AxxonSoft

ATM–Intellect Pro

Installation and Configuring Guide

Version 1.2

Moscow 2015

axxon

Video Surveillance and Security Solutions

CONTENTS

CONTENTS 2

1 HARDWARE REQUIREMENTS 3

2 ATM-INTELLECT RESTRICTIONS 3

3 INSTALLATION 3

3.1 Installer description 3

3.2 Installation environment and configuration 4

3.3 Installation steps 4

4 CONFIGURATION 8

4.1 Creating ATM-Intellect Pro objects in the hardware tree 8

4.2 Configuration of the ATM-Intellect Pro object 10
4.2.1 Setting up ATM-Intellect Pro logging subsystem 10
4.2.2 Configuring time synchronization and control of connection 12

4.3 Configuration of the Surveillance Object object 13
4.3.1 Setting Surveillance Object ID 13
4.3.2 Setting the port used to listen for messages from the UPS and Smart Card Service ATMs 14
4.3.3 Setting up a connection between ATM Intellect Pro and ATM Intellect Workstation 15
4.3.4 Configuring video cameras list 17
4.3.5 Setting up sensors 18
4.3.6 Configuring titles 22

4.4 Integration with UPS units 24

4.5 Integration with the “Gold crown” 36

4.6 Transferring events from ATMs to the Intellect core 37
4.6.1 General information 37
4.6.2 Event parameters 38
4.6.3 Example of script with using of ATM events 38

4.7 Working with ATM-Intellect Pro without Windows administration rights 39

5 APPENDIX 1. EXAMPLE OF SCRIPT TO SUSPEND RECORDING ON CAMERA 40

1 Hardware requirements

ATM Intellect Pro has the following minimum PC hardware requirements:

- CPU Intel Core i5 750
- RAM (GB) 2
- HDD (GB) 200
- Network adapter
- Video card with overlay support

2 ATM-Intellect restrictions

In the *ATM-Intellect* software package restrictions are imposed when creating of 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 10.
3. Maximal number of cameras which **Surveillance object** can handle is 32.

3 Installation

3.1 Installer description

The picture below shows the *ATM-Intellect* software installer content (Fig. 3.1—1).

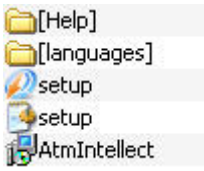

Fig. 3.1—1 Installer content

Documentation is available in the Help folder.

Use the setup.exe file to install *ATM-Intellect* software.

Installation language is selected according to the language settings of the base *Intellect* software. This information is stored in the Language registry key in the section HKEY_LOCAL_MACHINE\Software\Microsoft\Windows\CurrentVersion\Uninstall\Intellect\. If, for some reason, access to this information is not possible, the language of the current operating system locale will be used if it is available. The following languages are available: Russian and English.

3.2 Installation environment and configuration

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

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

Information on compatibility of *ATM-Intellect* and *Intellect* software versions is given on the page General information about product releases and versions compatibility.

3.3 Installation steps

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

1. Start the file setup.exe from the installation kit. The installation wizard informs that the installation process has begun (Fig. 3.3—1).

Fig. 3.3—1 Initialization

2. You are prompted to start installation (Fig. 3.3—2). Click the **Next** button.

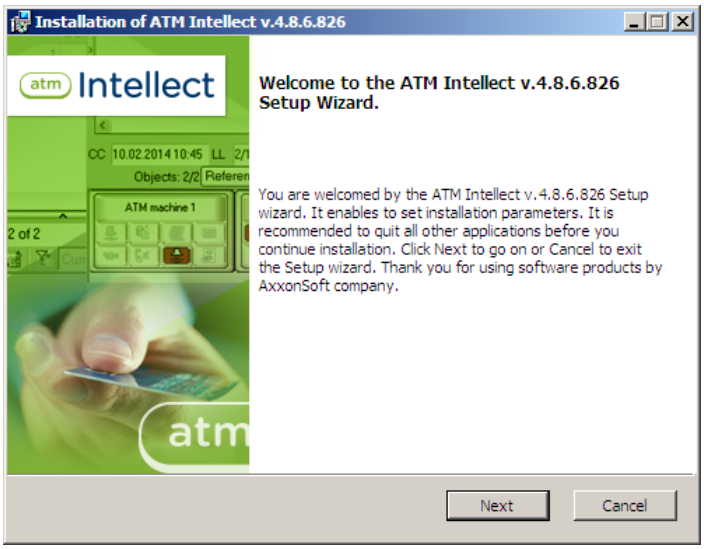

Fig. 3.3—2 Beginning installation

3. In the **License agreement** window read the terms of the End-User License Agreement (Fig. 3.3—3). Set the switch into the **I accept the terms in the license agreement** position and press **Next**.

Fig. 3.3—3 License agreement

4. Set the **ATM-Intellect Pro** installation type (Fig. 3.3—4). Click **Next**.

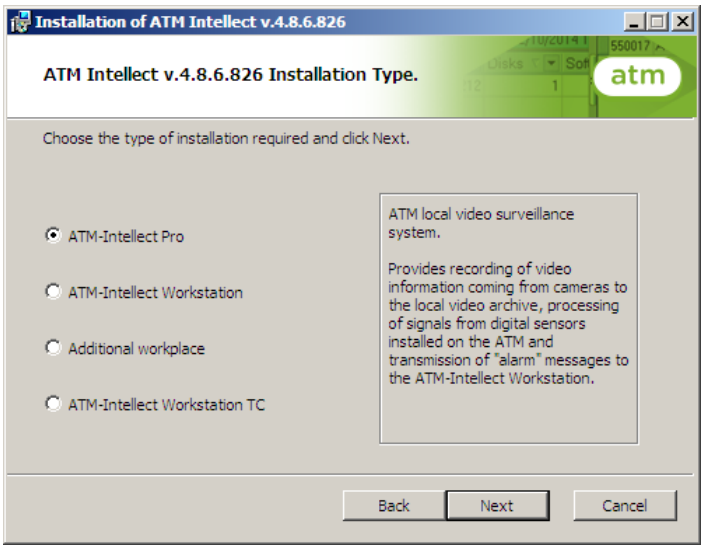

Fig. 3.3—4 Select installation type

5. If base *Intellect* software is installed as service, set the **Install ATM-Intellect as a service** checkbox (Fig. 3.3—5). Click **Next**.

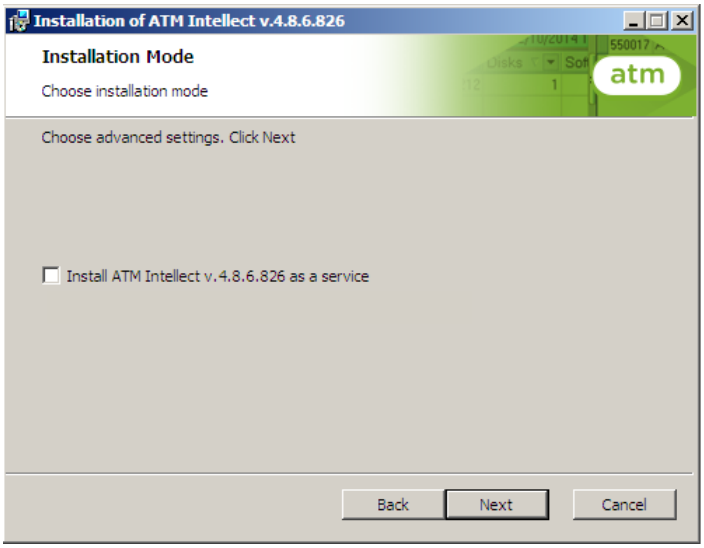

Fig. 3.3—5 Advanced settings

6. A dialog box to confirm installation will be displayed (Fig. 3.3—6). Click **Install** to run installation process.

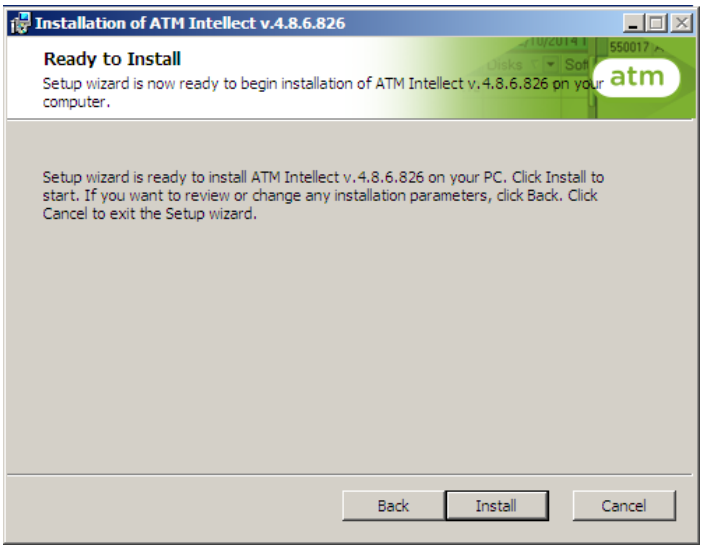

Fig. 3.3—6 Ready to install

7. Installation begins (Fig. 3.3—7).

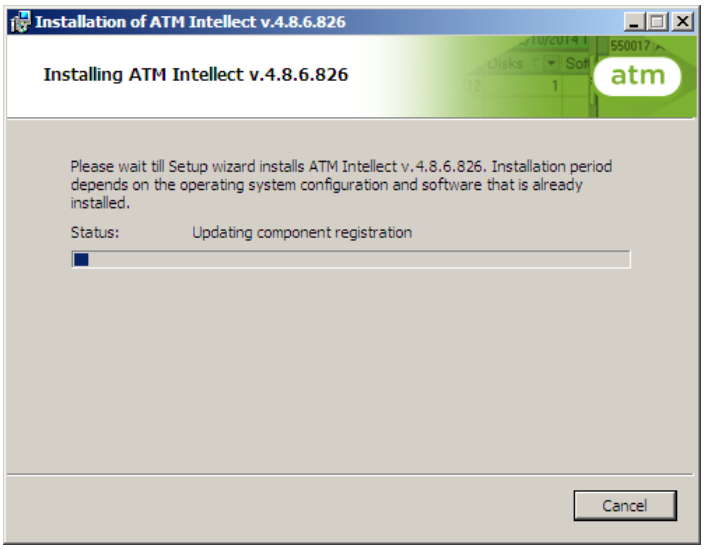

Fig. 3.3—7 Installation progress

8. After the final installation tasks are completed, the wizard informs that the software has been successfully installed (Fig. 3.3—8). Click **Finish**.

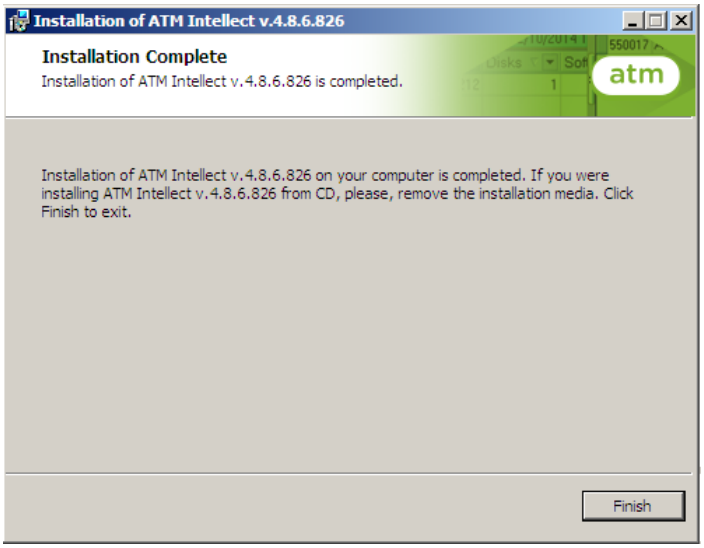

Fig. 3.3—8 Installation complete

ATM-Intellect Pro installation is completed.

4 Configuration

Note. All ATM Intellect components (ATM-Intellect Workstation, ATM-Intellect Workstation TC and ATM-Intellect Pro) can operate in distributed architecture of the digital video surveillance system. In this case all of these objects shall be configured locally, not remotely.

