

RAID:

```
$ sudo -i
```

```
$ fdisk -l
```

Ejecutar para cada disco: sda, sdb y sdc:

```
$ fdisk /dev/sda
```

```
=> n
```

```
=> p
```

```
=> t (changing partition type)
```

```
=> L
```

```
=> fd
```

```
=> p (to see partition details)
```

```
=> w
```

```
$ mkfs.ext4 /dev/sda1
```

Test:

```
$ mount -t ext4 /dev/sda1 /mnt
```

```
$ df -h
```

```
$ umount /mnt
```

```
$ fdisk -l
```

```
$ lsblk
```

```
$ mdadm --create /dev/md0 --level=5 --raid-devices=3 /dev/sda1 /dev/sdb1 /dev/sdc1
```

```
$ cat /proc/mdstat
```

```
$ mdadm -E /dev/sd[a-c]1
```

```
$ mdadm --detail /dev/md0
```

```
$ mkfs.ext4 /dev/md0
```

```
$ lsblk
```

```
$ mount /dev/md0 /mnt/md0
```

```
$ df -h
```

```
$ mdadm --detail --scan --verbose >> /etc/mdadm/mdadm.conf
```

=> ¿Qué sucede al reiniciar? Explicar la resolución

```
$ mdadm --stop /dev/md127
```

```
$ mdadm --assemble --scan
```

```
$ update-initramfs -u -v
```

GLUSTERFS:

MVA:

```
$ apt update
$ fdisk /dev/sda
$ fdisk /dev/sdb
$ fdisk /dev/sdc
$ clear
$ mkfs -t ext4 /dev/sda1
$ mkfs -t ext4 /dev/sdb1
$ mkfs -t ext4 /dev/sdc1
$ mkdir -p /data/node1
$ mkdir -p /data/node2
$ mkdir -p /data/node3
$ nano /etc/fstab
$ mount -a
$ df -h
$ apt install glusterfs-client glusterfs-server => (en mva y mvb)
$ systemctl start glusterd
$ systemctl enable glusterd
$ systemctl status glusterd
$ gluster peer probe mvb
$ gluster peer status
$ gluster pool list
$ gluster volume create tv1 replica 2 mva:/data/node1/brick0 mvb:/data/node4/brick0
$ gluster volume start tv1
$ gluster volume info
```

Archivo /etc/fstab en mva:

# /etc/fstab: static file system information.					
#					
UUID=7e159bcd-82de-4d68-a899-398b69c42d3f /	ext4	errors=remount-ro	0	1	
# swap was on /dev/sda5 during installation					
UUID=9311667f-fb2c-4a5c-82cc-ff3d37146c18 none	swap	sw	0	0	
/dev/sr0	/media/cdrom0	udf,iso9660	user,noauto	0	0
# Node 1					
/dev/sda1	/data/node1	ext4	defaults	0	1
# Node 2					
/dev/sdb1	/data/node2	ext4	defaults	0	1
# Node 3					
/dev/sdc1	/data/node3	ext4	defaults	0	1

MVB:

```
$ apt update
$ clear
$ apt update
$ fdisk /dev/sda
$ fdisk /dev/sdb
$ fdisk /dev/sdc
$ clear
$ mkdir -p /data/node4
$ mkdir -p /data/node5
$ mkdir -p /data/node6
$ nano /etc/fstab
$ mount -a
$ mkfs -t ext4 /dev/sda1
$ mkfs -t ext4 /dev/sdb1
$ mkfs -t ext4 /dev/sdc1
$ clear
$ mount -a
$ df -h
$ apt install glusterfs-client glusterfs-server
$ systemctl start glusterd
$ systemctl enable glusterd
$ systemctl status glusterd
$ ping mva
$ gluster peer probe mva
$ gluster peer status
$ gluster pool list
=====
$ mkdir /data-client
$ mount.glusterfs mva:/tv1 /data-client
$ df -h
$ nano /etc/fstab
$ reboot
$ clear
$ cd /data-client/
$ touch {file..15}.md
$ ls -l
$ rm *
$ touch file{1..15}.md
$ ls -l
$ ls -l
$ ls -l
$ ls -l
$ clear
```

```

$ rm *
$ cd /data/node4/brick0/
$ ls -l
$ cd /data-client
$ ls -l
$ touch file{1..15}.md
$ ls -l
$ ls -l /data/node4/brick0/
$ gluster peer status
$ clear
$ gluster peer status (con mva desconectada)
$ gluster peer status (tras conectar mva)
$ clear

```

Archivo /etc/fstab en mvb:

```

# /etc/fstab: static file system information.
#
# Use 'blkid' to print the universally unique identifier for a
# device; this may be used with UUID= as a more robust way to name devices
# that works even if disks are added and removed. See fstab(5).
#
# systemd generates mount units based on this file, see systemd.mount(5).
# Please run 'systemctl daemon-reload' after making changes here.
#
# <file system> <mount point> <type> <options>          <dump> <pass>
# / was on /dev/sda1 during installation
UUID=7e159bcd-82de-4d68-a899-398b69c42d3f /          ext4    errors=remount-ro 0    1
# swap was on /dev/sda5 during installation
UUID=9311667f-fb2c-4a5c-82cc-ff3d37146c18 none        swap    sw              0    0
/dev/sr0          /media/cdrom0  udf,iso9660 user,noauto   0    0

# Node 4
/dev/sda1         /data/node4    ext4    defaults       0    1

# Node 5
/dev/sdb1         /data/node5    ext4    defaults       0    1

# Node 6
/dev/sdc1         /data/node6    ext4    defaults       0    1

# Data client
mva:/tv1         /data-client   glusterfs defaults,_netdev 0    0

```