

**NAME**

**readlink** — get symbolic link target

**SYNOPSIS**

```
readlink [-n|-z] file...
readlink -f|-e|-m file...
```

**DESCRIPTION**

Writes the target (content) of each *file*, which must be a symbolic link, followed by a new-line (**0xA**), to the standard output stream.

With **-fem**, canonicalises the path to *files* by replacing itself with `realpath(1)`.

**OPTIONS**

**-n, --no-newline** Write nothing after the target of each *file*.  
**-z, --zero** Write a NUL after the target of each *file*.  
**-f, --canonicalize** Replace with **realpath** [-z] *file*...  
**-e, --canonicalize-existing** Replace with **realpath -e** [-z] *file*...  
**-m, --canonicalize-missing** Replace with **realpath -m** [-z] *file*...

**EXIT STATUS**

**1** if a *file* wasn't a symbolic link. An error is also issued to the standard error stream in this case.

**EXAMPLES**

```
$ ls -l store
lrwxrwxrwx 1 root root 25 2020-03-16 store -> /mnt/filling/store/cicada
$ readlink store
/mnt/filling/store/cicada
```

**SEE ALSO**

`ln(1)`, `ls(1)`, `realpath(1)`, `readlink(2)`, `symlink(2)`

**STANDARDS**

Conforms to IEEE Std 1003.1-2024 ("POSIX.1"). **-zfem** and more than one *file* are extensions, compatible with the GNU system.

**HISTORY**

Appeared fully-formed in OpenBSD 2.2 (1997-12) (appears in time for OpenBSD 2.1, saying it targets OpenBSD 2.1, but is not *tagged* for inclusion in OpenBSD 2.1, and is not included in OpenBSD 2.1 distribution tarballs; the first tag is for OpenBSD 2.2 and it features in OpenBSD 2.2 tarballs) as `readlink(1)` ("display target of symbolic link on standard output"), synopsised as

```
readlink [-fn] file
-n and successful behaviour is as present-day, but errors aren't:
    If readlink is invoked with an argument other than the pathname of a symbolic link it exits with a non-zero exit code and without printing anything.
-f replaces readlink(2) with realpath(3); which is like this implementation's readlink -e (realpath -e). A realpath(3) failure dumps uninitialised data and a newline (unless -n). The result of -f is truncated at the length of file; this is fixed in OpenBSD 2.4 (1998-12).
```

OpenBSD 4.1 (2007-05) properly exits with an error if `realpath(3)` failed.

NetBSD 2.0 (2004-12) adds **readlink** to `stat(1)` ("display file status"), "for similarity to OpenBSD", synopsising it as

```
readlink [-n] [file . . .]
which is like OpenBSD readlink, but for any number of files.
```

NetBSD 4.0 (2007-12) adds **-f**, same as OpenBSD.

NetBSD 6.0 (2012-10) sees a **SYNOPSIS** of

**readlink** [**-fnqsv**] [*file* . . .]

**-qs** is the default (errors aren't logged) and **-v** reverses this (errors to the standard error stream).

NetBSD 10 splits the manuals into `stat(1)/readlink(1)`.

coreutils 4.5.5 (2003-02) adds `readlink(1)` ("display value of a symbolic link"), synopsised as:

**readlink** [*OPTION*] *FILE*

where *OPTIONS* is actually any of **-fnqsv** ☺ This is described as equivalent to NetBSD 10; it's unclear if **-f** is as present-day or as NetBSD 10.

coreutils 5.3.0 (2005-01) adds **-em** (and notes correcting **-f**), making them as present-day.

coreutils 8.21 (2013-02) "now supports multiple arguments" and adds **-z**. **-n** is ignored with multiple *files*.