

"

"

1		1
2		1
3		1
4		4
5		5
1	5
2	6
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7

22

8

23

1

1

ASCII Data Parser,
"Python plugin" "Proxy plugin".

XML

XML

XML

2

: Windows 2000 SP4

32-x 64-x

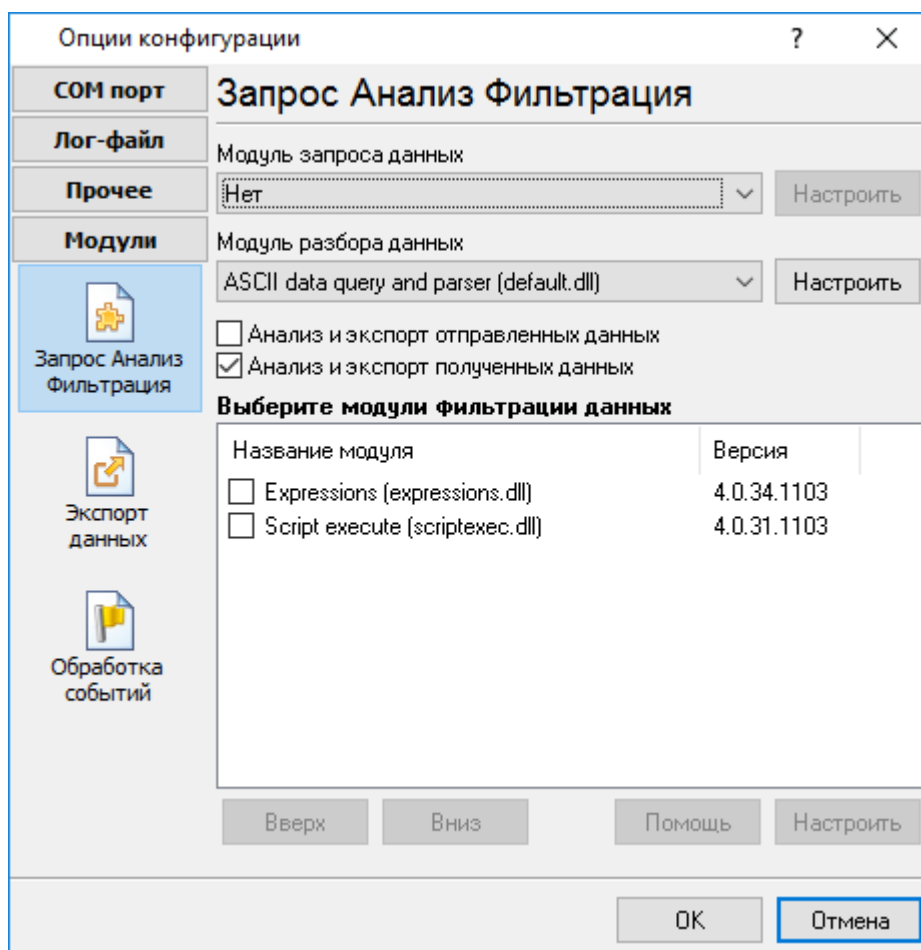
5 MB

(), Advanced Serial Data Logger.

