

Standardizing our OS for this class

for this class, we will work within an ubuntu os, a linux operating system that we will install within VirtualBox.

<https://www.virtualbox.org/>

there are other ways to run ubuntu, like dual booting or doing a fresh install on your computer. VirtualBox is the easiest right now...

it will run an ubuntu operating system like an application *within your native operating system*.

Installing VirtualBox

go to <https://www.virtualbox.org/wiki/Downloads> and select the proper host, i.e. if you are running a Windows OS, you need a Windows host, etc.

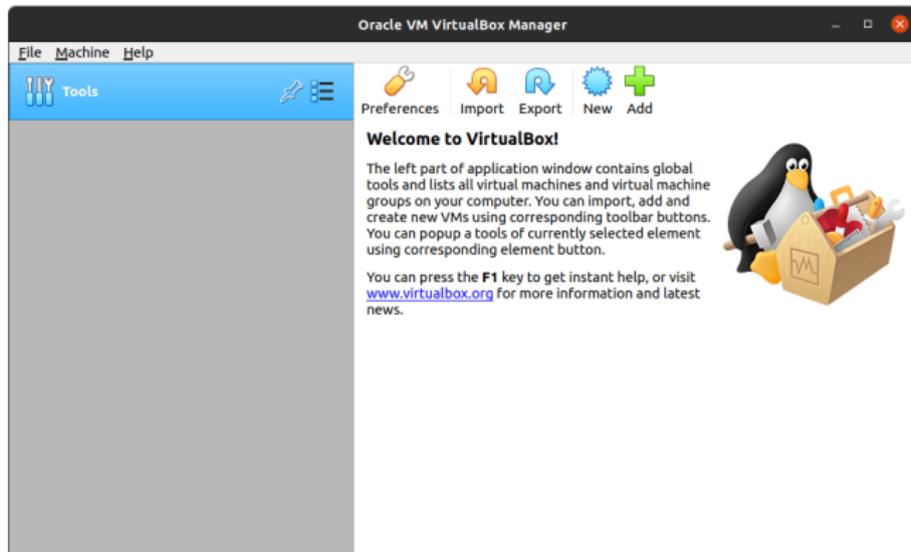
also, go to <https://ubuntu.com/download/desktop> to download the iso file for ubuntu 20.04. we will use this file to install the linux os on our VirtualBox.

we can follow roughly these instructions for the install:

<https://brb.nci.nih.gov/seqtools/installUbuntu.html>

Step 0: set up a virtual machine

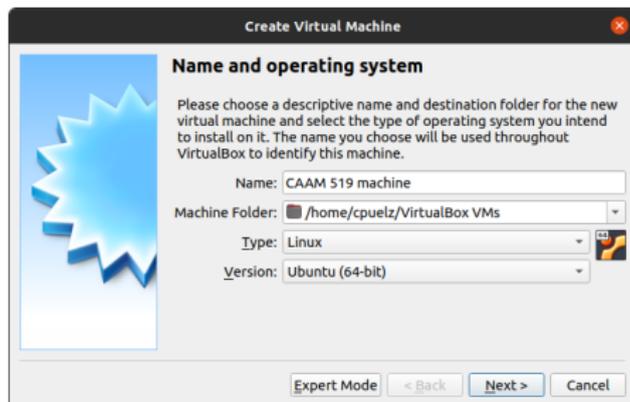
click "NEW" in the menu...



Step 1: name your machine

give your machine a name.

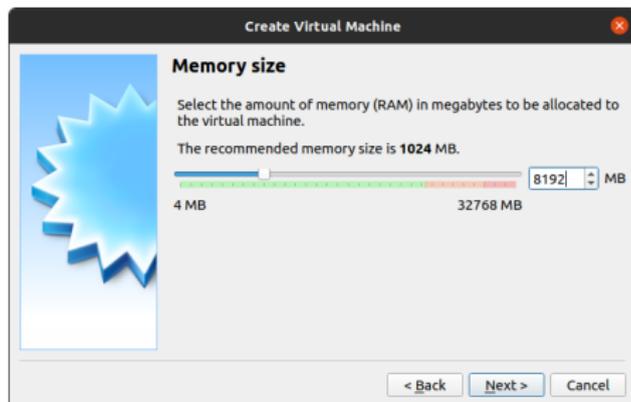
the type should be "linux," and version will be 64-bit ubuntu.



