

NAME

fchmodat – change permissions of a file relative to a directory file descriptor

SYNOPSIS

```
#define _ATFILE_SOURCE
#include <fcntl.h> /* Definition of AT_* constants */
#include <sys/stat.h>
```

```
int fchmodat(int dirfd, const char *pathname, mode_t mode, int flags);
```

DESCRIPTION

The **fchmodat**() system call operates in exactly the same way as **chmod**(2), except for the differences described in this manual page.

If the *pathname* given in *pathname* is relative, then it is interpreted relative to the directory referred to by the file descriptor *dirfd* (rather than relative to the current working directory of the calling process, as is done by **chmod**(2) for a relative *pathname*).

If *pathname* is relative and *dirfd* is the special value **AT_FDCWD**, then *pathname* is interpreted relative to the current working directory of the calling process (like **chmod**(2)).

If *pathname* is absolute, then *dirfd* is ignored.

flags can either be 0, or include the following flag:

AT_SYMLINK_NOFOLLOW

If *pathname* is a symbolic link, do not dereference it: instead operate on the link itself. This flag is not currently implemented.

RETURN VALUE

On success, **fchmodat**() returns 0. On error, **-1** is returned and *errno* is set to indicate the error.

ERRORS

The same errors that occur for **chmod**(2) can also occur for **fchmodat**(). The following additional errors can occur for **fchmodat**():

EBADF

dirfd is not a valid file descriptor.

EINVAL

Invalid flag specified in *flags*.

ENOTDIR

pathname is relative and *dirfd* is a file descriptor referring to a file other than a directory.

ENOTSUP

flags specified **AT_SYMLINK_NOFOLLOW**, which is not supported.

VERSIONS

fchmodat() was added to Linux in kernel 2.6.16.

CONFORMING TO

POSIX.1-2008.

NOTES

See **openat**(2) for an explanation of the need for **fchmodat**().

SEE ALSO

chmod(2), **openat**(2), **path_resolution**(7), **symlink**(7)

COLOPHON

This page is part of release 3.22 of the Linux *man-pages* project. A description of the project, and information about reporting bugs, can be found at <http://www.kernel.org/doc/man-pages/>.