```
omar@omar-VirtualBox:~$ sudo apt install ftpd
[sudo] password for omar:
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  openbsd-inetd tcpd
The following NEW packages will be installed:
  ftpd openbsd-inetd tcpd
0 upgraded, 3 newly installed, 0 to remove and 220 not upgraded.
Need to get 99.0 kB of archives.
After this operation, 339 kB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://eg.archive.ubuntu.com/ubuntu jammy/universe amd64 tcpd amd64 7.6.q-31build2 [25.2 kB]
Get:2 http://eg.archive.ubuntu.com/ubuntu jammy/universe amd64 openbsd-inetd amd64 0.20160825-5 [26.3 kB]
Get:3 http://eg.archive.ubuntu.com/ubuntu jammy/universe amd64 ftpd amd64 0.17-36.2 [47.5 kB]
Fetched 99.0 kB in 1s (80.0 kB/s)
Selecting previously unselected package tcpd.
(Reading database ... 205425 files and directories currently installed.)
Preparing to unpack .../tcpd_7.6.q-31build2_amd64.deb ...
Unpacking tcpd (7.6.q-31build2) ...
Selecting previously unselected package openbsd-inetd.
Preparing to unpack .../openbsd-inetd_0.20160825-5_amd64.deb ...
Unpacking openbsd-inetd (0.20160825-5) ...
Selecting previously unselected package ftpd.
Preparing to unpack .../ftpd_0.17-36.2_amd64.deb ...
Unpacking ftpd (0.17-36.2) ...
Setting up tcpd (7.6.q-31build2) ...
Setting up openbsd-inetd (0.20160825-5) ...
Created symlink /etc/systemd/system/multi-user.target.wants/inetd.service → /lib/systemd/system/inetd.service.
Setting up ftpd (0.17-36.2) ...
Processing triggers for man-db (2.10.2-1) ...
```

```
omar@omar-VirtualBox:~$ sudo iptables -t filter -A INPUT -p tcp --dport 21 -j ACCEPT
omar@omar-VirtualBox:~$ ftp localhost
Connected to localhost.
220 omar-VirtualBox FTP server (Version 6.4/OpenBSD/Linux-ftpd-0.17) ready.
Name (localhost:omar):
331 Password required for omar.
Password:
230 User omar logged in.
Remote system type is UNIX.
Using binary mode to transfer files.
