Práctica 5
CPD

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Ejercicio 1.

```
vagrant@ubuntu-bionic:~$ uname -a
Linux ubuntu-bionic 4.15.0-38-generic #41-Ubuntu SMP Wed Oct 10 10:59:38 UTC 201
8 x86_64 x86_64 x86_64 GNU/Linux
vagrant@ubuntu-bionic:~$
```

Creación de **Ubuntu bionic** y acceso con **Vagrant**.

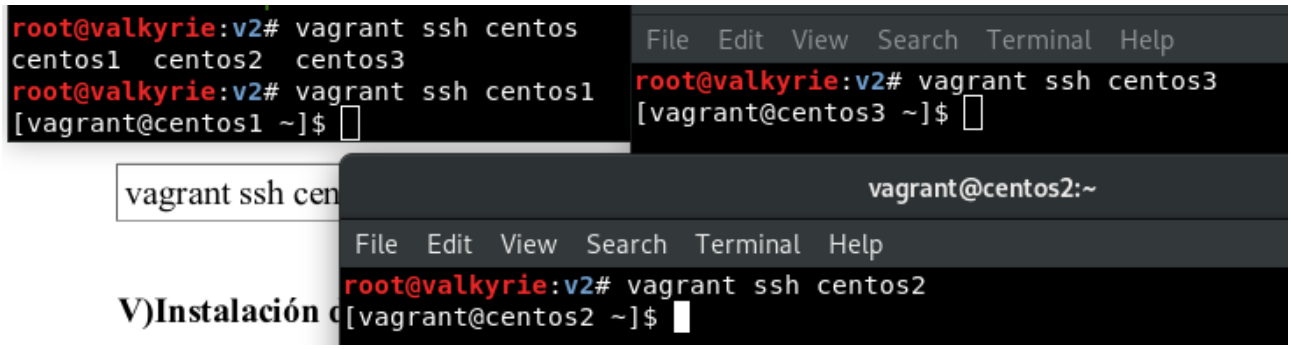
Ejercicio 2.

```
root@valkyrie:v1# VAGRANT_DISABLE_STRICT_DEPENDENCY_ENFORCEMENT=1 vagrant plugin
 install vagrant-hostmanager
Installing the 'vagrant-hostmanager' plugin. This can take a few minutes...
Fetching: fog-core-1.43.0.gem (100%)
Fetching: vagrant-hostmanager-1.8.9.gem (100%)
Installed the plugin 'vagrant-hostmanager (1.8.9)'!
```

Instalamos el plugin **vagrant-hostmanager**

```
    centos3:   From       : /etc/pki/rpm-gpg/RPM-GPG-KEY-CentOS-7
    centos3: Running transaction check
    centos3: Running transaction test
    centos3: Transaction test succeeded
    centos3: Running transaction
    centos3:   Installing : epel-release-7-11.noarch
         1/2
    centos3:
    centos3:   Installing : net-tools-2.0-0.22.20131004git.el7.x86_64
         2/2
    centos3:
    centos3:   Verifying  : net-tools-2.0-0.22.20131004git.el7.x86_64
         1/2
    centos3:
    centos3:   Verifying  : epel-release-7-11.noarch
         2/2
    centos3:
    centos3:
    centos3: Installed:
    centos3:   epel-release.noarch 0:7-11     net-tools.x86_64 0:2.0-0.22.201310
04git.el7
    centos3:
    centos3: Complete!
root@valkyrie:v2#
```

Ejecutamos **vagrant up** para crear las tres máquinas virtuales Centos.



