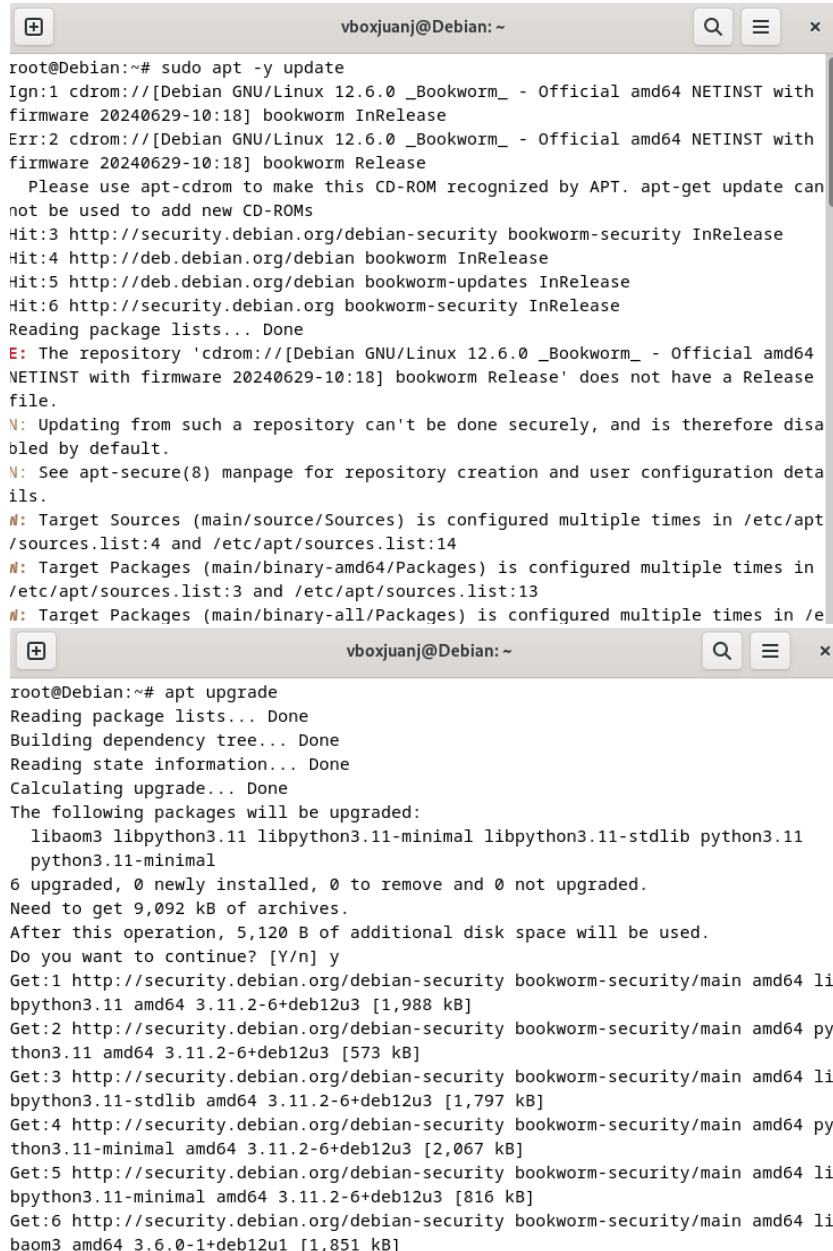


# Laboratorio 1\_U3

**Nombre:** Juan Jiménez

**Fecha:** 27/08/2024

## 1. Actualizar el servidor:



```
root@Debian:~# sudo apt -y update
Ign:1 cdrom://[Debian GNU/Linux 12.6.0 _Bookworm_ - Official amd64 NETINST with
firmware 20240629-10:18] bookworm InRelease
Err:2 cdrom://[Debian GNU/Linux 12.6.0 _Bookworm_ - Official amd64 NETINST with
firmware 20240629-10:18] bookworm Release
Please use apt-cdrom to make this CD-ROM recognized by APT. apt-get update can
not be used to add new CD-ROMs
Hit:3 http://security.debian.org/debian-security bookworm-security InRelease
Hit:4 http://deb.debian.org/debian bookworm InRelease
Hit:5 http://deb.debian.org/debian bookworm-updates InRelease
Hit:6 http://security.debian.org bookworm-security InRelease
Reading package lists... Done
E: The repository 'cdrom://[Debian GNU/Linux 12.6.0 _Bookworm_ - Official amd64
NETINST with firmware 20240629-10:18] bookworm Release' does not have a Release
file.
N: Updating from such a repository can't be done securely, and is therefore disa
bled by default.
N: See apt-secure(8) manpage for repository creation and user configuration deta
ils.
W: Target Sources (main/source/Sources) is configured multiple times in /etc/ap
t/sources.list:4 and /etc/apt/sources.list:14
W: Target Packages (main/binary-amd64/Packages) is configured multiple times in
/etc/apt/sources.list:3 and /etc/apt/sources.list:13
W: Target Packages (main/binary-all/Packages) is configured multiple times in /e

root@Debian:~# apt upgrade
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
Calculating upgrade... Done
The following packages will be upgraded:
  libaom3 libpython3.11 libpython3.11-minimal libpython3.11-stdlib python3.11
  python3.11-minimal
6 upgraded, 0 newly installed, 0 to remove and 0 not upgraded.
Need to get 9,092 kB of archives.
After this operation, 5,120 B of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://security.debian.org/debian-security bookworm-security/main amd64 li
bpython3.11 amd64 3.11.2-6+deb12u3 [1,988 kB]
Get:2 http://security.debian.org/debian-security bookworm-security/main amd64 py
thon3.11 amd64 3.11.2-6+deb12u3 [573 kB]
Get:3 http://security.debian.org/debian-security bookworm-security/main amd64 li
bpython3.11-stdlib amd64 3.11.2-6+deb12u3 [1,797 kB]
Get:4 http://security.debian.org/debian-security bookworm-security/main amd64 py
thon3.11-minimal amd64 3.11.2-6+deb12u3 [2,067 kB]
Get:5 http://security.debian.org/debian-security bookworm-security/main amd64 li
bpython3.11-minimal amd64 3.11.2-6+deb12u3 [816 kB]
Get:6 http://security.debian.org/debian-security bookworm-security/main amd64 li
baom3 amd64 3.6.0-1+deb12u1 [1,851 kB]
```

