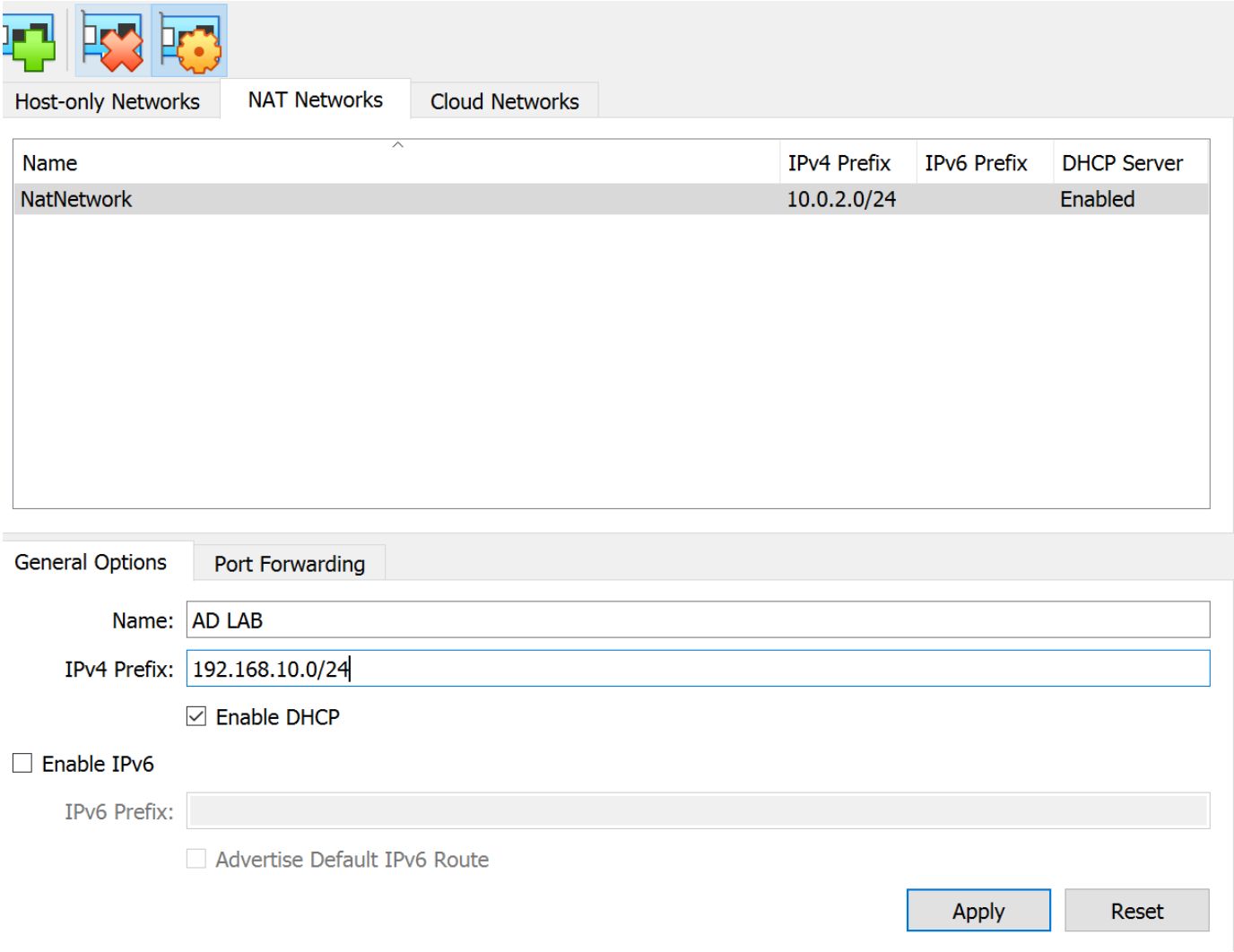
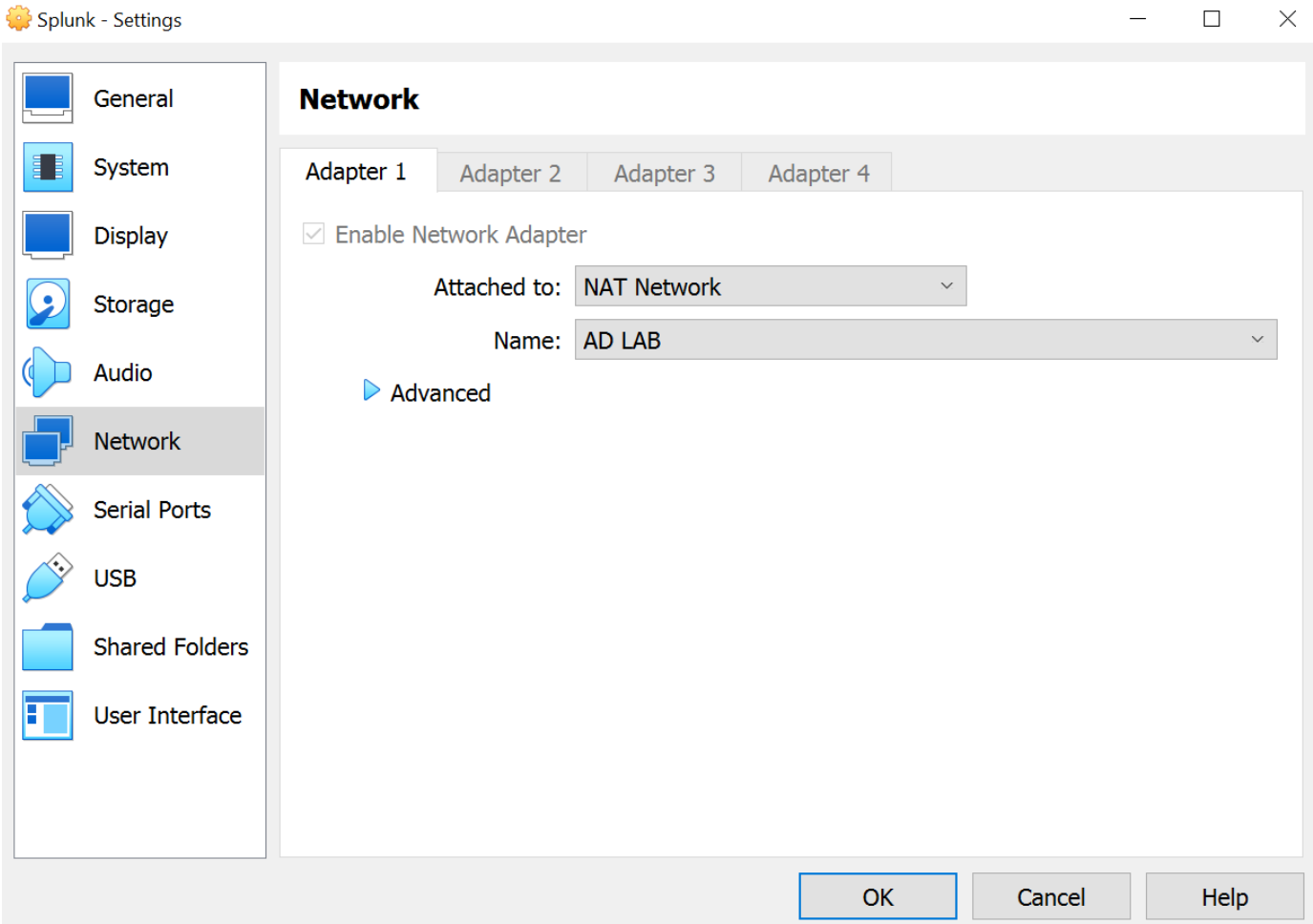
2. Network Lab , Shared Folder and Splunk Installation Settings

