File permissions in Linux

Project description

In this short project I will be demonstrating some of the commands used in linux to look for and change file permissions.

Check file and directory details

To check file and directory details I am using the ls -la command to display all files and the permissions accompanying them.



Describe the permissions string

The permissions string consists of 10 character slots. The 1st slot will always be either “D”which represents the item is a directory, Or “-” notating that item is a file. From there there are 3 slots representing 3 separate permission groups User(2,3,4), Group(5,6,7) or Other(8,9,10)

X-XXX-XXX-XXX

-rw-rw-rw- 1 researcher2 research\_team 46 Oct 14 18:40 project\_k.txt

Following that string of characters is the name of the file owner immediately followed by the name of the group that the owner is assigned to! (Researcher2, research\_team). Other describes any other person/team on the internal network that has access to the file or folder.

Change file permissions

To change file permissions on project\_K.txt i will use the chmod command to remove the read and write permissions from the group permission slots and the read write, and execute permissions from the others slot.



Change file permissions on a hidden file

Hidden files and directories are notated to start with a (.) before the name. To search for hidden files the ls -a, or ls -la command is used.



When changing file permissions on the hidden file remember to place a (.) before the file or folder name to signal that the item is hidden.



Change directory permissions

In order to change permissions for a directory the process will remain the same, but after we assign permissions there is no extension that follows.





In this example i used the chmod (g-x) command to remove the executable permission from the group permission slot.

Summary

This short demonstration is to show the use of some commands in linux that deal with file permisssions and hidden files/folders. I now have a baseline for file permissions and chmod that i look to build upon in the future.