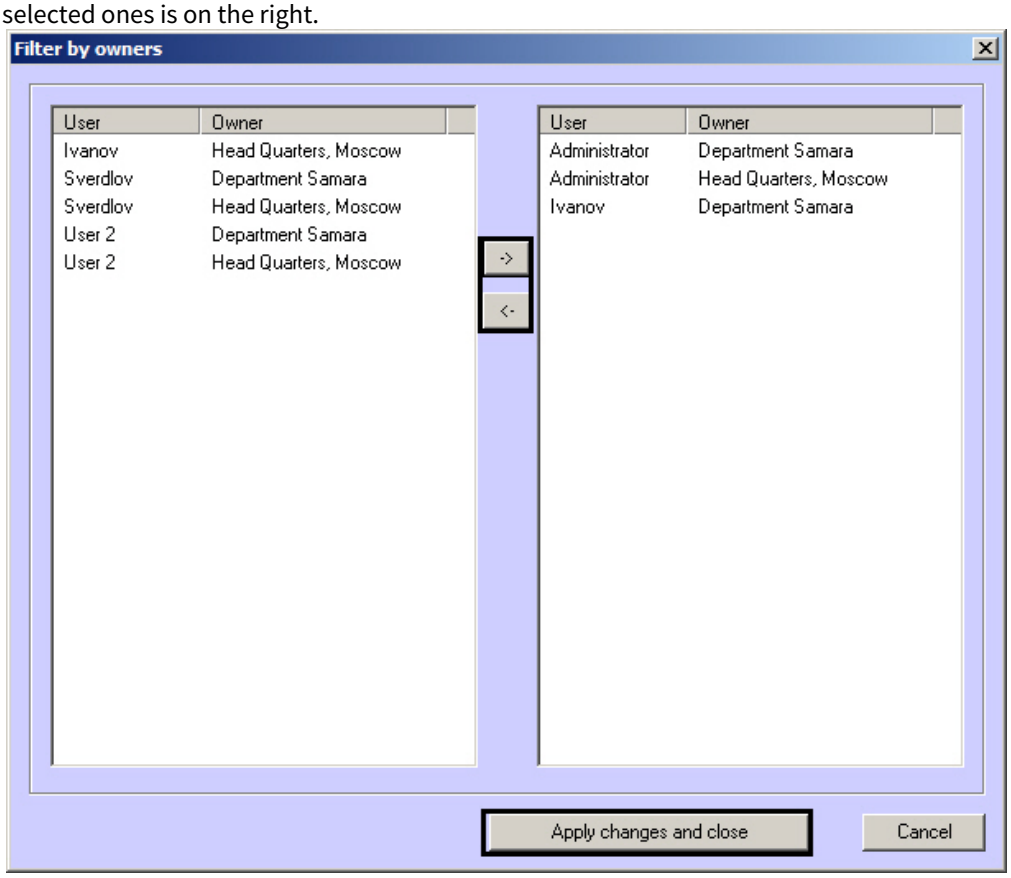
> **Note**
>
> To cancel the prohibition, select the camera in the right part of the window and click the  button.

g. Click **OK** (**4**).

> **Notes**
>
> - If a filter by owner is used for the **ATM Monitoring** interface object, then its value is taken into account when configuring prohibited cameras.
> - If the user selects a camera that is not prohibited from viewing live video in the **ATM Monitoring** interface, they can enter the camera's functional menu and select a camera prohibited from viewing using the Camera menu item. To prevent this from happening, it is necessary to hide the Camera menu item using the MENU_CAMS_DISABLE_OPTION registry key (see Registry keys reference guide).
> - When adding a camera to the list of prohibited from viewing, the camera is not automatically removed from the previously created screens to which this camera was added.

14. If specific owners are to be available for specific users on the **Owners panel**, then set the filter by owners:
    a. Click the **Filter…** button (**14**).

b. The **Filter by owners** window appears. The list of available user-owner pairs is on the left, the list of selected ones is on the right.



> **Note.**
>
> The list of owners is set on the Control Panel – see Reference information.
> Users and their rights are configured in the **Users** tab of the **System settings** dialog box – for details, see Limiting access to the system objects administration, control and viewing functions.

c. Move the pairs between the lists using the <- and -> buttons.
d. When the list of user-owner pairs is formed, click the **Apply changes and close** button.

15. Selected pairs of users and owners are displayed in the table (**13**).
16. Click **Apply** (**15**).

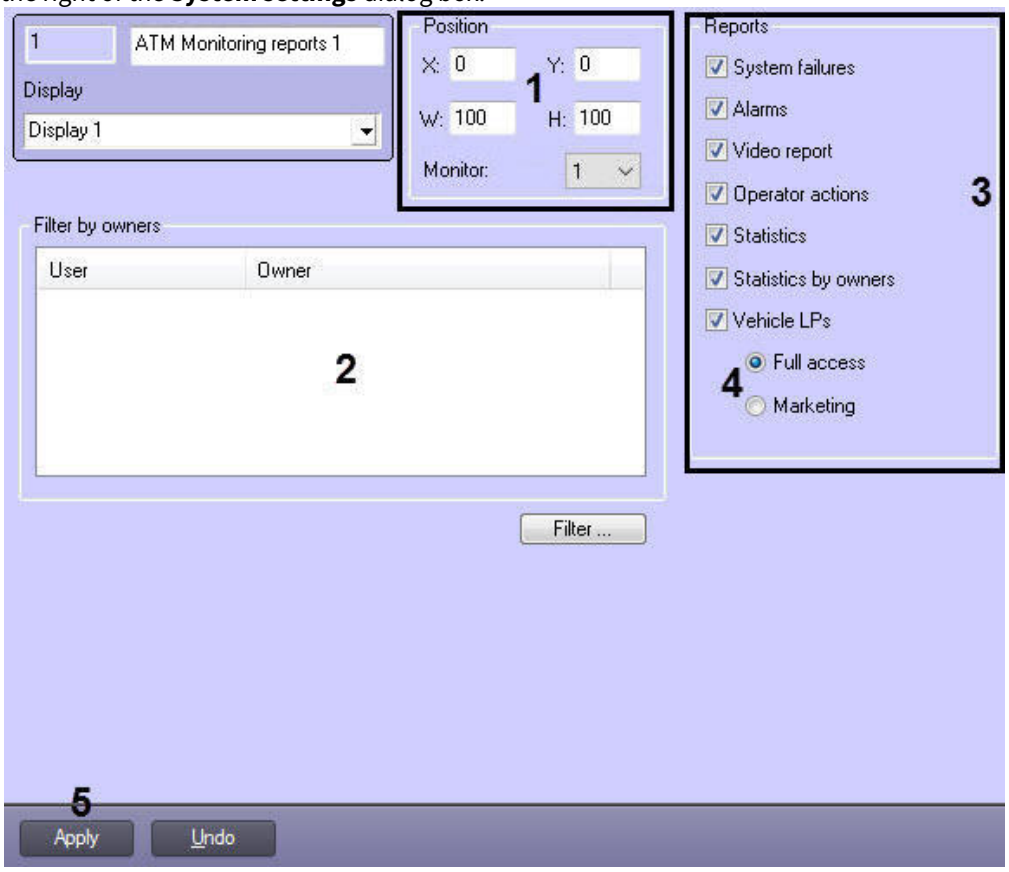
Configuring the **ATM Monitoring** object is completed.

If display is selected under which the **ATM Monitoring** object is created, the **ATM Monitoring** window will be displayed.

9.2 Configuration of the ATM Monitoring reports object

To configure the **ATM Monitoring reports** object, proceed as follows:

1. Select the **ATM Monitoring reports** object in the object tree. The settings panel of the object is displayed on the right of the **System settings** dialog box.



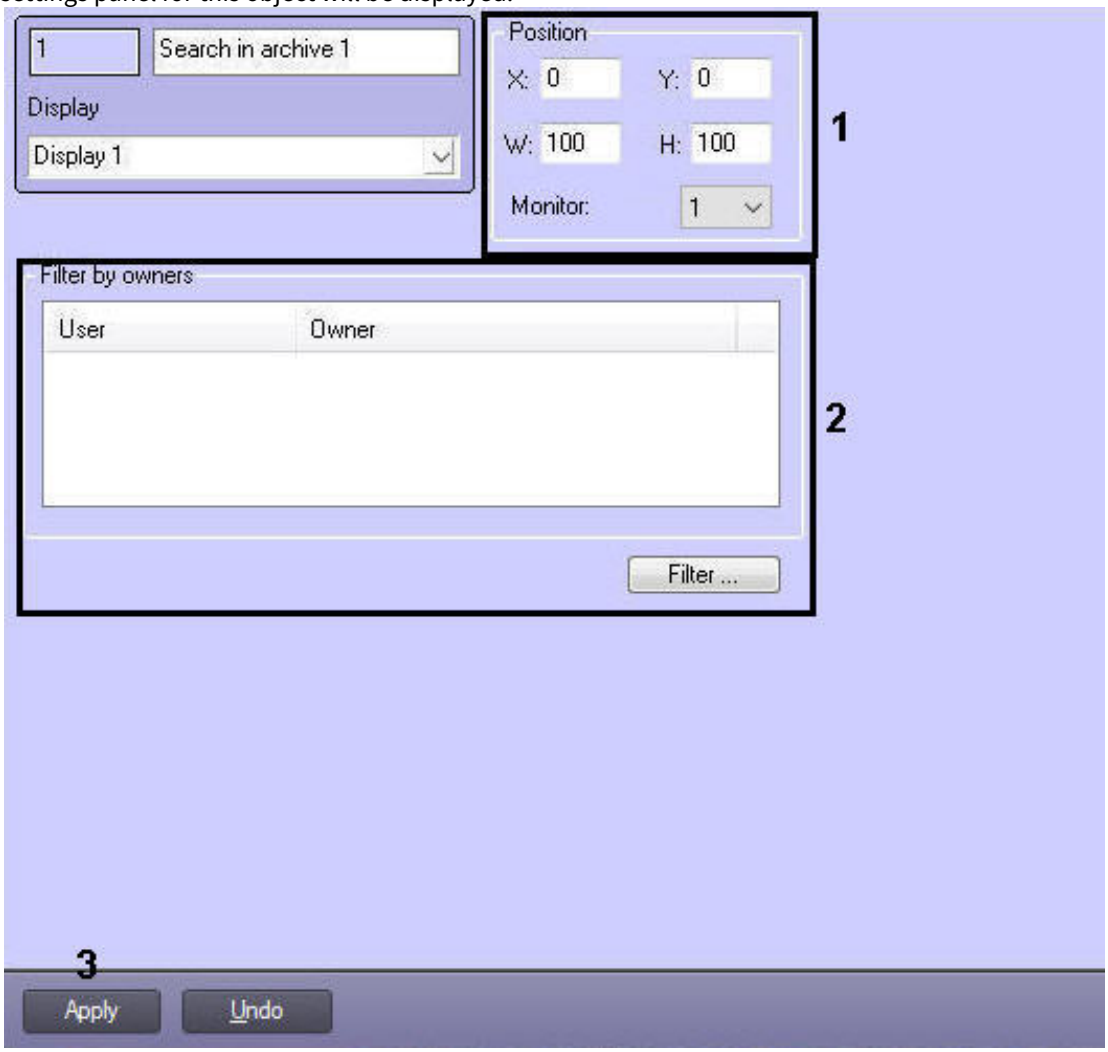
2. From the **Monitor** drop-down list (**1**), select the number of the physical monitor, which coordinates should be specified. Specify the **ATM Monitoring reports** window position coordinates on the screen of the selected monitor.
3. Set owners filter similar to the one for the **ATM Monitoring** object (**2**), see Configuring the ATM Monitoring object.
4. By default, all reports are available for the operator. To hide some of the reports, uncheck the boxes next to them in the **Reports** group (**3**).
5. Select the type of access to the Vehicle LPs reports (**4**):
    a. **Full access**: all Vehicle LPs report types are available.
    b. **Marketing**: only the average time span at the gas station and number of vehicles reports are available, and the Vehicle LP field is restricted to three letters and % symbol.
6. Click **Apply** (**5**).

Configuration of the **ATM Monitoring reports** object is completed.

9.3 Setting up the Search in archive object

The **Search in archive** interface object is configured as follows:

1. Select the **Search in archive** object in the tree. In the right part of the **System settings** dialog box, the settings panel for this object will be displayed:



2. From the **Monitor** drop-down list (**1**), select the number of the physical monitor, which coordinates should be specified. Specify the **Search in archive** window position coordinates on the screen of the selected monitor.
3. Set up a filter by owners (**2**) by analogy with the **ATM Monitoring** interface object — see Configuring the ATM Monitoring object.
4. Click the **Apply** button (**3**).

When you select the **Display** object on the basis of which the **Search in archive** object was created in *Intellect,* the **Search in archive** interface window will be visualized (see Search in archive).

10 Configuring audio calls from the ATM Monitoring interface

10.1 General information

Audio calls are supported between operators in a distributed configuration on the *ATM-Intellect Workstation/ATM-Intellect Pro* side. Audio calls are made using the **SIP terminal** object. Physical SIP devices are not required.

> **Important!**
>
> This functionality is only available in *Intellect* 4.11.2 or higher.

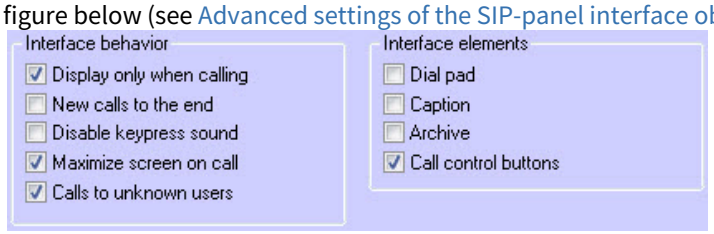
10.2 Configuring audio calls from the ATM-Monitoring interface

Configure audio calls from the **ATM-Monitoring** interface as follows:

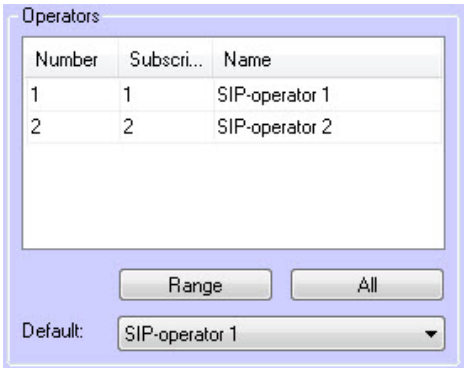
1. At the *ATM-Intellect Workstation* and *ATM-Intellect Pro* side:
   a. Create **Audio card** object with the **Microphone** object under it (see Audio subsystem configuration).
   b. Create **Audio playback card** object with the **Speaker** object under it (see Configuring audio playback).
2. At the *ATM-Intellect Workstation* side:
   a. Create a **SIP-terminal** object as a SIP server in *Intellect* (see Configuring SIP-terminal).
   b. On the basis of the **SIP-terminal** object, create 2 child **SIP-operator** objects and for each of them specify the corresponding operator identification number (Configuring SIP-operators of the Intellect's SIP server).
   c. On the basis of the **SIP-terminal** object, create the **Address book** object and select to use the previously created SIP operators (see Configuring address book of SIP-terminal).
   d. On the settings panel of each **SIP-operator**, select a previously created address book for use (see Configuring SIP-operators of the Intellect's SIP server).
   e. Create a **SIP-panel 1** interface object on the same **Screen 1** object where the **ATM-Monitoring** interface object was created (see Configuring the SIP-panel interface object).

      > **Note.**
      >
      > Recommended coordinates of the SIP panel: X = 40, Y = 40, W = 20, H = 21.