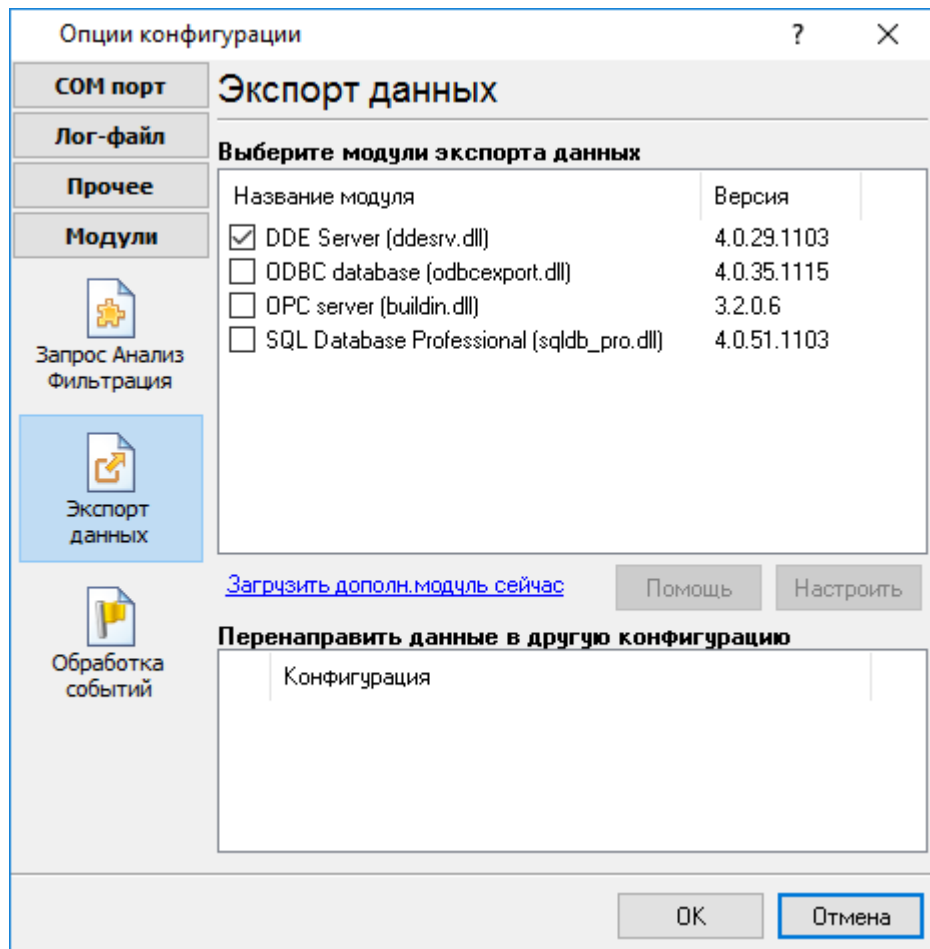
3

1. (, Advanced Serial Data Logger), ;
2. ;
3. ,
4. Windows;
5. " " ,
" " .

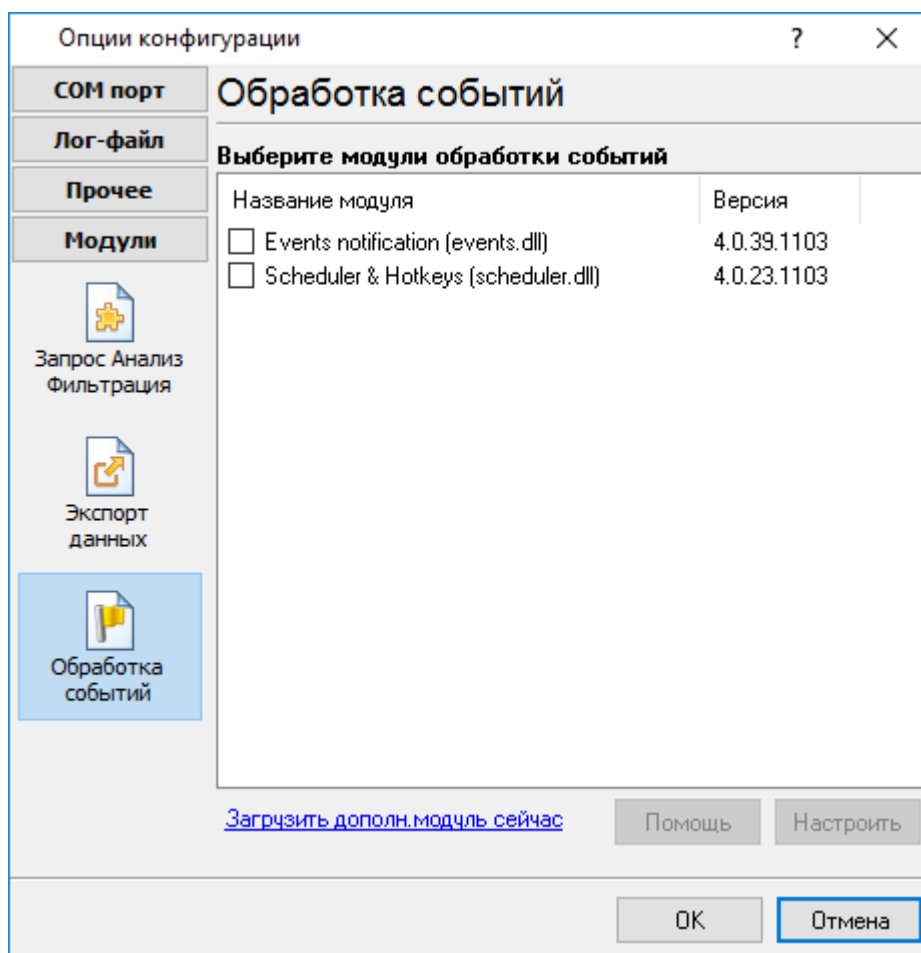
. 1-2.