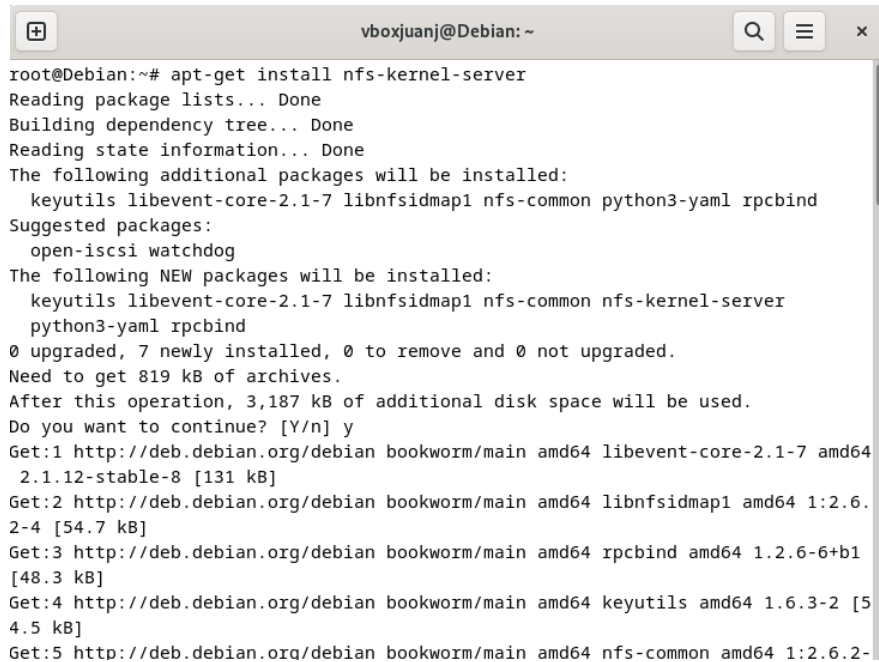
Con los comandos “apt -y update” y “apt upgrade” el primero ayuda a actualizar las

librerías apt de la distribución esto facilita al poder realizar nuevas funciones y arregla

problemas, el segundo comando sirve para mejorar la versión de la librería apt e

instala versiones nuevas de las librerías.

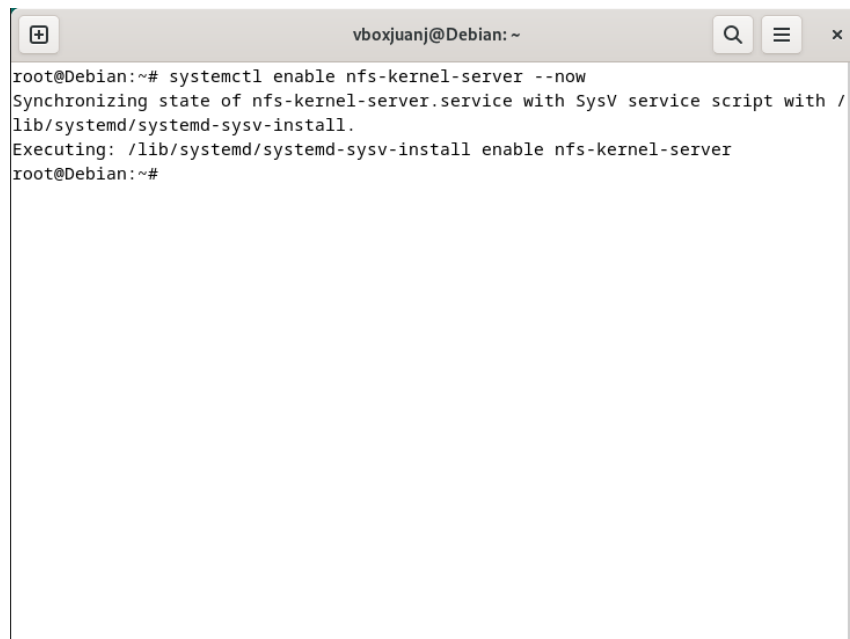
## 2. Instalación del servidor:

A terminal window titled 'vboxjuan@Debian: ~' showing the command 'apt-get install nfs-kernel-server' and its output. The output indicates that several additional packages will be installed along with the requested package, including keyutils, libevent-core, libnfsidmap1, nfs-common, python3-yaml, and rpcbind. It also shows the disk space requirements and the sources from which the packages are being downloaded.

```
vboxjuan@Debian: ~  
root@Debian:~# apt-get install nfs-kernel-server  
Reading package lists... Done  
Building dependency tree... Done  
Reading state information... Done  
The following additional packages will be installed:  
  keyutils libevent-core-2.1-7 libnfsidmap1 nfs-common python3-yaml rpcbind  
Suggested packages:  
  open-iscsi watchdog  
The following NEW packages will be installed:  
  keyutils libevent-core-2.1-7 libnfsidmap1 nfs-common nfs-kernel-server  
  python3-yaml rpcbind  
0 upgraded, 7 newly installed, 0 to remove and 0 not upgraded.  
Need to get 819 kB of archives.  
After this operation, 3,187 kB of additional disk space will be used.  
Do you want to continue? [Y/n] y  
Get:1 http://deb.debian.org/debian bookworm/main amd64 libevent-core-2.1-7 amd64  
  2.1.12-stable-8 [131 kB]  
Get:2 http://deb.debian.org/debian bookworm/main amd64 libnfsidmap1 amd64 1:2.6.  
  2-4 [54.7 kB]  
Get:3 http://deb.debian.org/debian bookworm/main amd64 rpcbind amd64 1.2.6-6+b1  
  [48.3 kB]  
Get:4 http://deb.debian.org/debian bookworm/main amd64 keyutils amd64 1.6.3-2 [5  
  4.5 kB]  
Get:5 http://deb.debian.org/debian bookworm/main amd64 nfs-common amd64 1:2.6.2-
```

Con el comando “apt-get install nfs-kernel-server” se instala el servicio de nfs server del kernel que es el servicio necesario para esta actividad.

