



Advanced PBX Data Logger

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1	RS-232		0
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5		RS-232	0
7		?	74
1			74

1

1.1 O Advanced PBX Data Logger

Private Branch eXchange (PBX Private Business Exchange)

(),

Automatic Branch eXchange). PABX (Private
(PBX,

) SMDR, CDR, CIL. PBX

:

- (RS232) - COM
- UDP () - Advanced PBX Data Logger TCP
- () - Advanced PBX Data Logger

Advanced PBX Data Logger

TCP UDP, SMDR CIR, RS232, RS845,
, Excel, DDE, OPC.

Advanced PBX Data Logger:

-
- 50 (PBX)
- ; CDR SMDR,
- ;
- ;
- ;
- ;
- ;
- ;
- MS Excel. MS Excel;
- (MS SQL, Oracle, MS Access, dBase MSSQL, MySQL, ODBC-
(.));
- . Advanced PBX Data Logger
- DDE OPC ;
- ;
- ;

- ;
- , .
- ;
- Windows 2000+,
x86 x64.
- Windows. Advanced PBX Data Logger
Windows 2000+,

Advanced PBX Data Logger, !

: <http://www.aggsoft.ru/>

: <http://www.aggsoft.ru/pbx-data-logger.htm>

1.2

ASCII - ASCII -

Windows
ASCII. ASCII *.TXT (,
README.TXT).

Binary File - , ASCII (0 255).

Bytes () - , , .

Bit () - : 0 1. 8
8 () .

Baud Rate - , BPS (,) ,

600 , 2400 bps () ,

Cable () - , ,

CDR (Call detail record) - .

COM port - .

IBM IBM-

4 COM1, COM2, COM3 COM4.

Data bits - (),

DNS (Domain Name System) - DNS

(TCP/IP) IP DNS www.aggsoft.com
198.63.211.24.

Flow control -

" "

()

Handshaking -

Internet () - TCP/IP

IP, Internet Protocol () - Internet Protocol,

TCP/IP,

IP IP ,

'xx.xx.xx.xx'.

IP (Internet Protocol) -

IP , TCP/IP.

IP , IP

: 198.63.211.24.

LAN (Local Area Network) -

NIC, Network Interface Card () -

nuBus,) (, 10baseFL).

(PCI, turbochannel,

PC () - Personal Computer ().

Ports () -

Protocol () -

RS232, RS423, RS422 RS485 - Electronics Industry Association (EIA)
 RS232, RS423, RS422, RS485,
 EIA "RS"
 (recommended standard).
 "EIA".

Stop bits () -
 1 2.

SMDR (Station Messaging Detail Record) - Call detail record CDR.

TCP/IP, Transport Control Protocol / Internet Protocol - TCP IP

TCP/IP
 Internet.

(Log file) - (.log) —

2

2.1

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1. Advanced PBX Data Logger -
- 2.
3. Advanced PBX Data Logger ,
4. ,
5. Advanced PBX Data Logger
 sales@aggsoft.ru

6. Advanced PBX Data Logger

Advanced PBX Data Logger

7. Advanced PBX Data Logger

"AS IS".

8.

9.

Advanced PBX Data Logger

10.

Advanced PBX Data Logger
Advanced PBX Data Logger.

2.2

shareware-

[5](#)

21

-
-

2.3

shareware-

Internet,

2.4

Advanced PBX Data Logger	support@aggsoft.ru
	support@aggsoft.ru
	sales@aggsoft.ru

3

3.1

- Windows 2000 SP 4 - Windows 10 (x86 x64,).

3.2

Advanced PBX Data Logger.

, Advanced PBX Data Logger
PBX Data Logger"

"\Programs Files\Advanced

Advanced PBX Data Logger

4

4.1

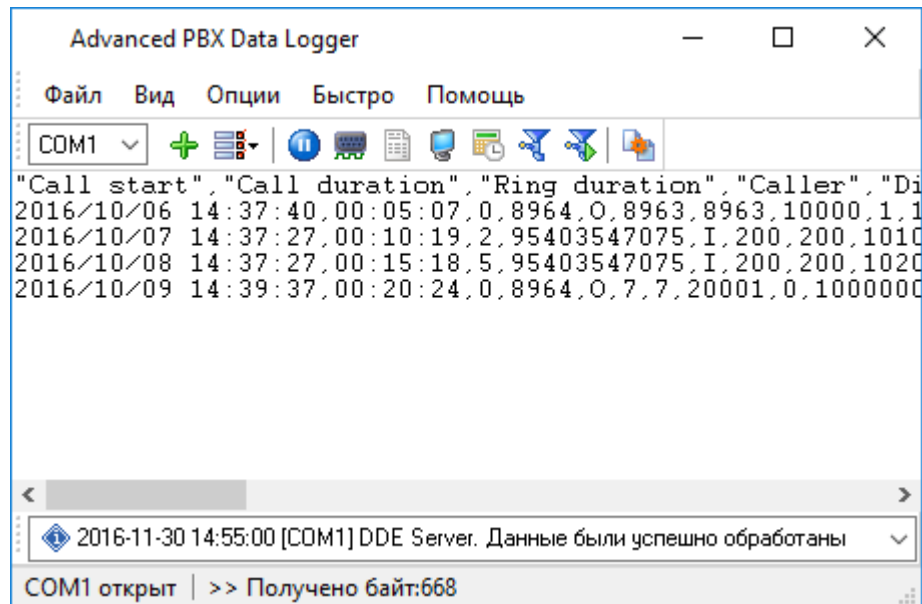
Advanced PBX Data Logger

Advanced PBX Data Logger

" "

(. 1.1.1),

1.1.2)



. 1.1.1.

- RS-232 (
 - RS-485); "
 - " (- ;), ,
 - ;
 - COM - , , , ,
- _____ [12]".
- _____

(NIC).

- Advanced PBX Data Logger IP (NIC),
 - Advanced PBX Data Logger IP
 - Advanced PBX Data Logger IP
 - Advanced PBX Data Logger DHCP, IP
 - IP . 0.0.0.0.
- _____ TCP/IP [17]".

_____ [31]

_____ [34]

_____ [7]

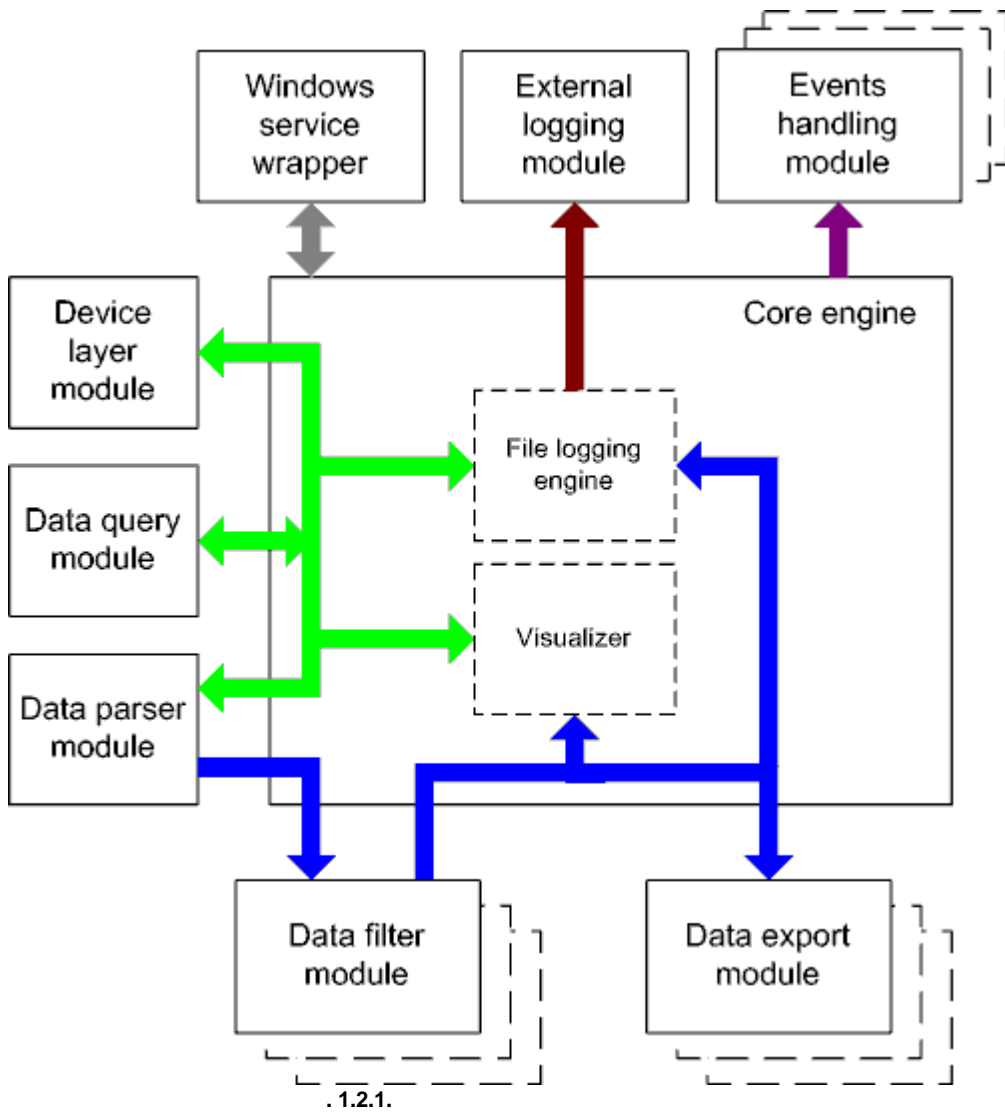
Advanced PBX Data Logger "_____ [26]", _____ [65]


Advanced PBX Data Logger _____ [37] (plug-ins),


"_____ 37".

_____ 68) (_____), (_____ 1.1.1 7)

4.3



 - ().

 - ().

- Core engine -
- Device layer module -
- Data query module -
- Data parser module -
- Data filter module -
- Data export module -
- Visualizer -
- File logging engine -
- Windows service wrapper -
- External logging module -
- Events handling module -

4.4

Windows. / COM-

4.5

1.

2.

1.

" " " " ,

2.

regedit.exe

:

Windows.

Windows x64

HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\AGG Software\Advanced PBX Data
Logger

Windows x32

HKEY_LOCAL_MACHINE\SOFTWARE\AGG Software\Advanced PBX Data Logger

- 3.
 - Ctrl+S -
 - Ctrl+D -
 - Ctrl+P -
 - Ctrl+L -
 - Ctrl+R -
 - Ctrl+E -
 - Ctrl+M -
- 4.
- 5.
- 6.

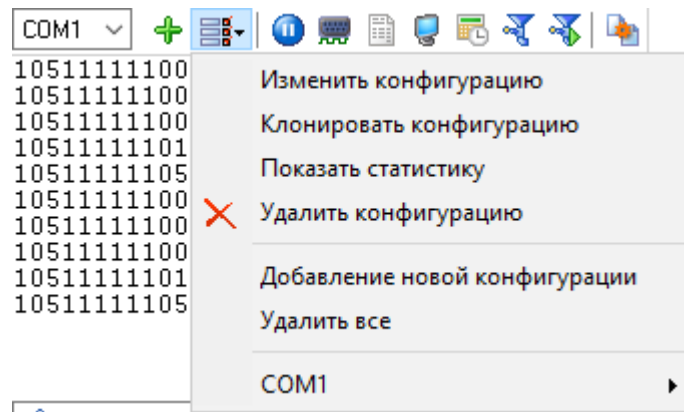
5

5.1

5.1.1

(COM)

([1.1.1](#)) (2.1.2). COM (2.1.1).



. 2.1.1.

COM-

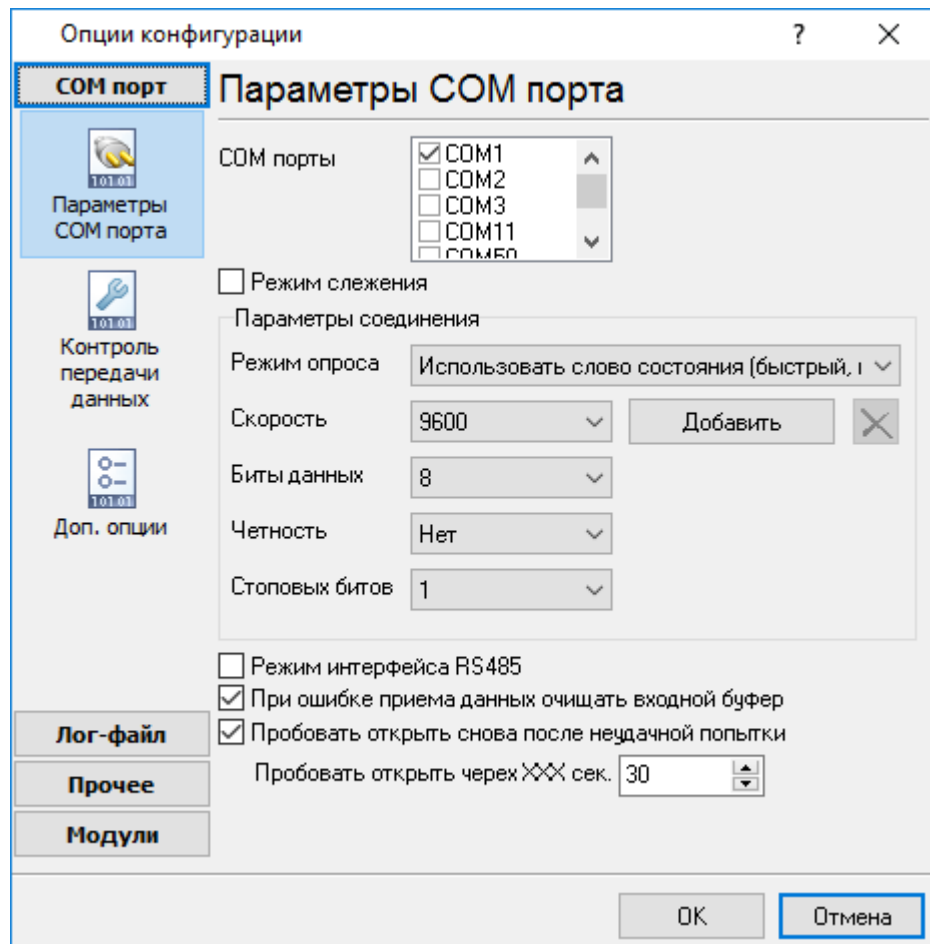
COM-

COM-

(. .)

"

" (. 2.1.1).



. 2.1.2.

COM-

RS-485

RTS-

(,)

API- Windows / : API- Windows.

API,

Windows API , API - . Advanced PBX Data
Logger

(WRPI.DRV

Advanced PBX Data Logger

(. 2.1.3).

"

"

"

"

DTR"

(RTS / DTR)
90%

RTS" / "

10%

DSR" " CTS" / "

Windows , (CTS / DSR).

RTS CTS
DTR DSR.

" " " " " " " " " "

Xoff

10 %

10% Xon.

10% 90% " " " " " "

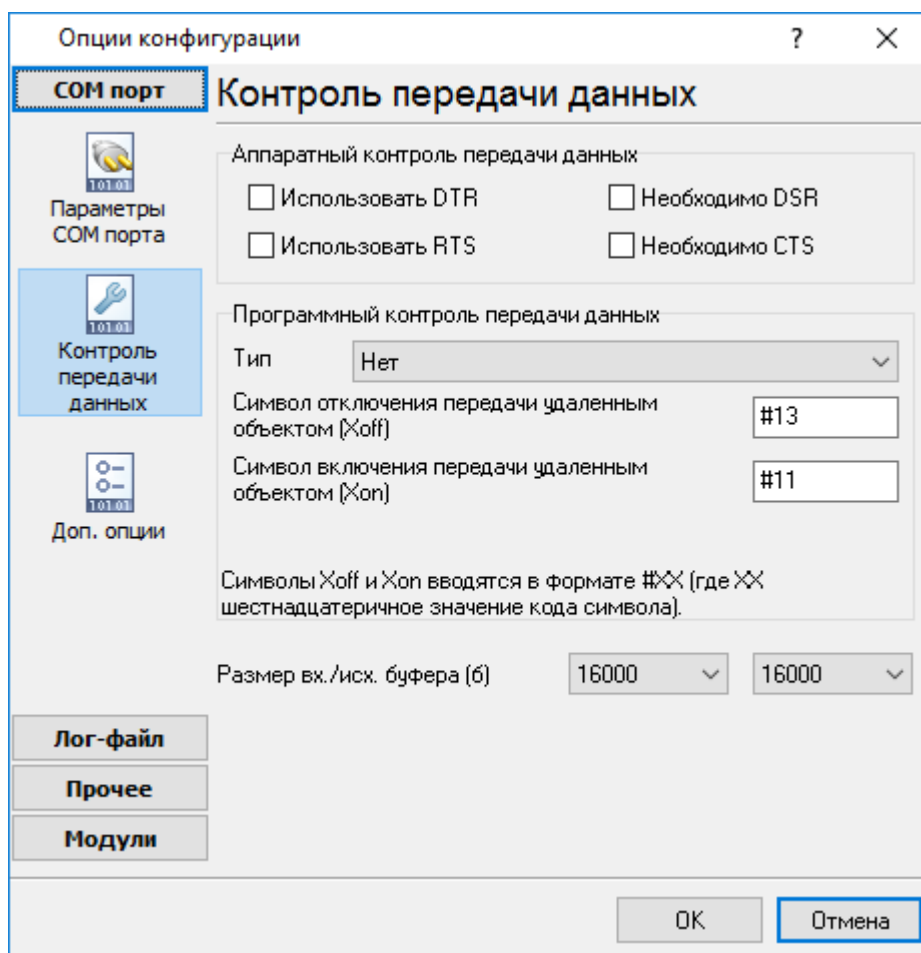
Xon Xoff.

