

Practica 4

César Muñoz Reinoso

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cesar@cesar-TM1701: ~/Escritorio/CPD/Práctica/Practica 4
Archivo  Editar  Ver  Buscar  Terminal  Ayuda
cesar@cesar-TM1701:~/Escritorio/CPD/Práctica/Practica 4$ vagrant plugin install vagrant-hostmanager
Installing the 'vagrant-hostmanager' plugin. This can take a few minutes...
Fetching vagrant-hostmanager-1.8.9.gem
Installed the plugin 'vagrant-hostmanager (1.8.9)'!
cesar@cesar-TM1701:~/Escritorio/CPD/Práctica/Practica 4$ mkdir cpd5
```

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cesar@cesar-TM1701: ~/Escritorio/CPD/Práctica/Practica 4/cpd5
Archivo  Editar  Ver  Buscar  Terminal  Ayuda
cesar@cesar-TM1701:~/Escritorio/CPD/Práctica/Practica 4$ cd
cpd5/      val/      va2/      .vagrant/  Vagrantfile_pr4/
cesar@cesar-TM1701:~/Escritorio/CPD/Práctica/Practica 4$ cd cpd5/
cesar@cesar-TM1701:~/Escritorio/CPD/Práctica/Practica 4/cpd5$ vagrant up
Bringing machine 'centos1' up with 'virtualbox' provider...
Bringing machine 'centos2' up with 'virtualbox' provider...
Bringing machine 'centos3' up with 'virtualbox' provider...
==> centos1: Importing base box 'centos/8'...
==> centos1: Matching MAC address for NAT networking...
==> centos1: Checking if box 'centos/8' version '2011.0' is up to date...
==> centos1: Setting the name of the VM: centos1
centos1: Clearing any previously set network interfaces...
==> centos1: Preparing network interfaces based on configuration...
centos1: Adapter 1: nat
centos1: Adapter 2: hostonly
==> centos1: Forwarding ports...
centos1: 22 (guest) => 2222 (host) (adapter 1)
==> centos1: Running 'pre-boot' VM customizations...
==> centos1: Booting VM...
==> centos1: Waiting for machine to boot. This may take a few minutes...
centos1: SSH address: 127.0.0.1:2222
centos1: SSH username: vagrant
centos1: SSH auth method: private key
centos1:
centos1: Vagrant insecure key detected. Vagrant will automatically replace
centos1: this with a newly generated keypair for better security.
centos1:
centos1: Inserting generated public key within guest...
centos1: Removing insecure key from the guest if it's present...
centos1: Key inserted! Disconnecting and reconnecting using new SSH key...
==> centos1: Machine booted and ready!
==> centos1: Checking for guest additions in VM...
centos1: No guest additions were detected on the base box for this VM! Guest
centos1: additions are required for forwarded ports, shared folders, host only
centos1: networking, and more. If SSH fails on this machine, please install
centos1: the guest additions and repack the box to continue.
centos1:
centos1: This is not an error message; everything may continue to work properly,
centos1: in which case you may ignore this message.
```

