

**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.