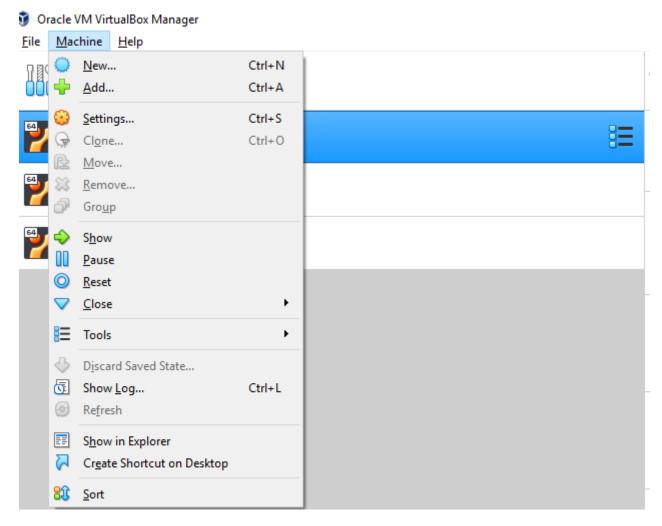
## **Table of Contents**

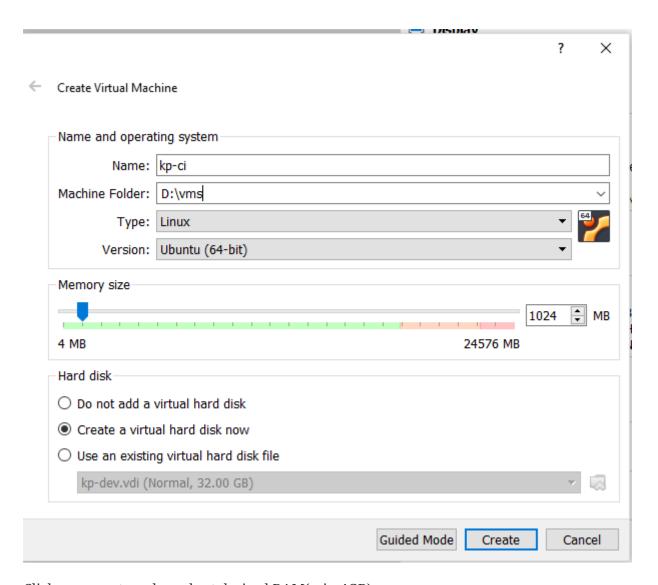
## Setup VM on VirtualBox

The below steps guides through to create Virtual Machine in VirtualBox.

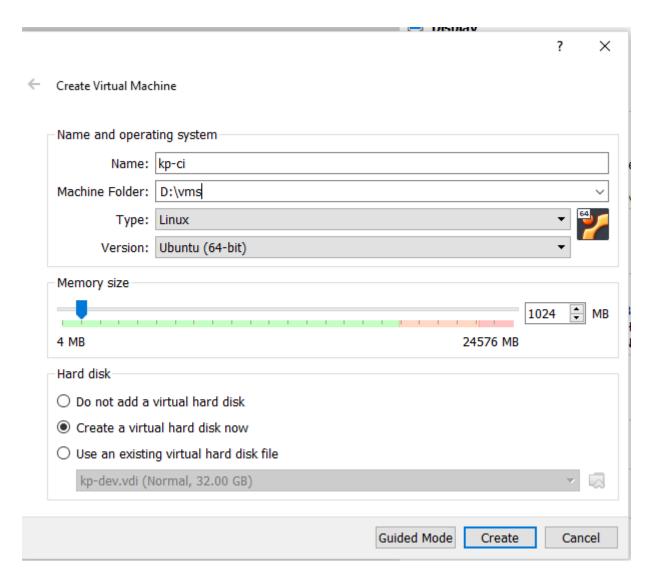
• In VirtualBox home screen go to Machine Menu and click on New (Machine → New), which would open VM creation form window.