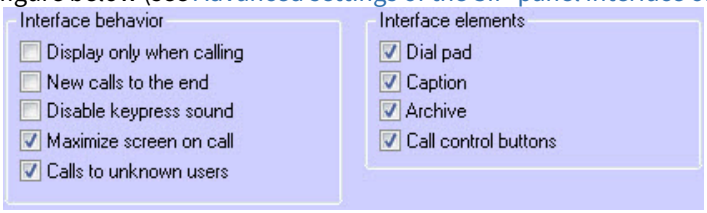
      i. On the **Basic settings** tab of the **SIP panel 1** object, select the **SIP terminal** as the terminal (see Basic settings of the SIP-panel interface object).
      ii. On the **Advanced settings** tab of the **SIP panel 1** object, check the boxes as shown in the figure below (see Advanced settings of the SIP-panel interface object).



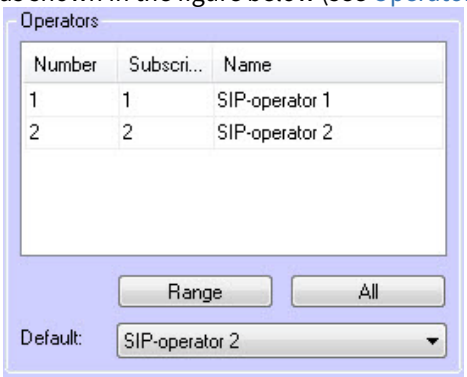
      iii. On the **Operator settings** tab of the **SIP-panel 1** object, configure the list of SIP-operators as shown in the figure below (see Operator settings of the SIP-panel interface object).



f. Create the **Screen 2** object, which will be displayed only on the *ATM-Intellect Pro* side (see Assigning the displays to the operator workstations).
g. Create child interface object **SIP panel 2**.
   i. On the **Basic settings** tab of the **SIP panel 2** object, select the **SIP terminal** as the terminal (see Basic settings of the SIP-panel interface object).
   ii. On the **Advanced settings** tab of the **SIP panel 2** object check the boxes as shown in the figure below (see Advanced settings of the SIP-panel interface object).



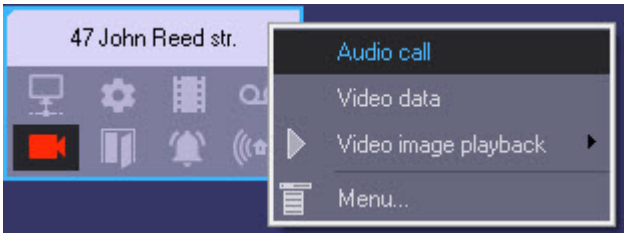
   iii. On the **Operator settings** tab of the **SIP-panel 2** object and configure the list of SIP-operators as shown in the figure below (see Operator settings of the SIP-panel interface object).



h. On the settings panel of the **Computer** object, select the speaker and microphone of the SIP operator (see Selecting speaker, microphone and camera for SIP-operator).

Setting up audio calls from the **ATM-Monitoring** interface is now complete.

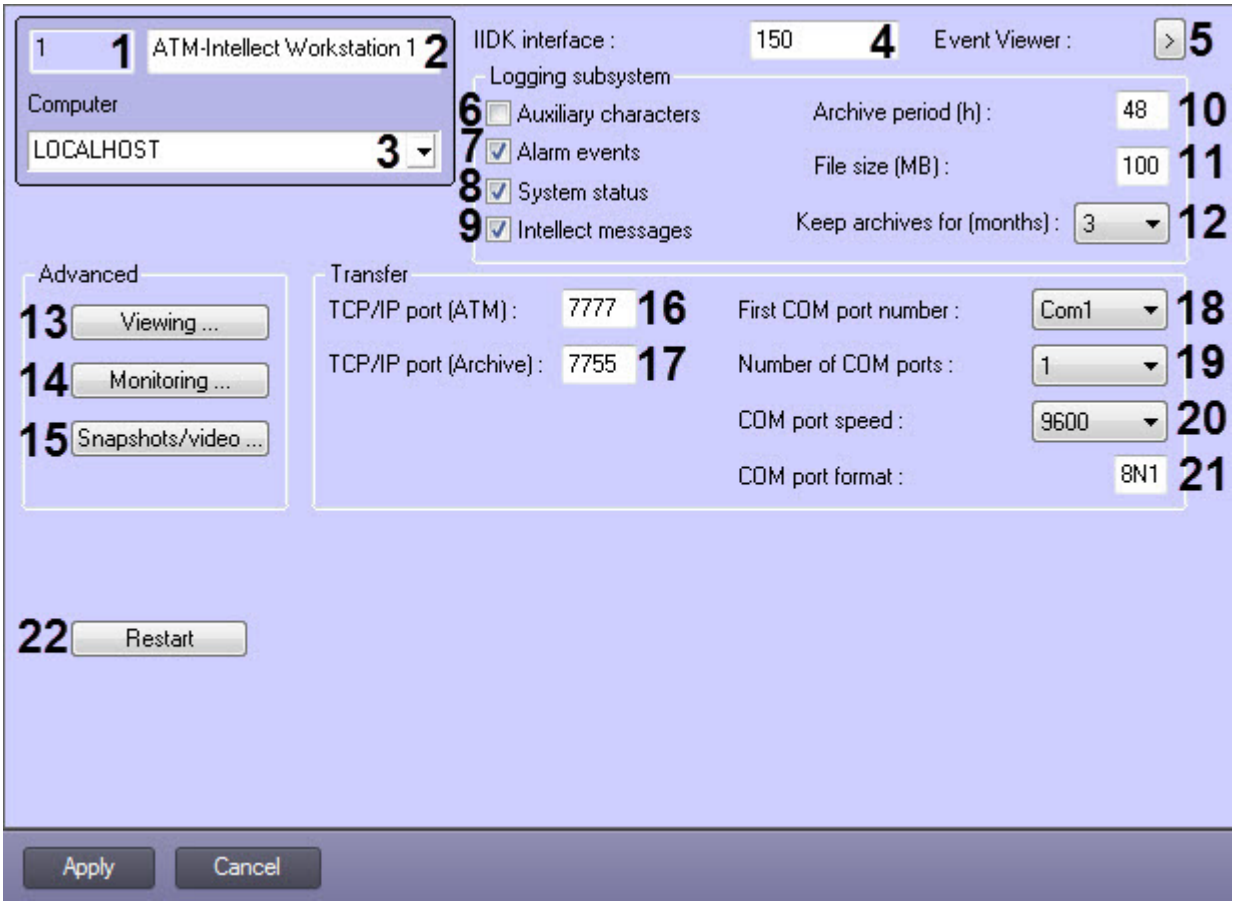
As a result, the **Audio call** item will appear in the context menu of the object in the **ATM-Monitoring** interface. When you select this menu item, an audio call will be made to the operator who is on the computer with the corresponding object.


47 John Reed str.
Audio call
Video data
Video image playback
Menu...

11 Appendix 1. Interfaces

11.1 Settings panel of the ATM-Intellect Workstation object

Settings panel of the **ATM-Intellect Workstation** object is given on the figure.



Description of the **ATM-Intellect Workstation** object settings panel elements is given in the table.

#	Parameter	Method for setting the parameter value	Description	Type	Default value	Value range
1	Identifier	Automatically	Shows the identification number of the **ATM-Intellect Workstation** object in the system	Nonnegative integer	-	>=0

#	Parameter	Method for setting the parameter value	Description	Type	Default value	Value range
2	Parameter	Enter the value in the field	Shows the name of the **ATM-Intellect Workstation** object in the system	Latin, Cyrillic letters and service characters	ATM-Intellect Workstation	A line representing a sequence of any symbols (letters, digits, service characters apart from > and < symbols), not case-sensitive. Number of symbols – from 1 to 60.
3	**Computer**	Is selected in the list	Assigns the parent **Computer** object for the **ATM-Intellect Workstation** object	Name of the **Computer** objects registered in the system.	Name of the parent **Computer** object	Depends on the number of the **Computer** objects in the system.
4	**IIDK interface**	Enter the value in the field	Sets the ID number of **IIDK interface** object used by the *ATM-Intellect Workstation*	Nonnegative integer	150	>=0
5	**Event Viewer**	Click the button	Opens the *ATM-Intellect Workstation* event viewer	-	-	-
Logging subsystem group						

#	Parameter	Method for setting the parameter value	Description	Type	Default value	Value range
6	**Auxiliary characters**	Is set in a checkbox	Enables logging of auxiliary characters at the transport level into the event log	Boolean	False	True – logging of auxiliary characters is enabled False – logging of auxiliary characters is not performed
7	**Alarm events**	Is set in a checkbox	Enables logging alarms into the event log	Boolean	True	True – logging of alarms is enabled False – logging of alarms is not performed
8	**System status**	Is set in a checkbox	Enables logging of events related to system status	Boolean	True	True – logging of events related to system status is enabled False – logging of events related to system status is not performed
9	**Intellect messages**	Is set in a checkbox	Enables logging of messages from *Intellect* software. The log is stored in <*Intellect* installation>\VHost\video.log	Boolean	True	True – logging of messages from Intellect software is enabled False – logging of messages from Intellect software is disabled
10	**Archive period (h)**	Enter the value in the field	Sets the frequency at which the event log is to be archived	Hours	48	>0

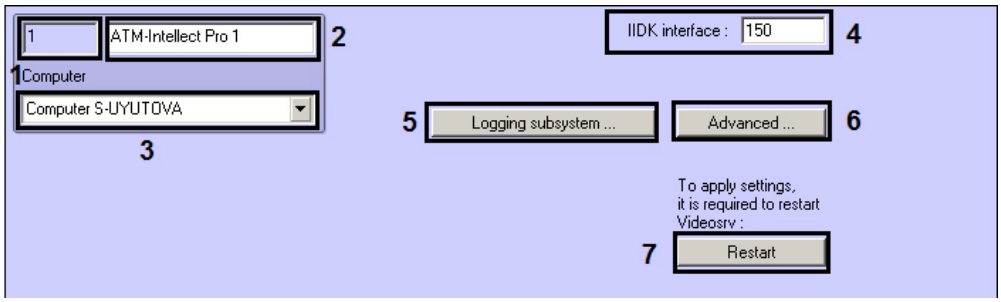
#	Parameter	Method for setting the parameter value	Description	Type	Default value	Value range
11	**File size (MB)**	Enter the value in the field	Sets the file size threshold upon which the event log is archived. This setting overrides the value in the **Archive frequency** field.	Megabytes	100	>0
12	**Keep archives for (months)**	Enter the value in the field	Sets the length of time for which you want to store archived event logs.	Months	3	from 1 to 24
Advanced group						
13	**Viewing...**	Click the button	Opens a dialog box for selecting data to display in the Event viewer.	-	-	-
14	**Monitoring...**	Click the button	Opens a dialog box for setting Additional workplaces list	-	-	-
15	**Snapshots/ video...**	Click the button	Opens a dialog box for configuring reaction to snapshots and videos receiving on sensors alarms at the *ATM-Intellect Pro*	-	-	-
Transfer group						

#	Parameter	Method for setting the parameter value	Description	Type	Default value	Value range
16	**TCP/IP port (ATM)**	Enter the value in the field	Sets the port number for TCP/IP communication with remote objects of **ATM-Intellect Pro**	Nonnegative integer	7777	from 1 to 60000
17	**TCP/IP port (Archive)**	Enter the value in the field	Sets the port number for TCP/IP communication with remote *Search in archive* module	Nonnegative integer	7755	from 1 to 60000
18	**First COM port number**	Is selected in the list	Sets the first COM port number	COM-ports names	Com1	from Com1 to Com256
19	**Number of COM ports**	Is selected in the list	Sets number of COM ports used	Nonnegative integer	1	from 1 to 256
20	**COM port speed**	Is selected in the list	Sets the COM port speed	Baud	9600	110 300 1200 2400 4800 9600 19200 38400 57600

#	Parameter	Method for setting the parameter value	Description	Type	Default value	Value range
21	**COM port format**	Enter the value in the field	Sets the COM port format	COM port format	8N1	• first digit: from 5 to 9 data bits; • second letter: **N** (No parity) – no parity bit, **E** (Even parity) – even parity bit, **O** (Odd parity) – odd parity bit; • third digit: 1 or 2 stop bits.
Outside the groups						
22	**Restart**	Click the button	*VideoSrv* communication module restarting	-	-	-

11.2 Settings panel of the ATM-Intellect Pro object

Settings panel of the **ATM-Intellect Pro** object is given on figure.



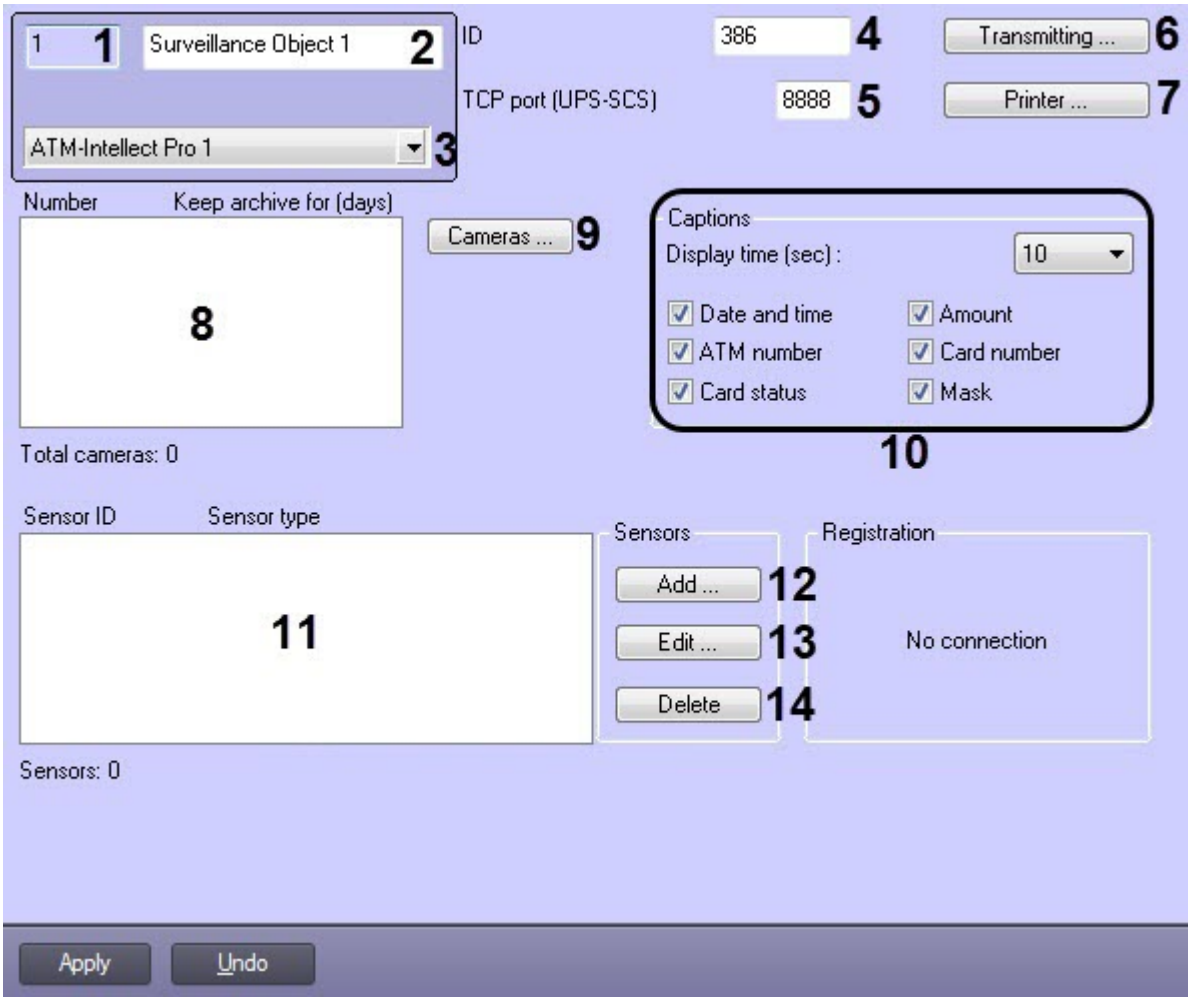
Description of the **ATM-Intellect Pro** object settings panel elements is given in the table.

