AxxonSoft

ATM Event Capture

Installation and Configuring Guide

Version 1.2

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axxon

Video Surveillance and Security Solutions

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1 Requirements to the operating system and pre-installed software

ATM Event Capture is implemented as a service, 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 and 8.1 it is necessary to configure 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 must be installed as well. ATM Event Capture is compatible with XFS versions 2.0 through 3.2.

2 Installation

2.1 Installer description

The picture below shows the *ATM Event capture* software installer content (Fig. 2.1—1).

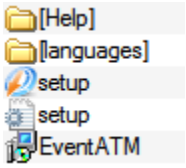


Fig. 2.1—1 Installer content

Documentation is available in the Help folder.

Use the setup.exe file to unstall *ATM Event capture* 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.

2.2 Preparing to install

Before starting 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 must be performed by a user with administrator rights.

2.3 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. The installation wizard informs that the installation process has begun (Fig. 2.3—1).

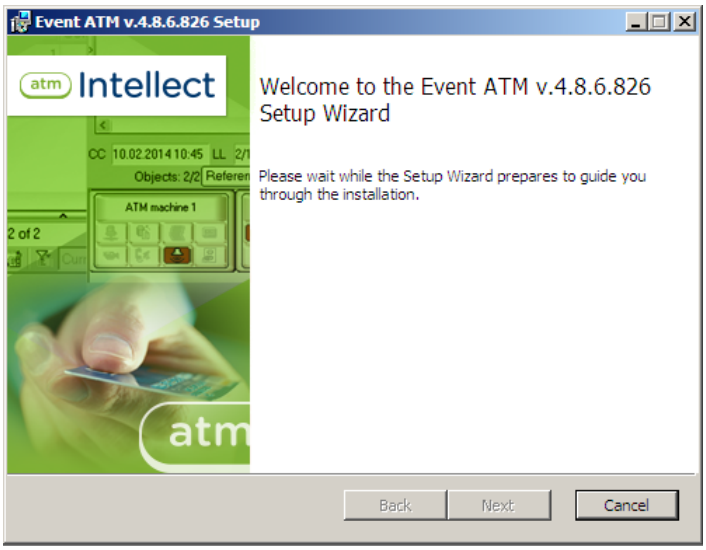


Fig. 2.3—1 Initialization

2. You are prompted to start installation (Fig. 2.3—2). Click the **Next** button.

Fig. 2.3—2 Beginning installation

3. In the **License agreement** window read the terms of the End-User License Agreement (Fig. 2.3—3). Set the switch into the **I accept the terms in the license agreement** position and press **Next**.

