

# usermod(8) - Linux manual page

Archived: 2026-04-05 16:21:36 UTC

*USERMOD(8)*

System Management Commands

*USERMOD(8)*

## NAME [top](#)

usermod - modify a user account

## SYNOPSIS [top](#)

usermod [*options*] *LOGIN*

## DESCRIPTION [top](#)

The usermod command modifies the system account files.

## OPTIONS [top](#)

The options which apply to the usermod command are:

- a, --append  
Add the user to the supplementary group(s). Use only with the -G option.
- b, --badname  
Allow names that do not conform to standards.
- c, --comment *COMMENT*  
update the comment field of the user in /etc/passwd, which is normally modified using the [chfn\(1\)](#) utility.
- d, --home *HOME\_DIR*  
The user's new login directory.

If the -m option is given, the contents of the current home directory will be moved to the new home directory, which is created if it does not already exist. If the current home

directory does not exist the new home directory will not be created.

**-e, --expiredate** *EXPIRE\_DATE*

Specifies the date on which the user account will be disabled. The value can be specified as a date in the YYYY-MM-DD format or as a number of days since 1970-01-01. The date is interpreted using the UTC timezone.

An input of -1 or an empty string blanks the account expiration field in the shadow password file. The account will remain available with no expiration date.

This option requires the /etc/shadow file. If no entry exists in the /etc/shadow file, the system will automatically create one.

**-f, --inactive** *INACTIVE*

Defines the number of days after a password exceeds its maximum age during which the user can still log in by immediately changing their password. If the user does not change their password within this period of time, their account becomes inactive. This value is stored in the shadow password file.

A value of 0 disables the account when the password expires, with no delay.

A value of -1 empties the respective field in the shadow password file, which means that the inactivity period is not enforced.

This option requires the /etc/shadow file. If no entry exist in the /etc/shadow file, the system will automatically create one.

**-g, --gid** *GROUP*

The name or numerical ID of the user's new primary group. The group must exist.

Any file from the user's home directory owned by the previous primary group of the user will be owned by this new group.

The group ownership of files outside of the user's home directory must be fixed manually.

The change of the group ownership of files inside of the

user's home directory is also not done if the home dir owner uid is different from the current or new user id. This is a safety measure for special home directories such as /.

**-G, --groups** *GROUP1[,GROUP2,...[,GROUPN]]*

A list of supplementary groups which the user is also a member of. Each group is separated from the next by a comma, with no intervening whitespace. The groups must exist.

If the user is currently a member of a group which is not listed, the user will be removed from the group. This behaviour can be changed via the **-a** option, which appends the user to the current supplementary group list.

**-l, --login** *NEW\_LOGIN*

The name of the user will be changed from *LOGIN* to *NEW\_LOGIN*. Nothing else is changed. In particular, the user's home directory or mail spool should probably be renamed manually to reflect the new login name.

**-L, --lock**

Lock a user's password. This puts a '!' in front of the encrypted password, effectively disabling the password. You can't use this option with **-p** or **-U**.

Note: if you wish to lock the account (not only access with a password), you should also set the *EXPIRE\_DATE* to 1.

**-m, --move-home**

moves the content of the user's home directory to the new location. If the current home directory does not exist the new home directory will not be created.

This option is only valid in combination with the **-d** (or **--home**) option.

usermod will try to adapt the ownership of the files and to copy the modes, ACL and extended attributes, but manual changes might be needed afterwards.

**-o, --non-unique**

allows to change the user ID to a non-unique value.

This option is only valid in combination with the **-u** option. As a user identity serves as key to map between users on one hand and permissions, file ownerships and other aspects that determine the system's behavior on the other hand, more than

one login name will access the account of the given UID.

**-p, --password *PASSWORD***  
defines a new password for the user. *PASSWORD* is expected to be encrypted, as returned by `crypt(3)`.

Note: Avoid this option on the command line because the password (or encrypted password) will be visible by users listing the processes.

