

NAME

`ares_create_query` – Compose a single-question DNS query buffer

SYNOPSIS

```
#include <ares.h>

int ares_create_query(const char *name,
                    int dnsclass,
                    int type,
                    unsigned short id,
                    int rd,
                    unsigned char **buf,
                    int *buflen,
                    int max_udp_size)
```

DESCRIPTION

The `ares_create_query(3)` function composes a DNS query with a single question. The parameter *name* gives the query name as a NUL-terminated C string of period-separated labels optionally ending with a period; periods and backslashes within a label must be escaped with a backslash.

The parameters *dnsclass* and *type* give the class and type of the query using the values defined in `<arpa/nameser.h>`.

The parameter *id* gives a 16-bit identifier for the query.

The parameter *rd* should be nonzero if recursion is desired, zero if not.

The query will be placed in an allocated buffer, a pointer to which will be stored in the variable pointed to by *buf*, and the length of which will be stored in the variable pointed to by *buflen*.

It is the caller's responsibility to free this buffer using `ares_free_string(3)` when it is no longer needed. The parameter *max_udp_size* should be nonzero to activate EDNS. Usage of `ares_create_query(3)` with *max_udp_size* set to zero is equivalent to using `ares_mkquery(3)`.

RETURN VALUES

`ares_create_query` can return any of the following values:

ARES_SUCCESS

Construction of the DNS query succeeded.

ARES_EBADNAME

The query name *name* could not be encoded as a domain name, either because it contained a zero-length label or because it contained a label of more than 63 characters.

ARES_ENOMEM

Memory was exhausted.

AVAILABILITY

Added in c-ares 1.10.0

SEE ALSO

`ares_expand_name(3)`, `ares_free_string(3)`, `ares_mkquery(3)`

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