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cesar@cesar-TM1701: ~/Escritorio/CPD/Práctica/Practica 4/cpd5
Archivo Editar Ver Buscar Terminal Ayuda
centos3: epel-release noarch 8-11.el8 extras 24 k
centos3: net-tools x86_64 2.0-0.52.20160912git.el8 baseos 322 k
centos3:
centos3: Transaction Summary
centos3: =====
centos3: Install 2 Packages
centos3:
centos3: Total download size: 346 k
centos3: Installed size: 977 k
centos3: Downloading Packages:
centos3: (1/2): epel-release-8-11.el8.noarch.rpm 167 kB/s | 24 kB 00:00
centos3: (2/2): net-tools-2.0-0.52.20160912git.el8.x86_64 1.5 MB/s | 322 kB 00:00
centos3: -----
centos3: Total 801 kB/s | 346 kB 00:00
centos3: warning: /var/cache/dnf/baseos-31c79d9833c65cf7/packages/net-tools-2.0-0.52.20160912git.el8
.x86_64.rpm: Header V3 RSA/SHA256 Signature, key ID 8483c65d: NOKEY
centos3: CentOS Linux 8 - BaseOS 1.0 MB/s | 1.6 kB 00:00
centos3: Importing GPG key 0x8483c65d:
centos3: Userid : "CentOS (CentOS Official Signing Key) <security@centos.org>"
centos3: Fingerprint: 0906 78FA E1D7 C622 7F66 48B2 05B5 5581 8483 C65D
centos3: From : /etc/pki/rpm-gpg/RPM-GPG-KEY-centosofficial
centos3: Key imported successfully
centos3: Running transaction check
centos3: Transaction check succeeded.
centos3: Running transaction test
centos3: Transaction test succeeded.
centos3: Running transaction
centos3: Preparing : 1/1
centos3: Installing : epel-release-8-11.el8.noarch 1/2
centos3: Installing : net-tools-2.0-0.52.20160912git.el8.x86_64 2/2
centos3: Running scriptlet: net-tools-2.0-0.52.20160912git.el8.x86_64 2/2
centos3: Verifying : net-tools-2.0-0.52.20160912git.el8.x86_64 1/2
centos3: Verifying : epel-release-8-11.el8.noarch 2/2
centos3: Installed:
centos3: epel-release-8-11.el8.noarch net-tools-2.0-0.52.20160912git.el8.x86_64
centos3: Complete!
cesar@cesar-TM1701:~/Escritorio/CPD/Práctica/Practica 4/cpd5$

```

```

vagrant@centos1:~
Archivo Editar Ver Buscar Terminal Ayuda
cesar@cesar-TM1701:~/Escritorio/CPD/Práctica/Practica 4/cpd5$ vagrant ssh centos1
[vagrant@centos1 ~]$ dnf search centos-release-gluster
Failed to set locale, defaulting to C.UTF-8
CentOS Linux 8 - AppStream 3.9 MB/s | 9.3 MB 00:02
CentOS Linux 8 - BaseOS 4.3 MB/s | 7.5 MB 00:01
CentOS Linux 8 - Extras 13 kB/s | 10 kB 00:00
Extra Packages for Enterprise Linux Modular 8 - x86_64 950 kB/s | 956 kB 00:01
Extra Packages for Enterprise Linux 8 - x86_64 5.7 MB/s | 10 MB 00:01
===== Name Matched: centos-release-gluster =====
centos-release-gluster6.noarch : Gluster 6 packages from the CentOS Storage SIG repository
centos-release-gluster7.noarch : Gluster 7 packages from the CentOS Storage SIG repository
centos-release-gluster8.noarch : Gluster 8 packages from the CentOS Storage SIG repository
centos-release-gluster9.noarch : Gluster 9 packages from the CentOS Storage SIG repository
[vagrant@centos1 ~]$ sudo dnf -y install centos-release-gluster9
Failed to set locale, defaulting to C.UTF-8
Extra Packages for Enterprise Linux Modular 8 - x86_64 1.3 MB/s | 956 kB 00:00
Extra Packages for Enterprise Linux 8 - x86_64 4.3 MB/s | 10 MB 00:02
Dependencies resolved.
=====
Package Architecture Version Repository Size
=====
Installing:
centos-release-gluster9 noarch 1.0-1.el8 extras 9.3 k
Installing dependencies:
centos-release-storage-common noarch 2-2.el8 extras 9.4 k
=====
Transaction Summary
=====
Install 2 Packages

Total download size: 19 k
Installed size: 2.4 k
Downloading Packages:
(1/2): centos-release-storage-common-2-2.el8.noarch.rpm 74 kB/s | 9.4 kB 00:00
(2/2): centos-release-gluster9-1.0-1.el8.noarch.rpm 73 kB/s | 9.3 kB 00:00
-----
Total 34 kB/s | 19 kB 00:00
Running transaction check
Transaction check succeeded.

```