Comprobamos que tenemos acceso a las tres máquinas virtuales.

```
[root@centos1 vagrant]# systemctl enable glusterd.service
Created symlink from /etc/systemd/system/multi-user.target.wants/glusterd.servic
e to /usr/lib/systemd/system/glusterd.service.
[root@centos1 vagrant]# systemctl start glusterd.service
[root@centos1 vagrant]#

Complete!
[root@centos2 vagrant]# systemctl enable glusterd.service
Created symlink from /etc/systemd/system/multi-user.target.wants/glusterd.servic
e to /usr/lib/systemd/system/glusterd.service.
[root@centos2 vagrant]# systemctl start glusterd.service
[root@centos2 vagrant]#
```

```
[root@centos1 vagrant]# gluster peer probe centos2
peer probe: success.
[root@centos1 vagrant]# gluster peer status
Number of Peers: 1

Hostname: centos2
Uuid: 9e91798b-8a57-491f-86d5-7ee85133f0e9
State: Peer in Cluster (Connected)
[root@centos1 vagrant]#
```

Creamos la partición.

```
Command (m for help): n
Partition type:
   p   primary (0 primary, 0 extended, 4 free)
   e   extended
Select (default p): p
Partition number (1-4, default 1): 1
First sector (2048-20971519, default 2048):
Using default value 2048
Last sector, +sectors or +size{K,M,G} (2048-20971519, default 20971519):
Using default value 20971519
Partition 1 of type Linux and of size 10 GiB is set

Command (m for help): t
Selected partition 1
Hex code (type L to list all codes): 8e
Changed type of partition 'Linux' to 'Linux LVM'

Command (m for help): w
The partition table has been altered!

Calling ioctl() to re-read partition table.
Syncing disks.
[root@centos1 vagrant]#
```

```
[root@centos1 vagrant]# pvcreate /dev/sdb1
  Physical volume "/dev/sdb1" successfully created.
[root@centos1 vagrant]# vgcreate vg01 /dev/sdb1
  Volume group "vg01" successfully created
[root@centos1 vagrant]# lvcreate -l 100%FREE -n lv01 vg01
  Logical volume "lv01" created.
[root@centos1 vagrant]# mkfs.xfs /dev/mapper/vg01-lv01
meta-data=/dev/mapper/vg01-lv01  isize=512    agcount=4, agsize=655104 blks
         =                       sectsz=512   attr=2, projid32bit=1
         =                       crc=1        finobt=0, sparse=0
data     =                       bsize=4096   blocks=2620416, imaxpct=25
         =                       sunit=0      swidth=0 blks
naming   =version 2              bsize=4096   ascii-ci=0 ftype=1
log      =internal log           bsize=4096   blocks=2560, version=2
         =                       sectsz=512   sunit=0 blks, lazy-count=1
realtime =none                   extsz=4096   blocks=0, rtextents=0
[root@centos1 vagrant]#
```

```
#
# /etc/fstab
# Created by anaconda on Sun Sep 30 19:58:21 2018
#
# Accessible filesystems, by reference, are maintained under '/dev/disk'
# See man pages fstab(5), findfs(8), mount(8) and/or blkid(8) for more info
#
UUID=b5b20816-947c-4616-b15a-abaae4afe31b /                       ext4    defaults        1 1
/swapfile none swap defaults 0 0

/dev/mapper/vg01-lv01    /gluster/bricks/brick1  xfs     defaults  0 0
~
```

