NAME

chroot − change root directory

SYNOPSIS

#include <unistd.h>

int chroot(const char * *path***);**

DESCRIPTION

chroot() changes the root directory of the calling process to that specified in *path*. This directory will be used for pathnames beginning with /. The root directory is inherited by all children of the calling process.

Only a privileged process (Linux: one with the **CAP_SYS_CHROOT** capability) may call **chroot**().

This call changes an ingredient in the pathname resolution process and does nothing else.

This call does not change the current working directory, so that after the call '.' can be outside the tree rooted at '/'. In particular, the superuser can escape from a "chroot jail" by doing:

```
mkdir foo; chroot foo; cd ..
```

This call does not close open file descriptors, and such file descriptors may allow access to files outside the chroot tree.

RETURN VALUE

On success, zero is returned. On error, −1 is returned, and *errno* is set appropriately.

ERRORS

Depending on the file system, other errors can be returned. The more general errors are listed below:

EACCES
Search permission is denied on a component of the path prefix. (See also **path_resolution**(7).)

EFAULT
path points outside your accessible address space.

EIO An I/O error occurred.

ELOOP
Too many symbolic links were encountered in resolving *path*.

ENAMETOOLONG
path is too long.

ENOENT
The file does not exist.

ENOMEM
Insufficient kernel memory was available.

ENOTDIR
A component of *path* is not a directory.

EPERM
The caller has insufficient privilege.

CONFORMING TO

SVr4, 4.4BSD, SUSv2 (marked LEGACY). This function is not part of POSIX.1-2001.

NOTES

A child process created via **fork**(2) inherits its parent's root directory. The root directory is left unchanged by **execve**(2).

FreeBSD has a stronger **jail**() system call.

SEE ALSO

chdir(2), **path_resolution**(7)

COLOPHON

This page is part of release 3.22 of the Linux *man-pages* project. A description of the project, and information about reporting bugs, can be found at http://www.kernel.org/doc/man-pages/.