



Rocky Enterprise Linux 9.2 Manual Pages on command 'posix_openpt.3'

\$ man posix_openpt.3

POSIX_OPENPT(3) Linux Programmer's Manual POSIX_OPENPT(3)

NAME

posix_openpt - open a pseudoterminal device

SYNOPSIS

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

```
#include <fcntl.h>
```

```
int posix_openpt(int flags);
```

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

```
posix_openpt(): _XOPEN_SOURCE >= 600
```

DESCRIPTION

The `posix_openpt()` function opens an unused pseudoterminal master device, returning a file descriptor that can be used to refer to that device.

The `flags` argument is a bit mask that ORs together zero or more of the following flags:

`O_RDWR` Open the device for both reading and writing. It is usual to specify this flag.

`O_NOCTTY`

Do not make this device the controlling terminal for the process.

RETURN VALUE

On success, `posix_openpt()` returns a file descriptor (a nonnegative integer) which is the lowest numbered unused file descriptor. On failure, -1 is returned, and `errno` is set to indicate the error.

ERRORS

See `open(2)`.

VERSIONS

Glibc support for `posix_openpt()` has been provided since version 2.2.1.

ATTRIBUTES

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

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?Interface ? Attribute ? Value ?

??

?`posix_openpt()` ? Thread safety ? MT-Safe ?

??

CONFORMING TO

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

`posix_openpt()` is part of the UNIX 98 pseudoterminal support (see `pts(4)`).

NOTES

Some older UNIX implementations that support System V (aka UNIX 98) pseudoterminals don't have this function, but it can be easily implemented by opening the pseudoterminal multiplexor device:

```
int
posix_openpt(int flags)
{
    return open("/dev/ptmx", flags);
}
```

Calling `posix_openpt()` creates a pathname for the corresponding pseudoterminal slave device. The pathname of the slave device can be ob?

tained using ptsname(3). The slave device pathname exists only as long as the master device is open.

SEE ALSO

open(2), getpt(3), grantpt(3), ptsname(3), unlockpt(3), pts(4), pty(7)

COLOPHON

This page is part of release 5.10 of the Linux man-pages project. A description of the project, information about reporting bugs, and the latest version of this page, can be found at <https://www.kernel.org/doc/man-pages/>.

2020-08-13

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