



"ASCII Data Query And Parser"

| | | |
|----|-----------------------------|----|
| 1 | | 1 |
| 2 | | 1 |
| 3 | ASCII Data Query And | |
| | Parser | 1 |
| 4 | | 4 |
| 5 | | 5 |
| 6 | | 7 |
| 7 | | 12 |
| 8 | | 14 |
| 9 | | 15 |
| 10 | | 16 |

1

(, Advanced Serial Data Logger).

ASCII

1. [\(Data query\)](#) -

2. [\(, data parser\)](#) -

2

ASCII Data Query And Parser

: Windows 2000 SP4

32-x 64-x

5 MB

(), Advanced Serial Data Logger.

3

ASCII Data Query And Parser

1. (, Advanced Serial Data Logger), ;

2. ;

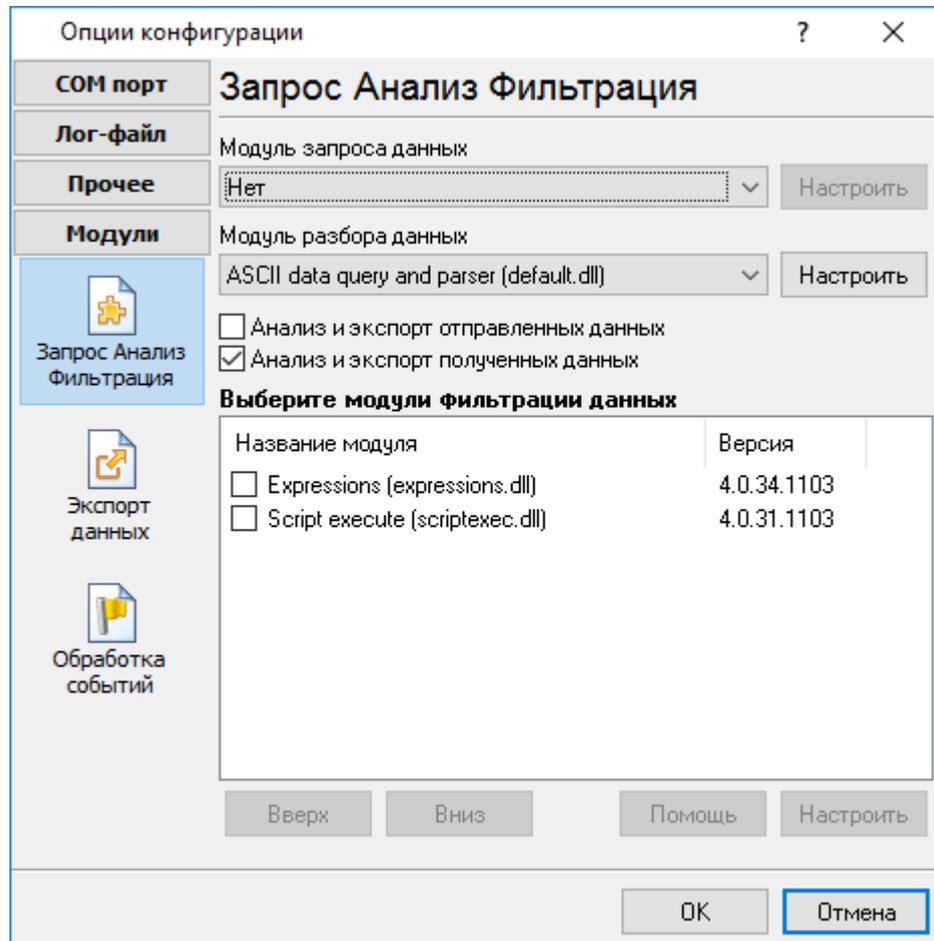
3. ,

Windows;

