

1. Download the VM file at the following location:

USE ONE OF THE VM LINKS GIVEN IN LAB0 DOCUMENT

2. If brew is not installed on your Mac, run the following command to install brew:

```
/bin/bash -c "$(curl -fsSL
```

<https://raw.githubusercontent.com/Homebrew/install/HEAD/install.sh>)"

3. Install qemu using the following:

```
brew install qemu
```

4. Now let us extract the ".ova" file we have downloaded

```
tar -xvf FILENAME.ova (Replace the FILENAME)
```

5. From the above step, you should see ".mf", ".ovf" and ".vmdk" files being generated. We convert the ".vmdk" file to the ".qcow2" file that can be used by QTM. Use the following command:

```
qemu-img convert FILENAME.vmdk FILENAME.qcow2 -O qcow2 (Change the FILENAMEs appropriately)
```

6. Try the below command to check if the ".qcow2" file has been generated properly:
file FILENAME.qcow2

7. Download and install UTM online: <https://mac.getutm.app/> (It's free!)

8. Open UTM, Click on the "+" symbol to create a new VM

9. Now click on "Emulate" (Please do not click on "Virtualize", it does not work as the VM we are trying to use is of different architecture than mac)

10. Now click on "other", then Check the "Skip ISO boot" and click "Next"

11. Let the architecture be x86_64. Increase the memory to 6GB for the VM to run smoothly and click "Next".

12. Let the size of the drive be 64GB. Click on "Next"

13. Click on "Next" again

14. Click on "Save"

15. Now click on "Settings" → top right of the UTM

16. Click on "New Drive", then click on "Import" and select the ".qcow2" file we have generated. It will take some time to load the file and then click "save"

17. Now start your VM. Press enter when "Arch linux" is shown in the boot option

18. It takes a few minutes for the VM to load.

19. If the network does not work inside the VM, try to change the network settings to "Bridged" and try again.

20. Now follow the steps given in the Lab 0 instructions after the VM is loaded to start your assignment.