

Portfolio Activity: Use Linux commands to manage file permissions

File permissions in Linux

Project description

Use linux commands to manage file permissions

Check file and directory details

In the /home/researcher2/projects directory, there are five files with the following names and permissions:

- project_k.txt
 - ☐ User = read, write,
 - ☐ Group = read, write
 - ☐ Other = read, write
- project_m.txt
 - ☐ User = read, write
 - ☐ Group = read
 - ☐ Other = none
- project_r.txt
 - ☐ User= read, write
 - ☐ Group = read, write
 - ☐ Other = read
- project_t.txt
 - ☐ User = read, write
 - ☐ Group = read, write
 - ☐ Other = read
- .project_x.txt
 - ☐ User = read, write
 - ☐ Group = write
 - ☐ Other = none

There is also one subdirectory inside the projects directory named drafts. The permissions on drafts are:

- User = read, write, execute
- Group = execute
- Other = none

Describe the permissions string

[Add content here.]

Change file permissions

```
researcher2@b5f2f57d027d:~/projects$ ls -l
total 20
drwx--x--- 2 researcher2 research_team 4096 Aug 31 19:04 drafts
-rw-rw-rw- 1 researcher2 research_team  46 Aug 31 19:04 project_k.txt
-rw-r----- 1 researcher2 research_team  46 Aug 31 19:04 project_m.txt
-rw-rw-r-- 1 researcher2 research_team  46 Aug 31 19:04 project_r.txt
-rw-rw-r-- 1 researcher2 research_team  46 Aug 31 19:04 project_t.txt
researcher2@b5f2f57d027d:~/projects$ chmod o-w project_k.txt
researcher2@b5f2f57d027d:~/projects$ ls -l
total 20
drwx--x--- 2 researcher2 research_team 4096 Aug 31 19:04 drafts
-rw-rw-r-- 1 researcher2 research_team  46 Aug 31 19:04 project_k.txt
-rw-r----- 1 researcher2 research_team  46 Aug 31 19:04 project_m.txt
-rw-rw-r-- 1 researcher2 research_team  46 Aug 31 19:04 project_r.txt
-rw-rw-r-- 1 researcher2 research_team  46 Aug 31 19:04 project_t.txt
researcher2@b5f2f57d027d:~/projects$
```

Change file permissions on a hidden file

```
researcher2@b5f2f57d027d:~/projects$ ls -la
total 32
drwxr-xr-x 3 researcher2 research_team 4096 Aug 31 19:04 .
drwxr-xr-x 3 researcher2 research_team 4096 Aug 31 19:52 ..
-rw--w---- 1 researcher2 research_team  46 Aug 31 19:04 .project_x.txt
drwx--x--- 2 researcher2 research_team 4096 Aug 31 19:04 drafts
-rw-rw-r-- 1 researcher2 research_team  46 Aug 31 19:04 project_k.txt
-rw-r----- 1 researcher2 research_team  46 Aug 31 19:04 project_m.txt
-rw-rw-r-- 1 researcher2 research_team  46 Aug 31 19:04 project_r.txt
-rw-rw-r-- 1 researcher2 research_team  46 Aug 31 19:04 project_t.txt
researcher2@b5f2f57d027d:~/projects$ chmod g-w .project_x.txt
researcher2@b5f2f57d027d:~/projects$ ls -la
total 32
drwxr-xr-x 3 researcher2 research_team 4096 Aug 31 19:04 .
drwxr-xr-x 3 researcher2 research_team 4096 Aug 31 19:52 ..
-rw----- 1 researcher2 research_team  46 Aug 31 19:04 .project_x.txt
drwx--x--- 2 researcher2 research_team 4096 Aug 31 19:04 drafts
-rw-rw-r-- 1 researcher2 research_team  46 Aug 31 19:04 project_k.txt
-rw-r----- 1 researcher2 research_team  46 Aug 31 19:04 project_m.txt
-rw-rw-r-- 1 researcher2 research_team  46 Aug 31 19:04 project_r.txt
-rw-rw-r-- 1 researcher2 research_team  46 Aug 31 19:04 project_t.txt
researcher2@b5f2f57d027d:~/projects$
```

Change directory permissions

```
researcher2@b5f2f57d027d:~/projects$ chmod o-x /home/researcher2/projects/drafts
researcher2@b5f2f57d027d:~/projects$ ls -la
total 32
drwxr-xr-x 3 researcher2 research_team 4096 Aug 31 19:04 .
drwxr-xr-x 3 researcher2 research_team 4096 Aug 31 19:52 ..
-rw----- 1 researcher2 research_team  46 Aug 31 19:04 .project_x.txt
drwx--x--- 2 researcher2 research_team 4096 Aug 31 19:04 drafts
-rw-rw-r-- 1 researcher2 research_team  46 Aug 31 19:04 project_k.txt
-rw-r----- 1 researcher2 research_team  46 Aug 31 19:04 project_m.txt
-rw-rw-r-- 1 researcher2 research_team  46 Aug 31 19:04 project_r.txt
-rw-rw-r-- 1 researcher2 research_team  46 Aug 31 19:04 project_t.txt
researcher2@b5f2f57d027d:~/projects$
```