asn1_read_value(3)

NAME

asn1_read_value - API function

SYNOPSIS

#include <libtasn1.h>

int asn1_read_value(asn1_node root**, const char *** name**, void *** ivalue**, int *** len**);**

ARGUMENTS

asn1_node root pointer to a structure.

const char * name the name of the element inside a structure that you want to read.

void * ivalue vector that will contain the element's content, must be a pointer to memory cells already allocated (may be **NULL**).

int * len number of bytes of *value: value[0]..value[len-1]. Initialy holds the sizeof value.

DESCRIPTION

Returns the value of one element inside a structure. If an element is OPTIONAL and this returns **ASN1_ELEMENT_NOT_FOUND**, it means that this element wasn't present in the der encoding that created the structure. The first element of a SEQUENCE_OF or SET_OF is named "?1". The second one "?2" and so on.

Note that there can be valid values with length zero. In these case this function will succeed and len will be zero.

INTEGER

VALUE will contain a two's complement form integer.

integer=-1 -> value[0]=0xFF , len=1. integer=1 -> value[0]=0x01 , len=1.

ENUMERATED

As INTEGER (but only with not negative numbers).

BOOLEAN

VALUE will be the null terminated string "TRUE" or "FALSE" and LEN=5 or LEN=6.

OBJECT IDENTIFIER: VALUE will be a null terminated string with each number separated by a dot (i.e. "1.2.3.543.1").

LEN = strlen(VALUE)+1

UTCTIME

VALUE will be a null terminated string in one of these formats: "YYMMDDhhmmss+hh'mm"' or "YYMMDDhhmmss-hh'mm"'. LEN=strlen(VALUE)+1.

GENERALIZEDTIME

VALUE will be a null terminated string in the same format used to set the value.

OCTET STRING: VALUE will contain the octet string and LEN will be the number of octets.

GENERALSTRING

VALUE will contain the generalstring and LEN will be the number of octets.

BIT STRING: VALUE will contain the bit string organized by bytes and LEN will be the number of bits.

CHOICE

If NAME indicates a choice type, VALUE will specify the alternative selected.

ANY

If NAME indicates an any type, VALUE will indicate the DER encoding of the structure actually used.

RETURNS

ASN1_SUCCESS if value is returned, **ASN1_ELEMENT_NOT_FOUND** if name is not a valid element, **ASN1_VALUE_NOT_FOUND** if there isn't any value for the element selected, and **ASN1_MEM_ERROR** if The value vector isn't big enough to store the result, and in this case len will contain the number of bytes needed.

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SEE ALSO

The full documentation for **libtasn1** is maintained as a Texinfo manual. If the **info** and **libtasn1** programs are properly installed at your site, the command

info libtasn1

should give you access to the complete manual. As an alternative you may obtain the manual from:

http://www.gnu.org/software/libtasn1/manual/