



## ***Linux Ubuntu 26.04 Manual Pages on command 'ttyname\_r.3'***

***\$ man ttyname\_r.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

ENOTTY fd does not refer to a terminal device.

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

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

|              |               |                           |  |
|--------------|---------------|---------------------------|--|
| Interface    | Attribute     | Value                     |  |
| ttynamex()   | Thread safety | MT-Unsafe race:ttynamex() |  |
| ttynamex_r() | Thread safety | MT-Safe                   |  |

POSIX.1-2008.

POSIX.1-2001, 4.2BSD.

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 `ttynamex()` or `ttynamex_r()` on the file descriptor in the new mount namespace will cause these functions to return `NULL` and set `errno` to `ENODEV`.

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