

1. Listar Discos y Particiones

```
PROBLEMAS  SALIDA  CONSOLA DE DEPURACIÓN  TERMINAL  PUERTOS  HISTORIAL SQL  COMENTARIOS  SUPERVISIÓN DE TAREAS

[vagrant@vbox ~]$ lsblk
NAME MAJ:MIN RM SIZE RO TYPE MOUNTPOINTS
sda   8:0    0   10G  0 disk
├─sda1 8:1    0    2M  0 part
├─sda2 8:2    0  100M  0 part /boot/efi
├─sda3 8:3    0 1000M  0 part /boot
└─sda4 8:4    0   8.9G  0 part /
sdb   8:16   0   20G  0 disk
sdc   8:32   0   10G  0 disk
[vagrant@vbox ~]$ sudo fdisk -l
Disk /dev/sdc: 10 GiB, 10737418240 bytes, 20971520 sectors
Disk model: VBOX HARDDISK
Units: sectors of 1 * 512 = 512 bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes

Disk /dev/sda: 10 GiB, 10737418240 bytes, 20971520 sectors
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Disklabel type: gpt
Disk identifier: CA05FAC8-FDE0-426B-A6FC-59FB889E4C7E

Device        Start      End  Sectors  Size Type
/dev/sda1      2048      6143    4096    2M BIOS boot
/dev/sda2      6144    210943   204800   100M EFI System
/dev/sda3     210944   2258943   2048000  1000M Linux extended boot
/dev/sda4     2258944   20971486 18712543   8.9G Linux root (x86-64)

Disk /dev/sdb: 20 GiB, 21474836480 bytes, 41943040 sectors
Disk model: VBOX HARDDISK
Units: sectors of 1 * 512 = 512 bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes
```

2. Crear una partición

```
[vagrant@vbox ~]$ echo -e "n\np\n1\n\n5G\nw" | sudo fdisk /dev/sdb

Welcome to fdisk (util-linux 2.37.4).
Changes will remain in memory only, until you decide to write them.
Be careful before using the write command.

Device does not contain a recognized partition table.
Created a new DOS disklabel with disk identifier 0xaae06fa5.

Command (m for help): Partition type
   p   primary (0 primary, 0 extended, 4 free)
   e   extended (container for logical partitions)
Select (default p): Partition number (1-4, default 1): First sector (2048-41943039, default 2048): Last sector, +/-sectors or +/-size{K,M,G,T,P} (2048-41943039, default 41943039):
Created a new partition 1 of type 'Linux' and of size 5 GiB.

Command (m for help): The partition table has been altered.
Calling ioctl() to re-read partition table.
Syncing disks.

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```

3. Formatear la Partición.

```
[vagrant@vbox ~]$ sudo mkfs.ext4 /dev/sdb1
mke2fs 1.46.5 (30-Dec-2021)
Creating filesystem with 1310720 4k blocks and 327680 inodes
filesystem UUID: 81469437-b184-4194-a0fd-9cee5226aca6
Superblock backups stored on blocks:
    32768, 98304, 163840, 229376, 294912, 819200, 884736

Allocating group tables: done
Writing inode tables: done
Creating journal (16384 blocks): done
Writing superblocks and filesystem accounting information: done

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```

4. Montar la Partición en un Directorio

```
[vagrant@vbox ~]$ sudo mkdir /mnt/mi_particion
[vagrant@vbox ~]$ sudo mount /dev/sdb1 /mnt/mi_particion
[vagrant@vbox ~]$
```

5. Verificar el Espacio en Disco

```
[vagrant@vbox ~]$ df -h


| Filesystem | Size | Used | Avail | Use% | Mounted on        |
|------------|------|------|-------|------|-------------------|
| devtmpfs   | 4.0M | 0    | 4.0M  | 0%   | /dev              |
| tmpfs      | 984M | 0    | 984M  | 0%   | /dev/shm          |
| tmpfs      | 394M | 11M  | 384M  | 3%   | /run              |
| /dev/sda4  | 8.9G | 3.4G | 5.5G  | 39%  | /                 |
| /dev/sda3  | 936M | 123M | 814M  | 14%  | /boot             |
| /dev/sda2  | 100M | 7.0M | 93M   | 8%   | /boot/efi         |
| tmpfs      | 197M | 0    | 197M  | 0%   | /run/user/1000    |
| /dev/sdb1  | 4.9G | 24K  | 4.6G  | 1%   | /mnt/mi_particion |


[vagrant@vbox ~]$
```

6. Crear un Archivo de Texto en la Partición Montada

```
[vagrant@vbox ~]$ echo "Este es un archivo de prueba de itxine" | sudo tee /mnt/mi_particion/archivo.txt
Este es un archivo de prueba de itxine
[vagrant@vbox ~]$
```

7. Verificar el Uso de Espacio del Archivo

```
[vagrant@vbox ~]$ du -sh /mnt/mi_particion/archivo.txt
4.0K    /mnt/mi_particion/archivo.txt
[vagrant@vbox ~]$
```

8. Desmontar la Partición

```
[vagrant@vbox ~]$ sudo umount /mnt/mi_particion
[vagrant@vbox ~]$
```

9. Verificar el Sistema de Archivos en la Partición

```
vagrant@vbox ~]$ sudo fsck.ext4 /dev/sdb1
2fsck 1.46.5 (30-Dec-2021)
/dev/sdb1: clean, 12/327680 files, 42079/1310720 blocks
vagrant@vbox ~]$
```

10. Crear un Volumen Lógico LVM

```
[vagrant@vbox ~]$ sudo pvcreate /dev/sdc
WARNING: ext4 signature detected on /dev/sdc at offset 1080. Wipe it? [y/n]: y
WARNING: Invalid input 'sudo vgc...'.
WARNING: ext4 signature detected on /dev/sdc at offset 1080. Wipe it? [y/n]: y
Wiping ext4 signature on /dev/sdc.
Physical volume "/dev/sdc" successfully created.
Creating devices file /etc/lvm/devices/system.devices
[vagrant@vbox ~]$
[vagrant@vbox ~]$ sudo vgcreate itxine_vg /dev/sdc
Volume group "itxine_vg" successfully created
[vagrant@vbox ~]$
[vagrant@vbox ~]$ sudo vgcreate itxine_vg /dev/sdc
Volume group "itxine_vg" successfully created
[vagrant@vbox ~]$ sudo lvcreate -L 5G -n itxine_lv itxine_vg
Logical volume "itxine_lv" created.
```