

Crear los carpetas y archivos

```
Debian12 [Corriendo] - Oracle VirtualBox
Archivo  Máquina  Ver  Entrada  Dispositivos  Ayuda

Debian GNU/Linux 12 debian tty1

debian login: usuario
Password:
Linux debian 6.1.0-18-amd64 #1 SMP PREEMPT_DYNAMIC Debian 6.1.76-1 (2024-02-01) x86_64

The programs included with the Debian GNU/Linux system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Debian GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent
permitted by applicable law.
usuario@debian:~$ su -
Password:
root@debian:~# cd /tmp
root@debian:/tmp# mkdir COPIA
root@debian:/tmp# ls
COPIA
systemd-private-c6b70a4d52314f589b1b20161f9595d2-systemd-logind.service-lxmfWU
systemd-private-c6b70a4d52314f589b1b20161f9595d2-systemd-timesyncd.service-d7U1Kx
root@debian:/tmp# cd COPIA/
root@debian:/tmp/COPIA# mkdir DESTINO ORIXE
root@debian:/tmp/COPIA# ls
DESTINO  ORIXE
root@debian:/tmp/COPIA# touch ORIXE/f{1..5}
root@debian:/tmp/COPIA# ls ORIXE/
f1 f2 f3 f4 f5
root@debian:/tmp/COPIA# S_
```

escribe un texto en f1 y copia seguridad

```
root@debian:/tmp/COPIA# cat ORIXE/f1
asdfasdfa
```

```
root@debian:/tmp/COPIA# rdiff-backup backup ORIXE/ DESTINO/
NOTE: Starting mirror from source path ORIXE to destination path DESTINO
root@debian:/tmp/COPIA# ls DESTINO/
f1 f2 f3 f4 f5 rdiff-backup-data
root@debian:/tmp/COPIA# _
```

elimina f1 y copia seguridad

```
root@debian:/tmp/COPIA# rm ORIXE/f1
root@debian:/tmp/COPIA# rdiff-backup backup ORIXE/ DESTINO/
NOTE: Starting increment operation from source path ORIXE to destination path DESTINO
root@debian:/tmp/COPIA# ls DESTINO/
f2 f3 f4 f5 rdiff-backup-data
root@debian:/tmp/COPIA#
```

recupera version que hay f1

--list increments

```
root@debian:/tmp/COPIA# rdiff-backup list
files      -h      --help      increments
root@debian:/tmp/COPIA# rdiff-backup list increments
usage: rdiff-backup list increments [-h] [--size | --no-size] [[USER@]SERVER::]PATH
rdiff-backup list increments: error: the following arguments are required: [[USER@]SERVER::]PATH
root@debian:/tmp/COPIA# rdiff-backup list increments DESTINO/
Found 1 increments:
    increments.2025-05-09T10:05:54+02:00.dir   Fri May  9 10:05:54 2025
Current mirror: Fri May  9 10:08:11 2025
```

--resotre

```
root@debian:/tmp/COPIA# rdiff-backup restore DESTINO/rdiff-backup-data/increments.2025-05-09T10\05\
:54+02\00.dir ORIXE
ERROR: Target path ORIXE exists and isn't empty, call with '--force' to overwrite
ERROR: Action restore failed on step check
root@debian:/tmp/COPIA# ls ORIXE/
f2 f3 f4 f5
root@debian:/tmp/COPIA# rm ORIXE/*
root@debian:/tmp/COPIA# rdiff-backup restore DESTINO/rdiff-backup-data/increments.2025-05-09T10\05\
:54+02\00.dir ORIXE
root@debian:/tmp/COPIA# ls ORIXE/
f1 f2 f3 f4 f5
root@debian:/tmp/COPIA# S_
```

crea os grupos de usuarios

```
root@debian:~# addgroup diurno
Engadindo grupo «diurno» (GID 1001) ...
Feito.
root@debian:~# addgroup nocturno
Engadindo grupo «nocturno» (GID 1002) ...
Feito.
root@debian:~# S_
```

dentro del /etc/group

```
GNU nano 7.2 /etc/group
www-data:x:33:
backup:x:34:
operator:x:37:
list:x:38:
irc:x:39:
src:x:40:
gnats:x:41:
shadow:x:42:
utmp:x:43:
video:x:44:usuario
sasl:x:45:
plugdev:x:46:usuario
staff:x:50:
games:x:60:
users:x:100:
nogroup:x:65534:
systemd-journal:x:101:
systemd-network:x:102:
systemd-resolve:x:103:
input:x:104:
kvm:x:105:
render:x:106:
crontab:x:107:
netdev:x:108:usuario
messagebus:x:109:
systemd-timesync:x:110:
usuario:x:1000:
systemd-coredump:x:999:
sgx:x:112:
lssh:x:111:
diurno:x:1001:
nocturno:x:1002:
```