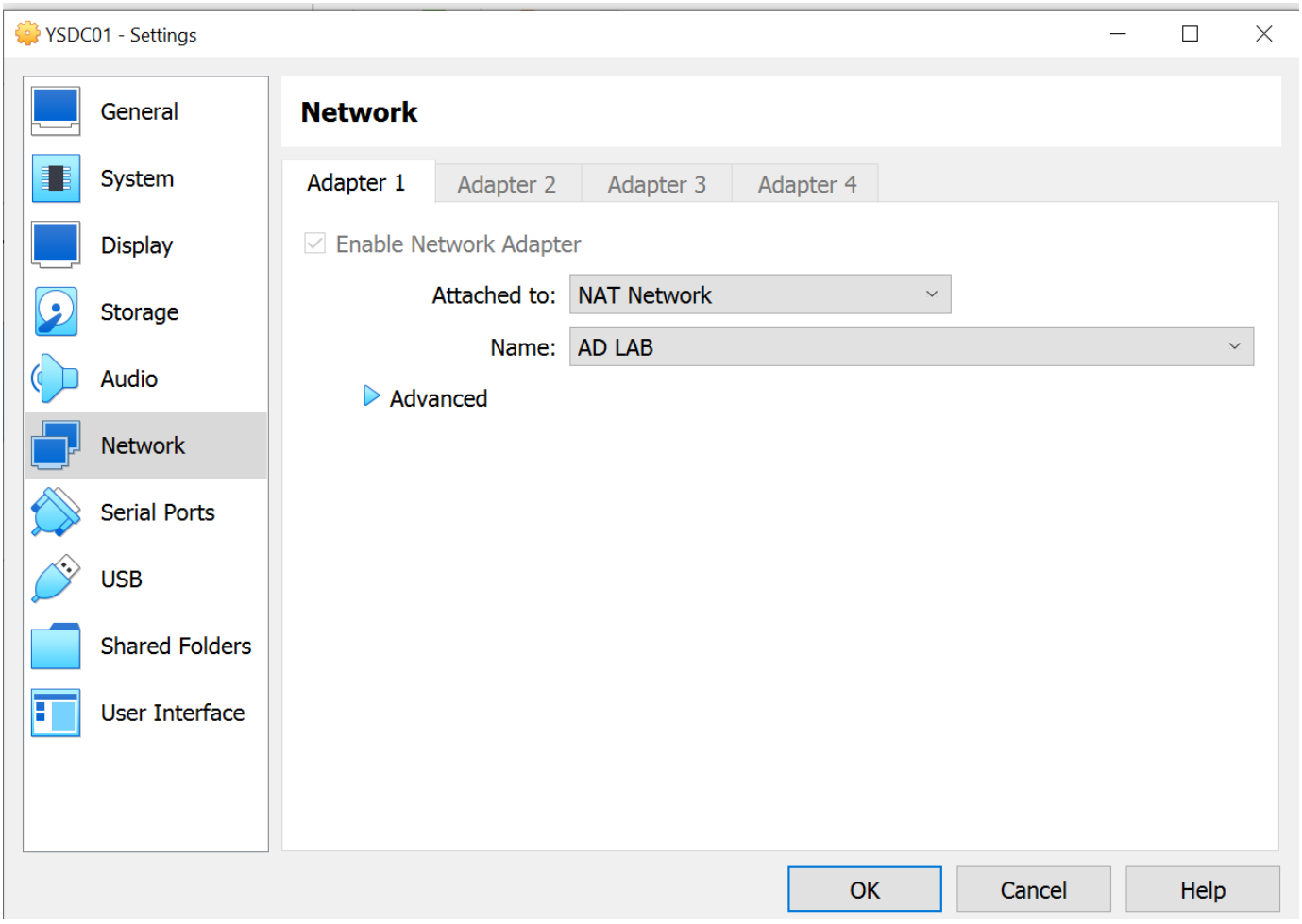
Change Network Settings to NAT NETWORK



Apply the newly created network to the Splunk server :



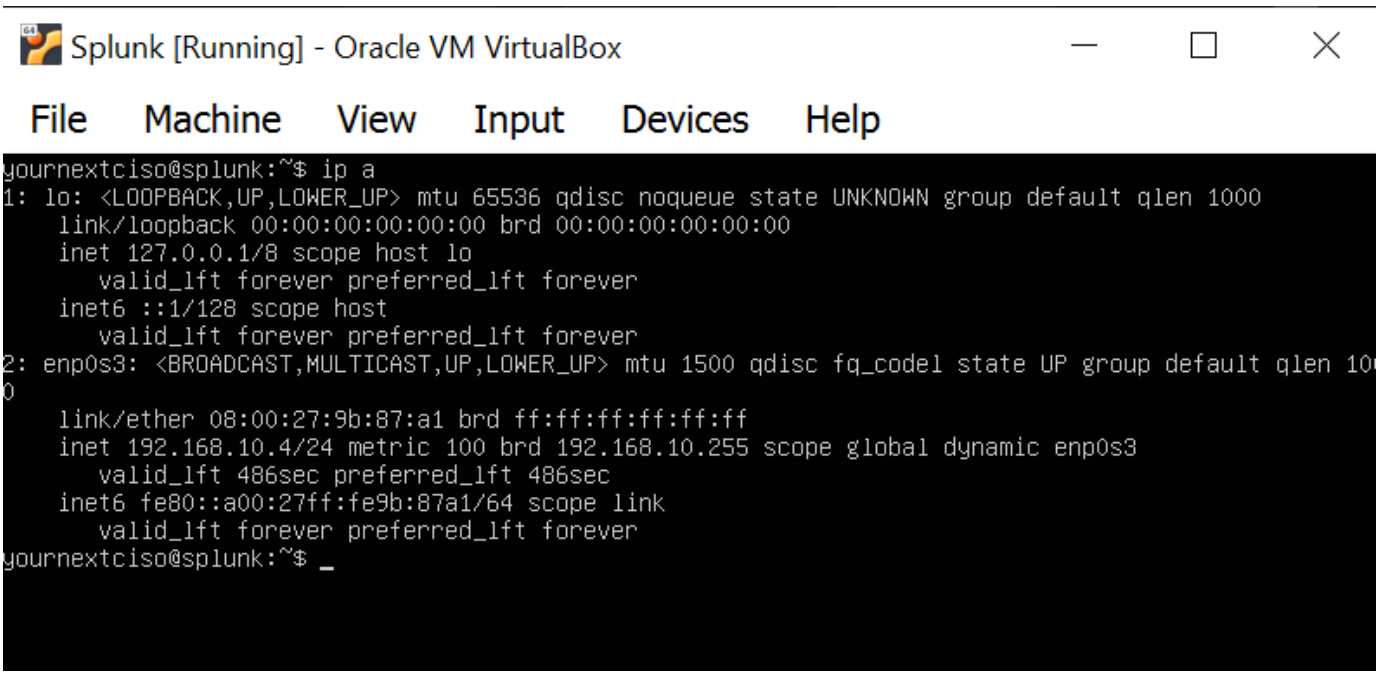
Do the same to the AD server, windows client and kali machine :