Important: Every time when ATM Intellect Pro is started, it checks for a Backup folder at the root of the disk on which Intellect is installed. This folder is created if it does not exist already. Do not delete this folder.

4.1 Creating ATM-Intellect Pro objects in the hardware tree

Objects creation in the hardware tree is performed as follows:

1. Go to the **Hardware** tab (Fig. 4.1—1, 1).

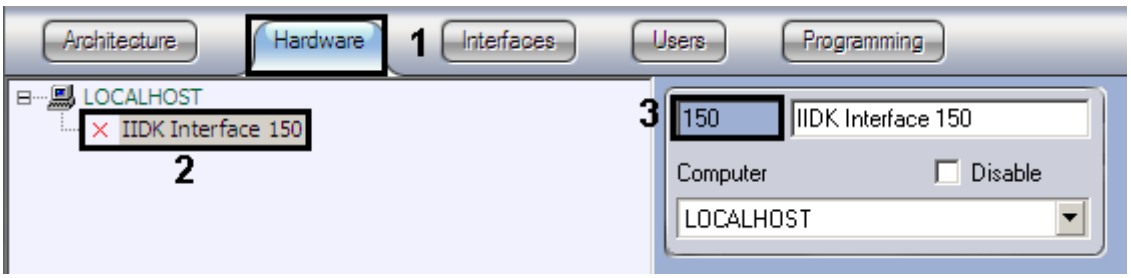

Fig. 4.1—1 IIDK Interface

2. Create the **IIDK Interface** object based on the **Computer** object (see Fig. 4.1—1, 2). Set the ID number of the **IIDK Interface** object (see Fig. 4.1—1, 3).

3. Then create the **ATM-Intellect Pro** object based on the **Computer** object (Fig. 4.1—2) .

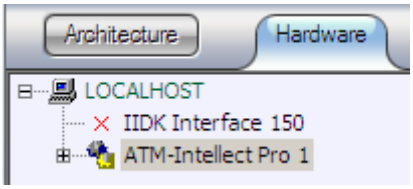

Fig. 4.1—2 ATM-Intellect Pro object

4. After the **ATM-Intellect Pro** object is created, it can be configured (Fig. 4.1—3).

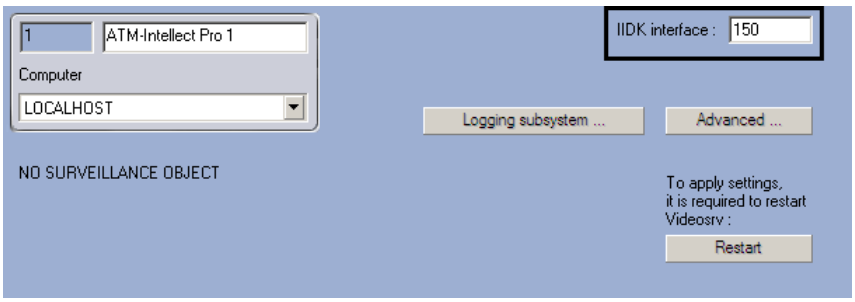

Fig. 4.1—3 Specifying IIDK Interface number

5. In the **IIDK interface** field enter the identification number of the **IIDK interface** object created on step 2 (see Fig. 4.1—3).

6. Then create one or more child **Surveillance Object** objects for the **ATM-Intellect Pro** object (Fig. 4.1—4).

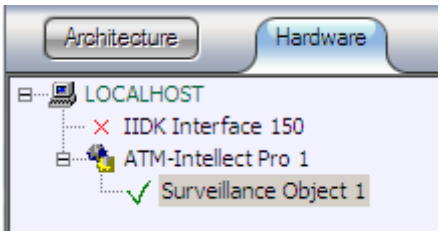

Fig. 4.1—4 Surveillance object

7. After the **Surveillance Object** object is created, it can be configured (Fig. 4.1—5).

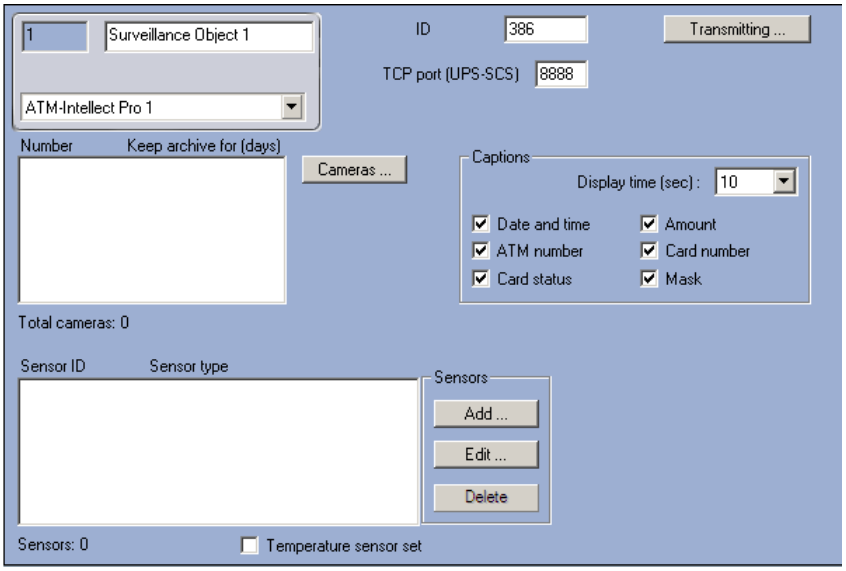

Fig. 4.1—5 Surveillance object settings panel

Note.

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.

4.2 Configuration of the ATM-Intellect Pro object

4.2.1 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 (Fig. 4.2—1).

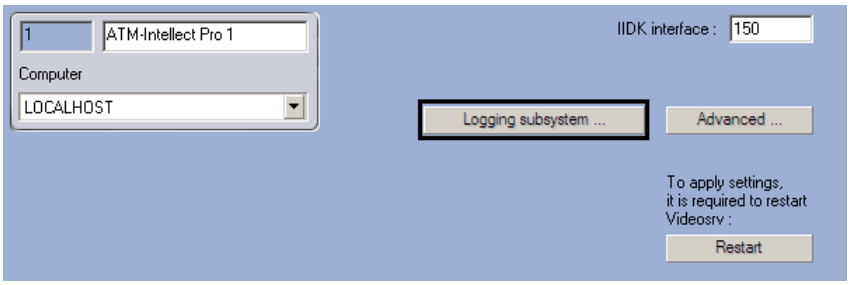

Fig. 4.2—1 Logging subsystem button

2. Click the **Logging subsystem...** button (see Fig. 4.2—1).

3. In the opened dialog box configure the following parameters (Fig. 4.2—2):

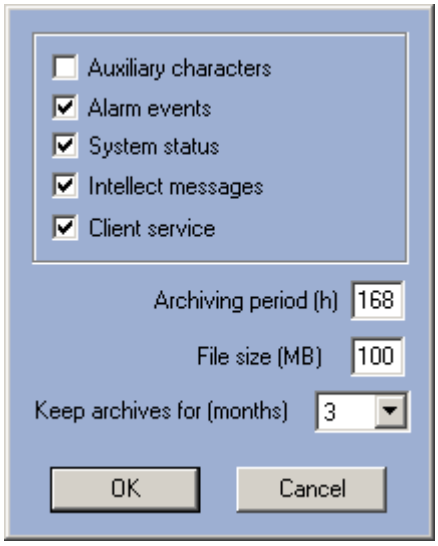

Fig. 4.2—2 Setting up logging subsystem

3.1. **Auxiliary characters**. Set the checkbox to log auxiliary characters on the transport level.

3.2. **Alarm events**. Set the checkbox to log alarm events (activation of vibration sensor, temperature sensor, or forcible lock opening).

3.3. **System status**. Set the checkbox to log events related to the system status.

3.4. **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.

3.5. **Client service**. Set the checkbox to log the performance of financial transactions on the ATM.

3.6. **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

3.6.1.namelog is the name of the archived log file;

3.6.2.yy is the year of archive creation;

3.6.3.mm is the month of archive creation;

3.6.4.dd is the day of archive creation;

3.6.5.hh is the hour of archive creation;

3.6.6.mm is the minute of archive creation;

3.6.7.ss is the second of archive creation.

3.7. **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.

3.8. **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.

4.2.2 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 (Fig. 4.2—3).

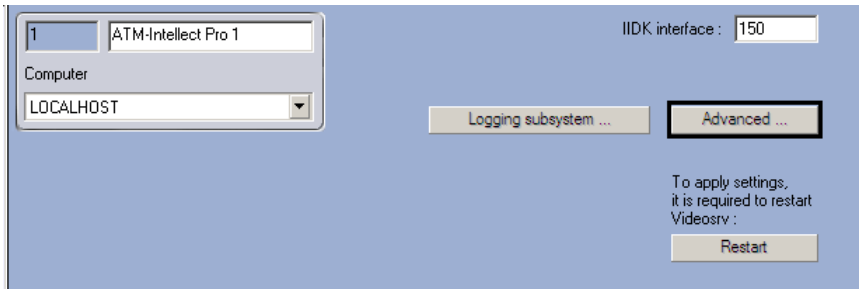

Fig. 4.2—3 Advanced button

2. To view a dialog box with more configuration options, click the **Advanced ...** button (see Fig. 4.2—3).

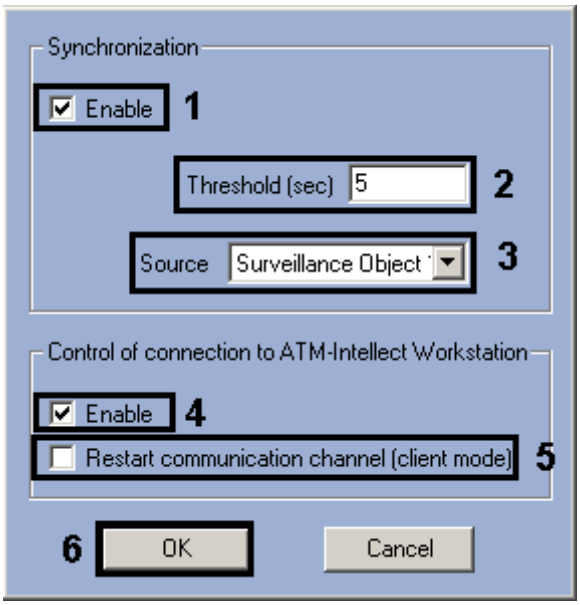

Fig. 4.2—4 Configuring time synchronization and control of connection

3. Configure synchronization in the following way:

   a. Set the **Enable** checkbox (see Fig. 4.2—4, 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 (see Fig. 4.2—4, 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 (see Fig. 4.2—4, 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 (see Fig. 4.2—4, 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 (see Fig. 4.2—4, 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** (see Fig. 4.2—4, 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.

4.3 Configuration of the Surveillance Object object

4.3.1 Setting Surveillance Object ID

To set the Surveillance Object ID, do the following:

1. Go to the **Surveillance Object** object setting panel (Fig. 4.3—1).

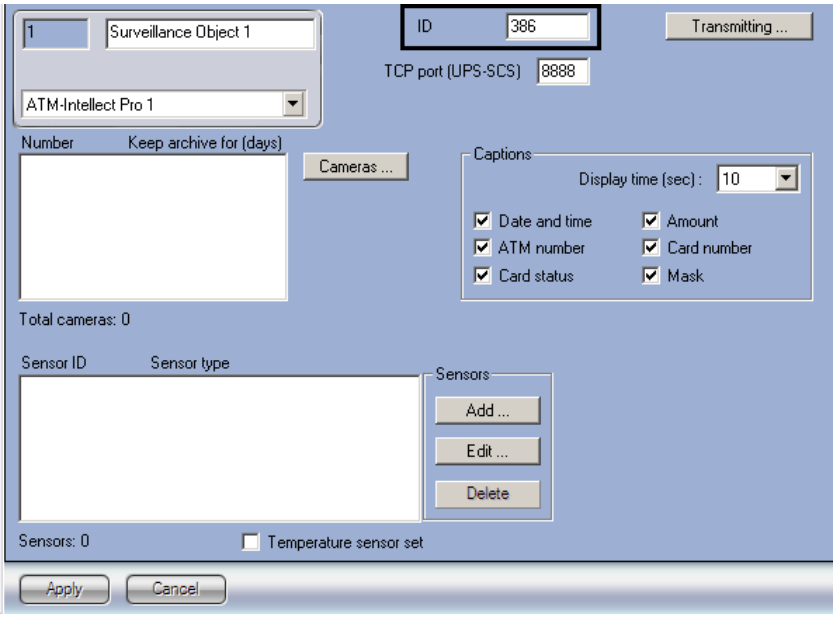

Fig. 4.3—1 Setting Surveillance Object ID

2. In the **ID** field enter the unique ID number of the object on which *ATM Intellect Pro* is installed (see Fig. 4.3—1). May contain 3 to 9 characters.