```
vagrant@centos1:~  
Archivo Editar Ver Buscar Terminal Ayuda  
[vagrant@centos1 ~]$ sudo dnf -y update  
Failed to set locale, defaulting to C.UTF-8  
CentOS-8 - Gluster 9 44 kB/s | 50 kB 00:01  
Last metadata expiration check: 0:00:01 ago on Fri Oct 8 18:12:50 2021.  
Dependencies resolved.  
=====
```

Package	Arch	Version	Repository	Size
Installing:				
kernel	x86_64	4.18.0-305.19.1.el8_4	baseos	5.9 M
kernel-core	x86_64	4.18.0-305.19.1.el8_4	baseos	36 M
kernel-modules	x86_64	4.18.0-305.19.1.el8_4	baseos	28 M
Upgrading:				
NetworkManager	x86_64	1:1.30.0-10.el8_4	baseos	2.6 M
NetworkManager-libnm	x86_64	1:1.30.0-10.el8_4	baseos	1.8 M
NetworkManager-team	x86_64	1:1.30.0-10.el8_4	baseos	146 k
NetworkManager-tui	x86_64	1:1.30.0-10.el8_4	baseos	328 k
authselect	x86_64	1.2.2-2.el8	baseos	133 k
authselect-libs	x86_64	1.2.2-2.el8	baseos	222 k
avahi-libs	x86_64	0.7-20.el8	baseos	62 k
bash	x86_64	4.4.20-1.el8_4	baseos	1.5 M
bind-export-libs	x86_64	32:9.11.26-4.el8_4	baseos	1.1 M
brotli	x86_64	1.0.6-3.el8	baseos	323 k
ca-certificates	noarch	2021.2.50-80.0.el8_4	baseos	390 k
centos-gpg-keys	noarch	1:8-3.el8	baseos	12 k
centos-linux-release	noarch	8.4-1.2105.el8	baseos	22 k
centos-linux-repos	noarch	8-3.el8	baseos	20 k
chrony	x86_64	3.5-2.el8	baseos	270 k
cpio	x86_64	2.12-10.el8	baseos	265 k
crontabs	noarch	1.11-17.20190603git.el8	baseos	25 k
crypto-policies	noarch	20210209-1.gitbfb6bed.el8_3	baseos	62 k
crypto-policies-scripts	noarch	20210209-1.gitbfb6bed.el8_3	baseos	67 k
cryptsetup-libs	x86_64	2.3.3-4.el8	baseos	470 k
curl	x86_64	7.61.1-18.el8_4.1	baseos	351 k
dbus	x86_64	1:1.12.8-12.el8_4.2	baseos	41 k
dbus-common	noarch	1:1.12.8-12.el8_4.2	baseos	46 k
dbus-daemon	x86_64	1:1.12.8-12.el8_4.2	baseos	240 k
dbus-libs	x86_64	1:1.12.8-12.el8_4.2	baseos	184 k
dbus-tools	x86_64	1:1.12.8-12.el8_4.2	baseos	85 k

