



## ***Rocky Enterprise Linux 9.2 Manual Pages on command 'error\_at\_line.3'***

**C:\>man error\_at\_line.3**

ERROR(3)                   Linux Programmer's Manual                   ERROR(3)

### NAME

error, error\_at\_line, error\_message\_count, error\_one\_per\_line, error\_print\_progname  
- glibc error reporting functions

### SYNOPSIS

```
#include <error.h>

void error(int status, int errnum, const char *format, ...);
void error_at_line(int status, int errnum, const char *filename,
                  unsigned int linenum, const char *format, ...);

extern unsigned int error_message_count;
extern int error_one_per_line;
extern void (*error_print_progname) (void);
```

### DESCRIPTION

error() is a general error-reporting function. It flushes stdout, and then outputs to stderr the program name, a colon and a space, the message specified by the printf(3)-style format string format, and, if errnum is nonzero, a second colon and a space followed by the string given by strerror(errnum). Any arguments required for format should follow format in the argument list. The output is terminated by a newline character.

The program name printed by error() is the value of the global variable program\_invocation\_name(3). program\_invocation\_name initially has the same value as main()'s argv[0]. The value of this variable can be modified to change the output of er?

ror()).

If status has a nonzero value, then error() calls exit(3) to terminate the program using the given value as the exit status.

The error\_at\_line() function is exactly the same as error(), except for the addition of the arguments filename and linenum. The output produced is as for error(), except that after the program name are written: a colon, the value of filename, a colon, and the value of linenum. The preprocessor values \_\_LINE\_\_ and \_\_FILE\_\_ may be useful when calling error\_at\_line(), but other values can also be used. For example, these arguments could refer to a location in an input file.

If the global variable error\_one\_per\_line is set nonzero, a sequence of error\_at\_line() calls with the same value of filename and linenum will result in only one message (the first) being output.

The global variable error\_message\_count counts the number of messages that have been output by error() and error\_at\_line().

If the global variable error\_print\_progname is assigned the address of a function (i.e., is not NULL), then that function is called instead of prefixing the message with the program name and colon. The function should print a suitable string to stderr.

## ATTRIBUTES

For an explanation of the terms used in this section, see attributes(7).

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?Interface ? Attribute ? Value ?

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?error() ? Thread safety ? MT-Safe locale ?

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?error\_at\_line() ? Thread safety ? MT-Unsafe race: error\_at\_line/er? ?

? ? ?ror\_one\_per\_line locale ?

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The internal error\_one\_per\_line variable is accessed (without any form of synchronization, but since it's an int used once, it should be safe enough) and, if error\_one\_per\_line is set nonzero, the internal static variables (not exposed to users) used to hold the last printed filename and line number are accessed and modified without synchronization; the update is not atomic and it occurs before dis?

abling cancellation, so it can be interrupted only after one of the two variables is modified. After that, `error_at_line()` is very much like `error()`.

#### CONFORMING TO

These functions and variables are GNU extensions, and should not be used in programs intended to be portable.

#### SEE ALSO

`err(3)`, `errno(3)`, `exit(3)`, `perror(3)`, `program_invocation_name(3)`, `strerror(3)`

#### COLOPHON

This page is part of release 5.05 of the Linux man-pages project. A description of the project, information about reporting bugs, and the latest version of this page, can be found at <https://www.kernel.org/doc/man-pages/>.

GNU

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