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

Setting Surveillance Object ID is completed.

4.3.2 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 (Fig. 4.3—2).

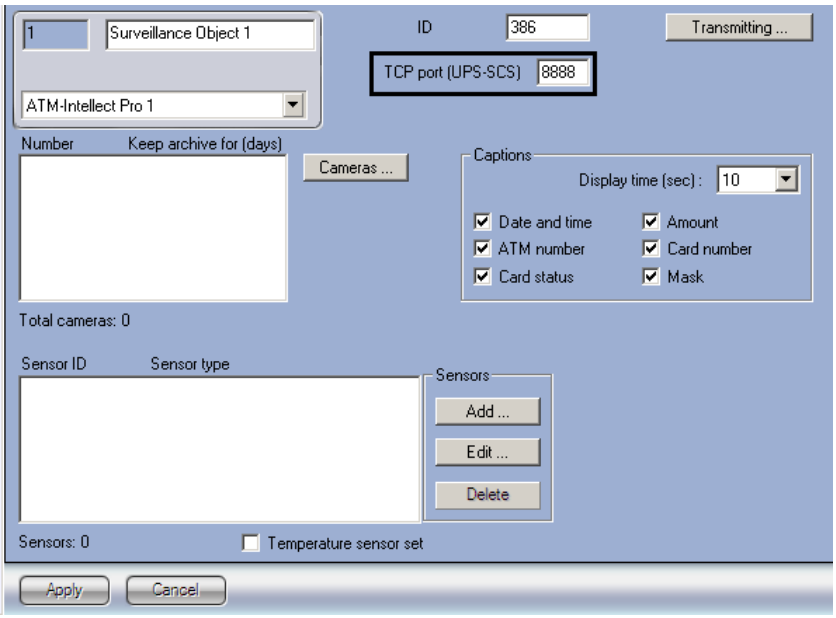

Fig. 4.3—2 Setting the port used to listen for messages from the UPS and Smart Card Service ATMs

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 (see Fig. 4.3—2).

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

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

4.3.3 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.

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 (Fig. 4.3—3).

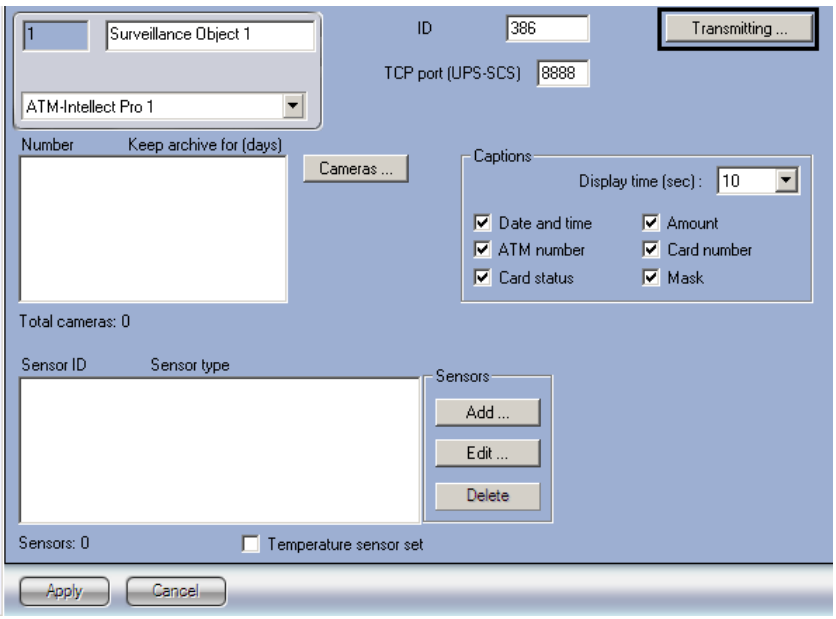

Fig. 4.3—3 Transmitting button

2. Click the **Transmitting ...** button (see Fig. 4.3—3). A dialog box for selecting the interface method between *ATM Intellect Pro* and *ATM Intellect Workstation* opens.

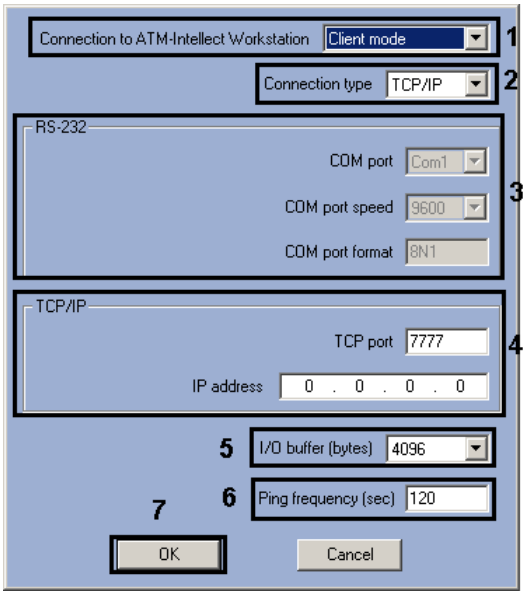

Fig. 4.3—4 Setting up a connection

3. In 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** (see Fig. 4.3—4, 1).

4. In the **Connection type** drop-down list select the type of transport interface. Can be either **TCP/IP** or **RS232** (see Fig. 4.3—4, 2).

5. If **RS232** is chosen for the **Connection type**, the **COM port number, COM port speed** and **COM port format** must be configured (see Fig. 4.3—4, 3).

6. If **TCP/IP** is chosen for the **Connection type,** in the **TCP port** enter the number of port for TCP/IP connections (see Fig. 4.3—4, 4).
   If **Client mode** has been chosen for the connection to *ATM Intellect Workstation* and **TCP/IP** has been chosen for the **Connection type**, in the dialog box, indicate the **IP address** and **TCP port** of *ATM Intellect Workstation*.

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 (see Fig. 4.3—4, 5). 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. In the **Ping frequency (sec)** field enter the frequency at which *ATM Intellect Pro* sends ping test messages about its technical status to *ATM Intellect Workstation* (**Client mode**) - (see Fig. 4.3—4, 6). Minimal possible value is 10 sec. The value in the **Ping frequency (sec.)** field 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.

9. Click **OK** (see Fig. 4.3—4, 7).

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

4.3.4 Configuring video cameras list

To configure list of used video cameras do the following:

1. Go to the **Surveillance Object** object setting panel (Fig. 4.3—5).

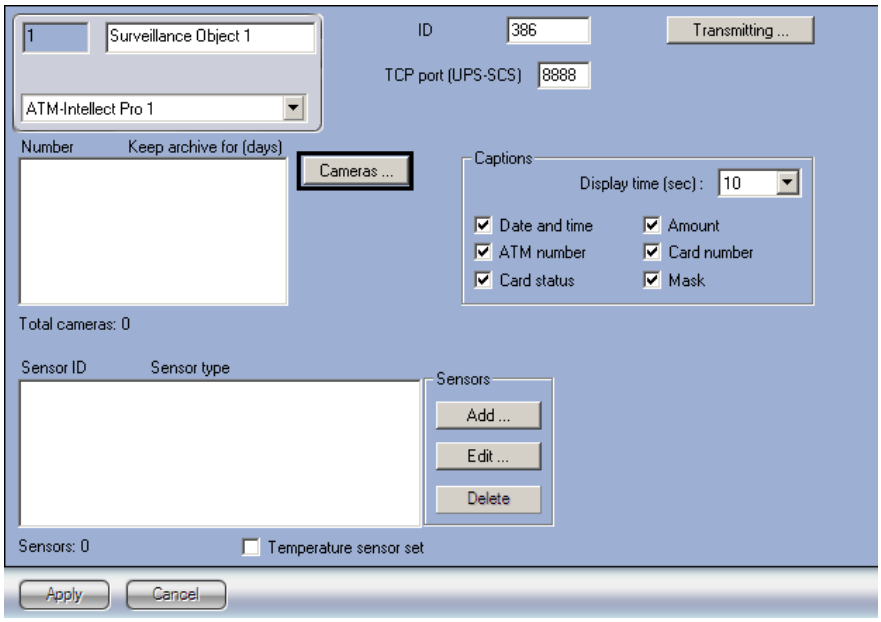

Fig. 4.3—5 Cameras button

2. Click the **Cameras…** button (see Fig. 4.3—5). The **Add/Edit cameras** dialog box opens (Fig. 4.3—6).

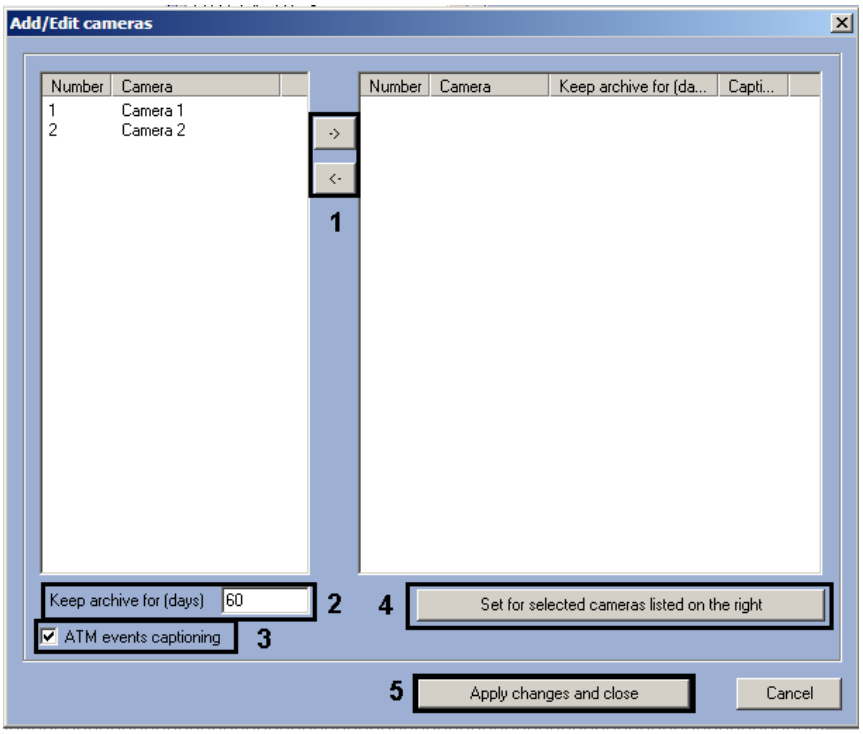

Fig. 4.3—6 Configuring cameras list

3. Move cameras from the list on the left to the list on the right with and buttons (see Fig. 4.3—6, 1).

4. Select cameras in the list on the right.
5. Specify the length of time for which you want to keep video archives, in days (see Fig. 4.3—6, 2).
6. If titles displaying is required, set the ATM events captions checkbox (see Fig. 4.3—6, 3).
7. Click the **Set for selected cameras listed on the right** button (see Fig. 4.3—6, 4).
8. Repeat steps 4-7 for all cameras in the list on the right.
9. Click **Apply changes and close** button (see Fig. 4.3—6, 5).

Note.

Video camera and Captioner ID numbers must be whole integers.

Configuring cameras list is completed.

4.3.5 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. There is another device as well, "Temperature sensor set".

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 INTELLECT software package. Installing and configuring security system components guide.

Attention!

The ID numbers for these sensors must be whole integers.

Attention!

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 Appendix 1. 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 (Fig. 4.3—7).