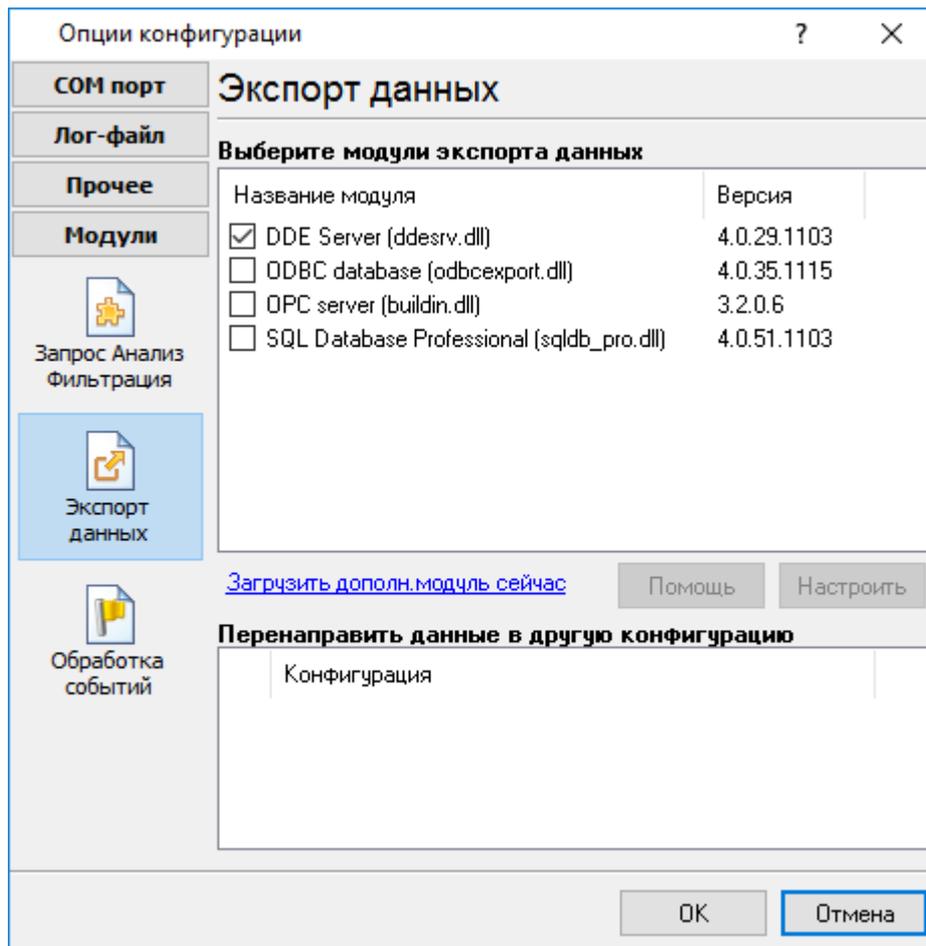
4. " " ;

5. " " ;

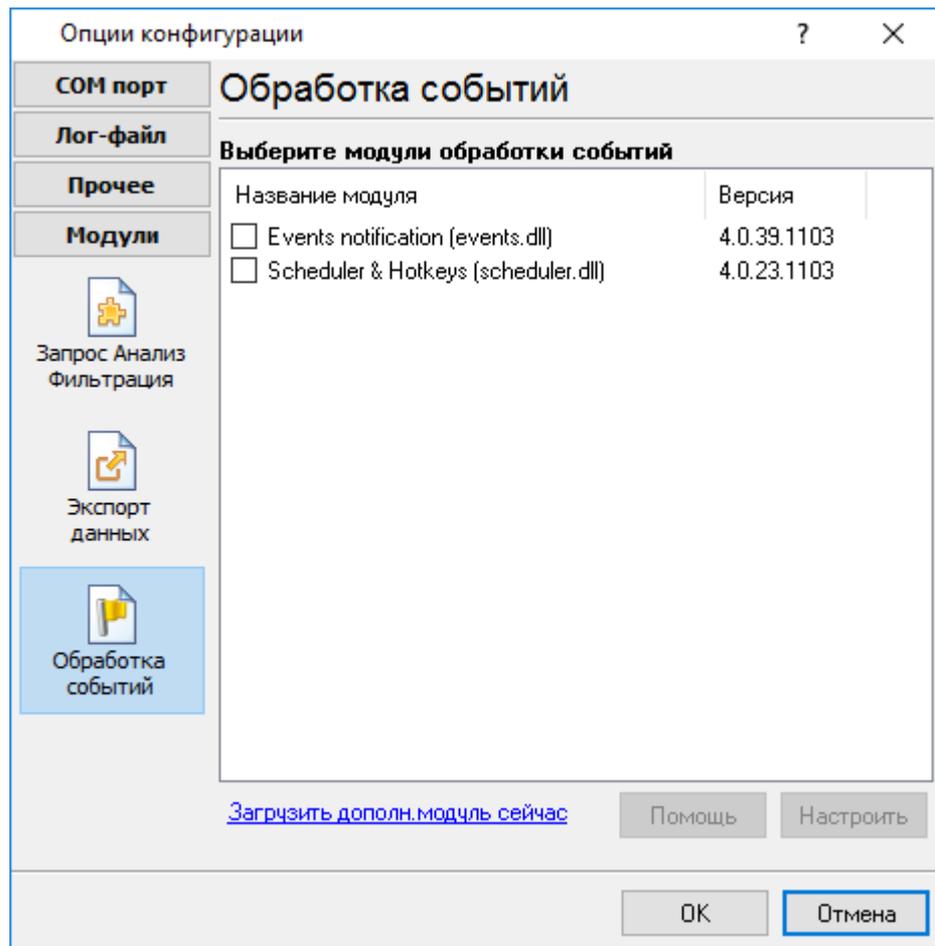
. 1-2.