Xon

) (- "

COM- 0x11

0x13 -



. 2.1.3

./ . COM

Advanced PBX Data Logger

COM-

COM-

Advanced PBX Data Logger,
COM-

Advanced PBX Data Logger.

```

UART (UART receiver parity error) -
;

UART (UART receiver overrun),
UART (UART receiver framing error) -
;

CTS (transmit timeout waiting for CTS),
DSR (transmit timeout waiting for DSR),
RLSD (transmit timeout waiting for RLSD) -
;

(transmit queue is full) - Advanced PBX Data Logger
;

break (break condition received)

```

Windows NT

" -> " [\[12\]](#)

5.2

5.2.1 TCP/IP

UDP TCP

(User Datagram Protocol). TCP

TCP (Transport Control Protocol) UDP

IP. TCP

TCP

, TCP

, UDP

UDP

UDP
TCP, UDP

IP

TCP, UDP

Messaging, UDP IP Instant

Advanced PBX Data Logger

TCP/IP

(TCP/IP) Advanced PBX Data Logger

1. TCP/IP, IP Advanced PBX Data Logger (www.yourserver.com)

"Plant1" IP Advanced PBX Data Logger IP "Plant1", IP IP

2. IP Advanced PBX Data Logger (NIC), IP Advanced PBX Data Logger

Microsoft Windows, TCP/ IP IP

Advanced PBX Data Logger "OK" TCP/IP.

Data Logger IP Advanced PBX

Advanced PBX Data Logger

(.1.1.17).

(.1.1.17)

(.2.2.2). IP"

TCP/IP

" (.2.2.1).

0.0.0.0:7777

1051111110026#0
 1051111110019#0
 1051111110033#0
 1051111110123#0
 1051111110521#0
 1051111110026#0
 1051111110019#0
 1051111110033#0
 1051111110123#0
 1051111110521#0

- Изменить конфигурацию
- Клонировать конфигурацию
- Показать статистику
- Удалить конфигурацию
- Добавление новой конфигурации
- Удалить все

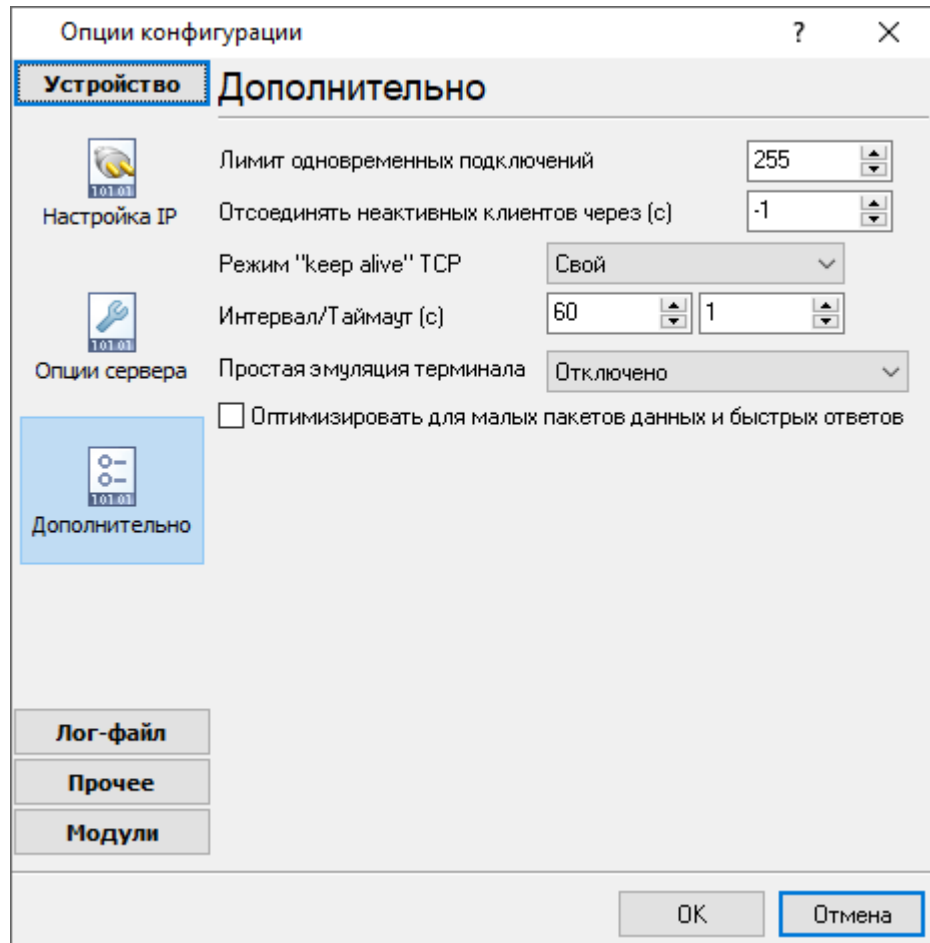
0.0.0.0:7777

.2.2.1.

TCP/IP: IP

IP"

IP



. 2.2.4.

TCP/IP

keep-alive TCP (

) -

keep-alive,

Windows.

: keep-alive

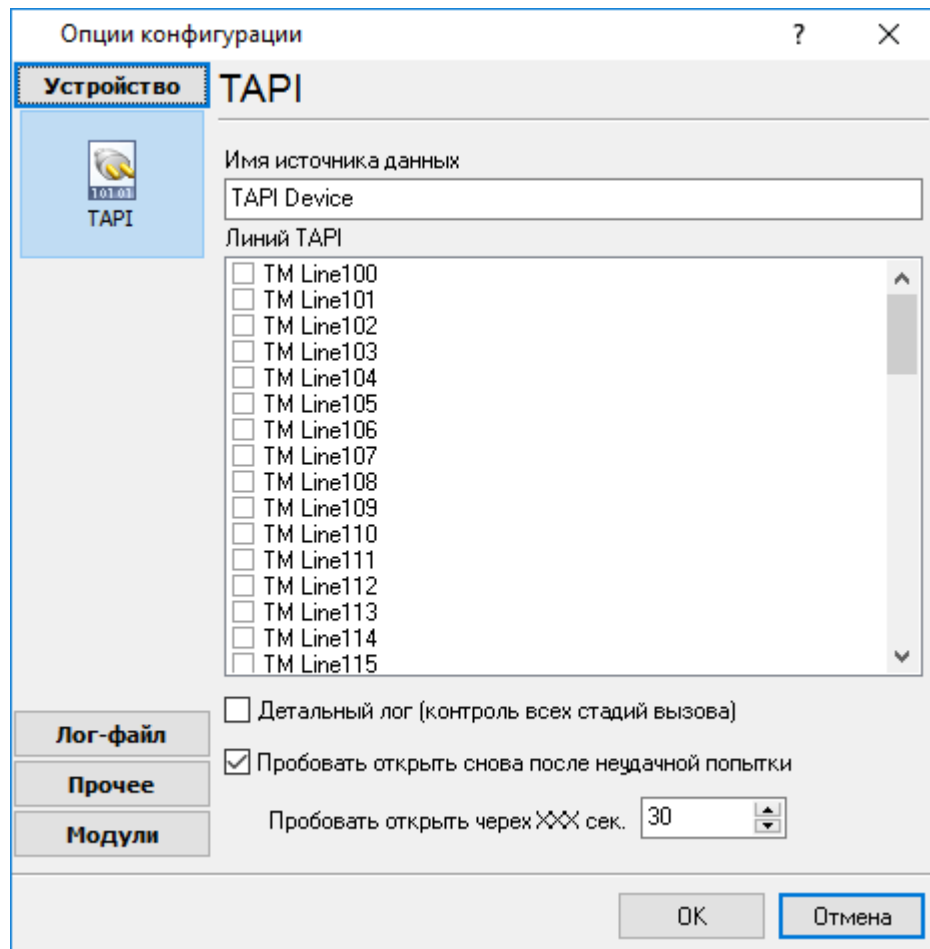
(TCP

UDP):

5.3 TAPI

5.3.1 TAPI

TAPI
TSP
PBX,
" TAPI"



.1 TAPI

(, , , .).

5.3.2

Panasonic USB

1. USB , USB.
2. USB (x64 x86)
3. TAPI Service Provider (TSP).

Panasonic KX-TDA/TDE/NCP/NS	TSP v4.2 x86 (16,5 MB)
	TSP v4.2 x64 (20,6 MB)
Panasonic KX-Series TSP	Installation Manual (961 KB)
Panasonic KX-TDA, Panasonic KX-TVM, Panasonic KX-TE	USB-driver (610KB v2.3.0.0)
Panasonic KX-TD	TSP (1,6MB v1.2.177)

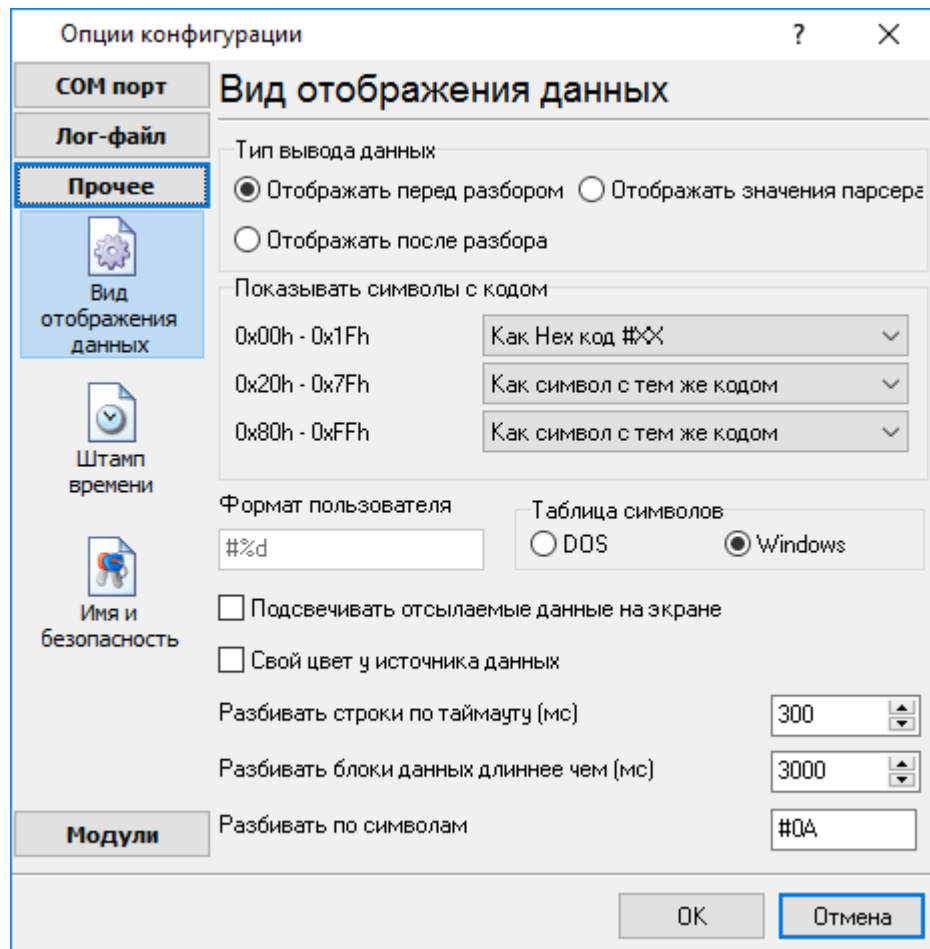
- 4.
- 5. "TAPI"

5.4

5.4.1

([.1.1.1](#)⁷) 2 (. 3.1.1):

- 1.
- 2.



. 3.1.1.

" - " (. 3.1.1)

Hex-

,%d

, %x -

: Windows DOS

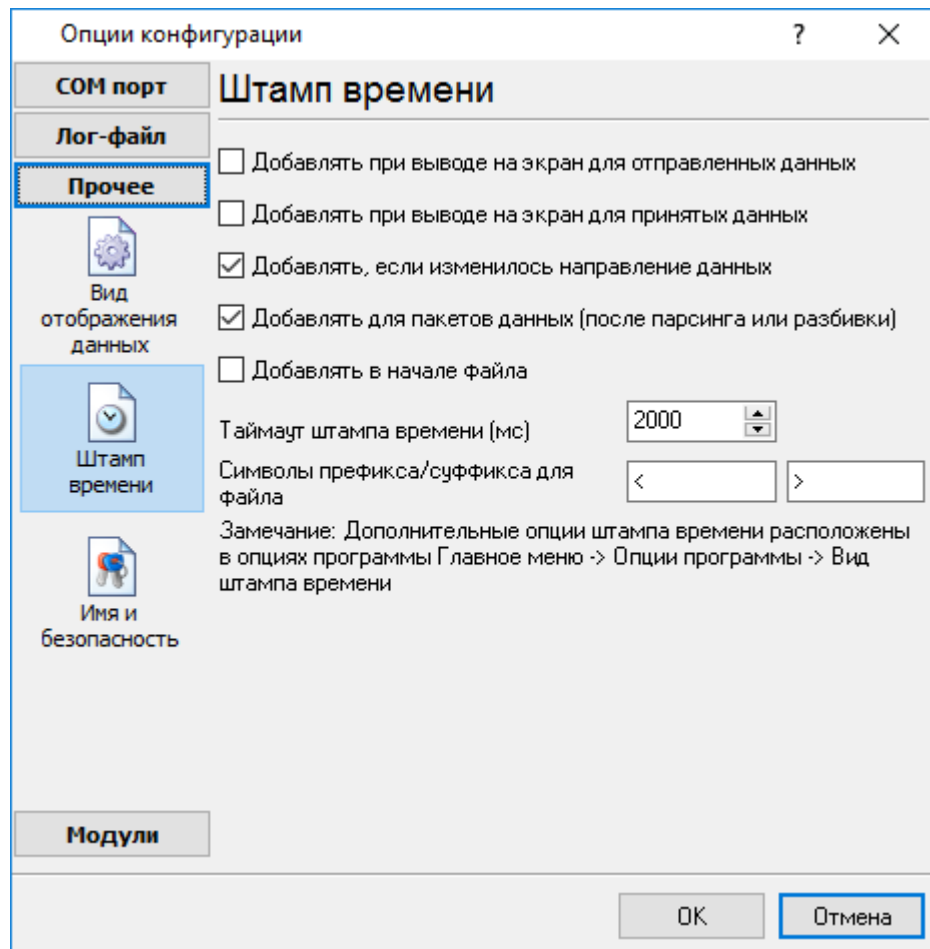
(OEM).

- ,
,
0,
0,
. 3.1.1

5.4.2

(. 3.2.1) ()

 67.



. 3.2.1.

:>#0D#0A

5.4.3

(. 3.3.1)

:

-

"

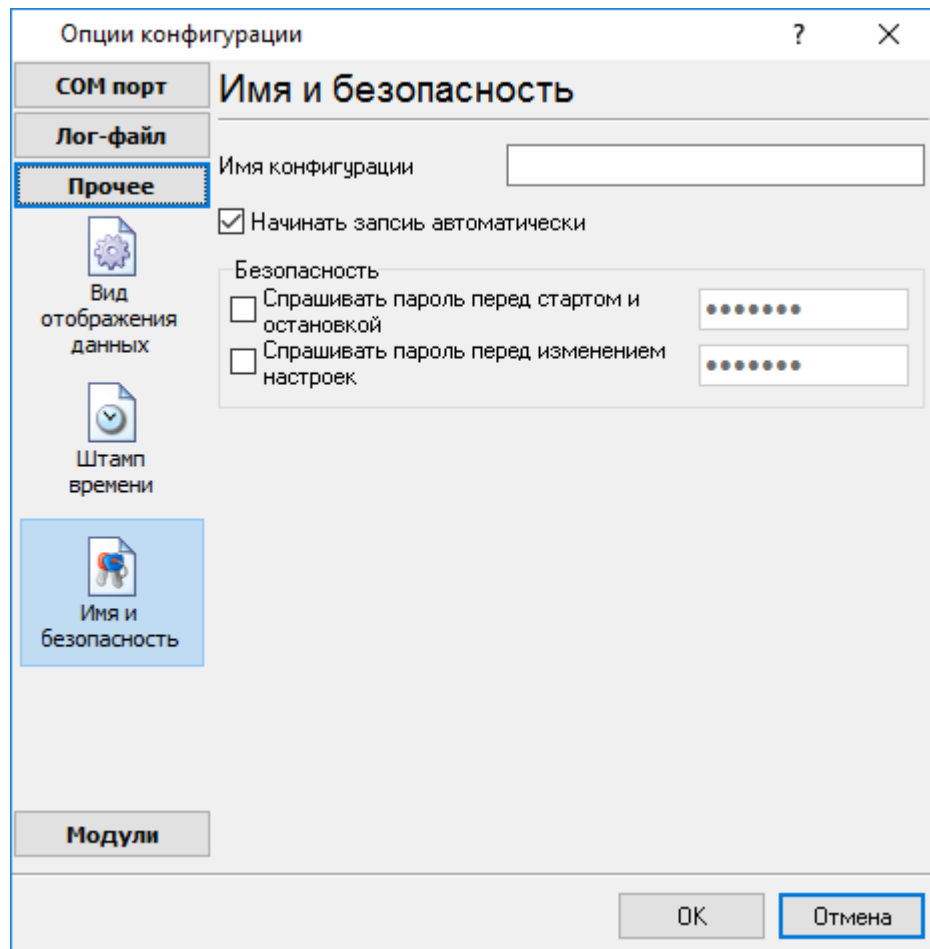
"

73

"

/

"



. 3.3.1.