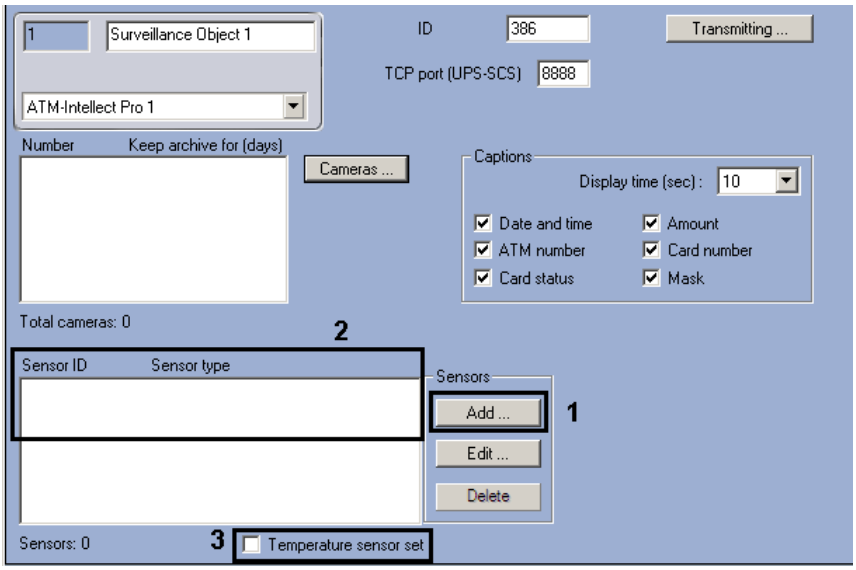

Fig. 4.3—7 Configuring sensors list

2. Click **Add…** (see Fig. 4.3—7, 1). A dialog box for sensor adding opens.

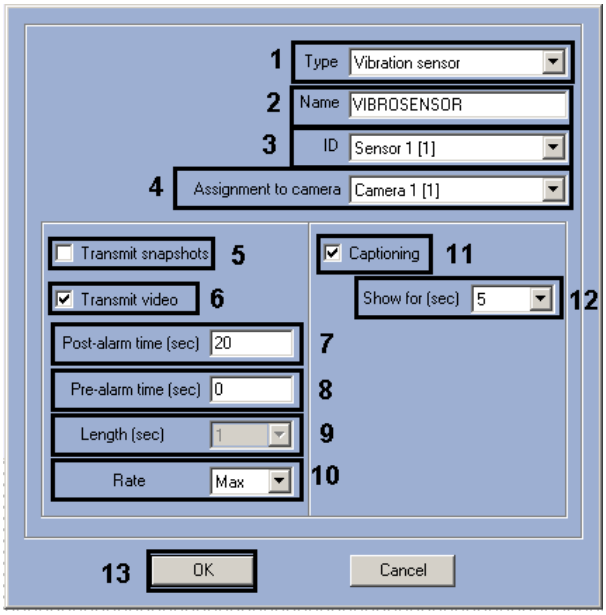

Fig. 4.3—8 Adding a sensor

3. In the **Type** drop-down list select a type of sensor from the 16 types described previously (see Fig. 4.3—8, 1).

4. In the **Name** field enter the text which will be sent to *ATM Intellect Workstation* together with an alarm message (see Fig. 4.3—8, 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* (see Fig. 4.3—8, 3).

6. In the **Attach to camera** drop-down list select a **Camera** object that has been previously created in *Intellect* (see Fig. 4.3—8, 4).

7. Set the **Transmit snapshots** checkbox to send video frames to *ATM Intellect Workstation* when the sensor is activated, select this check box (see Fig. 4.3—8, 5). In the **Attach to**

camera field, indicate the video camera from which you want video frames to be sent (see Fig. 4.3—8, 4).

Note.

Configuration parameters for video and snapshots transmitting are different.

8. Set the **Transmit video** checkbox to send video to *ATM Intellect Workstation* when the sensor is activated, select this check box (see Fig. 4.3—8, 6). In the **Attach to camera** field, indicate the video camera from which you want video to be sent (see Fig. 4.3—8, 4).

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 (see Fig. 4.3—8, 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. In the **Number of frames** drop-down list select the number of video fragment frames to send when a sensor is activated (for **Transmit snapshots** mode) - (Fig. 4.3—9, 1).

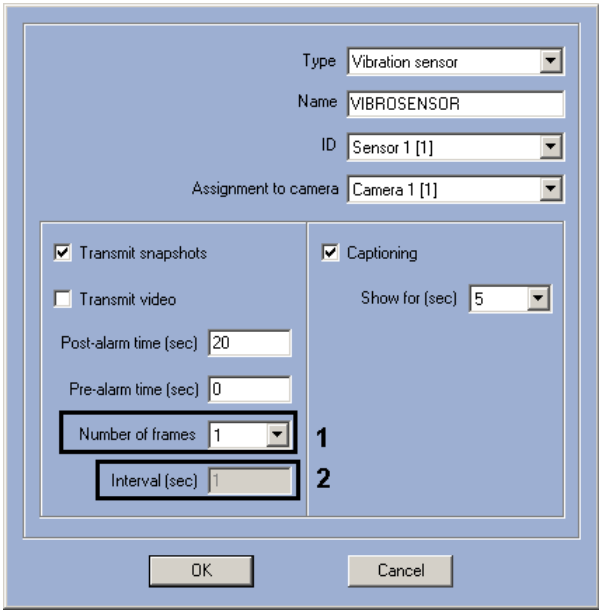

Fig. 4.3—9 Settings for Transmit snapshots mode

12. In the **Interval (sec)** field enter the interval, in seconds, between video frames if more than one frame is being transmitted (see Fig. 4.3—9, 2). 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 (for **Transmit snapshots** mode).

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 Appendix 1. 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, Fig. 4.3—10).

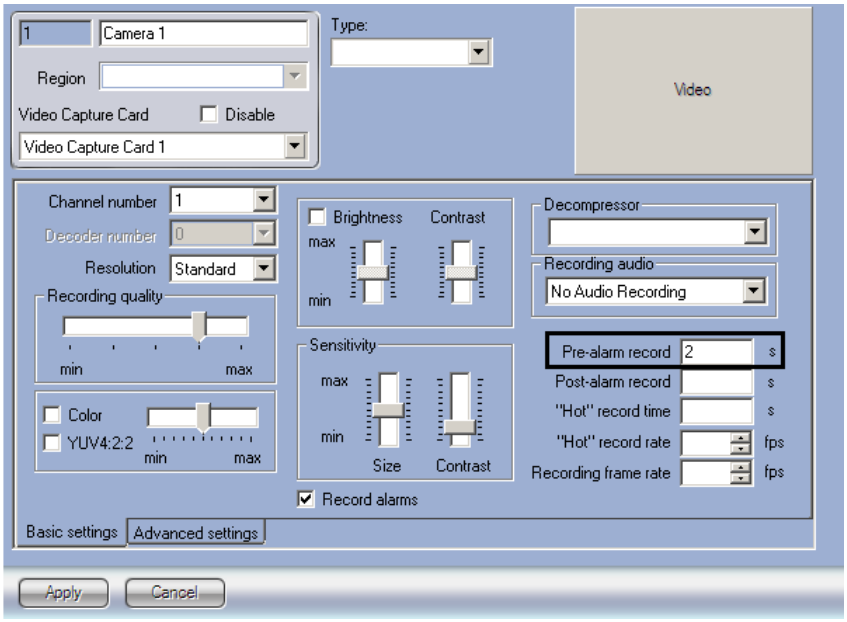

Fig. 4.3—10 Pre-alarm record parameter

13. In the **Length (sec)** field enter the length of the transmitted video fragment (for **Transmit video** mode, Fig. 4.3—8).

Attention!

This setting cannot be accessed in this version of the program (1). The length will be determined by the size of the video footage file in the video archive. To limit the length of the video fragment that is sent, pause camera recording by using a script (a sample script is given in Appendix 1. Example of script to suspend recording on camera).

14. In the **Rate** field enter the speed of transmission of the video fragment (for **Transmit video** mode) - (Fig. 4.3—8).

15. Set the **Captioning** check box if captions are to be superimposed on the video image when a sensor is activated (see Fig. 4.3—8, 11). In the **Attach to camera** field, indicate the video camera on whose video you want to overlay captions (see Fig. 4.3—8, 4).

16. In the **Show for (sec)** field specify the duration of display of captions on the video image, in seconds (see Fig. 4.3—8, 12).

17. Click **OK** (see Fig. 4.3—8, 13).

18. Set the **Temperature sensor set** checkbox if it is necessary to monitor temperatures within a particular allowable range, enable this option (see Fig. 4.3—7, 3). For temperature control, a set of DS18S20-type temperature sensors is used. Temperature sensors are connected through a twisted-pair cable using the Dallas 1-Wire communications network to a MicroLAN network adapter; the adapter is connected to the COM port of the computer that has *ATM Intellect Pro* installed. A MicroLAN network adapter can be connected to the USB port of the

computer on which *ATM Intellect Pro* is installed, by using an additional RS232-to-USB adapter.

19. To save settings click **Apply** (see Fig. 4.3—7, 4).

Configuring the list of used sensors is completed.

4.3.6 Configuring titles

4.3.6.1 Setting information contained in titles

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

1. Go to the **Surveillance Object** object setting panel (Fig. 4.3—11).

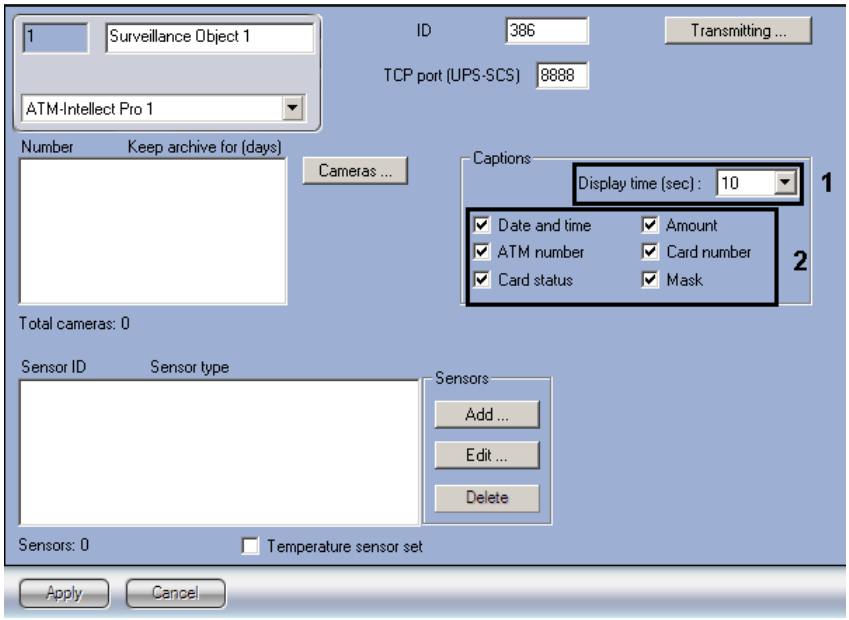

Fig. 4.3—11 Setting information contained in titles

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) - (see Fig. 4.3—11, 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 titles is completed.

4.3.6.2 Setting up the Captioner object

To configure captions, you must create a **Captioner** object for each camera on which you want to overlay captions (Fig. 4.3—12).

Attention!

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

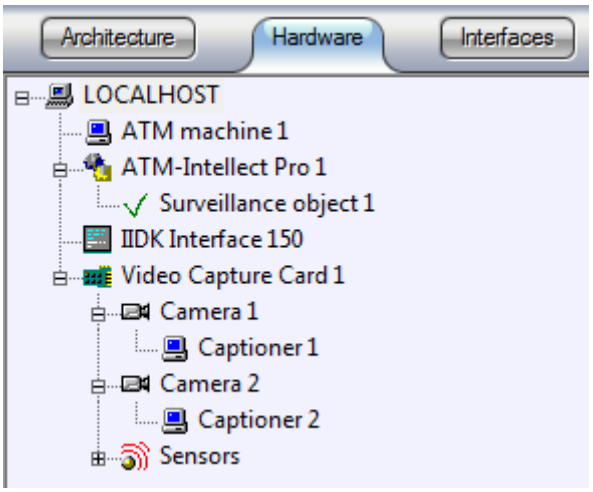

Fig. 4.3—12 Captioner objects in the Hardware tab

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 (Fig. 4.3—13).