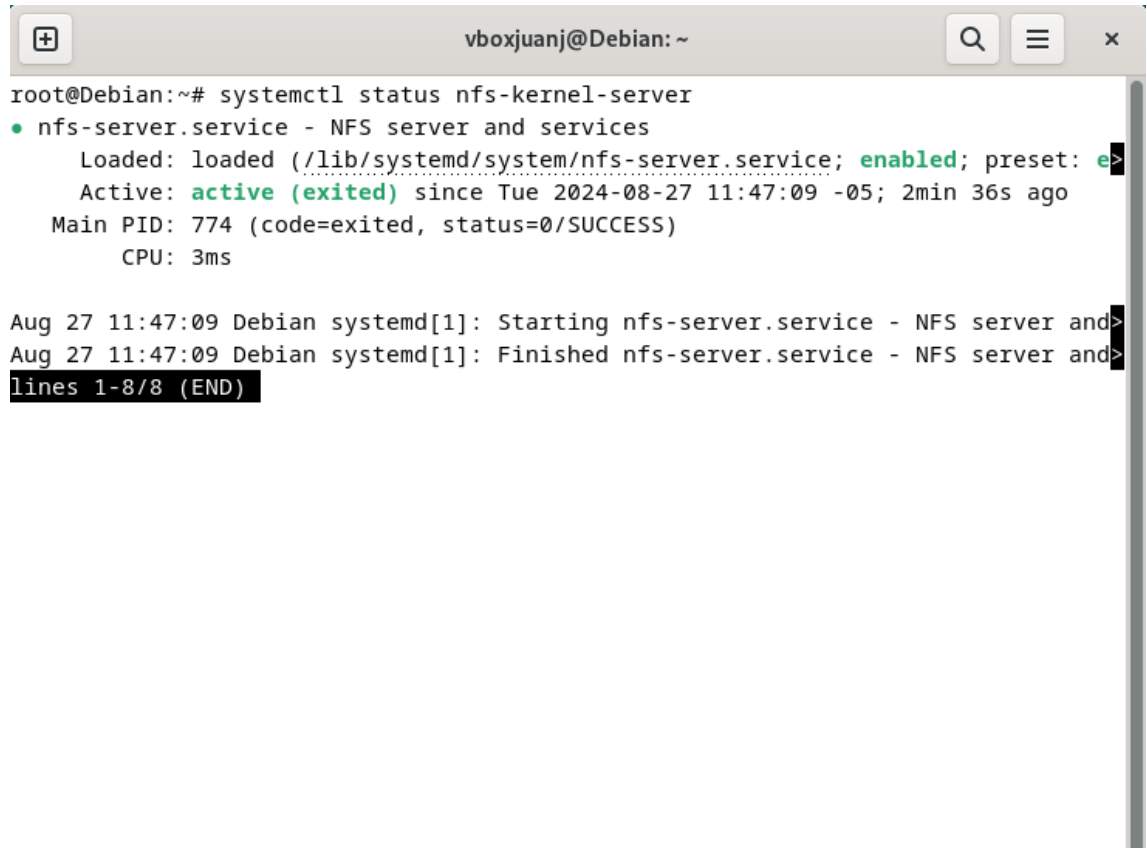
## 3. Habilitamos y levantamos el servicio NFS:

A terminal window titled 'vboxjuan@Debian: ~' showing the command 'systemctl enable nfs-kernel-server --now' and its output. The output indicates that the service is being enabled and synchronized with the SysV service script, and that the command is being executed.

```
vboxjuan@Debian: ~  
root@Debian:~# systemctl enable nfs-kernel-server --now  
Synchronizing state of nfs-kernel-server.service with SysV service script with /  
  lib/systemd/systemd-sysv-install.  
Executing: /lib/systemd/systemd-sysv-install enable nfs-kernel-server  
root@Debian:~#
```

Con el comando “systemctl enable nfs-kernel-server --now” se habilita el servidor nfs server.

#### 4. Comprobar status del servicio:



```
vboxjuanj@Debian: ~  
root@Debian:~# systemctl status nfs-kernel-server  
● nfs-server.service - NFS server and services  
   Loaded: loaded (/lib/systemd/system/nfs-server.service; enabled; preset: e>  
   Active: active (exited) since Tue 2024-08-27 11:47:09 -05; 2min 36s ago  
   Main PID: 774 (code=exited, status=0/SUCCESS)  
     CPU: 3ms  
  
Aug 27 11:47:09 Debian systemd[1]: Starting nfs-server.service - NFS server and>  
Aug 27 11:47:09 Debian systemd[1]: Finished nfs-server.service - NFS server and>  
lines 1-8/8 (END)
```

Con el comando “systemctl status nfs-kernel-server” se comprueba de la condición del servicio en este caso se ver como anteriormente se realizó la función de habilitar este sale en verde diciendo que esta activo.

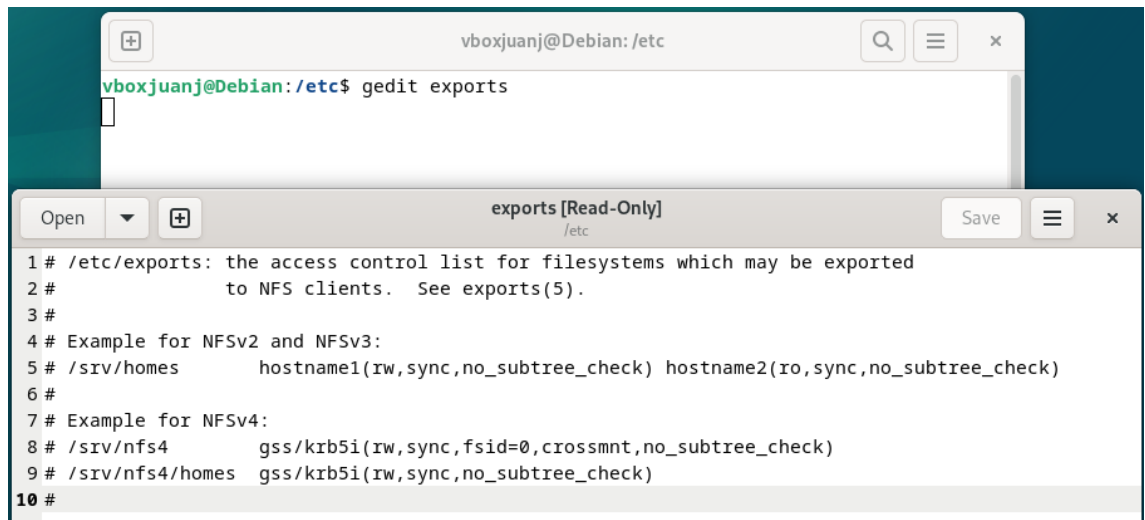
#### 5. Crear carpeta compartida y asignar permisos:



```
vboxjuanj@Debian: ~  
root@Debian:/home/compnfs# ls -lh  
total 0  
root@Debian:/home/compnfs#
```

Se crea una carpeta compartida para la realización de la actividad y con el comando “ls -lh” se revisa el total de archivos que se encuentre en la carpeta.

