## LAB3

```
ahmed@ahmed-VirtualBox:~$ sudo apt install ftpd
[sudo] password for ahmed:
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
ftpd is already the newest version (0.17-36.2).
O upgraded, O newly installed, O to remove and 235 not upgraded.
ahmed@ahmed-VirtualBox:~$ sudo iptables -t filter -A INPUT -p tcp
 --dport 20 -j ACCEPT
ahmed@ahmed-VirtualBox:~$ sudo iptables -t filter -A INPUT -p tcp
--dport 21 -j ACCEPT
ahmed@ahmed-VirtualBox:~$ sudo ftp localhost
Connected to localhost.
220 ahmed-VirtualBox FTP server (Version 6.4/OpenBSD/Linux-ftpd-0
.17) ready.
Name (localhost:ahmed):
331 Password required for ahmed.
Password:
230 User ahmed logged in.
Remote system type is UNIX.
Using binary mode to transfer files.
ftp> ls
229 Extended Passive Mode OK (|||38765|)
150 Opening ASCII mode data connection for '/bin/ls'.
total 112
-rw----- 1 ahmed ahmed
                            bash history. أبر 5 49:49 1773
-rw-r--r-- 1 ahmed ahmed
                            bash_logout. فبر 13:41 220
-rw-r--r-- 1 ahmed ahmed
                            bashrc. فبر 13:41 13:71
drwx----- 13 ahmed ahmed
                            cache. فبر 11 09:05 4096
drwx----- 14 ahmed ahmed
                            config. فبر 12:57 13:66
drwxr-xr-x 2 ahmed ahmed
                            Desktop فبر 14:17 4096
drwxr-xr-x 2 ahmed ahmed
                            Documents فبر 14:17 4096
```

```
tp> by
221 Goodbye.
   nmed@ahmed-VirtualBox:~$ sudo ufw enable
 Firewall is active and enabled on system startup
  hmed@ahmed-VirtualBox:~$ sudo ufw deny 20/tcp
 Rule added (v6)
    med@ahmed-VirtualBox:~$ sudo ufw deny 21/tcp
 Rule added
Rule added (v6)
Anned@ahmed-VirtualBox:-$ tail /var/log/kern.log

Apr 5 15:55:51 ahmed-VirtualBox kernel: [ 212.287756] audit: type=1107 audit(1680702951.775:55): pid=679 uid=102 auid=4294967295 ses=4294967

295 subj=unconfined msg='apparmor="DENIED" operation="dbus_method_call" bus="system" path="/org/freedesktop/PolicyKit1/Authority" interface="
org.freedesktop.PolicyKit1.Authority" member="CheckAuthorization" mask="send" name=":1.3" pid=2260 label="snap.snap-store.ubuntu-software" pee
org. Teedesktop. Pottcy fitted to the known to the known traction mask- send have 1.13 ptd-2200 tabet- snap.snap-store.additu-sortware peer rpid=701 peer labet="unconfined"

Apr 5 15:55:51 ahmed-VirtualBox kernel: [ 212.287756] exe="/usr/bin/dbus-daemon" sauid=102 hostname=? addr=? terminal=?'

Apr 5 15:55:51 ahmed-VirtualBox kernel: [ 212.312593] audit: type=1107 audit(1680702951.799:56): pid=679 uid=102 auid=4294967295 ses=4294967

295 subj=unconfined msg='apparmor="DENIED" operation="dbus_method_call" bus="system" path="/org/freedesktop/PolicyKit1/Authority" interface="
org. freedesktop. DBus. Properties" member="GetAll" mask="send" name=":1.3" pid=2260 label="snap.snap-store.ubuntu-software" peer_pid=701 peer_la
 oel="unconfined"
Apr 5 15:55:51 ahmed-VirtualBox kernel: [ 212.312593] exe="/usr/bin/dbus-daemon" sauid=102 hostname=? addr=? terminal=?'
Apr 5 15:55:51 ahmed-VirtualBox kernel: [ 212.317766] audit: type=1107 audit(1680702951.807:57): pid=679 uid=102 auid=4294967295 ses=4294967
295 subj=unconfined msg='apparmor="DENIED" operation="dbus_method_call" bus="system" path="/org/freedesktop/PolicyKit1/Authority" interface="
org.freedesktop.PolicyKiti.Authority" member="CheckAuthorization" mask="send" name=":1.3" pid=2260 label="snap.snap-store.ubuntu-software" pee
 Apr 5 15:55:51 ahmed-virtualBox kernel: [ 212.317766] exe="/usr/bin/dbus-daemon" sauid=102 hostname=? addr=? terminal=?'
