ttyname(3) — Linux manual page

NAME | SYNOPSIS | DESCRIPTION | RETURN VALUE | ERRORS | ATTRIBUTES |
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```
TTYNAME(3)              Linux Programmer's Manual              TTYNAME(3)
```

NAME   top

```
       ttyname, ttyname_r - return name of a terminal
```

SYNOPSIS   top

```
       #include <unistd.h>

       char *ttyname(int fd);
       int ttyname_r(int fd, char *buf, size_t buflen);
```

DESCRIPTION   top

```
       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 length
       buflen.
```

RETURN VALUE   top

```
       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   top

```
       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**()) *buflen* was too small to allow storing the
> pathname.

ATTRIBUTES   top

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

Interface	Attribute	Value
ttyname()	Thread safety	MT-Unsafe race:ttyname
ttyname_r()	Thread safety	MT-Safe

CONFORMING TO   top

POSIX.1-2001, POSIX.1-2008, 4.2BSD.

NOTES   top

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   top

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

COLOPHON   top

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Pages that refer to this page: [ctermid(3)](#), [getttyent(3)](#), [getutent(3)](#), [isatty(3)](#), [openpty(3)](#), [ptsname(3)](#), [ttyslot(3)](#)

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