crea os usuarios ana, xian

```
root@debian:/tmp/COPIA# adduser xian
Engadindo usuario «xian» ...
Engadindo novo grupo «xian» (1003) ...
Engadindo novo usuario «xian» (1003) con grupo «xian (1003)» ...
Creando cartafol persoal «/home/xian» ...
Copiando ficheiros dende «/etc/skel» ...
New password:
Retype new password:
passwd: o contrasinal actualizouse con éxito
A cambiar a información de usuario de xian
Introduza o novo valor ou prema Intro para o valor por defecto
    Nome completo []:
    Número de cuarto []:
    Teléfono do traballo []:
    Teléfono da casa []:
    Outro []:
Esta información é correcta? [S/n]
Engadindo usuario «xian» aos grupos extra / suplementarios «users» ...
Engadindo usuario «xian» ao grupo «users» ...
root@debian:/tmp/COPIA# adduser ana
Engadindo usuario «ana» ...
Engadindo novo grupo «ana» (1004) ...
Engadindo novo usuario «ana» (1004) con grupo «ana (1004)» ...
Creando cartafol persoal «/home/ana» ...
Copiando ficheiros dende «/etc/skel» ...
New password:
```

pon en group diurno

```
root@debian:/tmp/COPIA# adduser xian diurno
Engadindo usuario «xian» ao grupo «diurno» ...
Feito.
root@debian:/tmp/COPIA# adduser ana diurno
Engadindo usuario «ana» ao grupo «diurno» ...
Feito.
root@debian:/tmp/COPIA# S
```

cambiar permiso de Apuntes

```
root@debian:~# chmod 770 Apuntes/
root@debian:~# ls -lh
total 4,0K
drwxrwx--- 2 root root 4,0K Mai  9 10:22 Apuntes
root@debian:~# chgrp diurno Apuntes/
root@debian:~# ls -lh
total 4,0K
drwxrwx--- 2 root diurno 4,0K Mai  9 10:22 Apuntes
root@debian:~# SS_
```

como tiene que poner xian non pode hacer nada aunque es miembro de Diurno
entonces tengo que instar acl

install acl

```
root@debian:~# apt install acl
Lendo as listas de paquetes... Feito
Construindo a árbore de dependencias... Feito
Lendo a información do estado... Feito
Os seguintes paquetes foron instalados automaticamente e xa non son necesarios:
  libcbor0 libicu67 libldap-2.4-2 libmpdec3 libperl5.32 libpython3.9-minimal libpython3.9
  libusb-0.1-4 perl-modules-5.32 python3.9 python3.9-minimal telnet
Use 'apt autoremove' to remove them.
Os seguintes paquetes NOVOS hanse instalar:
  acl
0 anovados, 1 instalados, Vanse retirar 0 e deixar 70 sen anovar.
Ten que recibir 61,2 kB de arquivos.
Despois desta operación ocuparanse 215 kB de disco adicionais.
Rcb:1 https://deb.debian.org/debian bookworm/main amd64 acl amd64 2.3.1-3 [61,2 kB]
Obtivéronse 61,2 kB en 3s (18,5 kB/s)
Selecting previously unselected package acl.
(A ler a base de datos ... 36160 files and directories currently installed.)
Preparing to unpack .../archives/acl_2.3.1-3_amd64.deb ...
Unpacking acl (2.3.1-3) ...
A configurar acl (2.3.1-3) ...
Processing triggers for man-db (2.11.2-2) ...
root@debian:~# _
```

set acl

```
root@debian:~# setfacl -m u:xian:0 Apuntes/
root@debian:~# ls -lh
total 4,0K
drwxrwx---+ 2 root diurno 4,0K Mai  9 10:22 Apuntes
root@debian:~# getfacl Apuntes/
# file: Apuntes/
# owner: root
# group: diurno
user::rwx
user:xian:---
group::rwx
mask::rwx
other:---
root@debian:~#
```

para ana iniciar seccion temporalmente

crea password de nocturno

```
root@debian:~# gpasswd nocturno
A cambiar o contrasinal do grupo nocturno
Novo contrasinal:
Volva introducir o novo contrasinal:
root@debian:~# S
```

