

**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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