And that should set it.

Setting up Static IP for the Splunk server

Note the ip address currently assigned through dhcp . Use ip a :



Change into the /etc/netplan directory to edit the network config file : Modify this initial setup

```
# This is the network config written by 'subiquity'
network:
  ethernets:
    enp0s3:
      dhcp4: true
  version: 2
```

To this :

Splunk [Running] - Oracle VM VirtualBox

File Machine View Input Devices Help

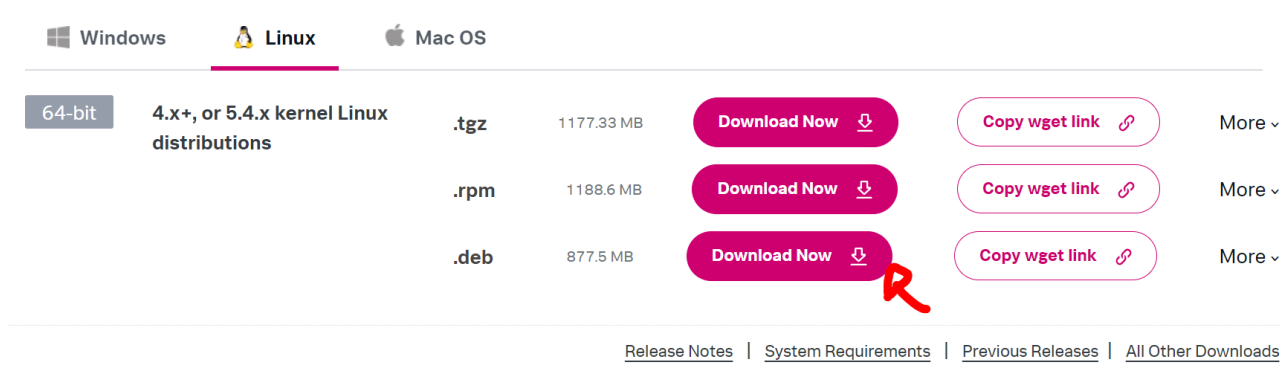
```
  GNU nano 6.2                    00-installer-config.yaml *
# This is the network config written by 'subiquity'
network:
  ethernets:
    enp0s3:
      dhcp4: no
      addresses: [192.168.10.4/24]
      nameservers:
          addresses: [8.8.8.8]
      routes:
          - to: default
            via: 192.168.10.1
  version: 2
```

Save the config and apply it . Use sudo netplan apply:

Downloading Splunk

1. Head over to Splunk.com and download the setup file here

   Choose Your Installation Package



2. Install the virtualbox guess addon file on the splunk vm :

Splunk [Running] - Oracle VM VirtualBox

File Machine View Input Devices Help

```
yournextciso@splunk:/$ sudo apt-get install virtualbox
virtualbox                      virtualbox-guest-utils          virtualbox-qt
virtualbox-dkms                 virtualbox-guest-utils-hwe      virtualbox-source
virtualbox-ext-pack             virtualbox-guest-x11
virtualbox-guest-additions-iso  virtualbox-guest-x11-hwe
yournextciso@splunk:/$ sudo apt-get install virtualbox-guest-additions-iso _
```

