

# Installing VirtualBox, Ubuntu, and Docker

Note: I'm on a mac. If you are doing this through windows, some steps may be slightly different, but the overall process will still apply. This is the most basic and generic process of getting Docker to run in a virtual machine provided through Virtual Box.

If you want, you can use a more integrated solution such as

- Docker Toolbox: <https://www.docker.com/toolbox>
- Kitematic: <https://kitematic.com/>

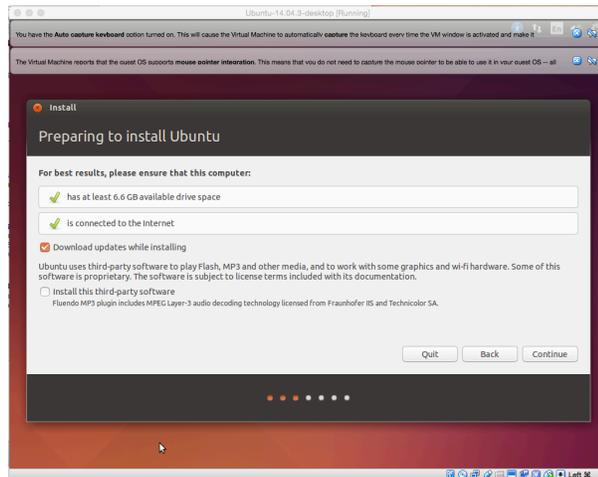
1. Install Virtual Box (VB): <https://www.virtualbox.org/wiki/Downloads>
2. Get Ubuntu: <http://virtualboxes.org/images/ubuntu/>
  - a. 14.04: <http://www.ubuntu.com/download/desktop>
  - b. Download the .iso file
3. Create new VB Image:
  - a. Click "New" in VB



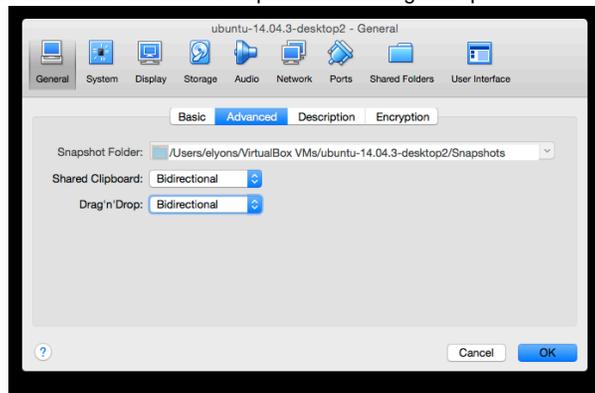
- i.
- b. When you start the VM, select the iso file for ubuntu you downloaded



- i.
- c. You may set the HD space to around 20G, just to have enough room to do some stuff
- d. When Ubuntu runs in the VM, you'll have to install it (the iso is the installation "disk" for Ubuntu)



- e. Tips and tricks:
  - i. After installation, I noticed that my screen resolution was too small. To change:
    1. Click "Devices" from VirtualBox menu bar at top of screen
    2. Click "Insert guest additions"
    3. I then applied updates to Ubuntu
    4. Restart guest OS
    5. Resize works!
  - ii. To enable copy/paste between your Mac Desktop and the Guest OS VM
    1. Virtualbox->Machine->Settings
    2. Select Advance tab
    3. Select "Bidirectional" for Shared Clipboard and Drag'n'Drop



a.

#### 4. Install Docker

- a. <https://docs.docker.com/installation/ubuntu/linux/#for-trusty-14-04>
- b. `sudo apt-get update`
- c. `sudo apt-get install linux-image-generic-lts-trusty`
- d. `sudo reboot`
- e. `curl -sSL http s: // get .docker. com / | sh`

#### 5. Start docker daemon:

- a. `sudo docker -d &`
- b. **Note:** I had this error:  
"ubuntu 14.04 docker your kernel does not support cgroup memory limit: mountpoint for memory not found"
- c. To fix:
  - i. `sudo vi /etc/default/grub`
  - ii. Modify: `GRUB_CMDLINE_LINUX="cgroup_enable=memory swapaccount=1"`
  - iii. Save and close file
  - iv. `sudo update-grub`
  - v. `sudo reboot`

#### 6. Verify Docker is installed

- a. `sudo docker run hello-world`

#### 7. If you don't want to run docker as root all the time:

a. <http://askubuntu.com/questions/477551/how-can-i-use-docker-without-sudo>

**Next Step**