Getting Started with Linux

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Course Objectives

In this course, we are going to focus on 5 learning objectives:

1. How to use simple commands to create and manipulate files and folders.
2. Perform multiple complex tasks using one simple command.
3. Use the superuser to perform high privilege operations.

You will be able to create files and folders using the Linux terminal, renaming, copying, deleting, moving these files/folders, and performing bulk operations on them using wildcards. You will be able to use the Linux manual to check how to use more Linux commands. You will be able to use the superuser called "root", and perform high privilege operations like installing packages from the repository, updating and upgrading the Linux packages, downloading files from the internet, creating, deleting, and updating hidden files, and even many more.

Project Structure

The hands-on project on **Getting started with Linux commands** is divided into the following tasks:

Task 1: Using basic Linux commands like cd, ls, pwd.

Task 2: Using different techniques to create and read files and content folders.

Task 3: Moving and manipulating files.

Task 4: Getting comfortable with piping and redirection.

Task 5: Using superuser to perform high privilege tasks.

Task 6: Create and manipulate hidden files.

We will accomplish it by completing each task in the project:

- Using basic Linux commands like cd, ls, pwd.
- Using different techniques to create and read files and content folders.
- Moving and manipulating files.
- Getting comfortable with piping and redirection.
- Using superuser to perform high privilege tasks.
- Create and manipulate hidden files.

1. pwd
2. cd
3. cd /
4. cd ..
5. ls
6. whoami
7. touch test.txt
8. cat test.txt
9. nano test.txt
10. nano test2.txt
11. cat *.txt -> print content of all txt extenstion
12. mkdir folder
13. mkdir dir1 dir2 -> create multiple directories
14. mkdir –p dir4/dir5 -> create sub directory inside new directory at once.
15. mv filte1.txt dir1/
16. mv file.txt ../ -> move to parent folder
17. mv *.txt dir1/ -> move all text file to directory
18. mv file1.txt file2.txt dir2/ ../ -> move two files at once
19. cp file1.txt file1-cp.txt -> copy file
20. rm file1.txt -> remove file non-interactive mode
21. rm -rf dir -> delete not empty directory.
22. rmdir dir2/ -> remove directory
23. ctrl + L -> clear screen
24. rm -i file1.txt -> interactive mode
25. echo "text file here" > file.txt [redirection, create file.txt using redirection]
26. man echo -> look manual of the command
27. ls / > root -> save lists of files of root directory. in command root is file here even it doesn't have extension.
28. cat root | grep dev [piping]
29.

Using superuser to perform high privilege tasks.

Super user

```
$ sudo su
$ whoami
$ exit
```

Update apt-get

```
$ apt-get update
```

Download and install
$ apt-get upgrade

Install VLC player

$ apt-get install vlc

Uninstall VLC player
$ apt-get remove vlc

Download file from internet

$ wget https://google.com/robots.txt

$ cat robots.txt

Create and Manipulate hidden files.

List -a all hidden folders. HIdden files as dot at the beginning of the name of the file.
E.g. .hidden or .file . All files start with dot (.) are hidden files.

$ ls -a

List -all hidden files and permissions

$ ls -la

Create hidden file
$ echo "Hidden" > .file
$ cat .file

1.
Question 1

What symbol is at the same time the directory separator and root directory?

1 / 1 point

~

\

/

Correct

In Linux, the root directory can also be represented with “/”.This is also used as a directory separator.

2.
Question 2

Select the command which is used to move to the /etc/ directory from the Desktop.

1 / 1 point

cd ../etc/

cd /etc/

cd etc/

Correct

The “/etc/” directory is the absolute path to the folder “etc” passing via the root.

3.
Question 3

What is the command to show the current working directory?

1 / 1 point

cd

pwd

curdir

Correct

print working directory (pwd) is the command to print the current working directory

4.
Question 4

Select the command used to create three nested directories including the parent i.e dir1 in dir2 in dir3 represented as dir3/dir2/dir1

1 / 1 point

mkdir dir1/dir2/dir3

mkdir -v dir1/dir2/dir3

mkdir -p dir1/dir2/dir3

Correct

The “-p” argument will create the directory including the parent.

5.
Question 5

What is the command to move file1.txt to dir1assuming they are both found within the same folder?

1 / 1 point

mv dir1 file1.txt

mv dir1 .

mv file1.txt dir1

Correct

The move command accept as the first argument the item to be moved and the destination.

6.

Question 6

Select the command used to copy a file from etc directory to the current directory.

1 / 1 point

cp /etc/file.txt .

mv /etc/file.txt /

cp file1.txt etc/

Correct

The cp command accepts the full path of a file and the “.” represents the current directory.

7.

Question 7

What command is used to delete a file found within the same directory?

1 / 1 point

rm dir1

B: rm file.txt

rmdir file.txt

Correct

Feedback: The rm command which stands for remove is used to remove a

file within the same directory

8.

Question 8

What is the symbol used for redirecting a standard output from one command and save the output to a file?

1 / 1 point

/

^

>

Correct

The “>” symbol is used to redirect outputs from a previous standard output to a file.

9.

Question 9

Which user is considered as the highest privileged user?

1 / 1 point

user1

root

toor

Correct

Feedback: The root user is the highest privilege user in Linux used to perform high privilege tasks like installing software from the repository, changing passwords, opening the shadow files, and many more.

10.

Question 10

What command is used to download a file from the internet given just the URL to the file.

1 / 1 point

wget

ls

sudo

Correct

wget is the command used to download a file from the internet by specifying the link to that file.