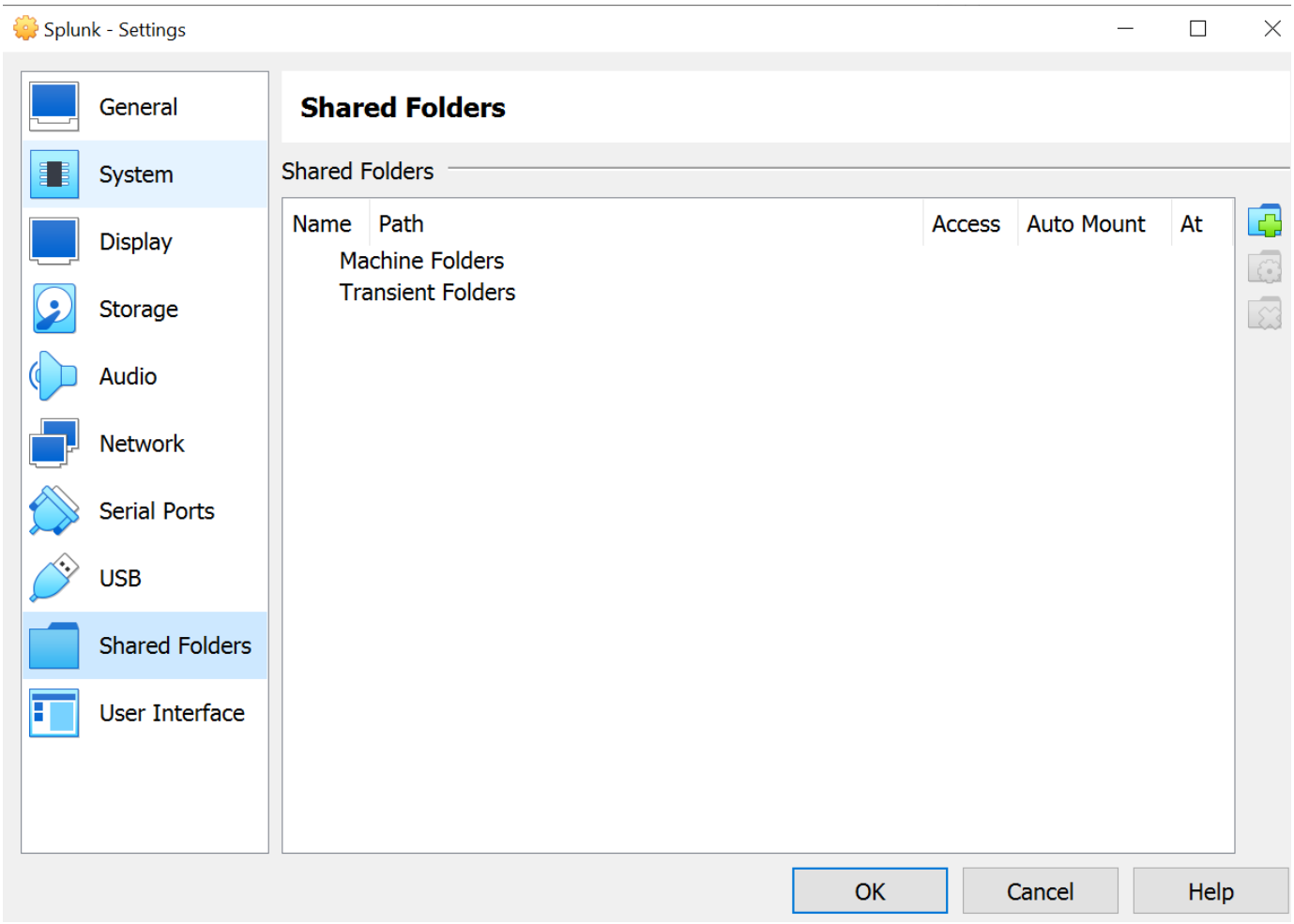
Install the virtualbox-guest-utils (sudo apt-get install virtualbox-guest-utils):

```
(Reading database ... 97619 files and directories currently installed.)
Preparing to unpack .../virtualbox-guest-utils_6.1.50-dfsg-1~ubuntu1.22.04.3_am
Unpacking virtualbox-guest-utils (6.1.50-dfsg-1~ubuntu1.22.04.3) ...
Setting up virtualbox-guest-utils (6.1.50-dfsg-1~ubuntu1.22.04.3) ...
Created symlink /etc/systemd/system/multi-user.target.wants/virtualbox-guest-ut
stemd/system/virtualbox-guest-utils.service.
[  233.233249] vboxsf: Unknown parameter 'tag'
Processing triggers for man-db (2.10.2-1) ...
Scanning processes...
Scanning linux images...

Running kernel seems to be up-to-date.

No services need to be restarted.

No containers need to be restarted.

No user sessions are running outdated binaries.

No VM guests are running outdated hypervisor (qemu) binaries on this host.
yournextciso@splunk:~$ _
```