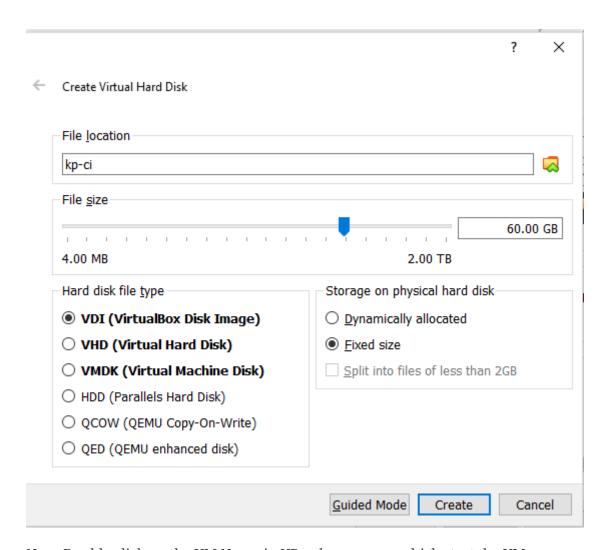
• In VM creation Window set VM name, location to store machine config and logs. and OS type desired(In our case it will be Linux) and version (Ubuntu 18.04).



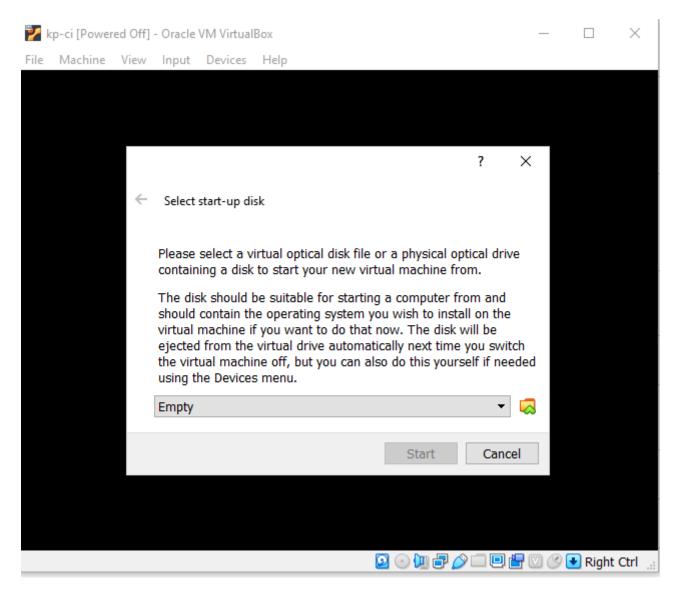
- Click on expert mode and set desired RAM(min 4GB)
- Select Option Create new Virtual Harddisk now and click create.



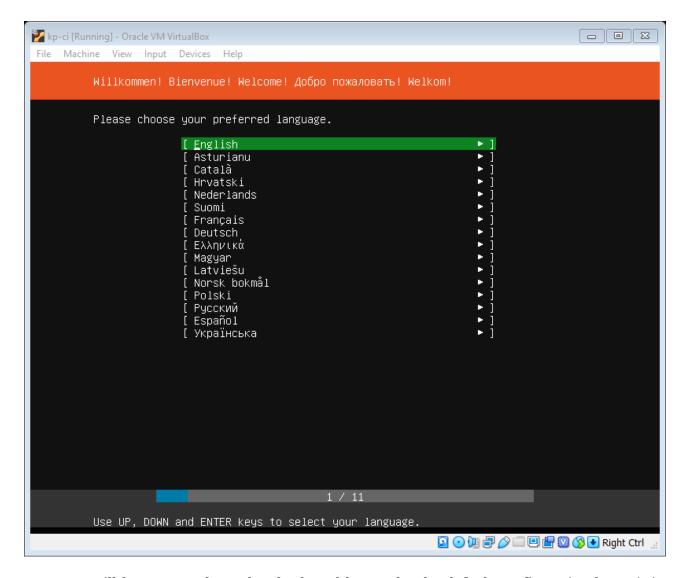
• Provide directory location to store VM image, set Hard disk space required(min 20GB) and set Fixed Size Mode so that we get better performance. Let the image type be default VDI. Then click Create Button(It would take couple of minutes to create Allocate Image)