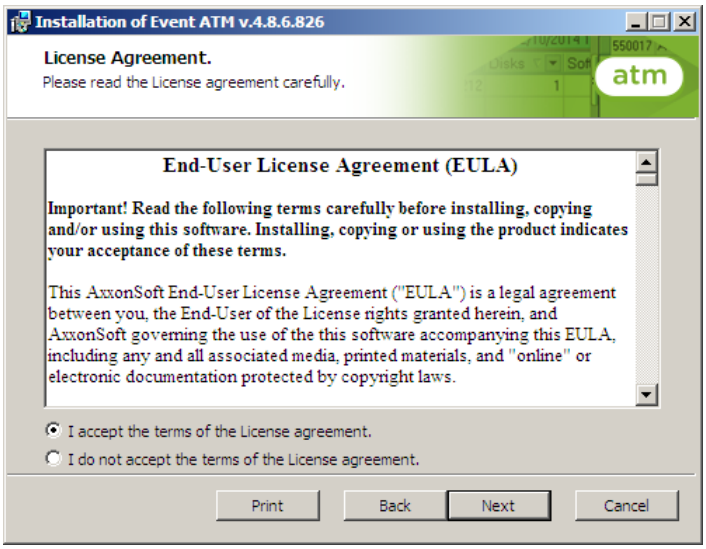


Fig. 2.3—3 License agreement

4. In the wizard page that appears, specify the path to the folder in which the software will be installed (Fig. 2.3—4).

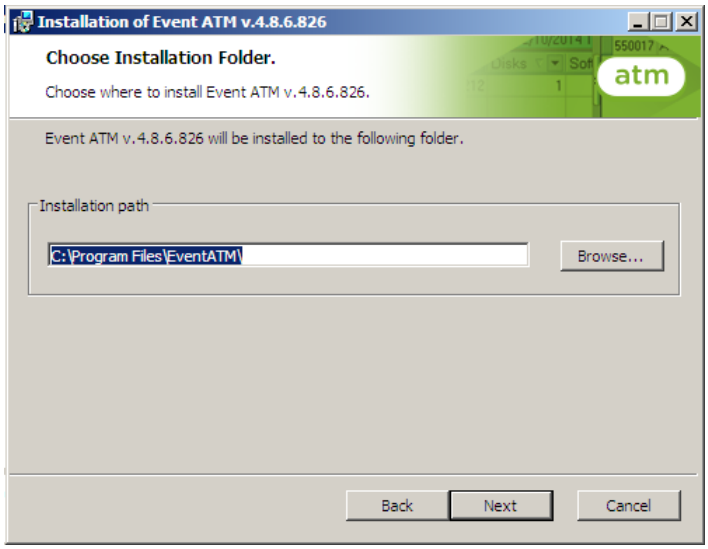


Fig. 2.3—4 Installation path

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

5. Click **Install** in the next dialog box (Fig. 2.3—5).

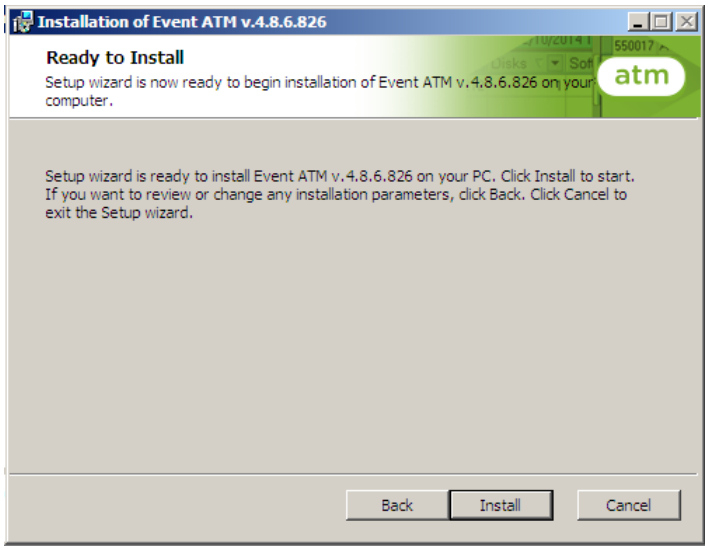


Fig. 2.3—5 Ready to install

6. The ATM Event Capture utility is installed (Fig. 2.3—6).

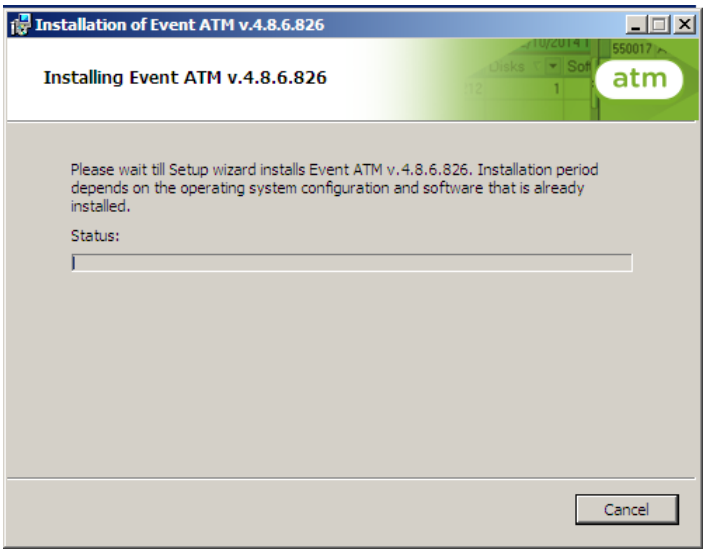


Fig. 2.3—6 Installation progress

7. After final installation tasks are completed, the wizard informs that the software has been successfully installed (Fig. 2.3—7).

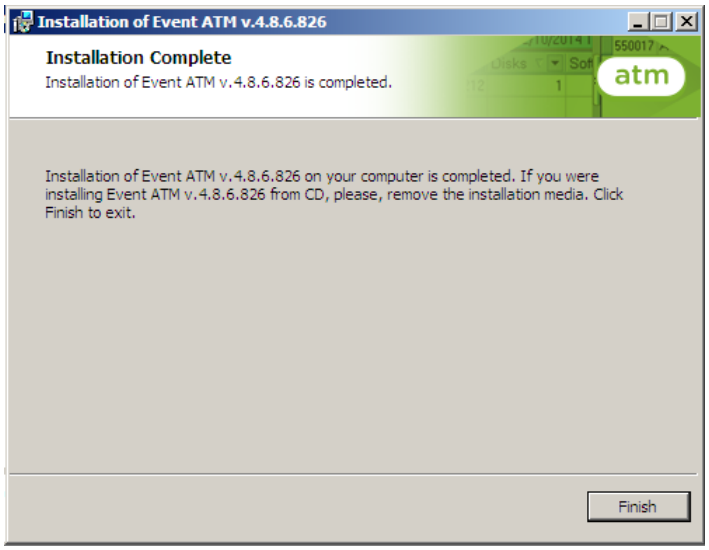


Fig. 2.3—7 Installation complete

ATM Event Capture installation is completed.

