

Lab 2.1 : Command-line Review

LAB NAME:

Systems Administration, Command-line review (L2-CAT-02-01)

OVERVIEW:

This lab marks the beginning of level 2 and delivers a comprehensive review that should be completed prior to proceeding with the remaining level 2 labs.

PREREQUISITES:

- Introduction to command line
- Introduction to virtual machines (optional)
- Creating accounts on Linux and Windows
- Permission controls on Linux and Windows

MATERIALS:

- Internet connection (for accessing additional resources)

LEARNING OBJECTIVES:

- Review key concepts from the previous unit 1 labs in order to establish a solid foundation for which to build on with unit 2 concepts.

TASKS: (WORK IN PROGRESS)

1. Complete the review questions

DELIVERABLES:

- A PDF file with the given questions in the review category and your corresponding answers.
- Push the completed lab to your Git repository or submit through the designated method provided by your instructor.

ADDITIONAL RESOURCES:

Review

If you feel comfortable with the following exercises, please feel free to move onto the next section! Otherwise the other labs are open for review. For reference you can use this script: `enterprise.sh`.

1. Create an organizational chart.
2. Who works in the CIO's office?
3. Imagine Teresa Thomas has just been promoted to CFO and needs her permissions elevated to an administrative level. Modify Teresa's user permissions so that she is an administrator.
4. There is one file that is not a .txt file. Which one is it and where is it?
5. Larry is the new CISO at XYZ Corporation. What is a CISO? What kind of permissions would you expect a CISO to have? Create a CISO directory in the `c_level` directory, add Larry as a user.
6. Using either octal or symbolic notation, set all the files in Sales & Marketing to read only for everyone, including the assigned group and the owner. What were the original file permissions? What are they now?
7. What is inside the `quartiles.csv` file? Can you make sure to include Q4's 2023 sales? ***the actual number isn't relevant, just that you are able to open, edit, and save the file using the editor of your choice.***
8. Who works in information technology? Can you create a group for them?
9. Change the `umask` to give read and write permissions to all files in Information Technology to all users in the information technology group. Then use `umask` to change all those permissions. What was the resulting `umask`?
10. Do you see any files in the `c-level` directory?
11. There are two people with the last name Smith, what are their first names?
12. Russell John has quit! He had decided to take a position elsewhere. His successor is named Alec. Please set up Alec's access.
13. Which user(s) has a password associated with their login?
14. Can you create a group for the CISO office? Who should be in it?

15. What command would you use to change the owner of the c-level folder? Who do you think should be the owner?
16. Mario is also a new hire at XYZ Corp. He is now working in the IT department as a technician. Do you think his position requires administrative access? Please create a profile for him and give his administrative access if his position requires it.
17. Create a file for Mario.
18. Christopher Warren is now Larry's executive assistant. How do you determine his current access and change his group to CISO?
19. How would you give the Sales&Marketing Supervisor ownership of all staff files in the Sales&Marketing folder?
20. Reset all the files in the Human Resources directory to their original permissions. What command or commands did you use to do this?
21. Russel John from the CEO's office requests write and execute permissions to all c-level procedures or policies files. Their job is to manage and upkeep documentation for the CEO, and the CEO has requested that Russell make revision drafts for the current policy and procedure documents to present to the CFO and the CIO. Do you give Russell write and execute permissions for these files? Why or Why Not?
22. The CIO has put in a request for ownership of all the staff files located in the Information Technology folder. He wants to look at job duties, recent performance trends and other markers to see if the department should hire more staff. Do you give the CIO ownership over these files? Why or why not?
23. Which department has the most employees?
24. The CEO's office requires procedures that should only be available to those who work in that office. Create that file.
25. Go through your users, are there any who should not have access to the system currently who do?