



"HTTP parser"

1		1
2		1
3	HTTP parser	2
4		3
5		3
6		6
7		8
8		10
9		11

1

()
TCP (Advanced TCP/IP Data Logger Data Logger Suite)
HTTP

Hypertext Transfer Protocol (HTTP) . HTTP

(, -)

HTTP,

HTTP

HTTP;

(POST GET) HTTP ;

HTTP

-
-
-
-
-
-

2

HTTP parser :

: Windows 2000 SP4 ,

32-x 64-x

5 MB

(), Advanced Serial Data Logger.

4

Plug-in -

Advanced Serial Data Logger

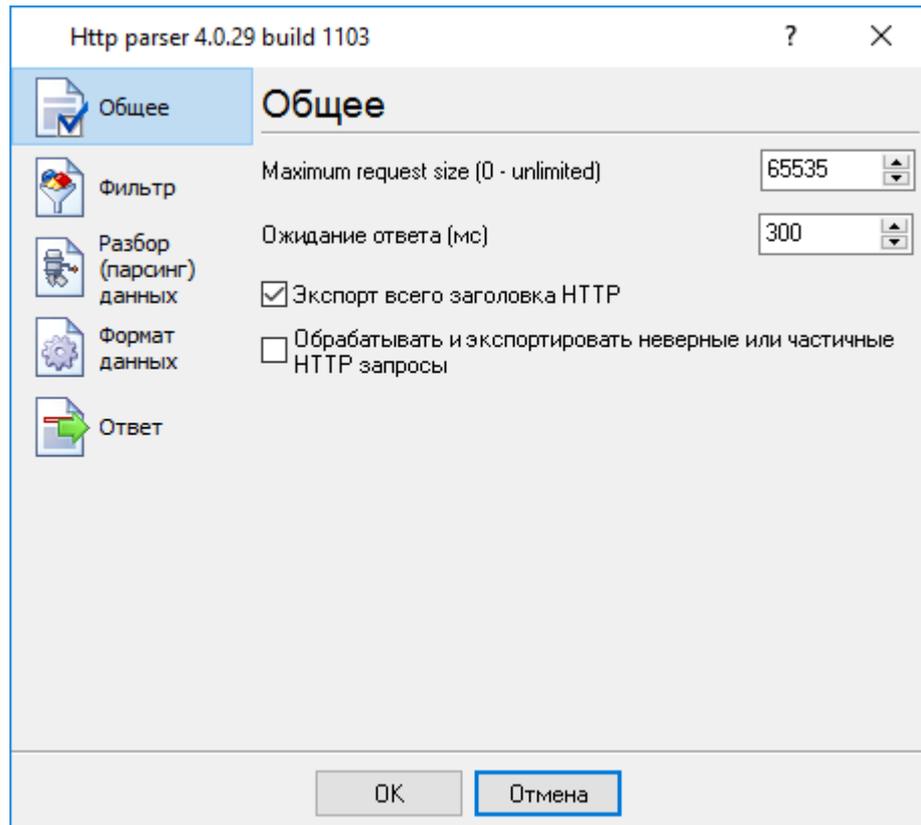
5

HTTP :

- GET /images/logo.gif HTTP/1.1.
- logo.gif /images
- , Accept-Language: en
-
-

(HTTP/1.1). <CR><LF>
<CR><LF>.
 , "Host"

HTTP
 POST- "multipart/mixed",



.1.

- . - HTTP .
- ; - HTTP ;
- HTTP - ,
- , " " ; HTTP -
- HTTP, ,

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

```
GET /js/some.js HTTP/1.1
Host: 127.0.0.1:10000
User-Agent: Mozilla/5.0 (Windows; U; Windows NT 5.1; rv:1.8.1.17) Gecko/20080829 Firefox/2.
```

