

7168bd79b8 ▾

...

yajl-ruby / ext / yajl / yajl\_buf.c



brianmario move to rake-compiler, Bundler

History

1 contributor

119 lines (102 sloc) | 3.21 KB

...

```
1  /*
2   * Copyright 2010, Lloyd Hilaiel.
3   *
4   * Redistribution and use in source and binary forms, with or without
5   * modification, are permitted provided that the following conditions are
6   * met:
7   *
8   * 1. Redistributions of source code must retain the above copyright
9   *   notice, this list of conditions and the following disclaimer.
10  *
11  * 2. Redistributions in binary form must reproduce the above copyright
12  *   notice, this list of conditions and the following disclaimer in
13  *   the documentation and/or other materials provided with the
14  *   distribution.
15  *
16  * 3. Neither the name of Lloyd Hilaiel nor the names of its
17  *   contributors may be used to endorse or promote products derived
18  *   from this software without specific prior written permission.
19  *
20  * THIS SOFTWARE IS PROVIDED BY THE AUTHOR ``AS IS'' AND ANY EXPRESS OR
21  * IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED
22  * WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE
23  * DISCLAIMED. IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY DIRECT,
24  * INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES
25  * (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR
26  * SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION)
27  * HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT,
28  * STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING
29  * IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE
```

```

30  * POSSIBILITY OF SUCH DAMAGE.
31  */
32
33  #include "yajl_buf.h"
34
35  #include <assert.h>
36  #include <stdlib.h>
37  #include <string.h>
38
39  #define YAJL_BUF_INIT_SIZE 2048
40
41  struct yajl_buf_t {
42      unsigned int len;
43      unsigned int used;
44      unsigned char * data;
45      yajl_alloc_funcs * alloc;
46  };
47
48  static
49  void yajl_buf_ensure_available(yajl_buf buf, unsigned int want)
50  {
51      unsigned int need;
52
53      assert(buf != NULL);
54
55      /* first call */
56      if (buf->data == NULL) {
57          buf->len = YAJL_BUF_INIT_SIZE;
58          buf->data = (unsigned char *) YA_MALLOC(buf->alloc, buf->len);
59          buf->data[0] = 0;
60      }
61
62      need = buf->len;
63
64      while (want >= (need - buf->used)) need <<= 1;
65
66      if (need != buf->len) {
67          buf->data = (unsigned char *) YA_REALLOC(buf->alloc, buf->data, need);
68          buf->len = need;
69      }
70  }
71
72  yajl_buf yajl_buf_alloc(yajl_alloc_funcs * alloc)
73  {
74      yajl_buf b = YA_MALLOC(alloc, sizeof(struct yajl_buf_t));
75      memset((void *) b, 0, sizeof(struct yajl_buf_t));
76      b->alloc = alloc;
77      return b;
78  }

```

```

79
80 void yajl_buf_free(yajl_buf buf)
81 {
82     assert(buf != NULL);
83     if (buf->data) YA_FREE(buf->alloc, buf->data);
84     YA_FREE(buf->alloc, buf);
85 }
86
87 void yajl_buf_append(yajl_buf buf, const void * data, unsigned int len)
88 {
89     yajl_buf_ensure_available(buf, len);
90     if (len > 0) {
91         assert(data != NULL);
92         memcpy(buf->data + buf->used, data, len);
93         buf->used += len;
94         buf->data[buf->used] = 0;
95     }
96 }
97
98 void yajl_buf_clear(yajl_buf buf)
99 {
100     buf->used = 0;
101     if (buf->data) buf->data[buf->used] = 0;
102 }
103
104 const unsigned char * yajl_buf_data(yajl_buf buf)
105 {
106     return buf->data;
107 }
108
109 unsigned int yajl_buf_len(yajl_buf buf)
110 {
111     return buf->used;
112 }
113
114 void
115 yajl_buf_truncate(yajl_buf buf, unsigned int len)
116 {
117     assert(len <= buf->used);
118     buf->used = len;
119 }

```