

Adding and Managing users with Linux

Project description

In this project, I went through the process of onboarding and offboarding an employee using Linux commands.

Adding a New User to The System

The following code demonstrates how I used Linux commands to add a new employee to the system.

```
analyst@05ea3e02965b:~$ sudo useradd researcher9
analyst@05ea3e02965b:~$ sudo usermod -g research_team researcher9
analyst@05ea3e02965b:~$ █
```

The first line in the screenshot is a command adding a new employee to an organization's system. I used “sudo” which gives temporary elevated permissions to specific employees instead of logging in as a root user which is a security risk. After adding researcher9 to the system, i used the command “usermod -g research_team”, which assigns the new employee to a specific team

Assigning file ownership

The employee, researcher9, is then assigned to their own project file. The command “chown” changes file ownership to the argument “researcher9”. After the argument, “researcher9” I wrote out the file path from the directory that “researcher9” will become the owner of.

```
analyst@05ea3e02965b:~$ sudo chown researcher9 /home/researcher2/projects/project_r.txt
analyst@05ea3e02965b:~$ █
```

Adding employee to a secondary group

I had to add “researcher9” to a secondary group using the command “sudo usermod”, command “-a” appends the secondary group, “sales_team” to the authorized controls instead of replacing the initial group, “research_team” with “sales_team”. The command “-G” is the command used to add the secondary group. The employee is now working on both teams as given permission through the commands.

```
analyst@05ea3e02965b:~$ sudo usermod -a -G sales_team researcher9
analyst@05ea3e02965b:~$
```

Deleting a user

The following code demonstrates how I used Linux commands to delete a user:

```
analyst@05ea3e02965b:~$ sudo userdel researcher9
userdel: group researcher9 not removed because it is not the primary group of user
researcher9.
analyst@05ea3e02965b:~$ sudo groupdel researcher9
analyst@05ea3e02965b:~$
```

When you create a new user in Linux, a group with the same name as the user is automatically created and the user is the only member of that group. That is why the initial command “sudo userdel researcher9” did not work, I had to use the command “groupdel” to delete the entire group that the user belongs to.

Summary

This project showcases my practical experience with Linux user access management, which is a vital aspect of maintaining a secure and organized system. The ability to add, modify, and remove users while managing file ownership and group assignments is essential for ensuring data security and access control.

By successfully completing this project, I've demonstrated competence in basic Linux system administration tasks, further strengthening my technical skill set in this domain.