. 1.



. 2.



. 3.

4

Plug-in -

Advanced Serial Data Logger

5

5.1

"xml"
"uniparser.dll". "Configs",

:

```
uniparser
|--Configs
|  |--config.xml
|--uniparser.dll
```

XML

[XML](#).

1. ("true" "false")
 - o 0 - false.
 - o 1 - true.
2. [d].
 - o 0 [d].
 - o value - ([d] 0).
3. , false,
4. XML
HTML XML
 - o < <
 - o > >
 - o & &
 - o " () "

5.

```
logtitle="value" -
logtitle='value' -
logtitle='value1 "value2"-value1' -
      value2
```

```
logtitle='value" -
```

```
logtitle=value -
```


logtitle="value1 & value2" -

5.2

XML 1.0

XML

:

```
<?xml version="1.0" encoding="windows-1251"?>
```

```
<?xml version="1.0" encoding="utf-8"?>
```

1252 . . , ANSI UTF-8. Windows: Windows 1250, Windows 1251, Windows
Windows 1252.

5.3

XML

XML

:

```
<Config name="MyPlugin [Custom Format 0]" logtitle="MyPlugin">
```

Config -

name, logtitle -

5.4

XML

5.4.1

```
<!-- ... --> -
```

5.4.2 Config

XML ,

name - ,

logtitle - ,

5.4.2.1 Devices

: [Config](#)

name - .

caption - (,

).

5.4.2.1.1 Includes

: [Devices](#), [Device](#)

5.4.2.1.1.1 IncludeItem

: [Includes](#)

name - ["Include"](#).

:

```
<IncludeItem name="decode_gps_fix">
  <Item value="1" name="No fix" />
  <Item value="2" name="2D" />
  <Item value="3" name="3D" />
  <Item value="" name="Unknown" default="1" />
</IncludeItem>
```

5.4.2.1.2 Include

["IncludeItem"](#).

:

:

name - .

:

```
<Include name="decode_gps_fix" />
```

5.4.2.1.3 Device

: [Devices](#)

:

name - .

caption - .

5.4.2.1.3.1 SetVar

```
( , , ).
( ) .
```

: [Device](#)

```

"
"
:
name -
value - ( ).
type - ([d]). "const",
:
<SetVar name="UNIQUE_ID" value="" />

```

5.4.2.1.3.2 Options

```

,
"OK"
: Device, Command
:
:
: Options
:
name -
,
,
,
,
,
caption -
hint -
type -
:
• integer -
• string - [d].
• uppercase - ,
• mixedcase - ,
• lowercase - ,
• password - ,
• hex - , A-F 0-9.
• alphanumeric - ,

```

- **validchars** - , , "validchars".
- **combodropdown** - , , "comboitems" "combovalues", "ComboItems". (Text)
- **combosimple** - .
- **combodropdownlist** - .
- **combodropdownvalueslist** - , , "combovalues" "value" "ComboItems", .

- **color** - , . RGB.
- **extended** - .
- **checkbox** - "check box", :
 - 0 - [d].
 - 2 - .
 - 4 - (check box).

default - .

min, max - .

validchars - , .

comboitems - , , " ". , comboitem1~ comboitem2~ comboitem3.

combovalues - , " ". , value1~ value2~ value3. , comboitems.

checktype - "check box".

- 1 - check box c [d].
- 2 - check box c .
- 3 - radio button.

:

```
<Option name="DATAFORMAT" caption="Data format" type="combodropdownvalueslist" default="0">
  <ComboItems>
    <Item name="Engineering unit" value="0" />
    <Item name="Percent of FSR (full scale range)" value="1" />
    <Item name="2s complement hexadecimal" value="2" />
    <Item name="Ohms" value="3" />
  </ComboItems>
</Option>
```

"

"

"combobox".

: [Option](#)

:

Item

: Comboltems

:

name -

value -

5.4.2.1.3.3 Request

[Item, Items.](#)

: [Device](#)

:

5.4.2.2 **Commands**

(),

: [Device](#)

:

5.4.2.2.1 Command

().

:

-
-
-

: [Commands](#)

:

name -

caption -

5.4.2.2.1.1 Responses

()

: [Command](#)

:

: [Responses](#)

:

begin - ()

begintype.

begin="+RGA".

begintype -

- o 0 - [\[d\]](#).
- o 1 -

beginbuff - ([d] 0)

1.

end - ([d]) ()

endtype. : end="#0D#0A"

endtype -

- o 0 - [d]

: end="#0D#0A".

