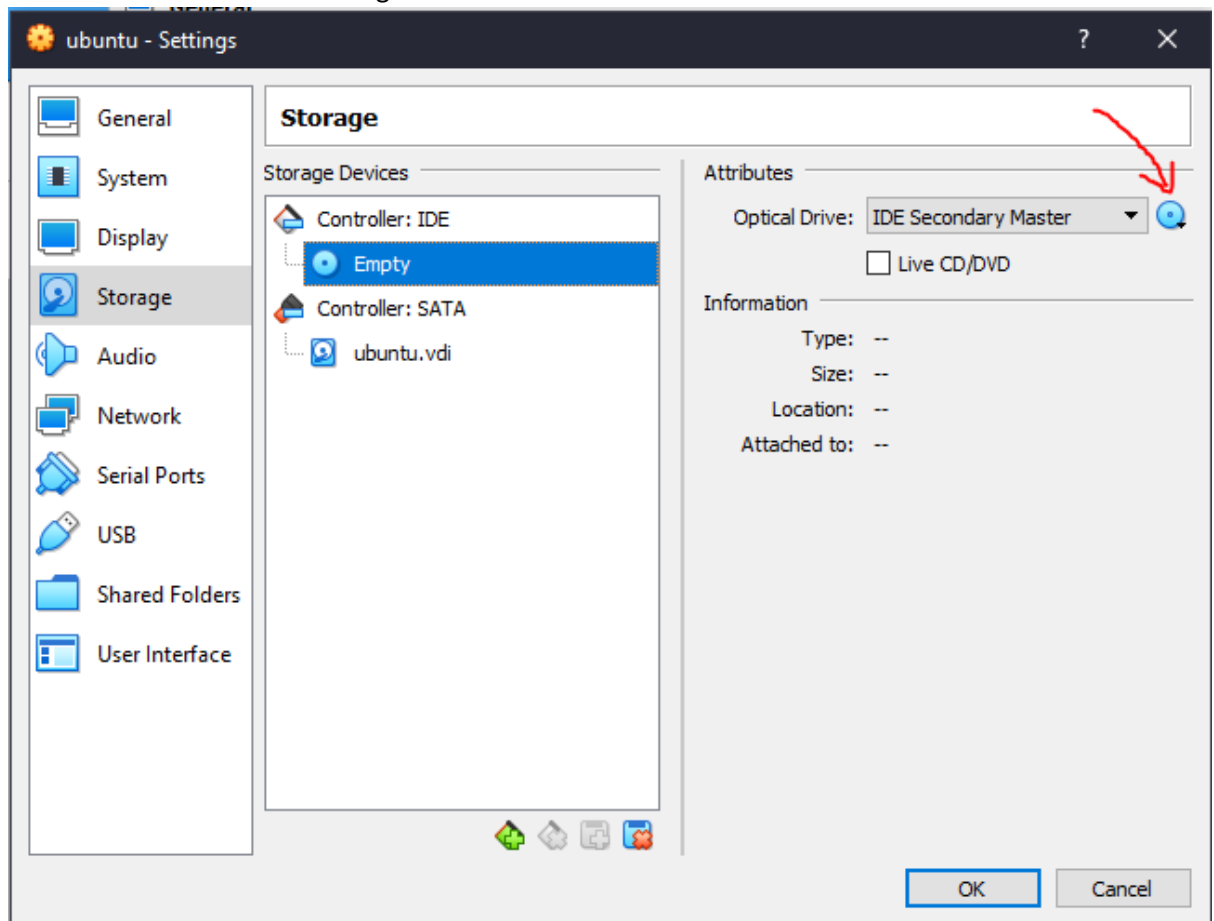
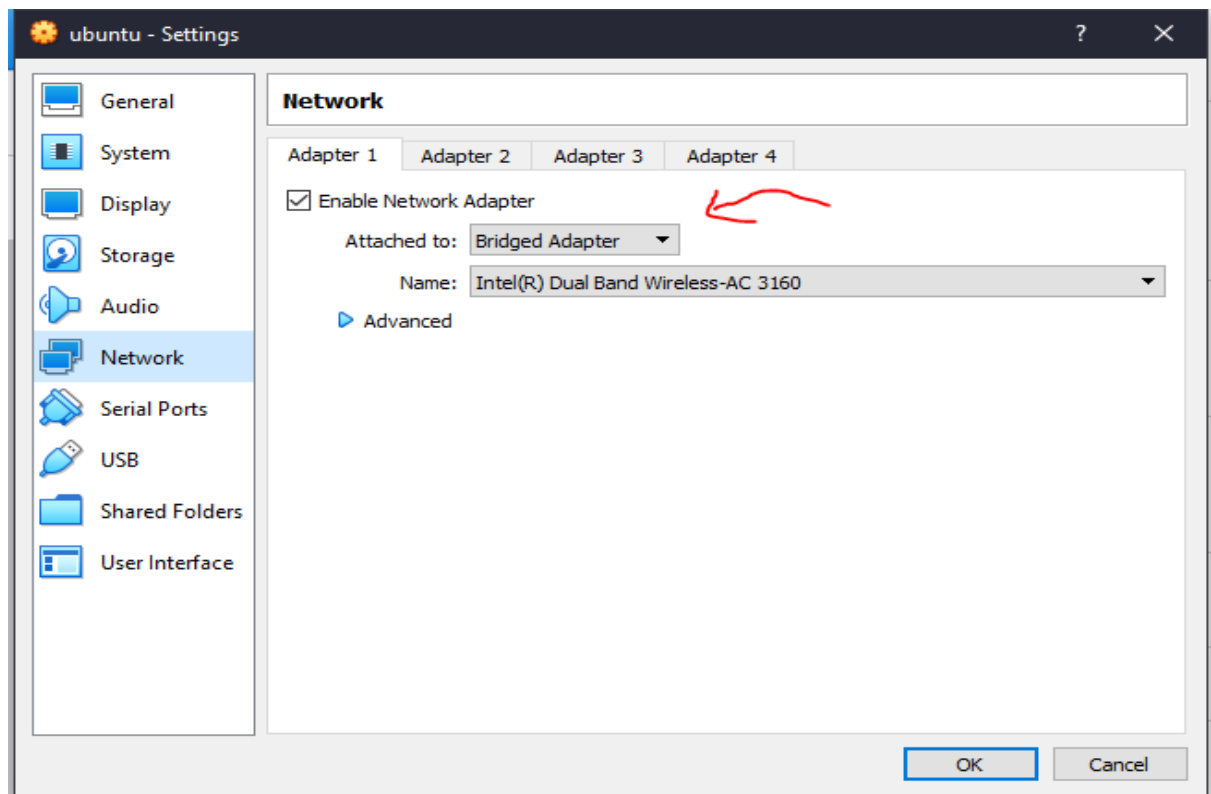


