



"JSON parser"

1		1
2		1
3	JSON parser	1
4		2
5		3
1	.....	3
2	JSON .....	4
3	.....	6
4	.....	7
5	.....	8
6	.....	13

# 1

JSON

JSON

- HTTP, Advanced TCP/IP Data Logger.
- MQTT, Data Logger Suite.

# 2

JSON parser

: Windows 2000 SP4

32-x 64-x

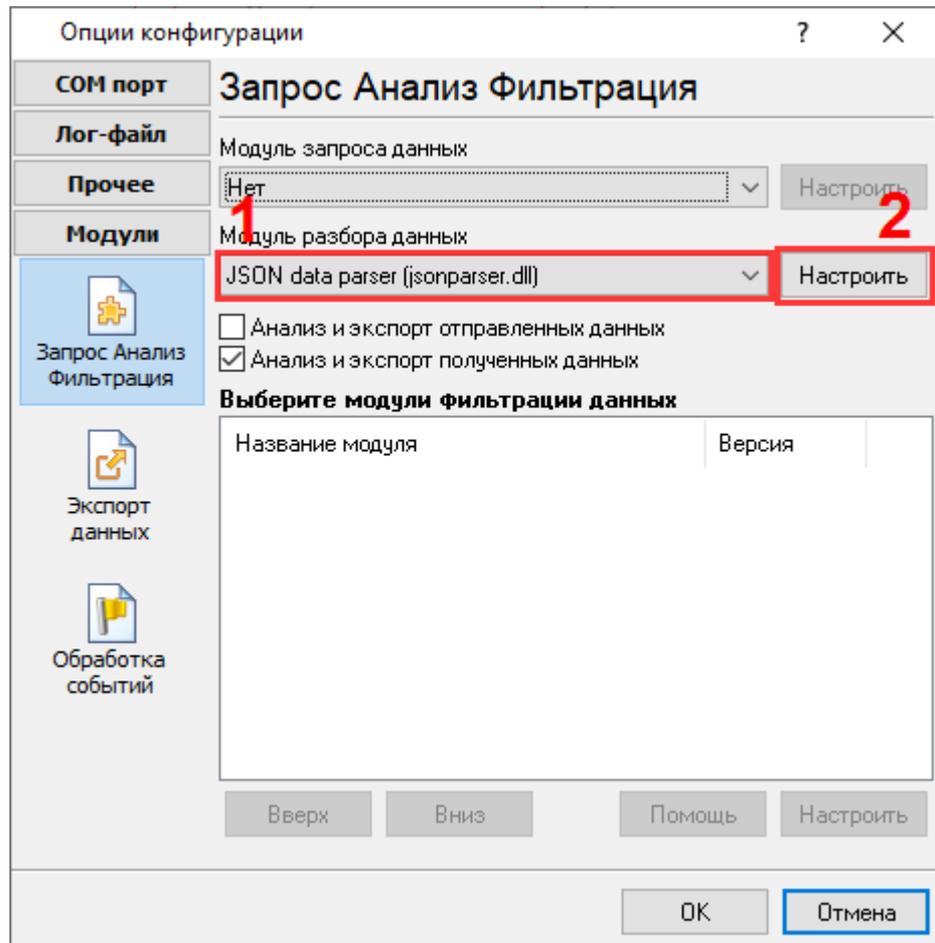
5 MB

( ), Advanced Serial Data Logger.

# 3

## JSON parser

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



.1.