#	Parameter	Method for setting the parameter value	Description	Type	Default value	Value range
1	Identifier	Automatically	Shows the identification number of the **ATM-Intellect Pro** object in the system	Nonnegative integer	-	>=0
2	Parameter	Enter the value in the field	Shows the name of the **ATM-Intellect Pro** object in the system	Latin, Cyrillic letters and service characters	ATM-Intellect Pro	A line representing a sequence of any symbols (letters, digits, service characters apart from > and < symbols), not case-sensitive. Number of symbols – from 1 to 60.
3	**Computer**	Is selected in the list	Assigns the parent **Computer** object for the **ATM-Intellect Pro** object	Name of the **Computer** objects registered in the system.	Name of the parent **Computer** object	Depends on the number of the **Computer** objects in the system.
4	**IIDK interface**	Enter the value in the field	Sets the ID number of **IIDK interface** object used by the **ATM-Intellect Pro**	Nonnegative integer	150	>=0
5	**Logging subsystem ...**	Click the button	Opens a dialog box for setting event log parameters	-	-	-
6	**Advanced. ..**	Click the button	Opens a dialog box for setting up time synchronization and control of connection	-	-	-

#	Parameter	Method for setting the parameter value	Description	Type	Default value	Value range
7	**Restart**	Click the button	VideoSrv communication module restarting	-	-	-

11.3 Settings panel of the Surveillance Object object

Settings panel of the **Surveillance Object** object is given on the figure.



Description of the **Surveillance Object** object settings panel elements is given in the table.

#	Parameter	Method for setting the parameter value	Description	Type	Default value	Value range
1	Identifier	Enter the value in the field	Shows the identification number of the **Surveillance object** object in the system	Latin, Cyrillic letters and service characters	-	-
2	Name	Enter the value in the field	Shows the name of the **Surveillance object** object in the system	Latin, Cyrillic letters and service characters	Surveillance object	A line representing a sequence of any symbols (letters, digits, service characters excluding characters: underscore "_", backslash "\", angle brackets ">" and "<", single quote "'"). Number of symbols – from 1 to 60.
3	ATM-Intellect Pro	Is selected in the list	Assigns the parent **ATM-Intellect Pro** object for the **Surveillance object** object	Names of **Surveillance object** objects registered in the system	Name of the parent **ATM-Intellect Pro** object	Depends on the number of the **ATM-Intellect Pro** objects in the system.

#	Parameter	Method for setting the parameter value	Description	Type	Default value	Value range
4	**ID**	Enter the value in the field	Sets the unique ID number of the ATM machine	Latin, Cyrillic letters and some characters	386	A line representing a sequence of any symbols (letters, digits, service characters excluding characters: space " ", underscore "_", backslash "\" and single quote "'"), not case-sensitive. Number of symbols – from 1 to 9.
5	**TCP port (UPS-SCS)**	Enter the value in the field	Sets the port on which to "listen" for UPS messages	Nonnegative integer	8888	from 1 to 60000
6	**Transmitting...**	Click the button	Opens a dialog box with settings for configuring the communication between *ATM-Intellect Pro* and *ATM-Intellect Workstation*	-	-	-
7	**Printer...**	Click the button	Opens a dialog box for configuration of ATM receipts captioning.	-	-	-
8	Cameras	Using the **Cameras ...** button	Displays the list of cameras whose state and archives are monitored by *ATM-Intellect Pro* and operating with which shall be available from *ATM-Intellect* software interface.	-	-	-

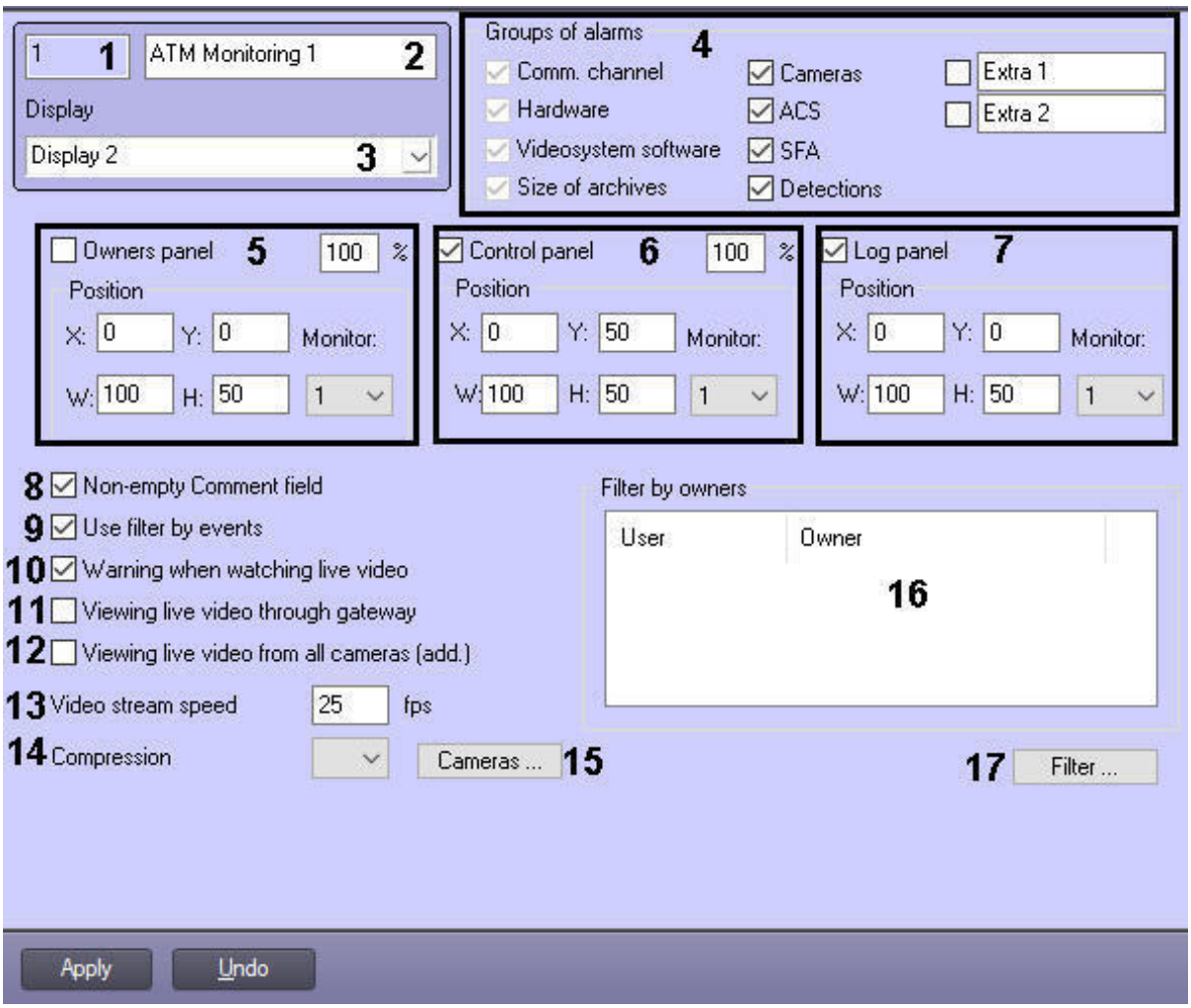
#	Parameter	Method for setting the parameter value	Description	Type	Default value	Value range
9	**Cameras...**	Click the button	Opens a dialog box for adding cameras for monitoring their status	-	-	-
10	**Displaying time (sec.)**	Is selected in the list	Sets duration of captions displaying on video image beginning at the moment of corresponding event appearing from the secured object (ATM)	Seconds	10	5, 10, 15, 20, 30, 45, 60, 90, 120, 200
	Date and time	Is set in a checkbox	Specifies if it is necessary to include event date and time into the captions	Boolean	True	True – date and time are included into the captions False – date and time are not included into the captions
	ATM number	Is set in a checkbox	Specifies if it is necessary to include into the captions the number of ATM from which the event came	Boolean	True	True – ATM number is included into the captions False – ATM number is not included into the captions
	Card status	Is set in a checkbox	Specifies if it is necessary to include data on card status into the captions	Boolean	True	True – card status is included into the captions False – card status is not included into the captions

#	Parameter	Method for setting the parameter value	Description	Type	Default value	Value range
	Amount	Is set in a checkbox	Specifies if it is necessary to include operation amount into the captions	Boolean	True	True – amount is included into the captions False – amount is not included into the captions
	Card number	Is set in a checkbox	Specifies if it is necessary to include card number into the captions	Boolean	True	True – ATM number is included into the captions False – ATM number is not included into the captions
	Mask	Is set in a checkbox	Specifies if it is necessary to apply mask to a card number when displaying in in the captions	Boolean	True	True – card number is masked False – card number is fully displayed
11	Sensors	Using the **Add**, **Edit** and **Delete** buttons	Displays IDs and types of sensors whose state is monitored by *ATM-Intellect Pro* and on whose triggering video data are sent to the ATM-Intellect Workstation.	-	-	-
12	**Add...**	Click the button	Opens a dialog box for adding a sensor. In this dialog box one can also setup video data sending on the sensor triggering	-	-	-
13	**Edit...**	Click the button	Opens a dialog box for editing the sensor. This dialog box is similar to the one for adding a sensor	-	-	-

#	Parameter	Method for setting the parameter value	Description	Type	Default value	Value range
14	**Delete**	Click the button	Deletes sensor from the list	-	-	-

11.4 Settings panel of the ATM Monitoring interface object

Settings panel of the **ATM Monitoring** interface object is given on the figure.

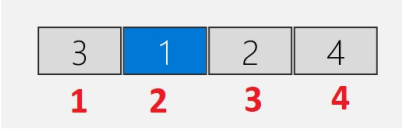


Description of the **ATM Monitoring** object settings panel elements is given in the table.

#	Parameter	Method for setting the parameter value	Description	Type	Default value	Value range
1	Identifier	Automatically	Shows the identification number of the **ATM Monitoring** object in the system	Nonnegative integer	-	>=0
2	Parameter	Enter the value in the field	Shows the identification number of the **ATM Monitoring** object in the system	Latin, Cyrillic letters and service characters	ATM Monitoring	A line representing a sequence of any symbols (letters, digits, service characters apart from > and < symbols), not case-sensitive. Number of symbols – from 1 to 60.
3	**Display**	Is selected in the list	Assigns the parent **Display** object for the **ATM Monitoring** object	Names of **Display** objects registered in the system	Name of the parent **Display** object	Depends on the number of the **Display** objects in the system.

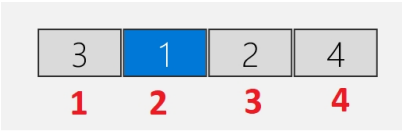
#	Parameter	Method for setting the parameter value	Description	Type	Default value	Value range
4	**Groups of alarms** check boxes	Is set in a checkbox	Sets alarms that one want to visualize on the Control panel	Boolean	All checkboxes except the **Extra 1** and **Extra 2** are set	If checkbox is set next to the group of alarms, then alarm from the corresponding group will be displayed on the Control panel
5	**Owners panel** check box	Is set in a checkbox	Enables Owners panel displaying	Boolean	True	True - Owners panel is displayed False - Owners panel is hidden
	X: field	Enter the value in the field	Set the X coordinate in the horizontal axis for the upper-left corner of the Owners panel interface box	% of the screen width	0	From 0 to 100. When more than one monitor is connected to the computer it is possible to use coordinates outside this range, but it is not recommended to use coordinates less than -200.
	Y: field	Enter the value in the field	Set the Y coordinate in the vertical axis for the upper-left corner of the Owners panel interface box	% of the screen width	50	From 0 to 100. When more than one monitor is connected to the computer it is possible to use coordinates outside this range, but it is not recommended to use coordinates less than -200.

#	Parameter	Method for setting the parameter value	Description	Type	Default value	Value range
	W: field	Enter the value in the field	Set the width of the Owners panel interface box	% of the screen width	100	From 0 to 100. When more than one monitor is connected to the computer it is possible to use coordinates outside this range, but it is not recommended to use coordinates less than -200.
	H: field	Enter the value in the field	Set the height of the Owners panel interface box	% of the screen width	50	From 0 to 100. When more than one monitor is connected to the computer it is possible to use coordinates outside this range, but it is not recommended to use coordinates less than -200.
	% field	Enter the value in the field	Sets the scaling of objects in the Owners panel	Percent	100	From 100% to 500% If the scaling parameter exceeds 110%, then the high resolution icons will be displayed on the object, and the Courier New font will be used for the text in the object title, otherwise - MS Sans Serif.

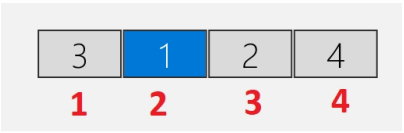
#	Parameter	Method for setting the parameter value	Description	Type	Default value	Value range
	Monitor drop-down list	Select from the list	Sets the number of the physical monitor which coordinates are specified. Monitors are numbered in physical order from left to right, top to bottom. Thus, number 1 corresponds to the top-left monitor, regardless of which monitor is the primary or first in the OS numbering. In the figure, the monitor numbers in the OS are highlighted in gray, and monitor numbers in *Intellect* are highlighted in red:  ***Attention! It is recommended to use the same resolution for all monitors in the system. Different resolutions are allowed only if each row of logical monitors is aligned to some sort of boundary (for example, to the top).***	Natural number series	1	From 1 to 16
6	**Control panel** check box	Is set in a checkbox	Enables Control panel displaying	Boolean	True	True - Control panel is displayed False - Control panel is hidden

#	Parameter	Method for setting the parameter value	Description	Type	Default value	Value range
	X: field	Enter the value in the field	Set the X coordinate in the horizontal axis for the upper-left corner of the Control panel interface box	% of the screen width	0	From 0 to 100. When more than one monitor is connected to the computer it is possible to use coordinates outside this range, but it is not recommended to use coordinates less than -200.
	Y: field	Enter the value in the field	Set the Y coordinate in the vertical axis for the upper-left corner of the Control panel interface box	% of the screen heigh t	50	From 0 to 100. When more than one monitor is connected to the computer it is possible to use coordinates outside this range, but it is not recommended to use coordinates less than -200.
	W: field	Enter the value in the field	Set the width of the Control panel interface box	% of the screen width	100	From 0 to 100. When more than one monitor is connected to the computer it is possible to use coordinates outside this range, but it is not recommended to use coordinates less than -200.

#	Parameter	Method for setting the parameter value	Description	Type	Default value	Value range
	H: field	Enter the value in the field	Set the height of the Control panel interface box	% of the screen height	50	From 0 to 100. When more than one monitor is connected to the computer it is possible to use coordinates outside this range, but it is not recommended to use coordinates less than -200.
	% field	Enter the value in the field	Sets the scaling of objects in the Control panel	Percent	100	From 100% to 500% If the scaling parameter exceeds 110%, then the high resolution icons will be displayed on the object, and the Courier New font will be used for the text in the object title, otherwise - MS Sans Serif.

