NAME

cap_fcntls_limit, **cap_fcntls_get** - manage allowed fcntl commands

LIBRARY

Standard C Library (libc, -lc)

SYNOPSIS

#include <sys/capsicum.h>

int
cap_fcntls_limit(*int fd, uint32_t fcntlrights*);

int
cap_fcntls_get(*int fd, uint32_t *fcntlrightsp*);

DESCRIPTION

If a file descriptor is granted the CAP_FCNTL capability right, the list of allowed fcntl(2) commands can be selectively reduced (but never expanded) with the **cap_fcntls_limit**() system call.

A bitmask of allowed fcntls commands for a given file descriptor can be obtained with the **cap_fcntls_get**() system call.

FLAGS

The following flags may be specified in the *fcntlrights* argument or returned in the *fcntlrightsp* argument:

CAP_FCNTL_GETFL Permit F_GETFL command.

CAP_FCNTL_SETFL Permit F_SETFL command.

CAP_FCNTL_GETOWN Permit F_GETOWN command.

CAP_FCNTL_SETOWN Permit F_SETOWN command.

RETURN VALUES

Upon successful completion, the value 0 is returned; otherwise the value -1 is returned and the global variable *errno* is set to indicate the error.

ERRORS

cap_fcntls_limit() succeeds unless:

[EBADF] The *fd* argument is not a valid descriptor.

[EINVAL] An invalid flag has been passed in *fcntlrights*.

[ENOTCAPABLE] *fcntlrights* would expand the list of allowed fcntl(2) commands.

cap_fcntls_get() succeeds unless:

[EBADF] The *fd* argument is not a valid descriptor.

[EFAULT] The *fcntlrightsp* argument points at an invalid address.

[ENOSYS] The running kernel was compiled without **options CAPABILITY_MODE**.

SEE ALSO

cap_ioctls_limit(2), cap_rights_limit(2), fcntl(2)

HISTORY

The **cap_fcntls_get**() and **cap_fcntls_limit**() system calls first appeared in FreeBSD 8.3. Support for capabilities and capabilities mode was developed as part of the TrustedBSD Project.

AUTHORS

This function was created by Pawel Jakub Dawidek <*pawel@dawidek.net*> under sponsorship of the FreeBSD Foundation.