6. Modificar el archivo `/etc/exports` en el cual se configuran los permisos de la carpeta a compartir, la ip a la cual se va a compartir la carpeta:

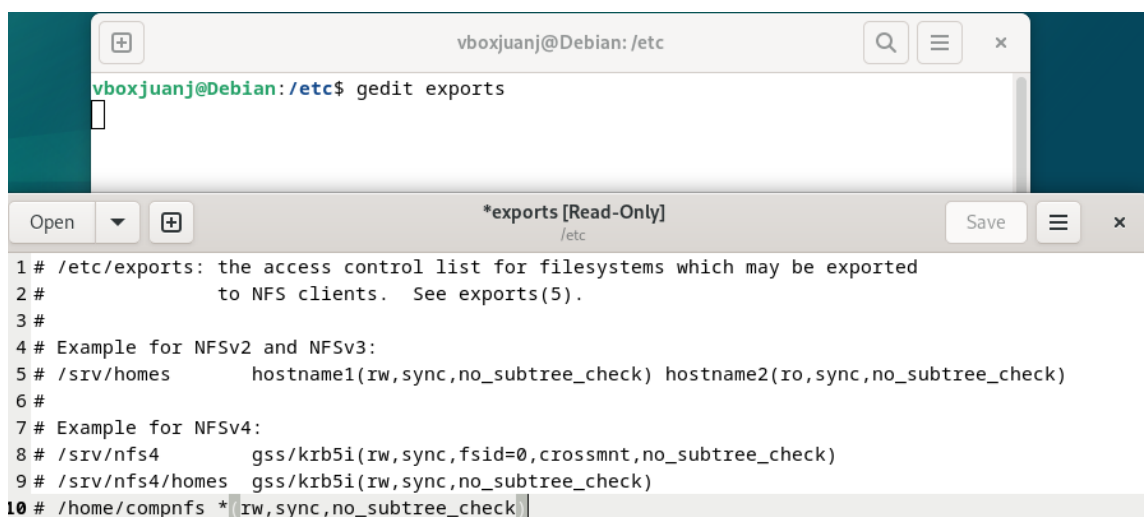


The image shows a terminal window at the top with the command `gedit exports` executed. Below it is a text editor window titled `exports [Read-Only] /etc`. The editor displays the following content:

```
1 # /etc/exports: the access control list for filesystems which may be exported
2 #           to NFS clients.  See exports(5).
3 #
4 # Example for NFSv2 and NFSv3:
5 # /srv/homes      hostname1(rw,sync,no_subtree_check) hostname2(ro,sync,no_subtree_check)
6 #
7 # Example for NFSv4:
8 # /srv/nfs4       gss/krb5i(rw,sync,fsid=0,crossmnt,no_subtree_check)
9 # /srv/nfs4/homes gss/krb5i(rw,sync,no_subtree_check)
10 #
```

En aquí se desarrolla la actividad de configurar los permisos para compartir la red.

7. En este archivo se establece el recurso compartido, la red, si es para cualquier red se coloca el `*`, el atributo de lectura y escritura `rw` y el atributo `sync`



The image shows a terminal window at the top with the command `gedit exports` executed. Below it is a text editor window titled `*exports [Read-Only] /etc`. The editor displays the following content:

```
1 # /etc/exports: the access control list for filesystems which may be exported
2 #           to NFS clients.  See exports(5).
3 #
4 # Example for NFSv2 and NFSv3:
5 # /srv/homes      hostname1(rw,sync,no_subtree_check) hostname2(ro,sync,no_subtree_check)
6 #
7 # Example for NFSv4:
8 # /srv/nfs4       gss/krb5i(rw,sync,fsid=0,crossmnt,no_subtree_check)
9 # /srv/nfs4/homes gss/krb5i(rw,sync,no_subtree_check)
10 # /home/compnfs * (rw,sync,no_subtree_check)
```

Se le añade la carpeta creada que nos será para compartir los archivos en las conexiones.

## 8. Comprobar que el archivo exports esté correctamente configurado

con el siguiente comando:

```
vboxjuanj@Debian: /etc
root@Debian:~# exportfs -fa
root@Debian:~#
```

Al usar el comando “exportfs -fa” se verifica si se a configurado correctamente.

## 9. Reiniciar los servicios:

```
vboxjuanj@Debian: /etc
root@Debian:~# systemctl restart nfs-server
root@Debian:~# systemctl status nfs-server-kernel
Unit nfs-server-kernel.service could not be found.
root@Debian:~# systemctl status nfs-kernel-server
• nfs-server.service - NFS server and services
   Loaded: loaded (/lib/systemd/system/nfs-server.service; enabled; preset: e>
   Active: active (exited) since Tue 2024-08-27 12:07:16 -05; 25s ago
   Process: 3419 ExecStartPre=/usr/sbin/exportfs -r (code=exited, status=0/SUC>
   Process: 3420 ExecStart=/usr/sbin/rpc.nfsd (code=exited, status=0/SUCCESS)
   Main PID: 3420 (code=exited, status=0/SUCCESS)
   CPU: 3ms

Aug 27 12:07:16 Debian systemd[1]: Starting nfs-server.service - NFS server and>
Aug 27 12:07:16 Debian systemd[1]: Finished nfs-server.service - NFS server and>
lines 1-10/10 (END)
```

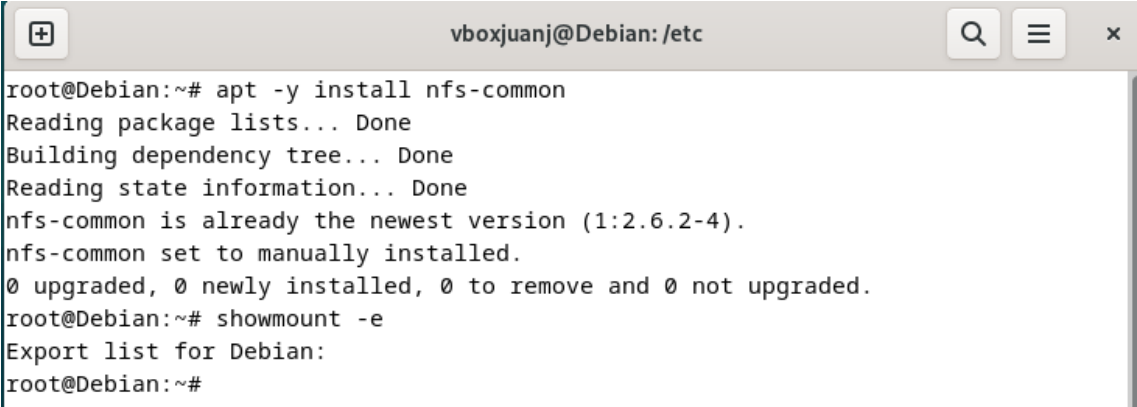
Se reinician los servidores para aplicar los cambios realizados y luego se vuelve a verificar las conexiones.