```
vagrant@centos1:~  
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[vagrant@centos1 ~]$ sudo dnf -y install glusterfs glusterfs-cli glusterfs-libs glusterfs-server  
Failed to set locale, defaulting to C.UTF-8  
Last metadata expiration check: 0:07:10 ago on Fri Oct 8 18:12:50 2021.  
Dependencies resolved.  
=====
```

Package	Arch	Version	Repository	Size
Installing:				
glusterfs	x86_64	9.3-2.el8	centos-gluster9	691 k
glusterfs-cli	x86_64	9.3-2.el8	centos-gluster9	215 k
glusterfs-server	x86_64	9.3-2.el8	centos-gluster9	1.4 M
Installing dependencies:				
attr	x86_64	2.4.48-3.el8	baseos	68 k
checkpolicy	x86_64	2.9-1.el8	baseos	348 k
device-mapper-event	x86_64	8:1.02.175-5.el8	baseos	269 k
device-mapper-event-libs	x86_64	8:1.02.175-5.el8	baseos	269 k
device-mapper-persistent-data	x86_64	0.8.5-4.el8	baseos	468 k
glusterfs-client-xlators	x86_64	9.3-2.el8	centos-gluster9	904 k
glusterfs-fuse	x86_64	9.3-2.el8	centos-gluster9	172 k
glusterfs-selinux	noarch	2.0.1-1.el8	centos-gluster9	30 k
libaio	x86_64	0.3.112-1.el8	baseos	33 k
libgfapi0	x86_64	9.3-2.el8	centos-gluster9	126 k
libgfchangelog0	x86_64	9.3-2.el8	centos-gluster9	68 k
libgfcrpc0	x86_64	9.3-2.el8	centos-gluster9	90 k
libgfxdr0	x86_64	9.3-2.el8	centos-gluster9	62 k
libglusterd0	x86_64	9.3-2.el8	centos-gluster9	45 k
libglusterfs0	x86_64	9.3-2.el8	centos-gluster9	353 k
liburing	x86_64	1.0.7-3.el8	appstream	24 k
lvm2	x86_64	8:2.03.11-5.el8	baseos	1.6 M
lvm2-libs	x86_64	8:2.03.11-5.el8	baseos	1.1 M
policycoreutils-python-utils	noarch	2.9-14.el8	baseos	252 k
psmisc	x86_64	23.1-5.el8	baseos	151 k
python3-audit	x86_64	3.0.0-17.20191104git1c2f876.el8	baseos	86 k
python3-libsemanage	x86_64	2.9-6.el8	baseos	127 k
python3-policycoreutils	noarch	2.9-14.el8	baseos	2.2 M
python3-pyattr	x86_64	0.5.3-18.el8	centos-gluster9	35 k
python3-setools	x86_64	4.3.0-2.el8	baseos	626 k
userspace-rcu	x86_64	0.10.1-4.el8	baseos	101 k

```
[vagrant@centos1 ~]$ sudo systemctl start firewalld.service
[vagrant@centos1 ~]$ sudo systemctl restart firewalld
[vagrant@centos1 ~]$ sudo systemctl enable firewalld
Created symlink /etc/systemd/system/dbus-org.fedoraproject.FirewallD1.service → /usr/lib/systemd/system/firewalld.service.
Created symlink /etc/systemd/system/multi-user.target.wants/firewalld.service → /usr/lib/systemd/system/firewalld.service.
```

```
[vagrant@centos1 ~]$ sudo firewall-cmd --add-service=glusterfs --permanent
success
[vagrant@centos1 ~]$ sudo firewall-cmd --reload
success
```

```
[vagrant@centos3 ~]$ sudo gluster peer probe centos2
peer probe: success
```

```
peer detach: success
[vagrant@centos3 ~]$ sudo gluster peer probe centos1
peer probe: success
[vagrant@centos3 ~]$ sudo gluster peer status
Number of Peers: 1

Hostname: centos1
Uuid: 8dcccda-47a9-4c9b-a206-49545756276c
State: Peer in Cluster (Connected)
[vagrant@centos3 ~]$ sudo gluster peer detach centos1
All clients mounted through the peer which is getting detached need to be remounted using one of the other active peers in the trusted storage pool to ensure client gets notification on any changes done on the gluster configuration and if the same has been done do you want to proceed? (y/n) y
peer detach: success
```

```
[vagrant@centos1 ~]$ sudo fdisk /dev/sdb

Welcome to fdisk (util-linux 2.32.1).
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 0x58723a07.

Command (m for help): n
Partition type
   p   primary (0 primary, 0 extended, 4 free)
   e   extended (container for logical partitions)
Select (default p): p
Partition number (1-4, default 1): 1
First sector (2048-20971519, default 2048):
Last sector, +sectors or +size{K,M,G,T,P} (2048-20971519, default 20971519):

Created a new partition 1 of type 'Linux' and of size 10 GiB.

