

**NAME**

**readlink**, **readlinkat** - read value of a symbolic link

**LIBRARY**

Standard C Library (libc, -lc)

**SYNOPSIS**

**#include** <unistd.h>

*ssize\_t*

**readlink**(*const char \*restrict path*, *char \*restrict buf*, *size\_t bufsiz*);

*ssize\_t*

**readlinkat**(*int fd*, *const char \*restrict path*, *char \*restrict buf*, *size\_t bufsiz*);

**DESCRIPTION**

The **readlink**() system call places the contents of the symbolic link *path* in the buffer *buf*, which has size *bufsiz*. The **readlink**() system call does not append a NUL character to *buf*.

The **readlinkat**() system call is equivalent to **readlink**() except in the case where *path* specifies a relative path. In this case the symbolic link whose content is read relative to the directory associated with the file descriptor *fd* instead of the current working directory. If **readlinkat**() is passed the special value `AT_FDCWD` in the *fd* parameter, the current working directory is used and the behavior is identical to a call to **readlink**().

**RETURN VALUES**

The call returns the count of characters placed in the buffer if it succeeds, or a -1 if an error occurs, placing the error code in the global variable *errno*.

**ERRORS**

The **readlink**() system call will fail if:

[ENOTDIR]           A component of the path prefix is not a directory.

[ENAMETOOLONG]       A component of a pathname exceeded 255 characters, or an entire path name exceeded 1023 characters.

[ENOENT]            The named file does not exist.

- [EACCES] Search permission is denied for a component of the path prefix.
- [ELOOP] Too many symbolic links were encountered in translating the pathname.
- [EINVAL] The named file is not a symbolic link.
- [EIO] An I/O error occurred while reading from the file system.
- [EINTEGRITY] Corrupted data was detected while reading from the file system.
- [EFAULT] The *buf* argument extends outside the process's allocated address space.

In addition to the errors returned by the **readlink()**, the **readlinkat()** may fail if:

- [EBADF] The *path* argument does not specify an absolute path and the *fd* argument is neither AT\_FDCWD nor a valid file descriptor open for searching.
- [ENOTDIR] The *path* argument is not an absolute path and *fd* is neither AT\_FDCWD nor a file descriptor associated with a directory.

## SEE ALSO

lstat(2), stat(2), symlink(2), symlink(7)

## STANDARDS

The **readlinkat()** system call follows The Open Group Extended API Set 2 specification.

## HISTORY

The **readlink()** system call appeared in 4.2BSD. The **readlinkat()** system call appeared in FreeBSD 8.0.