

NAME

dirfd – get directory stream file descriptor

LIBRARY

Standard C library (*libc*, *-lc*)

SYNOPSIS

```
#include <sys/types.h>
#include <dirent.h>

int dirfd(DIR *dirp);
```

Feature Test Macro Requirements for glibc (see **feature_test_macros(7)**):

```
dirfd():
/* Since glibc 2.10: */ _POSIX_C_SOURCE >= 200809L
|| /* glibc <= 2.19: */ _BSD_SOURCE || _SVID_SOURCE
```

DESCRIPTION

The function **dirfd()** returns the file descriptor associated with the directory stream *dirp*.

This file descriptor is the one used internally by the directory stream. As a result, it is useful only for functions which do not depend on or alter the file position, such as **fstat(2)** and **fchdir(2)**. It will be automatically closed when **closedir(3)** is called.

RETURN VALUE

On success, **dirfd()** returns a file descriptor (a nonnegative integer). On error, *-1* is returned, and *errno* is set to indicate the error.

ERRORS

POSIX.1-2008 specifies two errors, neither of which is returned by the current implementation.

EINVAL

dirp does not refer to a valid directory stream.

ENOTSUP

The implementation does not support the association of a file descriptor with a directory.

ATTRIBUTES

For an explanation of the terms used in this section, see **attributes(7)**.

Interface	Attribute	Value
dirfd()	Thread safety	MT-Safe

STANDARDS

POSIX.1-2008. This function was a BSD extension, present in 4.3BSD-Reno, not in 4.2BSD.

SEE ALSO

open(2), **openat(2)**, **closedir(3)**, **opendir(3)**, **readdir(3)**, **rewinddir(3)**, **scandir(3)**, **seekdir(3)**, **telldir(3)**