NAME
 grantpt − grant access to the slave pseudoterminal

SYNOPSIS
 #include <stdlib.h>

 int grantpt(int *fd***);**

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

 grantpt():
  Since glibc 2.24:
   _XOPEN_SOURCE >= 500 ‖
    (_XOPEN_SOURCE && _XOPEN_SOURCE_EXTENDED)
  Glibc 2.23 and earlier:
   _XOPEN_SOURCE

DESCRIPTION
 The **grantpt**() function changes the mode and owner of the slave pseudoterminal device corresponding to the master pseudoterminal referred to by *fd*. The user ID of the slave is set to the real UID of the calling process. The group ID is set to an unspecified value (e.g., *tty*). The mode of the slave is set to 0620 (crw−−w−−−−).

 The behavior of **grantpt**() is unspecified if a signal handler is installed to catch **SIGCHLD** signals.

RETURN VALUE
 When successful, **grantpt**() returns 0. Otherwise, it returns −1 and sets *errno* appropriately.

ERRORS
 EACCES
  The corresponding slave pseudoterminal could not be accessed.

 EBADF
  The *fd* argument is not a valid open file descriptor.

 EINVAL
  The *fd* argument is valid but not associated with a master pseudoterminal.

VERSIONS
 grantpt() 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
grantpt()	Thread safety	MT-Safe locale

CONFORMING TO
 POSIX.1-2001, POSIX.1-2008.

NOTES
 This is part of the UNIX 98 pseudoterminal support, see **pts**(4).

 Many systems implement this function via a set-user-ID helper binary called "pt_chown". On Linux systems with a devpts filesystem (present since Linux 2.2), the kernel normally sets the correct ownership and permissions for the pseudoterminal slave when the master is opened (**posix_openpt**(3)), so that nothing must be done by **grantpt**(). Thus, no such helper binary is required (and indeed it is configured to be absent during the glibc build that is typical on many systems).

SEE ALSO
 open(2), **posix_openpt**(3), **ptsname**(3), **unlockpt**(3), **pts**(4), **pty**(7)

COLOPHON

       This page is part of release 5.05 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/.