3 Configuration

3.1 Starting ATM Event Capture

Select Start>All Programs>EventATM>EventATM to start EventATM.exe (Fig. 3.1—1).

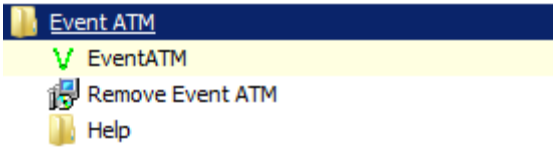


Fig. 3.1—1 EventATM utility in the Start menu

The program icon (a green checkmark) appears in the taskbar notification area (system tray) (Fig. 3.1—2).

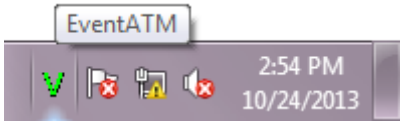


Fig. 3.1—2 EventATM utility in the taskbar notification area

Double-clicking the icon opens a dialog box with settings for ATM Event Capture (Fig. 3.1—3).

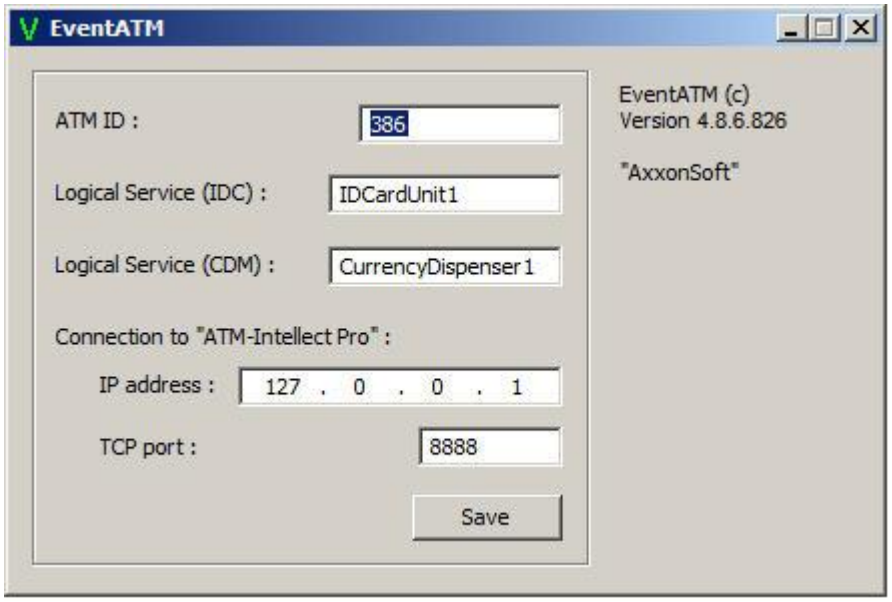


Fig. 3.1—3 EventATM interface

This dialog box allows configuring compatibility with the ATM XFS environment and with ATM Intellect Pro.

3.2 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 (Fig. 3.2—1).

