

NAME

groupadd – create a new group

SYNOPSIS

groupadd [*OPTIONS*] *NEWGROUP*

DESCRIPTION

The **groupadd** command creates a new group account using the values specified on the command line plus the default values from the system. The new group will be entered into the system files as needed.

Groupnames may contain only lower and upper case letters, digits, underscores, or dashes. They can end with a dollar sign. Dashes are not allowed at the beginning of the groupname. Fully numeric groupnames and groupnames . or .. are also disallowed.

On Debian, the only constraints are that groupnames must neither start with a dash ('-') nor plus ('+') nor tilde ('~') nor contain a colon (':'), a comma (','), or a whitespace (space: ' ', end of line: '\n', tabulation: '\t', etc.).

On Ubuntu, the same constraints as Debian are in place, with the additional constraint that the groupname cannot be fully numeric. This includes octal and hexadecimal syntax.

Groupnames may only be up to 32 characters long.

OPTIONS

The options which apply to the **groupadd** command are:

-f, --force

This option causes the command to simply exit with success status if the specified group already exists. When used with **-g**, and the specified GID already exists, another (unique) GID is chosen (i.e. **-g** is turned off).

-g, --gid *GID*

The numerical value of the group's ID. *GID* must be unique, unless the **-o** option is used. The value must be non-negative. The default is to use the smallest ID value greater than or equal to **GID_MIN** and greater than every other group.

See also the **-r** option and the **GID_MAX** description.

-h, --help

Display help message and exit.

-K, --key *KEY=VALUE*

Overrides /etc/login.defs defaults (**GID_MIN**, **GID_MAX** and others). Multiple **-K** options can be specified.

Example: **-K GID_MIN=100 -K GID_MAX=499**

Note: **-K GID_MIN=10,GID_MAX=499** doesn't work yet.

-o, --non-unique

permits the creation of a group with an already used numerical ID. As a result, for this *GID*, the mapping towards group *NEWGROUP* may not be unique.

-p, --password *PASSWORD*

defines an initial password for the group account. *PASSWORD* is expected to be encrypted, as returned by **crypt** (3).

Without this option, the group account will be locked and with no password defined, i.e. a single exclamation mark in the respective field of this system account file /etc/group or /etc/gshadow.

Note: This option is not recommended because the password (or encrypted password) will be visible

by users listing the processes.

You should make sure the password respects the system's password policy.

-r, --system

Create a system group.

The numeric identifiers of new system groups are chosen in the **SYS_GID_MIN**–**SYS_GID_MAX** range, defined in `login.defs`, instead of **GID_MIN**–**GID_MAX**.

-R, --root CHROOT_DIR

Apply changes in the `CHROOT_DIR` directory and use the configuration files from the `CHROOT_DIR` directory. Only absolute paths are supported.

-P, --prefix PREFIX_DIR

Apply changes to configuration files under the root filesystem found under the directory `PREFIX_DIR`. This option does not chroot and is intended for preparing a cross-compilation target. Some limitations: NIS and LDAP users/groups are not verified. PAM authentication is using the host files. No SELINUX support.

-U, --users

A list of usernames to add as members of the group.

The default behavior (if the `-g`, `-N`, and `-U` options are not specified) is defined by the **USERGROUPS_ENAB** variable in `/etc/login.defs`.

CONFIGURATION

The following configuration variables in `/etc/login.defs` change the behavior of this tool:

GID_MAX (number), **GID_MIN** (number)

Range of group IDs used for the creation of regular groups by **useradd**, **groupadd**, or **newusers**.

The default value for **GID_MIN** (resp. **GID_MAX**) is 1000 (resp. 60000).

MAX_MEMBERS_PER_GROUP (number)

Maximum members per group entry. When the maximum is reached, a new group entry (line) is started in `/etc/group` (with the same name, same password, and same GID).

The default value is 0, meaning that there are no limits in the number of members in a group.

This feature (split group) permits to limit the length of lines in the group file. This is useful to make sure that lines for NIS groups are not larger than 1024 characters.

If you need to enforce such limit, you can use 25.

Note: split groups may not be supported by all tools (even in the Shadow toolsuite). You should not use this variable unless you really need it.

SYS_GID_MAX (number), **SYS_GID_MIN** (number)

Range of group IDs used for the creation of system groups by **useradd**, **groupadd**, or **newusers**.

The default value for **SYS_GID_MIN** (resp. **SYS_GID_MAX**) is 101 (resp. **GID_MIN**–1).

FILES

`/etc/group`

Group account information.

`/etc/gshadow`

Secure group account information.

`/etc/login.defs`

Shadow password suite configuration.

CAVEATS

You may not add a NIS or LDAP group. This must be performed on the corresponding server.

If the groupname already exists in an external group database such as NIS or LDAP, **groupadd** will deny the group creation request.

EXIT VALUES

The **groupadd** command exits with the following values:

- 0
success
- 2
invalid command syntax
- 3
invalid argument to option
- 4
GID is already used (when called without **-o**)
- 9
group name is already used
- 10
can't update group file

SEE ALSO

chfn(1), **chsh(1)**, **passwd(1)**, **gpasswd(8)**, **groupdel(8)**, **groupmod(8)**, **login.defs(5)**, **useradd(8)**, **userdel(8)**, **usermod(8)**.