

NAME

`renameat` – rename a file relative to directory file descriptors

SYNOPSIS

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

```
int renameat(int olddirfd, const char *oldpath,
             int newdirfd, const char *newpath);
```

DESCRIPTION

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

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

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

If *oldpath* is absolute, then *olddirfd* is ignored.

The interpretation of *newpath* is as for *oldpath*, except that a relative pathname is interpreted relative to the directory referred to by the file descriptor *newdirfd*.

RETURN VALUE

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

ERRORS

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

EBADF

olddirfd or *newdirfd* is not a valid file descriptor.

ENOTDIR

oldpath is relative and *olddirfd* is a file descriptor referring to a file other than a directory; or similar for *newpath* and *newdirfd*

VERSIONS

renameat() 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 **renameat()**.

SEE ALSO

openat(2), **rename(2)**, **path_resolution(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/>.