## 10. Se configura el cliente NFS y de igual manera se instala el nfs-utils:

```
vboxjuanj@Debian: /etc
root@Debian:~# apt -y install nfs-common
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
nfs-common is already the newest version (1:2.6.2-4).
nfs-common set to manually installed.
0 upgraded, 0 newly installed, 0 to remove and 0 not upgraded.
root@Debian:~#
```

Se instala el “nfs-utils” donde al parecer en este equipo se visualizó que ya venía instalado.

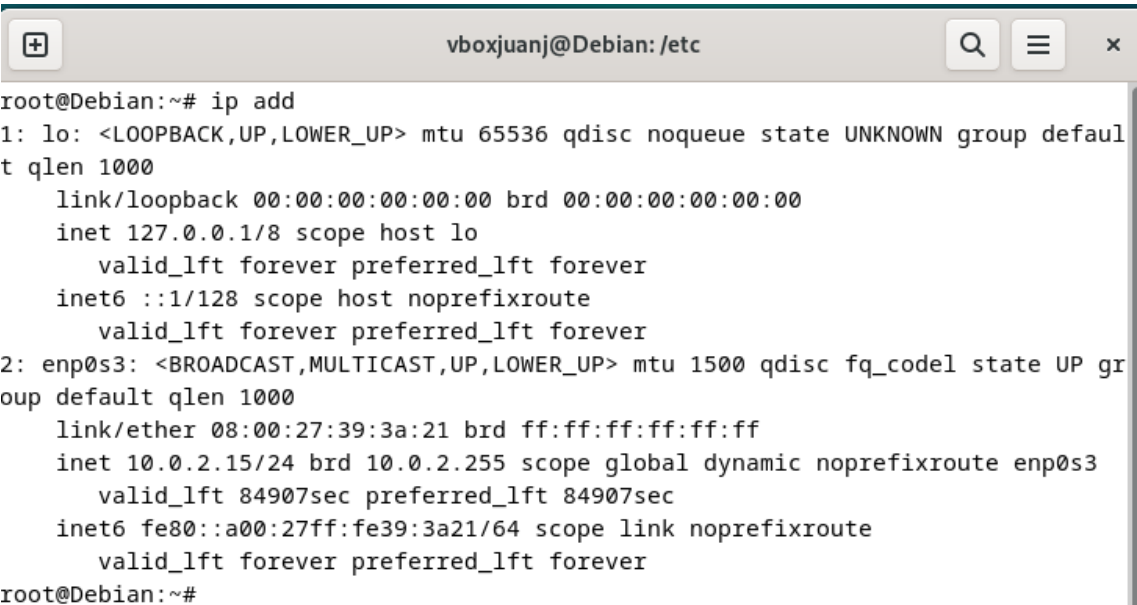
## 11..Se verifican los recursos compartidos disponibles:



```
vboxjuanj@Debian: /etc
root@Debian:~# apt -y install nfs-common
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
nfs-common is already the newest version (1:2.6.2-4).
nfs-common set to manually installed.
0 upgraded, 0 newly installed, 0 to remove and 0 not upgraded.
root@Debian:~# showmount -e
Export list for Debian:
root@Debian:~#
```

Se verifica las listas exportadas por alguna razón se ve en blanco no sabría decir el motivo debido a que se han realizado cada paso.

## 12.Se verifica la dirección ip del servidor que contiene el recurso compartido:



```
vboxjuanj@Debian: /etc
root@Debian:~# ip add
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
        valid_lft forever preferred_lft forever
    inet6 ::1/128 scope host noprefixroute
        valid_lft forever preferred_lft forever
2: enp0s3: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_codel state UP group default qlen 1000
    link/ether 08:00:27:39:3a:21 brd ff:ff:ff:ff:ff:ff
    inet 10.0.2.15/24 brd 10.0.2.255 scope global dynamic noprefixroute enp0s3
        valid_lft 84907sec preferred_lft 84907sec
    inet6 fe80::a00:27ff:fe39:3a21/64 scope link noprefixroute
        valid_lft forever preferred_lft forever
root@Debian:~#
```

Se verifica los puertos ip del equipo con el comando “ip add”.

## 13.Se crea una carpeta donde se montará el recurso compartido:

```
vboxjuanj@Debian: /etc
root@Debian:~# mkdir /home/compcli
root@Debian:~# cd /home
root@Debian:/home# ls
compcli compnfs vboxjuanj
root@Debian:/home#
```

14.Se monta el recurso compartido:

```
vboxjuanj@Debian: /etc
root@Debian:/home/compcli# mount -t nfs 192.168.109.128:/pruebanfs /clientenfs
mount.nfs: mount point /clientenfs does not exist
root@Debian:/home/compcli# df
Filesystem      1K-blocks    Used Available Use% Mounted on
udev            1778344         0   1778344   0% /dev
tmpfs           362124      1244    360880   1% /run
/dev/sda1       19480400 7249400  11216116  40% /
tmpfs           1810604         0   1810604   0% /dev/shm
tmpfs           5120         8      5112    1% /run/lock
/dev/loop0       76160     76160         0 100% /snap/core22/1564
/dev/loop1       505344    505344         0 100% /snap/netbeans/102
/dev/loop2       39808     39808         0 100% /snap/snapd/21759
tmpfs           362120      132    361988   1% /run/user/1000
root@Debian:/home/compcli#
```

