

# File permissions in Linux

## Project description

Linux file commands allow for quick and easy manipulation of user permissions whether on a single, shared computer or across a server in order to ensure that only those who need access to a file's contents are able to view or change that file.

## Check file and directory details

```
ls -l /user/myfolder
```

## Describe the permissions string

The permissions string takes the form "drwxrwxrwx" separated into subgroups as "d/rwx/rwx/rwx" where each "rwx" represents the permissions for the user, the group, and others, respectively. If the user, group, or others lack some permission, for example writing, it would take the form "dr-xr-xr-x" where "w" is replaced by a hyphen.

## Change file permissions

```
chmod 755 /user/myfolder/myfile.txt
```

## Change file permissions on a hidden file

```
chmod 755 -R /user/myfolder/myhiddenfile.txt
```

## Change directory permissions

```
chmod 755 /user/myfolder/
```

## Summary

The first, simple file permission change simple sets user permissions to read, write, and execute (rwx), group permissions to read and execute (r-x), and other permissions to read and execute (r-x). The second does the same using a recursive permission change in order to access a hidden text file that would not be visible without the -R chmod modifier. The final one simple sets the same controls to a folder rather than a file within the folder.