. 1.



. 2.



. 3.

4

Plug-in -

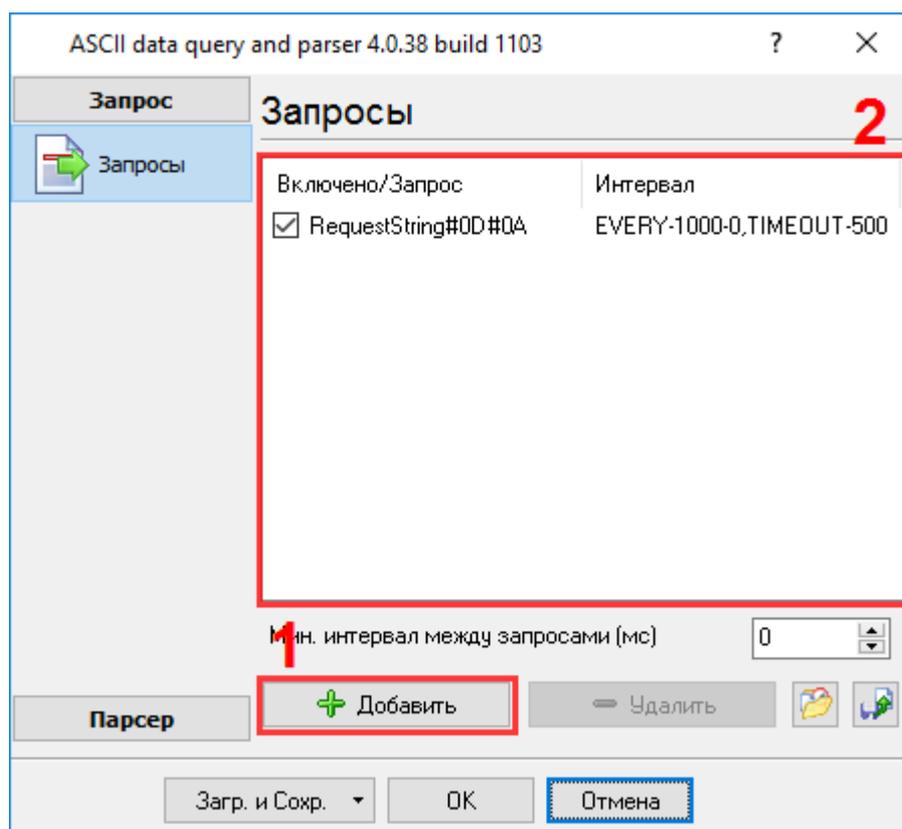
Advanced Serial Data Logger

5

2

(.1), (.2):

00:01:20;23:12:00;13:00:01.
59, : 1-59.
: */2 */3.
2 3



.1

(.2).

