

NAME

ptsname, ptsname_r – get the name of the slave pseudoterminal

LIBRARY

Standard C library (*libc*, *-lc*)

SYNOPSIS

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

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

```
int ptsname_r(int fd, char buf[.buflen], size_t buflen);
```

Feature Test Macro Requirements for glibc (see **feature_test_macros(7)**):

ptsname():

Since glibc 2.24:

 _XOPEN_SOURCE >= 500

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 the file descriptor *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, an error number is returned 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 since glibc 2.1.

ATTRIBUTES

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

Interface	Attribute	Value
ptsname()	Thread safety	MT-Unsafe race:ptsname
ptsname_r()	Thread safety	MT-Safe

STANDARDS

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 (Is-

sue 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)