y ahora usa “su – ana” entra seccion de ana y proba

```
ana@debian:~$ newgrp nocturno
Contrasinal:
ana@debian:~$ groups
nocturno users diurno ana
ana@debian:~$ S_
```

xian poida engadir usuarios pero ana no.

```
root@debian:~# gpasswd -A xian nocturno
```

buscar paquete

```
root@debian:~# apt search pstree
Sorting... Feito
Full Text Search... Feito
psmisc/stable 23.6-1 amd64
  utilities that use the proc file system
```

usa apt install psmisc (olvido capturar el commando solo puedo amosa su resulta)

```
Construindo a árbore de dependencias... Feito
Lendo a información do estado... Feito
Os seguintes paquetes foron instalados automaticamente e xa non so
 libcbor0 libicu67 libldap-2.4-2 libmpdec3 libperl5.32 libpython3
 libusb-0.1-4 perl-modules-5.32 python3.9 python3.9-minimal telne
Use 'apt autoremove' to remove them.
Os seguintes paquetes NOVOS hanse instalar:
  psmisc
0 anovados, 1 instalados, Vanse retirar 0 e deixar 70 sen anovar.
Ten que recibir 259 kB de arquivos.
Despois desta operación ocuparanse 931 kB de disco adicionais.
Rcb:1 https://deb.debian.org/debian bookworm/main amd64 psmisc amd
Obtivéronse 259 kB en 3s (75,4 kB/s)
Selecting previously unselected package psmisc.
(A ler a base de datos ... 36179 files and directories currently i
Preparing to unpack .../psmisc_23.6-1_amd64.deb ...
Unpacking psmisc (23.6-1) ...
A configurar psmisc (23.6-1) ...
Processing triggers for man-db (2.11.2-2) ...
root@debian:~# dpkg --search pstree
psmisc: /usr/share/man/sv/man1/pstree.1.gz
psmisc: /usr/share/man/fr/man1/pstree.1.gz
psmisc: /usr/share/man/ko/man1/pstree.1.gz
psmisc: /usr/share/pixmaps/pstree16.xpm
psmisc: /usr/bin/pstree
psmisc: /usr/share/man/man1/pstree.x11.1.gz
psmisc: /usr/share/man/uk/man1/pstree.1.gz
psmisc: /usr/share/man/ro/man1/pstree.1.gz
psmisc: /usr/share/man/ru/man1/pstree.1.gz
psmisc: /usr/share/man/de/man1/pstree.1.gz
psmisc: /usr/share/man/pt_BR/man1/pstree.1.gz
psmisc: /usr/share/man/man1/pstree.1.gz
psmisc: /usr/share/man/sr/man1/pstree.1.gz
psmisc: /usr/bin/pstree.x11
psmisc: /usr/share/man/hr/man1/pstree.1.gz
psmisc: /usr/share/pixmaps/pstree32.xpm
root@debian:~#
```

```
root@debian:~# pstree
systemd--cron
        |__dbus-daemon
        |__dhclient
        |__login--bash--su--bash--su--bash--su--bash--newgrp--bash--su--bash--pstree
        |__rsyslogd--3*[{rsyslogd}]
        |__sshd
        |__systemd--(sd-pam)
        |__systemd-journal
        |__systemd-logind
        |__systemd-timesyn--{systemd-timesyn}
        |__systemd-udev
```

source.list

```
#deb cdrom:[Debian GNU/Linux 11.4.0 _Bullseye_ - Official
#deb http://proxy.iesrodeira.com:3142/debian/ bookworm ma
#deb https://deb.debian.org/debian boookworm main
deb-src https://deb.debian.org/debian texting main
```

```
root@debian:~# apt update
Rcb:1 https://deb.debian.org/debian testing InRelease [175 kB]
Rcb:2 https://deb.debian.org/debian testing/main Sources [10,6 MB]
Obtivéronse 10,7 MB en 46s (235 kB/s)
Lendo as listas de paquetes... Feito
Construindo a árbore de dependencias... Feito
Lendo a información do estado... Feito
All packages are up to date.
```

configura interface

```
GNU nano 7.2 /etc/network/interfaces
# This file describes the network interfaces available on your system
# and how to activate them. For more information, see interfaces(5).

source /etc/network/interfaces.d/*

# The loopback network interface
auto lo
iface lo inet loopback

# The primary network interface
allow-hotplug enp0s3
iface enp0s3 inet static
address 172.20.4.51
netmask 255.255.0.0
gateway 172.20.0.1
dns-server 8.8.8.8
```

```
root@debian:~# ifdown enp0s3
RTNETLINK answers: No such process
RTNETLINK answers: Cannot assign requested address
root@debian:~# ifup enp0s3
root@debian:~# ip a
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 08:00:27:1a:11:f7 brd ff:ff:ff:ff:ff:ff
    inet 172.20.4.51/16 brd 172.20.255.255 scope global enp0s3
        valid_lft forever preferred_lft forever
    inet6 fe80::a00:27ff:fe1a:11f7/64 scope link
        valid_lft forever preferred_lft forever
root@debian:~# ping 8.8.8.8
```