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.
```

```
[vagrant@centos1 ~]$ sudo pvcreate /dev/sdb1
Physical volume "/dev/sdb1" successfully created.
[vagrant@centos1 ~]$ sudo vgcreate vg01 /dev/sdb1
Volume group "vg01" successfully created
[vagrant@centos1 ~]$ sudo lvcreate -l 100%FREE -n lv01 vg01
Logical volume "lv01" created.
[vagrant@centos1 ~]$ sudo 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=1, sparse=1, rmapbt=0
       =                       reflink=1
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
```



```
vagrant@centos1:~  
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#  
# /etc/fstab  
# Created by anaconda on Fri Dec 4 17:37:32 2020  
#  
# 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.  
#  
# After editing this file, run 'systemctl daemon-reload' to update systemd  
# units generated from this file.  
#  
UUID=a62c5b49-755e-41b0-9d36-de3d95e17232 /                xfs     defaults    0 0  
/swapfile none swap defaults 0 0  
#VAGRANT-BEGIN  
# The contents below are automatically generated by Vagrant. Do not modify.  
#VAGRANT-END  
  
/dev/mapper/vg01-lv01 /gluster/bricks/brick1 xfs defaults 0 0  
~  
~  
~  
~  
~  
~  
~
```

```
[vagrant@centos1 ~]$ sudo mount -a  
[vagrant@centos1 ~]$ sudo gluster peer probe centos2  
peer probe: success  
[vagrant@centos1 ~]$ sudo gluster peer status  
Number of Peers: 1  
  
Hostname: centos2  
Uuid: 47e08da3-a173-4ed1-98c2-9e9258217b5e  
State: Peer in Cluster (Connected)  
[vagrant@centos1 ~]$ sudo gluster pool list  
UUID                               Hostname      State  
47e08da3-a173-4ed1-98c2-9e9258217b5e centos2       Connected  
8dccccda-47a9-4c9b-a206-49545756276c localhost     Connected
```

```
vagrant@centos2:/gluster/bricks/brick1/vol1  
Archivo  Editar  Ver  Buscar  Terminal  Ayuda  
cesar@cesar-TM1701:~/Escritorio/CPD/Práctica/Practica 4/cpd5$ vagrant ssh centos1  
Last login: Fri Oct 8 19:18:02 2021 from 10.0.2.2  
[vagrant@centos1 ~]$ cd /gluster/bricks/brick1/vol1/  
[vagrant@centos1 vol1]$ pwd  
/gluster/bricks/brick1/vol1  
[vagrant@centos1 vol1]$ exit  
logout  
Connection to 127.0.0.1 closed.  
cesar@cesar-TM1701:~/Escritorio/CPD/Práctica/Practica 4/cpd5$ vagrant ssh centos2  
Last login: Wed Oct 13 16:31:43 2021 from 10.0.2.2  
[vagrant@centos2 ~]$ cd /gluster/bricks/brick1/vol1/  
[vagrant@centos2 vol1]$ pwd  
/gluster/bricks/brick1/vol1  
[vagrant@centos2 vol1]$
```

```
[vagrant@centos1 ~]$ sudo gluster volume create glustervol1 replica 2 transport tcp centos1:/gluster/bricks/brick1/vol1 centos2:/gluster/bricks/brick1/vol1
Replica 2 volumes are prone to split-brain. Use Arbiter or Replica 3 to avoid this. See: http://docs.gluster.org/en/latest/Administrator%20Guide/Split%20brain%20and%20ways%20to%20deal%20with%20it/.
Do you still want to continue?
(y/n) y
volume create: glustervol1: success: please start the volume to access data
```

```
[vagrant@centos1 ~]$ sudo gluster volume start glustervol1
volume start: glustervol1: success
[vagrant@centos1 ~]$ sudo gluster volume info glustervol1

Volume Name: glustervol1
Type: Replicate
Volume ID: 0f81e5e7-85c6-46e3-bd61-d6c78f499813
Status: Started
Snapshot Count: 0
Number of Bricks: 1 x 2 = 2
Transport-type: tcp
Bricks:
Brick1: centos1:/gluster/bricks/brick1/vol1
Brick2: centos2:/gluster/bricks/brick1/vol1
Options Reconfigured:
cluster.granular-entry-heal: on
storage.fips-mode-rchecksum: on
transport.address-family: inet
nfs.disable: on
performance.client-io-threads: off
[vagrant@centos1 ~]$
```