#	Parameter	Method for setting the parameter value	Description	Type	Default value	Value range
	Monitor drop-down list	Select from the list	Sets the number of the physical monitor which coordinates are specified. Monitors are numbered in physical order from left to right, top to bottom. Thus, number 1 corresponds to the top-left monitor, regardless of which monitor is the primary or first in the OS numbering. In the figure, the monitor numbers in the OS are highlighted in gray, and monitor numbers in *Intellect* are highlighted in red:  ***Attention! It is recommended to use the same resolution for all monitors in the system. Different resolutions are allowed only if each row of logical monitors is aligned to some sort of boundary (for example, to the top).***	Natural number series	1	From 1 to 16
7	**Log panel** check box	Is set in a checkbox	Enables Log panel displaying	Boolean	True	True - Log panel is displayed False - Log panel is hidden

#	Parameter	Method for setting the parameter value	Description	Type	Default value	Value range
	X: field	Enter the value in the field	Set the X coordinate in the horizontal axis for the upper-left corner of the Log panel interface box	% of the screen width	0	From 0 to 100. When more than one monitor is connected to the computer it is possible to use coordinates outside this range, but it is not recommended to use coordinates less than -200.
	Y: field	Enter the value in the field	Set the Y coordinate in the vertical axis for the upper-left corner of the Log panel interface box	% of the screen height	0	From 0 to 100. When more than one monitor is connected to the computer it is possible to use coordinates outside this range, but it is not recommended to use coordinates less than -200.
	W: field	Enter the value in the field	Set the width of the Log panel interface box	% of the screen width	100	From 0 to 100. When more than one monitor is connected to the computer it is possible to use coordinates outside this range, but it is not recommended to use coordinates less than -200.

#	Parameter	Method for setting the parameter value	Description	Type	Default value	Value range
	H: field	Enter the value in the field	Set the height of the Log panel interface box	% of the screen width	50	From 0 to 100. When more than one monitor is connected to the computer it is possible to use coordinates outside this range, but it is not recommended to use coordinates less than -200.
	Monitor drop-down list	Select from the list	Sets the number of the physical monitor which coordinates are specified. Monitors are numbered in physical order from left to right, top to bottom. Thus, number 1 corresponds to the top-left monitor, regardless of which monitor is the primary or first in the OS numbering. In the figure, the monitor numbers in the OS are highlighted in gray, and monitor numbers in *Intellect* are highlighted in red:  ***Attention! It is recommended to use the same resolution for all monitors in the system. Different resolutions are allowed only if each row of logical monitors is aligned to some sort of boundary (for example, to the top).***	Natural number series	1	From 1 to 16

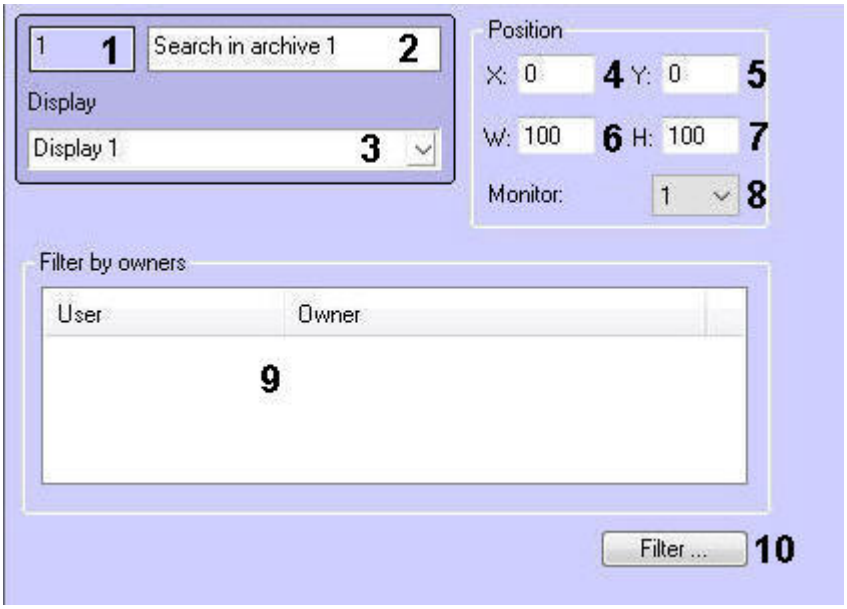
#	Parameter	Method for setting the parameter value	Description	Type	Default value	Value range
8	**Non-empty Comment field** check box	Is set in a checkbox	Is set to require that operators leave comments when accepting an alarm to describe the alarm and/or their actions	Boolean	True	True - **Comment** field shall not be empty on alarm accepting False - alarm accepting can be done without a comment from Operator
9	**Use filter by events** check box	Is set in a checkbox	Is set to enable filtering objects by Alarm and Failure events and Connected and Disconnected states.	Boolean	True	True – filter can be applied. False – filter cannot be applied.
10	**Warning when watching live video** check box	Is set in a checkbox	Is set if it is necessary to display a warning upon the live video playback attempt that it can create the critical load on the data channel.	Boolean	True	True - when live video is attempted to be viewed, the warning is displayed False - when live video is attempted to be viewed, the video is displayed with no warnings
11	**Viewing live video through gateway** check box	Is set in a checkbox	If set if *ATM-Intellect Pros* and *Additional workplaces* are in different subnets and the *ATM-Intellect* components are not in a distributed system configuration in *Intellect* object tree and **Data gateway** is in use for transmission of live video to *Additional workplaces*	Boolean	False	True – live video is transferred to the *Additional workplaces* through the data gateway. False – live video is transferred to the *Additional workplaces* directly from the *ATM-Intellect Pro*.

#	Parameter	Method for setting the parameter value	Description	Type	Default value	Value range
12	**Viewing live video from all cameras (add.)** checkbox	Is set in a checkbox	Is set if the "All cameras of Surveillance Object" item should be added to the object's "Video image playback" context menu which enables viewing video from all cameras of the selected Surveillance Object.	Boolean	False	True – the "All cameras of Surveillance Object" item is added to the object's "Video image playback" context menu. False – there is no "All cameras of Surveillance Object" item in the menu.
13	**Video stream speed** field	Enter the value in the field	Sets the number of frames per second of the video image when viewing live video or video from the archive. • *Note 1. The **Video stream speed** setting works for the archive video only with CamMonitor.ocx 4.11.0.1766 or later versions.* • *Note 2. If the archive is recorded with the h264 codec and the video stream speed is set to more than **0** frames per second, then the archive video will be played back only by reference frames.* • *Note 3. If the value of the video stream speed is **0**, then the live and archive video will be played back without scaling.*	Frames per second	25	Depends on the camera features
14	**Compression** drop-down list	Is selected in the list	Sets the compression rate for the live video.	Available compression rates	False	0-5

#	Parameter	Method for setting the parameter value	Description	Type	Default value	Value range
15	**Cameras...** button	Click the button	Opens a window for configuring cameras prohibited from viewing live video for users.	-	-	-
16	**Filter by owners** field	Via the **Filter...** button	Displays selected pairs of users and owners	-	-	-
17	**Filter...** button	Click the button	Opens a window for configuring the correspondence of owners to users.	-	-	-

11.5 Settings panel of the Search in archive interface object

Settings panel of the **Search in archive** interface object is given on the figure.



Description of the **Search in archive** object settings panel elements is given in the table.

#	Parameter	Method for setting the parameter value	Description	Type	Default value	Value range
1	Identifier	Automatically	Shows the identification number of the **Search in archive** object in the system	Nonnegative integer	-	>=0
2	Parameter	Enter the value in the field	Shows the name of the **Search in archive** object in the system	Latin, Cyrillic letters and service characters	Search in archive	A line representing a sequence of any symbols (letters, digits, service characters apart from > and < symbols), not case-sensitive. Number of symbols – from 1 to 60.
3	**Display**	Is selected in the list	Assigns the parent **Display** object for the **Search in archive** object	Names of **Display** objects registered in the system	Name of the parent **Display** object	Depends on the number of the **Display** objects in the system.

#	Parameter	Method for setting the parameter value	Description	Type	Default value	Value range
4	**X:**	Enter the value in the field	Set the X coordinate in the horizontal axis for the upper-left corner of the **Search in archive** interface box	% of the screen width	0	From 0 to 100. When more than one monitor is connected to the computer it is possible to use coordinates outside this range, but it is not recommended to use coordinates less than -200.
5	**Y:**	Enter the value in the field	Set the Y coordinate in the vertical axis for the upper-left corner of the **Search in archive** interface box	% of the screen height	50	From 0 to 100. When more than one monitor is connected to the computer it is possible to use coordinates outside this range, but it is not recommended to use coordinates less than -200.
6	**W:**	Enter the value in the field	Sets width of he **Search in archive** interface box	% of the screen width	100	From 0 to 100. When more than one monitor is connected to the computer it is possible to use coordinates outside this range, but it is not recommended to use coordinates less than -200.

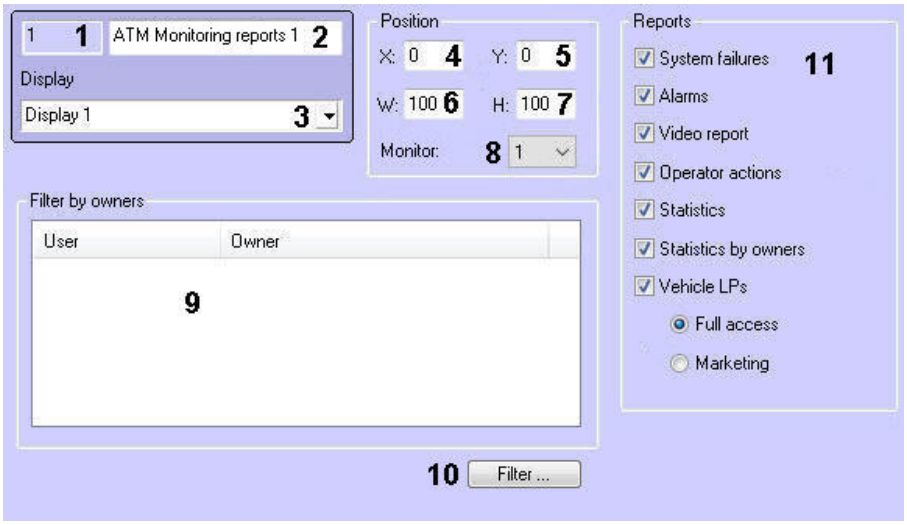
#	Parameter	Method for setting the parameter value	Description	Type	Default value	Value range
7	**H:**	Enter the value in the field	Sets height of he **Search in archive** interface box	% of the screen height	50	From 0 to 100. When more than one monitor is connected to the computer it is possible to use coordinates outside this range, but it is not recommended to use coordinates less than -200.

#	Parameter	Method for setting the parameter value	Description	Type	Default value	Value range
8	**Monitor**	Select from the list	Sets the number of the physical monitor which coordinates are specified. Monitors are numbered in physical order from left to right, top to bottom. Thus, number 1 corresponds to the top-left monitor, regardless of which monitor is the primary or first in the OS numbering. In the figure, the monitor numbers in the OS are highlighted in gray, and monitor numbers in *Intellect* are highlighted in red:  ***Attention! It is recommended to use the same resolution for all monitors in the system. Different resolutions are allowed only if each row of logical monitors is aligned to some sort of boundary (for example, to the top).***	Nonnegative integer	1	From 1 to 16
9	**Filter by owners**	Via the **Filter...** button	Displays selected pairs of users and owners	-	-	-

#	Parameter	Method for setting the parameter value	Description	Type	Default value	Value range
10	**Filter...**	Click the button	Opens a window for configuring the correspondence of owners to users	-	-	-

11.6 Settings panel of the ATM Monitoring reports interface object

Settings panel of the **ATM Monitoring reports** interface object is given on the figure.

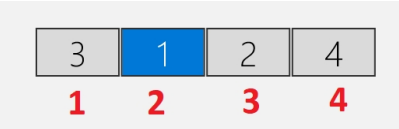


Description of the **ATM Monitoring reports** object settings panel elements is given in the table.

#	Parameter	Method for setting the parameter value	Description	Type	Default value	Value range
1	Identifier	Automatically	Shows the identification number of the **ATM Monitoring reports** object in the system	Nonnegative integer	-	>=0

#	Parameter	Method for setting the parameter value	Description	Type	Default value	Value range
2	Parameter	Enter the value in the field	Shows the identification number of the **ATM Monitoring reports** object in the system	Latin, Cyrillic letters and service characters	ATM Monitoring reports	A line representing a sequence of any symbols (letters, digits, service characters apart from > and < symbols), not case-sensitive. Number of symbols – from 1 to 60.
3	**Display**	Is selected in the list	Assigns the parent **Display** object for the **ATM Monitoring reports** object	Names of **Display** objects registered in the system	Name of the parent **Display** object	Depends on the number of the **Display** objects in the system.
4	**X:**	Enter the value in the field	Set the X coordinate in the horizontal axis for the upper-left corner of the **ATM Monitoring reports** interface box	% of the screen width	0	From 0 to 100. When more than one monitor is connected to the computer it is possible to use coordinates outside this range, but it is not recommended to use coordinates less than -200.
5	**Y:**	Enter the value in the field	Set the Y coordinate in the vertical axis for the upper-left corner of the **ATM Monitoring reports** interface box	% of the screen height	50	From 0 to 100. When more than one monitor is connected to the computer it is possible to use coordinates outside this range, but it is not recommended to use coordinates less than -200.

#	Parameter	Method for setting the parameter value	Description	Type	Default value	Value range
6	**W:**	Enter the value in the field	Sets width of he **ATM Monitoring reports** interface box	% of the screen width	100	From 0 to 100. When more than one monitor is connected to the computer it is possible to use coordinates outside this range, but it is not recommended to use coordinates less than -200.
7	**H:**	Enter the value in the field	Sets height of he **ATM Monitoring reports** interface box	% of the screen height	50	From 0 to 100. When more than one monitor is connected to the computer it is possible to use coordinates outside this range, but it is not recommended to use coordinates less than -200.

#	Parameter	Method for setting the parameter value	Description	Type	Default value	Value range
8	**Monitor**	Select from the list	Sets the number of the physical monitor which coordinates are specified. Monitors are numbered in physical order from left to right, top to bottom. Thus, number 1 corresponds to the top-left monitor, regardless of which monitor is the primary or first in the OS numbering. In the figure, the monitor numbers in the OS are highlighted in gray, and monitor numbers in *Intellect* are highlighted in red:  ***Attention! It is recommended to use the same resolution for all monitors in the system. Different resolutions are allowed only if each row of logical monitors is aligned to some sort of boundary (for example, to the top).***	Nonnegative integer	1	From 1 to 16
9	**Filter by owners**	Via the **Filters...** button	Displays selected pairs of users and owners	-	-	-
10	**Filter...**	Click the button	Opens a dialog box to match owners to users	-	-	-

#	Parameter	Method for setting the parameter value	Description	Type	Default value	Value range
11	**Reports**	Set by checkbox	Select reports available in the interface window. *Note. Vehicle LPs report is not in use in ATM Intellect.*	Boolean	All checkboxes are set, full access to the Vehicle PLs report is set	Yes – the report button is displayed in the **ATM Monitoring Reports** interface window. No – the report button is not displayed in the **ATM Monitoring Reports** interface window.

