

GETMNTENT(3)

GETMNTENT(3) Linux Programmer's Manual GETMNTENT(3)

NAME

getmntent, setmntent, addmntent, endmntent, hasmntopt, getmntent_r - get filesystem descriptor file entry

SYNOPSIS

```
#include <stdio.h>
#include <mntent.h>

FILE *setmntent(const char *filename, const char *type);

struct mntent *getmntent(FILE *fp);

int addmntent(FILE *fp, const struct mntent *mnt);

int endmntent(FILE *fp);

char *hasmntopt(const struct mntent *mnt, const char *opt);

/* GNU extension */
#include <mntent.h>

struct mntent *getmntent_r(FILE *fp, struct mntent *mntbuf,
                           char *buf, int buflen);
```

Feature Test Macro Requirements for glibc (see [feature_test_macros\(7\)](#)):

getmntent_r(): `_BSD_SOURCE` || `_SVID_SOURCE`

DESCRIPTION

These routines are used to access the filesystem description file `/etc/fstab` and the mounted filesystem description file `/etc/mntab`.

The **setmntent**() function opens the filesystem description file `filename` and returns a file pointer which can be used by **getmntent**(). The argument `type` is the type of access required and can take the same values as the `mode` argument of **fopen**(3).

The **getmntent**() function reads the next line from the filesystem description file `fp` and returns a pointer to a structure containing the broken out fields from a line in the file. The pointer points to a static area of memory which is overwritten by subsequent calls to **getmntent**().

The **addmntent**() function adds the `mntent` structure `mnt` to the end of the open file `fp`.

The **endmntent**() function closes the filesystem description file `fp`.

The **hasmntopt**() function scans the `mnt_opts` field (see below) of the `mntent` structure `mnt` for a substring that matches `opt`. See `<mntent.h>` and **mount**(8) for valid mount options.

The reentrant **getmntent_r**() function is similar to **getmntent**(), but stores the `struct mount` in the provided `*mntbuf` and stores the strings pointed to by the entries in that struct in the provided array `buf` of size `buflen`.

The `mntent` structure is defined in `<mntent.h>` as follows:

```
struct mntent {
    char *mnt_fsname; /* name of mounted filesystem */
    char *mnt_dir;    /* filesystem path prefix */
    char *mnt_type;   /* mount type (see mntent.h) */
    char *mnt_opts;   /* mount options (see mntent.h) */
    int   mnt_freq;   /* dump frequency in days */
    int   mnt_passno; /* pass number on parallel fsck */
};
```

Since fields in the `mntab` and `fstab` files are separated by whitespace, octal escapes are used to represent the four characters space (`\040`), tab (`\011`), newline (`\012`)

and backslash (\134) in those files when they occur in one of the four strings in a mntent structure. The routines **addmntent**() and **getmntent**() will convert from string representation to escaped representation and back.

RETURN VALUE

The **getmntent**() and **getmntent_r**() functions return a pointer to the mntent structure or NULL on failure.

The **addmntent**() function returns 0 on success and 1 on failure.

The **endmntent**() function always returns 1.

The **hasmntopt**() function returns the address of the substring if a match is found and NULL otherwise.

FILES

<code>/etc/fstab</code>	filesystem description file
<code>/etc/mntab</code>	mounted filesystem description file

CONFORMING TO

The nonreentrant functions are from SunOS 4.1.3. A routine **getmntent_r**() was introduced in HP-UX 10, but it returns an int. The prototype shown above is glibc-only.

NOTES

System V also has a **getmntent**() function but the calling sequence differs, and the returned structure is different. Under System V /etc/mnttab is used. 4.4BSD and Digital UNIX have a routine **getmntinfo**(), a wrapper around the system call **getfsstat**().

SEE ALSO

fopen(3), **fstab**(5), **mount**(8)

COLOPHON

This page is part of release 3.54 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/>.

2009-09-15
