

**NAME**

**dirfd** – get directory stream file descriptor

**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 versions <= 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, a nonnegative file descriptor is returned. On error,  $-1$  is returned, and *errno* is set to indicate the cause of 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   |
|-----------------|---------------|---------|
| <b>dirfd</b> () | Thread safety | MT-Safe |

**CONFORMING TO**

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

**SEE ALSO**

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

**COLOPHON**

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