Apr 5 15:55:55 ahmed-virtualBox kernel: [ 215.603883] audit: type=1400 audit(1680702955.090:58): apparmor="DENIED" operation="open" class="f
ile" profile="snap.snap-store.ubuntu-software" name="/etc/PackageKit/Vendor.conf" pid=2260 comm="snap-store" requested_mask="r" denied_mask="r
   fsuid=1000 ouid=0
Apr 5 15:55:59 ahmed-VirtualBox kernel: [ 219.608771] audit: type=1400 audit(1680702959.093:59): apparmor="DENIED" operation="open" class="f
ile" profile="snap.snap-store.ubuntu-software" name="/etc/appstream.conf" pid=2260 comm="snap-store" requested_mask="r" denied_mask="r" fsuid=
                                           alBox:~$ sudo apt install nfs-ke<u>rnel-server</u>
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:
```

```
ahmedgahmed-VirtualBox:-$ sudo apt install nfs-kernel-server

Reading package lists.. Done

Building dependency tree... Done

Reading state information... 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-iscst watchdog

The following NEW packages will be installed:
    keyutils libevent-core-2.1-7 libnfsidmap1 nfs-common
    nfs-kernel-server rpcbind

O upgraded, 6 newly installed, 0 to remove and 235 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-wani amd64 rpcbind amd64 1.2.6.2-build1 [46.6 kB]

Get:4 http://eg.archive.ubuntu.com/ubuntu jammy-updates/main amd64 nfs-common amd64 1:2.6.1-1ubuntu1.2 [241 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 10s (63.2 kB/s)

Selecting previously unselected package libevent-core-2.1-7:amd64

. (Reading database ... 204513 files and directories currently inst

alled.)

Preparing to unpack .../0-libevent-core-2.1-7_2.1.12-stable-1build3

3 amd64.deb ...

Unpacking libevent-core-2.1-7:amd64 (2.1.12-stable-1build3) ...

Selecting previously unselected package libersidmap1:amd64.

Preparing to unpack .../1-libnfsidmap1=ix3a2.6.1-1ubuntu1.2_amd64
```

```
ahmed@ahmed-VirtualBox:~$ mkdir /tmp/shares
ahmed@ahmed-VirtualBox:~$ sudo nano /etc/exports
ahmed@ahmed-VirtualBox:~$ sudo exportfs -a
exportfs: /etc/exports [1]: Neither 'subtree_check' or 'no_subtre
e_check' specified for export "*:/tmp/shares".
   Assuming default behaviour ('no_subtree_check').
   NOTE: this default has changed since nfs-utils version 1.0.x
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```
ahmed@ahmed-VirtualBox: ~
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                                                   \equiv
                                                                  ×
                                                             ♂
 GNU nano 6.2
                              /etc/exports *
 /etc/exports: the access control list for filesystems which ma>
                to NFS clients. See exports(5).
# Example for NFSv2 and NFSv3:
                   hostname1(rw,sync,no_subtree_check) hostname2>
 /srv/homes
 Example for NFSv4:
                  gss/krb5i(rw,sync,fsid=0,crossmnt,no_subtree_>
 /srv/nfs4/homes gss/krb5i(rw,sync,no_subtree_check)
 /tmp/shares *(rw)
```

```
Processing triggers for man-db (2.10.2-1) ...
Processing triggers for libc-bin (2.35-0ubuntu3.1) ...
  hmed@ahmed-VirtualBox:~S sudo ufw allow 2849/tcp
Rule added
Rule added (v6)
 ahmed@ahmed-VirtualBox:~$ sudo ufw allow 2849/udp
Rule added
Rule added (v6)
  hmed@ahmed-VirtualBox:~$ mkdir /tmp/shares
ahmed@ahmed-VirtualBox:~$ sudo nano /etc/exports
ahmed@ahmed-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
ahmed@ahmed-VirtualBox: $ sudo mount -t nfs localhost:/tmp/shares /mnt
ahmed@ahmed-VirtualBox: $ cd /tmp/shares
 ahmed@ahmed-VirtualBox:/tmp/shares$ touch filelab3.txt
ahmed@ahmed-VirtualBox:/tmp/shares$ ls
filelab3.txt
 ahmed@ahmed-VirtualBox:/tmp/shares$ cd ~
ahned@ahned-VirtualBox:-$ cp /tmp/shares/filelab3.txt /mnt
ahmed@ahned-VirtualBox:-$ cd /mnt
ahmed@ahned-VirtualBox:/mnt$ ls
filelab3.txt
 ahmed@ahmed-VirtualBox:/mnt$ cd ~
ahmed@ahmed-VirtualBox:-$ sudo iptables-save > /tmp/iptables-backup
ahmed@ahmed-VirtualBox:-$ cat /tmp/iptables-backup
# Generated by iptables-save v1.8.7 on Wed Apr 5 17:33:40 2023
 *filter
:INPUT DROP [0:0]
:FORWARD DROP [0:0]
```