5.5

-

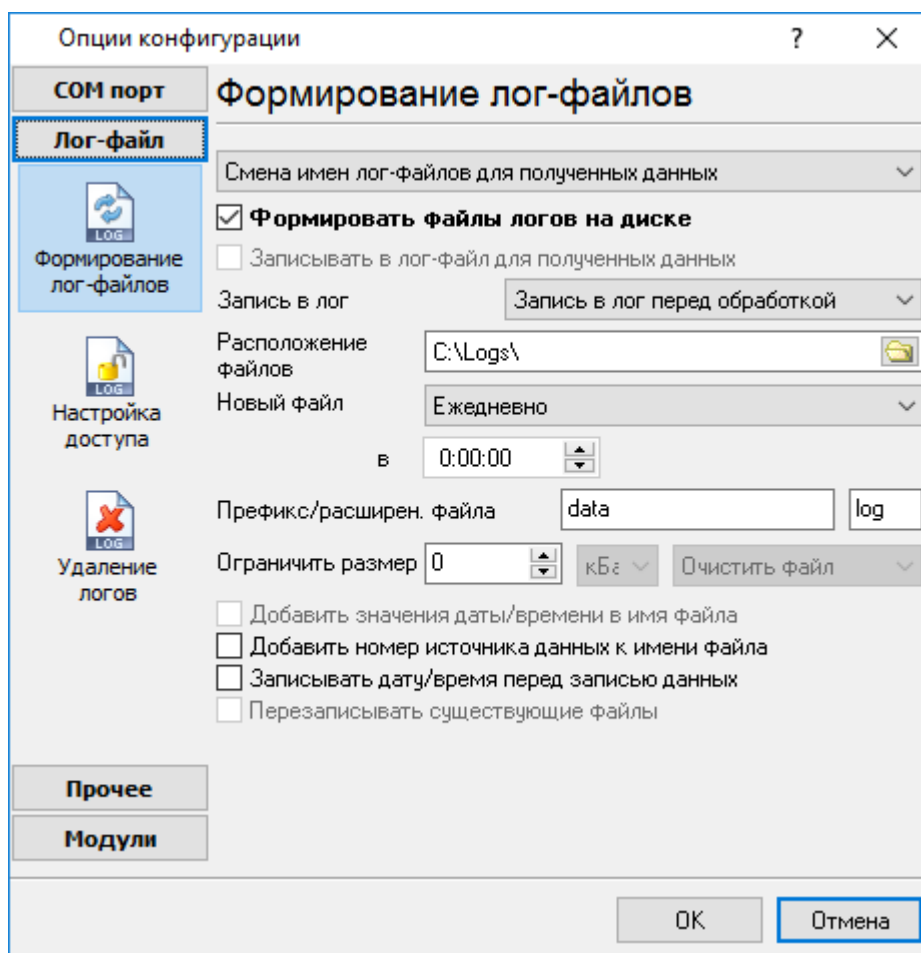
5.5.1

-

-

(. 4.1.1).

- ().



. 4.1.1.

Advanced PBX Data Logger

```

"sampleYYYYMMDD.log". 21-
2003 - "sample20030321.log".
.
( ).
, , , .
" " :
1. - , .
DDMMYYYY, DD - , MM -
YYYY - ;
2. - . MMYYYY;
3. - YYYYMMDD;
4. -
sample00000001.log.
5. - ;
6. - WWYYYY, WW -
, YYYY -
7. - ;
8. - HHDDMMYYYY;
9. -
:
d - , (1 - 31);
dd - , (01 - 31);
ddd - ( - )
;
dddd - ( - )
;
m - , (1 - 12);
mm - , (01 - 12);
mmm - ( - )
;
mmmm - ( - )
;
yy - (00 - 99);
yyyy - (0000 - 9999);

```

```

h - , (0 - 23);
hh - , (00 - 23);
n - , (0 - 59);
nn - , (00 - 59);
s - , (0 - 59);
ss - , (00-59).

```

```

: "sample_log", "txt".
: = sample_log_, = txt ( !).
HHDDMMYYYY.

```

4 7 /

sample20030321.log.

/

, COM1-

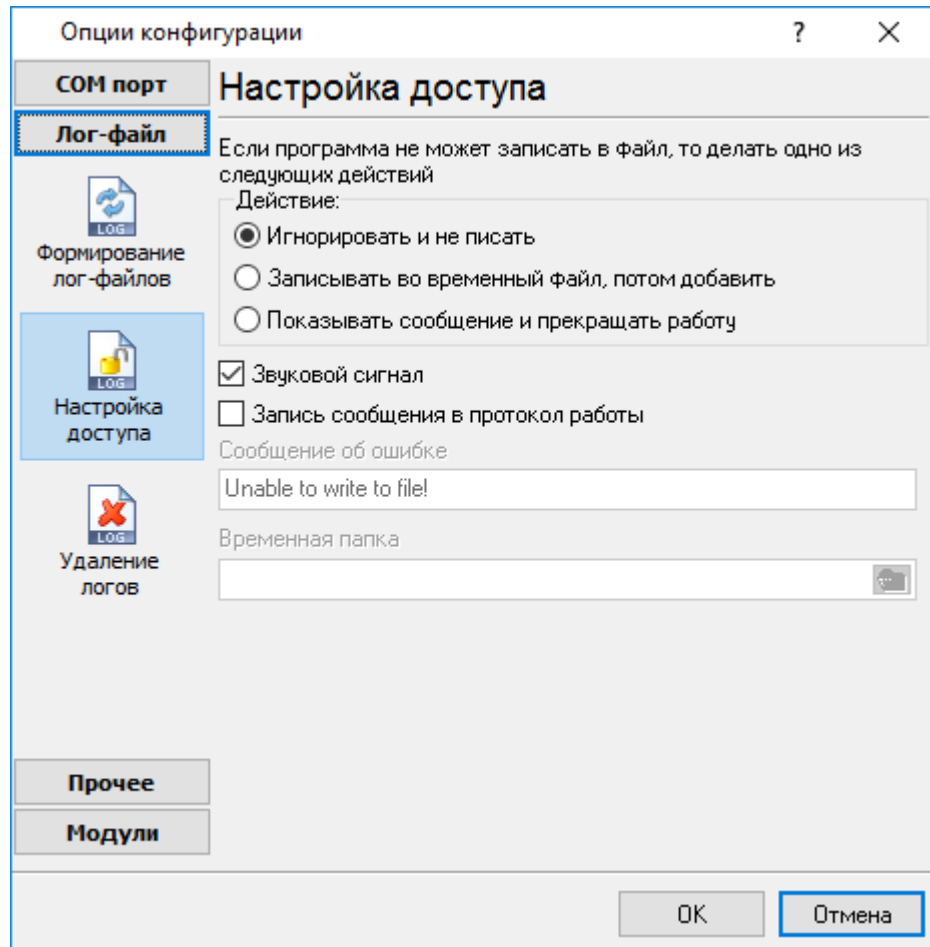
4 7.

- 1. "
- 2. !
- 3. () -
- 4. ().

5.5.2

Office (, Microsoft Word),
PBX Data Logger

Microsoft
Advanced



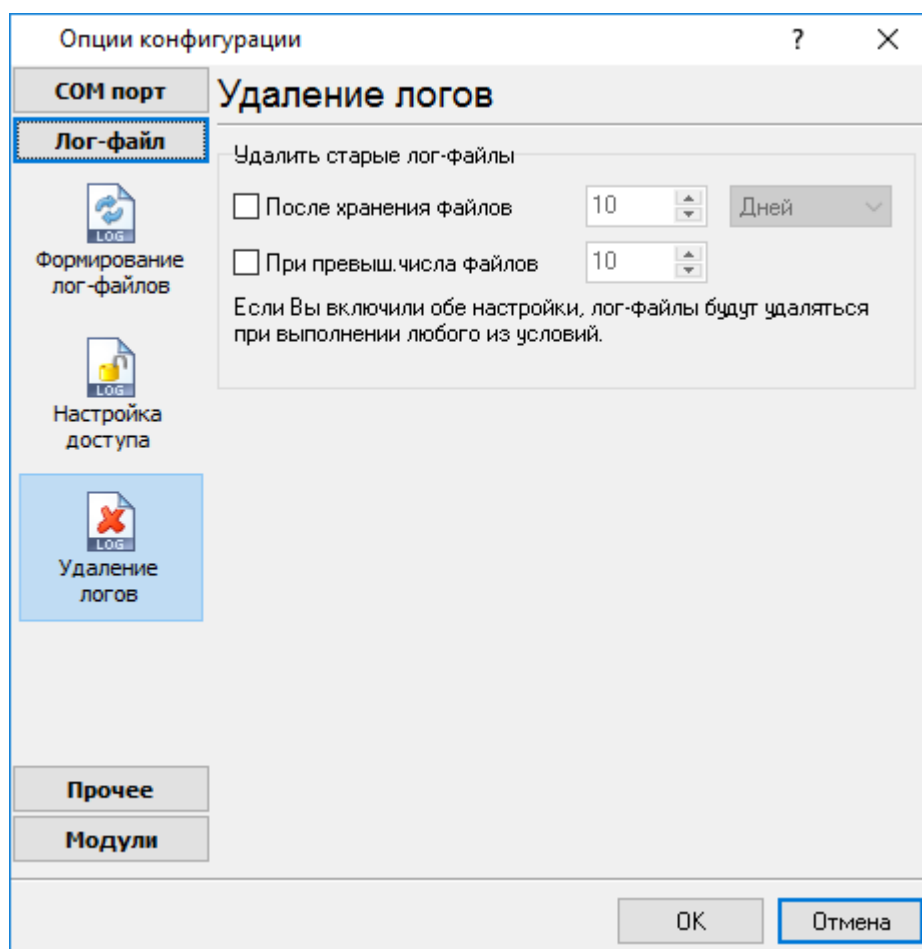
. 4.2.1.

Advanced PBX Data Logger
(. 4.2.1),

-
-
-

5.5.3

(рис. 4.3.1).



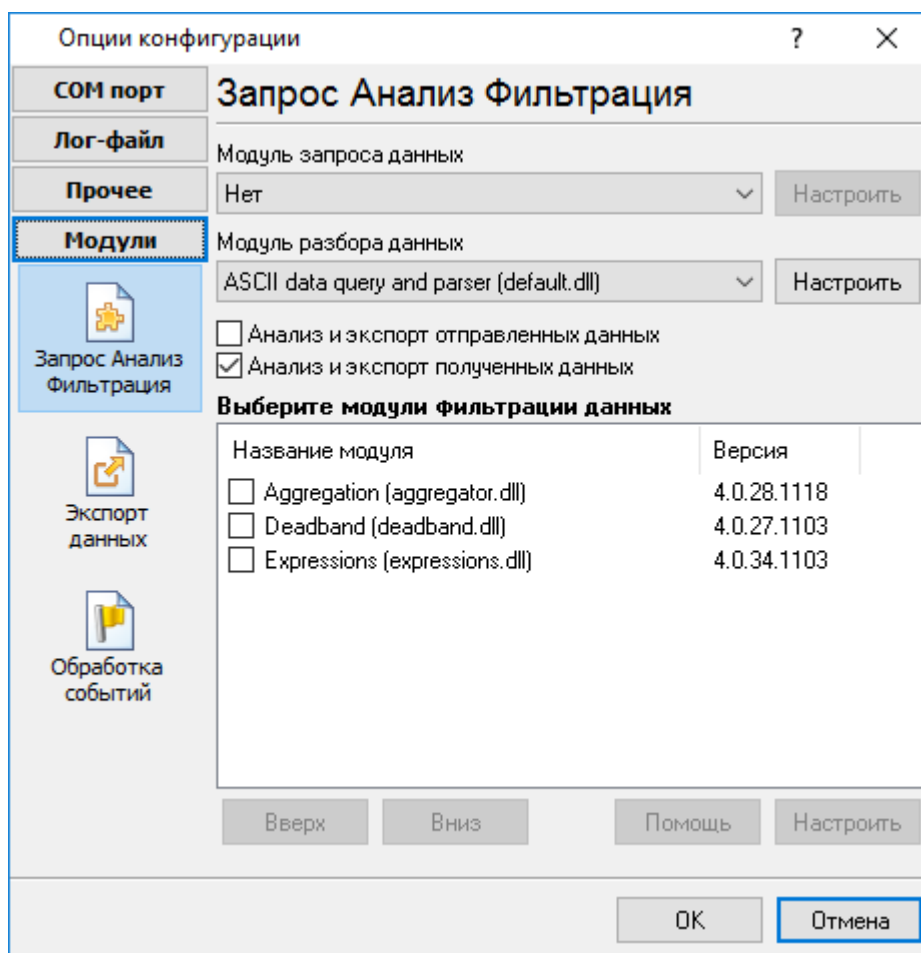
. 4.3.1.

5.6

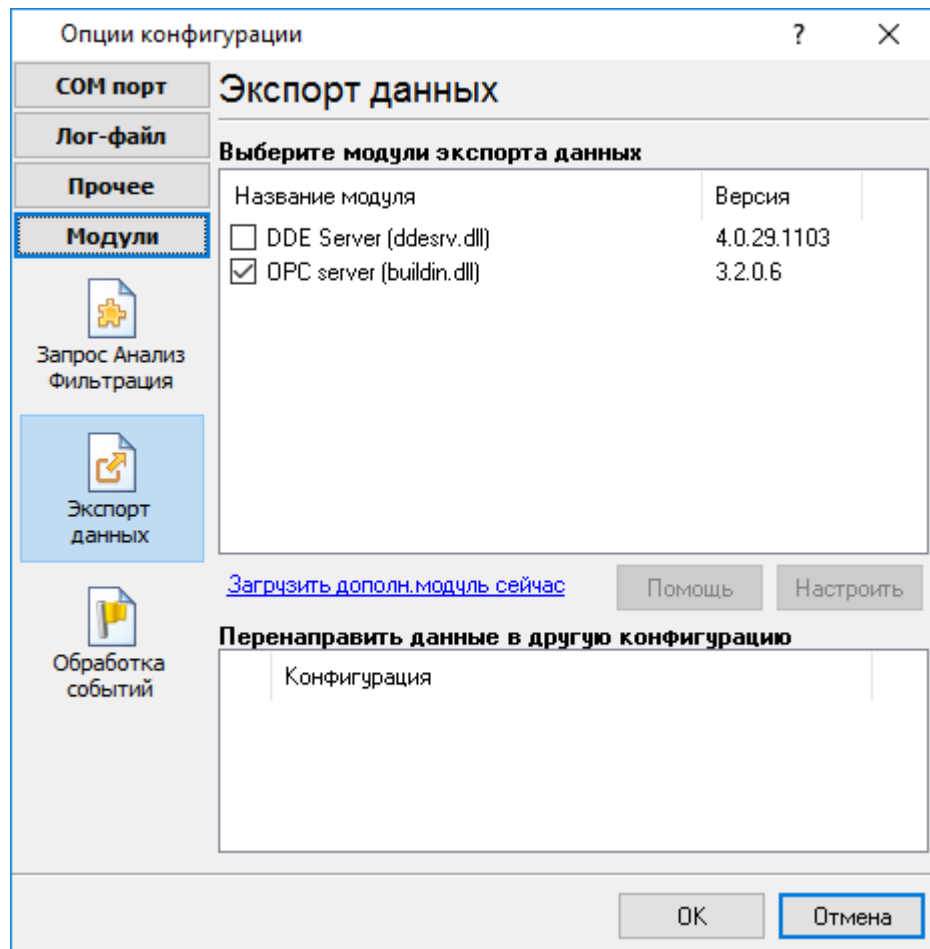
5.6.1

Advanced PBX Data Logger :

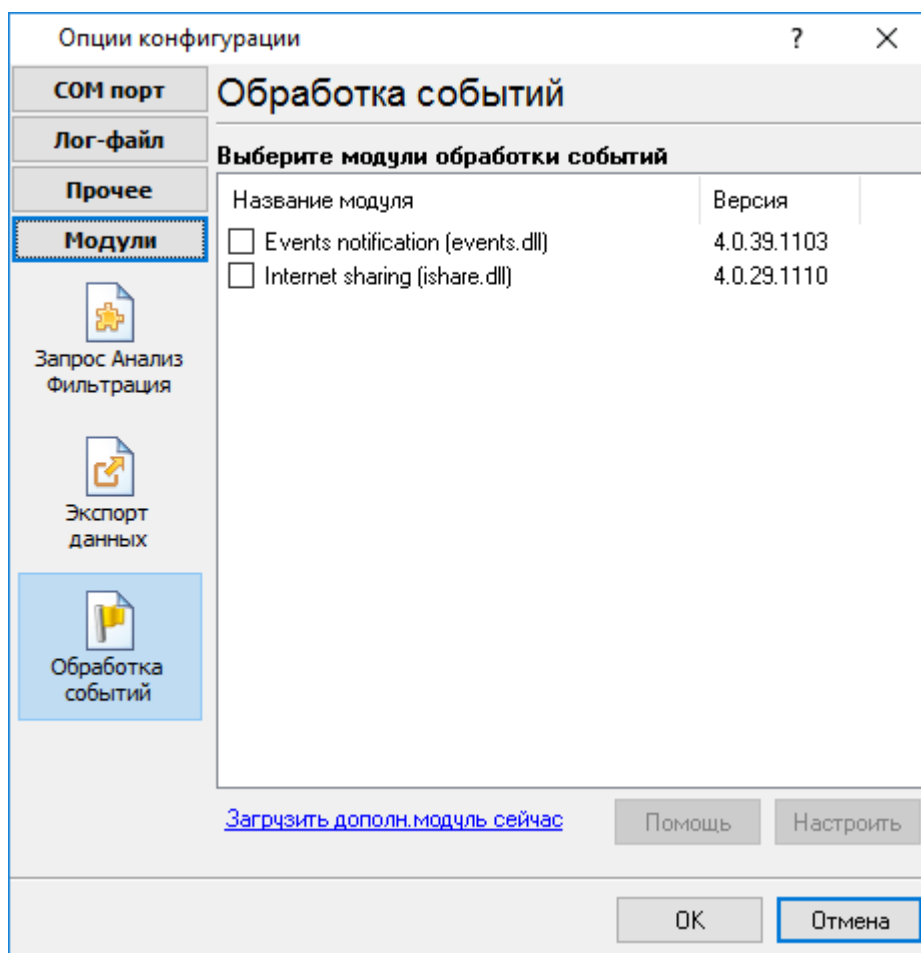
- - ; (, ,) - ()
- - ;
- - ;
- - ;
- - , Excel ; (. 5.1.3) - Advanced PBX Data Logger. , " - " "



. 5.1.1.



