

File Permissions - 1

- **File permissions** (file modes) specify who can access, change or execute a file on a Linux System.
- It ensures that only authorized users and processes can access files and directories.
- **Each file or directory has an owner and a group. By default, the owner is the user who creates the file and the group is the primary group of that user.**
- The ownership of a file or a directory can be changed only by root using the **chown** and **chgrp** commands.

For each file the permissions are assigned to three different categories of users:

1. The file owner.
2. The group owner.
3. Others (anyone else or the whole world).

File Permissions - 2

There are three file permissions types that apply to each category:

- The read permission (**r**)
- The write permission (**w**)
- The execute permission (**x**)

To view the files permission run: **ls -l** or **stat**.

```
stud@ubuntu-20:~$ ls -l /etc/passwd
-rw-r--r-- 1 root root 2869 aug  2 16:05 /etc/passwd
stud@ubuntu-20:~$ █
```