Admin2
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- Install ftpd service on your laptop

```
sara@sara-VirtualBox:~$ sudo apt install vsftpd
[sudo] password for sara:
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following NEW packages will be installed:
  vsftpd
```

- enable port 21 and 20 (tcp) using iptables command using INPUT chain

```
sara@sara-VirtualBox:~$ sudo iptables -t filter -A INPUT -p tcp --dport 20 -j A
CCEPT
sara@sara-VirtualBox:~$ sudo iptables -t filter -A INPUT -p tcp --dport 21 -j A
CCEPT
sara@sara-VirtualBox:~$
```

- connect to ftp server (e.g: localhost) and browse the current directory

```
sara@sara-VirtualBox:~$ ftp localhost
Connected to localhost.
220 ProFTPD Server (ProFTPD) [::ffff:127.0.0.1]
Name (localhost:sara): sara
331 Password required for sara
Password:
230 User sara logged in
Remote system type is UNIX.
Using binary mode to transfer files.
ftp> ls
```

- enable ufw service

```
sara@sara-VirtualBox:~$ sudo ufw enable
[sudo] password for sara:
Firewall is active and enabled on system startup
sara@sara-VirtualBox:~$
```

- block port 20 and 21 (tcp) using ufw

```
sara@sara-VirtualBox:~$ sudo ufw deny 20/tcp
Rule added
Rule added (v6)
sara@sara-VirtualBox:~$ sudo ufw deny 21/tcp
Rule added
Rule added (v6)
sara@sara-VirtualBox:~$
```

- try to connect to ftp service

```
sara@sara-VirtualBox:~$ ftp localhost
Connected to localhost.
220 ProFTPD Server (ProFTPD) [::ffff:127.0.0.1]
Name (localhost:sara): sara
331 Password required for sara
Password:
230 User sara logged in
```

- capture the ufw log to detect the blocked operation

```
sara@sara-VirtualBox:~$ tail /var/log/kern.log
Apr  2 16:02:27 sara-VirtualBox kernel: [9186416122.421479] e1000: enp0s3 NIC L
ink is Down
Apr  2 16:02:27 sara-VirtualBox kernel: [9186416122.444809] usb 2-1: USB discon
nect, device number 17
Apr  2 16:02:28 sara-VirtualBox kernel: [9186416122.968371] usb 2-1: new full-s
peed USB device number 18 using ohci-pci
Apr  2 16:02:29 sara-VirtualBox kernel: [9186416124.186558] usb 2-1: New USB de
vice found, idVendor=80ee, idProduct=0021, bcdDevice= 1.00
Apr  2 16:02:29 sara-VirtualBox kernel: [9186416124.186570] usb 2-1: New USB de
vice strings: Mfr=1, Product=3, SerialNumber=0
Apr  2 16:02:29 sara-VirtualBox kernel: [9186416124.186575] usb 2-1: Product: U
SB Tablet
Apr  2 16:02:29 sara-VirtualBox kernel: [9186416124.186578] usb 2-1: Manufactur
er: VirtualBox
Apr  2 16:02:29 sara-VirtualBox kernel: [9186416124.412292] input: VirtualBox U
SB Tablet as /devices/pci0000:00/0000:00:06.0/usb2/2-1/2-1:1.0/0003:80EE:0021.0
011/input/input23
Apr  2 16:02:29 sara-VirtualBox kernel: [9186416124.541760] hid-generic 0003:80
EE:0021.0011: input,hidraw0: USB HID v1.10 Mouse [VirtualBox USB Tablet] on usb
-0000:00:06.0-1/input0
Apr  2 16:02:33 sara-VirtualBox kernel: [9186416128.475442] e1000: enp0s3 NIC L
ink is Up 1000 Mbps Full Duplex, Flow Control: RX
sara@sara-VirtualBox:~$
```

- install nfs service on your system

```
sara@sara-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
```

- enable nfs service on the firewall

```
sara@sara-VirtualBox:~$ sudo ufw allow 2049/tcp
Rule added
Rule added (v6)
sara@sara-VirtualBox:~$ sudo ufw allow 2049/udp
Rule added
Rule added (v6)
```

- create and share /tmp/shares folder using exportfs command and /etc/exports file

```
sara@sara-VirtualBox:/tmp$ sudo nano /etc/exports
sara@sara-VirtualBox:/tmp$ sudo exportfs -a
```

- mount the remote share on /mnt folder (you can using localhost as well)

```
sara@sara-VirtualBox:/tmp$ sudo mkdir /mnt/myshare
sara@sara-VirtualBox:/tmp$ sudo mount localhost:/tmp/shares  /mnt/myshare
sara@sara-VirtualBox:/tmp$ ls /mnt
```

- copy some files to the remote share
  - ➢ sudo cp /home/sara/Desktop/iti-0/file2.html /mnt/myshare
- save iptables rules to /tmp/iptables-backup file
  - ➢ sudo iptables-save > /tmp/iptables-backup