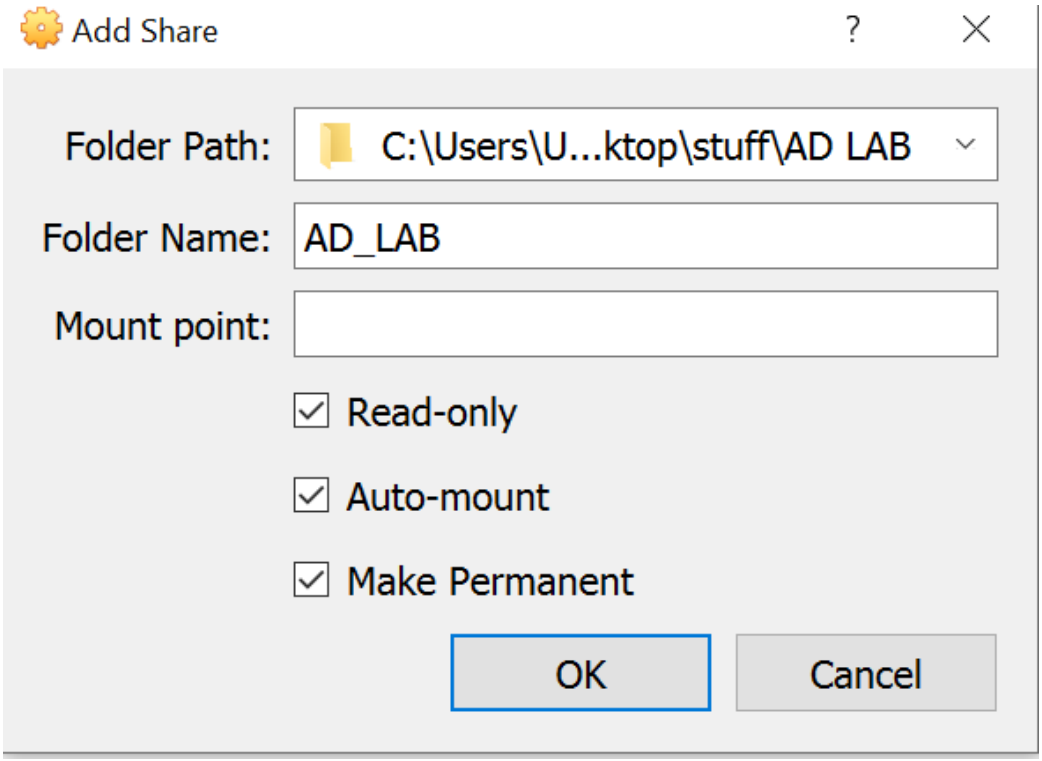
Share Folder creation

Since we will be downloading the splunk package on our host machine it is better if we create a shared folder accessible to the splunk VM. Choose a directory and create a folder(name it anything you want).

Then head over to the splunk VM, and in the top menu click on devices --> Shared folders --> Shared folder settings :