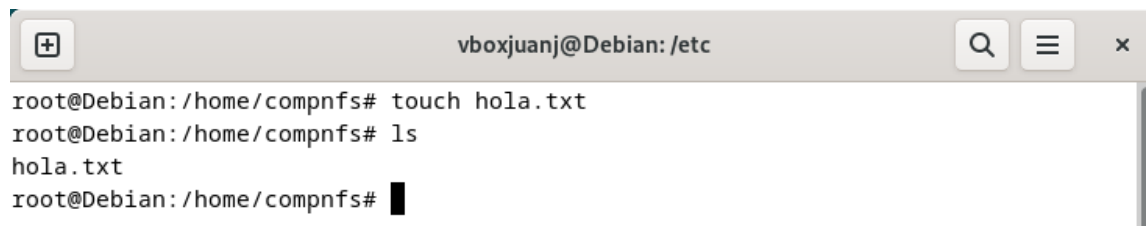
15..Se verifica si el montaje tuvo éxito:

```
vboxjuanj@Debian: /etc
root@Debian:/home/compcli# mount -t nfs 192.168.109.128:/pruebanfs /clientenfs
mount.nfs: mount point /clientenfs does not exist
root@Debian:/home/compcli# df
Filesystem      1K-blocks    Used Available Use% Mounted on
udev            1778344         0   1778344   0% /dev
tmpfs           362124      1244    360880   1% /run
/dev/sda1       19480400 7249400  11216116  40% /
tmpfs           1810604         0   1810604   0% /dev/shm
tmpfs           5120         8      5112    1% /run/lock
/dev/loop0       76160     76160         0 100% /snap/core22/1564
/dev/loop1       505344    505344         0 100% /snap/netbeans/102
/dev/loop2       39808     39808         0 100% /snap/snapd/21759
tmpfs           362120      132    361988   1% /run/user/1000
root@Debian:/home/compcli#
```

Esto se verifica realizando uso del comando “df” que muestra las particiones la información del disco.

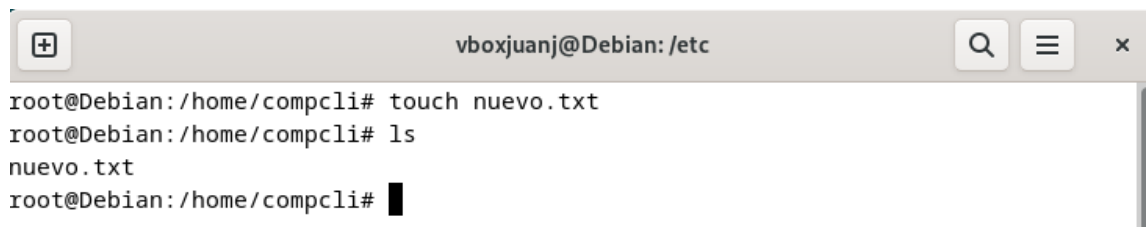
## 16. Verificar la compartición de archivos simulando servidor y cliente

Ingresamos a la carpeta servidor:



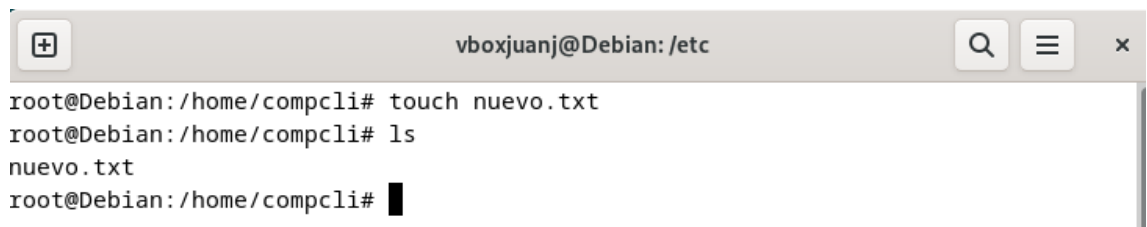
```
vboxjuan@Debian: /etc
root@Debian: /home/compnfs# touch hola.txt
root@Debian: /home/compnfs# ls
hola.txt
root@Debian: /home/compnfs#
```

## 17.. Crear un archivo:



```
vboxjuan@Debian: /etc
root@Debian: /home/compcli# touch nuevo.txt
root@Debian: /home/compcli# ls
nuevo.txt
root@Debian: /home/compcli#
```

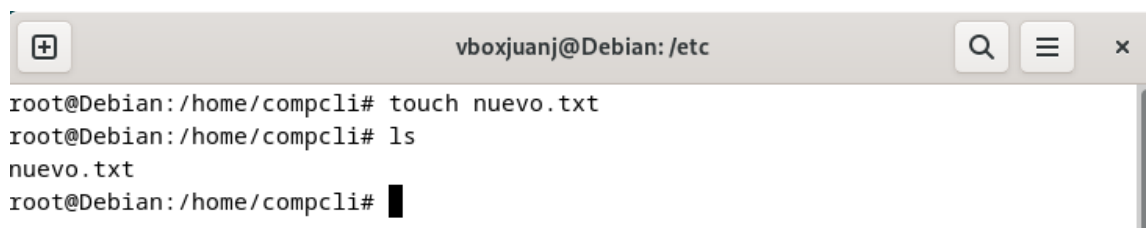
## 18. Comprobar la creación de un archivo:



```
vboxjuan@Debian: /etc
root@Debian: /home/compcli# touch nuevo.txt
root@Debian: /home/compcli# ls
nuevo.txt
root@Debian: /home/compcli#
```

## 19. Comprobar en la carpeta montada del cliente que se ha creado el

archivo Si cuento con una máquina extra como cliente:



```
vboxjuan@Debian: /etc
root@Debian: /home/compcli# touch nuevo.txt
root@Debian: /home/compcli# ls
nuevo.txt
root@Debian: /home/compcli#
```



20. Crear un archivo desde el cliente:

```
vboxjuanj@Debian: /etc
root@Debian:/home/compcli# echo hola >> otro.txt
root@Debian:/home/compcli# ls
nuevo.txt  otro.txt
root@Debian:/home/compcli#
```

21. Verificar en la carpeta del servidor si se creó el archivo:

```
vboxjuanj@Debian: /etc
root@Debian:/home/compnfs# ls
hola.txt  otro.txt
root@Debian:/home/compnfs#
```

22. . Desmontar la carpeta del cliente para verificar que todo se almacena en el servidor:

```
vboxjuanj@Debian: /etc
root@Debian:/home# umount /home/compcli
umount: /home/compcli: not mounted.
root@Debian:/home#
```

23. Comprobar que la carpeta este vacía:

```
vboxjuanj@Debian: /etc
root@Debian:~# cd clientsnfs/
root@Debian:~/clientsnfs# ls
root@Debian:~/clientsnfs#
```

Se puede comprobar que la carpeta se encuentra vacía.