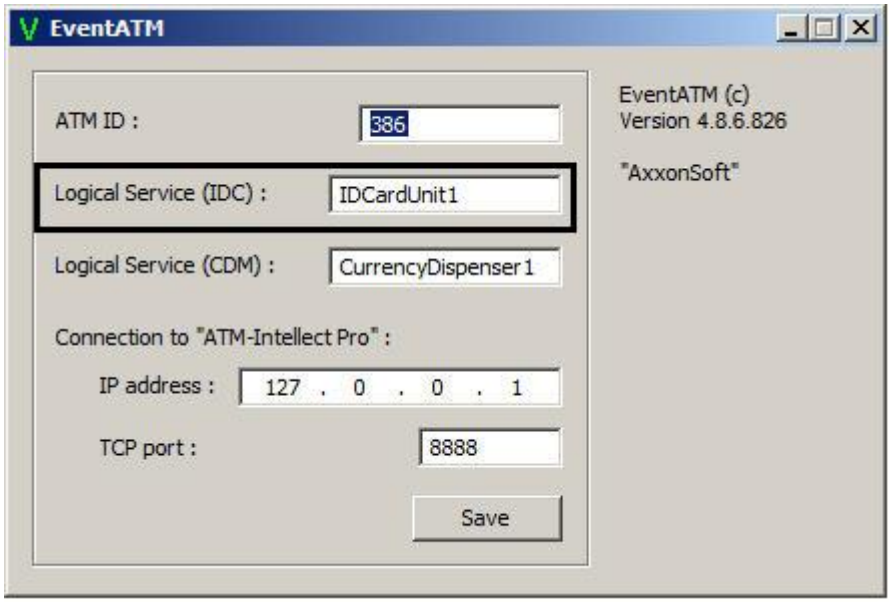


Fig. 3.2—1 Logical service (IDC) parameter

This setting can assume different values for different ATM types. In accordance with the XFS specification, this value is stored in the system registry. For earlier versions of XFS, this value is stored

in the registry key HKEY_CLASSES_ROOT\WOSA/XFS_ROOT\LOGICAL_SERVICES\Logical Service (Fig. 3.2—2).

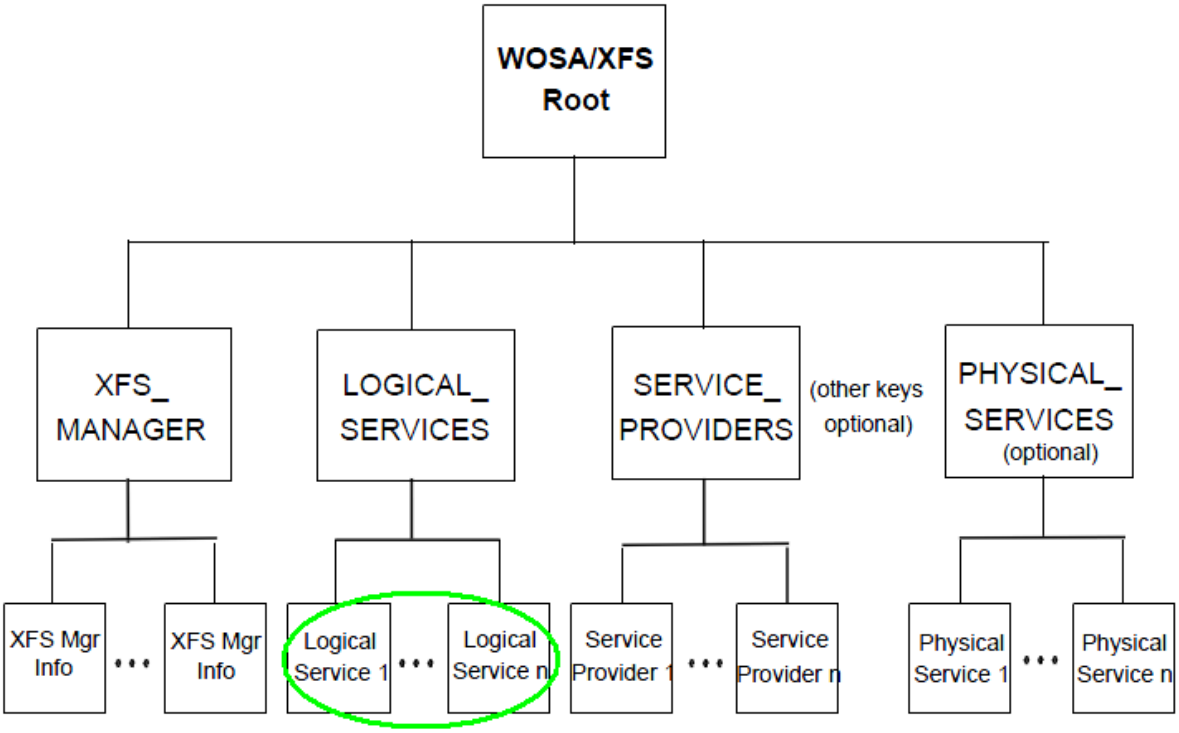


Fig. 3.2—2 Logical service parameters in the registry

For later versions of XFS, this value is stored in the registry key HKEY_USERS\.DEFAULT\XFS\LOGICAL_SERVICES\LS (Fig. 3.2—3).