#XX, XX
0x02, INIT, 0x03.

"#02INIT#03"

.2.

: "[XYZD]" (), :

• X-

• Z-

- S - ;
- N - ;
- H - ;
- D - ;
- M - ;
- Y - ;
- U - 2 ;
- Y - , ;
- D - ;
- H - ;
- Z - , , /
- S - , D;
- Z - D.
- D - ()

Y, Z, D

D Y Z Z Y . . .

: 20050130
 : [[Y]][[MDZ2]][[DDZ2]],
 [[Y]] - 4 ;
 [[MDZ2]] - ;
 [[DDZ2]] - .

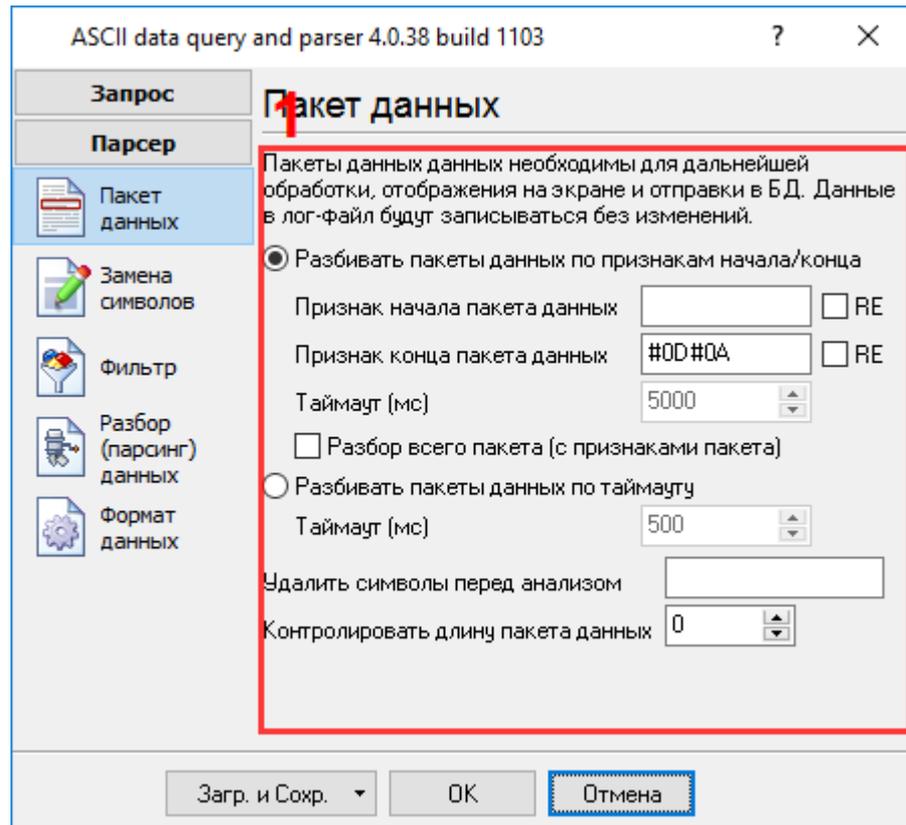
6

. ASCII data parser
ASCII

'
" (.3)

1. / -

2. ; -



.3.

1.

ASCII

0x0D, 0x0A

0x20h

<0x20h,

: #XX#XX (, #0D#0A).

• - : #02;

• - : #0D#0A;

00:01:55,

\d{2}\:\d{2}\:\d{2} RE

() - ,

2.

3.