ASCII

CR LF

0x0Dh 0x0Ah

- o 1 -
- o 2 -
- o 3 -

len.

timeout.

- o 4 - 3, 0.
- o 5 - 3, 1.
- o 6 - timeout.

[Responses.](#)

endbuff - ([d] 0)

beginbuff.

len -

maxpacketize -
16384.

override - ([d] 0)

override

"1", **endtype**
Response,

"3",

Responses.

endtype begintype

0 1.

validatesize - ([d] 0)

1,

timeout - ([d] 500)

()

endtype).

parse -

: "b,p,e",

o b -

o p -

o e -

: parse="bp".

if).

: [Response](#)

[Item.](#)

case - ([d])
"true".

if

: [Responses, Items](#)

[parse.](#)

type -

- o break -
- o goto -

id, expr.
expr.

- o log -
- o push -

value.
name,
value,

- o pop -

name,
value,
value, pop
datatype,

- o reset -
- o const -

name,
value,
name.

type="const" pos="1" value="*NULL*" />

- o format -

[format](#)

name.

- o filter -
- [filtertype.](#)

name,

- o decode -
- value
name,

name

default="1".

```

<Item type="decode" pos="1" size="1" value="{CALL_TYPE}" name="DIRECTION" export="1"
  <Item value="0" name="INT" />
  <Item value="1" name="OUT" />
  <Item value="2" name="IN" />
  <Item value="" name="INT" default="1" />
</Item>

```

```

      ,
      "CALL_TYPE"      "1",
      "DIRECTION"      "OUT".
      "CALL_TYPE"      "10",
      "DIRECTION"
      "INT".

```

o **var** -

```

<Item type="var" pos="1" size="-1" value="{CALL_TYPE}" name="DIRECTION" export="1"
      "CALL_TYPE"
      "DIRECTION".

```

o **hex** -

```

<Item type="hex" pos="1" size="-1" value="#0D#0A" name="VALUE" export="1">

```

o **fix** - size, pos, value.

```

o delimit -
  ordernum.
  ,
  delimiter.
  ,
  ordernum
  "1".
  ordernum
  value.
  :

```

: 123,321;456;789;012

```

<Item type="delimit" pos="1" size="-1" ordernum="1" delimiter=";" name="FLAG1" d
  "123,321"
  "FLAG1".

```

```

<Item type="delimit" pos="1" size="-1" ordernum="2" delimiter="," name="FLAG2" v
  "321"
  "FLAG2".

```

o **regexp** -

```

      ,
      expr.
      ordernum
      ordernum.
      1. ordernum
      .
      match
      (1, 2
      . .).
      value.
      :

```

CALL_TYPE = 123456I

```
<Item type="regexp" size="-1" name="_DIRECTION" expr="(I|O)" value="{CALL_TYPE}" datatype="string" />
    "I"
    "_DIRECTION".
```

```
<Item type="regexp" size="-1" name="_BEGIN" expr="^(.{5})" datatype="string" />
    "_BEGIN".
```

```
o expr - , expr,
name. :
```

```
<Item type="expr" size="-1" expr="'IN'+'{DIRECTION}'" name="CALL_TYPE" datatype="string" />
    "DIRECTION" '12345', "CALL_TYPE"
'IN12345'.
```

```
o pascal - Pascal- ,
:
```

```
<Item size="-1" type="pascal"><![CDATA[begin SendByte($06); end.]]></Item>
```

```
,
UniParser_ScriptTest.exe "Script Execute".
```

```
o crc_AAA - , AAA - _____.
```

```
pos size.
```

```
<Item type="crc_crc8-sum" pos="0" size="10" name="CRC" />
```

```
name - ( ).
```

```
value - ([d] )
fix, expr, regexp :
```

```
o ,
o ,
, .
```

```
pos - ([d] 0) "{VAR}+1",
{VAR} ,
"VAR". "-1",
```

```
size - ([d] -1) ,
```

validatesize,**default - ([d])**

-
-
-

format -

: format="trim;uppercase".

caption - ([d])**datatype - ([d] string)**

: string, boolean, float,

smallInt, integer, word, dword, date, time, datetime, unknown.

export -

○ 0 [d] -

○ 1 -

○ 2 -

○ 3 -

).

○ 4 -

).

NULL.

NULL,

(

NULL,

false (

: name="_TEMP".

count - ([d] 1)**count****caption:**

○ ITEM_COUNT -

1 count.