```
vagrant@centos3:~
Archivo Editar Ver Buscar Terminal Ayuda

[vagrant@centos3 ~]$ sudo dnf -y install centos-release-gluster9
Failed to set locale, defaulting to C.UTF-8
Last metadata expiration check: 0:09:08 ago on Wed Oct 13 16:41:02 2021.
Package centos-release-gluster9-1.0-1.el8.noarch is already installed.
Dependencies resolved.
Nothing to do.
Complete!
[vagrant@centos3 ~]$ sudo dnf -y update
Failed to set locale, defaulting to C.UTF-8
Last metadata expiration check: 0:09:16 ago on Wed Oct 13 16:41:02 2021.
Dependencies resolved.
Nothing to do.
Complete!
[vagrant@centos3 ~]$ sudo dnf -y install glusterfs-cli glusterfs-fuse
Failed to set locale, defaulting to C.UTF-8
Last metadata expiration check: 0:09:21 ago on Wed Oct 13 16:41:02 2021.
Package glusterfs-cli-9.4-1.el8.x86_64 is already installed.
Package glusterfs-fuse-9.4-1.el8.x86_64 is already installed.
Dependencies resolved.
Nothing to do.
Complete!
[vagrant@centos3 ~]$
```

```
vagrant@centos1:~
Archivo Editar Ver Buscar Terminal Ayuda

[vagrant@centos1 ~]$ sudo dnf -y install centos-release-gluster9
Failed to set locale, defaulting to C.UTF-8
Last metadata expiration check: 0:00:31 ago on Wed Oct 13 16:56:39 2021.
Package centos-release-gluster9-1.0-1.el8.noarch is already installed.
Dependencies resolved.
Nothing to do.
Complete!
[vagrant@centos1 ~]$ sudo dnf -y update
Failed to set locale, defaulting to C.UTF-8
Last metadata expiration check: 0:00:34 ago on Wed Oct 13 16:56:39 2021.
Dependencies resolved.
Nothing to do.
Complete!
[vagrant@centos1 ~]$ sudo dnf -y install glusterfs-cli glusterfs-fuse
Failed to set locale, defaulting to C.UTF-8
Last metadata expiration check: 0:00:39 ago on Wed Oct 13 16:56:39 2021.
Package glusterfs-cli-9.4-1.el8.x86_64 is already installed.
Package glusterfs-fuse-9.4-1.el8.x86_64 is already installed.
Dependencies resolved.
Nothing to do.
Complete!
[vagrant@centos1 ~]$
```



```
vagrant@centos2:~  
Archivo Editar Ver Buscar Terminal Ayuda  
[vagrant@centos2 ~]$ sudo dnf -y install centos-release-gluster9  
Failed to set locale, defaulting to C.UTF-8  
Last metadata expiration check: 0:02:36 ago on Wed Oct 13 16:57:51 2021.  
Package centos-release-gluster9-1.0-1.el8.noarch is already installed.  
Dependencies resolved.  
Nothing to do.  
Complete!  
[vagrant@centos2 ~]$ sudo dnf -y update  
Failed to set locale, defaulting to C.UTF-8  
Last metadata expiration check: 0:02:39 ago on Wed Oct 13 16:57:51 2021.  
Dependencies resolved.  
Nothing to do.  
Complete!  
[vagrant@centos2 ~]$ sudo dnf -y install glusterfs-cli glusterfs-fuse  
Failed to set locale, defaulting to C.UTF-8  
Last metadata expiration check: 0:02:42 ago on Wed Oct 13 16:57:51 2021.  
Package glusterfs-cli-9.4-1.el8.x86_64 is already installed.  
Package glusterfs-fuse-9.4-1.el8.x86_64 is already installed.  
Dependencies resolved.  
Nothing to do.  
Complete!  
[vagrant@centos2 ~]$
```