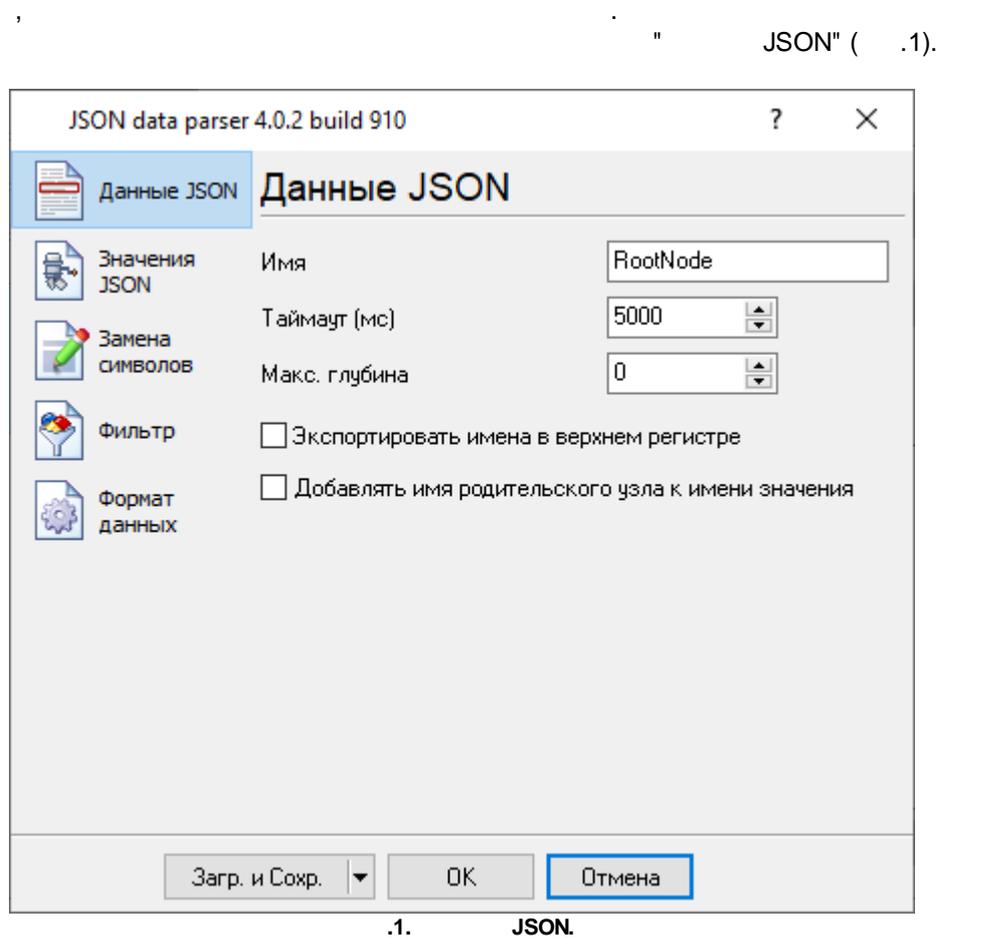
## 4

## Plug-in -

Advanced Serial Data Logger

## 5

## 5.1

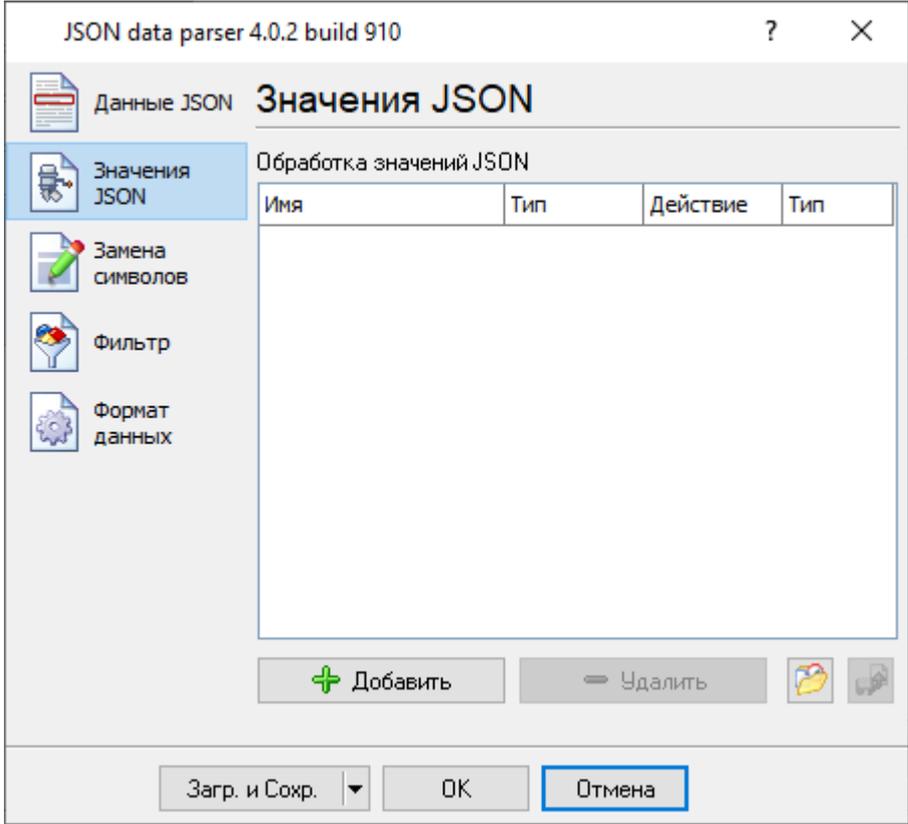


),    , Response.    (

JSON    :

```
{
  "root1":{
    "id":2,
    "int":123,
    "float":321.01,
  },
  "root2":{
    "id":2,
  }
}
```





.2. JSON.

- ( ).

- JSON :

,

• - ;

• - ;