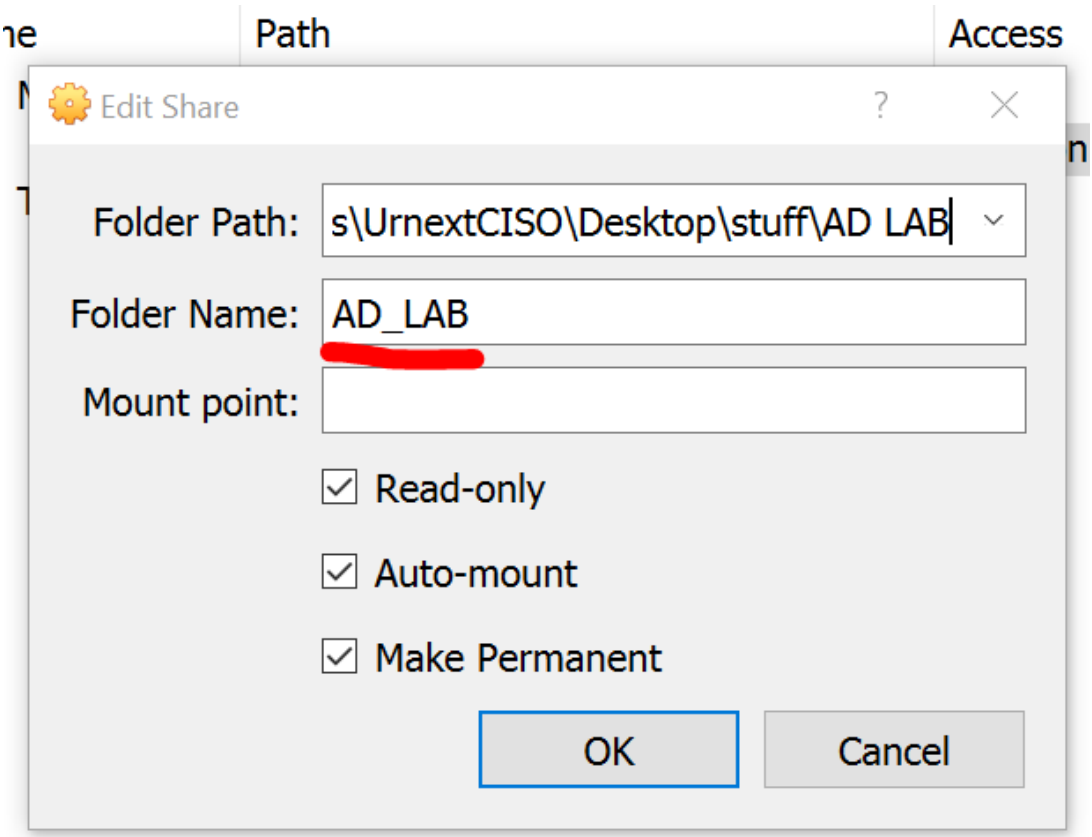
Add the folder you just created and assign various permission settings :



Now move the downloaded .deb file into the folder you just created and reboot the Splunk Now add the share user : sudo adduser "username" vboxsf:

```
yournextciso@splunk:~$ sudo adduser yournextciso vboxsf
Adding user `yournextciso' to group `vboxsf' ...
Adding user yournextciso to group vboxsf
Done.
yournextciso@splunk:~$ _
```

Make a directory called share and mount the directory created earlier onto our share folder:




```
yournextciso@splunk:~$ sudo adduser yournextciso vboxsf
Adding user `yournextciso' to group `vboxsf' ...
Adding user yournextciso to group vboxsf
Done.
yournextciso@splunk:~$ mkdir share
yournextciso@splunk:~$ ls
share
yournextciso@splunk:~$ sudo mount -t vboxsf -o uid=1000,gid=1000 AD_LAB share/
yournextciso@splunk:~$
```

Now log out and then login let the settings take effect :

```
yournextciso@splunk:~$ cd share/
yournextciso@splunk:~/share$ ls -la
total 898560
drwxrwxrwx 1 yournextciso yournextciso         0 Jan  9 12:02 .
drwxr-x--- 5 yournextciso yournextciso      4096 Jan  9 12:31 ..
-rwxrwxrwx 1 yournextciso yournextciso 920120936 Jan  9 11:38 splunk-9.4.0-6b4ebe426ca6-linux-amd64.
deb
yournextciso@splunk:~/share$
```

