#### NAME

vfs\_getopt, vfs\_getopts, vfs\_flagopt, vfs\_scanopt, vfs\_copyopt, vfs\_filteropt, vfs\_setopt, vfs\_setopt\_part, vfs\_setopts - manipulate mount options and their values

#### SYNOPSIS

#include <sys/param.h>
#include <sys/mount.h>

int

**vfs\_getopt**(*struct vfsoptlist \*opts, const char \*name, void \*\*buf, int \*len*);

char \*

**vfs\_getops**(*struct vfsoptlist \*opts, const char \*name, int \*error*);

int

**vfs\_flagopt**(*struct vfsoptlist \*opts, const char \*name, uint64\_t \*flags, uint64\_t flag*);

int

vfs\_scanopt(struct vfsoptlist \*opts, const char \*name, const char \*fmt, ...);

int

**vfs\_copyopt**(*struct vfsoptlist \*opts, const char \*name, void \*dest, int len*);

int

vfs\_filteropt(struct vfsoptlist \*opts, const char \*\*legal);

int

vfs\_setopt(struct vfsoptlist \*opts, const char \*name, void \*value, int len);

int

vfs\_setopt\_part(struct vfsoptlist \*opts, const char \*name, void \*value, int len);

int

**vfs\_setopts**(*struct vfsoptlist \*opts*, *const char \*name*, *const char \*value*);

## DESCRIPTION

The **vfs\_getopt**() function sets *buf* to point to the value of the named mount option, and sets *len* to the length of the value if it is not NULL. The *buf* argument will point to the actual value, and does not need to be freed or released (and probably should not be modified).

The **vfs\_getopts**() function returns the value of the specified option if it is a string (i.e., NUL terminated).

The **vfs\_flagopt**() function determines if an option exists. If the option does exist, and *flags* is not NULL, *flag* is added to those already set in *flags*. If the option does not exist, and *flags* is not NULL, *flag* is removed from those already set in *flags*. An example of typical usage is:

if (vfs\_flagopt(mp->mnt\_optnew, "wormlike", NULL, 0)) vfs\_flagopt(mp->mnt\_optnew, "appendok", &(mp->flags), F\_APPENDOK);

The **vfs\_scanopt**() function performs a vsscanf(3) with the option's value, using the given format, into the specified variable arguments. The value must be a string (i.e., NUL terminated).

The **vfs\_copyopt**() function creates a copy of the option's value. The *len* argument must match the length of the option's value exactly (i.e., a larger buffer will still cause **vfs\_copyout**() to fail with EINVAL).

The **vfs\_filteropt**() function ensures that no unknown options were specified. A option is valid if its name matches one of the names in the list of legal names. An option may be prefixed with 'no', and still be considered valid.

The **vfs\_setopt**() and **vfs\_setopt\_part**() functions copy new data into the option's value. In **vfs\_setopt**(), the *len* argument must match the length of the option's value exactly (i.e., a larger buffer will still cause **vfs\_copyout**() to fail with EINVAL).

The **vfs\_setopts**() function copies a new string into the option's value. The string, including NUL byte, must be no longer than the option's length.

## **RETURN VALUES**

The vfs\_getopt() function returns 0 if the option was found; otherwise, ENOENT is returned.

The **vfs\_getops**() function returns the specified option if it is found, and is NUL terminated. If the option was found, but is not NUL terminated, *error* is set to EINVAL and NULL is returned. If the option was not found, *error* is set to 0, and NULL is returned.

The vfs\_flagopt() function returns 1 if the option was found, and 0 if it was not.

The **vfs\_scanopt**() function returns 0 if the option was not found, or was not NUL terminated; otherwise, the return value of vsscanf(3) is returned. If vsscanf(3) returns 0, it will be returned unchanged; therefore, a return value of 0 does not always mean the option does not exist, or is not a valid string.

The **vfs\_copyopt**() and **vfs\_setopt**() functions return 0 if the copy was successful, EINVAL if the option was found but the lengths did not match, and ENOENT if the option was not found.

The vfs\_filteropt() function returns 0 if all of the options are legal; otherwise, EINVAL is returned.

The **vfs\_setopts**() function returns 0 if the copy was successful, EINVAL if the option was found but the string was too long, and ENOENT if the option was not found.

# AUTHORS

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