

NAME

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

SYNOPSIS

```
#include <unistd.h>
```

```
char *ttyname(int fd);
```

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

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 length *buflen*.

RETURN VALUE

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

ERRORS**EBADF**

Bad file descriptor.

ENOTTY

File descriptor does not refer to a terminal device.

ERANGE

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

ENODEV

File descriptor refers to a slave pseudoterminal device but the corresponding pathname could not be found (see NOTES).

ATTRIBUTES

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

POSIX.1-2001, POSIX.1-2008, 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)**

COLOPHON

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