# File permissions in Linux

## Project description

I am a security professional at a large organization and am currently checking that the proper authorizations are given to the correct group of people. A screenshot of a computer

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## Check file and directory details

The command you can use to check permissions in a certain directory is one of three commands: ls -a, ls -l, ls -la. In this picture I used ls -la to locate the permissions of ordinary and hidden files. A screenshot of a computer program

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## Describe the permissions string

D stands for directory, and if there is no D at the beginning of the string it is just a regular file. 2nd-4th characters describe user permissions, r being their read permissions, w being their write permissions, and x being their execute permissions. If there is a “-“ this indicates they do not have that certain permission. The 5th-7th character displays the group permissions. While the 8th- 10th character are the other’s permissions.

A black background with white letters

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## Change file permissions

Due to my organization not allowing others to have write access to any files, I located the “project\_k.txt” file and had to change the permissions for other. In order to change file permissions for certain individuals/groups/others I used the chmod command.

A screenshot of a computer

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## Change file permissions on a hidden file

There is one hidden file that has been archived, and should not have any write permissions for anyone but should have read permissions for user/group, so I again used the chmod command line and changed permissions for both the user and group.





## Change directory permissions

[I had to change directories using “cd” to go to the draft directory, and from there I looked into the certain permissions and changed them so that only researcher2 would have access to drafts directory and its contents.

A computer screen with white text

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## Summary

As the Security professional at a large organization, it is my duty to review and ensure that certain users on the team are authorized with appropriate permissions. I ensured that I reviewed the permissions for all and every file, making sure to change the accessibilities for the groups that should not have certain permissions. Furthermore, I changed directories and changed permissions on two other hidden files.