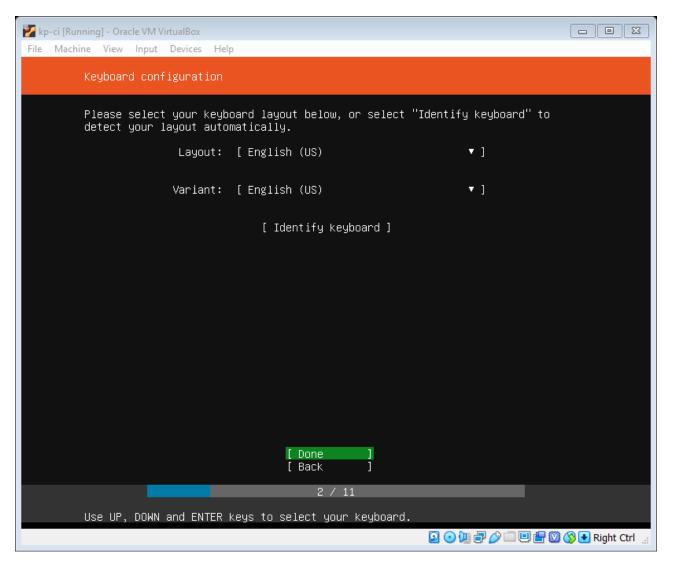
- Now, Double click on the VM Name in VBox home page. which start the VM.
- A option will popup to provide OS Image. Browse to OS image location and provide OS image (ubuntu-18.04.1.0-live-server-amd64.iso). Then click on button start.



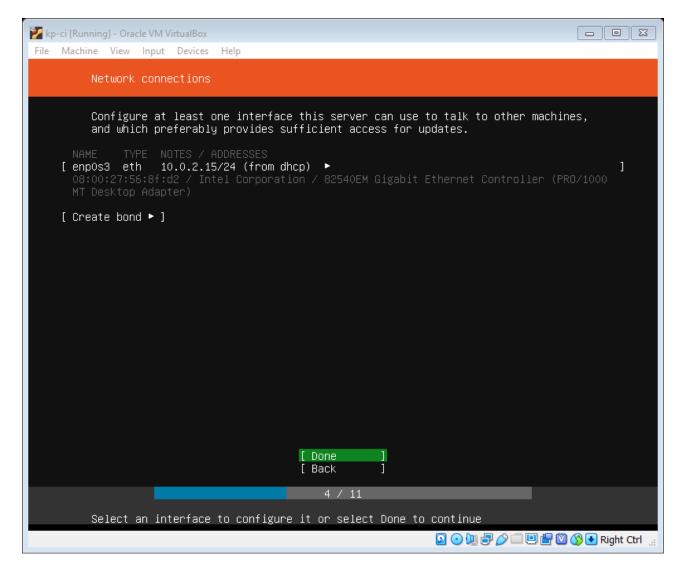
• After image is loaded, you will be asked to choose the language, set the desired language.



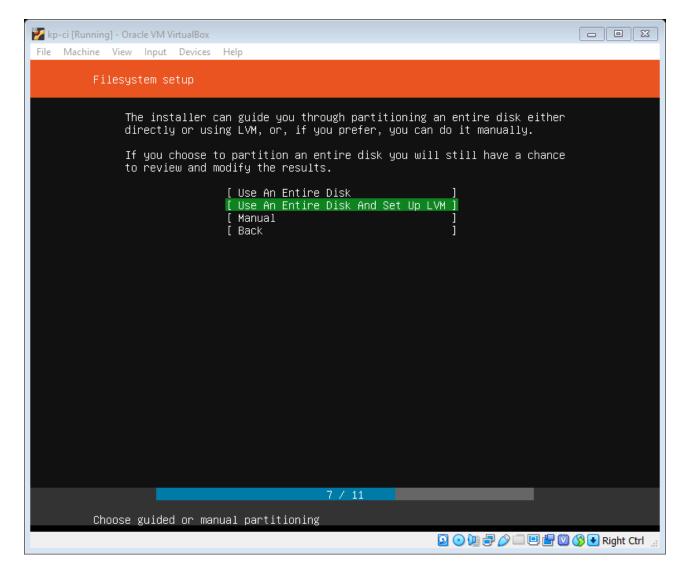
• Next you will be prompted to select keyboard layout, let the default configuration be as it is. Navigate to Done using tab and click enter.