Step 2: pick amount of RAM

ubuntu recommends 4Gb for the os version we will be installing

see: <https://ubuntu.com/download/desktop>



Step 3: setup hard disk



Step 4: virtual disk image



Step 5: let the hard disk be a fixed size

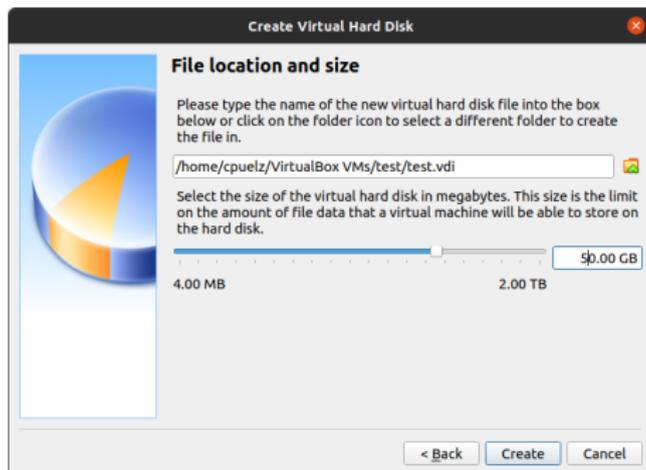
this will be faster.



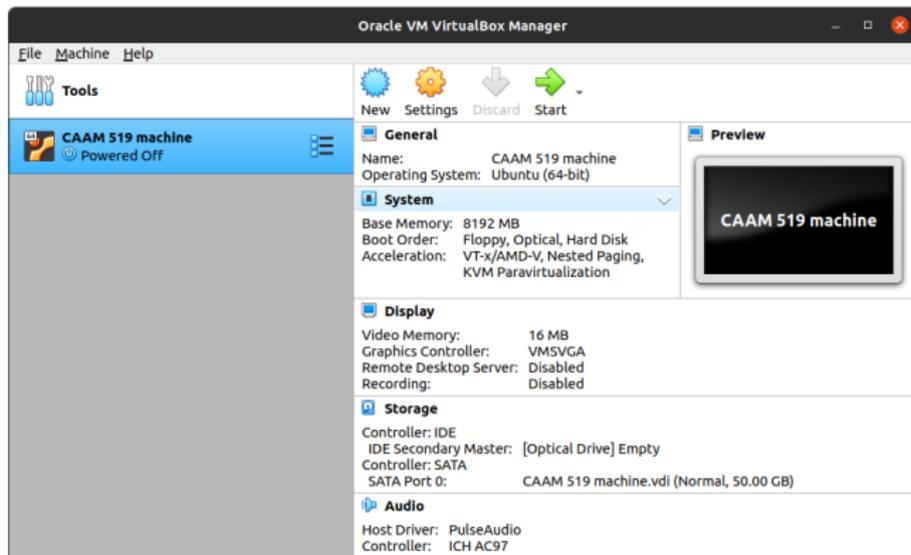
Step 6: pick size of hard drive

ubuntu recommends 25Gb for the os version we will be installing
i am picking a bit more, for a “buffer”

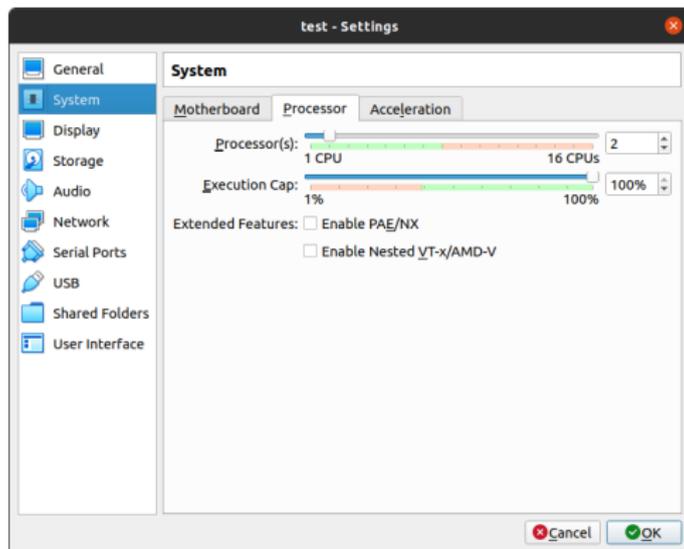
see: <https://ubuntu.com/download/desktop>



