

NAME

`ptsname`, `ptsname_r` - get the name of the slave pseudoterminal

SYNOPSIS

```
#define _XOPEN_SOURCE /* See feature\_test\_macros\(7\)
*/
#include <stdlib.h>

char *ptsname(int fd);

#define _GNU_SOURCE /* See feature\_test\_macros\(7\)
*/
#include <stdlib.h>

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

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.

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
<code>ptsname()</code>	Thread safety	MT-Unsafe race:ptsname
<code>ptsname_r()</code>	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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