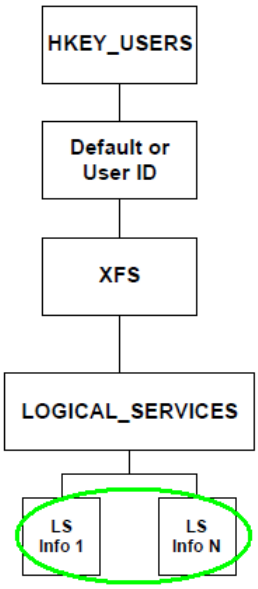


Fig. 3.2—3 Logical service parameters for later versions

The LOGICAL_SERVICES hive contains keys for each service provider (card reader, PIN entry pad, receipt printer, etc.) (Fig. 3.2—4).

```
[HKEY_USERS\.DEFAULT\XFS\LOGICAL_SERVICES\MyCurrencyDispenser]
"class"="CDM"
"provider"="CDM"

[HKEY_USERS\.DEFAULT\XFS\LOGICAL_SERVICES\MyCardReader]
"class"="IDC"
"provider"="IDC"

[HKEY_USERS\.DEFAULT\XFS\LOGICAL_SERVICES\MyJournalPrinter]
"class"="PTR"
"provider"="JPTR"

[HKEY_USERS\.DEFAULT\XFS\LOGICAL_SERVICES\MyPassbookPrinter]
"class"="PTR"
"provider"="PPTR"

[HKEY_USERS\.DEFAULT\XFS\LOGICAL_SERVICES\MyPinpad]
"class"="PIN"
"provider"="PIN"

[HKEY_USERS\.DEFAULT\XFS\LOGICAL_SERVICES\MyReceiptPrinter]
"class"="PTR"
"provider"="RPTR"

[HKEY_USERS\.DEFAULT\XFS\LOGICAL_SERVICES\MyStatementPrinter]
"class"="PTR"
"provider"="SPTR"
```

Fig. 3.2—4 Logical name of the card reader service provider

What we are interested in is the logical name of the card reader service provider ("class" = "IDC"). In the example given in Fig. 3.2—4, the logical name is "MyCardReader". This is the value that should be indicated in ATM Event Capture (Fig. 3.1—3).

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».

3.3 Configuring the connection to the service provider of the dispenser

To configure connection to the service provider of the dispenser (CDM), specify the value of Logical Service (CDM) parameter (Fig. 3.3—1).

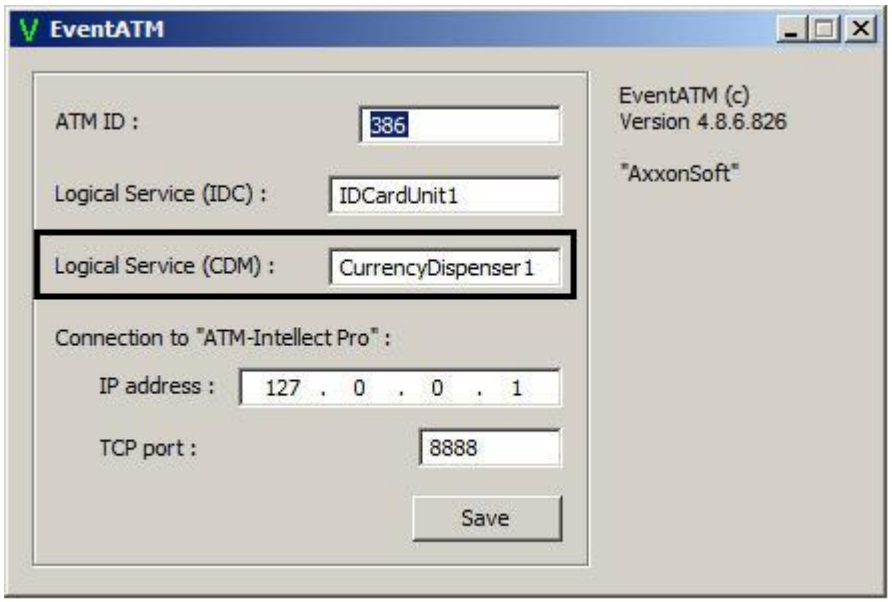


Fig. 3.3—1 Logical Service (CDM) parameter

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 one should find the "class"="CDM" value.

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

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

3.4 Configuring the connection with ATM-Intellect Pro

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

1. In the **ATM ID** field specify identification number of the ATM. This value should match the "ID" value in the settings of *ATM-Intellect Pro* (Fig. 3.4—1, 1, Fig. 3.4—2).

