



Linux Ubuntu 26.04 Manual Pages on command 'getgrouplist.3'

\$ man getgrouplist.3

getgrouplist(3) Library Functions Manual getgrouplist(3)

NAME

getgrouplist - get list of groups to which a user belongs

LIBRARY

Standard C library (libc, -lc)

SYNOPSIS

```
#include <grp.h>
```

```
int getgrouplist(const char *user, gid_t group,
                 gid_t *groups, int *ngroups);
```

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

getgrouplist():

Since glibc 2.19:

 _DEFAULT_SOURCE

glibc 2.19 and earlier:

 _BSD_SOURCE

DESCRIPTION

The `getgrouplist()` function scans the group database (see `group(5)`) to obtain the list of groups that user belongs to. Up to `*ngroups` of these groups are returned in the array `groups`.

If it was not among the groups defined for user in the group database, then `group` is included in the list of groups returned by `getgrouplist()`; typically this argument is specified as the group ID from the password record for user.

The `ngroups` argument is a value-result argument: on return it always contains the number of

33 (video)

100 (users)

Program source

```
#include <errno.h>

#include <grp.h>

#include <pwd.h>

#include <stdio.h>

#include <stdlib.h>

int

main(int argc, char *argv[])

{

    int      ngroups;

    gid_t     *groups;

    struct group  *gr;

    struct passwd *pw;

    if (argc != 3) {

        fprintf(stderr, "Usage: %s <user> <ngroups>\n", argv[0]);

        exit(EXIT_FAILURE);

    }

    ngroups = atoi(argv[2]);

    groups = malloc(sizeof(*groups) * ngroups);

    if (groups == NULL) {

        perror("malloc");

        exit(EXIT_FAILURE);

    }

    /* Fetch passwd structure (contains first group ID for user). */

    errno = 0;

    pw = getpwnam(argv[1]);

    if (pw == NULL) {

        if (errno)

            perror("getpwnam");

        else

            fprintf(stderr, "no such user\n");
```

```

    exit(EXIT_FAILURE);
}

/* Retrieve group list. */
if (getgrouplist(argv[1], pw->pw_gid, groups, &ngroups) == -1) {
    fprintf(stderr, "getgrouplist() returned -1\n");
    fprintf(stderr, "ngroups = %d\n", ngroups);
    exit(EXIT_FAILURE);
}

/* Display list of retrieved groups, along with group names. */
fprintf(stderr, "ngroups = %d\n", ngroups);
for (int j = 0; j < ngroups; j++) {
    printf("%d", groups[j]);
    gr = getgrgid(groups[j]);
    if (gr != NULL)
        printf(" (%s)", gr->gr_name);
    printf("\n");
}
exit(EXIT_SUCCESS);
}

```

SEE ALSO

getgroups(2), setgroups(2), getgrent(3), group_member(3), group(5), passwd(5)

Linux man-pages 6.17

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