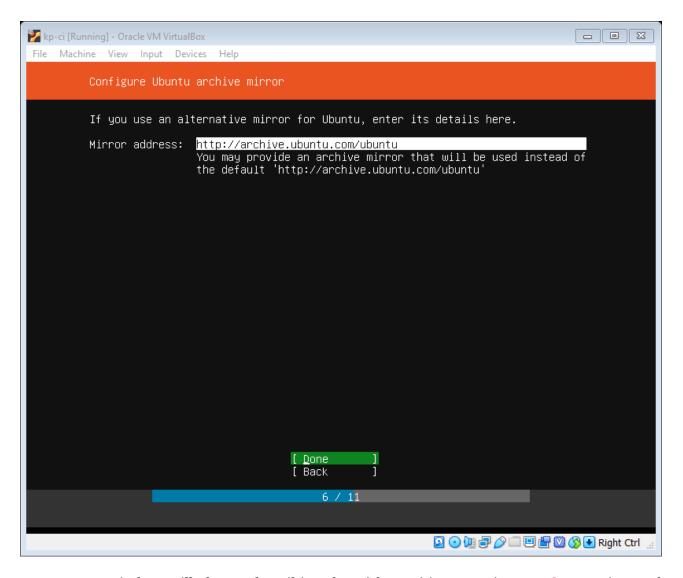
• Next you will be prompted to select Network interface, let the default configuration be as it is will change it later on. Navigate to Done using tab and click enter.



• Next setup hard drive by selecting option entire disk with LVM. CAUTION: When choosing LVM make sure you've selected added entire disk to VG by default in 18.04 4GB is selected. You can add the Disk at later point as well.



• Navigate through Configure Ubuntu Archive Mirror with default values.



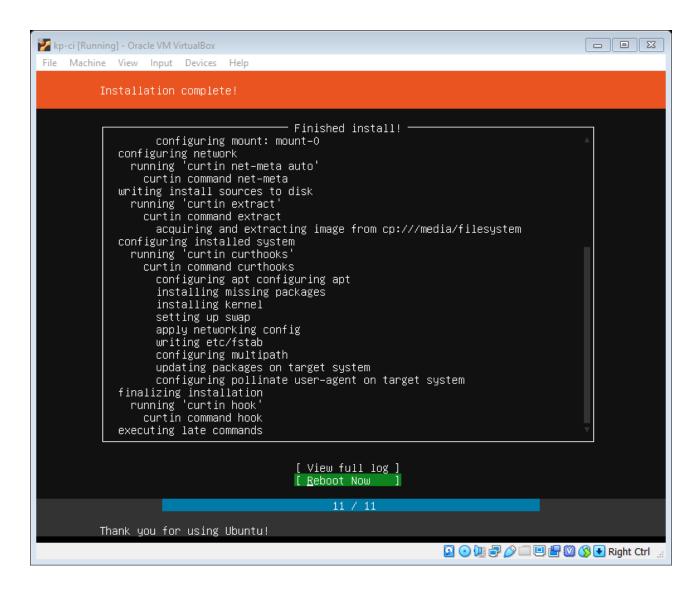
• A summary window will shown describing the Disk Partitions, Navigate to Done option and press Enter.

```
kp-ci [Running] - Oracle VM VirtualBox
                                                                                           File Machine View Input Devices Help
          Filesystem setup
    [ /
[ /boot
                      4.000G ext4 LVM logical volume
                      1.000G ext4 LvM logical volume ►]
1.000G ext4 partition of local disk ►]
  AVAILABLE DEVICES
                                             SIZE TYPE
58.996G LVM volume group ►
    [ ubuntu-vg
    [ ubuntu—lv
                                              4.000G (6%)
         formatted as ext4, mounted at /
        free space
                                             54.996G (93%)
 USED DEVICES
    [ VBOX_HARDDISK_VB9f8dec0b-e8911818
[ partition 1
                                             60.000G local disk
                                              1.000M (0%)
         bios_grub
       partition 2
                                              1.000G (1%)
                                                                        ▶ ]
          formatted as ext4, mounted at /boot
                                            [ Done
                                            [ Rese
                                              Reset
          Select available disks to format and mount
```