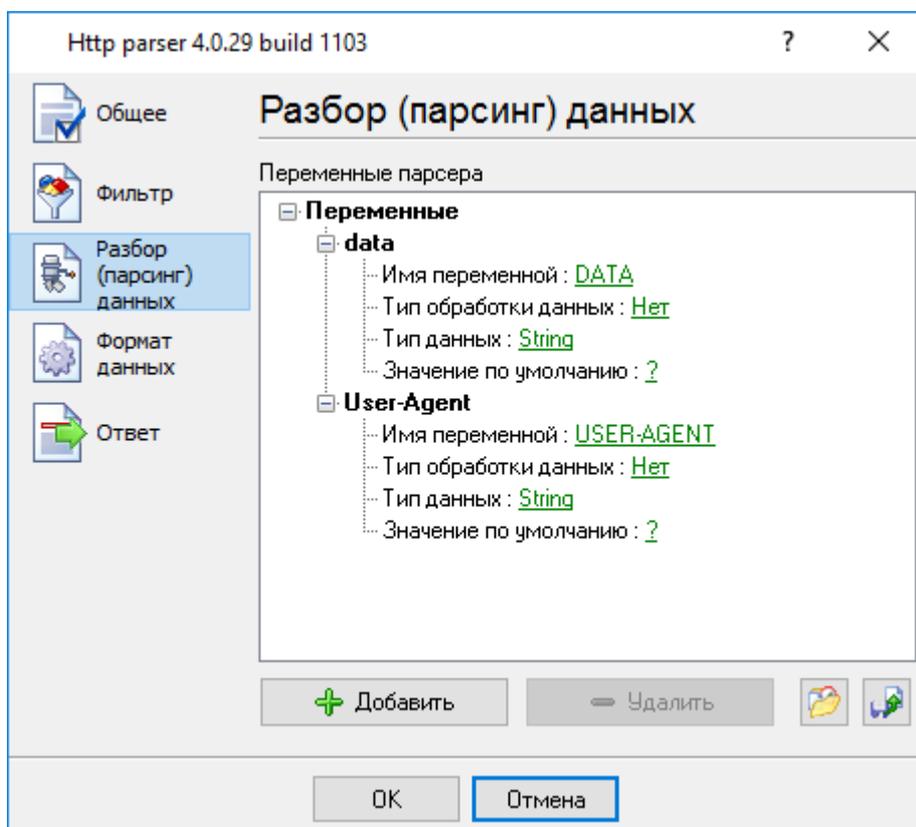
```

Accept: */*
Accept-Language: q=0.8,en-us;q=0.5,en;q=0.3
Accept-Charset: windows-1250,utf-8;q=0.7,*;q=0.7
Keep-Alive: 300
Connection: keep-alive
Referer: http://127.0.0.1:10000/incl/meta1.txt

```

- Host - "127.0.0.1:10000";
- User-Agent - ;

" (.2)
: string, date, time, . ..



.2.

1.

(HTTP .).

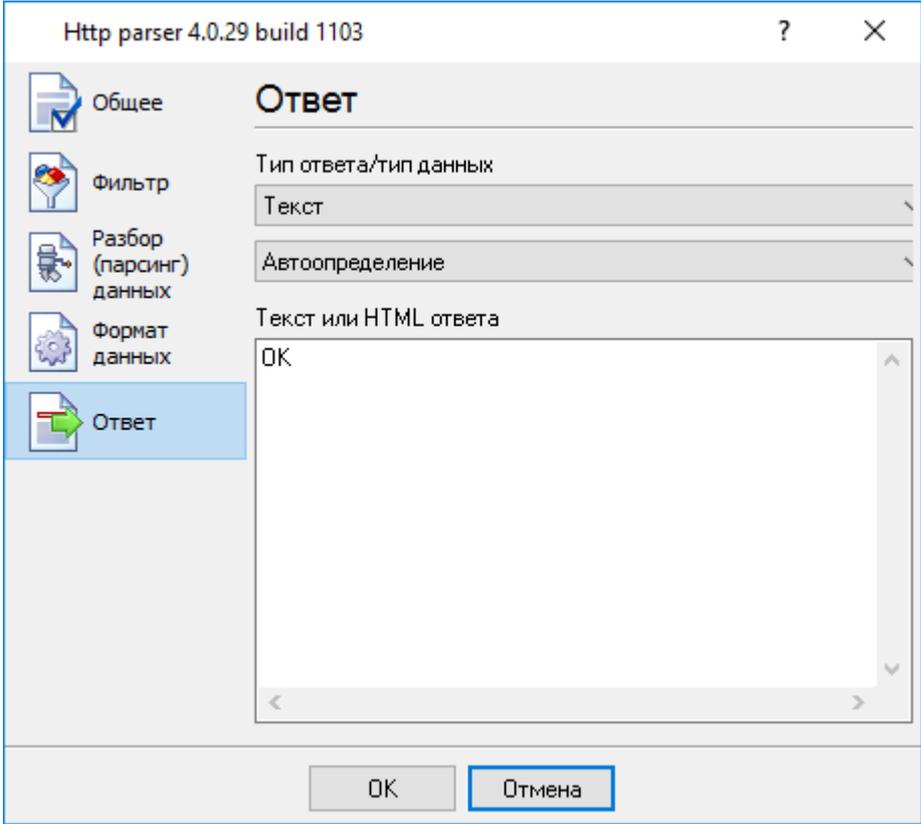
2.

3. HTTP (query string).
4. HTTP (POST GET). HTTP
5. - NULL. HTTP
6. - HTTP
7. . - ().

- 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 - .

6

HTML . " HTTP/1.1 200 OK",
HTTP.

