

**NAME**

ptsname, ptsname\_r – get the name of the slave pseudoterminal

**SYNOPSIS**

```
#include <stdlib.h>
```

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

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

Feature Test Macro Requirements for glibc (see **feature\_test\_macros(7)**):

**ptsname()**:

Since glibc 2.24:

```
_XOPEN_SOURCE >= 500 ||
(_XOPEN_SOURCE && _XOPEN_SOURCE_EXTENDED)
```

Glibc 2.23 and earlier:

```
_XOPEN_SOURCE
```

**ptsname\_r()**:

```
_GNU_SOURCE
```

**DESCRIPTION**

The **ptsname()** function returns the name of the slave pseudoterminal device corresponding to the master referred to by *fd*.

The **ptsname\_r()** function is the reentrant equivalent of **ptsname()**. It returns the name of the slave pseudoterminal device as a null-terminated string in the buffer pointed to by *buf*. The *buflen* argument specifies the number of bytes available in *buf*.

**RETURN VALUE**

On success, **ptsname()** returns a pointer to a string in static storage which will be overwritten by subsequent calls. This pointer must not be freed. On failure, NULL is returned.

On success, **ptsname\_r()** returns 0. On failure, a nonzero value is returned and *errno* is set to indicate the error.

**ERRORS****EINVAL**

(**ptsname\_r()** only) *buf* is NULL. (This error is returned only for glibc 2.25 and earlier.)

**ENOTTY**

*fd* does not refer to a pseudoterminal master device.

**ERANGE**

(**ptsname\_r()** only) *buf* is too small.

**VERSIONS**

**ptsname()** is provided in glibc since version 2.1.

**ATTRIBUTES**

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

| Interface          | Attribute     | Value                  |
|--------------------|---------------|------------------------|
| <b>ptsname()</b>   | Thread safety | MT-Unsafe race:ptsname |
| <b>ptsname_r()</b> | Thread safety | MT-Safe                |

**CONFORMING TO**

**ptsname()**:

POSIX.1-2001, POSIX.1-2008.

**ptsname()** is part of the UNIX 98 pseudoterminal support (see **pts(4)**).

**ptsname\_r()** is a Linux extension, that is proposed for inclusion in the next major revision of POSIX.1 (Issue 8). A version of this function is documented on Tru64 and HP-UX, but on those implementations, -1 is returned on error, with *errno* set to indicate the error. Avoid using this function in portable programs.

**SEE ALSO**

**grantpt(3), posix\_openpt(3), ttyname(3), unlockpt(3), pts(4), pty(7)**

**COLOPHON**

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