12 Appendix 2. Examples of scripts

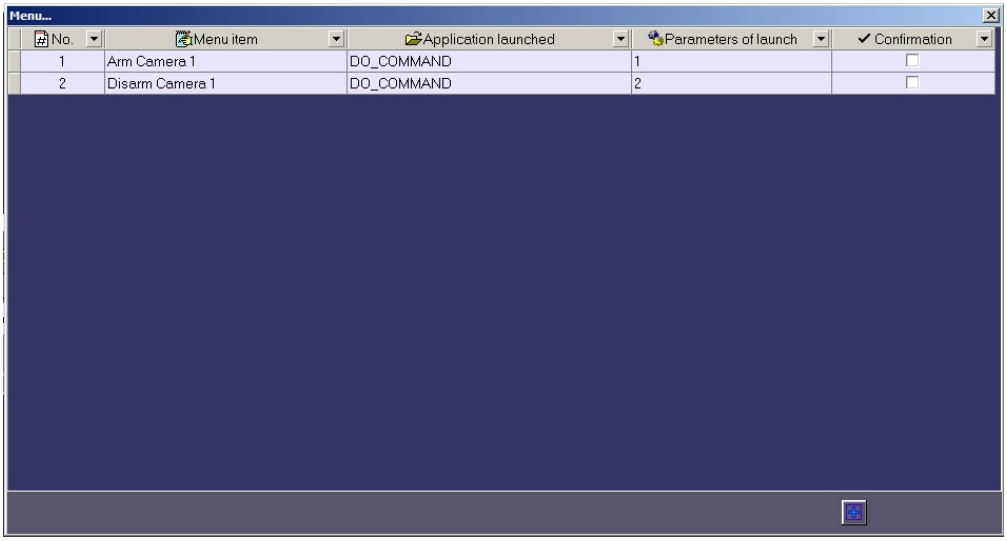
> **Note**
>
> Detailed information about creating programs and scripts in the Intellect software can be found in *Programming Guide* and *Programming Guide (JScript)* documents. The most recent versions of these documents are available in the documentation repository.

12.1 Sample script for processing ATM-Intellect Workstation command on ATM-Intellect Pro

In the *ATM-Intellect* software package one can configure ad hoc command sending by the Operator of the *ATM-Intellect Workstation* to the *ATM-Intellect Pro*. Information on how to configure commands on the *ATM-Intellect Workstation* can be found in the Executing ad hoc command on the ATM-Intellect Pro by the operator of ATM-Intellect Workstation section of Operator's Guide.

A script for processing incoming commands is to be created on the *ATM-Intellect Workstation*.

Example. Extra menu items are created on the *ATM-Intellect Workstation* – “Arm camera 1” and “Disarm camera 1”. They send a command with parameter 1 or 2 correspondingly.



The sample of program in *Intellect* embedded language for processing the incoming command is shown below:

```
OnEvent("VIDEOSRV_C_DVC_ATM","1","DO_COMMAND")
{
    if (strequal(param0,"1"))
    {
        DoReact("CAM","1","ARM");
    }
    if (strequal(param0,"2"))
    {
        DoReact("CAM","1","DISARM");
    }
```

```
}
```

12.2 Example of script to suspend recording on camera

If you want to attach a JPEG frame or video fragment to the alarm message that is sent when a sensor is activated (**Sensor** object), remember that attachment is made only after the current archive file is written to disk. To reduce the waiting time (the **Post-alarm time (sec)** value, see Setting up sensors) and to guarantee that camera footage will be recorded, you can create a **Program** object on the **Programming** tab of *Intellect* software package.

These programs are written for a camera with an ID of 1 and for a **Sensor** object whose ID is also equal to 1. Thanks to these programs, the value of the **Delay** parameter can be set equal to 7 seconds.

> **Attention!**
>
> To get several video fragments, you can specify several repeated commands "REC" and "REC_STOP" in the script. If "rollback" is used, and the prerecording time in the settings of the **Camera** object is greater than or equal to the time between subsequent "REC_STOP" and "REC" commands, then this video fragment will be combined with the next video fragment.

Option 1. The camera is disarmed:

```
OnEvent("GRAY","1","ALARM")
{
[
    if( !CheckState("CAM","1","DETACHED") )
    {
        DoReact("CAM","1","REC","rollback<1>");
        Wait(5);
        DoReact("CAM","1","REC_STOP","priority<2>");
    }
]
}

OnEvent("GRAY","1","ALARM")
{
[
    Wait(2);
    DoReact("GRAY","1","CONFIRM");
    Wait(2);
    DoReact("GRAY","1","ARM");
]
}
```

Option 2. Camera is armed:

```
OnEvent("GRAY","1","ALARM")
{
[
    if( !CheckState("CAM","1","DETACHED") )
    {
        DoReact("CAM","1","DISARM");
```

```
        Sleep(50);
        DoReact("CAM","1","REC","rollback<1>");
        Wait(5);
        DoReact("CAM","1","REC_STOP","priority<2>");
        Sleep(2050); // Prerecording time in the Camera settings = 2 sec.
        DoReact("CAM","1","ARM");
    }
]
}

OnEvent("GRAY","1","ALARM")
{
[
    Wait(2);
    DoReact("GRAY","1","CONFIRM");
    Wait(2);
    DoReact("GRAY","1","ARM");
]
}
```

Option 3. Continuous recording:

```
OnEvent("GRAY","1","ALARM")
{
[
    if( !CheckState("CAM","1","DETACHED") )
    {
        Wait(5); // Specifies the time after which the recording should be stopped in
order to get the required video fragment or number of frames
        DoReact("CAM","1","REC_STOP","priority<2>");
        Sleep(2050); // Prerecording time in the Camera settings = 2 sec.
        DoReact("CAM","1","REC","rollback<1>"); // Start recording with 2 sec
rollback (during prerecording). Thus, data in the archive is not lost.
    }
]
}

OnEvent("GRAY","1","ALARM")
{
[
    Wait(2);
    DoReact("GRAY","1","CONFIRM");
    Wait(2);
    DoReact("GRAY","1","ARM");
]
}
```

12.3 Example of script with using of ATM events

If the way of captioning ATM events used in *ATM-Intellect Pro* by default is unacceptable in some reason (the **ATM events captioning** checkbox is set in the **Surveillance object** settings - see Configuring video cameras list), then

one can disable this setting and implement a new scenario using scripts. For example, in this case record can be initiated on some ATM event or events and stopped on another ATM event or events.

> **Note.**
>
> It is also possible for receipts printer. The following events of VIDEOSRV_C_DVC_ATM (**Surveillance object**) object can be used for that:
> RECEIPT_START – Receipt start
> RECEIPT_STOP – Receipt end

Example of script on built-in Intellect programming language for captioning on **Card inserted** event is given below:

```
OnEvent("VIDEOSRV_C_DVC_ATM","1","INSERT_CARD")
{
[
    if( !CheckState("CAM","1","DETACHED") )
    {
        DoReact("CAM","1","REC");
        DoReact("CAM","1","ADD_SUBTITLES","command<"+param2+" ID : "+param1+"\r>,page
<BEGIN>,title_id<1>");
        DoReact("CAM","1","ADD_SUBTITLES","command<CARD No: "+param0+"\r>,title_id<1>
");
        DoReact("CAM","1","ADD_SUBTITLES","command<EVENT: Card
inserted\r>,title_id<1>");
        Wait(5);
        DoReact("CAM","1","ADD_SUBTITLES","command< \r>,page<END>,title_id<1>");
        DoReact("CAM","1","CLEAR_SUBTITLES","title_id<1>");
        DoReact("CAM","1","REC_STOP");
    }
]
}
```

As a result of the script, the following info will be displayed on a video image for 5 seconds.

12.4 Sample script to export filtered data from the Log Panel to .xls

Before executing this command, apply filter in the Log Panel. It can be done from the user interface (see Custom filter in the Log Panel) or by a script (see Sample script for setting custom filter in the Log Panel).

Export filtered Log Panel data to the test.xls file on disk C:

```
DoReact("VIDEOSRV_M","","EXPORT_EXCEL","computer<NamePC>,file<c:\test.xls>");
```

12.5 Sample script for setting custom filter in the Log Panel

Custom filter on the Log Panel can be changed with a script or macro. For more details on the filter and its configuration in the user interface, see Custom filter in the Log Panel.

Use APPLY_FILTER reaction of the VIDEOSRV_M object to create or change the custom filter in the Log Panel:

```
DoReact("VIDEOSRV_M","","APPLY_FILTER","computer<>,query<>");
```

Parameters:

computer<> – NetBIOS name of the computer to execute the command on.

query<> – filter condition.

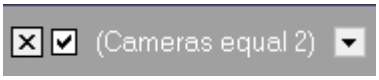
The query<>parameter syntax:

query<TotalExpressions;BoolOperatorKind;Expression[;Expression]>

- **TotalExpressions** — number of expressions in the condition
  Example:
  TotalExpressions = 1 for condition (Cameras equal 2)
  TotalExpressions = 3 for condition (Cameras equal 2) and ((Disks equal 1) or (Disks equal 2))
- **BoolOperatorKind** — boolean operator for main expression. Possible values:
  – and
  – or
  Example:
  BoolOperatorKind = and for condition (Cameras equal 2)
  BoolOperatorKind = and for condition (Cameras equal 2) and ((Disks equal 1) or (Disks equal 2))
  BoolOperatorKind = or for condition (Cameras equal 1) or (Cameras equal 2)
- **Expression** — one or several expressions
  Format: Field;Expressions;LocalBoolOperator;OperatorKind;Value
  - *Field* — name of the field in the DB table.
    Possible values:
    – ID
    – Name
    – Region
    – Province
    – City
    – CamCnt
    – ArcMax
    – HddCnt
    – IpAddress
    – FirstRecord
    – TemperHdd
    – AvailMemory
    – WorkingTime
    – VerSoft

- *Expressions* — number of expressions in a subcondition.
  Example:
  Expressions = 1 for condition (Cameras equal 2) and ((Disks equal 1) or (Disks equal 2))
  Expressions = 2 for condition (Cameras equal 2) and ((Disks equal 1) or (Disks equal 2))
- *LocalBoolOperator* — boolean operator for subconditions. Possible values:
  – and
  – or
  Example:
  LocalBoolOperator = and for condition (Cameras equal 2)
  LocalBoolOperator = or for condition (Cameras equal 2) and ((Disks equal 1) or (Disks equal 2))
- *OperatorKind* — operator type.
  Possible values:
  – Equal
  – NotEqual
  – Less
  – LessOrEqual
  – Greater
  – GreaterOrEqual
  – Like
  – NotLike
- *Value* — value to compare with.

Examples:




```
query<1;and;CamCnt;1;and;Equal;2>
```

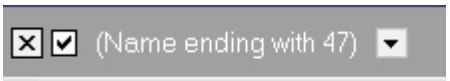
With main expressions:


```
query<2;and;CamCnt;1;and;Less;5;CamCnt;1;and;Greater;3>
```

With subquery:


```
query<2;and;CamCnt;2;and;Less;5;CamCnt;2;and;Greater;3>
```


```
query<3;and;CamCnt;2;and;Greater;1;CamCnt;2;and;Less;5;HddCnt;1;and;Greater;0>
```




```
query<1;and;Name;1;and;Like;%47>
```

12.6 Sample script for creating a system failures report

A **System failures report** (see Report on technical faults) can be automatically generated using a script that uses the REPORT_FAILURES reaction of the VIDEOSRV_R object:

```
DoReact("VIDEOSRV_R","","REPORT_FAILURES",
"computer<>,file<>,export<>,object<>,region<>,district<>,city<>,type<>,fromTime<>,toT
ime<>,sorting<>,comment<>");
```

Parameters description is given in the table below:

Parameter	Description
computer<>	Specifies the NetBIOS name of the computer on which the report is to be created. Required parameter.
file<>	The full path to the file where the report will be saved. Required parameter.
export<>	Format of the export file. 0 - Excel, 1 - HTML, 2 - RTF, 3 - CSV. Optional parameter. If this parameter is absent, the file is exported in Excel format.
object<>	The object on which the report is created. This parameter specifies the "Object code", which is displayed on the Log Panel of the **ATM Monitoring** interface object (see Information on the object). Optional parameter. If this parameter is absent, a report is created for all objects.
region<>	Filter by the Region. It is necessary to specify the indexing numbers of the options to be used separated by commas in the **Region** drop-down list. For example: (region<1,3>) (see Report on technical faults). Optional parameter. If this parameter is absent, a report is created for all regions.
district<>	Filter by the District. It is necessary to specify the indexing numbers of the options to be used separated by commas in the **District** drop-down list. For example: (district<2,3,5>) (see Report on technical faults). Optional parameter. If this parameter is absent, a report is created for all districts.

Parameter	Description
city<>	Filter by the City. It is necessary to specify the indexing numbers of the options to be used separated by commas in the **City** drop-down list. For example: (city<1>) (see Report on technical faults). Optional parameter. If this parameter is absent, a report is created for all cities.
type<>	Filter by the Failure type. It is necessary to specify the indexing numbers of the options to be used separated by commas in the **Failure type** drop-down list. For example: (type<1,3,5>) (see Report on technical faults). Optional parameter. If this parameter is absent, a report is created for all failure types.
fromTime<>	Date and time of the report beginning in the DD-MM-YY HH:MM:SS format. Required parameter.
toTime<>	Date and time of the report ending in the DD-MM-YY HH:MM:SS format. Required parameter.
sorting<>	Sorting mode. 0 - by event, 1 - by time. Optional parameter. If this parameter is absent, sorting by event is used.
comment<>	Show comment. 0 - do not show, 1 - show. Optional parameter. If this parameter is absent, comments are not shown.

Sample script that will automatically create a **System failures report** every day at 20:00 and save it to the C:\report.html file:

```
OnTime(W,D,X,Y,"20","00","00")
{
DoReact("VIDEOSRV_R","","REPORT_FAILURES","computer<MONITORING>,file<c:
\report.html>,export<1>,fromTime<" + date + " 00:00:00>,toTime<" + date + " " + time
+ ">");
}
```

12.7 Sample script for creating an alarm situations report

An **Alarms report** (see Report on alarm situations) can be automatically generated using a script that uses the REPORT_ALARMS reaction of the VIDEOSRV_R object:

```
DoReact("VIDEOSRV_R","","REPORT_ALARMS",
"computer<>,file<>,export<>,object<>,region<>,district<>,city<>,type<>,fromTime<>,toT
ime<>,sorting<>,comment<>,filter<>");
```

Parameters description is given in the table below:

Parameter	Description
computer<>	Specifies the NetBIOS name of the computer on which the report is to be created. Required parameter.
file<>	The full path to the file where the report will be saved. Required parameter.
export<>	Format of the export file. 0 - Excel, 1 - HTML, 2 - RTF, 3 - CSV. Optional parameter. If this parameter is absent, the file is exported in Excel format.
object<>	The object on which the report is created. This parameter specifies the "Object code", which is displayed on the Log Panel of the **ATM Monitoring** interface object (see Information on the object). Optional parameter. If this parameter is absent, a report is created for all objects.
region<>	Filter by the Region. It is necessary to specify the indexing numbers of the options to be used separated by commas in the **Region** drop-down list. For example: (region<1,3>) (see Report on alarm situations). Optional parameter. If this parameter is absent, a report is created for all regions.
district<>	Filter by the District. It is necessary to specify the indexing numbers of the options to be used separated by commas in the **District** drop-down list. For example: (district<2,3,5>) (see Report on alarm situations). Optional parameter. If this parameter is absent, a report is created for all districts.
city<>	Filter by the City. It is necessary to specify the indexing numbers of the options to be used separated by commas in the **City** drop-down list. For example: (city<1>) (see Report on alarm situations). Optional parameter. If this parameter is absent, a report is created for all cities.

