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## **Red Hat Enterprise Linux Release 9.2 Manual Pages on 'ERR\_peek\_error.3ossl' command**

**\$ man ERR\_peek\_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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3.0.7                    2023-07-13            ERR\_GET\_ERROR(3openssl)