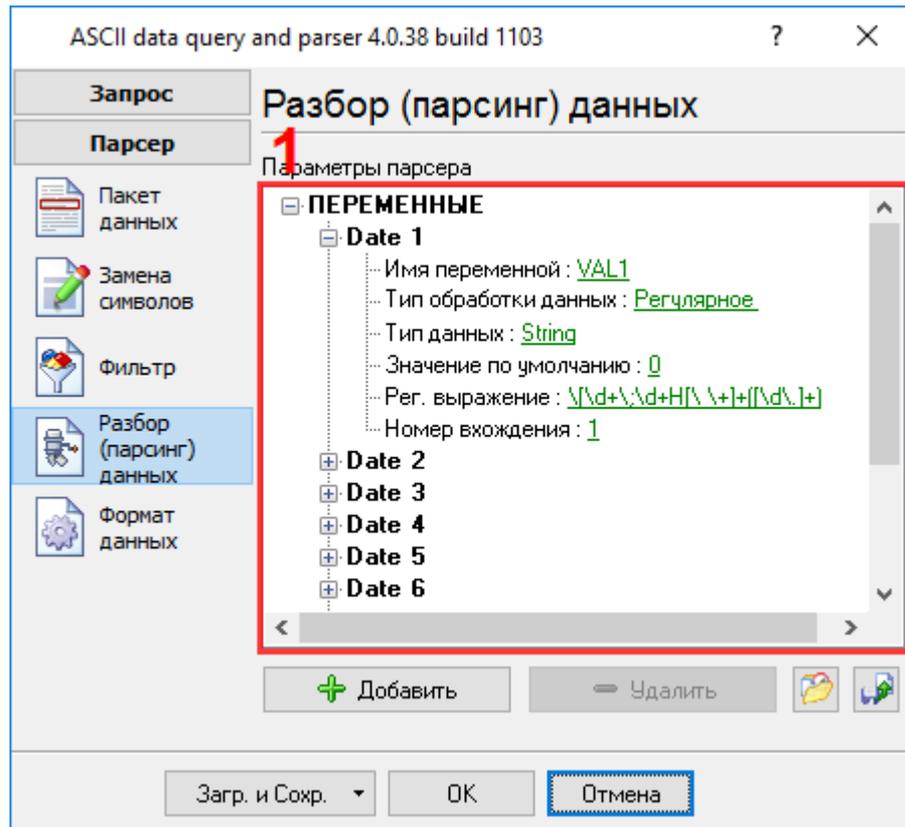
1.

ASCII

2.

0,

<https://www.aggsoft.ru/serial-data-logger/tutorials.htm>



.3.1

1.

```

:
),
223      741  09127 15: 53: 30 00: 05: 28 O
*****
223      741  09127 15: 56: 30 00: 01: 28 T
*****
(77
),
• - "15: 53: 30" - (8), :
  ( ) (26);
• "223" - ;
• "741" - ;
• "00: 05: 28" - -
" ( ) "
( - 4 )
,

```

" " " " ,
 : , , . .
 . ,
 , .
 2. - :
 223 741 09127 5: 21: 20 00: 05: 28 O *****
 5 13134 013 15: 53: 30 0: 05: 28 O *****

()
 (1..7),

3. - , NULL.

4. - , " ,
 " .

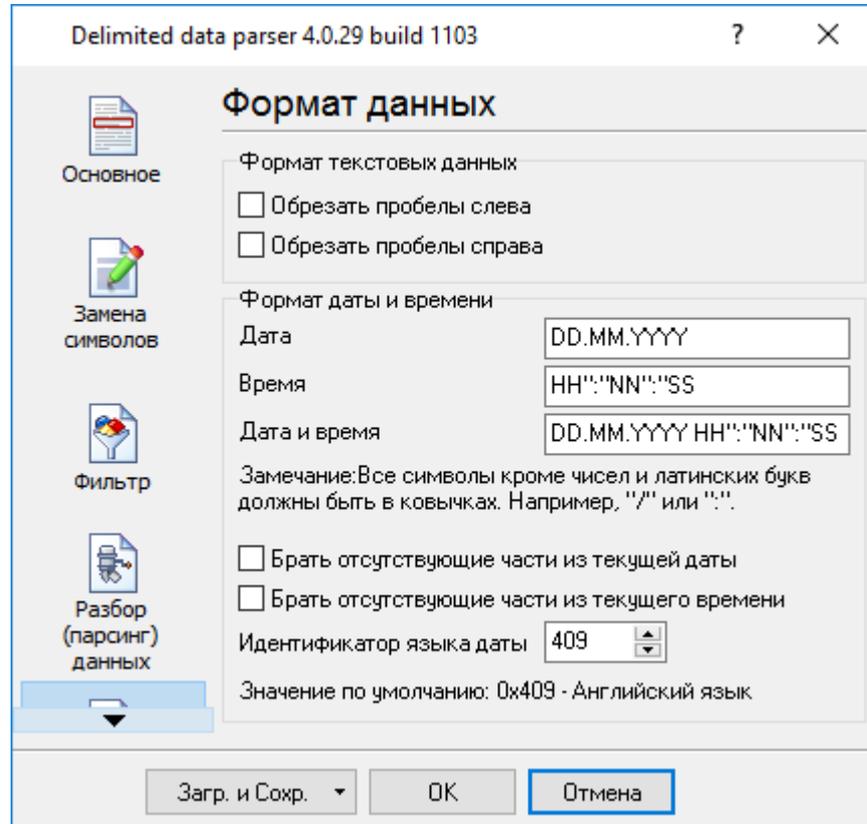
5. - ,
 () .

