

Creating and managing users

Useradd *username* to add new user

Eg. useradd kawal

We have now created a new user called kawal

Note: only the root has the right to create new users so you have to login as root ,For that type ***su*** – in terminal and press enter. A password for root will be asked. Fill that *(if you cant see the letters while typing password...don't worry 😊)*

All user account related information are stored in the following files:

1. `cat /etc/passwd` – Contains one line for each user account.
2. `cat /etc/group` – Defines the groups on the system.

Set password for user

`passwd username`

Eg. passwd kawal

press enter it will ask to set password for user

Delete a user

`userdel username`

Eg. `userdel kawal`

*Note: to check the list of existing users you can
type*

`cat /etc/passwd`

'cat'

there is space after

More about passwd file

Each entry has the following fields: ***user:password:UID:GID:comment:home:shell***

1. Username: User login name used to login into system. It should be between 1 to 32 characters long.
2. Password: User password (or x character) stored in `/etc/shadow` file in encrypted format.
3. User ID (UID): Every user must have a User ID (UID) User Identification Number. By default UID 0 is reserved for root user and UID's ranging from 1-99 are reserved for other predefined accounts. Further UID's ranging from 100-999 are reserved for system accounts and groups.
4. Group ID (GID): The primary Group ID (GID) Group Identification Number stored in `/etc/group` file. *GID* is the group ID for the primary group of the user. This is also a numerical value and to root, also has the value 0.
5. comment/User Info: This field is optional and allow you to define extra information about the user. For example, user full name. This field is filled by 'finger' command.
6. Home Directory: The absolute location of user's home directory. *home* defines the home directory of that user.
7. Shell: The absolute location of a user's shell i.e. `/bin/bash`.

Create an group

`groupadd groupname`

Eg. groupadd cappractice

*Note: to check the list of existing groups you can
type :*

cat /etc/group

Creating and managing users

You can use the **useradd** or **usermod** commands to add a user to a group. The **useradd** command creates a new user . The **usermod** command modifies a user account and it is useful to add user to existing groups. There are two types of groups under Linux operating systems:

1. Primary user group.
2. Secondary or supplementary user group.

Your Primary Group is the default group your account is associated when you login, this is the group with the Group ID that is the 4th field in your account `/etc/passwd` file. Directories and files you create have this Group ID.

Your Secondary Group is any Group(s) you are a member of other than your Primary Group.

All Group(s) are found in the `/etc/group` file and are created with the 'groupadd' command

Users are added to a Group with the 'usermod -G groupname username' command. You can see the members of a Group by viewing the `/etc/group` file.

Users can change the current Group they are in with the command 'newgrp' and can check their current group with the 'id' command.

Access to directory/files is controlled by the permission bits of the directory/file and the Group that "owns" the directory/file.

Add new users to the Secondary group

`useradd -G <groupname> username`

eg. `useradd -G cappractice kawal`

Please note that capital G (-G) option add user to a list of secondary groups.

You can easily add a user to more than one group by simply specifying them in a comma-delimited list

For example, add user jerry to groups admins, ftp, www, and developers.

```
# useradd -G admins,ftp,www,developers jerry
```

Add a new user to primary group

To add a user tony to group developers use the following command:

```
# useradd -g developers tony
```

```
# id tony
```

Please note that small g (-g) option add user to initial login group (primary group). The group name must exist. A group number must refer to an already existing group.

Change a User's Primary Group

Sometimes you might want to change the primary group that a user is assigned to, which you can do with this command:

```
usermod -g <groupname> username
```

Add an Existing User to a Group

Add existing user tony to ftp supplementary/secondary group with the usermod command using the -a option ~ i.e. add the user to the supplemental group(s).

Use only with -G option:

```
# usermod -a -G ftp tony
```

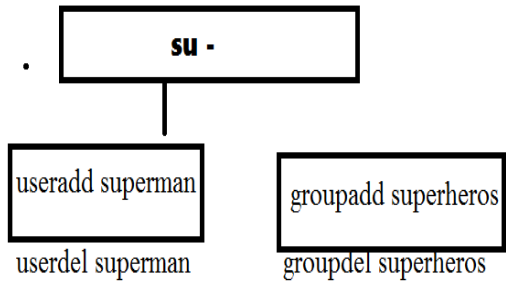
In this example, change tony user's primary group to www, enter:

```
# usermod -g www tony
```

Delete a group

`groupdel groupname`

Eg. groupdel cappractice



-g =primary group
-G =secondary group

cat /etc/passwd //contains
informatiin regarding users

cat /etc/group //contains
information regarding secondary
groups

useradd -G groupname username
eg. useradd -G superheros ironman

add new user to group

usermod -G superheros hulk

add existing user to group

usermod -G avengers hulk

change group of the user

usermode