

File permissions in Linux

Project description

[Working with file permissions.]

Check file and directory details

```
researcher2@e7b78590fc1c:~$ pwd
/home/researcher2
researcher2@e7b78590fc1c:~$ ls -l
total 4
drwxr-xr-x 3 researcher2 research_team 4096 May 30 20:00 projects
researcher2@e7b78590fc1c:~$
```

Describe the permissions string

The permissions string allows you to see which permissions are granted to the owner, group, and others.

Change file permissions

```
researcher2@e7b78590fc1c:~/projects$ chmod o-w project_k.txt
researcher2@e7b78590fc1c:~/projects$ ls -l
total 20
drwx--x--- 2 researcher2 research_team 4096 May 30 20:00 drafts
-rw-rw-r-- 1 researcher2 research_team 46 May 30 20:00 project_k.txt
-rw-r----- 1 researcher2 research_team 46 May 30 20:00 project_m.txt
-rw-rw-r-- 1 researcher2 research_team 46 May 30 20:00 project_r.txt
-rw-rw-r-- 1 researcher2 research_team 46 May 30 20:00 project_t.txt
researcher2@e7b78590fc1c:~/projects$
```

Change file permissions on a hidden file

```
researcher2@e7b78590fc1c:~/projects$ ls -la
total 32
drwxr-xr-x 3 researcher2 research_team 4096 May 30 20:00 .
drwxr-xr-x 3 researcher2 research_team 4096 May 30 20:42 ..
-rw--w---- 1 researcher2 research_team  46 May 30 20:00 .project_x.txt
drwx--x--- 2 researcher2 research_team 4096 May 30 20:00 drafts
-rw-rw-r-- 1 researcher2 research_team  46 May 30 20:00 project_k.txt
-rw-r----- 1 researcher2 research_team  46 May 30 20:00 project_m.txt
-rw-rw-r-- 1 researcher2 research_team  46 May 30 20:00 project_r.txt
-rw-rw-r-- 1 researcher2 research_team  46 May 30 20:00 project_t.txt
researcher2@e7b78590fc1c:~/projects$ chmod g+r,g-w .project_x.txt
researcher2@e7b78590fc1c:~/projects$ ls -la
total 32
drwxr-xr-x 3 researcher2 research_team 4096 May 30 20:00 .
drwxr-xr-x 3 researcher2 research_team 4096 May 30 20:42 ..
-rw-r----- 1 researcher2 research_team  46 May 30 20:00 .project_x.txt
drwx--x--- 2 researcher2 research_team 4096 May 30 20:00 drafts
-rw-rw-r-- 1 researcher2 research_team  46 May 30 20:00 project_k.txt
-rw-r----- 1 researcher2 research_team  46 May 30 20:00 project_m.txt
-rw-rw-r-- 1 researcher2 research_team  46 May 30 20:00 project_r.txt
-rw-rw-r-- 1 researcher2 research_team  46 May 30 20:00 project_t.txt
```

Change directory permissions

```
researcher2@e7b78590fc1c:~/projects$ ls -l
total 20
drwx--x--- 2 researcher2 research_team 4096 May 30 20:00 drafts
-rw-rw-r-- 1 researcher2 research_team  46 May 30 20:00 project_k.txt
-rw-r----- 1 researcher2 research_team  46 May 30 20:00 project_m.txt
-rw-rw-r-- 1 researcher2 research_team  46 May 30 20:00 project_r.txt
-rw-rw-r-- 1 researcher2 research_team  46 May 30 20:00 project_t.txt
researcher2@e7b78590fc1c:~/projects$ chmod g-x drafts
researcher2@e7b78590fc1c:~/projects$ ls -l
total 20
drwx----- 2 researcher2 research_team 4096 May 30 20:00 drafts
-rw-rw-r-- 1 researcher2 research_team  46 May 30 20:00 project_k.txt
-rw-r----- 1 researcher2 research_team  46 May 30 20:00 project_m.txt
-rw-rw-r-- 1 researcher2 research_team  46 May 30 20:00 project_r.txt
-rw-rw-r-- 1 researcher2 research_team  46 May 30 20:00 project_t.txt
researcher2@e7b78590fc1c:~/projects$
```