(\d+)
 ([A-F\d]+)
 (A.{2}\d{1,4})

- String - 1 65535 ;
- Memo - 1 2^32 ;
- Bytes - ;
- Blob - Binary Large Object field ();
- Boolean - (True/False) - 0 1;
- Float - : -2.9 x 10^39 .. 1.7 x 10^38
- Smallint - : 32768..32767;
- Word - : 0..65535;
- Integer - : -2147483648..2147483647;
- Date - ;
- Time - ;
- DateTime - .

7

(. . .).



. 4.

/ , - String.

Data Logger). : "/" / ":" (, Advanced Serial (. . .).

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).

```

```

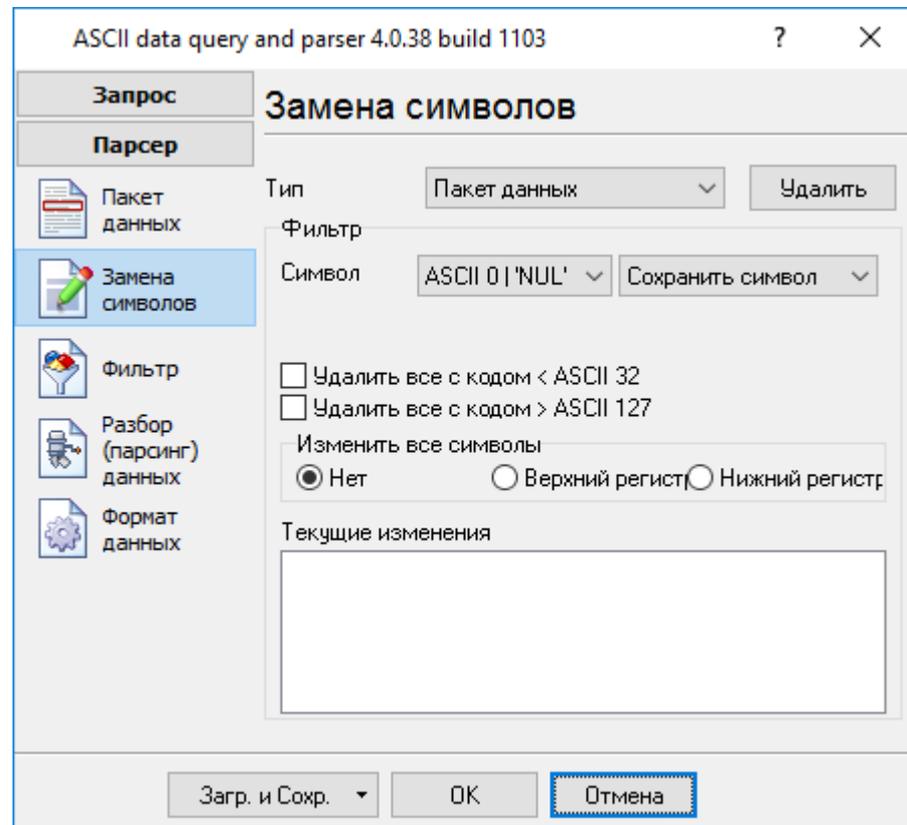
      - ( , )
      :
• ;
• .
      ( "Jan, 10 2024")
      ),
      (language ID),
      "
      ".

```

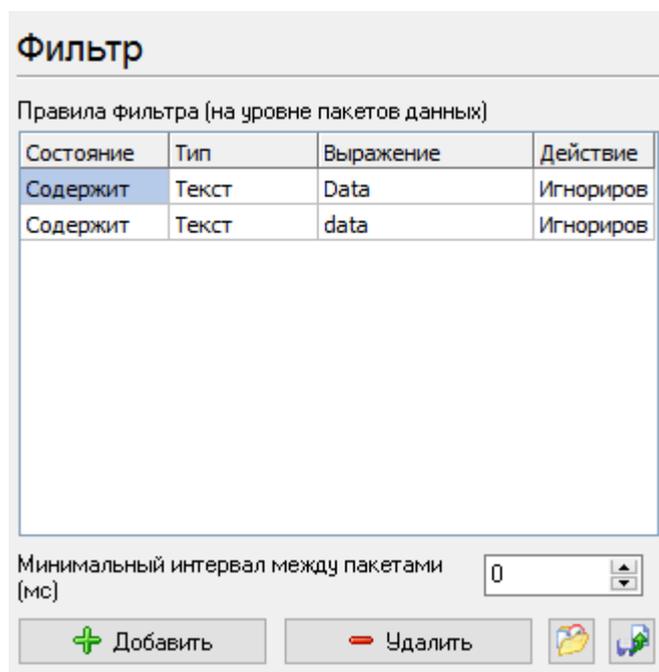
8

(.4)

ASCII.



.4



. 5.

10

| | | | |
|---|-------|----|-----|
| ? | {0,1} | a? | " . |
| + | {1,} | a+ | " . |
| * | {0,} | a* | " . |

" " (-) (U) .

g ()

i

m

s

u

U

x

UTF-8

()

[]

{a,b}

|

\

.

\d

\D

\f

\n

\pL

\r

[0-9]

[^d]

()

UTF-8

u

"a. "b.

[]

\s [\t\r\n\f]