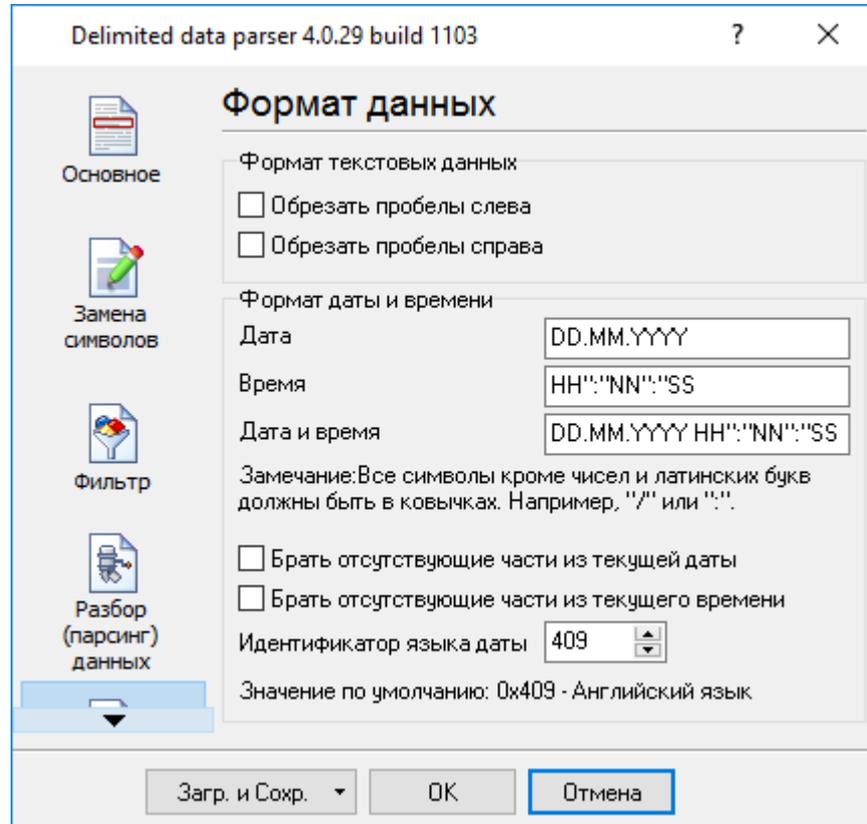


.5.

- HTTP
- 403 - HTTP 403 (Forbidden) ();
- 404 - HTTP 404 (Not Found) ();
- - HTML HTTP 200 (OK) ();
- - 200.
- - 404;
- - 404.
- - 200. " "

7

(. . .).



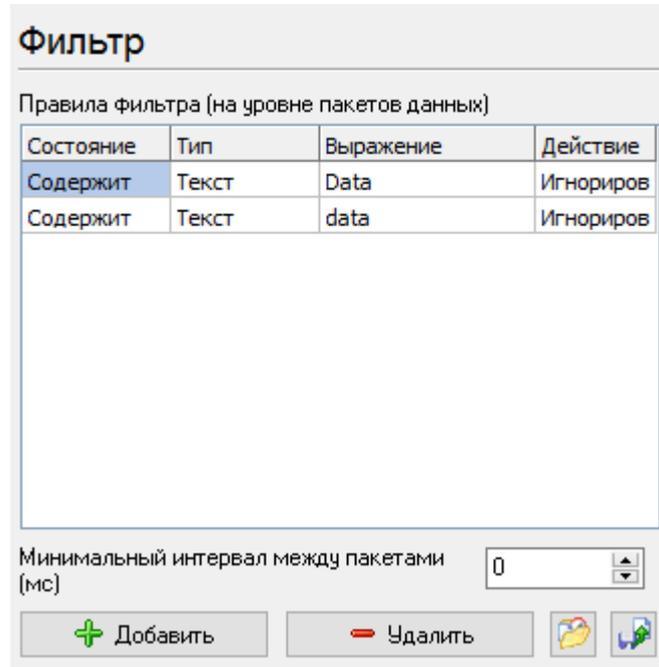
. 2.

/ , - String.

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

d - , (1 - 31);
 dd - , (01 - 31);
 ddd - (-) ,

8



.3.

9

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

" " (-) (U) .

g ()

i

m , ^ , \$- ,

s " . (.)

u UTF-8

U

x

() ,

[]

{a,b} "a. "b.

| " "

\ []

\d [0-9]

\D [^d]

\f ()

\n

\pL UTF-8

\r u

\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 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	4-	'	-	,
				a		

^[0-9]+

^

0 9 , \w
W -
:\nls

10 20
) "a.,
a{10,20}

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

 , "> ,

"helloworld.htm" title=" " , "

".*?"

(?) :

"helloworld.htm" " , "

.. -
" ..
" ..

aaa123bbb.
"aaa.
\1

Perl.
i

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+)