. 5.1.2.



. 5.1.3.

"OK".

5.6.2 OPC

Advanced PBX Data Logger

OPC.

OPC

Advanced PBX Data Logger

(. 5.2.1).

OPC

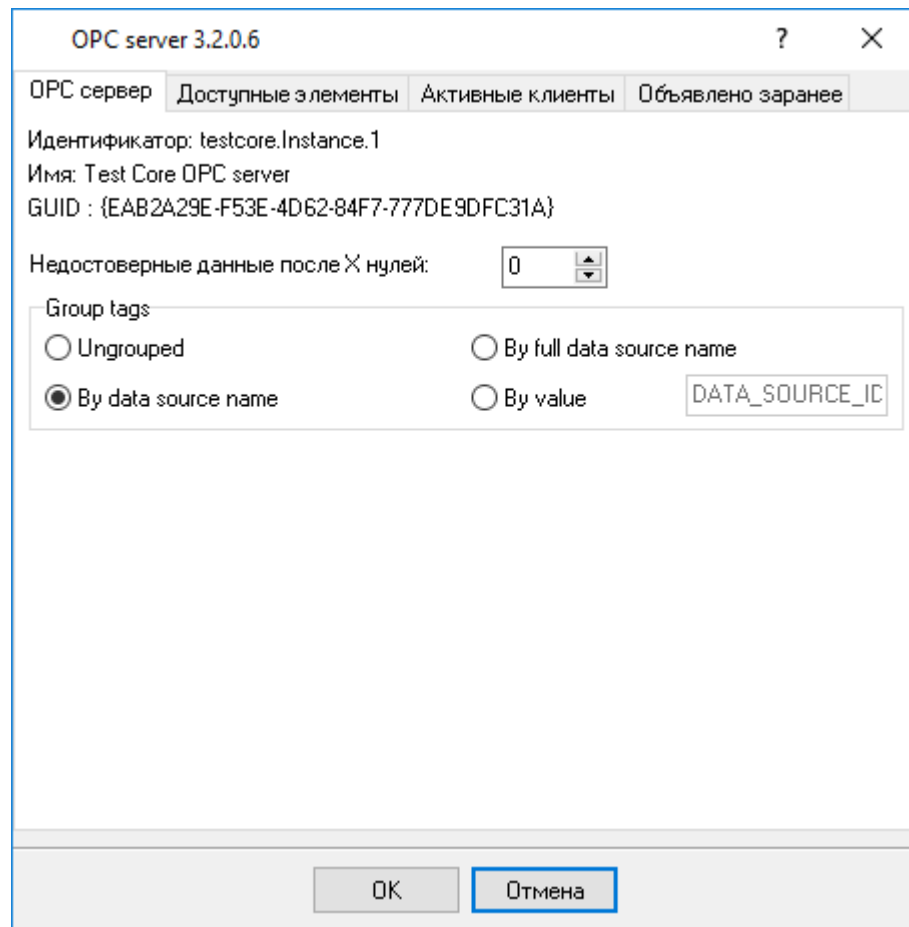
OPC Core Components Redistributable

www.opcfoundation.org

()

OPC

OPC



. 5.2.1.

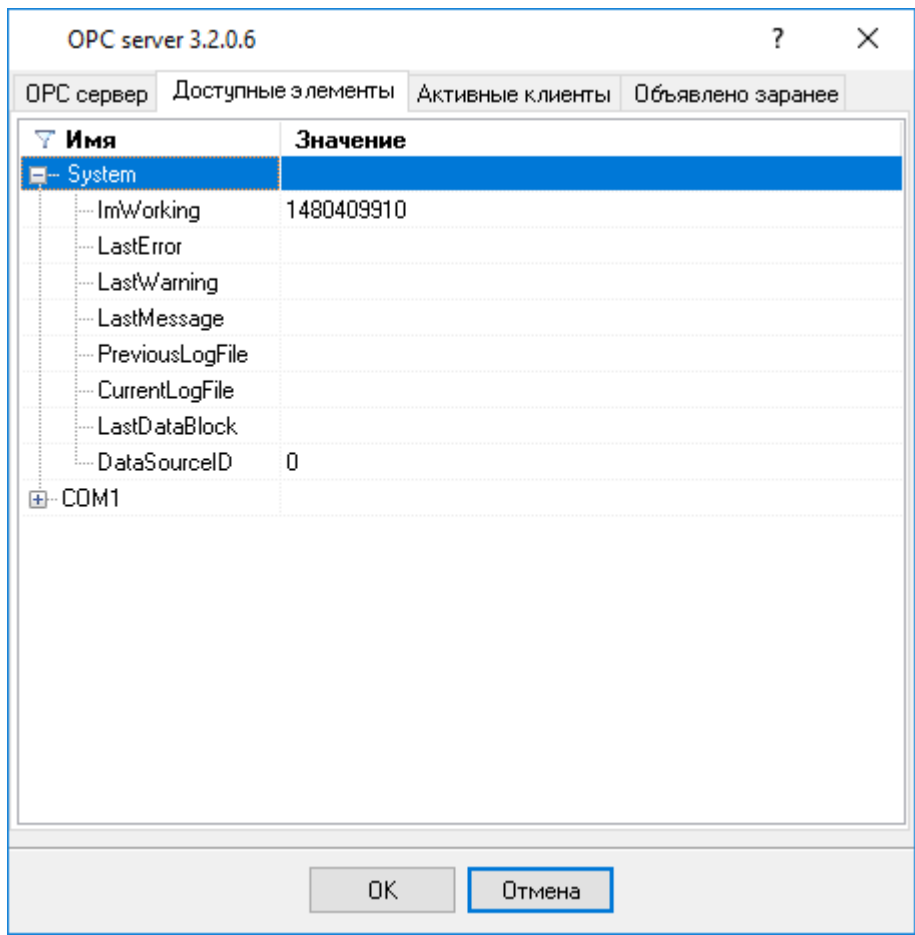
OPC

Advanced PBX Data Logger,

OPC

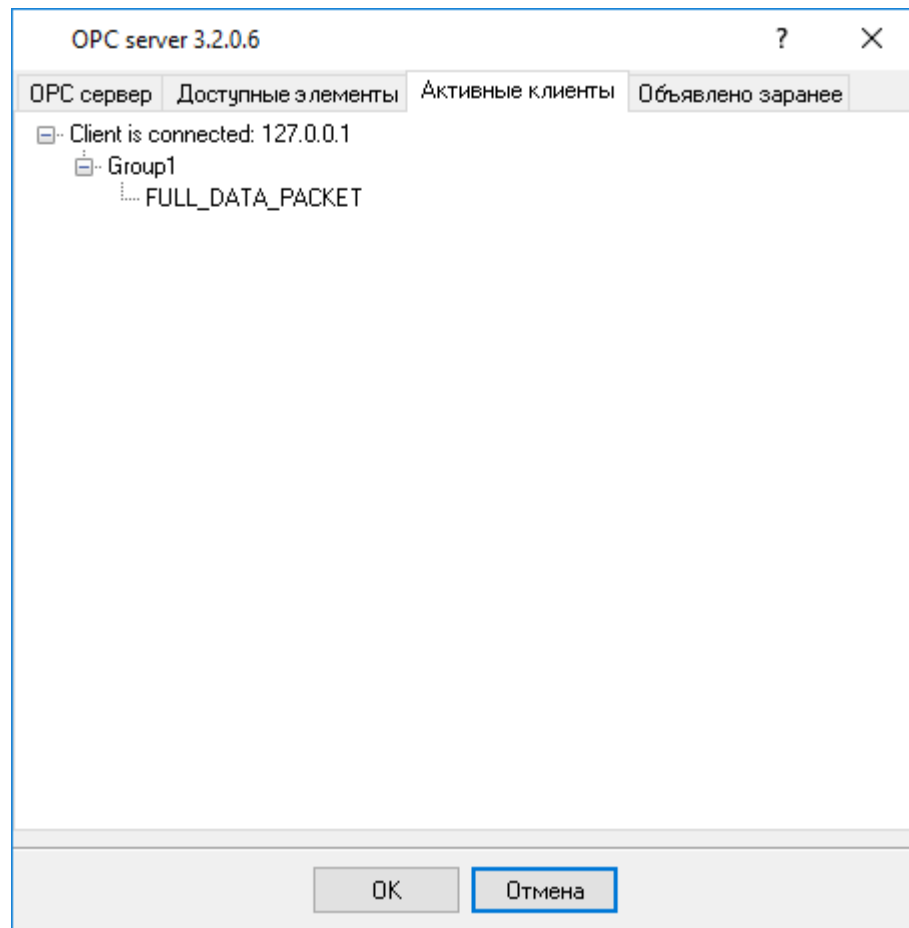
(.2).

OPC



. 5.2.2.

OPC



. 5.2.3.

Advanced PBX Data Logger

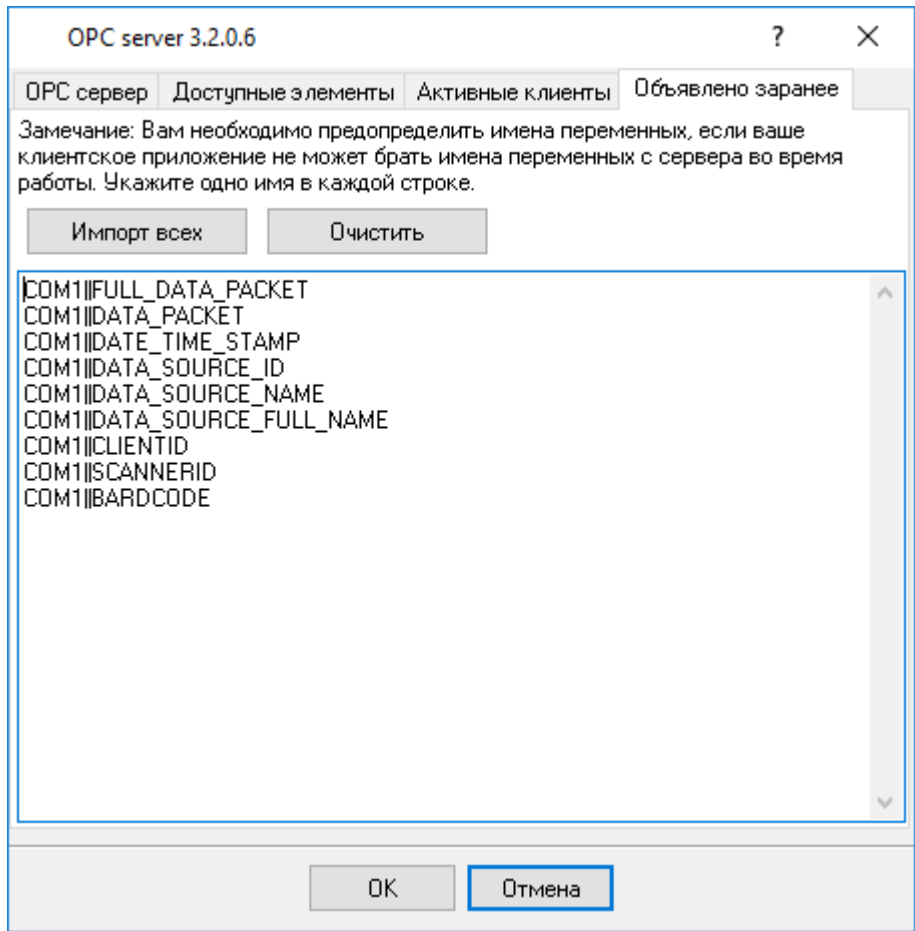
"

". Advanced PBX Data Logger

OPC

(.4).

OPC
OPC



. 5.2.4.

5.7 Database

ODBC

5.7.1

MS SQL Server, MySQL Oracle,

MySQL Oracle

32-

ODBC

MySQL: <http://dev.mysql.com/downloads/connector/odbc/>

Oracle: <http://www.oracle.com/technetwork/database/windows/downloads/index-096177.html>

ODBC

MS SQL Server

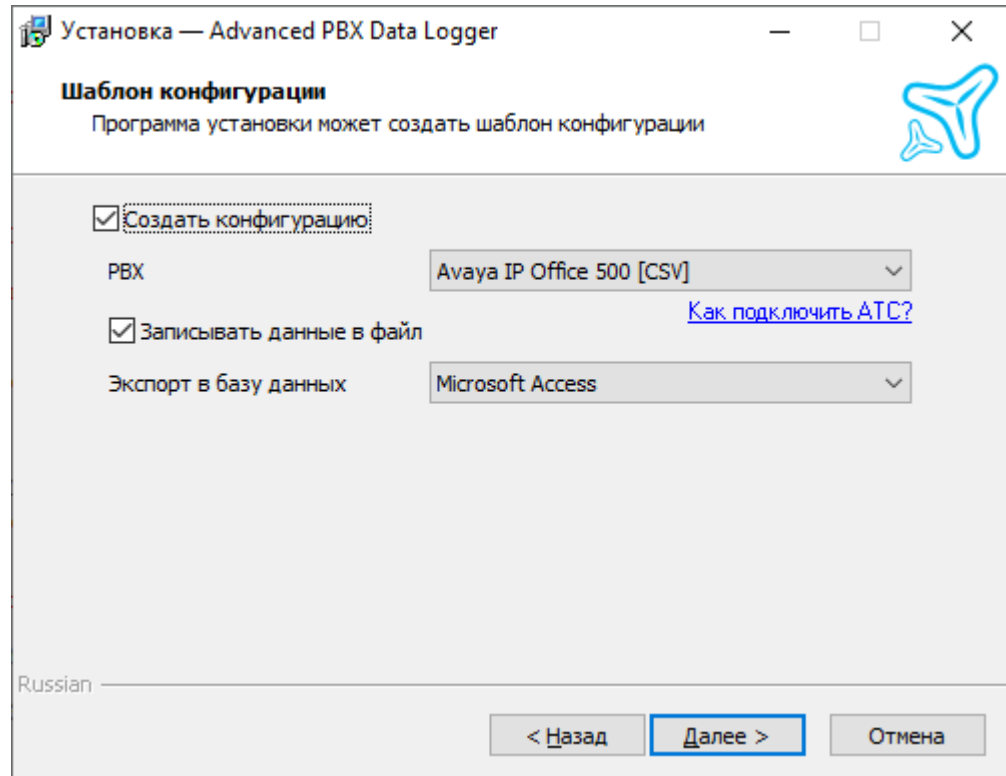
Windows XP

5.7.2

1

(. 1):

-
-
-



. 1.

- MS SQL Server, MySQL Oracle

Установка — Advanced PBX Data Logger

Шаблон конфигурации

Программа установки может создать шаблон конфигурации

Создать конфигурацию

PBX

Записывать данные в файл [Как подключить АТС?](#)

Экспорт в базу данных

Сервер базы данных

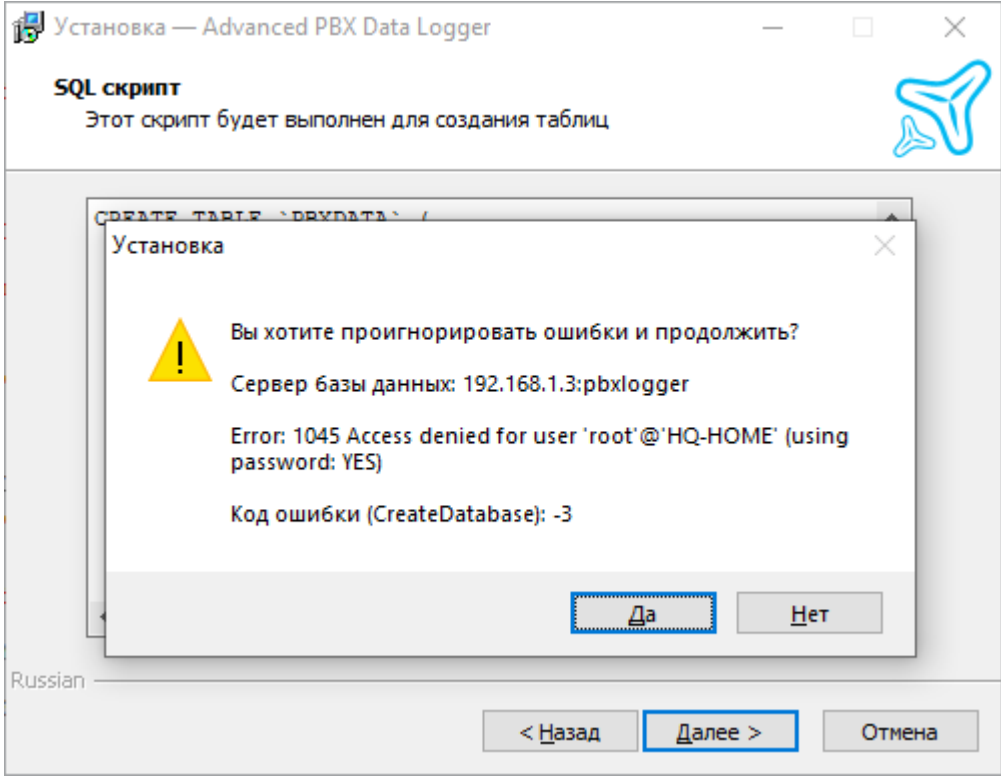
Имя базы данных

Логин/пароль администратора

Russian

< Назад **Далее >** Отмена

. 2.