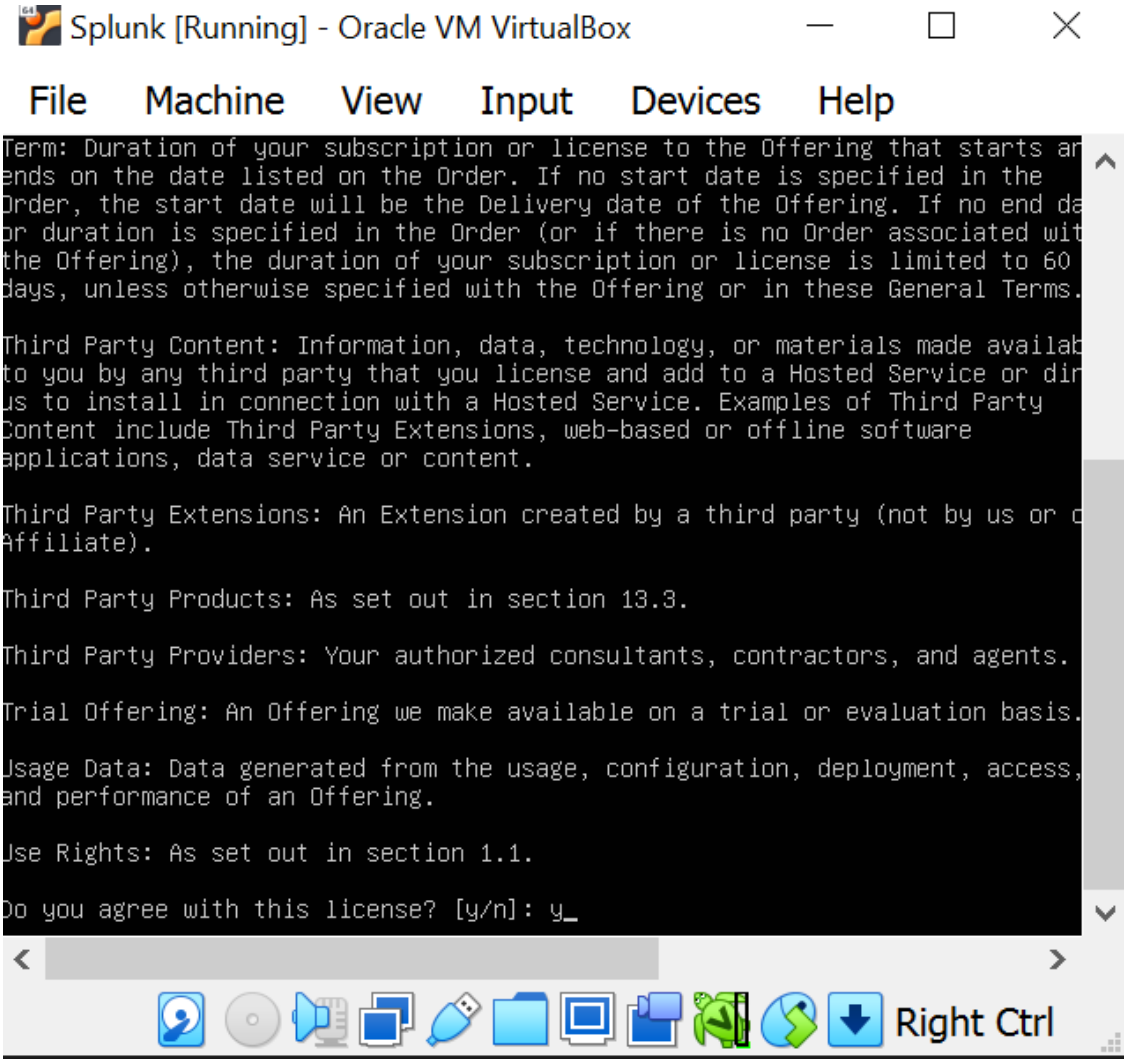
Now install splunk sudo dpkg - i "splunk file" :

```
yournextciso@splunk:~/share$ sudo dpkg -i splunk-9.4.0-6b4ebe426ca6-linux-amd64.deb
[sudo] password for yournextciso:
Selecting previously unselected package splunk.
(Reading database ... 97633 files and directories currently installed.)
Preparing to unpack splunk-9.4.0-6b4ebe426ca6-linux-amd64.deb ...
no need to run the pre-install check
Unpacking splunk (9.4.0) ...
Setting up splunk (9.4.0) ...
complete
yournextciso@splunk:~/share$
```

Cd into the directory where splunk is installed. cd /opt/splunk and then change into the splunk user by executing sudo -u splunk bash :

```
yournextciso@splunk:/opt/splunk$ sudo -u splunk bash
[sudo] password for yournextciso:
splunk@splunk:~$
```

Go into the splunk binary directory cd bin , and run the installer (./splunk start) , press q and the y to accept the agreement :



Set the username and password and wait for the setup to be completed.

```
        Done
All preliminary checks passed.

Starting splunk server daemon (splunkd)...
Generating a RSA private key
.....................................................................................
.......................+++++
.......................................................................+++++
writing new private key to 'privKeySecure.pem'
-----
Signature ok
subject=/CN=splunk/O=SplunkUser
Getting CA Private Key
writing RSA key
PYTHONHTTPSVERIFY is set to 0 in splunk-launch.conf disabling certificate validation for the httplib
 and urllib libraries shipped with the embedded Python interpreter; must be set to "1" for increased
 security
Done


Waiting for web server at http://127.0.0.1:8000 to be available..................................... Do
ne


If you get stuck, we're here to help.
Look for answers here: http://docs.splunk.com

The Splunk web interface is at http://splunk:8000

yournextciso@splunk:~$
```

You can now access the splunk GUI by booting up your kali vm and navigating to the http://<>:8000: