

A sample output is as follows:

```
# ./user_adm.sh -details test
Login: test                      Name:
Directory: /home/test           Shell: /bin/sh
Last login Tue Dec 21 00:07 (IST) on pts/1 from localhost
No mail.
No Plan.
Last password change            : Dec 20, 2010
Password expires                 : never
Password inactive               : never
Account expires                 : Oct 10, 2010
Minimum number of days between password change : 0
Maximum number of days between password change : 99999
Number of days of warning before password expires : 7
```

## How it works...

The `user_adm.sh` script can be used to perform many user management tasks. You can follow the `usage()` text for the proper usage of the script which is called when any of the parameters given by the user is wrong or has the `-usage` parameter. A case statement is used to match the command arguments and execute the corresponding commands according to that. The valid command options for the `user_adm.sh` script are: `-adduser`, `-deluser`, `-shell`, `-disable`, `-enable`, `-expiry`, `-passwd`, `-newgroup`, `-delgroup`, `-addgroup`, `-details`, and `-usage`. When the `*` case is matched, it means it is a wrong option and hence, `usage()` is invoked. For each match case, we have used `[ $# -ne 3 ] && usage`. It is used for checking the number of arguments. If the number of command arguments are not equal to the required number, the `usage()` function is invoked and the script will exit without executing further. In order to run the user management commands, the script needs to be run as root and hence, a check for the user ID 0 (root has user ID 0) is performed.

Let's explain each case one by one:

- ▶ `-useradd`: The `useradd` command can be used to create a new user. It has the following syntax:  
**useradd USER -p PASSWORD**
- ▶ The `-m` option is used to create the home directory. It is also possible to provide the full name of the user by using the `-c FULLNAME` option.
- ▶ `-deluser`: The `deluser` command can be used to remove the user. The syntax is as follows:  
**deluser USER**

- ▶ `--remove-all-files` is used to remove all files associated with the user including the home directory.
- ▶ `-shell`: The `chsh` command is used to change the default shell for the user. The syntax is:  
**chsh USER -s SHELL**
- ▶ `-disable` and `-enable`: The `usermod` command is used to manipulate several attributes related to user accounts. `usermod -L USER` locks the user account and `usermod -U USER` unlocks the user account.
- ▶ `-expiry`: The `chage` command is used to manipulate user account expiry information. The syntax is:  
**chage -E DATE**

There are additional options as follows:

- ❑ `-m MIN_DAYS` (set the minimum number of days between password changes to `MIN_DAYS`)
  - ❑ `-M MAX_DAYS` (set the maximum number of days during which a password is valid)
  - ❑ `-W WARN_DAYS` (set the number of days of warning before a password change is required)
- ▶ `-passwd`: The `passwd` command is used to change passwords for the users. The syntax is:  
**passwd USER**

The command will prompt to enter a new password.

- ▶ `-newgroup` and `addgroup`: The `addgroup` command will add a new user group to the system. The syntax is:  
**addgroup GROUP**

In order to add an existing user to a group use:

**addgroup USER GROUP**  
**-delgroup**

The `delgroup` command will remove a user group. The syntax is:

**delgroup GROUP**

- ▶ `-details`: The `finger USER` command will display the user information for the user which includes details such as user home directory path, last login time, default shell, and so on. The `chage -l` command will display the user account expiry information.