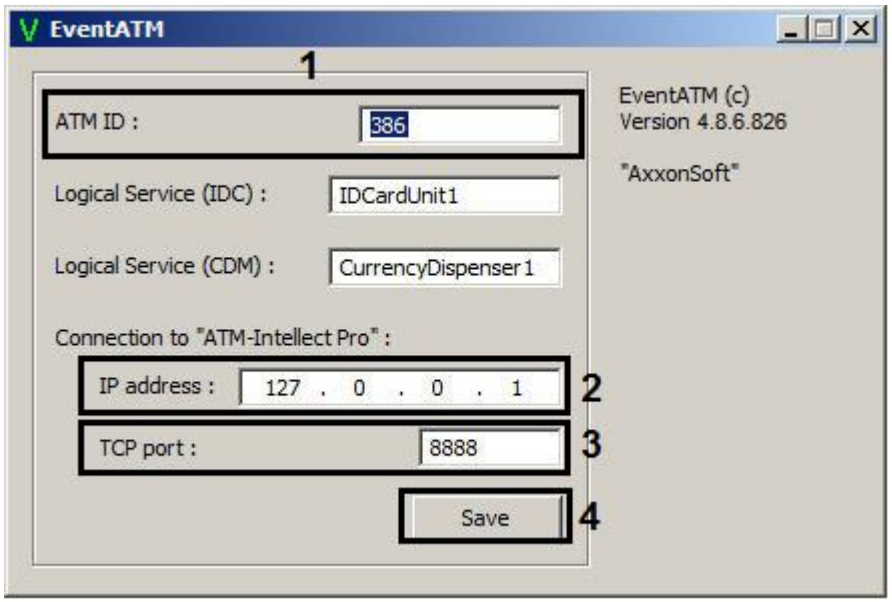


Fig. 3.4—1 Configuring connection

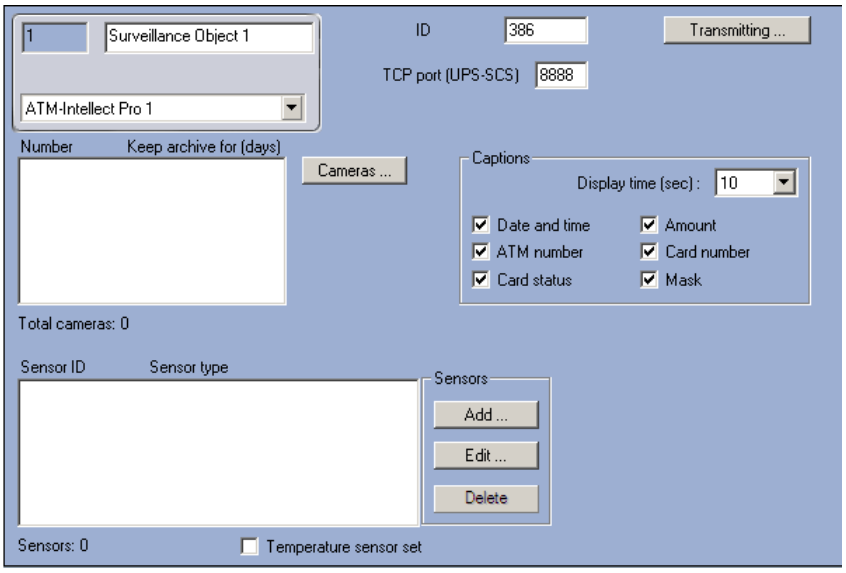


Fig. 3.4—2 ATM-Intellect Pro settings panel

2. In the **IP address** specify the IP address of the computer on which Intellect and *ATM-Intellect Pro* are installed (see Fig. 3.4—1, 2). 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 specify the TCP port on which *ATM-Intellect Pro* expects connections from ATM Event Capture. This value should match the **TCP port (UPS-SCS)** value in the settings of *ATM-Intellect Pro* (see Fig. 3.4—1, 3).

4. To save settings, click the **Save** button (see Fig. 3.4—1, 4).

Configuring the connection to the *ATM-Intellect Pro* is completed.

3.5 Configuring card number masking

By default ATM Event Capture automatically masks the card number when displaying captions on a video image so that only 6 digits in the beginning and 4 digits in the end of the number are visible. To change the mask parameters use a “Mask” key in the HKLM\Software\ITV\EventATM registry branch. The key value is set as follows:

0 – if no mask to be applied to the card number;

1-6 – number of digits in the beginning of the card number which are not masked.

Note.

To use the ATM Event Capture mask deselect the Mask checkbox in the Surveillance object object settings panel. The object is part of the ATM-Intellect Pro software (Fig. 3.5—1).

