

NAME

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

LIBRARY

Standard C library (*libc*, *-lc*)

SYNOPSIS

```
#include <err.h>

[[noreturn]] void err(int eval, const char *fmt, ...);
[[noreturn]] void errx(int eval, const char *fmt, ...);

void warn(const char *fmt, ...);
void warnx(const char *fmt, ...);

#include <stdarg.h>

[[noreturn]] void verr(int eval, const char *fmt, va_list args);
[[noreturn]] 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

STANDARDS

These functions are nonstandard BSD extensions.

EXAMPLES

Display the current *errno* information string and exit:

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

Display an error message and exit:

```
if (tm.tm_hour < START_TIME)
    errx(EXIT_FAILURE, "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(EXIT_FAILURE, "%s", block_device);
```

SEE ALSO**error(3), exit(3), perror(3), printf(3), strerror(3)**