Linux Essentials In-Class Hands-on

Clarusway   »

Subject: Linux Basic Shell Commands

Learning Goals

- Practice using the linux basic shell commands.

Introduction

We've covered a lot of Linux concepts, but now it's time to put the concepts in to practice. We'll start with basic shell commands.
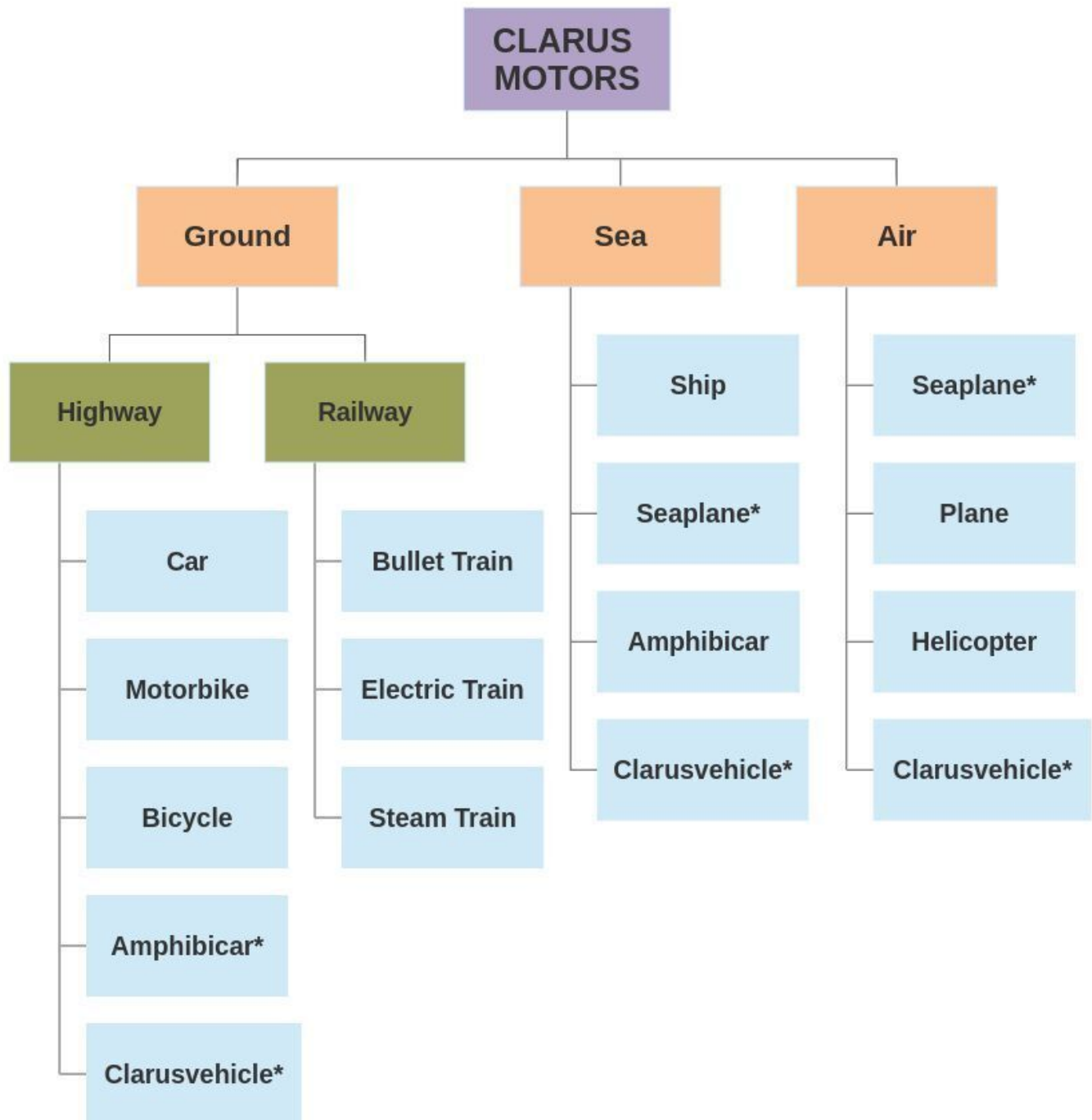
Practice Using the `Bash Shell` in Lesson

You might notice a few new things in this lesson that you haven't encountered before. We'll walk you through them.