he cambiado source.list y apt update

buscar openSSH

```
root@debian:~# apt search openssh | grep server

WARNING: apt does not have a stable CLI interface. Use with caution!

fwknop-server/stable 2.6.10-16 amd64
  Firewall KNOck OPerator server side - C version
gesftpservr/stable 2~ds-1 amd64
  sftp server submodule for OpenSSH
libnet-sftp-sftpservr-perl/stable 1.1.0-7 all
openssh-server/stable 1:9.2p1-2+deb12u5 amd64 [upgradable from: 1:9.2p1-2+deb12u4]
  secure shell (SSH) server, for secure access from remote machines
openssh-sftp-server/stable 1:9.2p1-2+deb12u5 amd64 [upgradable from: 1:9.2p1-2+deb12u4]
  secure shell (SSH) sftp server module, for SFTP access from remote machines
  asyncio-based client and server implementation of SSHv2 protocol
secure-shell-client-and-server (metapackage)
  tool for ssh server auditing
```

instalarlo

```
root@debian:~# apt install openssh-server
Lendo as listas de paquetes... Feito
Construindo a árbore de dependencias... Feito
Lendo a información do estado... Feito
Os seguintes paquetes foron instalados automaticamente e xa non son necesarios:
  libcbor0 libicu67 libldap-2.4-2 libmpdec3 libperl5.32 libpython3.9-minimal libpython3.9-stdlib
  libusb-0.1-4 perl-modules-5.32 python3.9 python3.9-minimal telnet
Use 'apt autoremove' to remove them.
The following additional packages will be installed:
  libssl3 openssh-client openssh-sftp-server openssl
Paquetes suxeridos:
  keychain libpam-ssh monkeysphere ssh-askpass molly-guard ufw
Vanse anovar os paquetes seguintes:
  libssl3 openssh-client openssh-server openssh-sftp-server openssl
5 anovados, 0 instalados, Vanse retirar 0 e deixar 65 sen anovar.
Ten que recibir 4966 kB de arquivos.
Despois desta operación ocuparanse 32,8 kB de disco adicionais.
Quere continuar? [S/n]
```

hacer ping desde cliente

```
PS C:\Users\lav> ping 172.20.4.51

Haciendo ping a 172.20.4.51 con 32 bytes de datos:
Respuesta desde 172.20.4.51: bytes=32 tiempo<1m TTL=64
Respuesta desde 172.20.4.51: bytes=32 tiempo<1m TTL=64

Estadísticas de ping para 172.20.4.51:
    Paquetes: enviados = 2, recibidos = 2, perdidos = 0
    (0% perdidos),
    Tiempos aproximados de ida y vuelta en milisegundos:
    Mínimo = 0ms, Máximo = 0ms, Media = 0ms
Control-C
PS C:\Users\lav> |
```

conecta ssh

```
PS C:\Users\lav> ssh usuario@172.20.4.51
The authenticity of host '172.20.4.51 (172.20.4.51)' can't be established.
ED25519 key fingerprint is SHA256:iiI1EPHw2/iTVd3cEAjiRLm0+XPetbeChEH6xqlucybo.
This key is not known by any other names.
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added '172.20.4.51' (ED25519) to the list of known hosts.
usuario@172.20.4.51's password:
Linux debian 6.1.0-18-amd64 #1 SMP PREEMPT_DYNAMIC Debian 6.1.76-1 (2024-02-01) x86_64

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permitted by applicable law.
Last login: Fri May  9 09:39:48 2025
usuario@debian:~$ |
```


para ssh no arranca automaticamente
busca servicio

```
usuario@debian:~$ systemctl list-units | grep ssh
ssh.service                                loaded active running    OpenBSD Secure Shell server
```

disable ssh

```
root@debian:~# systemctl disable ssh.service
Synchronizing state of ssh.service with SysV service script with /lib/sys
temd/systemd-sysv-install.
Executing: /lib/systemd/systemd-sysv-install disable ssh
Removed "/etc/systemd/system/multi-user.target.wants/ssh.service".
Removed "/etc/systemd/system/sshd.service".
root@debian:~#
```