The password will be written in the local `/etc/passwd` or `/etc/shadow` file. This might differ from the password database configured in your PAM configuration.

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

**-r, --remove**  
Remove the user from named supplementary group(s). Use only with the `-G` option.

**-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. No SELINUX support.

**-P, --prefix *PREFIX\_DIR***  
Apply changes within the directory tree starting with *PREFIX\_DIR* and use as well the configuration files located there. 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.

**-s, --shell *SHELL***  
changes the user's login shell. An empty string for *SHELL* empties the field in `/etc/passwd` and logs the user into the system's default shell.

**-u, --uid *UID***  
The new value of the user's ID.

This value must be unique, unless the `-o` option is used. The value must be non-negative.

The user's mailbox, and any files which the user owns and which are located in the user's home directory will have the

file user ID changed automatically.

The ownership of files outside of the user's home directory must be fixed manually.

The change of the user ownership of files inside of the user's home directory is also not done if the home dir owner uid is different from the current or new user id. This is a safety measure for special home directories such as /.

No checks will be performed with regard to the UID\_MIN, UID\_MAX, SYS\_UID\_MIN, or SYS\_UID\_MAX from /etc/login.defs.

**-U, --unlock**

Unlock a user's password. This removes the '!' in front of the encrypted password. You can't use this option with -p or -L.

Note: if you wish to unlock the account (not only access with a password), you should also set the *EXPIRE\_DATE* (for example to *99999*, or to the EXPIRE value from /etc/default/useradd).

**-v, --add-subuids *FIRST-LAST***

Add a range of subordinate uids to the user's account.

This option may be specified multiple times to add multiple ranges to a user's account.

No checks will be performed with regard to SUB\_UID\_MIN, SUB\_UID\_MAX, or SUB\_UID\_COUNT from /etc/login.defs.

**-V, --del-subuids *FIRST-LAST***

Remove a range of subordinate uids from the user's account.

This option may be specified multiple times to remove multiple ranges to a user's account. When both --del-subuids and --add-subuids are specified, the removal of all subordinate uid ranges happens before any subordinate uid range is added.

No checks will be performed with regard to SUB\_UID\_MIN, SUB\_UID\_MAX, or SUB\_UID\_COUNT from /etc/login.defs.

**-w, --add-subgids *FIRST-LAST***

Add a range of subordinate gids to the user's account.

This option may be specified multiple times to add multiple ranges to a user's account.

No checks will be performed with regard to SUB\_GID\_MIN, SUB\_GID\_MAX, or SUB\_GID\_COUNT from /etc/login.defs.

**-W, --del-subgids** *FIRST-LAST*

Remove a range of subordinate gids from the user's account.

This option may be specified multiple times to remove multiple ranges to a user's account. When both --del-subgids and --add-subgids are specified, the removal of all subordinate gid ranges happens before any subordinate gid range is added.

No checks will be performed with regard to SUB\_GID\_MIN, SUB\_GID\_MAX, or SUB\_GID\_COUNT from /etc/login.defs.

**-Z, --selinux-user** *SEUSER*

defines the SELinux user to be mapped with *LOGIN*. An empty string ("") will remove the respective entry (if any). Note that the shadow system doesn't store the selinux-user, it uses [semanage\(8\)](#) for that.

**--selinux-range** *SERANGE*

defines the SELinux MLS range for the new account. Note that the shadow system doesn't store the selinux-range, it uses [semanage\(8\)](#) for that.

This option is only valid if the **-Z** (or **--selinux-user**) option is specified.

## CAVEATS [top](#)

You must make certain that the named user is not executing any processes when this command is being executed if the user's numerical user ID, the user's name, or the user's home directory is being changed. `usermod` checks this on Linux. On other operating systems it only uses `utmp` to check if the user is logged in.

You must change the owner of any crontab files or at jobs manually.

You must make any changes involving NIS on the NIS server.