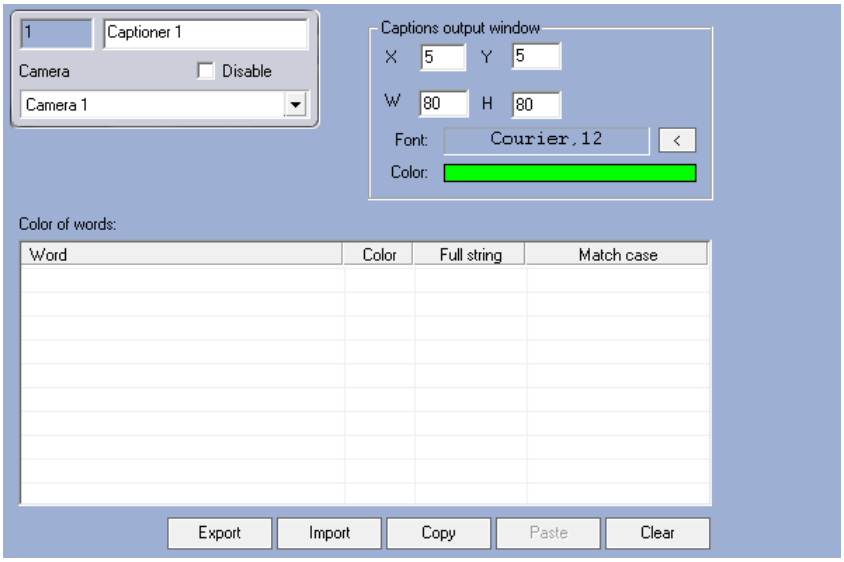

Fig. 4.3—13 Settings panel for the Captioner object

2. To configure the font face and font size, click the button to the right of the **Font** line to open the corresponding dialog box (Fig. 4.3—14).

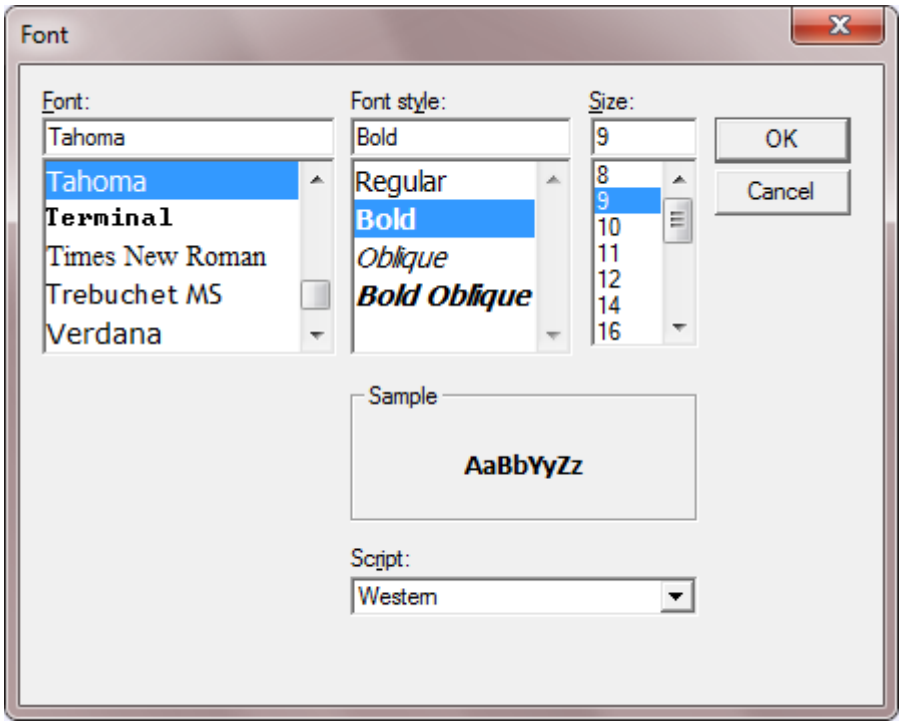

Fig. 4.3—14 Selecting font

3. To configure the color of captions, double-click the area to the right of the **Color** line. The color selection dialog box opens (Fig. 4.3—15).

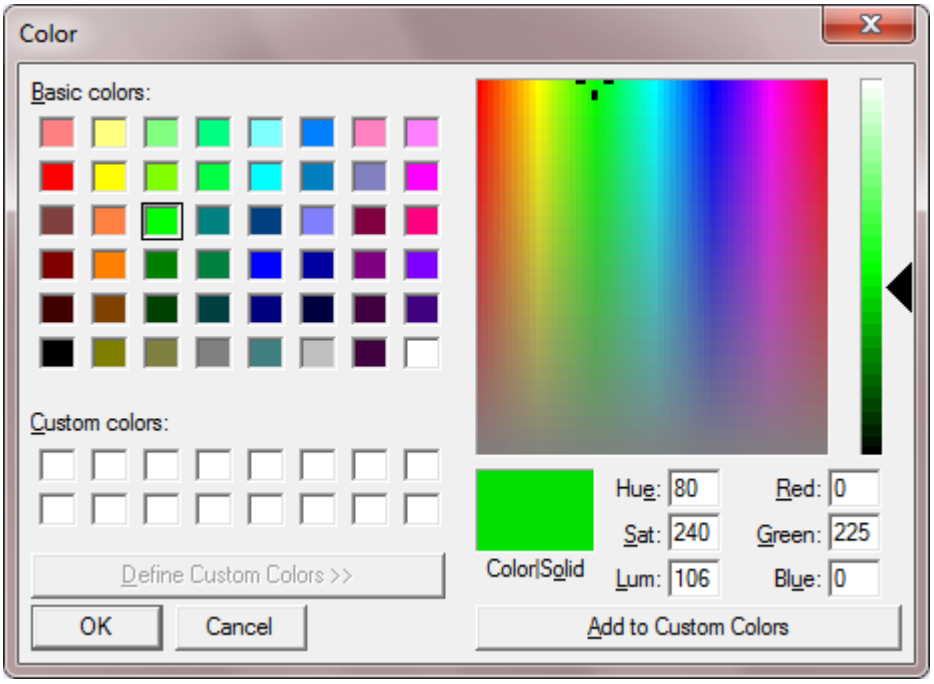

Fig. 4.3—15 Selecting color

4.4 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.

To begin, configure the StateUPS utility. StateUPS utility (exe and ini files) 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 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).

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

1. Create "HKLM\SOFTWARE\BitSoft\VHOST\VHostService" section 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.

Then install the software supplied by the UPS vendor. Before beginning installation, make sure that the interface cable is connected to the UPS. To start the installation process, start the file pc521.exe. After installation starts (Fig. 4.4—1), on the following wizard page (Fig. 4.4—2), select the option **Continue with the installation now** and click the **Next** button.

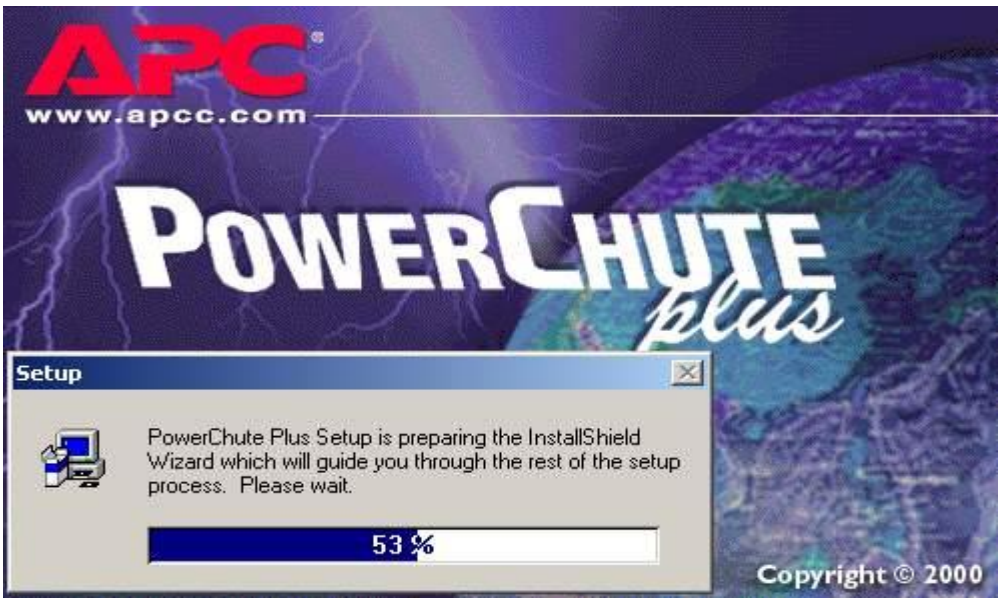

Fig. 4.4—1

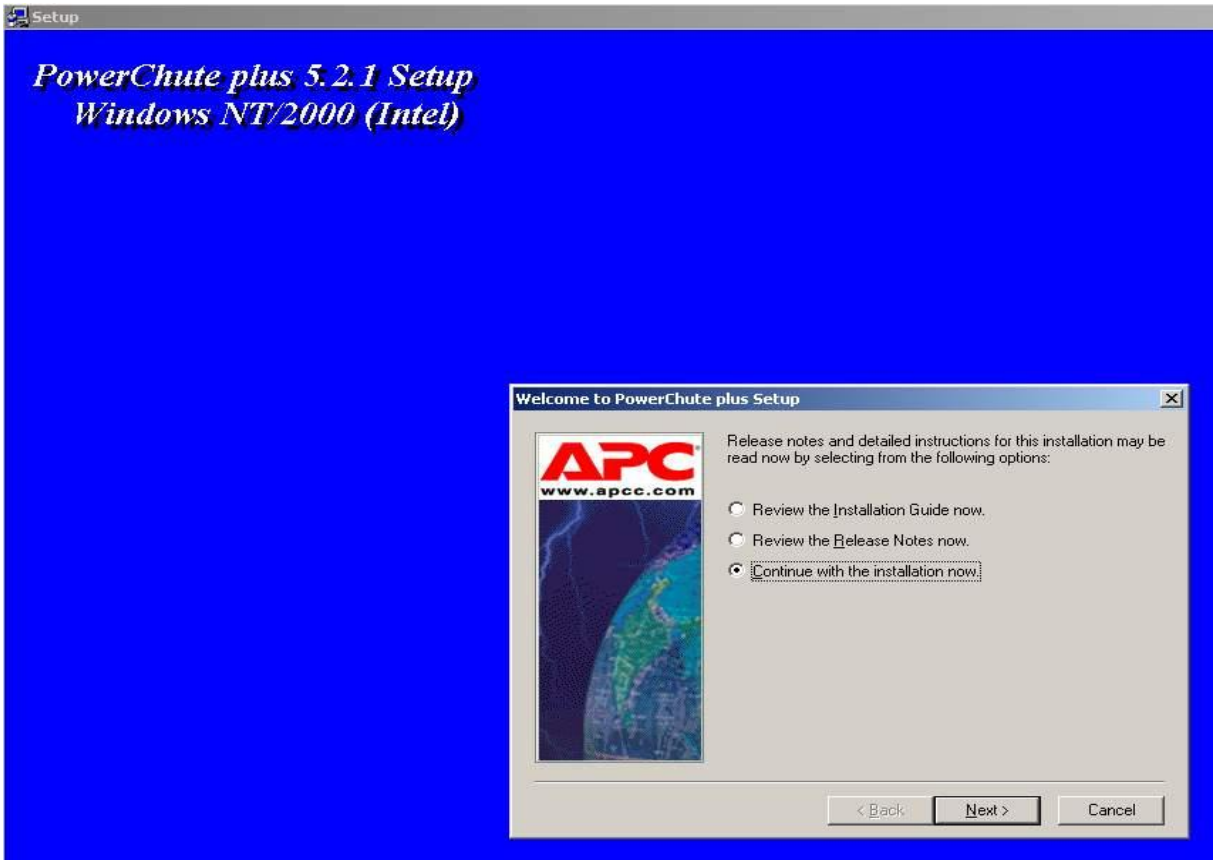

Fig. 4.4—2

After you accept the end-user license agreement (Fig. 4.4—3), on the following page of the wizard (Fig. 4.4—4), select the **Typical** installation type and indicate the path at which you want to install the software.

