Full credit is given to the above companies including the OS that this PDF file was generated!

Red Hat Enterprise Linux Release 9.2 Manual Pages on 'X509_NAME_get_index_by_OBJ.3ossl' command

$ man X509_NAME_get_index_by_OBJ.3ossl

X509_NAME_GET_INDEX_BY_NID(3ossl) OpenSSL X509_NAME_GET_INDEX_BY_NID(3ossl)

NAME

X509_NAME_get_index_by_NID, X509_NAME_get_index_by_OBJ,

X509_NAME_get_entry, X509_NAME_entry_count, X509_NAME_get_text_by_NID,

X509_NAME_get_text_by_OBJ - X509_NAME lookup and enumeration functions

SYNOPSIS

```
#include <openssl/x509.h>

int X509_NAME_get_index_by_NID(const X509_NAME *name, int nid, int lastpos);
int X509_NAME_get_index_by_OBJ(const X509_NAME *name,
                               const ASN1_OBJECT *obj, int lastpos);

int X509_NAME_entry_count(const X509_NAME *name);
X509_NAME_ENTRY *X509_NAME_get_entry(const X509_NAME *name, int loc);

int X509_NAME_get_text_by_NID(const X509_NAME *name, int nid,
                              char *buf, int len);
int X509_NAME_get_text_by_OBJ(const X509_NAME *name, const ASN1_OBJECT *obj,
                              char *buf, int len);
```

DESCRIPTION

These functions allow an X509_NAME structure to be examined. The X509_NAME structure is the same as the Name type defined in RFC2459 (and elsewhere) and used for example in certificate subject and issuer names.

X509_NAME_get_index_by_NID() and X509_NAME_get_index_by_OBJ() retrieve the next index matching nid or obj after lastpos. lastpos should initially be set to -1. If there are no more entries -1 is returned. If nid is invalid (doesn't correspond to a valid OID) then -2 is returned.

X509_NAME_entry_count() returns the total number of entries in name.

X509_NAME_get_entry() retrieves the X509_NAME_ENTRY from name corresponding to index loc. Acceptable values for loc run from 0 to (X509_NAME_entry_count(name) - 1). The value returned is an internal pointer which must not be freed.

X509_NAME_get_text_by_NID(), X509_NAME_get_text_by_OBJ() retrieve the "text" from the first entry in name which matches nid or obj, if no such entry exists -1 is returned. At most len bytes will be written and the text written to buf will be null terminated. The length of the output string written is returned excluding the terminating null. If buf is <NULL> then the amount of space needed in buf (excluding the final null) is returned.

NOTES

X509_NAME_get_text_by_NID() and X509_NAME_get_text_by_OBJ() should be considered deprecated because they have various limitations which make them of minimal use in practice. They can only find the first matching entry and will copy the contents of the field verbatim: this can be highly confusing if the target is a multicharacter string type like a BMPString or a UTF8String.

For a more general solution X509_NAME_get_index_by_NID() or
X509_NAME_get_index_by_OBJ() should be used followed by
X509_NAME_get_entry() on any matching indices and then the various
X509_NAME_ENTRY utility functions on the result.

The list of all relevant NID_* and OBJ_* codes can be found in the
source code header files <openssl/obj_mac.h> and/or
<openssl/objects.h>.

Applications which could pass invalid NIDs to
X509_NAME_get_index_by_NID() should check for the return value of -2.
Alternatively the NID validity can be determined first by checking
OBJ_nid2obj(nid) is not NULL.

RETURN VALUES

X509_NAME_get_index_by_NID() and X509_NAME_get_index_by_OBJ() return
the index of the next matching entry or -1 if not found.
X509_NAME_get_index_by_NID() can also return -2 if the supplied NID is
invalid.

X509_NAME_entry_count() returns the total number of entries.

X509_NAME_get_entry() returns an X509_NAME pointer to the requested
entry or NULL if the index is invalid.

EXAMPLES

Process all entries:

```
int i;
X509_NAME_ENTRY *e;

for (i = 0; i < X509_NAME_entry_count(nm); i++) {
```

```
    e = X509_NAME_get_entry(nm, i);
    /* Do something with e */
}
```

Process all commonName entries:

```
int lastpos = -1;
X509_NAME_ENTRY *e;

for (;;) {
    lastpos = X509_NAME_get_index_by_NID(nm, NID_commonName, lastpos);
    if (lastpos == -1)
        break;
    e = X509_NAME_get_entry(nm, lastpos);
    /* Do something with e */
}
```

SEE ALSO

ERR_get_error(3), d2i_X509_NAME(3)

COPYRIGHT