

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 *stream);

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

int endmntent(FILE *stream);

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

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

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

Feature Test Macro Requirements for glibc (see **feature_test_macros(7)**):

```
getmntent_r():
    Since glibc 2.19:
        _DEFAULT_SOURCE
    Glibc 2.19 and earlier:
        _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 returned stream should be closed using **endmntent()** rather than **fclose(3)**.

The **getmntent()** function reads the next line of the filesystem description file from *stream* 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 *stream*.

The **endmntent()** function closes the *stream* associated with the filesystem description file.

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 `mtab` and `fstab` files are separated by whitespace, octal escapes are used to represent the characters space (`\040`), tab (`\011`), newline (`\012`), and backslash (`\\`) 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. When converting from escaped representation, the sequence `\134` is also converted to a backslash.

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

/etc/fstab

filesystem description file

/etc/mtab

mounted filesystem description file

ATTRIBUTES

For an explanation of the terms used in this section, see **attributes(7)**.

Interface	Attribute	Value
setmntent() , endmntent() , hasmntopt()	Thread safety	MT-Safe
getmntent()	Thread safety	MT-Unsafe race:mntentbuf locale
addmntent()	Thread safety	MT-Safe race:stream locale
getmntent_r()	Thread safety	MT-Safe locale

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 5.02 of the Linux *man-pages* project. A description of the project, information about reporting bugs, and the latest version of this page, can be found at <https://www.kernel.org/doc/man-pages/>.