. 5. DDL

, Advanced PBX Data Logger

PBX Reports

5.7.3

2

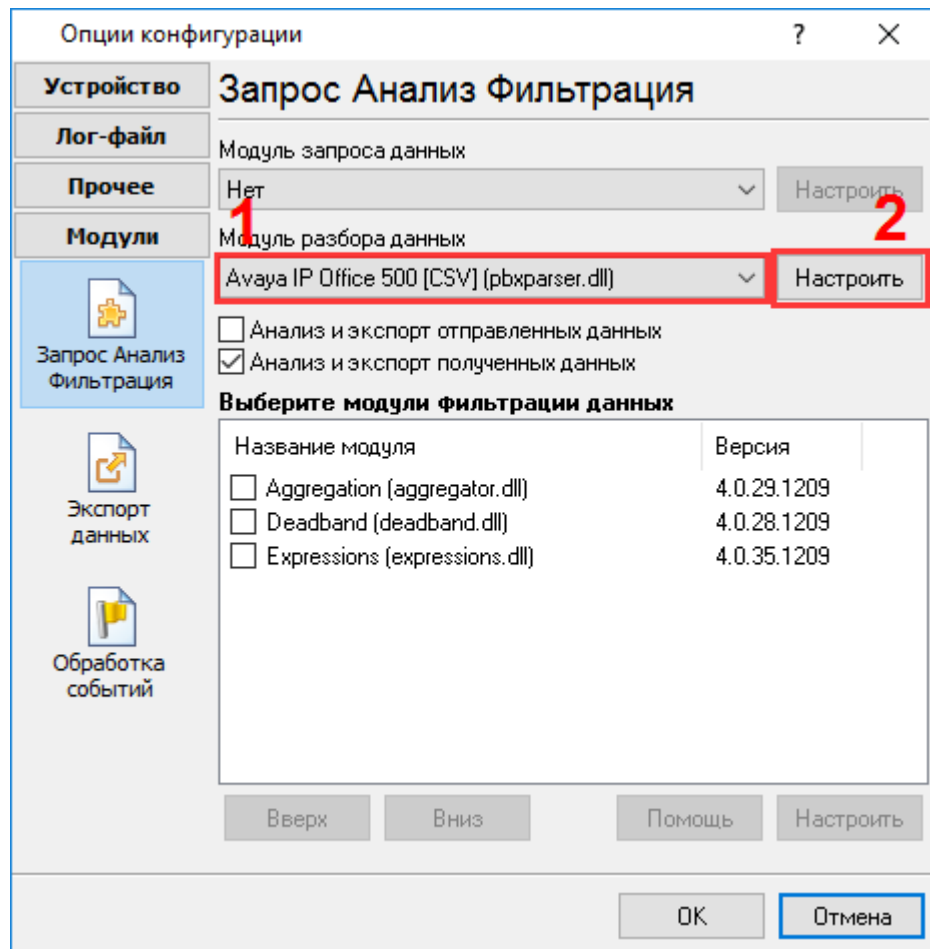
1. () ,

2.

3. " - "

(. 1).

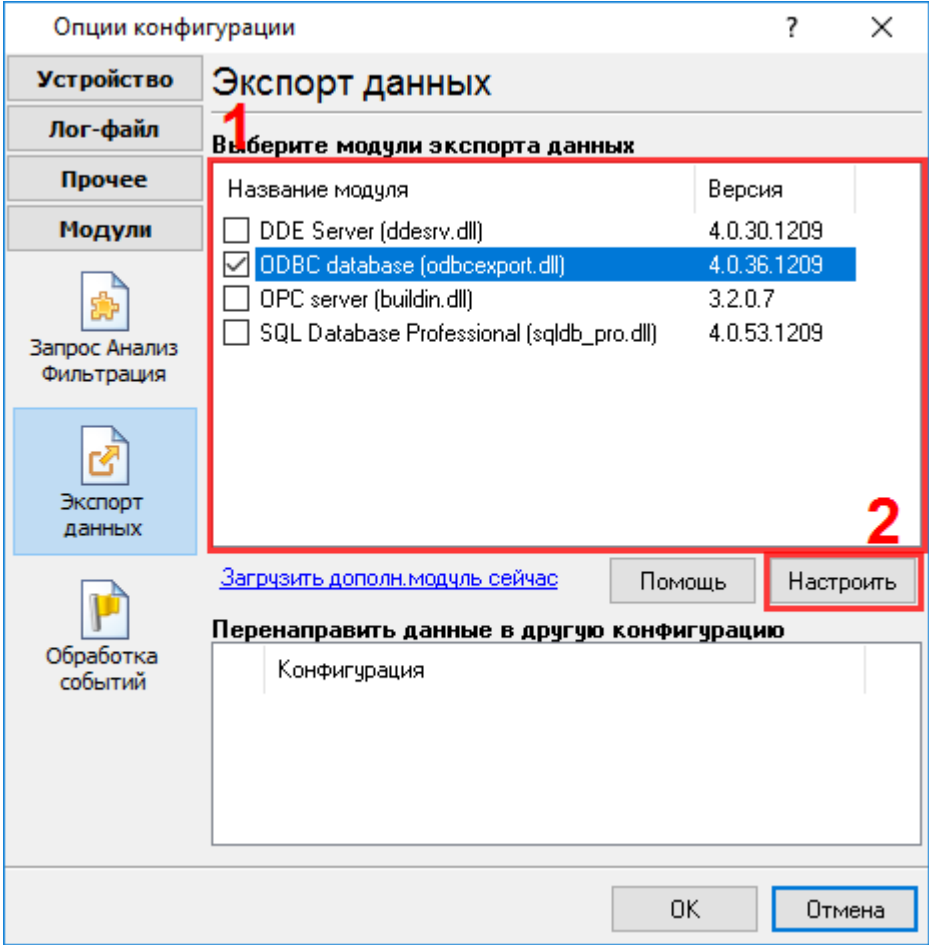
:



.1.

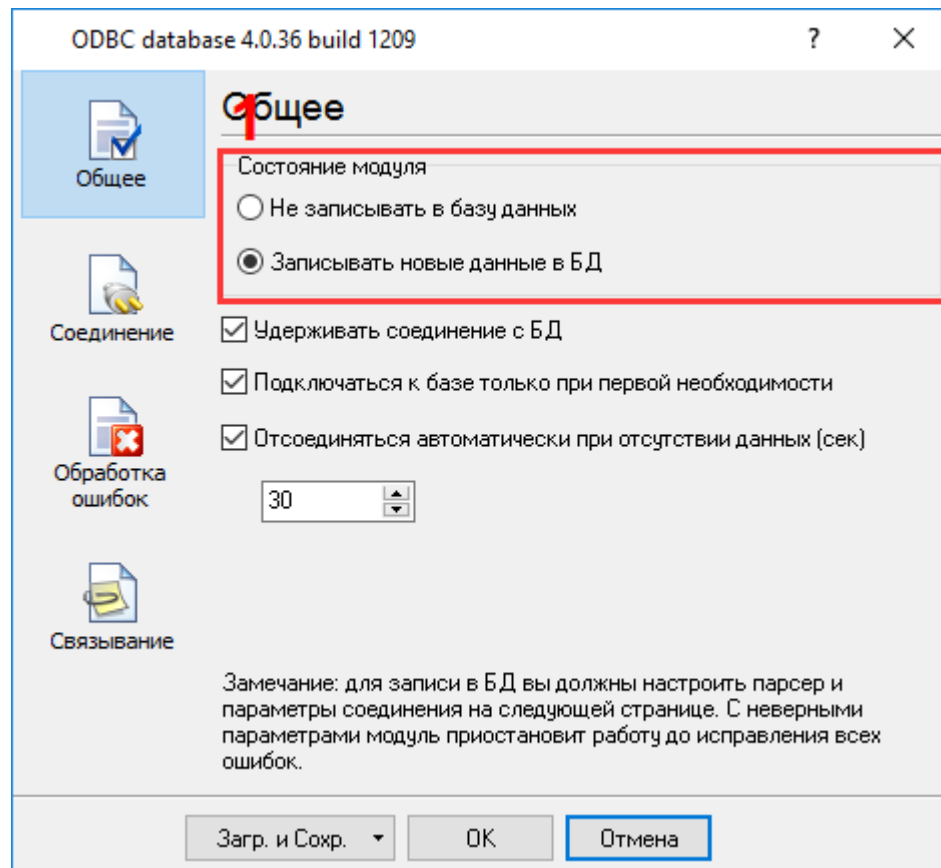
4.
Database (. 2).

ODBC



. 2.

5. , .
6. " (. 3) :
- "PBX-Logger-ODBC-Items" - MySQL, MS SQL Server, Oracle.
- "PBX-Logger-ODBC-Access" - MS Access.
7. " (. 3) .



. 3.

8.

" "

8.1.

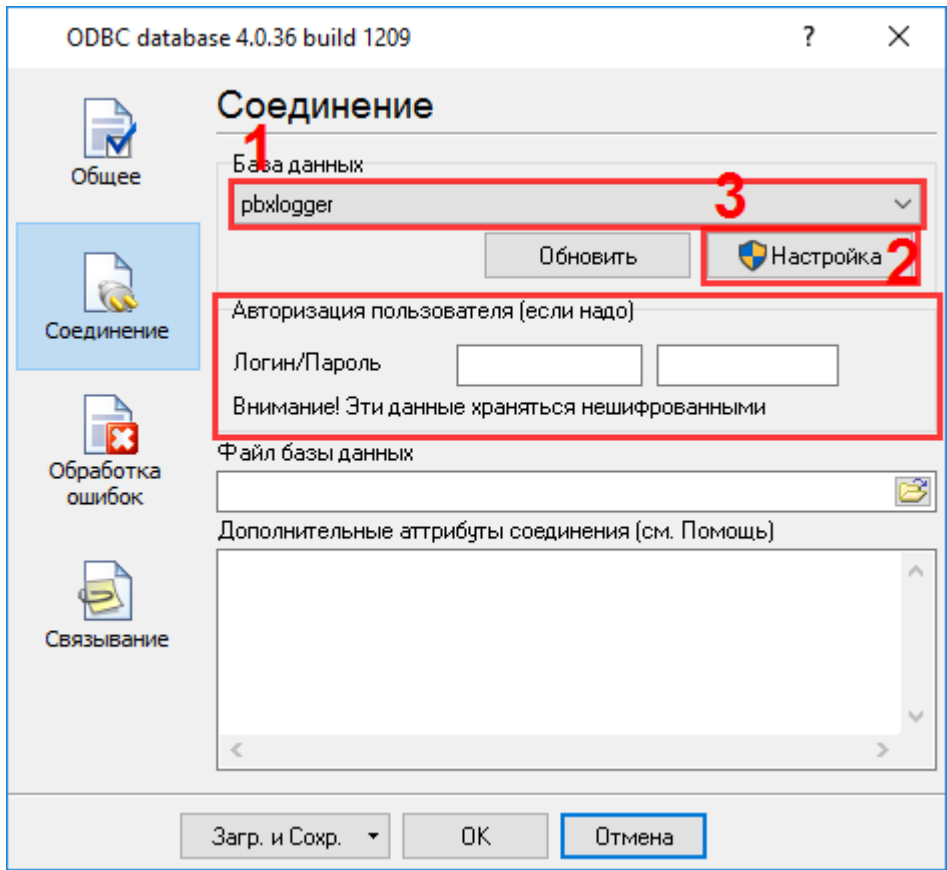
ODBC, (. 4).

8.2.

ODBC.

" "

52



. 4.

ODBC

9.

" "

"ODBC database",

5.8

ODBC

: 64-
32-x 64-x

Windows

32-x

ODBC"

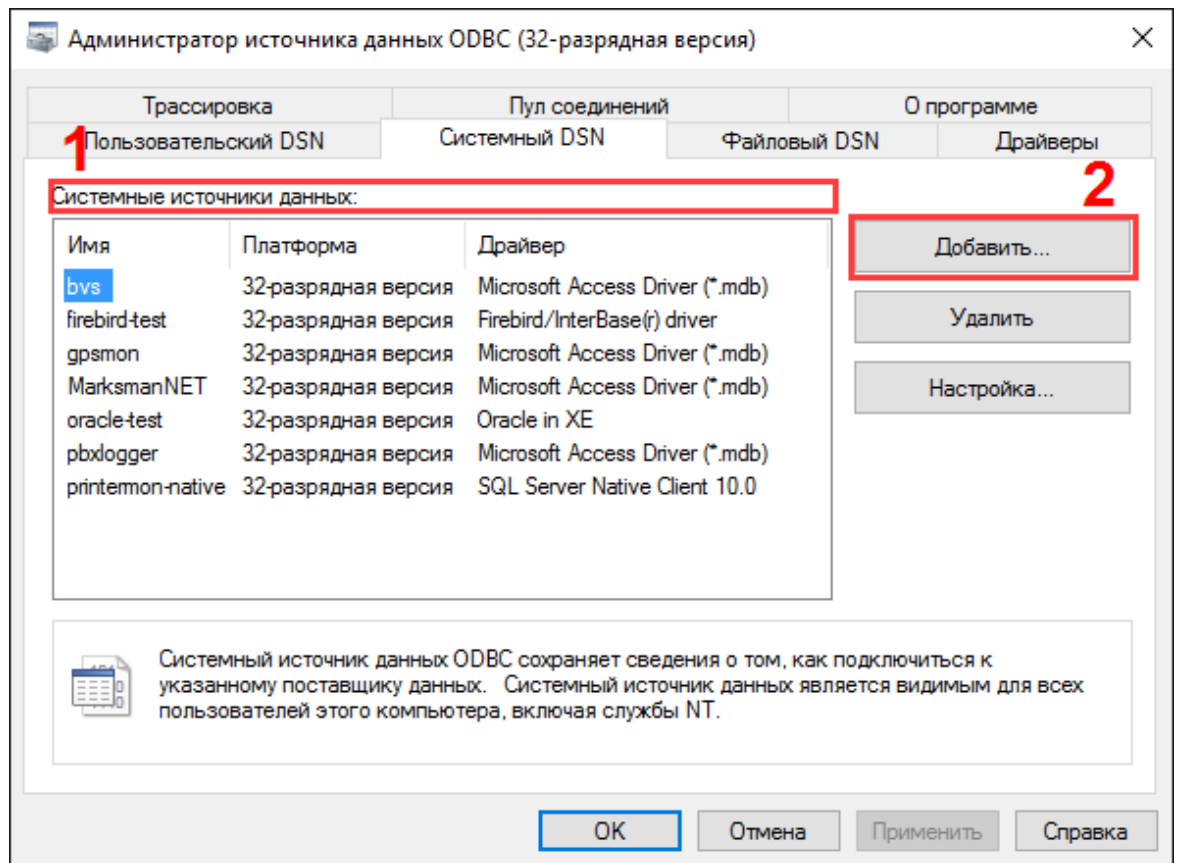
"ODBC database".

ODBC

1.

DSN"

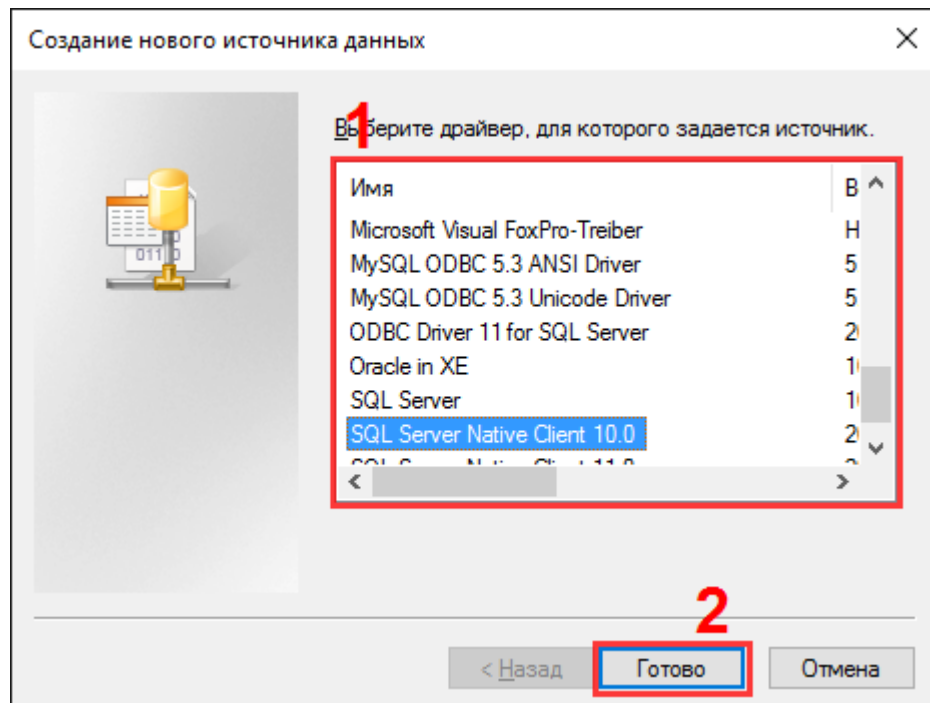
" (.1).