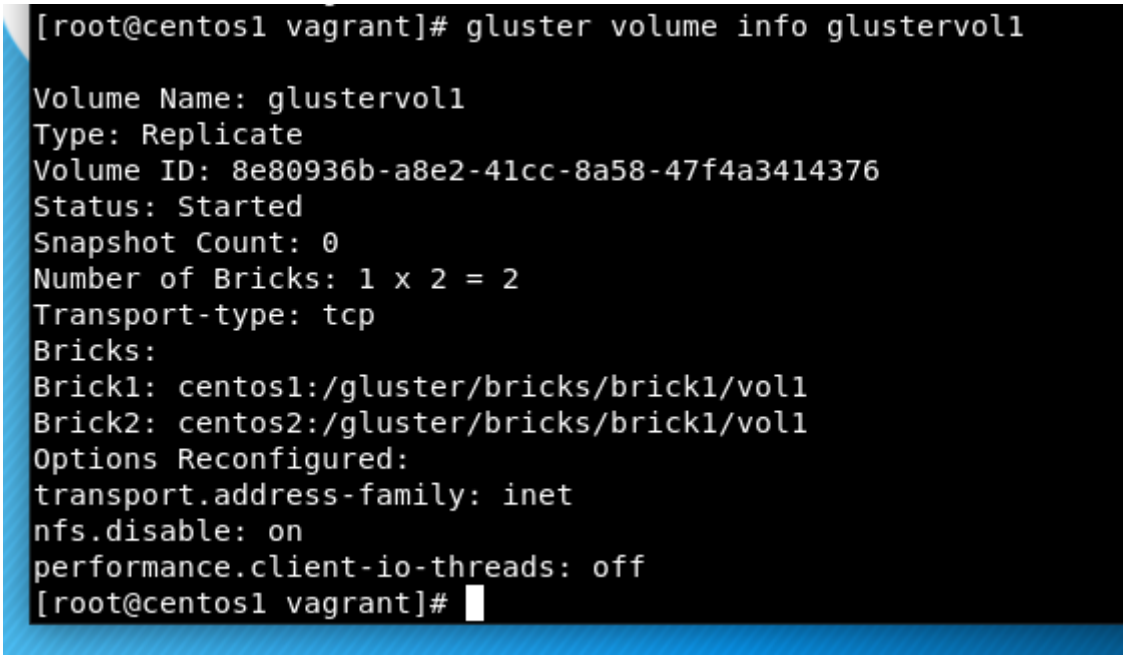
Editamos el fichero **/etc/fstab**

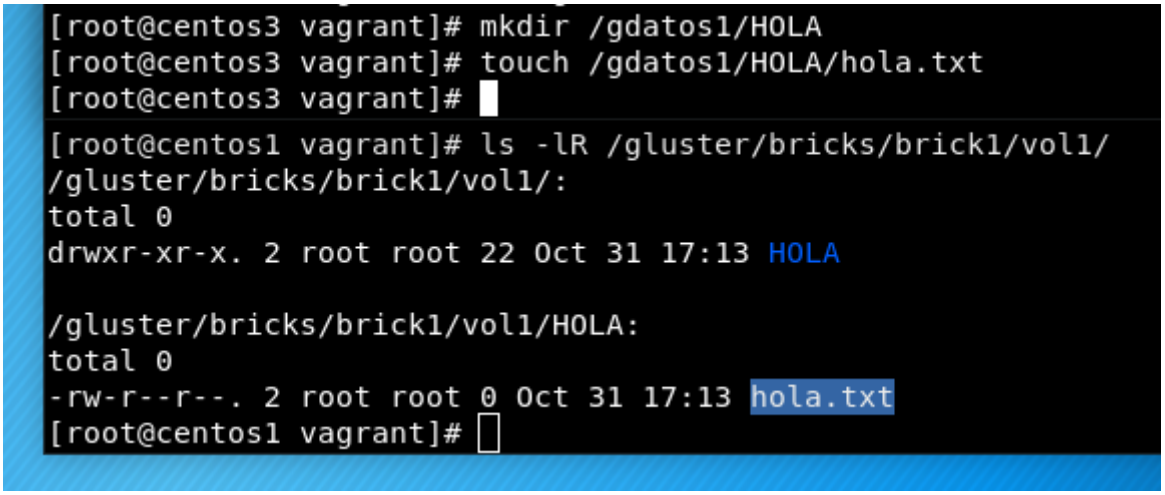
```
[root@centos1 vagrant]# mount -a
[root@centos1 vagrant]# gluster peer probe centos2
peer probe: success. Host centos2 port 24007 already in peer list
[root@centos1 vagrant]# gluster peer status
Number of Peers: 1

Hostname: centos2
Uuid: 9e91798b-8a57-491f-86d5-7ee85133f0e9
State: Peer in Cluster (Connected)
[root@centos1 vagrant]# gluster pool list
UUID                                    Hostname        State
9e91798b-8a57-491f-86d5-7ee85133f0e9    centos2         Connected
6c0eb89e-29f3-4d66-8846-78f6d6db25c0    localhost       Connected
[root@centos1 vagrant]#
```

