

**LAB**

**LINUX SYSTEM ADMINISTRATION**

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VERSION 2

20-JUN-2023

**LAB:** LAB18-01

**OBJECTIVE**: The objective of this lab is to learn how to set up and install a new disk.

**INSTRUCTIONS**: These labs will test your ability to actively research how to perform a required action on a Linux operating system. All questions asked (below) should be included in a lab report. This lab report should be written in Microsoft Word and include a numbered list corresponding to the task (below). This list must include a clear screenshot of the command and its output. Please follow the instructions for submitting this assignment on Blackboard.

* You should be logged in as labuser1 with the password ‘P@$$w0rd’
* You must be in the /labs/CH18 folder to complete this lab.
* Devices used: /dev/sdc

**SETUP AND USE A NEW DISK**

1. Using the ***lsblk*** command, locate and identify disk */dev/sdc*.
2. Using the ***fdisk***[[1]](#footnote-2) command, edit the partition table on */dev/sdc*.
   1. Create a new gpt partition (g) on */dev/sdc*.
   2. Create a new partition (n) on */dev/sdc*.
   3. List the new partition (p) on */dev/sdc*.
   4. Write the partition table (w) on */dev/sdc*.
3. Using the ***lsblk*** command, locate and identify disk */dev/sdc1*.
4. Using the ***mkfs.ext4***[[2]](#footnote-3) command, create a new filesystem on the */dev/sdc1* disk.
5. Create a new folder called **LAB18-01-BLK** in the */labs/CH18* folder.
6. Using the ***vim***[[3]](#footnote-4) editor, update the ***/etc/fstab*** file mounting this new device to the directory you created in the first step.
   1. Set */dev/sdc1* to mount at */labs/CH18/LAB18-01-BLK*.
7. Mount the newly created device[[4]](#footnote-5).
8. Set the volume ownership and permissions:
   1. Change the ownership of the **LABS18-01-BLK** folder to **labuser1:labusers2**[[5]](#footnote-6).
   2. Set the permissions of the **LABS18-01-BLK** folder to **02770**.
9. Change to the***labuser2*** account.
   1. Create a folder called ***pets*** in the **LABS18-01-BLK** folder.
   2. Create two files in the ***pets*** folder; one called “Dogs” and another called “Cats.”
   3. Exit from the ***labuser2*** account.

**NOTE**: To show me you did this correctly, attach an additional screenshot to your lab report showing the output from the ***df -h*** command.

1. You will have to use the ***sudo*** command for these steps. [↑](#footnote-ref-2)
2. You will have to use the ***sudo*** command for these steps. [↑](#footnote-ref-3)
3. You will have to use the ***sudo*** command for these steps. [↑](#footnote-ref-4)
4. You will have to use the ***sudo*** command for these steps. [↑](#footnote-ref-5)
5. You will have to use the ***sudo*** command for these steps. [↑](#footnote-ref-6)