. 1.

2.

(. 2).

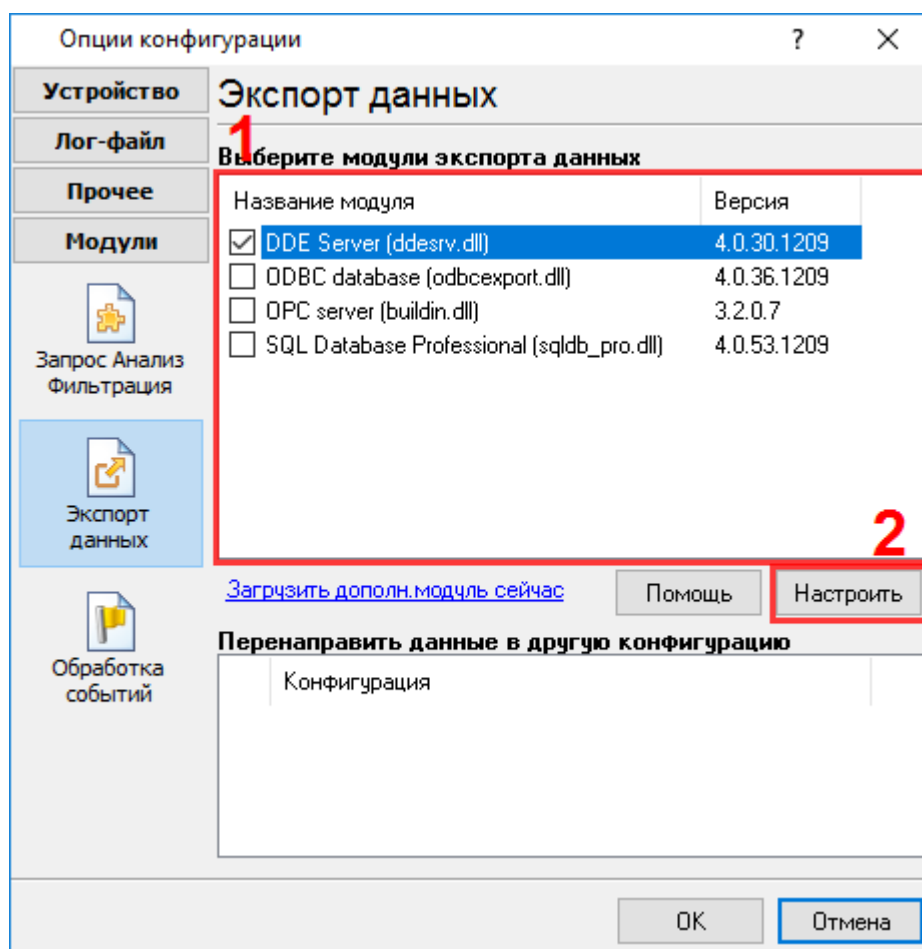


. 2

3.

5.9

1. "DDE server" (. 1).



. 1.

2.

3.

4.

(. 1)

"DDE server".

- 5. " " ,
- 6. "DDE server".

5.10 SQL Database Pro

5.10.1 SQL Database Pro ODBC Database

SQL Database Pro :

- 1. ,
- 2. .
- 3. SQL .

SQL Database Pro

- 1. ,
- 2. .
- 3. , ,

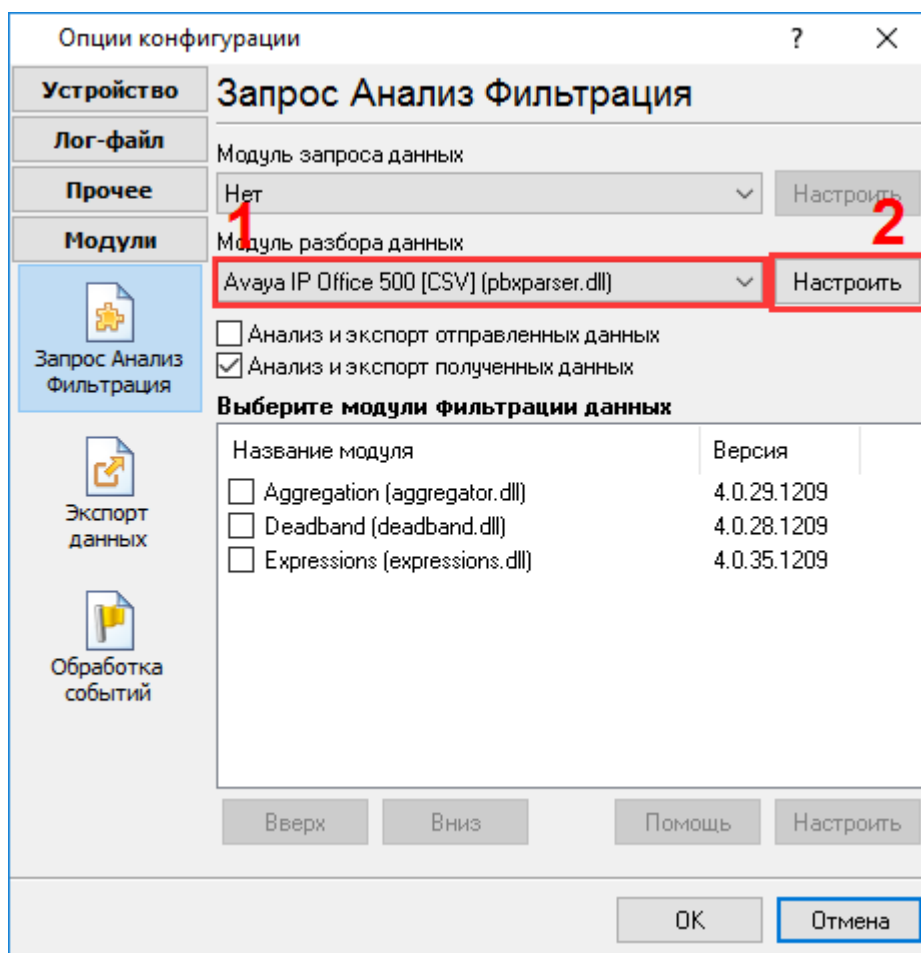
5.10.2

Oracle - Oracle Client , .

5.10.3

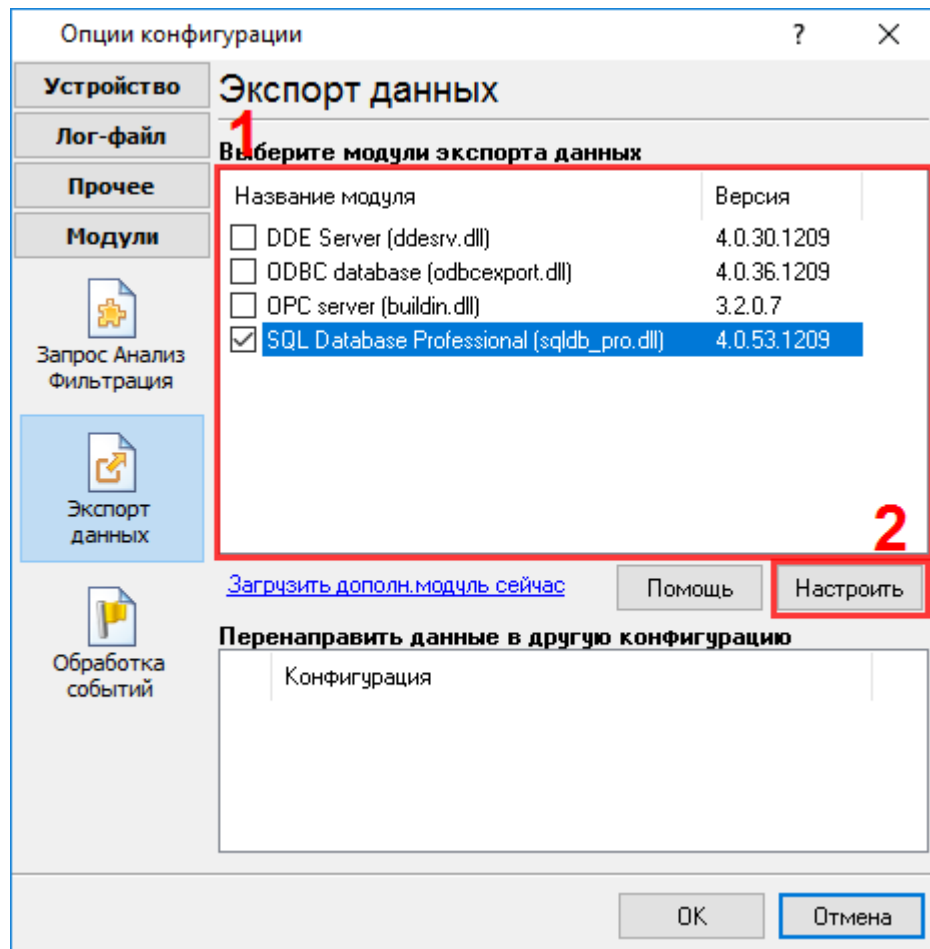
- 1. (),
 - 2. .
 - 3. " - "
- (. 1).

: [54](#) ,



. 1.

4. Database Pro (. 2). " - " " " SQL

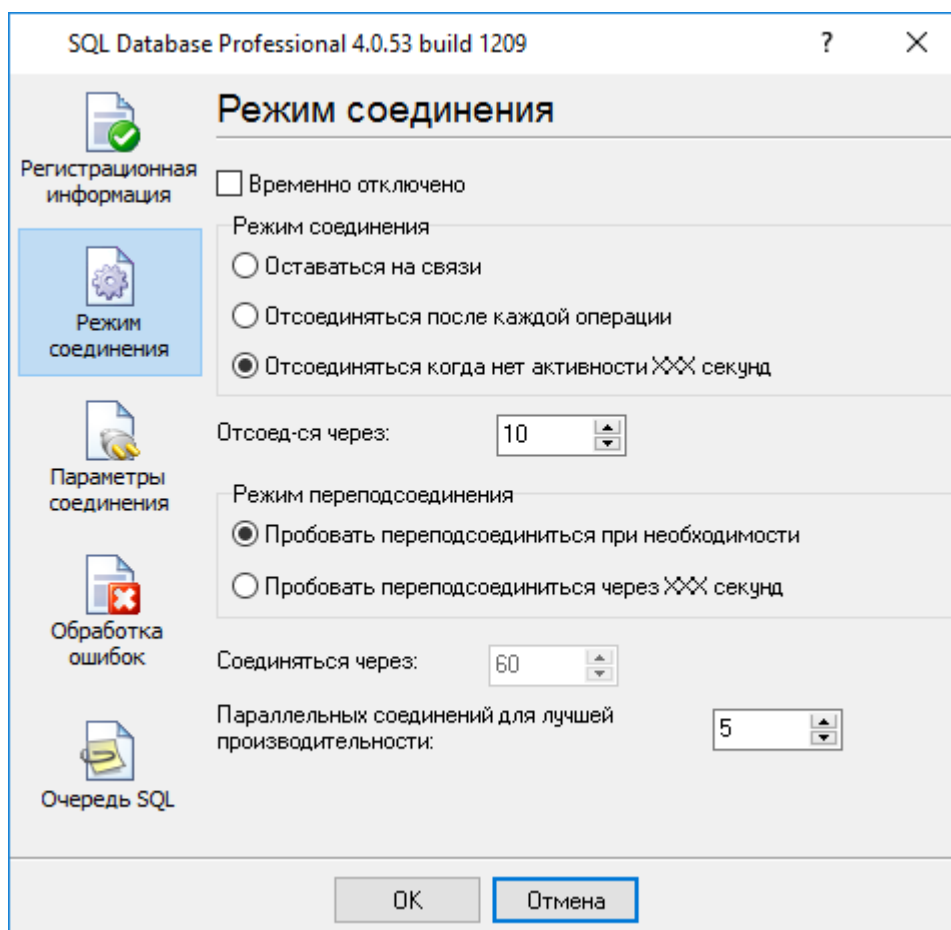


. 2.

5.

6.

(. 3).

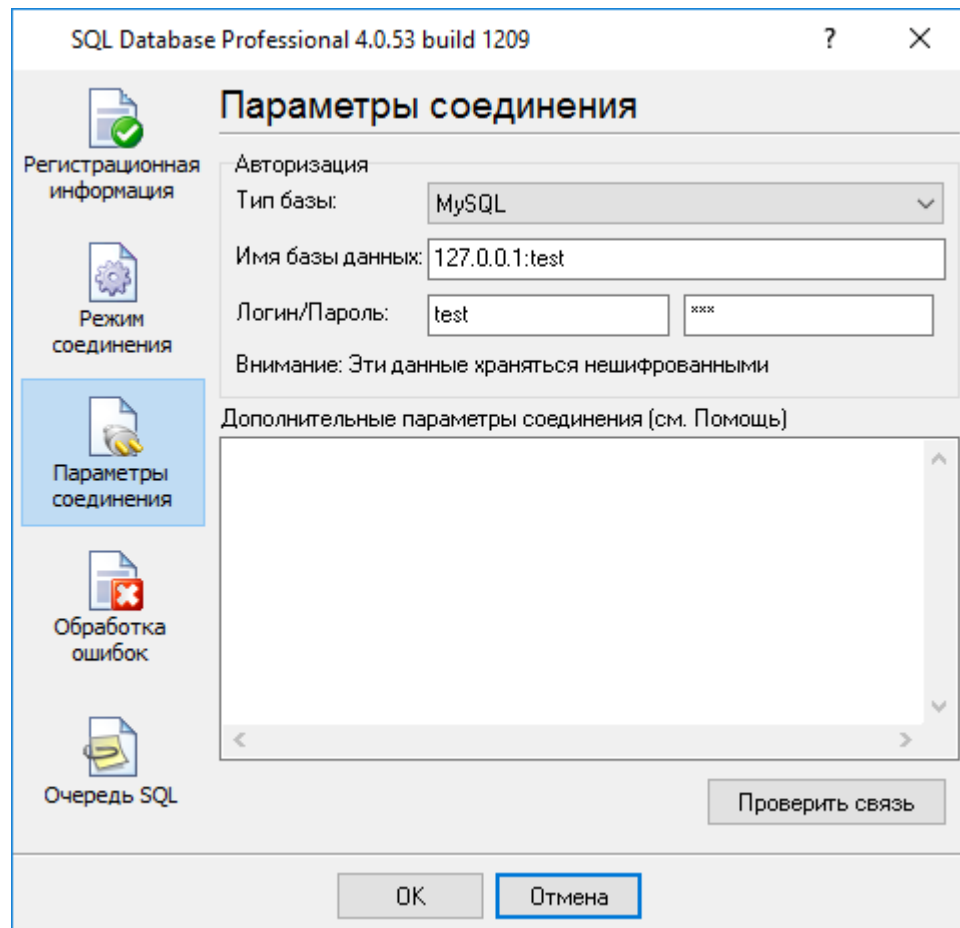


. 3.

7.

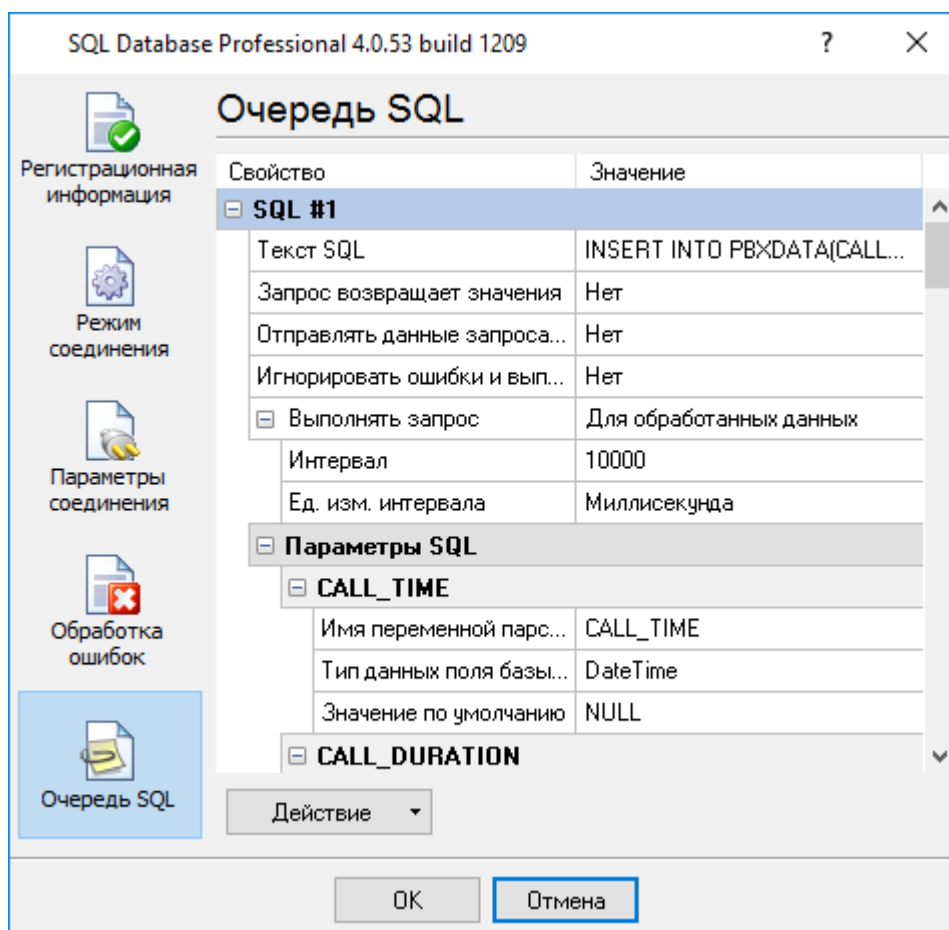
-
-
-

IP



. 4.

