

NAME

ERR_GET_LIB, ERR_GET_FUNC, ERR_GET_REASON - get library, function and reason code

SYNOPSIS

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

int ERR_GET_LIB(unsigned long e);

int ERR_GET_FUNC(unsigned long e);

int ERR_GET_REASON(unsigned long e);
```

DESCRIPTION

The error code returned by *ERR_get_error()* consists of a library number, function code and reason code. *ERR_GET_LIB()*, *ERR_GET_FUNC()* and *ERR_GET_REASON()* can be used to extract these.

The library number and function code describe where the error occurred, the reason code is the information about what went wrong.

Each sub-library of OpenSSL has a unique library number; function and reason codes are unique within each sub-library. Note that different libraries may use the same value to signal different functions and reasons.

ERR_R_... reason codes such as **ERR_R_MALLOC_FAILURE** are globally unique. However, when checking for sub-library specific reason codes, be sure to also compare the library number.

ERR_GET_LIB(), *ERR_GET_FUNC()* and *ERR_GET_REASON()* are macros.

RETURN VALUES

The library number, function code and reason code respectively.

SEE ALSO

[err\(3\)](#), [ERR_get_error\(3\)](#)

HISTORY

ERR_GET_LIB(), *ERR_GET_FUNC()* and *ERR_GET_REASON()* are available in all versions of SSLeay and OpenSSL.