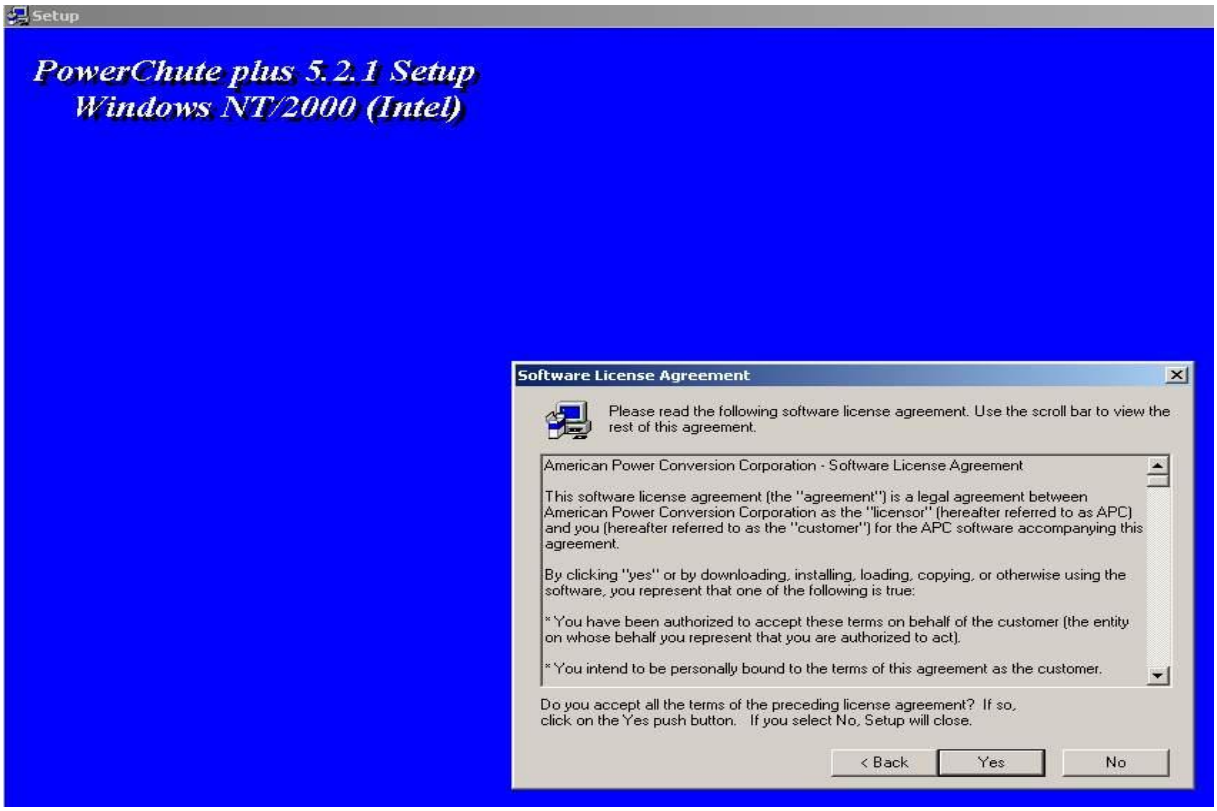

Fig. 4.4—3

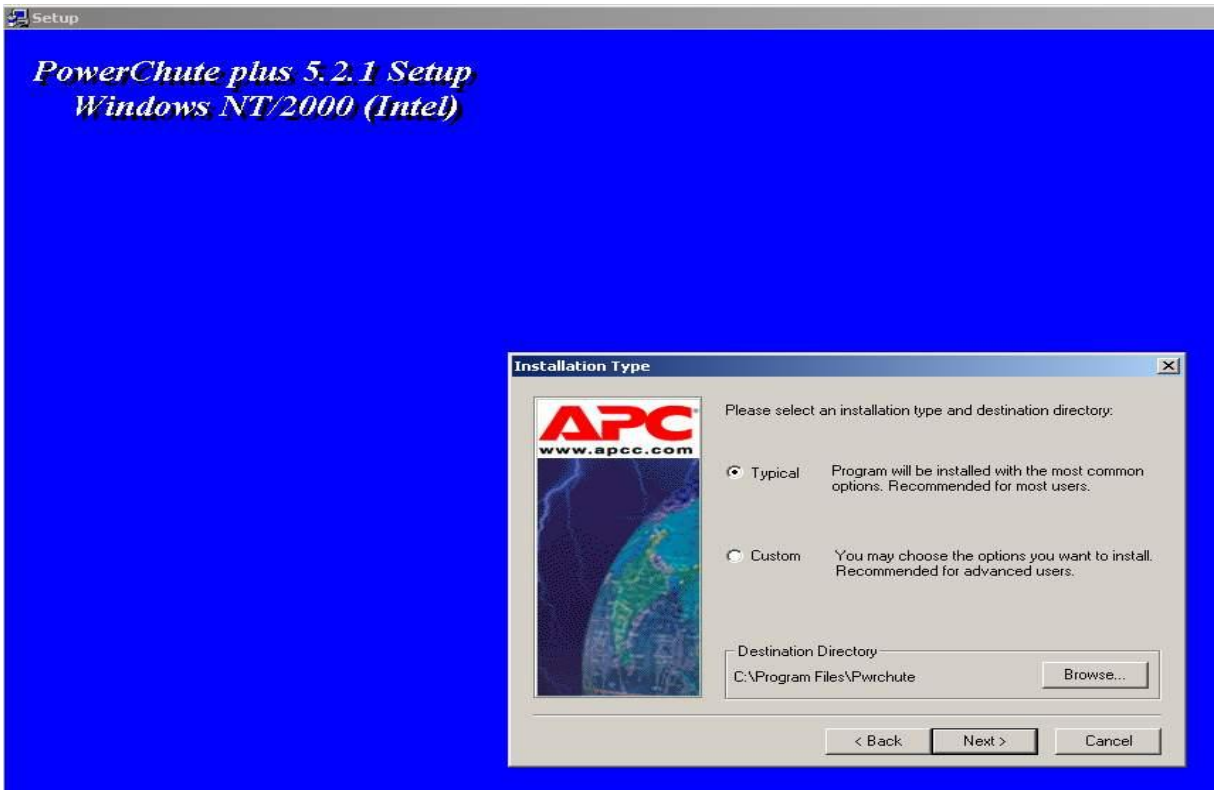

Fig. 4.4—4

After the necessary files are copied (Fig. 4.4—5), you are asked whether you want the program to automatically detect the COM port on which the UPS is located (Fig. 4.4—6). Click the **Yes** button.

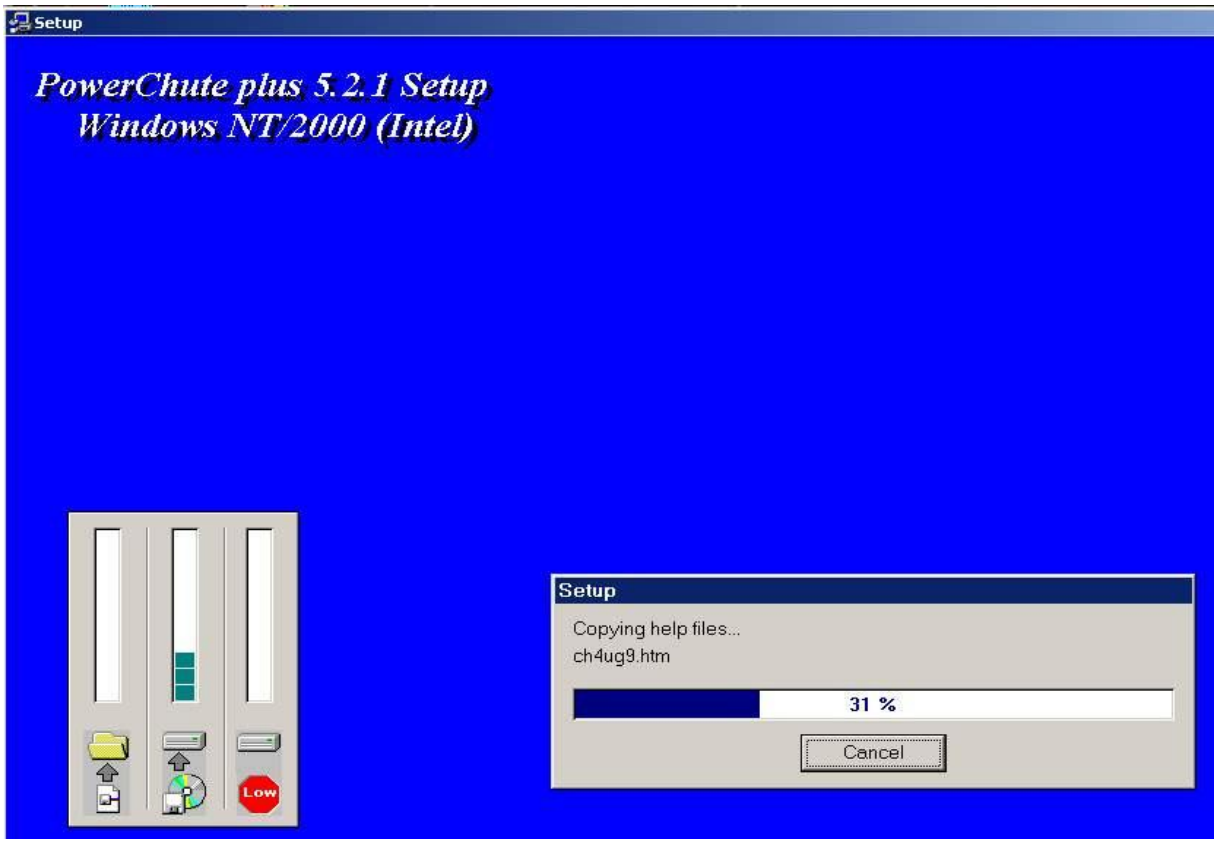

Fig. 4.4—5

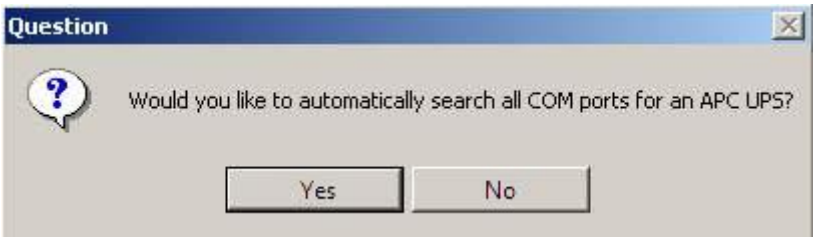

Fig. 4.4—6

After a short search (Fig. 4.4—7), the program shows the type of UPS that it found and the corresponding COM port (Fig. 4.4—8). Click the **Next** button.