8. " SQL" (. 5).



. 5. SQL

9. SQL " " , ' "pbxlogger-sql-queue.txt"
 \plugins\sqldb_pro\ SQL :
10. " " "SQL Database Pro",

5.11

Advanced PBX Data Logger

: <http://www.aggssoft.ru/pbx/>.

PBXDATA,

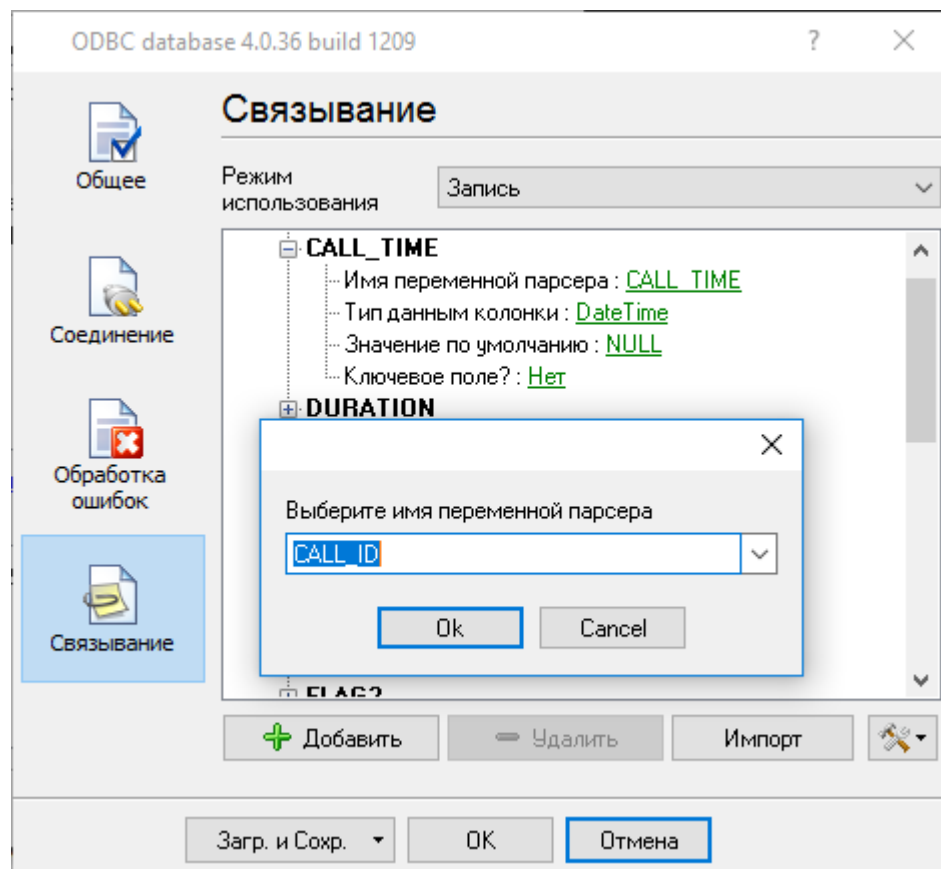
FLAG1-FLAG7,

CALL_ID Avaya IP Office

500.

ODBC Database

1. " "
 2. FLAG1
 3. " " "
- (CALL_ID) (. 1).



. 1.

ODBC Database

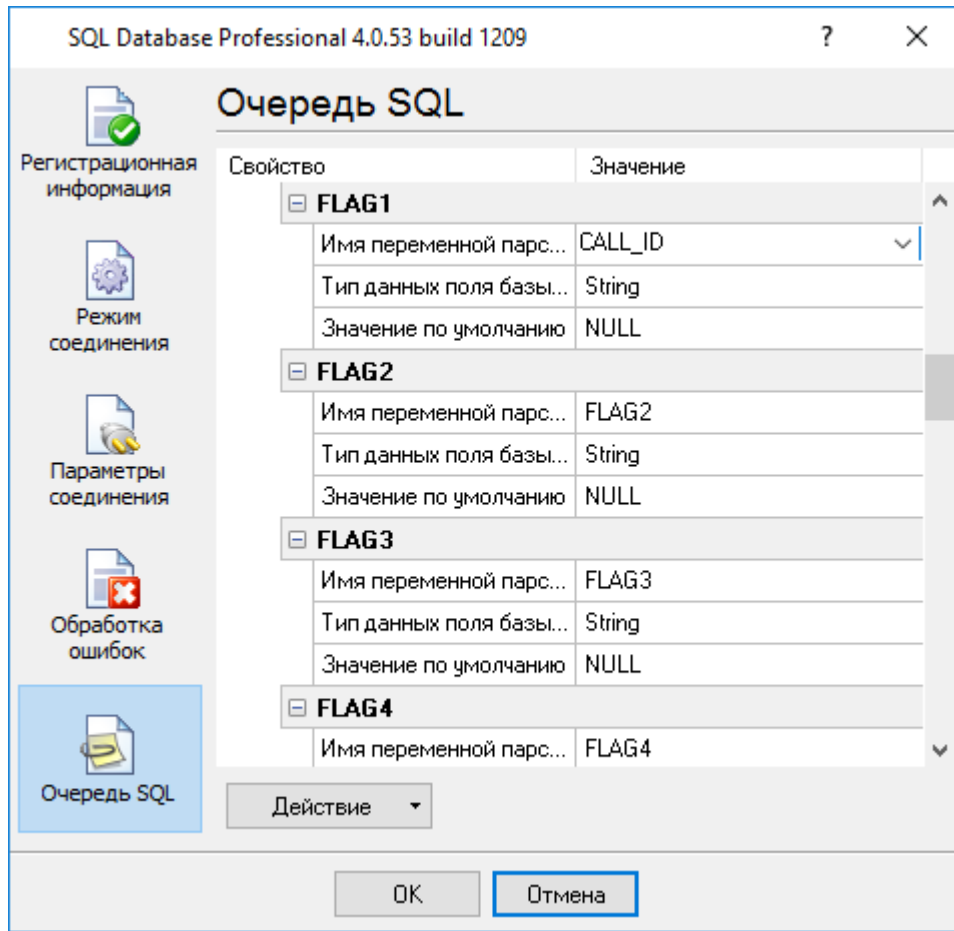
SQL Database Pro

SQL Database Pro.

1. " SQL".
2. FLAG1

3.

(CALL_ID) (. 2).



. 2. SQL Database Pro

5.12

Windows Vista

Windows.

1.

" (

2.

3.

3.1

3.2

4.

4.1

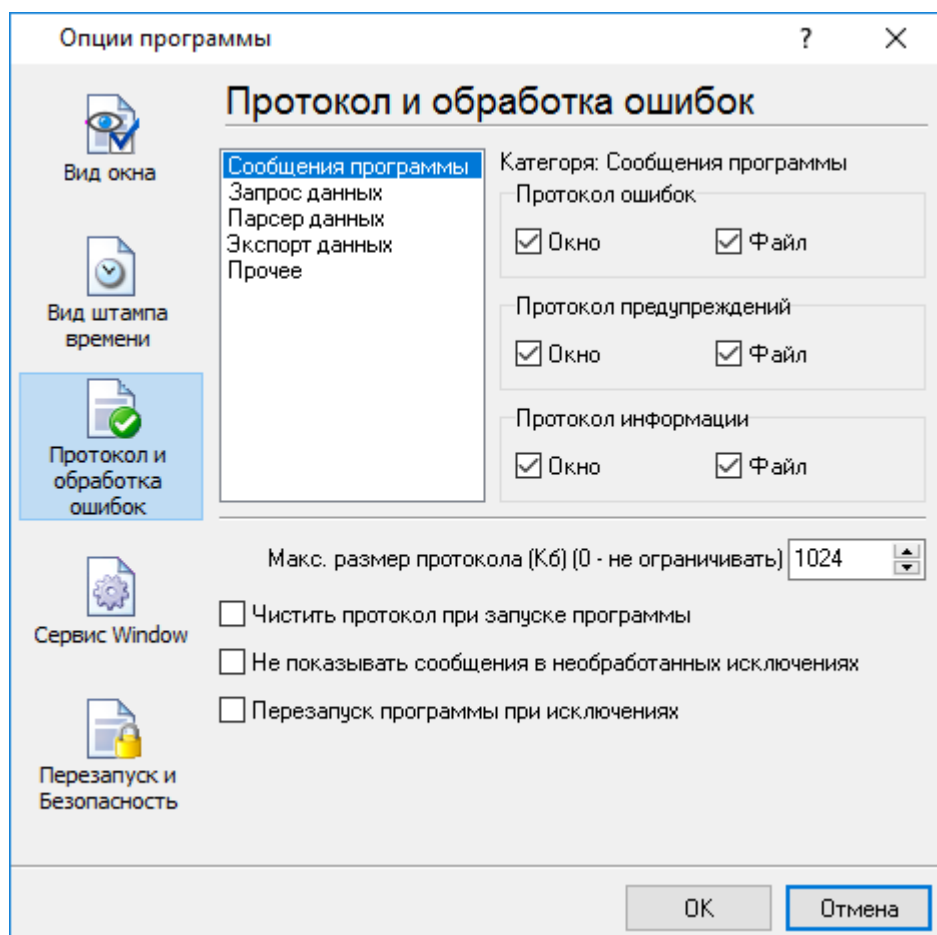
(. 1).

4.2

4.3

Logger\

: c:\Users\All Users\Advanced PBX Data



.1.

5.13

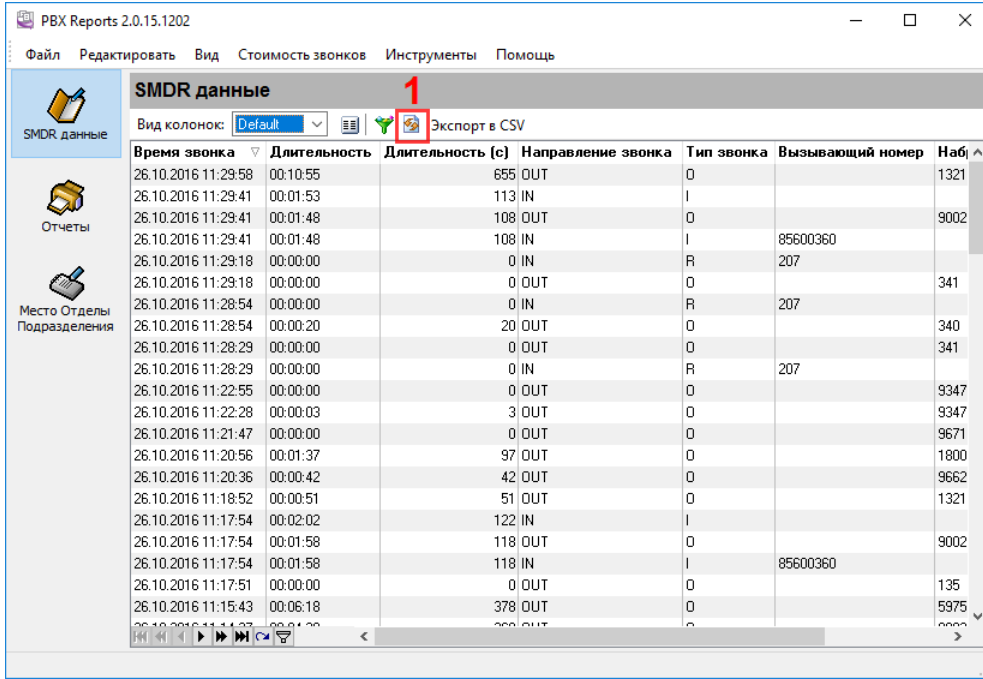
PBX Reports

PBX Reports

Advanced PBX Data Logger.
MySQL, MS SQL Server, Oracle MS Access.

PBX Reports
Advanced PBX Data Logger

"SMDR " (. 1).



.1 PBX Reports

Advanced PBX Data Logger

"SMDR records"

(. 1).

PBX Reports

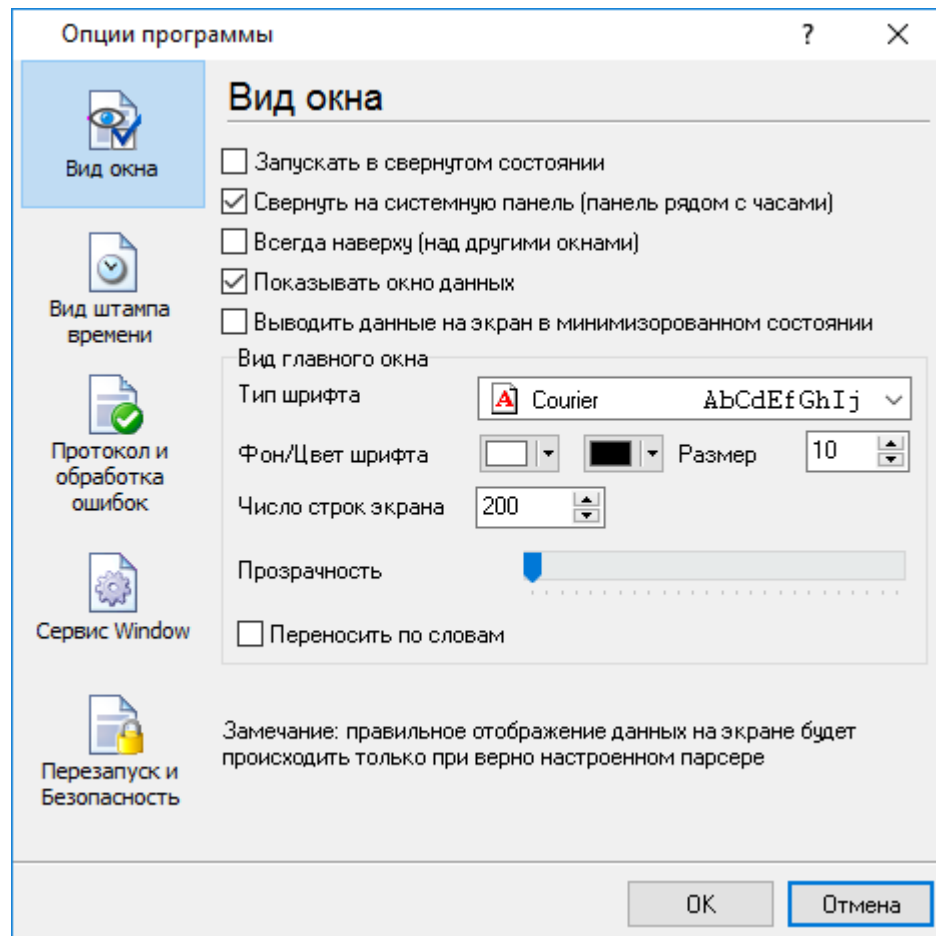
PBX Reports
Advanced PBX Data Logger.
) PBX Reports:

Advanced PBX Data Logger (.

1. : - -
2. " - "
3. .

5.14

5.14.1

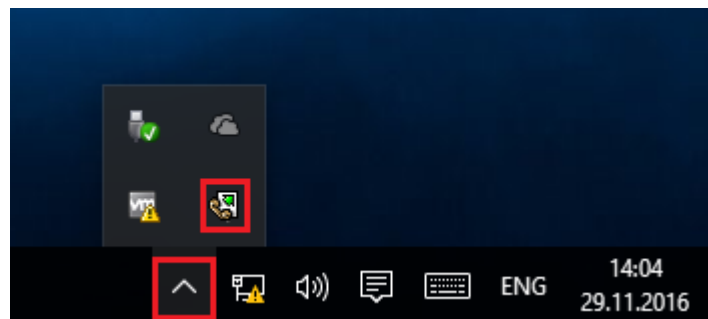


. 6.1.1.

" (. 6.1.1) :

- Advanced PBX Data Logger

(. 6.1.2) ;



. 6.1.2.

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(. 6.1.2) -

Advanced PBX Data Logger

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- Windows 2000

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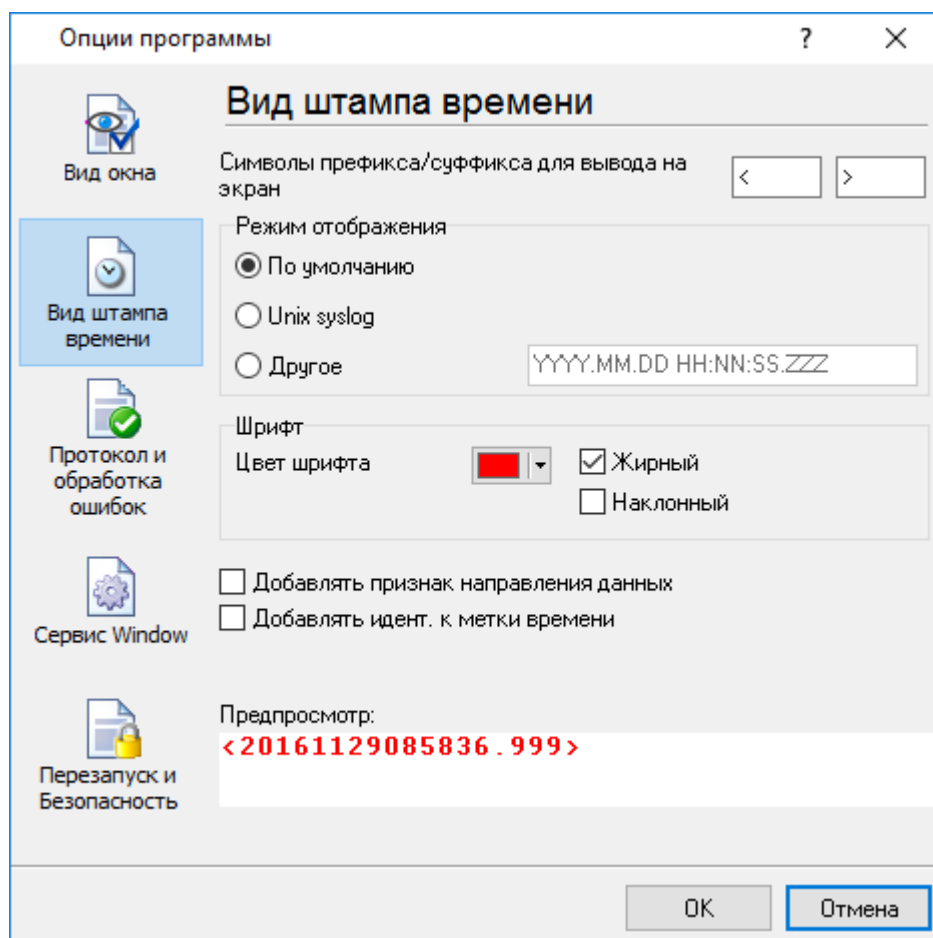
-

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5.14.2

(. 6.2.1)



. 6.2.1.

