

## \* Chapter - 11 User Environment \*

### \* Learning objective

→ By the end of this chapter, you should be able to

- use and configure user accounts and user groups.
- use and set environment variable.
- use the previous shell command history.
- use keyboard shortcuts.
- use and define aliases.
- use and set file permission and ownership.

### \* Identifying the current user.

→ As you know, Linux is a multi-user operating system, meaning more than one user can log on at the same time.

- To identify the current user, type `whoami`.

- To list the currently logged on users type `who`.

→ Giving `who` the `-u` option will give more detailed information.

### \* Creating Aliases

→ You can customize commands or modify the behaviour of already existing ones by creating aliases.

→ Typing `alias` with no arguments will list currently defined aliases.

→ Please note there should not be any spaces on either side of equals sign

→ And the alias definition needs to be placed within either single or double quotes if it contains any spaces.

## \* Adding and Removing users

→ Adding a new user is done with `useradd` and removing an existing user is done with `userdel`.

→ In the simplest form, an account for new user `blmoose` would be done with

```
$ sudo useradd blmoose,
```

→ which, by default, sets the home directory to `/home/blmoose` populates it with some basic files and add a line to `etc/passwd`

→ Removing a user account is as easy typing `userdel blmoose`. However this will leave the `/home/blmoose` directory intact.

→ To remove the home directory while removing the account one needs to use the `-r` option to `userdel`.

→ Typing `id` with no argument gives information about the current user, as in,

```
$ id
```

## \* Adding and Removing Groups

→ Adding a new group is done with groupadd

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

→ 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 group the user already belongs to

```
$ groups rjsquirrel
```

```
rjsquirrel : rjsquirrel
```

and then add the new group

```
$ sudo /usr/sbin/usermod -a -G anewgroup  
rjsquirrel.
```

```
$ groups rjsquirrel
```

```
rjsquirrel : rjsquirrel anewgroup
```



→ Removing a user from the group is somewhat trickier. The `-G` option to `usermod` must give a complete list of groups.

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

```
$ groups rjsquirrel
```

```
rjsquirrel: rjsquirrel
```

### \* Elevating to root Account

→ To execute just one command with root privilege type `sudo <command>`.

→ When the command is complete, you will return to being a normal unprivileged user.

Sudo configuration files are stored in the `/etc/sudoers` file and in the

`/etc/sudoers.d` directory.

→ By default, the `sudoers.d` is empty.