24.. Configurar la unidad para que se mantenga en cada arranque con el fstab:

```
vboxjuanj@Debian: /etc

cupshelpers      issue.net        passwd           timezone
dbus-1           java-17-openjdk  passwd-         timidity
dconf            kernel          perl            tmpfiles.d
debconf.conf     kernel-img.conf pki             ucf.conf
debian_version   keyutils        plymouth        udev
default          ldap            polkit-1        udisks2
deluser.conf     ld.so.cache     ppp            ufw
dhcp             ld.so.conf      profile         update-motd.d
dictionaries-common ld.so.conf.d    profile.d       UPower
discover.conf.d  libao.conf      protocols      usb_modeswitch.conf
discover-modprobe.conf libaudit.conf   pulse          usb_modeswitch.d
dpkg             libblockdev     python3         vdpau_wrapper.cfg
e2scrub.conf     libnl-3         python3.11      vim
emacs            libpaper.d      rc0.d          vulkan
environment      libreoffice     rc1.d          wgetrc
environment.d    lighttpd        rc2.d          wpa_supplicant
ethertypes       locale.alias    rc3.d          X11
exports          locale.gen      rc4.d          xattr.conf
firefox-esr      localtime      rc5.d          xdg
fonts            logcheck        rc6.d          xml
fstab            login.defs      rcS.d
fuse.conf        logrotate.conf reportbug.conf
fwupd           logrotate.d    request-key.conf

root@Debian: /etc#
```

## 25. Obtener un respaldo del fstab:

```
vboxjuanj@Debian: /etc

root@Debian: ~# cp fstab fstab.back1
cp: cannot stat 'fstab': No such file or directory
root@Debian: ~#
```

## 26. Editar fstab:

```
vboxjuanj@Debian: /etc

root@Debian: ~# ServerDebian:/home/compnfs /home/compcli/ nfs defaults 0 0
-bash: ServerDebian:/home/compnfs: No such file or directory
root@Debian: ~#
```

## Parte 2:

1. Instalar de Samba utilizando el siguiente comando:

```
vboxjuanj@Debian: /etc
root@Debian:/etc# sudo apt install samba
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  attr ibverbs-providers libcephfs2 libfmt9 libgfs2 libgfrpc0 libgfsxdr0
  libglusterfs0 libibverbs1 librados2 librdmacm1 liburing2 python3-anyio
  python3-click python3-colorama python3-dnspython python3-gpg python3-h11
  python3-h2 python3-hpack python3-httpcore python3-httpx python3-hyperframe
  python3-ldb python3-markdown python3-markdown-it python3-mdurl
  python3-pygments python3-requests-toolbelt python3-rfc3986 python3-rich
  python3-samba python3-sniffio python3-talloc python3-tdb samba-ad-provision
  samba-common samba-common-bin samba-dsdb-modules samba-vfs-modules tdb-tools
Suggested packages:
  python3-trio python3-aioquic python-markdown-doc python-pygments-doc
  ttf-bitstream-vera bind9 bind9utils ctdb ldb-tools ntp | chrony ufw winbind
  heimdal-clients
The following NEW packages will be installed:
  attr ibverbs-providers libcephfs2 libfmt9 libgfs2 libgfrpc0 libgfsxdr0
  libglusterfs0 libibverbs1 librados2 librdmacm1 liburing2 python3-anyio
  python3-click python3-colorama python3-dnspython python3-gpg python3-h11
  python3-h2 python3-hpack python3-httpcore python3-httpx python3-hyperframe
  python3-ldb python3-markdown python3-markdown-it python3-mdurl
  python3-pygments python3-requests-toolbelt python3-rfc3986 python3-rich
```

Se instala el servicio de samba dentro de la distribución de Debian en caso de no tenerlo para realizar la actividad.

2. Crear una copia de seguridad del archivo de configuración principal de Samba:

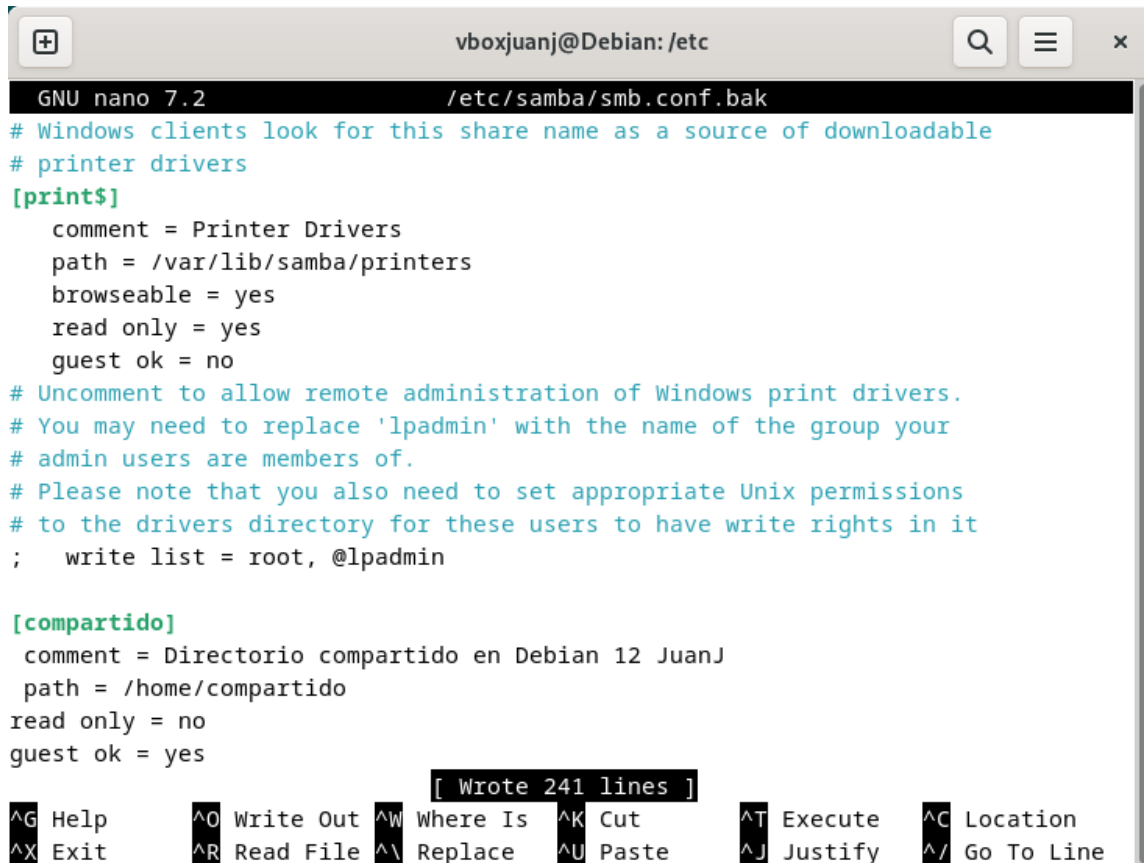
```
vboxjuanj@Debian: /etc
root@Debian:/etc# sudo cp /etc/samba/smb.conf /etc/samba/smb.conf.bak
root@Debian:/etc#
```