28

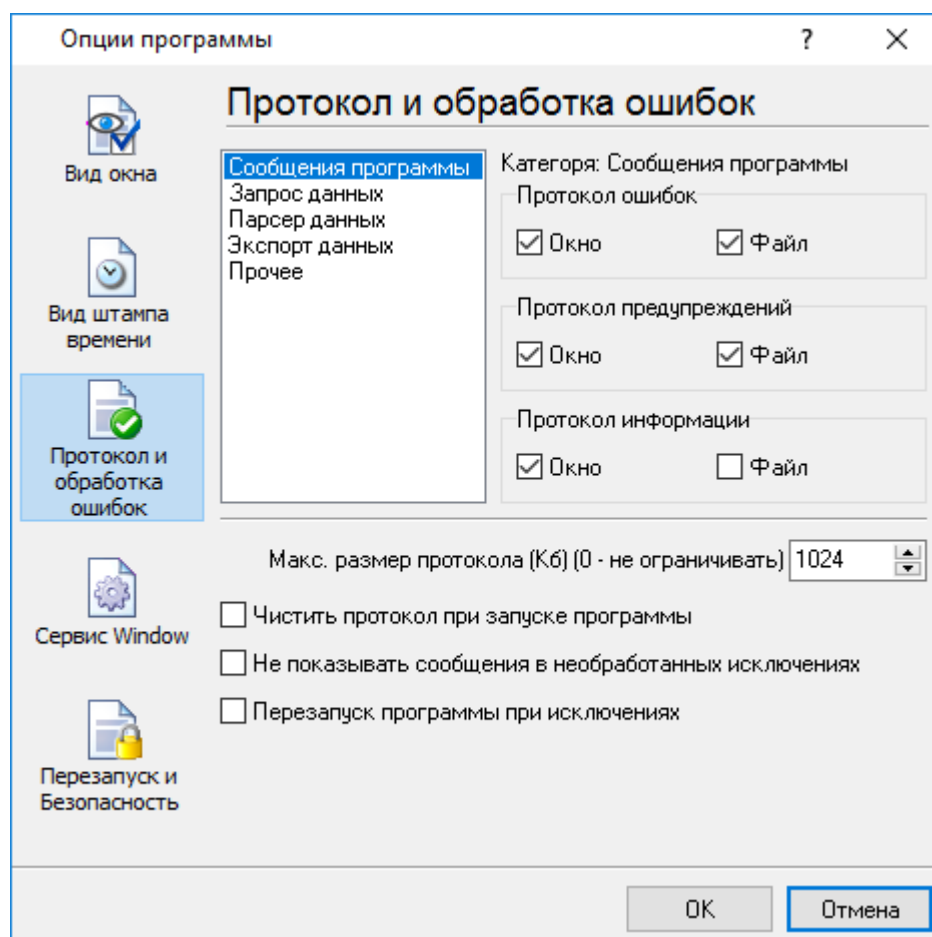
TX

RX

, COM1.

5.14.3

.log.



. 6.3.1.

Advanced PBX Data Logger

3-

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Advanced PBX Data Logger

5.14.4
5.14.4.1

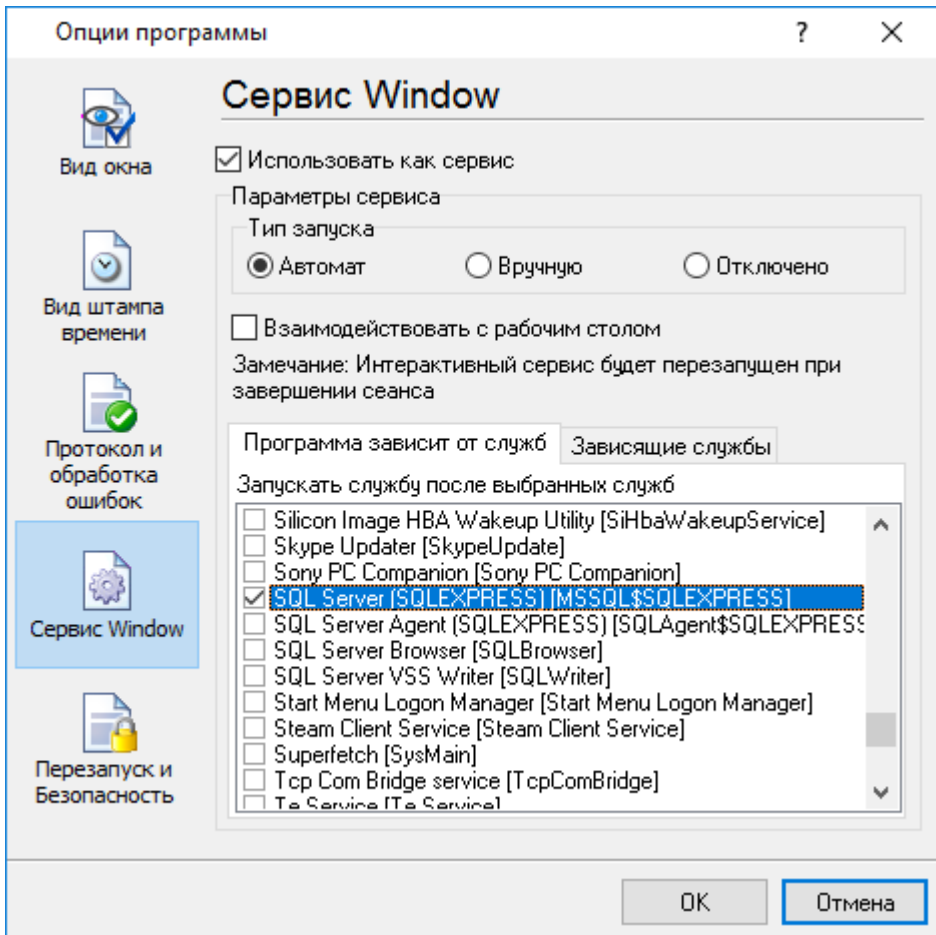
Windows 2000

() Windows :

- 2000);
- - ();
- ;
-)

(
Windows Vista
(*elevated*)

" " " **Windows**" (. 6.4.1).

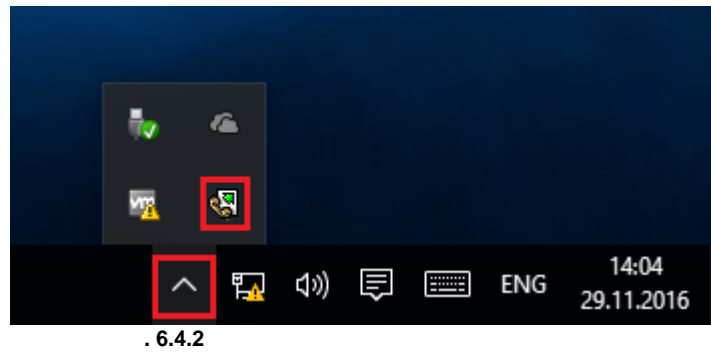


. 6.4.1.

1. - Windows
2. - ; " " ;
3. - .

" .
 (. 6.4.2).
 ", . . Windows

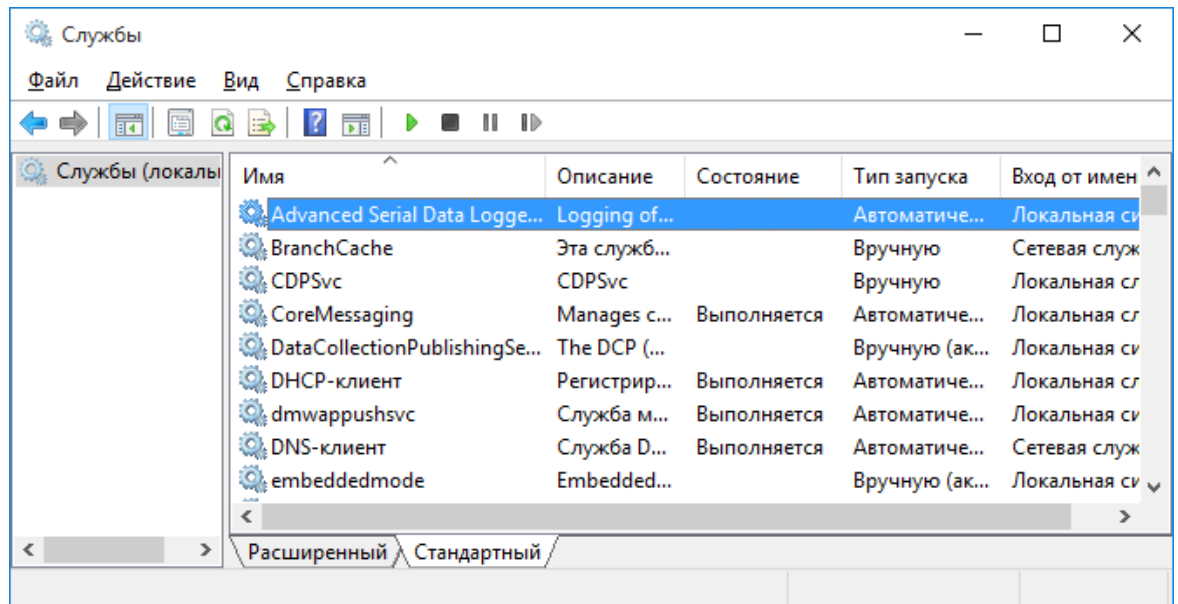
: _____ [72] Windows Vista



. 6.4.2

Advanced PBX Data Logger, " (. 6.4.1)

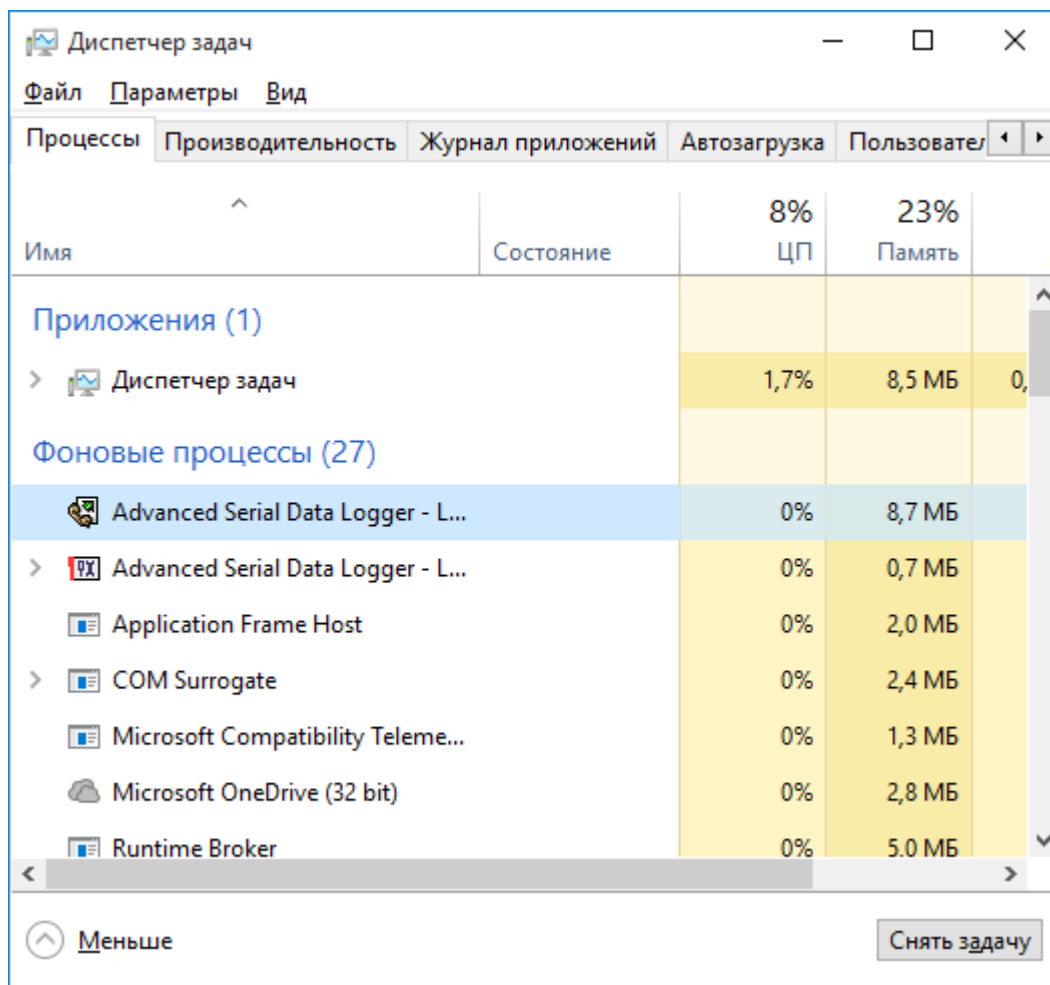
" " (. 6.4.3).



. 6.4.3.

(Windows 2000)

pbxlogger.exe (. 6.4.4). 2 - pbxloggersrv.exe
 Advanced PBX Data Logger
 Advanced PBX Data Logger,
 svany.exe



. 6.4.4.

pbxloggersrv.exe :

- /? - ;
- /l - ;
- /A - ;
- /D - ;
- /R -

5.14.4.2

Windows Vista

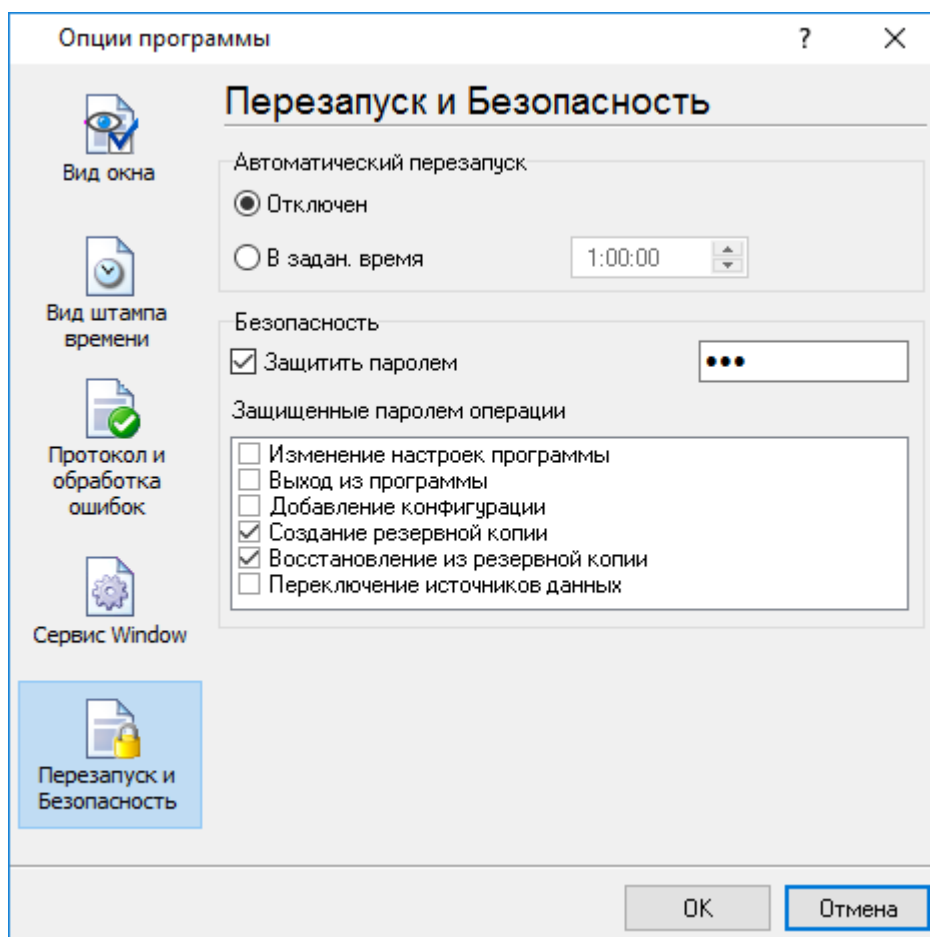
Windows Vista

Windows.

- : Interactive Services Detection
 - : UI0Detect
 - : UI0Detect.exe
 - :
 - : %windir%\system32\UI0Detect.exe
 - :
- * Home Basic:
* Home Premium:
* Business:
* Enterprise:
* Ultimate:

5.14.5

(. 6.5.1).



. 6.5.1.

" "

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7.1

SoftIce

support@aggsoft.ru