



Linux Ubuntu 26.04 Manual Pages on command 'ttyname.3'

\$ man ttyname.3

ttyname(3) Library Functions Manual ttyname(3)

NAME

 ttyname, ttyname_r - return name of a terminal

LIBRARY

 Standard C library (libc, -lc)

SYNOPSIS

```
#include <unistd.h>

char *ttyname(int fd);

int ttyname_r(size_t size;
               int fd, char buf[size], size_t size);
```

DESCRIPTION

 The function `ttyname()` returns a pointer to the null-terminated pathname of the terminal device that is open on the file descriptor `fd`, or `NULL` on error (for example, if `fd` is not connected to a terminal). The return value may point to static data, possibly overwritten by the next call. The function `ttyname_r()` stores this pathname in the buffer `buf` of size `size`.

RETURN VALUE

 The function `ttyname()` returns a pointer to a pathname on success. On error, `NULL` is returned, and `errno` is set to indicate the error. The function `ttyname_r()` returns 0 on success, and an error number upon error.

ERRORS

 EBADF Bad file descriptor.

 ENODEV `fd` refers to a slave pseudoterminal device but the corresponding pathname could not

be found (see NOTES).

ENOTTY fd does not refer to a terminal device.

ERANGE (ttyname r()) size was too small to allow storing the pathname.

ATTRIBUTES

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

[illegible]

?	Interface	?	Attribute	?	Value	?
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[illegible]

? ttyname()	? Thread safety ? MT-Unsafe race:ttyname ?
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[illegible]

? ttyname	r()	? Thread safety	? MT-Safe	?
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[illegible]

STANDARDS

POSIX.1-2008.

HISTORY

POSIX.1-2001, 4.2BSD.

NOTES

A process that keeps a file descriptor that refers to a pts(4) device open when switching to another mount namespace that uses a different /dev/ptmx instance may still accidentally find that a device path of the same name for that file descriptor exists. However, this device path refers to a different device and thus can't be used to access the device that the file descriptor refers to. Calling `ttyname()` or `ttyname_r()` on the file descriptor in the new mount namespace will cause these functions to return NULL and set `errno` to `ENODEV`.

SEE ALSO

tty(1), fstat(2), ctermid(3), isatty(3), pts(4)