○ ITEM_COUNT_Z -

0 count-1.

```
<Item name="NAME{ITEM_COUNT_Z}" count="{_COUNT1}" caption="Name{ITEM_COUNT_Z}" e
```

```
"_COUNT1",
```

: NAME0, NAME1, NAME2 . .

filtertype - "filter".
 ()
name,
 expr.
 format.
 (. exprtype),
 expr.
 expr.
 0x20h.
 0x7Fh.
target.
 \$0, \$1, \$2 . . .,
 "Perl regular expressions".

expr -

exprtype - **filtertype** 1 2:
 o 0 [d] -
 o 1 -
 o 2 -

if - ([d]) , "false",

:

... if="LENGTH('{FLAG3}')<i=5" />

FLAG3.

5.4.2.3 Predefine

: [Config](#)

:

```

"
"
"bool"
"1".
"0".

tree -
reqtype - (
. .).

respitems -
dataquery -
command -

unique - (bool, [d] 0). "1",
device - (bool, [d] 0). "1",

```

5.4.2.3.1 QUERYXML

```

XML
: Predefine
:
:
<Predefine tree="1" unique="0" device="0" command="0" reqtype="0" respitems="0"
  <QUERYXML>
    <Request caption="My Request" expanded="1">
      <DeviceType>DEF</DeviceType>
      <ReqType>DEF</ReqType>
      <ItemType>B</ItemType>
      <RequestMethod>
        <Timeout>2000</Timeout>
        <MethodPoll check="2">
          <PollInterval>5</PollInterval>
          <PollIntervalUnits>1</PollIntervalUnits>
        </MethodPoll>
      </RequestMethod>
    </Request>
  </QUERYXML>
</Predefine>

```

```

      : QUERYXML
      :
      caption - ([d] )
      expanded - (bool, [d] 0). "1",
      /
      ,
      name Device.
      : QUERYXML => Request
      :
      ,
      name Command.
      : QUERYXML => Request
      :
      :
      :
      • D -
      • B -
      • R -
      • S -
      :
      : QUERYXML => Request
      :
      ( , . .).
      : QUERYXML => Request

```

" "

:

: [QUERYXML](#) => [Request](#) => [RequestMethod](#)

:

: [QUERYXML](#) => [Request](#) => [RequestMethod](#)

:

check - 2,

. [MethodOnce](#).

: [QUERYXML](#) => [Request](#) => [RequestMethod](#) => [MethodPoll](#)

:

:

- 0 -
- 1 -
- 2 -
- 3 -

: [QUERYXML](#) => [Request](#) => [RequestMethod](#) => [MethodPoll](#)

:

6

uniparser.dll
DLL

uniparser.dbg,
DBG

7

utc2local, local2utc - UTC

dec2hex, hex2dec -

num2date - TDateTime.

time2sec -

sec2datetime, msec2datetime - TDateTime.

sec2datetime2, msec2datetime2 -
(1 1970) TDateTime.

be2le - Big Endian Little Endian.

bytes2uint64 - Int64.

bytes2int64 - Int64.

bytes2dword - DWORD.

bytes2word - WORD.

bytes2byte - Byte.

bytes2longint - Longint.

bytes2smallint - Smallint.

bytes2shortint - Shortint.

bytes2single - Single.

bytes2double - Double.

getbit(X) - ().

leadzero - size.

leadspace - , .
 hi - .
 lo- .
 trim - .
 trunc - , .
 trimleft - .
 trimright - .
 uppercase - .
 utf8decode, utf8encode - UTF-8.
 lowercase - .
 delete(X, Y) - Y X X, Y - .
 substr(X, Y) - Y X . X, Y - .
 div(X) - X, X .
 mul(X) - X, X .
 sub(X) - X , X .
 add(X) - X , X .

"@" ,

8

crc8-sum
 crc8
 crc8-darc
 crc8-i-code
 crc8-itu
 crc8-maxim
 crc8-rohc
 crc8-wcdma

crc16-sum
crc16
crc16-buypass
crc16-dds-110
crc16-dect
crc16-dnp
crc16-en-13757
crc16-genibus
crc16-maxim
crc16-mcrf4xx
crc16-riello
crc16-t10-dif
crc16-teledisk
crc16-usb
crc16-ccitt-1D0F
crc16-ccitt-FFFF
x25
xmodem
modbus
kermit

crc24
crc24-flexray-a
crc24-flexray-b

crc32
crc32-bzip2
crc32c
crc32d
crc32-mpeg
posix
crc32q
jamcrc
xfer