• Next Profile setup window comes up, fill all the details.

kp-ci [Running] - Oracle VM VirtualBox File Machine View Input Devices Help		
Profile setup		
Enter the username and system.	password (or ssh identity) you will use to log in to the	
Your name:		
Your server's name:	The name it uses when it talks to other computers.	
Pick a username:		
Choose a password:		
Confirm your password:		
Import SSH identity:	[ No ▼ ] You can import your SSH keys from Github or Launchpad.	
Import Username:		
	[ Done ]	
7 / 11  Install in progress: acquiring and extracting image from –		
cp:///media/filesystem		

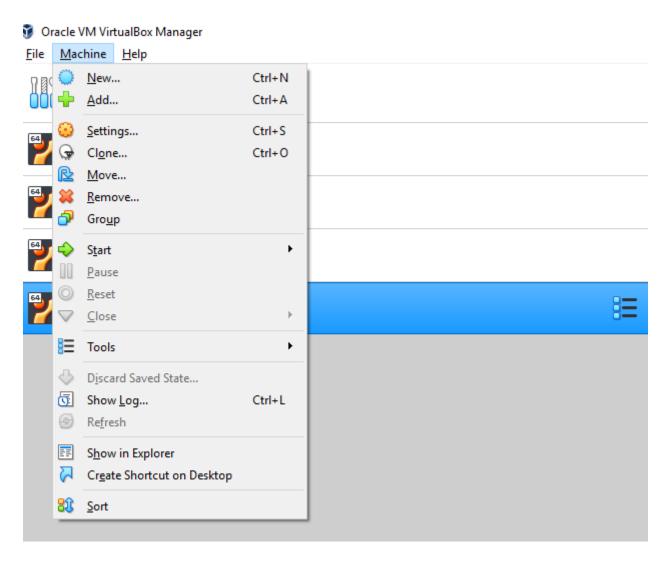
• Once you navigate from profile setup window, it would take sometime to setup OS. Once Setup completes, would prompt to install grub, select yes to install grub, finally after installation click on Reboot



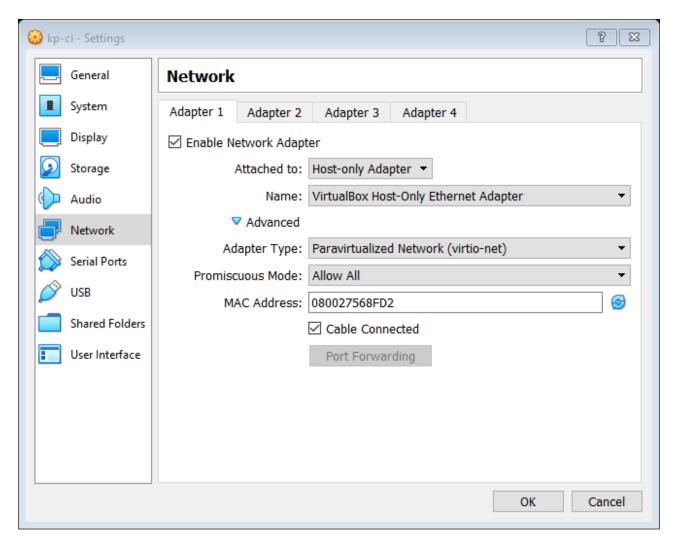
## **Setup VM Network**

We will add 3 Networks to VM, with first network being host only, second network being NAT and final network being Bridged