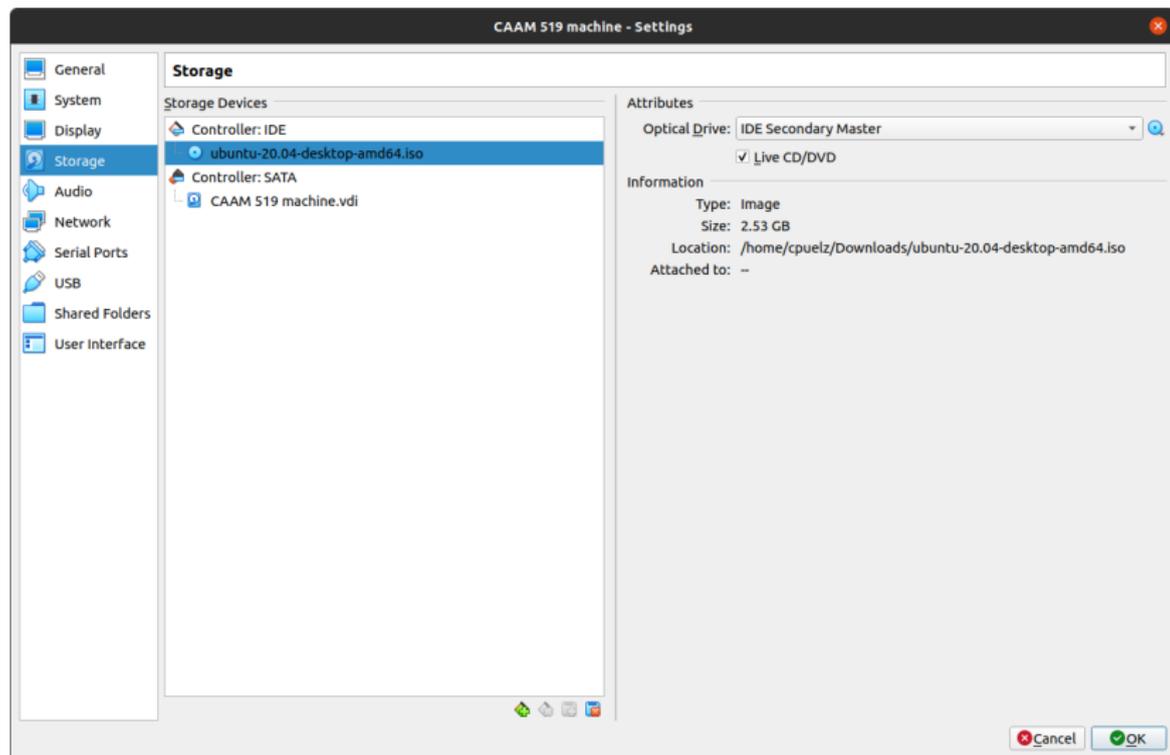
Step 7: done!



Step 8: pick number of processors



Step 9: point machine to image of ubuntu os for install



Step 10: reboot the machine and being using it!

note: when you reboot, you should “remove the installation medium, and then press ENTER.”

this requires you to go to **Settings** > **Storage**, and “eject” the iso file.

Step 11: (optional) install guest additions

this step seems to be helpful for graphics within the virtual machine. by the way, this change might not be possible on certain operating systems.

go to **Devices** > **Insert Guest Additions CD Image**, and following prompts.

Other options

I'm not going to require that you use Linux through a virtual machine if you prefer not to. Some other options at your disposal:

- Use your existing OS, if you have a machine running Linux or MacOS
 - Install a partition on your machine running Linux.
- I'll do best effort to help troubleshoot computing problems on other platforms, but I cannot guarantee success. The answer will very likely be “use the virtual machine.”