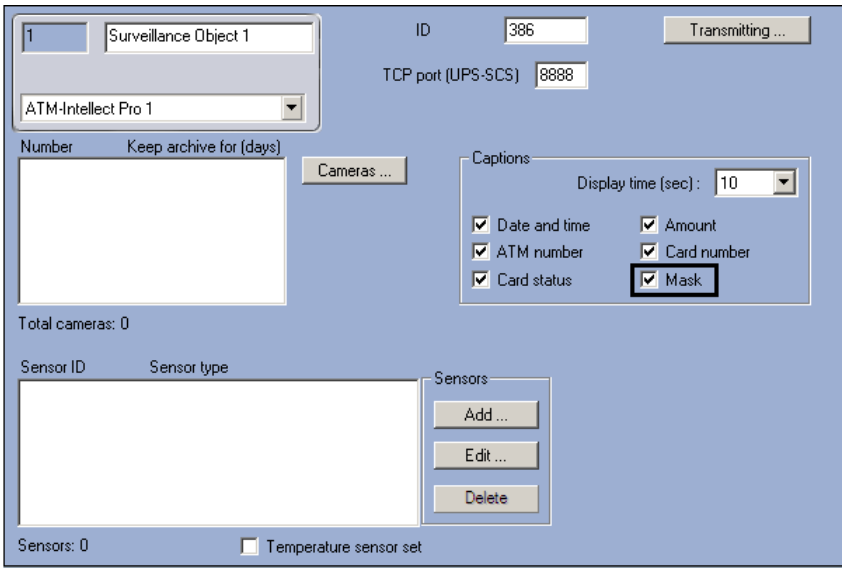


Fig. 3.5—1 Mask checkbox on the ATM-Intellect Pro settings panel

3.6 Setting up the card number receiving from transaction log

By default, ATM Event Capture 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 following registry keys:

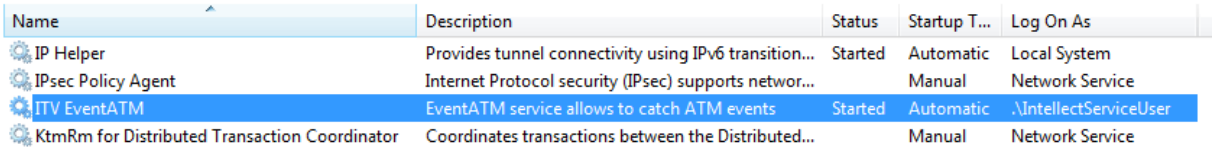
Key	**Description**	**Default value**	**Range**
HKEY_LOCAL_MACHINE\ SOFTWARE\ITV\EventATM\ **JrnMode**	The key defines the mode of operating the journal	0	0 – card number is read from the card reader 1 – card number is read from the ATM journal

Key	Description	Default value	Range
			through the Protopas software (Wincor)
HKEY_LOCAL_MACHINE\SOFTWARE\ITV\EventATM**JrnPath**	Defines the path to the ATM's journal	-	If JrnMode = 1, then JrnPath = C:\JOURNAL\
HKEY_LOCAL_MACHINE\SOFTWARE\ITV\EventATM**JrnTrack2Substring**	Substring for searching the card number	-	If JrnMode = 1, then JrnTrack2Substring = (TRACK 2 DATA):

4 Operation

4.1 ATM Event Capture principle of operation

After the computer is restarted, ATM Event Capture is started automatically as a system service (Fig. 4.1—1).



Name	Description	Status	Startup T...	Log On As
IP Helper	Provides tunnel connectivity using IPv6 transition...	Started	Automatic	Local System
IPsec Policy Agent	Internet Protocol security (IPsec) supports networ...		Manual	Network Service
ITV EventATM	EventATM service allows to catch ATM events	Started	Automatic	.\IntellectServiceUser
KtmRm for Distributed Transaction Coordinator	Coordinates transactions between the Distributed...		Manual	Network Service

Fig. 4.1—1 ITV EventATM 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 desktop access). On computers running on Windows 7, the program icon does not appear in the taskbar notification area. To change program settings, first stop the ITV EventATM service and then start the application ATM Event Capture, by selecting Start>All Programs>EventATM >EventATM (Fig. 4.1—2).

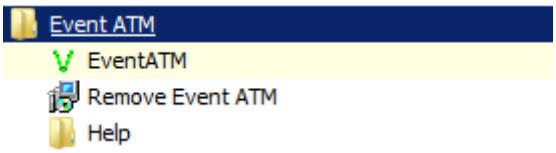


Fig. 4.1—2 EventATM in the Start menu

4.2 Capturing events

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

- Card inserted;
- Card taken by client;
- Card captured by ATM;

- Cash delivery;
- Client took out the cash;
- ATM took out the cash;
- Safe door opened;
- Safe door closed.

The following information is overlaid on the image, as captions (Fig. 4.2—1):

- date and time;
- ATM ID;
- number of client card;
- event.

