

## Users and Groups in Linux

A user is an entity, in a Linux operating system, that can manipulate and perform several other operations.

Users are accounts that can be used to login into a system. Each user is identified by a unique identification number or UID by the system.

All the information of users in a system are stored in `/etc/passwd` file. The hashed passwords for users are stored in `/etc/shadow` file.

There are three types of user in Linux - root, regular, Service.

### The root user account

This is main user account in Linux system. It is automatically created during the installation. It has the highest privilege in system. It can do any administrative work and can access any service. It should not be used for routine activities. It can't be deleted. But if required, it can be disabled.

### The regular user account

This is the normal user account. During the installation, one regular user account is created. After the installation, we can create as many regular user accounts as we need. This account has moderate privilege. This account is intended for routine works. It can perform only the tasks for which it is allowed and can access only those files and services for which it is authorized. As per requirement it can be disabled or deleted.

### The Service account

Service accounts are created by installation packages when they are installed. These accounts are used by services to run processes and execute functions.

**Groups:** Users can be listed in different groups. Groups allow us to set permission on the group level instead of setting the permission on individual level.



**\$ adduser [User name]** -- used to add a new user to your current Linux machine. it allows us to modify the configurations of the user which is to be created.

**\$ cat /etc/passwd** -- used to display a plain text-based database that contains information for all user account on the system. giving for each account some useful information like user ID, group ID, home directory, shell, and more.

**\$ userdel [User name]** -- used to delete a user account and related files. basically modifies the system account files, deleting all the entries which refer to the username login.

**\$ groupadd [gname]** -- groupadd command create a new group account using the values specified on the command line and the default values from the system.

**\$ cat /etc/group** -- used to display a plain text-file that contains a list of groups and members belonging to each group on the system.

**\$ groupdel [gname]** -- used to delete all entries related to a group in the system.

**\$ passwd [User name]** -- used to change passwords for user accounts