



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

C:\>man getgrent.3

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

NAME

getgrent, setgrent, endgrent - get group file entry

SYNOPSIS

```
#include <sys/types.h>
#include <grp.h>
struct group *getgrent(void);
void setgrent(void);
void endgrent(void);
```

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

```
setgrent():
    _XOPEN_SOURCE >= 500
    || /* Glibc since 2.19: */ _DEFAULT_SOURCE
    || /* Glibc versions <= 2.19: */ _BSD_SOURCE || _SVID_SOURCE
```

getgrent(), endgrent():

Since glibc 2.22:

```
_XOPEN_SOURCE >= 500 ||
    _DEFAULT_SOURCE
```

Glibc 2.21 and earlier

```
_XOPEN_SOURCE >= 500
    || /* Since glibc 2.12: */ _POSIX_C_SOURCE >= 200809L
    || /* Glibc versions <= 2.19: */ _BSD_SOURCE || _SVID_SOURCE
```

DESCRIPTION

The `getgrent()` function returns a pointer to a structure containing the broken-out fields of a record in the group database (e.g., the local group file `/etc/group`, NIS, and LDAP). The first time `getgrent()` is called, it returns the first entry; thereafter, it returns successive entries.

The `setgrent()` function rewinds to the beginning of the group database, to allow repeated scans.

The `endgrent()` function is used to close the group database after all processing has been performed.

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

```
struct group {
    char *gr_name;    /* group name */
    char *gr_passwd; /* group password */
    gid_t gr_gid;    /* group ID */
    char **gr_mem;   /* NULL-terminated array of pointers
                       to names of group members */
};
```

For more information about the fields of this structure, see `group(5)`.

RETURN VALUE

The `getgrent()` function returns a pointer to a group structure, or `NULL` if there are no more entries or an error occurs.

Upon error, `errno` may be set. If one wants to check `errno` after the call, it should be set to zero before the call.

The return value may point to a static area, and may be overwritten by subsequent calls to `getgrent()`, `getgrgid(3)`, or `getgrnam(3)`. (Do not pass the returned pointer to `free(3)`.)

ERRORS

EAGAIN The service was temporarily unavailable; try again later. For NSS backends in glibc this indicates a temporary error talking to the backend. The error may correct itself, retrying later is suggested.

EINTR A signal was caught; see `signal(7)`.

EIO I/O error.

EMFILE The per-process limit on the number of open file descriptors has been

reached.

ENFILE The system-wide limit on the total number of open files has been reached.

ENOENT A necessary input file cannot be found. For NSS backends in glibc this indicates the backend is not correctly configured.

ENOMEM Insufficient memory to allocate group structure.

ERANGE Insufficient buffer space supplied.

FILES

/etc/group

local group database file

ATTRIBUTES

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

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?Interface ? Attribute ? Value ?

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?getgrent() ? Thread safety ? MT-Unsafe race:grent ?

? ? ? race:grentbuf locale ?

??

?setgrent(), ? Thread safety ? MT-Unsafe race:grent locale ?

?endgrent() ? ? ?

??

In the above table, grent in race:grent signifies that if any of the functions setgrent(), getgrent(), or endgrent() are used in parallel in different threads of a program, then data races could occur.

CONFORMING TO

POSIX.1-2001, POSIX.1-2008, SVr4, 4.3BSD.

SEE ALSO

fgetgrent(3), getgrent_r(3), getgrgid(3), getgrnam(3), getgrouplist(3), putgrent(3), group(5)

COLOPHON

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