NAME

opendir, fdopendir - open a directory

SYNOPSIS

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

DIR *opendir(const char *name**);**
DIR *fdopendir(int fd**);**

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

fdopendir():
    Since glibc 2.10:
        _POSIX_C_SOURCE >= 200809L
    Before glibc 2.10:
        _GNU_SOURCE

DESCRIPTION

The **opendir**() function opens a directory stream corresponding to the directory *name*, and returns a pointer to the directory stream. The stream is positioned at the first entry in the directory.

The **fdopendir**() function is like **opendir**(), but returns a directory stream for the directory referred to by the open file descriptor *fd*. After a successful call to **fdopendir**(), *fd* is used internally by the implementation, and should not otherwise be used by the application.

RETURN VALUE

The **opendir**() and **fdopendir**() functions return a pointer to the directory stream. On error, NULL is returned, and *errno* is set appropriately.

ERRORS

EACCES
    Permission denied.

EBADF
    fd is not a valid file descriptor opened for reading.

EMFILE
    The per-process limit on the number of open file descriptors has been reached.

ENFILE
    The system-wide limit on the total number of open files has been reached.

ENOENT
    Directory does not exist, or *name* is an empty string.

ENOMEM
    Insufficient memory to complete the operation.

ENOTDIR
    name is not a directory.

VERSIONS

fdopendir() is available in glibc since version 2.4.

ATTRIBUTES

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

Interface	Attribute	Value
opendir(), **fdopendir**()	Thread safety	MT-Safe

CONFORMING TO

opendir() is present on SVr4, 4.3BSD, and specified in POSIX.1-2001. **fdopendir**() is specified in POSIX.1-2008.

NOTES

      Filename entries can be read from a directory stream using readaddir(3).

      The underlying file descriptor of the directory stream can be obtained using dirfd(3).

      The **opendir**() function sets the close-on-exec flag for the file descriptor underlying the *DIR **. The **fdopendir**() function leaves the setting of the close-on-exec flag unchanged for the file descriptor, *fd*. POSIX.1-200x leaves it unspecified whether a successful call to **fdopendir**() will set the close-on-exec flag for the file descriptor, *fd*.

SEE ALSO

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

COLOPHON

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