Parameter	Description
type<>	Filter by the Alarm type. It is necessary to specify the indexing numbers of the options to be used separated by commas in the **Alarm** drop-down list. For example: (type<1,3,5>) (see Report on alarm situations). Optional parameter. If this parameter is absent, a report is created for all alarm types.
fromTime<>	Date and time of the report beginning in the DD-MM-YY HH:MM:SS format. Required parameter.
toTime<>	Date and time of the report ending in the DD-MM-YY HH:MM:SS format. Required parameter.
sorting<>	Sorting mode. 0 - by event, 1 - by time. Optional parameter. If this parameter is absent, sorting by event is used.
comment<>	Show comment. 0 - do not show, 1 - show. Optional parameter. If this parameter is absent, comments are not shown.
filter<>	Text filter by messages of monitored alarms (see Configuring alarm groups). Optional parameter.

Sample script that will automatically create an **Alarms report** every day at 20:00 and save it to the C:\report.html file:

```
OnTime(W,D,X,Y,"20","00","00")
{
DoReact("VIDEOSRV_R","","REPORT_ALARMS","computer<MONITORING>,file<c:
\report.html>,export<1>,fromTime<" + date + " 00:00:00>,toTime<" + date + " " + time
+ ">");
}
```

13 Appendix 3. ATM Event Capture utility

13.1 Purpose of the ATM Event Capture utility

ATM Event Capture utility is designed for capturing events from the ATM card reader and transferring information of them to the *ATM-Intellect Pro* or to the *Axxon Next* for displaying of captions above the video image. It is possible to read the card number from an ATM journal (if Protopas, TellMe, MAKZ, APTRA Advance NDC software is in use) and not directly from the card in the card reader.

13.2 Requirements to the operating system and pre-installed software

ATM Event Capture software is implemented as a service, and is compatible with the operating systems supported by the *Intellect* software (see the *Operating system requirements* chapter in the Intellect: Administrator's Guide).

The standard OS settings are used for the utility operation. In Windows 7 or later OS versions, it is necessary to disable UAC. In Windows 8, 8.1 and 10 it is necessary to configure the security policies in order to entirely disable UAC (configuring security policies is described in the Intellect: Administrator's Guide).

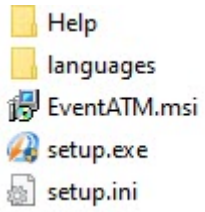
Before installation, the XFS environment from the ATM vendor should be pre-installed as well. The *ATM Event Capture* is compatible with XFS versions 2.0 through 3.30.

> **Note.**
>
> The XFS environment is necessary even if the ATM Event Capture utility does not connect to a card reader but reads a card number from an ATM journal. If you use this method, the *ATM Event Capture* utility receives a "Card inserted" event from XFS and refers to the ATM journal to get the card number.

13.3 Installing ATM Event Capture utility

13.3.1 ATM Event Capture installer description

The picture below shows the *ATM Event capture* software installer content.



Documentation is available in the Help folder.

Use the setup.exe file to install *ATM Event capture* software.

Installation language is selected in the same way as when installing *ATM-Intellect* (see General description of ATM Intellect distribution kit).

13.3.2 Preparing to install ATM Event Capture utility

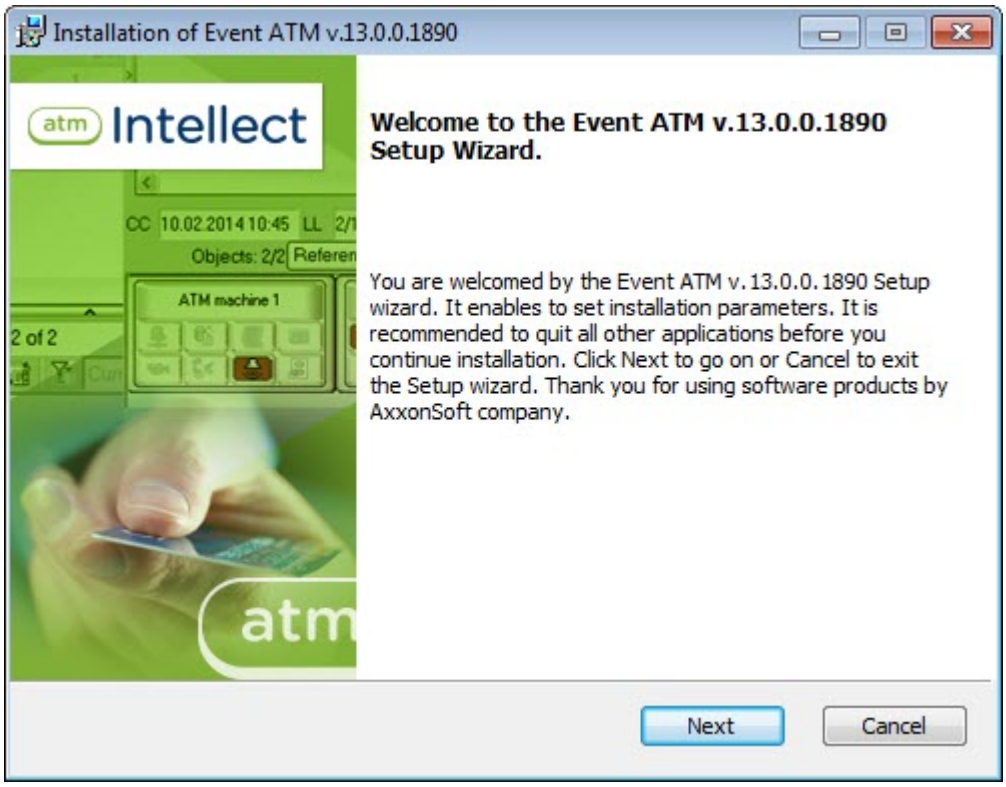
Before starting the installation, copy the installer package to a local disk and make sure that the installer files are not marked as "read-only".

Installation of ATM Event Capture should be performed by a user with administrator rights.

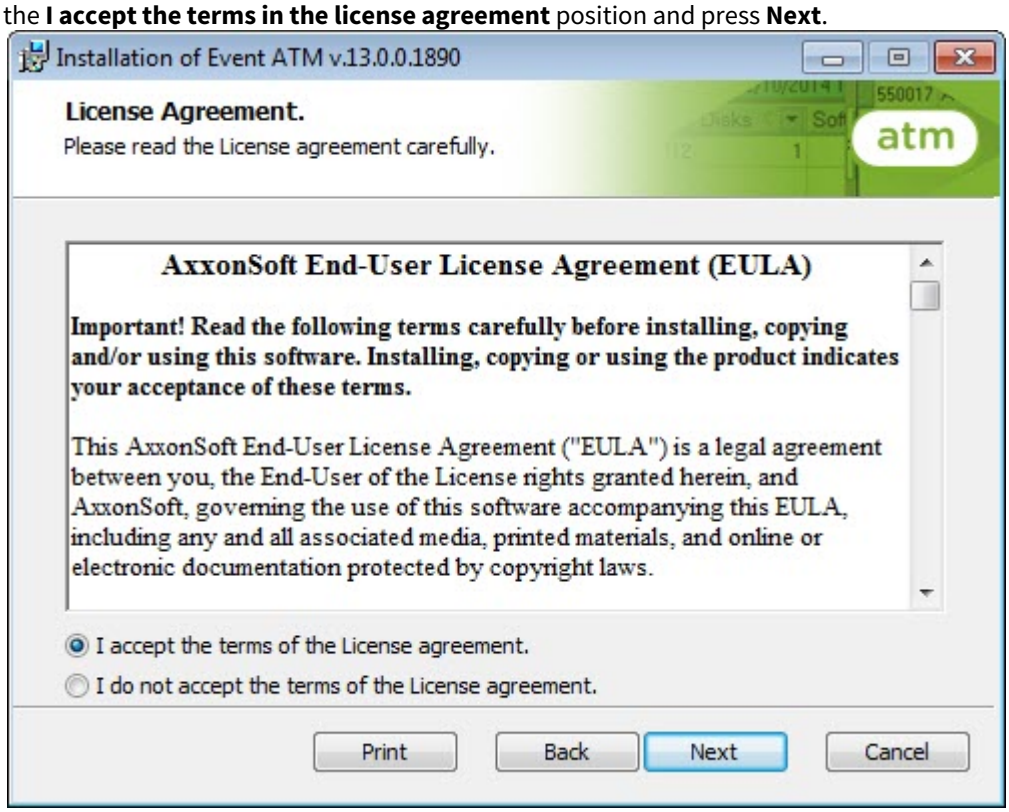
13.3.3 Installation steps

To install the *ATM Event Capture* utility, do the following:

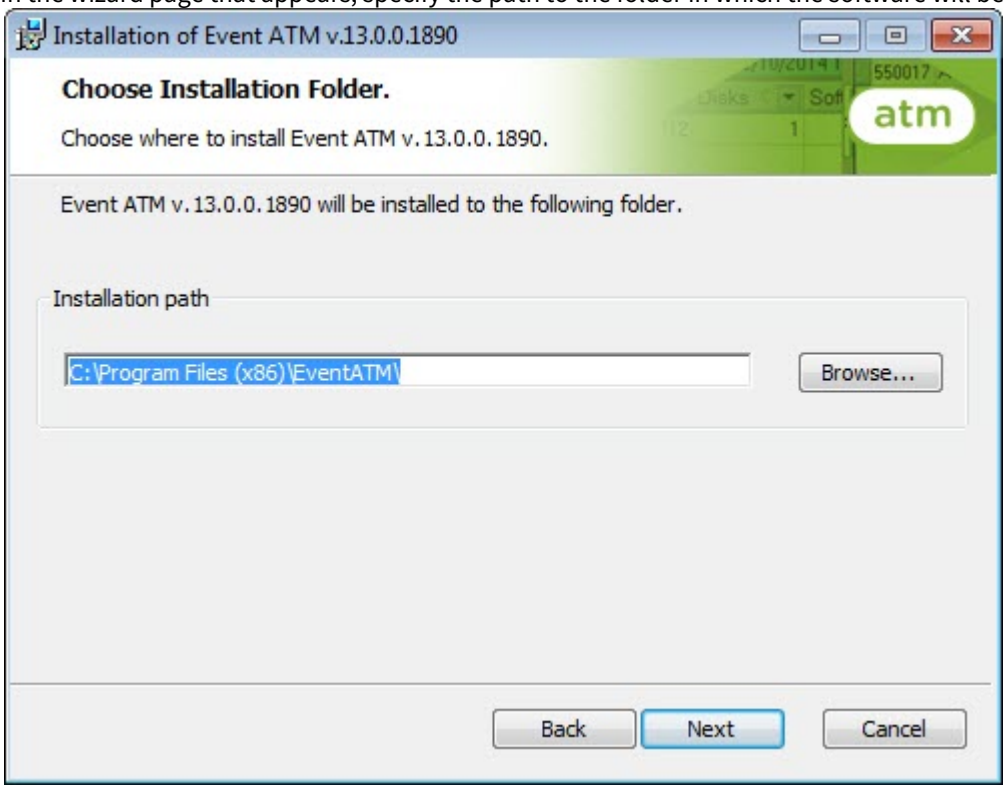
1. To start installation from the installation kit, start the file setup.exe. You are prompted to start installation. Click the **Next** button.



2. In the **License agreement** window read the terms of the End-User License Agreement . Set the switch into the **I accept the terms in the license agreement** position and press **Next**.

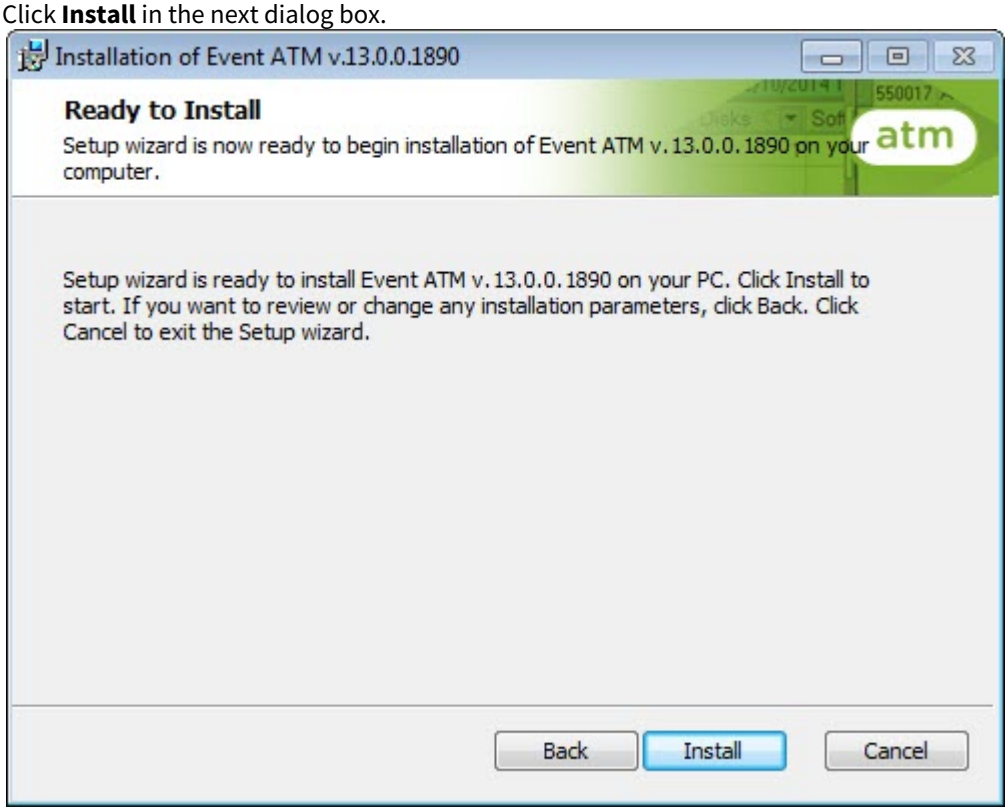


3. In the wizard page that appears, specify the path to the folder in which the software will be installed.

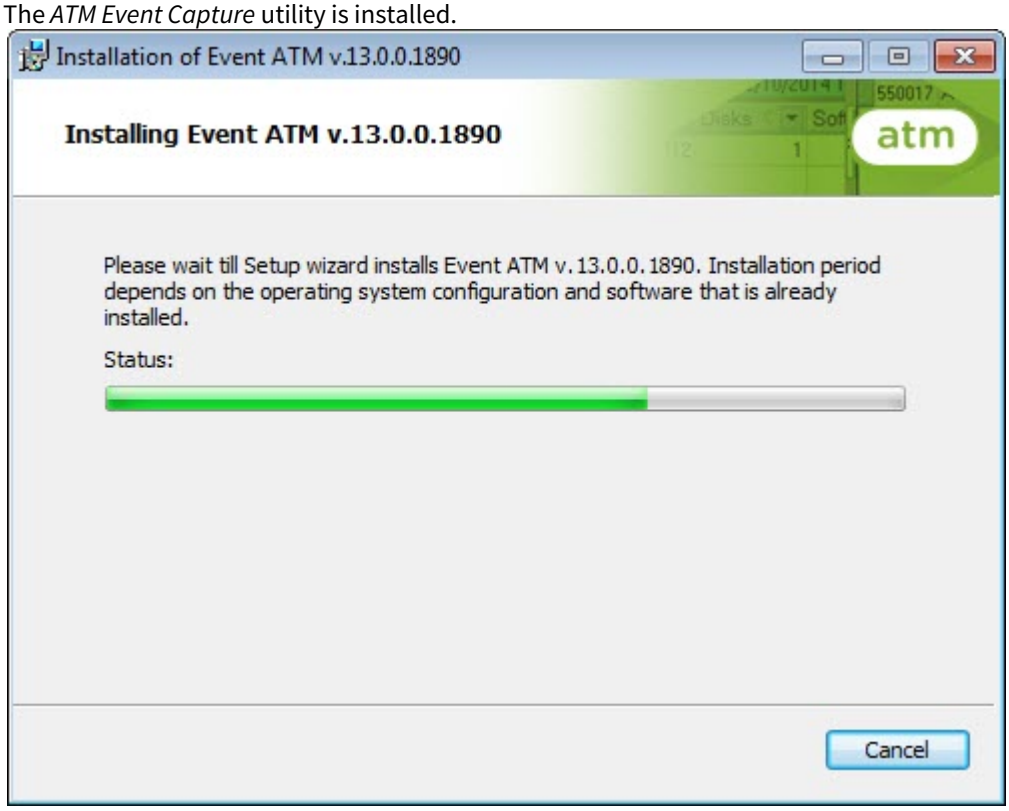


If you do not want to use the default folder, click the **Change...** button and specify another folder. Otherwise, click the **Next** button.

