

NAME

err, verr, errx, verrx, warn, vwarn, warnx, vwarnx - formatted error messages

SYNOPSIS

```
#include <err.h>

void err(int eval, const char *fmt, ...);
void errx(int eval, const char *fmt, ...);
void warn(const char *fmt, ...);
void warnx(const char *fmt, ...);

#include <stdarg.h>

void verr(int eval, const char *fmt, va_list args);
void verrx(int eval, const char *fmt, va_list args);
void vwarn(const char *fmt, va_list args);
void vwarnx(const char *fmt, va_list args);
```

DESCRIPTION

The **err()** and **warn()** family of functions display a formatted error message on the standard error output. In all cases, the last component of the program name, a colon character, and a space are output. If the *fmt* argument is not NULL, the [printf\(3\)](#)-like formatted error message is output. The output is terminated by a newline character.

The **err()**, **verr()**, **warn()**, and **vwarn()** functions append an error message obtained from [strerror\(3\)](#) based on the global variable *errno*, preceded by another colon and space unless the *fmt* argument is NULL.

The **errx()** and **warnx()** functions do not append an error message.

The **err()**, **verr()**, **errx()**, and **verrx()** functions do not return, but exit with the value of the argument *eval*.

ATTRIBUTES

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

Interface	Attribute	Value
err() , errx() , warn() , warnx() , verr() , verrx() , vwarn() , vwarnx()	Thread safety	MT-Safe locale

CONFORMING TO

These functions are nonstandard BSD extensions.

EXAMPLE

Display the current *errno* information string and exit:

```
p = malloc(size);
if (p == NULL)
err(1, NULL);
fd = open(file_name, O_RDONLY, 0);
if (fd == -1)
err(1, "%s", file_name);
```

Display an error message and exit:

```
if (tm.tm_hour < START_TIME)
errx(1, "too early, wait until %s", start_time_string);
```

Warn of an error:

```
fd = open(raw_device, O_RDONLY, 0);
if (fd == -1)
warnx("%s: %s: trying the block device",
raw_device, strerror(errno));
fd = open(block_device, O_RDONLY, 0);
if (fd == -1)
err(1, "%s", block_device);
```

SEE ALSO

[error\(3\)](#), [exit\(3\)](#), [perror\(3\)](#), [printf\(3\)](#), [strerror\(3\)](#)

COLOPHON

This page is part of release 4.10 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/>.