- JSON

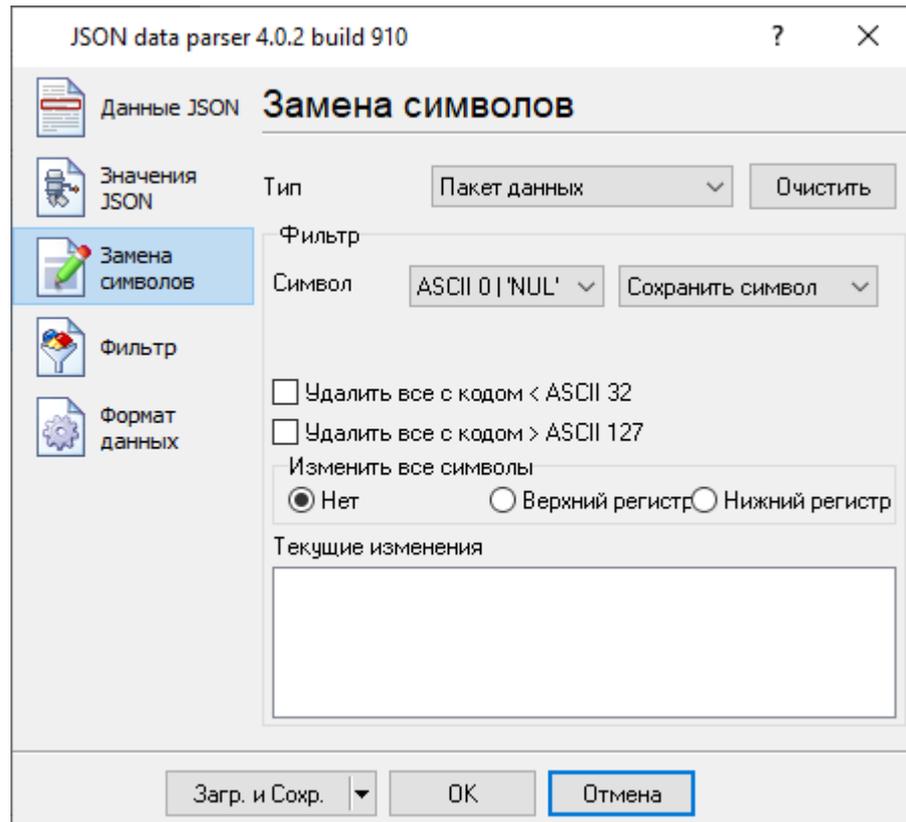
- String - 1 65535 ;
- Memo - 1 2^32 ;
- Bytes - ;
- Blob - Binary Large Object field ( );
- Boolean - (True/False) - 0 1;
- Float - : -2.9 x 10^39 .. 1.7 x 10^38
- Smallint - : 32768..32767;
- Word - : 0..65535;

- Integer - : -2147483648..2147483647;
- Date - ;
- Time - ;
- DateTime - .

### 5.3

(.3)

ASCII.



.3

## 5.4

**Фильтр**

Правила фильтра (на уровне пакетов данных)

Состояние	Тип	Выражение	Действие
Содержит	Текст	Data	Игнориров
Содержит	Текст	data	Игнориров

Минимальный интервал между пакетами (мс)

 Добавить  Удалить  

. 2.

### 5.5

?	{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

\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 -  
 \w\s

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

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

: , ,

<a href="helloworld.htm" title=" " > , </a>

:

"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.

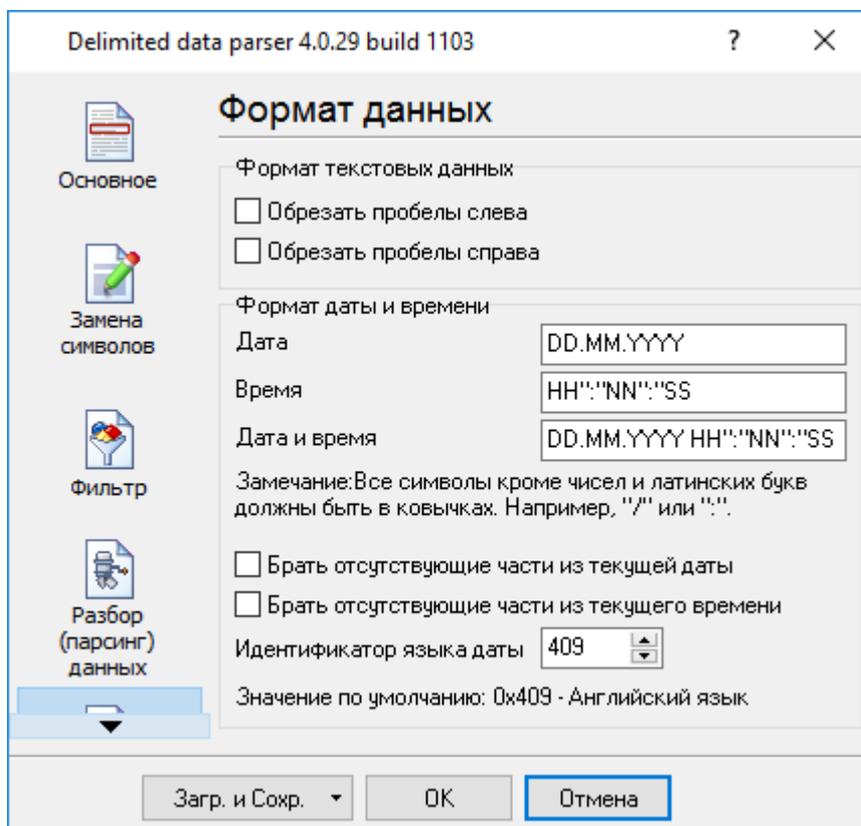
```

, "aaa123bbb.
"aaa.
\1
Perl.
Perl
( "/.),
:
(?:)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+)

```

## 5.6

( . . . ).



. 3.

/ , 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),
. " "

```