



Linux Ubuntu 26.04 Manual Pages on command 'ptsname_r.3'

\$ man ptsname_r.3

ptsname(3) Library Functions Manual ptsname(3)

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(size_t size;
               int fd, char buf[size], size_t size);
```

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 size 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.

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

VERSIONS

A version of ptsname_r() is documented on Tru64, HP-UX, and FreeBSD, but on those implementations, -1 is returned on error, with errno set to indicate the error. Avoid using this function in portable programs.

STANDARDS

- ptsname(): POSIX.1-2008.
- ptsname_r(): POSIX.1-2024.

HISTORY

- ptsname(): POSIX.1-2001. glibc 2.1.
- ptsname() is part of the UNIX 98 pseudoterminal support (see pts(4)).

ptsname_r():

GNU.

SEE ALSO

grantpt(3), posix_openpt(3), ttyname(3), unlockpt(3), pts(4), pty(7)

Linux man-pages 6.17

2025-10-29

ptsname(3)