3. Edita el archivo de configuración de Samba utilizando el editor de texto de tu elección:

```
vboxjuanj@Debian: /etc
GNU nano 7.2 /etc/samba/smb.conf.bak
# Sample configuration file for the Samba suite for Debian GNU/Linux.
#
#
# This is the main Samba configuration file. You should read the
# smb.conf(5) manual page in order to understand the options listed
# here. Samba has a huge number of configurable options most of which
# are not shown in this example
#
# Some options that are often worth tuning have been included as
# commented-out examples in this file.
# - When such options are commented with ";", the proposed setting
#   differs from the default Samba behaviour
# - When commented with "#", the proposed setting is the default
#   behaviour of Samba but the option is considered important
#   enough to be mentioned here
#
# NOTE: Whenever you modify this file you should run the command
# "testparm" to check that you have not made any basic syntactic
# errors.

^G Help      ^O Write Out ^W Where Is  ^K Cut       ^T Execute  ^C Location
^X Exit      ^R Read File ^\ Replace   ^U Paste     ^J Justify  ^_ Go To Line
```

4. Agregar las siguientes líneas al final del archivo para configurar un directorio compartido llamado "compartido" que se puede acceder desde cualquier usuario en la red:

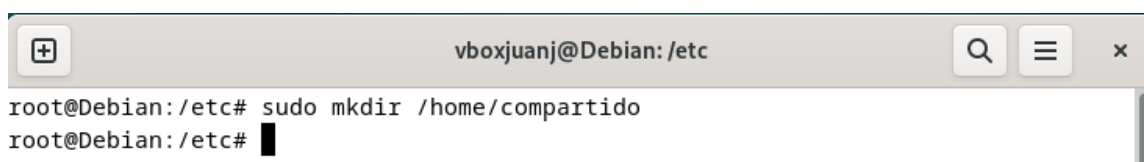


```
GNU nano 7.2 /etc/samba/smb.conf.bak
# Windows clients look for this share name as a source of downloadable
# printer drivers
[print$]
    comment = Printer Drivers
    path = /var/lib/samba/printers
    browseable = yes
    read only = yes
    guest ok = no
# Uncomment to allow remote administration of Windows print drivers.
# You may need to replace 'lpadmin' with the name of the group your
# admin users are members of.
# Please note that you also need to set appropriate Unix permissions
# to the drivers directory for these users to have write rights in it
; write list = root, @lpadmin

[compartido]
    comment = Directorio compartido en Debian 12 JuanJ
    path = /home/compartido
    read only = no
    guest ok = yes

[ Wrote 241 lines ]
^G Help      ^O Write Out ^W Where Is  ^K Cut       ^T Execute  ^C Location
^X Exit      ^R Read File ^\ Replace   ^U Paste     ^J Justify  ^_ Go To Line
```

5. Crea el directorio que has especificado en el archivo de configuración:



```
vboxjuanj@Debian: /etc
root@Debian:/etc# sudo mkdir /home/compartido
root@Debian:/etc#
```

6. Configurar los permisos de acceso al directorio compartido para que cualquier usuario pueda acceder a él:



```
vboxjuanj@Debian: /etc
root@Debian:/etc# sudo chmod -R 777 /home/compartido
root@Debian:/etc#
```

7. Reiniciar el servicio de Samba para que los cambios se hagan efectivos:

```
vboxjuanj@Debian: /etc

root@Debian:/etc# sudo systemctl restart smbd.service
root@Debian:/etc#
```

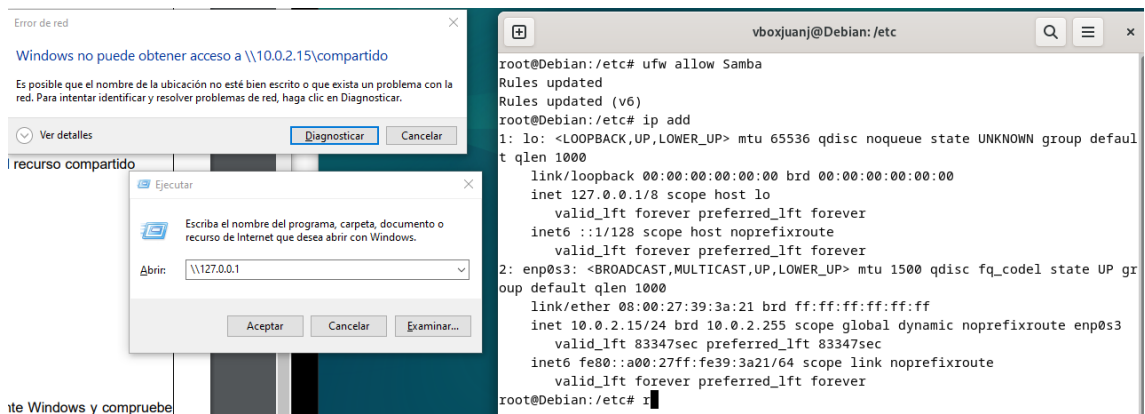
8. Crear una regla en el firewall para que acepte el tráfico Samba:

```
vboxjuanj@Debian: /etc

root@Debian:/etc# ufw allow Samba
Rules updated
Rules updated (v6)
root@Debian:/etc#
```

9. Ingresar a Windows como cliente en el prompt ejecutar e invocar al recurso

compartido:



La actividad llego hasta este punto debido a que el internet del lugar donde me encuentro realizando no permite realizar estas funciones pero a continuación se debería abrir una carpeta donde se crearía un archivo y en el Terminal de Debian se debería ver el archivo creado.