## CONFIGURATION [top](#)

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

`LASTLOG_UID_MAX` (number)

Highest user ID number for which the lastlog entries should be updated. As higher user IDs are usually tracked by remote user identity and authentication services there is no need to create a huge sparse lastlog file for them.

No `LASTLOG_UID_MAX` option present in the configuration means that there is no user ID limit for writing lastlog entries.

`MAIL_DIR` (string)

The mail spool directory. This is needed to manipulate the mailbox when its corresponding user account is modified or deleted. If not specified, a compile-time default is used. The parameter `CREATE_MAIL_SPOOL` in `/etc/default/useradd` determines whether the mail spool should be created.

`MAIL_FILE` (string)

Defines the location of the users mail spool files relatively to their home directory.

The `MAIL_DIR` and `MAIL_FILE` variables are used by `useradd`, `usermod`, and `userdel` to create, move, or delete the user's mail spool.

`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.

`SUB_GID_MIN` (number), `SUB_GID_MAX` (number), `SUB_GID_COUNT` (number)

If `/etc/subuid` exists, the commands `useradd` and `newusers`

(unless the user already have subordinate group IDs) allocate SUB\_GID\_COUNT unused group IDs from the range SUB\_GID\_MIN to SUB\_GID\_MAX for each new user.

The default values for SUB\_GID\_MIN, SUB\_GID\_MAX, SUB\_GID\_COUNT are respectively 100000, 600100000 and 65536.

SUB\_UID\_MIN (number), SUB\_UID\_MAX (number), SUB\_UID\_COUNT (number)

If /etc/subuid exists, the commands useradd and newusers (unless the user already have subordinate user IDs) allocate SUB\_UID\_COUNT unused user IDs from the range SUB\_UID\_MIN to SUB\_UID\_MAX for each new user.

The default values for SUB\_UID\_MIN, SUB\_UID\_MAX, SUB\_UID\_COUNT are respectively 100000, 600100000 and 65536.

## FILES [top](#)

/etc/group  
Group account information

/etc/gshadow  
Secure group account information

/etc/login.defs  
Shadow password suite configuration

/etc/passwd  
User account information

/etc/shadow  
Secure user account information

/etc/subgid  
Per user subordinate group IDs

/etc/subuid  
Per user subordinate user IDs

## SEE ALSO [top](#)

[chfn\(1\)](#), [chsh\(1\)](#), [passwd\(1\)](#), [crypt\(3\)](#), [gpasswd\(8\)](#), [groupadd\(8\)](#), [groupdel\(8\)](#), [groupmod\(8\)](#), [login.defs\(5\)](#), [subgid\(5\)](#), [subuid\(5\)](#), [useradd\(8\)](#), [userdel\(8\)](#).

## COLOPHON [top](#)

This page is part of the *shadow-utils* (utilities for managing accounts and shadow password files) project. Information about the project can be found at <https://github.com/shadow-maint/shadow>. If you have a bug report for this manual page, send it to [pkg-shadow-devel@alioth-lists.debian.net](mailto:pkg-shadow-devel@alioth-lists.debian.net). This page was obtained from the tarball *shadow-4.19.0.tar* fetched from <https://github.com/shadow-maint/shadow/releases> on 2026-01-16. If you discover any rendering problems in this HTML version of the page, or you believe there is a better or more up-to-date source for the page, or you have corrections or improvements to the information in this COLOPHON (which is *not* part of the original manual page), send a mail to [man-pages@man7.org](mailto:man-pages@man7.org)

shadow-utils 4.19.0

01/16/2026

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Pages that refer to this page: [getsubids\(1\)](#), [newgidmap\(1\)](#), [newuidmap\(1\)](#), [passwd\(1\)](#), [pcap\(3pcap\)](#), [subgid\(5\)](#), [subuid\(5\)](#), [groupadd\(8\)](#), [groupdel\(8\)](#), [groupmems\(8\)](#), [groupmod\(8\)](#), [pwck\(8\)](#), [useradd\(8\)](#), [userdel\(8\)](#)

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