

NAME

`unlinkat` – remove a directory entry relative to a directory file descriptor

SYNOPSIS

```
#define _ATFILE_SOURCE
#include <fcntl.h>
```

```
int unlinkat(int dirfd, const char *pathname, int flags);
```

DESCRIPTION

The `unlinkat()` system call operates in exactly the same way as either `unlink(2)` or `rmdir(2)` (depending on whether or not *flags* includes the `AT_REMOVEDIR` flag) 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 `unlink(2)` and `rmdir(2)` for a relative *pathname*).

If the *pathname* given in *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 `unlink(2)` and `rmdir(2)`).

If the *pathname* given in *pathname* is absolute, then *dirfd* is ignored.

flags is a bit mask that can either be specified as 0, or by ORing together flag values that control the operation of `unlinkat()`. Currently only one such flag is defined:

AT_REMOVEDIR

By default, `unlinkat()` performs the equivalent of `unlink(2)` on *pathname*. If the `AT_REMOVEDIR` flag is specified, then performs the equivalent of `rmdir(2)` on *pathname*.

RETURN VALUE

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

ERRORS

The same errors that occur for `unlink(2)` and `rmdir(2)` can also occur for `unlinkat()`. The following additional errors can occur for `unlinkat()`:

EBADF

dirfd is not a valid file descriptor.

EINVAL

An invalid flag value was specified in *flags*.

ENOTDIR

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

VERSIONS

`unlinkat()` was added to Linux in kernel 2.6.16.

CONFORMING TO

POSIX.1-2008. A similar system call exists on Solaris.

NOTES

See `openat(2)` for an explanation of the need for `unlinkat()`.

SEE ALSO

`openat(2)`, `rmdir(2)`, `unlink(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/>.