Fig. 4.4—7

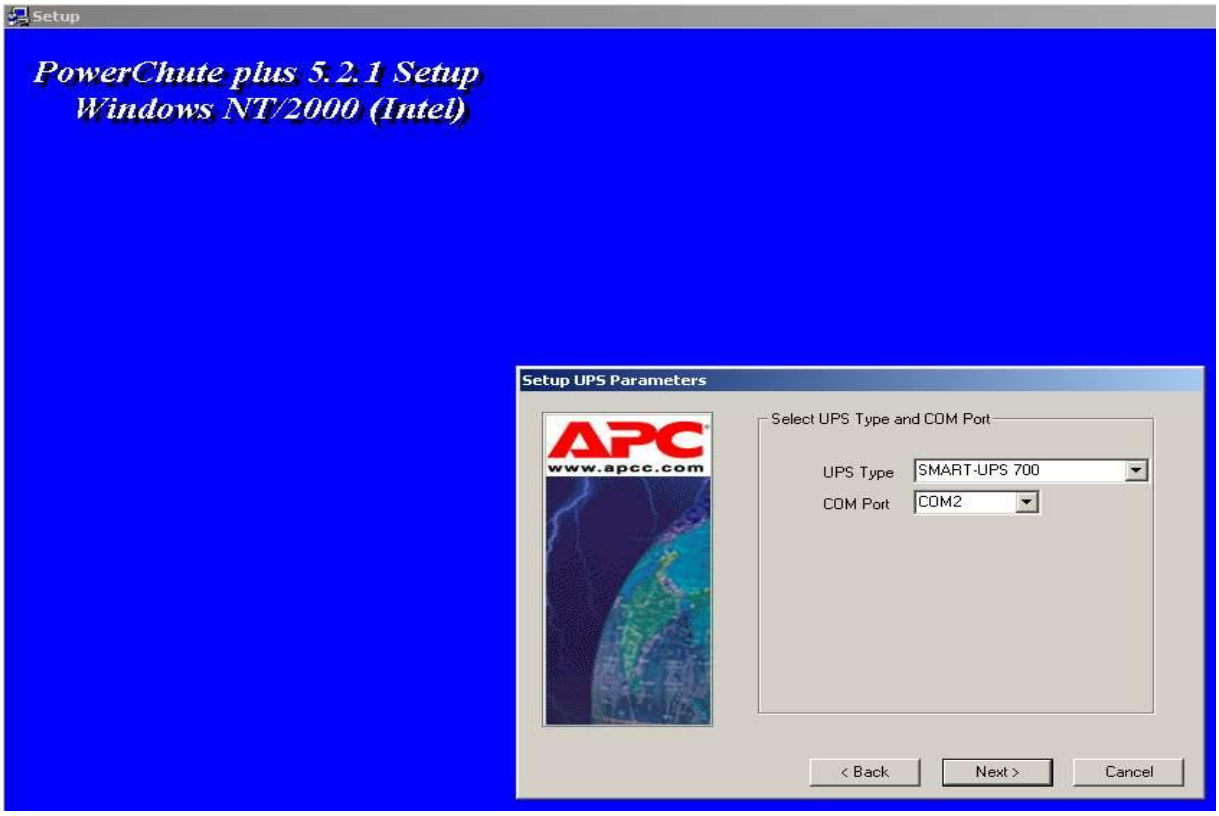

Fig. 4.4—8

Then clear the **Enable PowerChute plus remote monitoring** check box and click the **Next** button (Fig. 4.4—9).

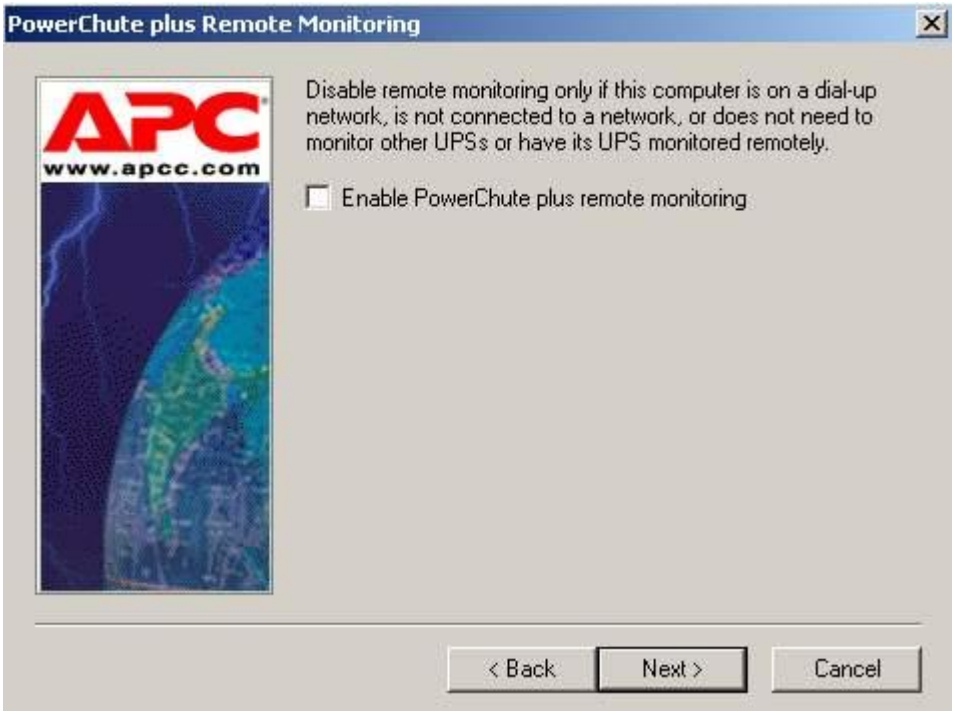

Fig. 4.4—9

The two following wizard pages complete the installation process (Fig. 4.4—10 and Fig. 4.4—11).

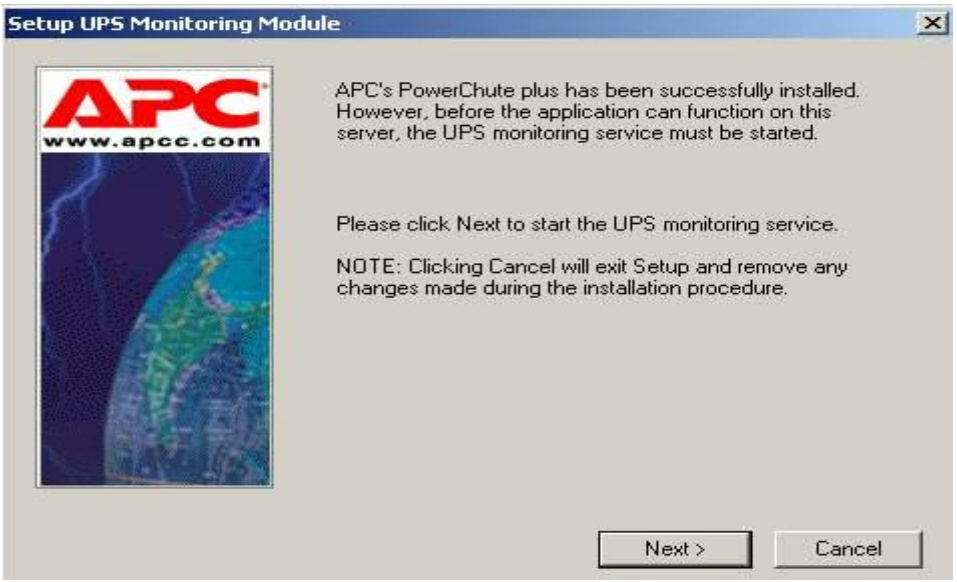

Fig. 4.4—10

Fig. 4.4—11

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.

Now you must configure PowerChute plus. Start configuration of PowerChute plus, by selecting Start>Programs>PowerChute plus>PowerChute plus (Fig. 4.4—12).

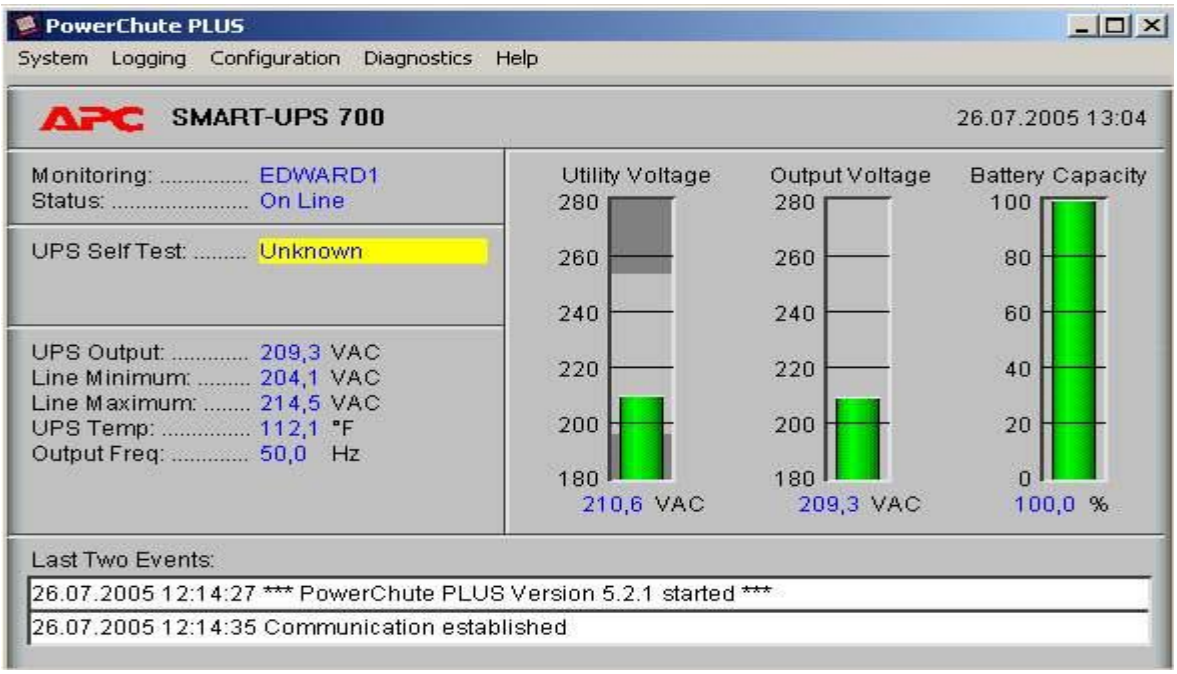

Fig. 4.4—12

Select the menu item Configuration>Event Actions... In the dialog box that appears (Fig. 4.4—13), in which events are listed on the left, you can set different reactions for event types, on the right side of the window. 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.

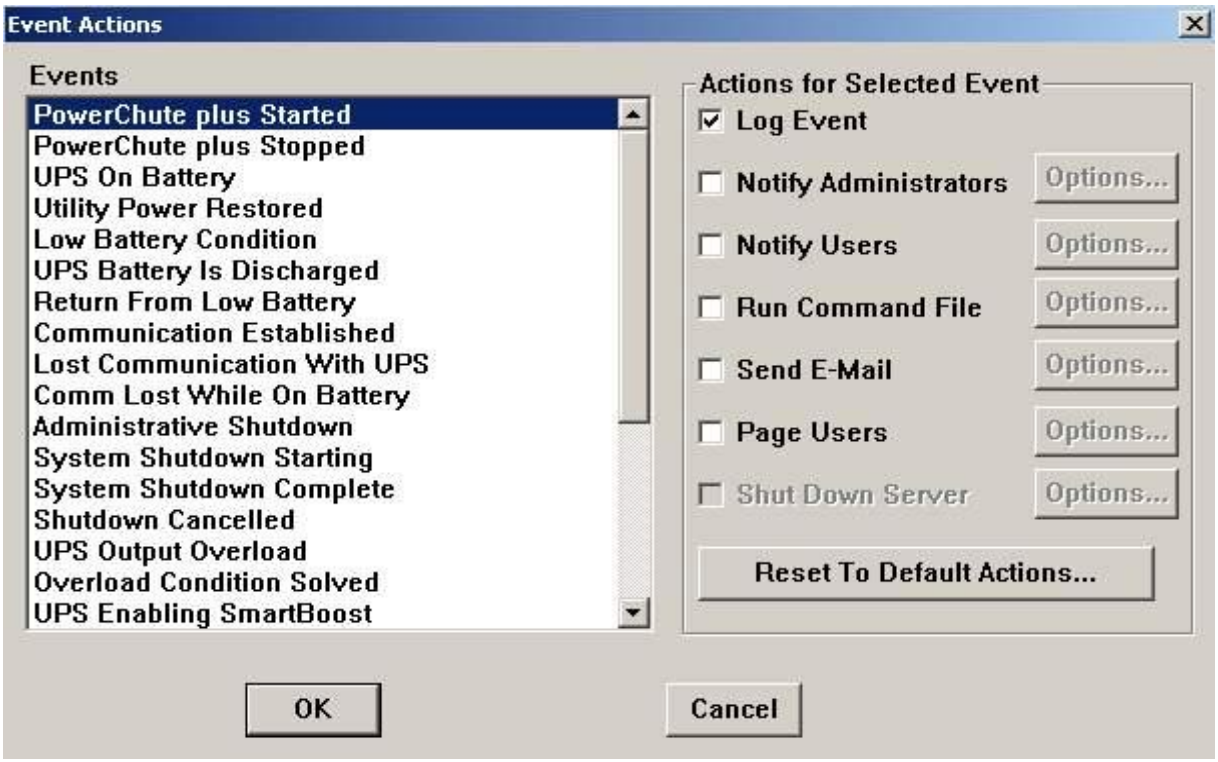

Fig. 4.4—13

A more complete list of events is given in Table 1.

