

## NAME

`uidaccess`, `eaccess` - check effective user's permissions for a file

## SYNOPSIS

```
#define _GNU_SOURCE /* See feature\_test\_macros\(7\) */
#include <unistd.h>

int uidaccess(const char *pathname, int mode);
int eaccess(const char *pathname, int mode);
```

## DESCRIPTION

Like [access\(2\)](#), `uidaccess()` checks permissions and existence of the file identified by its argument `pathname`. However, whereas [access\(2\)](#) performs checks using the real user and group identifiers of the process, `uidaccess()` uses the effective identifiers.

`mode` is a mask consisting of one or more of `R_OK`, `W_OK`, `X_OK`, and `F_OK`, with the same meanings as for [access\(2\)](#).

`eaccess()` is a synonym for `uidaccess()`, provided for compatibility with some other systems.

## RETURN VALUE

On success (all requested permissions granted), zero is returned. On error (at least one bit in `mode` asked for a permission that is denied, or some other error occurred), -1 is returned, and `errno` is set appropriately.

## ERRORS

As for [access\(2\)](#).

## VERSIONS

The `eaccess()` function was added to glibc in version 2.4.

## ATTRIBUTES

**Multithreading (see [pthreads\(7\)](#))**

The `uidaccess()` and `eaccess()` functions are thread-safe.

## CONFORMING TO

These functions are nonstandard. Some other systems have an `eaccess()` function.

## NOTES

*Warning:* Using this function to check a process's permissions on a file before performing some operation based on that information leads to race conditions: the file permissions may change between the two steps. Generally, it is safer just to attempt the desired operation and handle any permission error that occurs.

This function always dereferences symbolic links. If you need to check the permissions on a symbolic link, use [faccessat\(2\)](#) with the flags `AT_EACCESS` and `AT_SYMLINK_NOFOLLOW`.

## SEE ALSO

[access\(2\)](#), [chmod\(2\)](#), [chown\(2\)](#), [faccessat\(2\)](#), [open\(2\)](#), [setgid\(2\)](#), [setuid\(2\)](#), [stat\(2\)](#), [credentials\(7\)](#), [path\\_resolution\(7\)](#)

## COLOPHON

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