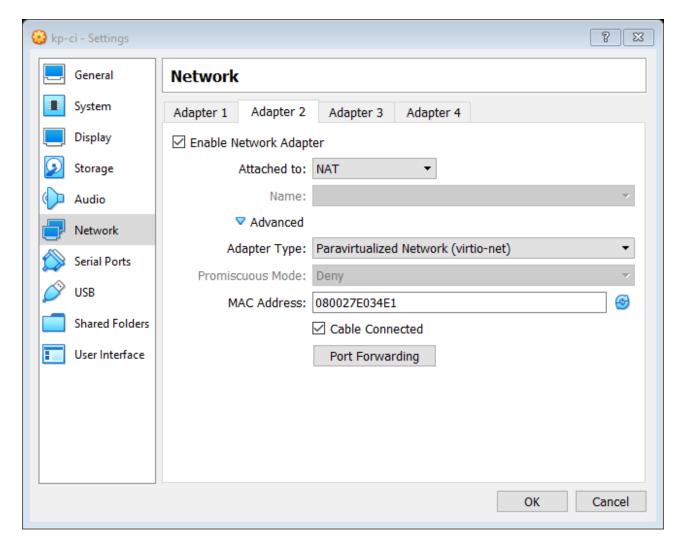
- · Shutdown the VM.
- Select the VM, Navigate to Machine → Settings and select tab Network.



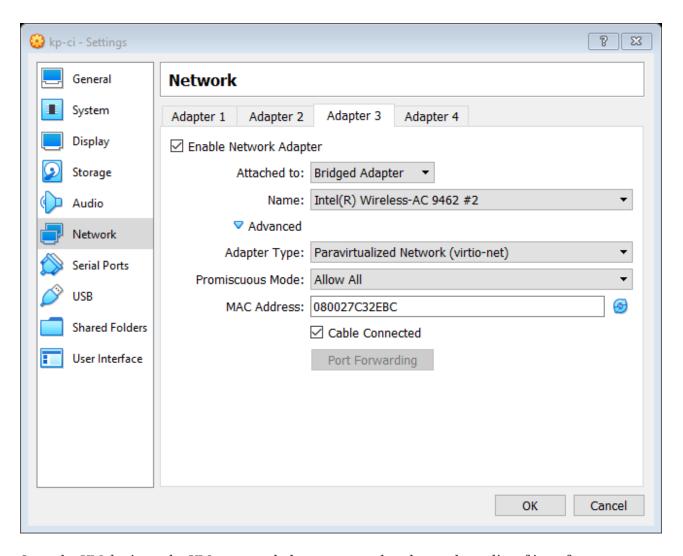
• Select Adapter 1 tab and set attached-to Host-Only Adapter and fill the details as show below.



• Select Adapter 2 tab and set attached-to NAT and fill the details as show below.



• Select Adapter 3 tab and set attached-to Bridged and fill the details as show below.



• Start the VM, login to the VM, execute below command and note down list of interface names.

```
$ ifconfig -a
```

• Open netplan yaml file at /etc/netplan/50-cloud-init.yaml and set static IP for host-only adapter and dhcp IP auto discovery for NAT and Bridged, For Host-only network before setting up note down the subnet for Host only adapter from VirtualBox Network. You can also setup a static IP from Bridge Network. A sample configuration is as shown below.

```
🏏 kp-ci [Running] - Oracle VM VirtualBox
                                                                                                                                  File Machine View Input Devices Help
 This file is generated from information provided by the datasource. Changes to it will not persist across an instance. To disable cloud-init's network configuration capabilities, write a file /etc/cloud/cloud.cg.d/99-disable-network-config.cfg with the following:
# network: {config: disabled}
network:
ethernets:
           enp0s3:
                 addresses: [192.168.56.8/12]
dhcp4: false
           enp0s8:
                  addresses: []
                 dhcp4: true
           enp0s9:
                  addresses: []
                 dhcp4: true
     version: 2
                                                                                                                                               A11
  - INSERT --
                                                                                                                           16,24
```

• Reboot the VM.