Table 1

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
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. Imagine that we are interested in situations when electricity has gone out and the UPS has switched to battery mode (ID Code = 2000), and electricity returned a while later (ID Code = 1003). In the list of events, select the **UPS On Battery** event and, for this event, enable the option **Run Command File** (Fig. 4.4—14). 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 is what we want to start whenever this event occurs (Fig. 4.4—15). 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 Table 1). The equivalent actions for the **Utility Power Restored** event are shown in Fig. 4.4—16 and Fig. 4.4—17. 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

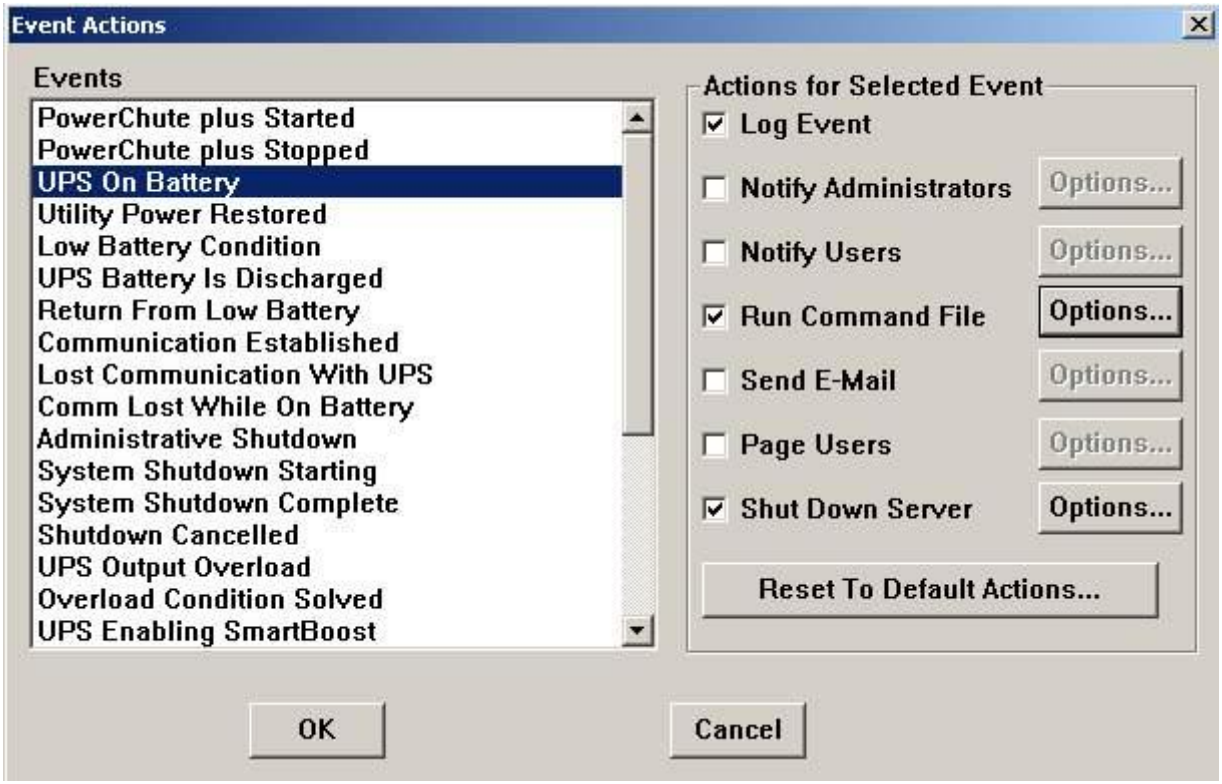

Fig. 4.4—14

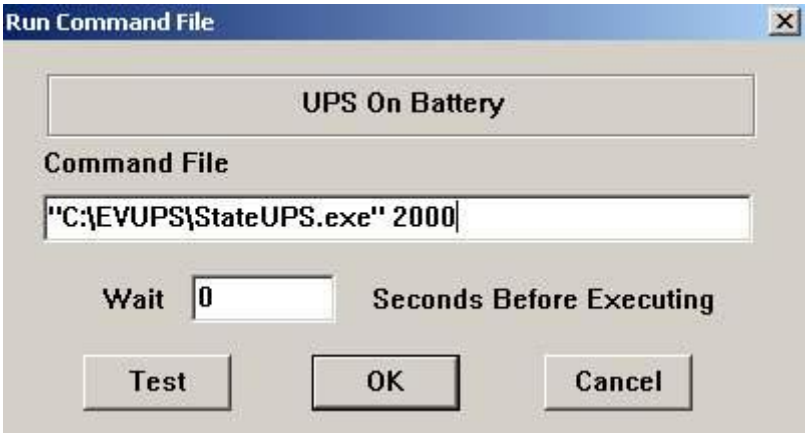

Fig. 4.4—15

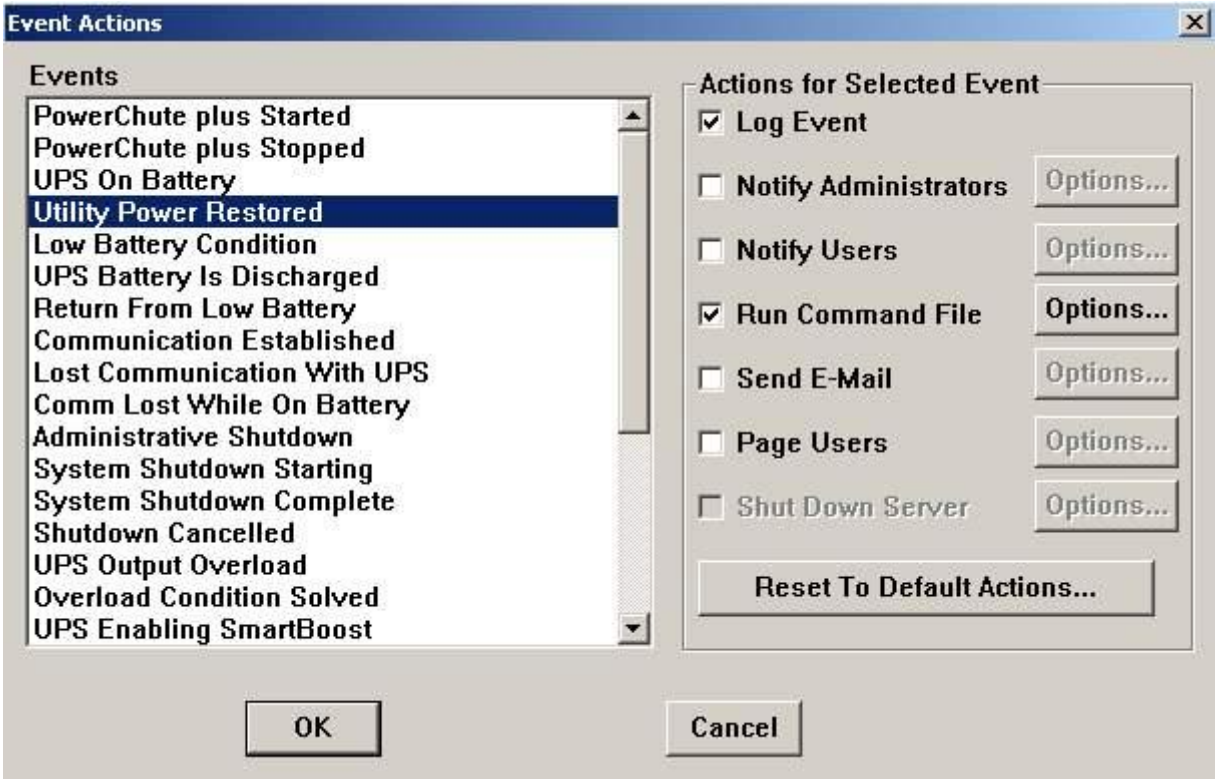

Fig. 4.4—16

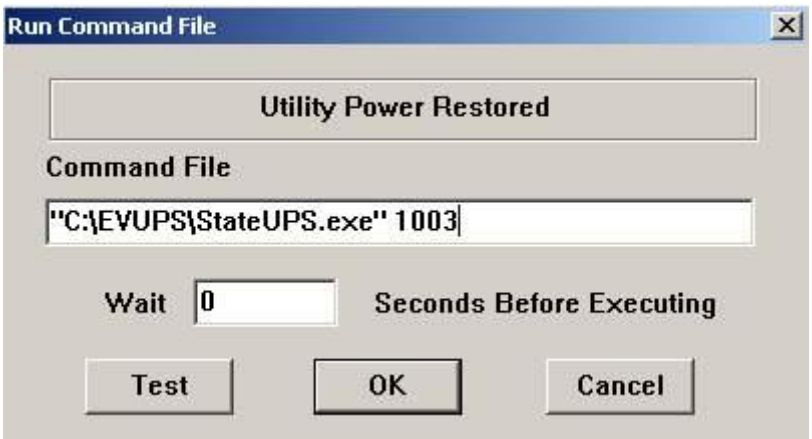

Fig. 4.4—17

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.

4.5 Integration with the "Gold crown"

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 «vmon_itv.reg» file and 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 (Fig. 4.5—1).

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

Fig. 4.5—1 Registry keys for Gold crown system

- *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.

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.

4.6 Transferring events from ATMs to the Intellect core

4.6.1 General information

Events recieved 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* (not available in English). 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). 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

4.6.2 Event parameters

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.*

4.6.3 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), 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.

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

```
OnEvent("ATM_ITV","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: date, ATM ID, masked card number, event.

4.7 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.

5 Appendix 1. 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 the following **Program** object in Intellect, on the **Programming** tab.

This script is written for a camera with ID number 1 and for a Sensor object whose ID number is 1 as well. With this script, we can set the *Post-alarm time* value to 7 seconds.

```
OnEvent("GRAY","1","ALARM")
{
[
    if( !CheckState("CAM","1","DETACHED") )
    {
        DoReact("CAM","1","REC_ROLLBACK");
        Wait(5);
        DoReact("CAM","1","REC_STOP");
    }
]
}
OnEvent("GRAY","1","ALARM")
{
[
    Wait(2);
    DoReact("GRAY","1","CONFIRM");
    Wait(2);
    DoReact("GRAY","1","ARM");
]
}
```

For constant recording mode, do not perform any commands for starting or stopping camera recording (REC_ROLLBACK и REC_STOP). In this case the following script variations can be used:

1. **Variation** 1: when captioning is disabled in sensors settings. In this case ATM-Intellect Pro does not stop recording and the program shall be as follows:

```
OnEvent("GRAY","1","ALARM")
{
[
    Wait(5); // Specifies the time after which the recording should
be stopped in order to get the required clip length or number of
frames
    DoReact("CAM","1","REC_STOP");
    Wait(2); // Pre-alarm record time in the camera settings = 2 sec.
    DoReact("CAM","1","REC_ROLLBACK"); // Start recording with pre-
alarm recording of 2 seconds. This allows us not to lose data in the
archive.
]
}
```

2. **Variation 2**: when captoning is enabled in sensors settings. In this case ATM-Intellect Pro stops recording in specified time after captions are put onto video image. The program shall be as follows:

```
OnEvent("GRAY","1","ALARM")
{
[
    Wait(7); // This time equals to captions displaying time + 2 seconds of
pre-alarm recording
    DoReact("CAM","1","REC_ROLLBACK"); // Start recording with pre-alarm
recording of 2 seconds. This allows us not to lose data in the archive.
]
}
```