

**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.

**ENODEV**

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

**ENOTTY**

File descriptor does not refer to a terminal device.

**ERANGE**

(**ttyname\_r()**) *buflen* was too small to allow storing the pathname.

**ATTRIBUTES**

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

Interface	Attribute	Value
<b>ttyname()</b>	Thread safety	MT-Unsafe race:ttyname
<b>ttyname_r()</b>	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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