Rocky Enterprise Linux 9.2 Manual Pages on command 'getmntent_r.3'

C:\>man getmntent_r.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 *stream);
int addmntent(FILE *stream, const struct mntent *mnt);
int endmntent(FILE *streamp);
char *hasmntopt(const struct mntent *mnt, const char *opt);
/* GNU extension */
#include <mntent.h>
struct mntent *getmntent_r(FILE *streamp, 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/mtab.

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 descrip? tion file.

The hasmntopt() function scans the mnt_opts field (see below) of the mntent struc? ture 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 en? tries 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 mn?

tent 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 struc? ture 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(),	Thread safety	MT-Safe
endmntent(),		
hasmntopt()		
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 in? troduced 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 getfs? stat().

SEE ALSO

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

COLOPHON

This page is part of release 5.05 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/.