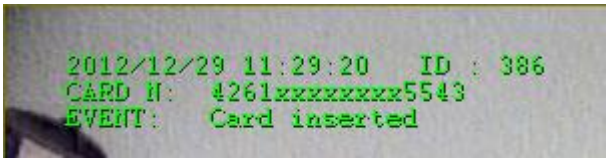
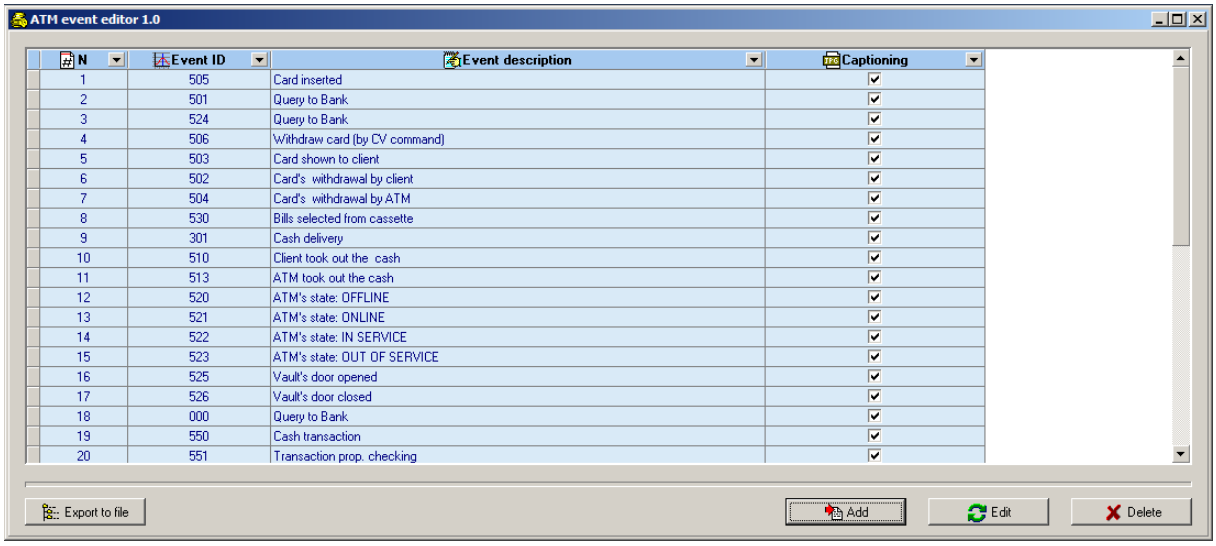


Fig. 4.2—1 Titles

If you do not want to overlay captions for a certain event, do the following on the computer on which *ATM Intellect Pro* is installed: select **Start>All Programs>Intellect>ATM Intellect >ATM events editor**. In the window that appears, edit the corresponding entry (Fig. 4.2—2) by clearing the corresponding check box in the **Captioning** column. Then quit and start *ATM Intellect Pro* again.



N	Event ID	Event description	Captioning
1	505	Card inserted	☑
2	501	Query to Bank	☑
3	524	Query to Bank	☑
4	506	Withdraw card (by CV command)	☑
5	503	Card shown to client	☑
6	502	Card's withdrawal by client	☑
7	504	Card's withdrawal by ATM	☑
8	530	Bills selected from cassette	☑
9	301	Cash delivery	☑
10	510	Client took out the cash	☑
11	513	ATM took out the cash	☑
12	520	ATM's state: OFFLINE	☑
13	521	ATM's state: ONLINE	☑
14	522	ATM's state: IN SERVICE	☑
15	523	ATM's state: OUT OF SERVICE	☑
16	525	Vault's door opened	☑
17	526	Vault's door closed	☑
18	000	Query to Bank	☑
19	550	Cash transaction	☑
20	551	Transaction prop. checking	☑

Fig. 4.2—2 ATM Event Editor

4.3 Event log

If errors arise in use of ATM Event Capture, it may become necessary to view its event log. To enable logging in ATM Event Capture, change the registry entry for the following setting from "0" to "1": HKLM\SOFTWARE\ITV\EventATM\LogEnable (Fig. 4.3—1). After you quit and start ATM Event Capture again, the file EventATM.log appears in the installation folder.

Name	Type	Data
(Default)	REG_SZ	(value not set)
IDC	REG_SZ	IDCardUnit1
InstallPath	REG_SZ	C:\Program Files\EventATM\
IpAddress	REG_SZ	127.0.0.1
LogEnable	REG_SZ	1
TcpPort	REG_SZ	8888
TID	REG_SZ	386

Fig. 4.3—1 Registry key value for enabled logging