Comprobamos que seguimos teniendo conexión con **centos2.**

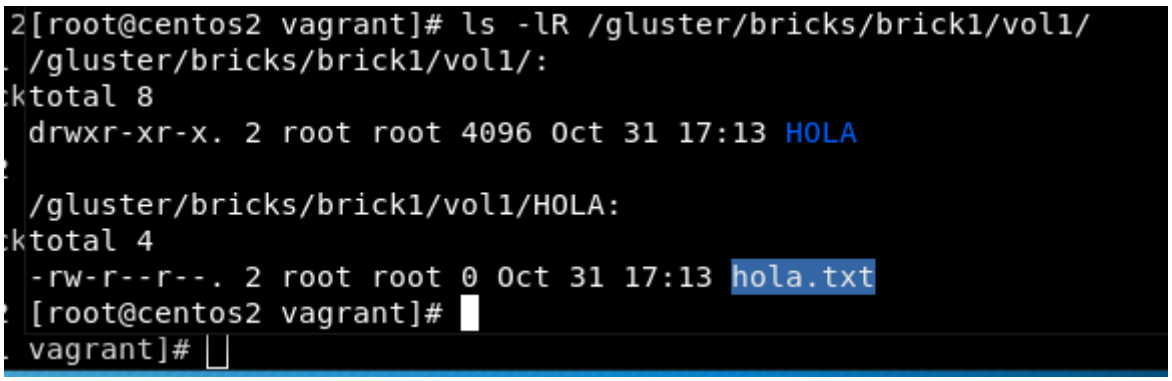
```
[root@centos1 vagrant]# gluster volume create glustervol1 replica 2 transport tc
p centos1:/gluster/bricks/brick1/vol1 centos2:/gluster/bricks/brick1/vol1 force
volume create: glustervol1: success: please start the volume to access data
[root@centos1 vagrant]#
[root@centos1 vagrant]#
[root@centos1 vagrant]# gluster volume start glustervol1
volume start: glustervol1: success
[root@centos1 vagrant]#
```

Añadimos '**force**' al comando.

