

NAME

ERR_error_string, ERR_error_string_n, ERR_lib_error_string, ERR_func_error_string,
ERR_reason_error_string - obtain human-readable error message

SYNOPSIS

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

```
char *ERR_error_string(unsigned long e, char *buf);  
void ERR_error_string_n(unsigned long e, char *buf, size_t len);
```

```
const char *ERR_lib_error_string(unsigned long e);  
const char *ERR_reason_error_string(unsigned long e);
```

Deprecated in OpenSSL 3.0:

```
const char *ERR_func_error_string(unsigned long e);
```

DESCRIPTION

ERR_error_string() generates a human-readable string representing the error code *e*, and places it at *buf*. *buf* must be at least 256 bytes long. If *buf* is **NULL**, the error string is placed in a static buffer. Note that this function is not thread-safe and does no checks on the size of the buffer; use **ERR_error_string_n()** instead.

ERR_error_string_n() is a variant of **ERR_error_string()** that writes at most *len* characters (including the terminating 0) and truncates the string if necessary. For **ERR_error_string_n()**, *buf* may not be **NULL**.

The string will have the following format:

```
error:[error code]:[library name]:[reason string]
```

error code is an 8 digit hexadecimal number, *library name* and *reason string* are ASCII text.

ERR_lib_error_string() and **ERR_reason_error_string()** return the library name and reason string respectively.

If there is no text string registered for the given error code, the error string will contain the numeric code.

ERR_print_errors(3) can be used to print all error codes currently in the queue.

RETURN VALUES

ERR_error_string() returns a pointer to a static buffer containing the string if *buf* == **NULL**, *buf* otherwise.

ERR_lib_error_string() and **ERR_reason_error_string()** return the strings, and **NULL** if none is registered for the error code.

ERR_func_error_string() returns **NULL**.

SEE ALSO

ERR_get_error(3), **ERR_print_errors(3)**

HISTORY

ERR_func_error_string() became deprecated in OpenSSL 3.0.

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