 \S [^s]
 \t
 \w [0-9a-z_]
 \W [^\w]
 \v

^ [^da] , "d. "a.
 - [a-z] , "a. "z.

^ ^a aaa aaa
 \$ a\$ aaa aaa
 \A \Aa aaa aaa
 \Z a\z aaa aaa
 aaa aaa

\b a\b aaa aaa
 \ba aaa aaa

\B \Ba\B aaa aaa

\G \Ga aaa aaa

\{0-9\}+

^

. , \d 0 9 , \w
 , \W - ,
 \ws , :

() ' "a., : 10 20
 a{10,20}

- " .. +, " ,
 (" .),
 :

"*"

: , ,

 ,

:

"helloworld.htm" title=" " "

, , .

".*?"

(?) :

"helloworld.htm" " "

' , ' , " ,
 ' , ' ,
 " .. - ,
 ' ,
 " .. ,
 , ,

(" - .).

:

\.

· , ' , ,
, , ,

\ , ' !\$()*+.<>?[\^{}]

\Q , \E
\E , \Q

- , ,

(0 9 A F),

:

[A-Fa-f0-9]

' , 0 9 A F:

[^A-Fa-f0-9]

' ; " . ;
" . : "ab. "bc.:

(ab|bc)

\n, \n "aaa. "bbb., \1.
, , :

(aaa|bbb)[0-9]+\1

"aaa. "bbb.,
([0-9]+), \1.

```

, "aaa123bbb.
"aaa.
\1
Perl.
Perl
( /.),
:
(?i)pattern
-
,
,
:
\
\#[a-fA-F][0-9]{3, 6}
0x00-0xFF
0x[a-fA-F0-9]{2}
0.0000
([0-9]+(\.[0-9]{2})?)
JSON "name": "1234"
"name":\s*"([\^"]+)"
XML HTML name="1234"
name=([\^"]+)
value : 1234
value\s*:\s*(\d+)

```