File permissions in Linux

Benjamin Taylor - Google Cybersecurity

Project description

This project shows how to manage and modify file and directory permissions in Linux using command-line tools. Through commands like Is -la, chmod, and understanding permission strings, people are able to control access to files, including hidden files and directories.

Check file and directory details

To check file and directory permissions, we can use the command "Is -la".

Describe the permissions string

"-rw-r--r-" is an example of a permissions string. This particular example means that the owner has permission to read and write, "group" has read permission, and "other" has read permission.

Change file permissions

We can use chmod to change permissions on a file. For example, continuing off of the last permissions string we used, doing the command "chmod u+x filename" adds execute permissions to the owner of the file.

Change file permissions on a hidden file

Changing permissions on a hidden file (found through Is -la) is simple, you just need to add a dot (.) before the filename. For example, "chmod u+x .filename".

Change directory permissions

Changing directory permissions is also straightforward, you can use chmod again but instead of providing a file name you need to specify the directory path. For example, "chmod o-r home/directory1".

Summary

In conclusion, Linux commands can be used to view and modify file and directory permissions, using some key commands such as "Is -la" and "chmod". These skills are critical for maintaining proper access control and system security in Linux environments.