ftp> ls
229 Extended Passive Mode OK (|||38839|)
150 Opening ASCII mode data connection for '/bin/ls'.
total 128
-rw-------  1 omar omar     9318 16:03 1 أبر .bash_history
-rw-r--r--  1 omar omar      220 15:21 1 فبر .bash_logout
-rw-r--r--  1 omar omar     3771 15:21 1 فبر .bashrc
drwx------ 11 omar omar     4096 15:19 20 فبر .cache
drwx------ 15 omar omar     4096 21:03 27 فبر .config
drwxr-xr-x  2 omar omar     4096 15:37 1 فبر Desktop
drwxr-xr-x  2 omar omar     4096 15:37 1 فبر Documents
drwxr-xr-x  2 omar omar     4096 14:59 11 فبر Downloads
drwx------  2 omar omar     4096 15:00 11 فبر .gnupg
drwxrwxr-x  2 omar omar     4096 15:00 8 فبر iti-0
-rw-------  1 omar omar       20 16:26 28 مار .lesshst
-rw-rw-r--  1 omar omar        0 20:59 27 فبر list.log
drwx------  3 omar omar     4096 15:37 1 فبر .local
drwxr-xr-x  2 omar omar     4096 15:37 1 فبر Music
-rw-rw-r--  1 omar omar       73 20:59 27 فبر myscript.sh
-rw-rw-r--  1 omar omar      191 22:28 27 فبر myser.service
drwxrwxr-x  2 omar os_team  4096 21:02 20 فبر os_team_workspace
drwxr-xr-x  2 omar omar     4096 15:37 1 فبر Pictures
drwx------  3 omar omar     4096 15:08 11 فبر .pki
-rw-r--r--  1 omar omar      807 15:21 1 فبر .profile
drwxr-xr-x  2 omar omar     4096 15:37 1 فبر Public
-rw-rw-r--  1 omar omar       64 22:36 27 فبر .selected_editor
drwx------  6 omar omar     4096 15:08 11 فبر snap
drwx------  2 omar omar     4096 14:20 11 فبر .ssh
-rw-r--r--  1 omar omar        0 15:38 1 فبر .sudo_as_admin_successful
drwxr-xr-x  2 omar omar     4096 15:37 1 فبر Templates
-rw-r-----  1 omar omar        5 16:56 5 أبر .vboxclient-clipboard.pid
-rw-r-----  1 omar omar        5 16:57 5 أبر .vboxclient-draganddrop.pid
-rw-r-----  1 omar omar        5 16:57 5 أبر .vboxclient-seamless.pid
-rw-r-----  1 omar omar        5 16:57 5 أبر .vboxclient-vmsvga-session-tty2.pid
drwxr-xr-x  2 omar omar     4096 15:37 1 فبر Videos
drwxrwxr-x  3 omar omar     4096 15:08 11 فبر .vscode
226 Transfer complete.
ftp>
```

Activate Windows
Go to Settings to activate W

```
omar@omar-VirtualBox:~$ sudo ufw enable
Firewall is active and enabled on system startup
omar@omar-VirtualBox:~$ sudo ufw deny 20/tcp
Rule added
Rule added (v6)
omar@omar-VirtualBox:~$ sudo ufw deny 21/tcp
Rule added
Rule added (v6)
omar@omar-VirtualBox:~$
```

```
omar@omar-VirtualBox:~$ tail /var/log/kern.log
Apr  5 16:57:02 omar-VirtualBox kernel: [   38.889870] audit: type=1107 audit(1680706622.651:63): pid=662 uid=102 auid=4294967295 ses=4294967295 subj=unconfined msg='apparmor="DENIED" operation="dbus_met
hod_call"  bus="system" path="/org/freedesktop/PolicyKit1/Authority" interface="org.freedesktop.PolicyKit1.Authority" member="CheckAuthorization" mask="send" name=":1.2" pid=2225 label="snap.snap-store.s
nap-store" peer_pid=688 peer_label="unconfined"
Apr  5 16:57:02 omar-VirtualBox kernel: [   38.889870]  exe="/usr/bin/dbus-daemon" sauid=102 hostname=? addr=? terminal=?'
Apr  5 16:57:03 omar-VirtualBox kernel: [   39.351054] audit: type=1400 audit(1680706623.112:64): apparmor="DENIED" operation="open" class="file" profile="snap.snap-store.snap-store" name="/etc/PackageKi
t/Vendor.conf" pid=2225 comm="snap-store" requested_mask="r" denied_mask="r" fsuid=1000 ouid=0
Apr  5 16:57:03 omar-VirtualBox kernel: [   39.685321] audit: type=1400 audit(1680706623.448:65): apparmor="DENIED" operation="open" class="file" profile="snap.snap-store.snap-store" name="/etc/appstream
.conf" pid=2225 comm="snap-store" requested_mask="r" denied_mask="r" fsuid=1000 ouid=0
Apr  5 16:57:42 omar-VirtualBox kernel: [   78.995951] audit: type=1326 audit(1680706662.775:66): auid=1000 uid=1000 gid=1000 ses=3 subj=snap.snap-store.snap-store pid=2225 comm="pool-org.gnome." exe="/s
nap/snap-store/638/usr/bin/snap-store" sig=0 arch=c000003e syscall=93 compat=0 ip=0x7f8199e8539b code=0x50000
Apr  5 17:06:45 omar-VirtualBox kernel: [  621.409273] loop20: detected capacity change from 0 to 149488
Apr  5 17:08:48 omar-VirtualBox kernel: [  744.103836] loop21: detected capacity change from 0 to 942872
Apr  5 17:08:49 omar-VirtualBox kernel: [  745.428371] audit: type=1400 audit(1680707329.545:67): apparmor="STATUS" operation="profile_replace" info="same as current profile, skipping" profile="unconfine
d" name="snap-update-ns.snapd-desktop-integration" pid=4620 comm="apparmor_parser"
Apr  5 17:08:49 omar-VirtualBox kernel: [  745.675039] audit: type=1400 audit(1680707329.789:68): apparmor="STATUS" operation="profile_replace" profile="unconfined" name="snap.snapd-desktop-integration.h
ook.configure" pid=4621 comm="apparmor_parser"
Apr  5 17:08:50 omar-VirtualBox kernel: [  746.131394] audit: type=1400 audit(1680707330.249:69): apparmor="STATUS" operation="profile_replace" profile="unconfined" name="snap.snapd-desktop-integration.s
napd-desktop-integration" pid=4622 comm="apparmor_parser"
omar@omar-VirtualBox:~$
```

```
omar@omar-VirtualBox:~$ sudo apt 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
  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 rpcbind
0 upgraded, 6 newly installed, 0 to remove and 220 not upgraded.
Need to get 615 kB of archives.
After this operation, 2,235 kB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://eg.archive.ubuntu.com/ubuntu jammy/main amd64 libevent-core-2.1-7 amd64 2.1.12-stable-1build3 [93.9 kB]
Get:2 http://eg.archive.ubuntu.com/ubuntu jammy-updates/main amd64 libnfsidmap1 amd64 1:2.6.1-1ubuntu1.2 [42.9 kB]
Get:3 http://eg.archive.ubuntu.com/ubuntu jammy/main amd64 rpcbind amd64 1.2.6-2build1 [46.6 kB]
Get:4 http://eg.archive.ubuntu.com/ubuntu jammy/main amd64 keyutils amd64 1.6.1-2ubuntu3 [50.4 kB]
Get:5 http://eg.archive.ubuntu.com/ubuntu jammy-updates/main amd64 nfs-common amd64 1:2.6.1-1ubuntu1.2 [241 kB]
Get:6 http://eg.archive.ubuntu.com/ubuntu jammy-updates/main amd64 nfs-kernel-server amd64 1:2.6.1-1ubuntu1.2 [140 kB]
Fetched 615 kB in 12s (49.5 kB/s)
Selecting previously unselected package libevent-core-2.1-7:a
md64.