## Virtual Box installation and configuration

- 1) Download virtual Box from given link based upon your operating system.  
<https://www.virtualbox.org/wiki/Downloads>
- 2) Install the virtual box, the procedure is straight forward.
- 3) After installation of virtual box, download ubuntu image or any Linux flavor you want. Since this course is designed using ubuntu so this is recommended.  
For ubuntu click to: <https://ubuntu.com/download/desktop/thank-you?version=18.04.3&architecture=amd64>
- 4) After downloading the .iso image open virtual box and follow this procedure.
- 5) Click New -> <Give Name to OS> like Linux -> <Give Memory size or set it default to 1 GB> -> Click Create -> Next -> Next -> Give the file storage size set it to at least 20 GB -> click Create
- 6) Now click on newly created Linux VM you created and go to settings -> Storage -> Empty -> click on disk icon as shown in figure.



- 7) Locate the .iso image you saved and go to network and select drop down **Attached to** with bridge adapter and name to your wireless adapter as shown in figure below.



- 8) And now click OK and start your Virtual machine click Install ubuntu -> follow the procedure of installation. Make everything default if it's your first installation and new to every setting and click next while installing because this is VM and our host OS would remain unaffected.
- 9) Connect your system to internet and start your ubuntu VM.
- 10) After successfully installation open ubuntu VM and open terminal.
- 11) Type -> **ifconfig**
- 12) If it doesn't run then you have to fire these commands->

```
sudo apt-get update
```

```
sudo apt install net-tools
```

- 13) And check run again ifconfig.
- 14) Check whether first two address of IP address of your host and vm is same or not  
Like 192.148.xx.xx
- 15) If it's same run ->

```
sudo apt update
```

```
sudo apt install openssh-server
```

- 16) Above command is for connection with ssh to your local system via putty, cmd or powershell.
- 17) Now install and open putty and type your ubuntu username and password. You will be connected to you VM. If there is any doubt please let me know in comments.