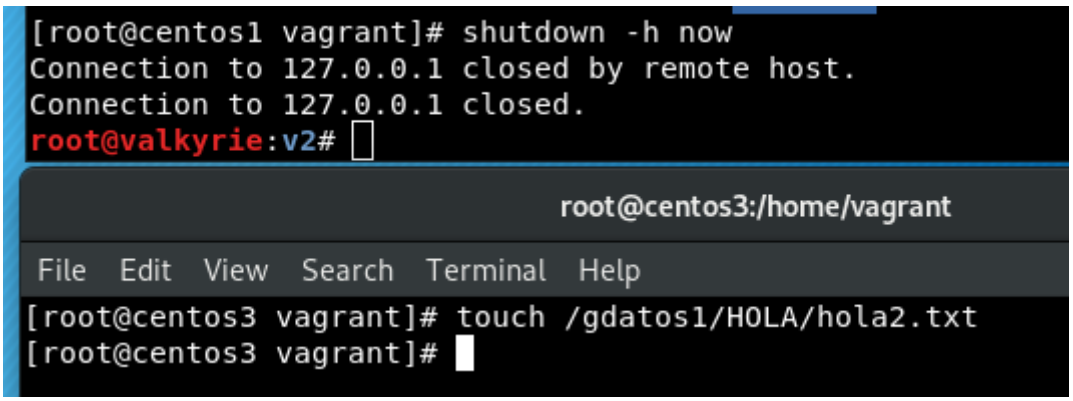




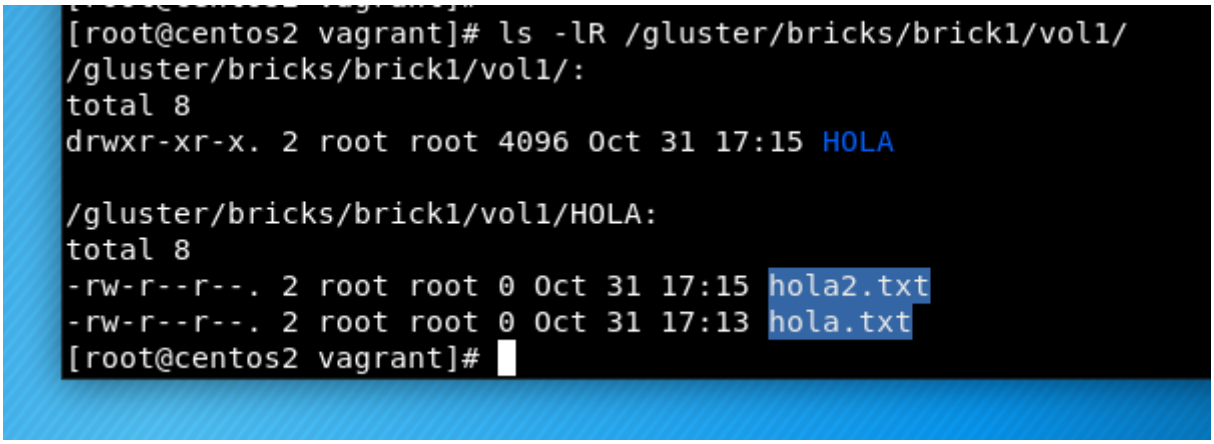
Creamos en **centos3** el directorio **HOLA** con el archivo **hola.txt**



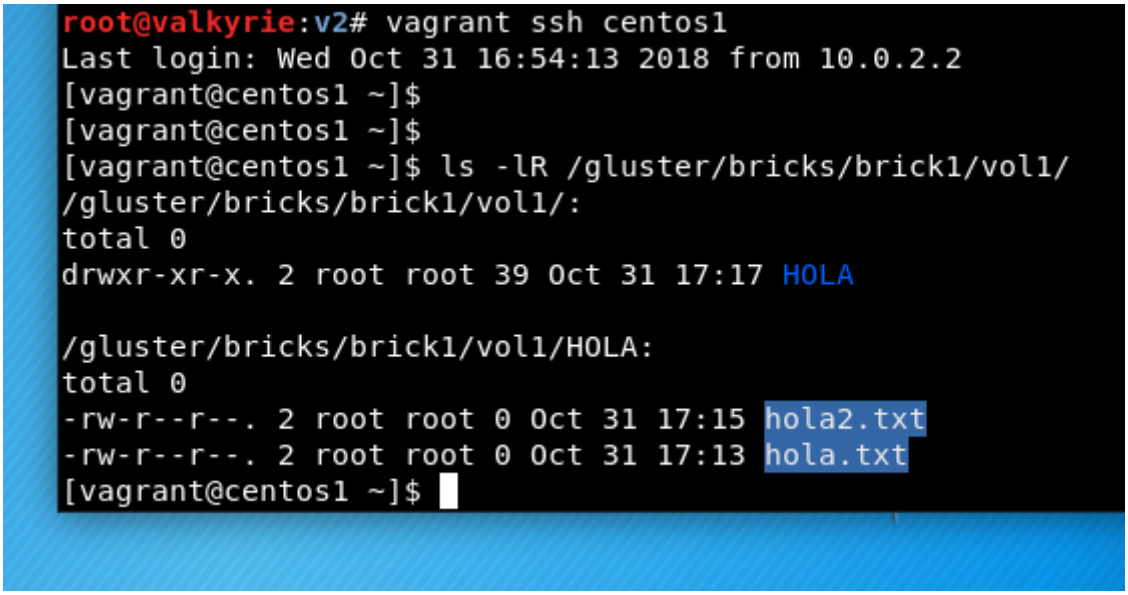
Vemos que tanto en **centos1** como en **centos2** nos aparecen los archivos creados en **centos3**.



Apagamos la máquina **centos1** y creamos un nuevo fichero en **centos3**, **hola2.txt**



Vemos que en **centos2** nos aparece el nuevo archivo creado.



Iniciamos **centos1** y comprobamos que efectivamente también nos aparece el archivo creado.