(Reading database ... 205460 files and directories currently
installed.)
Preparing to unpack .../0-libevent-core-2.1-7_2.1.12-stable-1
build3_amd64.deb ...
Unpacking libevent-core-2.1-7:amd64 (2.1.12-stable-1build3) .
..
Selecting previously unselected package libnfsidmap1:amd64.
Preparing to unpack .../1-libnfsidmap1_1%3a2.6.1-1ubuntu1.2_a
md64.deb ...
Unpacking libnfsidmap1:amd64 (1:2.6.1-1ubuntu1.2) ...
Selecting previously unselected package rpcbind.
Preparing to unpack .../2-rpcbind_1.2.6-2build1_amd64.deb ...
Unpacking rpcbind (1.2.6-2build1) ...
Selecting previously unselected package keyutils.
Preparing to unpack .../3-keyutils_1.6.1-2ubuntu3_amd64.deb .
```

```
Processing triggers for libc-bin (2.35-0ubuntu3.1) ...
omar@omar-VirtualBox:~$ sudo ufw allow 2049/tcp
Rule added
Rule added (v6)
omar@omar-VirtualBox:~$ sudo ufw allow 2049/udp
Rule added
Rule added (v6)
omar@omar-VirtualBox:~$
```

```
  GNU nano 6.2                                                                    /etc/exports *
# /etc/exports: the access control list for filesystems which may be exported
#               to NFS clients.  See exports(5).
#
# Example for NFSv2 and NFSv3:
# /srv/homes       hostname1(rw,sync,no_subtree_check) hostname2(ro,sync,no_subtree_check)
#
# Example for NFSv4:
# /srv/nfs4        gss/krb5i(rw,sync,fsid=0,crossmnt,no_subtree_check)
# /srv/nfs4/homes  gss/krb5i(rw,sync,no_subtree_check)
#
/tmp/shares *(rw)
```

```
omar@omar-VirtualBox:~$ mkdir /tmp/shares
omar@omar-VirtualBox:~$ sudo nano /etc/exports
omar@omar-VirtualBox:~$ sudo exportfs -a
exportfs: /etc/exports [1]: Neither 'subtree_check' or 'no_subtree_check' specified for export "*:/tmp/shares".
  Assuming default behaviour ('no_subtree_check').
  NOTE: this default has changed since nfs-utils version 1.0.x
```

```
omar@omar-VirtualBox:~$ sudo mount -t nfs localhost:/tmp/shares /mnt
omar@omar-VirtualBox:~$ cd /tmp/shares
omar@omar-VirtualBox:/tmp/shares$ touch script.txt
omar@omar-VirtualBox:/tmp/shares$ ls
script.txt
omar@omar-VirtualBox:/tmp/shares$ cd ~
omar@omar-VirtualBox:~$ cd /tmp/shares/script.txt /mnt
bash: cd: too many arguments
omar@omar-VirtualBox:~$ cp /tmp/shares/script.txt /mnt
omar@omar-VirtualBox:~$ cd /mnt
omar@omar-VirtualBox:/mnt$ ls
script.txt
omar@omar-VirtualBox:/mnt$
```

```
omar@omar-VirtualBox:/mnt$ cat /tmp/iptables-backup
# Generated by iptables-save v1.8.7 on Wed Apr  5 17:33:21 2023
*filter
:INPUT DROP [0:0]
:FORWARD DROP [0:0]
:OUTPUT ACCEPT [0:0]
:ufw-after-forward - [0:0]
:ufw-after-input - [0:0]
:ufw-after-logging-forward - [0:0]
:ufw-after-logging-input - [0:0]
:ufw-after-logging-output - [0:0]
:ufw-after-output - [0:0]
:ufw-before-forward - [0:0]
:ufw-before-input - [0:0]
:ufw-before-logging-forward - [0:0]
:ufw-before-logging-input - [0:0]
:ufw-before-logging-output - [0:0]
:ufw-before-output - [0:0]
:ufw-logging-allow - [0:0]
:ufw-logging-deny - [0:0]
:ufw-not-local - [0:0]
:ufw-reject-forward - [0:0]
:ufw-reject-input - [0:0]
:ufw-reject-output - [0:0]
:ufw-skip-to-policy-forward - [0:0]
:ufw-skip-to-policy-input - [0:0]
:ufw-skip-to-policy-output - [0:0]
:ufw-track-forward - [0:0]
:ufw-track-input - [0:0]
:ufw-track-output - [0:0]
:ufw-user-forward - [0:0]
:ufw-user-input - [0:0]
:ufw-user-limit - [0:0]
:ufw-user-limit-accept - [0:0]
:ufw-user-logging-forward - [0:0]
:ufw-user-logging-input - [0:0]
:ufw-user-logging-output - [0:0]
:ufw-user-output - [0:0]
-A INPUT -p tcp -m tcp --dport 20 -j ACCEPT
-A INPUT -p tcp -m tcp --dport 21 -j ACCEPT
-A INPUT -j ufw-before-logging-input
-A INPUT -j ufw-before-input
```