Coding Challenge's Story

You are working as a Linux administrator in a company named ClarusMotors that makes ground, sea and air vehicles. The company administration team came to you and they want to store their vehicles' informations in a file system on the linux machine. They gave you the table and instructions below.

*The vehicles can travel in more than one way.

Code Along

Part 1 - Basic Commands

1. Open the terminal
2. To know which directory you are in, you can use the "pwd" command.
3. Create a directory named "CLARUSMOTORS" in user's home directory.
4. Go into "CLARUSMOTORS" directory.

5. List all the files/folders with details in CLARUSMOTORS directory.

6. Create folders named "GROUND", "SEA" and "AIR".

7. Go into "GROUND" directory and list content of the directory with details and hidden files.

8. Create folders named "Highway" and "Railway" after that list the content of "GROUND".

9. Go into "SEA" directory from inside "GROUND" directory and list content of "SEA" directory with details and hidden files.

10. Print and check the path of the directory you are in.

11. Go into "AIR" directory from inside "SEA" directory and list content of "AIR" directory with details and hidden files.

12. Go into "Highway" folder inside "AIR" directory using relative path.

13. List of "Highway" directory with details.

14. Create 3 files named "car", "motorbike", "bicycle" inside "Highway".

15. Write the vehicles' informations using "echo" command into the files according to the table given below.

Vehicles	Information	Engine
car	GROUND_vehicle	2.0 TDI
motorbike	GROUND_vehicle	0.9 SI
bicycle	GROUND_vehicle	Feet

16. Create a file named "amphibicar". The vehicle can travel both on land and at sea.

17. Write the specifications of amphibicar given below on the file using vi editor.

- GROUND-SEA_vehicle-4.0 TDI

18. Only the users and groups (not others) can read and write amphibicar's file because the vehicle's information is secret.

19. Create a file named "clarusvehicle". The vehicle can travel on land, sea and air.

20. Write the specifications of amphibicar given below on the file using nano editor.

- GROUND-SEA-AIR_vehicle-8.5 XJI

21. Only the users can read and write and the groups only read clarusvehicle's file because the vehicle's information is top secret.

22. List the content of Highway directories with details and hidden files.

23. Go into "Railway" directory from inside "Highway" directory and list content of "Railway" directory with details and hidden files.

24. Create 3 files named "bullet_train", "electric_train", "steam_train" inside "Railway".

25. List the content of Railway directory.

26. Write the vehicles' informations using "echo" command into the files according to the table given below.

Vehicles	Information	Engine
bullet_train	GROUND_vehicle	Electric
electric_train	GROUND_vehicle	Electric
steam_train	GROUND_vehicle	Steam

27. Go into "SEA" directory from inside "Railway" directory and list content of "SEA" directory with details and hidden files.

28. Create a file named "ship" and write "SEA_vehicle-4250 HP" using echo command.

29. Create a file named "seaplane" and write "SEA_AIR_vehicle-600 HP" using vi editor.

30. Copy "amphibicar" file to SEA directory with relative path.

31. Copy "clarusvehicle" file to SEA directory with relative path.

32. Go into "AIR" directory from inside "SEA" directory and list content of "AIR" directory with details and hidden files.

33. Create 2 files named "plane", "helicopter".

34. Write the vehicles' informations using "echo" command into the files according to the table given below.

Vehicles	Information	Engine
plane	AIR_vehicle	2000 HP
helicopter	AIR_vehicle	1800 HP

35. Copy "clarusvehicle" file to AIR directory with relative path.

36. Copy "seaplane" file to "AIR" directory with relative path.

37. Go into CLARUSMOTORS directory.

38. Install "tree" command via packet manager. Reqired code is below.

For Ubuntu:

```
sudo apt update
sudo apt install tree -y
```

For centOS:

```
sudo yum update
sudo yum install tree -y
```

39. Run the command below.

```
tree
```

40. Attention please! Finally, remove CLARUSMOTORS directory.

41. Exit from the terminal

☺ Thanks for Attending ✍

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