#### **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_getopts(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\_getopts**() 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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