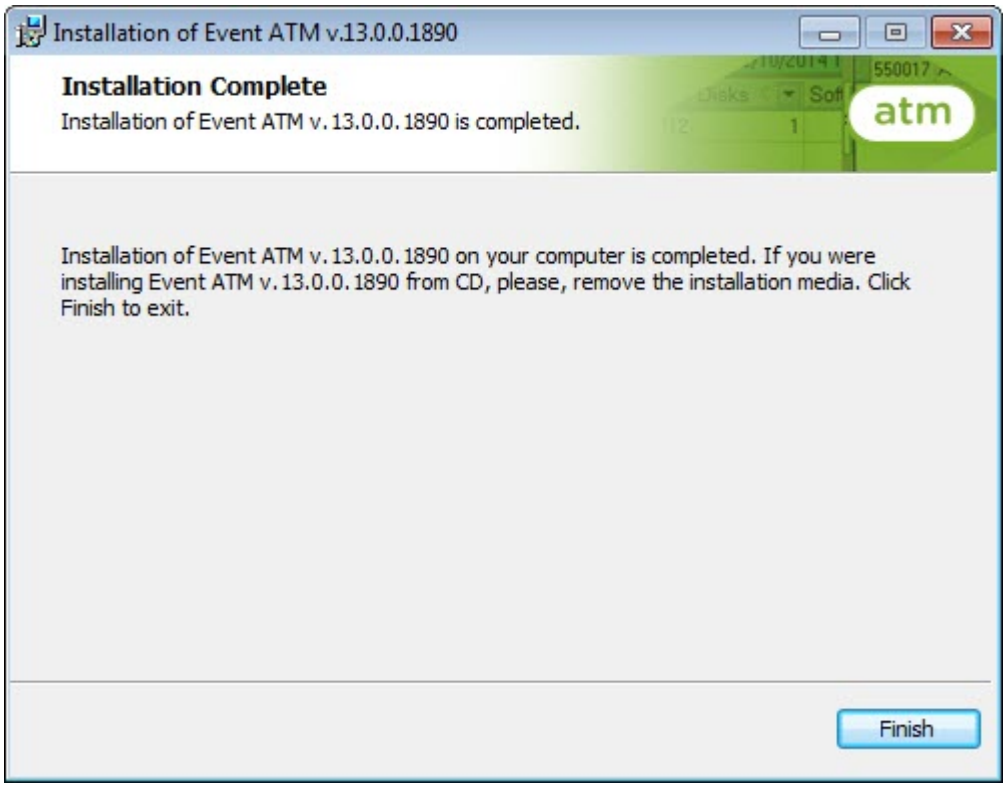
4. Click **Install** in the next dialog box.



5. The *ATM Event Capture* utility is installed.



6. After final installation tasks are completed, the wizard informs that the software has been successfully installed.



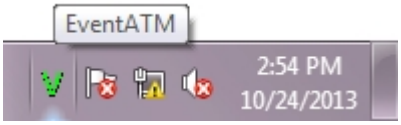
ATM Event Capture utility installation is completed.

13.4 ATM Event Capture configuration

13.4.1 Launching the ATM Event Capture utility

To launch the *ATM Event Capture* utility, select **Start>All Programs>EventATM>EventATM**.

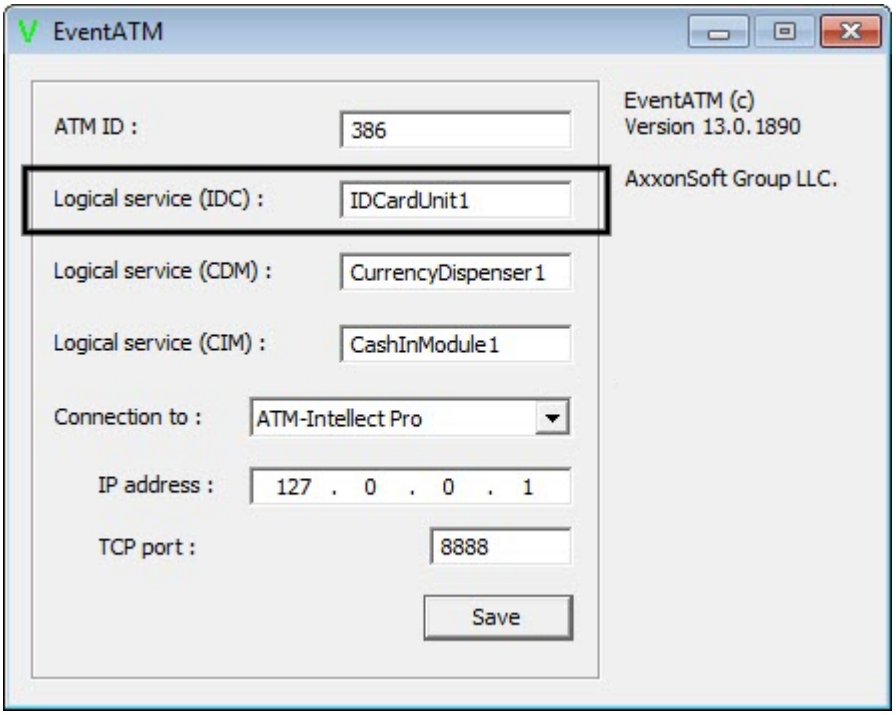
The program icon (a green checkmark) appears in the taskbar notification area (system tray).



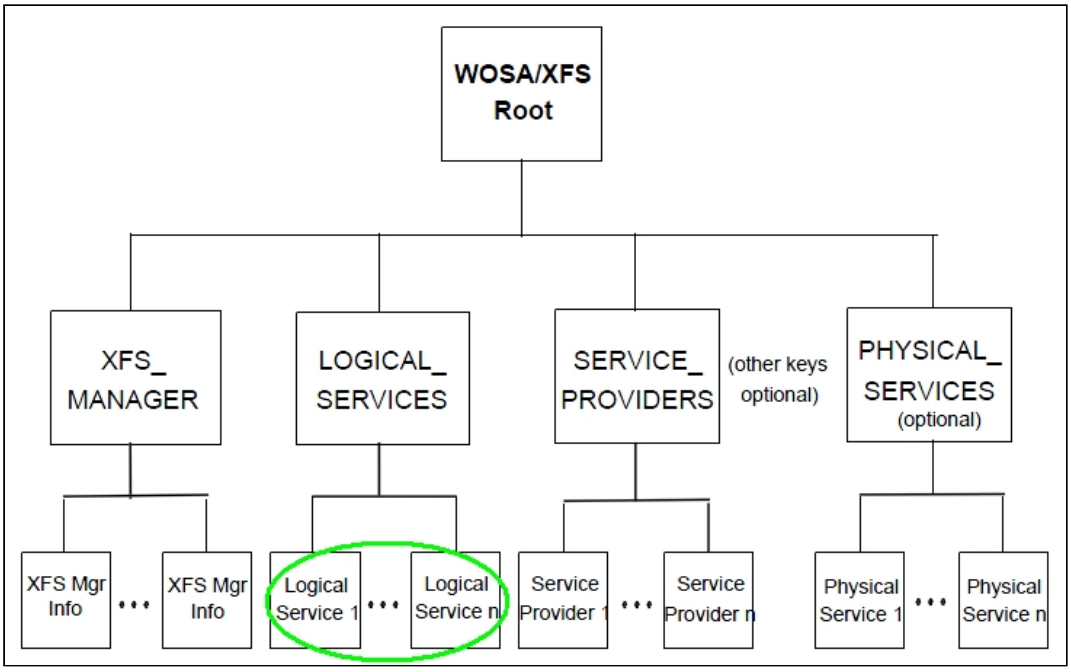
Double-clicking the icon opens a dialog box with settings for *ATM Event Capture*.

13.4.2 Configuring the connection to the card reader service provider

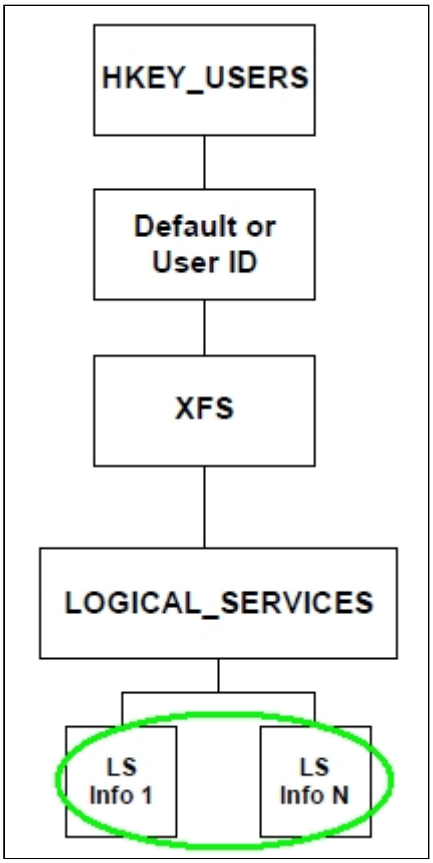
To configure the connection to the card reader service provider (IDC), set the **Logical service (IDC)** parameter.



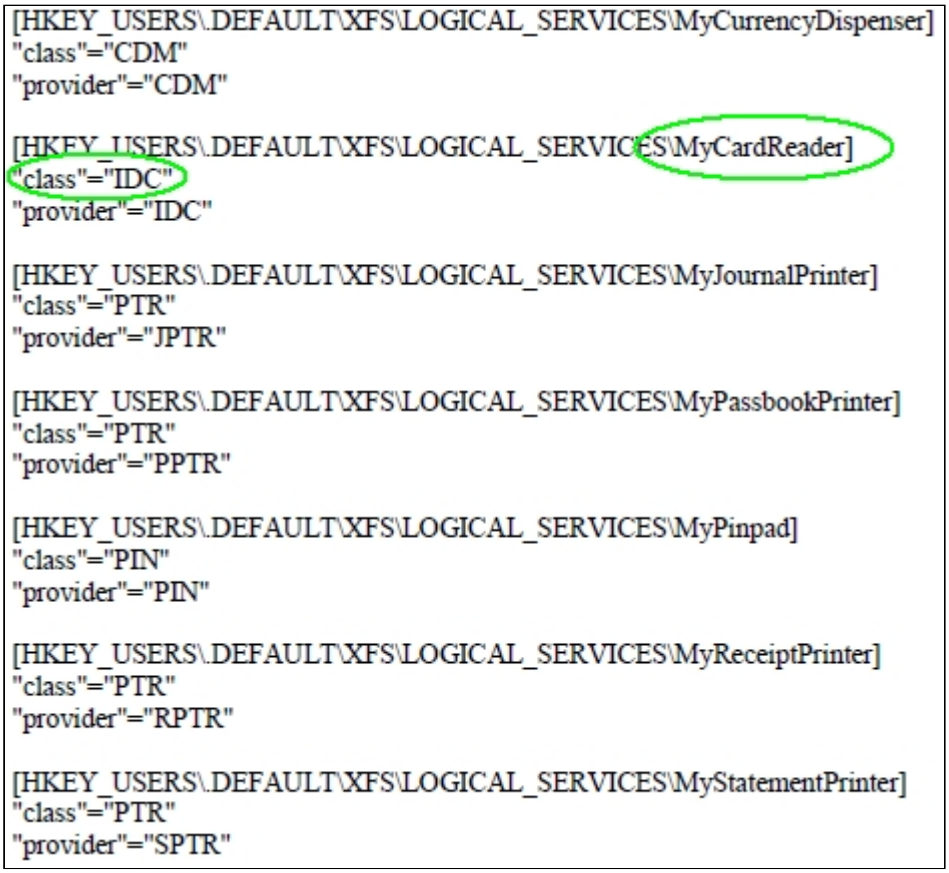
This parameter has different values for different types of ATMs. According to the XFS specifications, this parameter value is stored in the registry. For earlier versions of XFS, it is located in the HKEY_CLASSES_ROOT\WOSA/XFS_ROOT\LOGICAL_SERVICES\Logical Service registry key.



For later versions of XFS, this value is stored in the HKEY_USERS\.DEFAULT\XFS\LOGICAL_SERVICES\LS registry key.



The LOGICAL_SERVICES hive contains keys for each service provider (card reader, PIN entry pad, receipt printer, etc.).



The information of interest is the logical name of the card reader service provider ("class" = "IDC"). In the example given in the figure, the logical name is "MyCardReader". This is the value that should be indicated in *ATM Event Capture* utility.

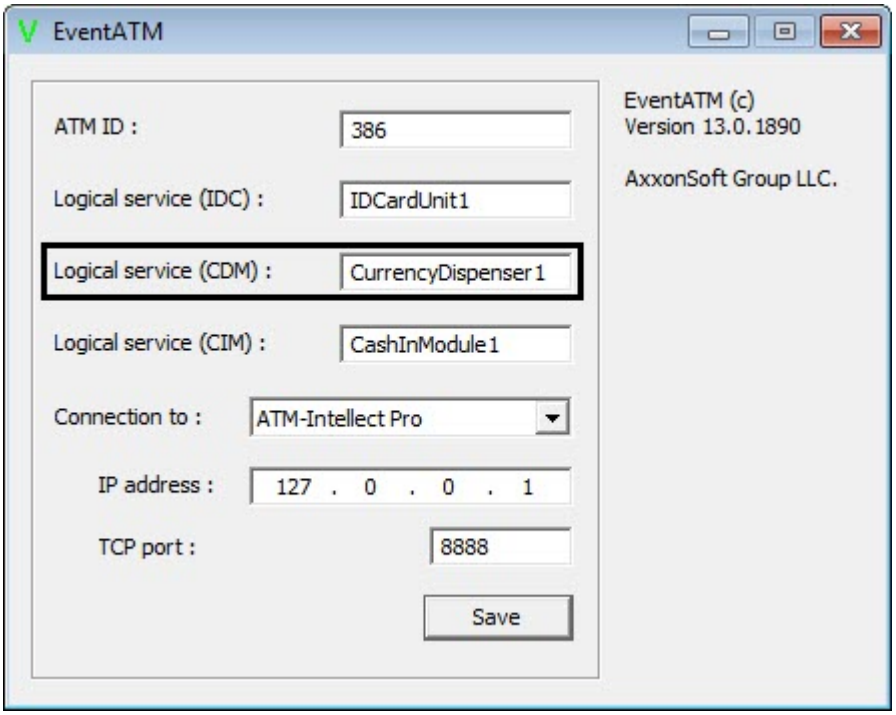
Logical name of the service provider of card-reader by default is:

- For ATMs made by NCR, "IDCardUnit1".
- For ATMs made by Wincor, "IDC30" ("IDC", in older versions).
- For ATMs made by Diebold, «DBD_MotoCardRdr».

