Adding a new user is done with **useradd** and removing an existing user is done with **userdel**. In the simplest form, an account for the new user **bjmoose** would be done with:

```
$ sudo /usr/sbin/useradd bjmoose
```

which, by default, sets the home directory to **/home/bjmoose**, populates it with some basic files (copied from **/etc/skel**), adds a line to **/etc/passwd** such as:

```
bjmoose:x:1002:1002::/home/bjmoose:/bin/bash
```

and sets the default shell to **/bin/bash**.

Additional options can be specified to change these properties, and to set others, such as the user name, etc. (see man **useradd**).

Before the account can be used, a password must be set. This can be done with the **-p** option to **useradd**, or by doing:

```
$ sudo passwd bjmoose
```

which will then prompt for adding a password.

Note that only the superuser, or root, has the right to establish (or remove) an account.

Removing a user account is as easy as:

```
$ sudo /usr/sbin/userdel bjmoose
```

However, this will leave the **/home/bjmoose** directory intact. This might be useful if it is a temporary inactivation, for example. To remove the home directory while removing the account, you need to use the **-r** option to **userdel**.

You can change the user's characteristics after the account has been established with **usermod**. For example, you could use the **-d** option to change the home directory, or the **-p** option to change the password.

Adding a new group is done with **groupadd**:

```
$ sudo /usr/sbin/groupadd anewgroup
```

establishes the group **anewgroup** with default properties. The group can be removed with:

```
$ sudo /usr/sbin/groupdel anewgroup
```

Adding a user to an already existing group is done with **usermod**. For example, you would first look at what groups the user already belongs to:

```
$ groups bjmoose
bjmoose : bjmoose
```

and then, add the new group:

```
$ sudo /usr/sbin/usermod -aG anewgroup bjmoose
$ groups bjmoose
bjmoose: rjsquirrel anewgroup
```

Once again, these utilities must be run as superuser or root, and update **/etc/group** as necessary. The **groupmod** utility can be used to change the group's properties, most often the numerical Group ID with the -**g** option, or its name with the **-m** option.

Removing a user from the group is somewhat trickier. The **-G** option to **usermod** must be given a complete list of groups. Thus, if you do:

```
$ sudo /usr/sbin/usermod -G rjsquirrel rjsquirrel
$ groups rjsquirrel
rjsquirrel : rjsquirrel
```

only the **rjsquirrel** group will be left.

An additional command, **id**, can be used to quickly glimpse user information. With no argument, it gives information about the current user, as in:

```
$ id
uid=1000(george) gid=1000(george) groups=106(fuse),1000(george)
```

If given the name of another user as an argument, **id** will report information about that other user.