NAME

readdir − read directory entry

LIBRARY

Standard C library (*libc*, *−lc*)

SYNOPSIS

#include <sys/syscall.h> /* Definition of **SYS_*** constants */
#include <unistd.h>

int syscall(SYS_readdir, unsigned int *fd***,**
struct old_linux_dirent ***dirp*, unsigned int** *count***);**

Note: There is no definition of **struct old_linux_dirent**; see NOTES.

DESCRIPTION

This is not the function you are interested in. Look at **readdir**(3) for the POSIX conforming C library interface. This page documents the bare kernel system call interface, which is superseded by **getdents**(2).

readdir() reads one *old_linux_dirent* structure from the directory referred to by the file descriptor *fd* into the buffer pointed to by *dirp*. The argument *count* is ignored; at most one *old_linux_dirent* structure is read.

The *old_linux_dirent* structure is declared (privately in Linux kernel file **fs/readdir.c**) as follows:

```
struct old_linux_dirent {
    unsigned long d_ino;     /* inode number */
    unsigned long d_offset;  /* offset to this old_linux_dirent */
    unsigned short d_namlen; /* length of this d_name */
    char  d_name[1];         /* filename (null-terminated) */
}
```

d_ino is an inode number. *d_offset* is the distance from the start of the directory to this *old_linux_dirent*. *d_reclen* is the size of *d_name*, not counting the terminating null byte ('\0'). *d_name* is a null-terminated filename.

RETURN VALUE

On success, 1 is returned. On end of directory, 0 is returned. On error, −1 is returned, and *errno* is set to indicate the error.

ERRORS

EBADF
Invalid file descriptor *fd*.

EFAULT
Argument points outside the calling process's address space.

EINVAL
Result buffer is too small.

ENOENT
No such directory.

ENOTDIR
File descriptor does not refer to a directory.

STANDARDS

This system call is Linux-specific.

NOTES

You will need to define the *old_linux_dirent* structure yourself. However, probably you should use **readdir**(3) instead.

This system call does not exist on x86-64.

SEE ALSO

getdents(2), **readdir**(3)