```
vagrant@centos3:~  
Archivo Editar Ver Buscar Terminal Ayuda  
[vagrant@centos3 gdatos1]$ sudo mkdir dir1 dir2 dir3  
[vagrant@centos3 gdatos1]$ sudo touch dir1/ar1 dir2/ar2 dir3/ar3  
[vagrant@centos3 gdatos1]$ exit  
logout  
Connection to 127.0.0.1 closed.  
cesar@cesar-TM1701:~/Escritorio/CPD/Práctica/Practica 4/cpd5$ vagrant ssh centos1  
Last login: Wed Oct 13 17:07:36 2021 from 10.0.2.2  
[vagrant@centos1 ~]$ shutdown -h now  
Failed to set wall message, ignoring: Interactive authentication required.  
Failed to power off system via logind: Interactive authentication required.  
Failed to open initctl fifo: Permission denied  
Failed to talk to init daemon.  
[vagrant@centos1 ~]$ sudo shutdown -h now  
Connection to 127.0.0.1 closed by remote host.  
Connection to 127.0.0.1 closed.  
cesar@cesar-TM1701:~/Escritorio/CPD/Práctica/Practica 4/cpd5$ vagrant ssh centos3  
Last login: Wed Oct 13 17:11:14 2021 from 10.0.2.2  
[vagrant@centos3 ~]$ touch /gdatos1/dir  
dir1/ dir2/ dir3/  
[vagrant@centos3 ~]$ touch /gdatos1/nuevoar  
touch: cannot touch '/gdatos1/nuevoar': Permission denied  
[vagrant@centos3 ~]$ sudo touch /gdatos1/nuevoar  
[vagrant@centos3 ~]$
```

```
cesar@cesar-TM1701:~/Escritorio/CPD/Práctica/Practica 4/cpd5$ vagrant up  
Bringing machine 'centos1' up with 'virtualbox' provider...  
Bringing machine 'centos2' up with 'virtualbox' provider...  
Bringing machine 'centos3' up with 'virtualbox' provider...  
==> centos1: Checking if box 'centos/8' version '2011.0' is up to date...  
==> centos1: Clearing any previously set forwarded ports...  
==> centos1: Clearing any previously set network interfaces...  
==> centos1: Preparing network interfaces based on configuration...  
centos1: Adapter 1: nat  
centos1: Adapter 2: hostonly  
==> centos1: Forwarding ports...  
centos1: 22 (guest) => 2222 (host) (adapter 1)  
==> centos1: Running 'pre-boot' VM customizations...  
centos1: Booting VM...  
==> centos1: Waiting for machine to boot. This may take a few minutes...  
centos1: SSH address: 127.0.0.1:2222  
centos1: SSH username: vagrant  
centos1: SSH auth method: private key  
==> centos1: Machine booted and ready!  
==> centos1: Checking for guest additions in VM...  
centos1: No guest additions were detected on the base box for this VM! Guest  
centos1: additions are required for forwarded ports, shared folders, host only  
centos1: networking, and more. If SSH fails on this machine, please install  
centos1: the guest additions and repackage the box to continue.  
centos1:  
centos1: This is not an error message; everything may continue to work properly,  
centos1: in which case you may ignore this message.  
==> centos1: Setting hostname...  
==> centos1: Configuring and enabling network interfaces...  
==> centos1: Rsyncing folder: /home/cesar/Escritorio/CPD/Práctica/Practica 4/cpd5/ => /vagrant  
==> centos1: Machine already provisioned. Run 'vagrant provision' or use the '--provision  
==> centos1: flag to force provisioning. Provisioners marked to run always will still run.  
==> centos2: Checking if box 'centos/8' version '2011.0' is up to date...  
==> centos2: Machine already provisioned. Run 'vagrant provision' or use the '--provision'  
==> centos2: flag to force provisioning. Provisioners marked to run always will still run.  
==> centos3: Checking if box 'centos/8' version '2011.0' is up to date...  
==> centos3: Machine already provisioned. Run 'vagrant provision' or use the '--provision'  
==> centos3: flag to force provisioning. Provisioners marked to run always will still run.
```

```
cesar@cesar-TM1701:~/Escritorio/CPD/Practica/Practica 4/cpd5$ vagrant ssh centos1
Last login: Wed Oct 13 17:15:28 2021 from 10.0.2.2
[vagrant@centos1 ~]$ ls /gluster/bricks/brick1/voll/
dir1 dir2 dir3 nuevoar
[vagrant@centos1 ~]$
```