After *ATM Event Capture* utility captures an event from the ATM card reader, it sends information about this event to *ATM-Intellect Pro*, which can overlay captions on the image. To do this, configure the connection to the *ATM-Intellect Pro* (see Configuring the connection with ATM-Intellect Pro or Axxon Next).

13.4.3 Configuring the connection to the dispenser service provider

To configure connection to the service provider of the dispenser (CDM), specify the value of **Logical Service (CDM)** parameter.



The way of identifying its value is similar to service provider of card reader except that instead of searching "class"="IDC" parameter in the registry, it is necessary to search for the "class"="CDM" value (see Configuring the connection to the card reader service provider).

Logical name of the service provider of dispenser by default is:

- For “NCR” ATMs, «CurrencyDispenser1».
- For “Wincor” ATMs, «CDM30».
- For “Diebold” ATMs, «DBD_AdvFuncDisp».

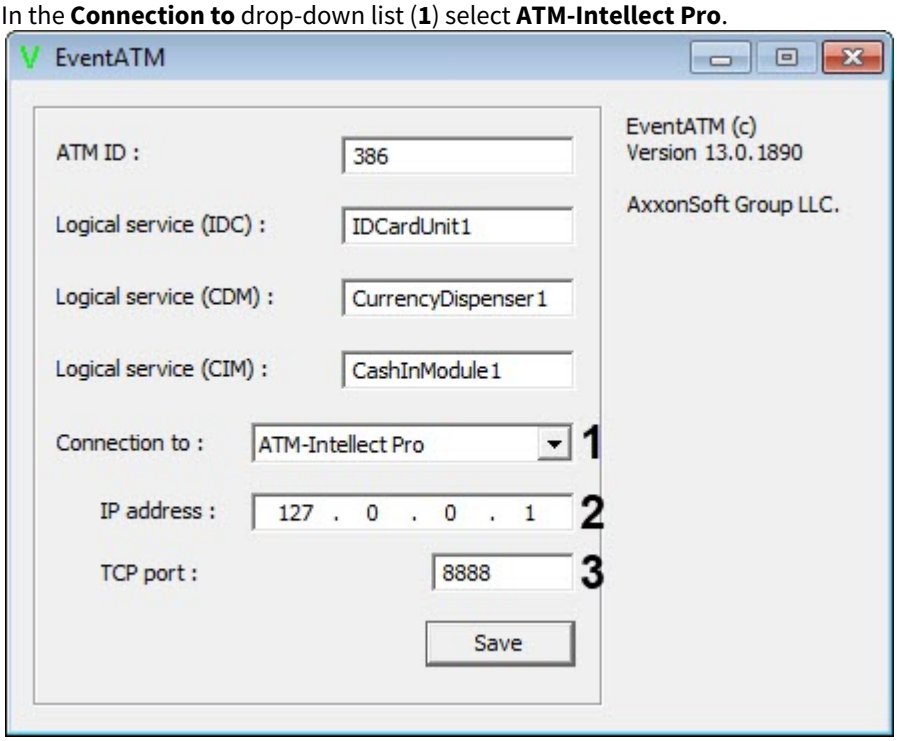
13.4.4 Configuring the connection with ATM-Intellect Pro or Axxon Next

On the page:

Configuring the connection with *ATM-Intellect Pro*

To configure the connection with *ATM-Intellect Pro*, do the following:

1. In the **Connection to** drop-down list (**1**) select **ATM-Intellect Pro**.



2. In the **IP address** field (**2**) specify the IP address of the computer on which *Intellect* and *ATM-Intellect Pro* are installed. If they are installed on the ATM's control computer, you can leave the default value unchanged (127.0.0.1).
3. In the **TCP port** field (**3**) specify the TCP port on which *ATM-Intellect Pro* listens for connections from *ATM Event Capture* utility. This value should match the **TCP port (UPS-SCS)** value in the settings of *ATM-Intellect Pro* (see Setting the port used to listen for messages from the UPS and Smart Card Service ATMs).
4. To save settings, click the **Save** button.

Configuring the connection with *Axxon Next*

For the *ATM Event Capture* utility to work with *Axxon Next*, copy the *Axxon Next* license key — the *license.key* file into the utility installation directory. The **ATMMonitoring** module should be enabled in this key.

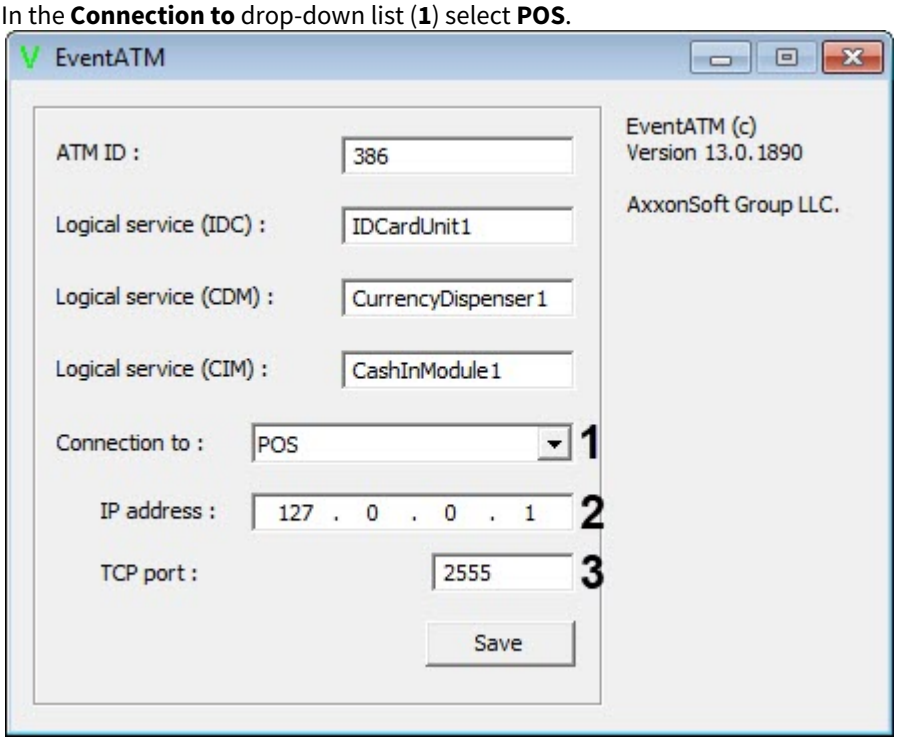
Attention!

- The **ATMMonitoring** position in the key should be equal to 1.
- The key should contain a computer with the same name on which the *ATM Event Capture* utility is launched.
- All MAC-codes of network interfaces, registered for this computer in the dongle, should match the real MAC-codes of the computer's network interfaces.

An **Event Source** object should be created and configured in *Axxon Next* (for details, see Configuring POS devices). The XML parser can be taken from the installation directory of the *ATM Event Capture* utility.

To configure the connection with *Axxon Next*, do the following:

1. In the **Connection to** drop-down list (**1**) select **POS**.



2. In the **IP address** field (**2**) specify the IP address of the computer on which *Axxon Next* is installed. If it is installed on the ATM's control computer, you can leave the default value unchanged (127.0.0.1).
3. In the **TCP port** field (**3**) specify the TCP port on which *Axxon Next* listens for connections from *ATM Event Capture* utility (see Connecting POS devices).
4. To save settings, click the **Save** button.

13.4.5 Configuring card number masking

By default *ATM Event Capture* utility automatically masks the first 6 and last 4 characters of the card number when displaying captions on a video image. Masking parameters can be changed using the **Mask** registry key (see Registry keys reference guide).

> **Note.**
>
> To use the *ATM Event Capture* utility masking, deselect the **Mask** checkbox in the **Surveillance object** object settings panel. The object is part of the *ATM-Intellect Pro* software (see Setting information contained in captions).

13.4.6 Setting up the card number receiving from transaction log

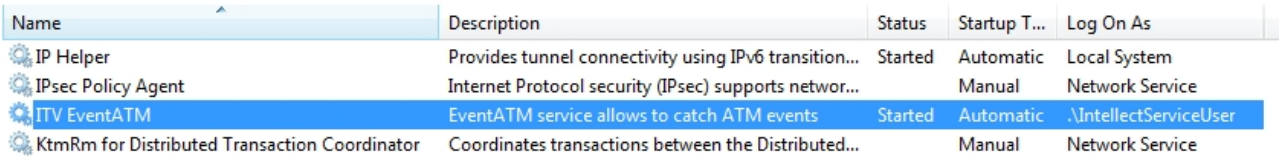
By default, *ATM Event Capture* utility receives the card number directly from the card reader. However, direct card reading can cause malfunction of the ATM software due to the fact that the ATM software works with the card reader directly (without XFS) or that service provider of card reader does not support simultaneous operation of several applications with a device. Therefore, it is possible to get a client's card number from the ATM transaction log, not by a direct reading of card inserted into the card reader.

Setting up the card number receiving is performed through the registry keys **JrnMode**, **JrnPath** и **JrnTrack2Substring** (see Registry keys reference guide).

13.5 ATM Event Capture operation

13.5.1 ATM Event Capture principle of operation

After the computer is restarted, *ATM Event Capture* utility is started automatically as a system service.



On computers running on Windows XP, the program icon also appears in the taskbar notification area (system tray) and *ATM Event Capture* settings become available for editing (by default, the ITV EventATM service is allowed the desktop access). On computers running on Windows 7, the program icon does not appear in the taskbar notification area. To change the program settings, it is necessary to first stop the ITV EventATM service and then start the *ATM Event Capture* application by selecting **Start>All Programs>EventATM>EventATM**.

13.5.2 Capturing events

The *ATM Event Capture* utility captures the following card reader and dispenser events:

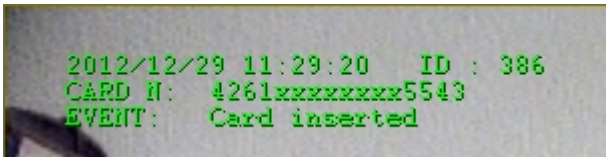
1. Card inserted;
2. Card taken by client;
3. Card captured by ATM;
4. Cash delivery;
5. Client took out the cash;
6. ATM took out the cash;
7. Safe door opened;
8. Safe door closed.

The *ATM Event Capture* utility also captures the following cash-in events:

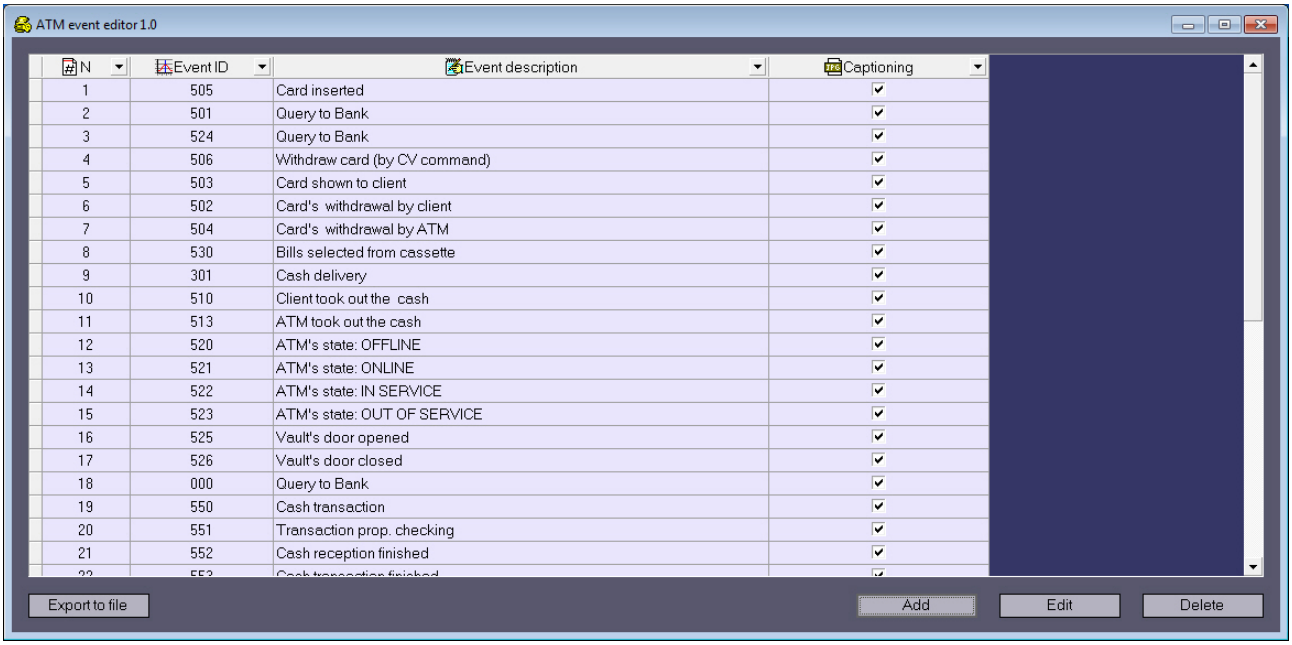
1. Cash operation;
2. Cash acceptance is completed;
3. Cash delivery to the client;
4. Cancellation: cash delivery;
5. Client took out the cash;
6. ATM took the cash;
7. Safe door opened;
8. Safe door closed.

The following information is overlaid on the image, as captions:

1. date and time;
2. ATM ID;
3. number of client card;
4. event.



If it is necessary that a certain event is not overlaid as captions on the image, then on the computer where the *ATM-Intellect Pro* is installed, select **Start>All Programs>Intellect>ATM Intellect >ATM Event Editor**. In the window that appears, edit the corresponding entry by unchecking the corresponding check box in the **Captioning** column. Then restart the *ATM Intellect*.



13.5.3 ATM Event Capture event log

If errors arise in use of *ATM Event Capture* utility, it may become necessary to view its event log. To enable logging in *ATM Event Capture* utility, change the **LogEnable** registry key to **1** (see Registry keys reference guide).

14 ATM-Intellect fault tolerance configuration

To configure the *ATM-Intellect* fault tolerance, do the following:

1. Configure the main *ATM-Intellect Workstation* (see ATM-Intellect Workstation configuration).
2. Configure the *ATM-Intellect Pro* (see ATM-Intellect Pro configuration) and set the **Surveillance Object** connection to the main *ATM-Intellect Workstation* (see Setting up a connection between ATM Intellect Pro and ATM Intellect Workstation).
3. Create the second **Surveillance Object**, configure in the same way, but with a different **Surveillance Object** ID (see Setting Surveillance Object ID).
4. Configure a backup *ATM-Intellect Workstation* (see ATM-Intellect Workstation configuration).
5. When configuring the second **Surveillance Object**, set the connection parameters to the backup *ATM-Intellect Workstation* (see Setting up a connection between ATM Intellect Pro and ATM Intellect Workstation).

   Attention!

   If the list of cameras for tracking was added when configuring the first **Surveillance Object** (see Configuring video cameras list), then to add the same cameras to the second **Surveillance Object**, it is necessary to change the **MonitoringReserving** key value to **1** in the Windows registry (for details, see Registry keys reference guide, for more information about working with the registry, see Working with Windows OS registry.)

The ATM-Intellect fault tolerance is configured.