



Red Hat Enterprise Linux Release 9.2 Manual Pages on 'ERR_get_error.3ossl' command

\$ man ERR_get_error.3ossl

ERR_GET_ERROR(3ossl) OpenSSL ERR_GET_ERROR(3ossl)

NAME

ERR_get_error, ERR_peek_error, ERR_peek_last_error, ERR_get_error_line,
ERR_peek_error_line, ERR_peek_last_error_line, ERR_peek_error_func,
ERR_peek_last_error_func, ERR_peek_error_data,
ERR_peek_last_error_data, ERR_get_error_all, ERR_peek_error_all,
ERR_peek_last_error_all, ERR_get_error_line_data,
ERR_peek_error_line_data, ERR_peek_last_error_line_data - obtain error
code and data

SYNOPSIS

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

unsigned long ERR_get_error(void);
unsigned long ERR_peek_error(void);
unsigned long ERR_peek_last_error(void);
unsigned long ERR_peek_error_line(const char **file, int *line);
unsigned long ERR_peek_last_error_line(const char **file, int *line);
unsigned long ERR_peek_error_func(const char **func);
unsigned long ERR_peek_last_error_func(const char **func);
unsigned long ERR_peek_error_data(const char **data, int *flags);
unsigned long ERR_peek_last_error_data(const char **data, int *flags);
unsigned long ERR_get_error_all(const char **file, int *line,
                                const char **func,
                                const char **data, int *flags);
```

```

unsigned long ERR_peek_error_all(const char **file, int *line,
                                const char **func,
                                const char **data, int *flags);
unsigned long ERR_peek_last_error_all(const char **file, int *line,
                                      const char *func,
                                      const char **data, int *flags);

```

The following functions have been deprecated since OpenSSL 3.0, and can be hidden entirely by defining `OPENSSL_API_COMPAT` with a suitable version value, see `openssl_user_macros(7)`:

```

unsigned long ERR_get_error_line(const char **file, int *line);
unsigned long ERR_get_error_line_data(const char **file, int *line,
                                      const char **data, int *flags);
unsigned long ERR_peek_error_line_data(const char **file, int *line,
                                       const char **data, int *flags);
unsigned long ERR_peek_last_error_line_data(const char **file, int *line,
                                            const char **data, int *flags);

```

DESCRIPTION

`ERR_get_error()` returns the earliest error code from the thread's error queue and removes the entry. This function can be called repeatedly until there are no more error codes to return.

`ERR_peek_error()` returns the earliest error code from the thread's error queue without modifying it.

`ERR_peek_last_error()` returns the latest error code from the thread's error queue without modifying it.

See `ERR_GET_LIB(3)` for obtaining further specific information such as the reason of the error, and `ERR_error_string(3)` for human-readable error messages.

`ERR_get_error_all()` is the same as `ERR_get_error()`, but on success it additionally stores the filename, line number and function where the error occurred in `*file`, `*line` and `*func`, and also extra text and flags in `*data`, `*flags`. If any of those parameters are `NULL`, it will not be changed. An unset filename is indicated as `""`, i.e. an empty string. An unset line number is indicated as `0`. An unset function name is

indicated as "", i.e. an empty string.

A pointer returned this way by these functions and the ones below is valid until the respective entry is overwritten in the error queue.

ERR_peek_error_line() and ERR_peek_last_error_line() are the same as ERR_peek_error() and ERR_peek_last_error(), but on success they additionally store the filename and line number where the error occurred in *file and *line, as far as they are not NULL. An unset filename is indicated as "", i.e., an empty string. An unset line number is indicated as 0.

ERR_peek_error_func() and ERR_peek_last_error_func() are the same as ERR_peek_error() and ERR_peek_last_error(), but on success they additionally store the name of the function where the error occurred in *func, unless it is NULL. An unset function name is indicated as "".

ERR_peek_error_data() and ERR_peek_last_error_data() are the same as ERR_peek_error() and ERR_peek_last_error(), but on success they additionally store additional data and flags associated with the error code in *data and *flags, as far as they are not NULL. Unset data is indicated as "". In this case the value given for the flag is irrelevant (and equals 0). *data contains a string if *flags&ERR_TXT_STRING is true.

ERR_peek_error_all() and ERR_peek_last_error_all() are combinations of all of the above.

ERR_get_error_line(), ERR_get_error_line_data(),

ERR_peek_error_line_data() and ERR_peek_last_error_line_data() are older variants of ERR_get_error_all(), ERR_peek_error_all() and ERR_peek_last_error_all(), and may give confusing results. They should no longer be used and are therefore deprecated.

An application MUST NOT free the *data pointer (or any other pointers returned by these functions) with OPENSSL_free() as freeing is handled automatically by the error library.

RETURN VALUES

The error code, or 0 if there is no error in the queue.

SEE ALSO

ERR_error_string(3), ERR_GET_LIB(3)

HISTORY

ERR_peek_error_func(), ERR_peek_last_error_func(),
ERR_peek_error_data(), ERR_peek_last_error_data(), ERR_peek_error_all()
and ERR_peek_last_error_all() were added in OpenSSL 3.0.
ERR_get_error_line(), ERR_get_error_line_data(),
ERR_peek_error_line_data() and ERR_peek_last_error_line_data() became
deprecated in OpenSSL 3.0.

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