NAME

      X509_NAME_add_entry_by_txt, X509_NAME_add_entry_by_OBJ, X509_NAME_add_entry_by_NID,
      X509_NAME_add_entry, X509_NAME_delete_entry - X509_NAME modification functions

SYNOPSIS

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

int X509_NAME_add_entry_by_txt(X509_NAME *name, const char *field, int type, con

int X509_NAME_add_entry_by_OBJ(X509_NAME *name, const ASN1_OBJECT *obj, int type

int X509_NAME_add_entry_by_NID(X509_NAME *name, int nid, int type, const unsigne

int X509_NAME_add_entry(X509_NAME *name, const X509_NAME_ENTRY *ne, int loc, int

X509_NAME_ENTRY *X509_NAME_delete_entry(X509_NAME *name, int loc);
```

DESCRIPTION

      X509_NAME_add_entry_by_txt(),   *X509_NAME_add_entry_by_OBJ()*   and
      X509_NAME_add_entry_by_NID() add a field whose name is defined by a string **field**, an object **obj** or a
      NID **nid** respectively. The field value to be added is in **bytes** of length **len**. If **len** is -1 then the field length
      is calculated internally using strlen(bytes).

      The type of field is determined by **type** which can either be a definition of the type of **bytes** (such as
      MBSTRING_ASC) or a standard ASN1 type (such as **V_ASN1_IA5STRING**). The new entry is added to a
      position determined by **loc** and **set**.

      X509_NAME_add_entry() adds a copy of **X509_NAME_ENTRY** structure **ne** to **name**. The new entry is
      added to a position determined by **loc** and **set**. Since a copy of **ne** is added **ne** must be freed up after the
      call.

      X509_NAME_delete_entry() deletes an entry from **name** at position **loc**. The deleted entry is returned and
      must be freed up.

NOTES

      The use of string types such as **MBSTRING_ASC** or **MBSTRING_UTF8** is strongly recommended for the
      type parameter. This allows the internal code to correctly determine the type of the field and to apply length
      checks according to the relevant standards. This is done using *ASN1_STRING_set_by_NID()*.

      If instead an ASN1 type is used no checks are performed and the supplied data in **bytes** is used directly.

      In *X509_NAME_add_entry_by_txt()* the **field** string represents the field name using OBJ_txt2obj(field, 0).

      The **loc** and **set** parameters determine where a new entry should be added. For almost all applications **loc**
      can be set to -1 and **set** to 0. This adds a new entry to the end of **name** as a single valued
      RelativeDistinguishedName (RDN).

      loc actually determines the index where the new entry is inserted: if it is -1 it is appended.

      set determines how the new type is added. If it is zero a new RDN is created.

      If **set** is -1 or 1 it is added to the previous or next RDN structure respectively. This will then be a
      multivalued RDN: since multivalues RDNs are very seldom used **set** is almost always set to zero.

EXAMPLES

      Create an **X509_NAME** structure:

      "C=UK, O=Disorganized Organization, CN=Joe Bloggs"

```
X509_NAME *nm;
nm = X509_NAME_new();
if (nm == NULL)
/* Some error */
if (!X509_NAME_add_entry_by_txt(nm, "C", MBSTRING_ASC,
"UK", -1, -1, 0))
/* Error */
if (!X509_NAME_add_entry_by_txt(nm, "O", MBSTRING_ASC,
"Disorganized Organization", -1, -1, 0))
/* Error */
if (!X509_NAME_add_entry_by_txt(nm, "CN", MBSTRING_ASC,
"Joe Bloggs", -1, -1, 0))
/* Error */
```

RETURN VALUES

X509_NAME_add_entry_by_txt(), *X509_NAME_add_entry_by_OBJ()*, *X509_NAME_add_entry_by_NID()* and *X509_NAME_add_entry()* return 1 for success of 0 if an error occurred.

X509_NAME_delete_entry() returns either the deleted **X509_NAME_ENTRY** structure of **NULL** if an error occurred.

BUGS

type can still be set to **V_ASN1_APP_CHOOSE** to use a different algorithm to determine field types. Since this form does not understand multicharacter types, performs no length checks and can result in invalid field types its use is strongly discouraged.

SEE ALSO

ERR_get_error(3) , *d2i_X509_NAME(3)*

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