- My recommendations for Installing Linux (Ubuntu Bionic Beaver 18.04) as a **virtual machine** for use in CPSC 327. If you have difficulty with VMware setup contact:

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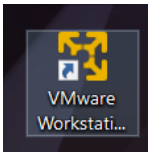
1. Download VMware Workstation player 15.5. This program is free and can be found at: https://www.vmware.com/products/workstation-player/workstation-player-evaluation.html

2. Once downloaded, run the installer. If it needs any firewall changes, allow all.

3. Upon completing the install, it will ask you to restart your computer.

4. After restarting, on the desktop look for this icon: 

5. Click on this icon and you will open up the VMware workstation player. This will be the place that you will launch Ubuntu.

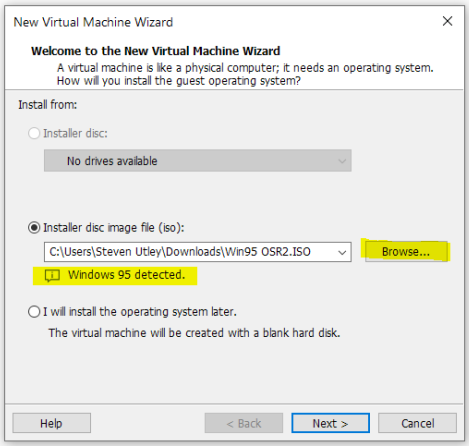
6. Next, we need to download the ISO image for Ubuntu 18.04. This can be found at:

   http://releases.ubuntu.com/18.04/

7. Once downloaded, it will appear in your downloads folder. Remember this location.

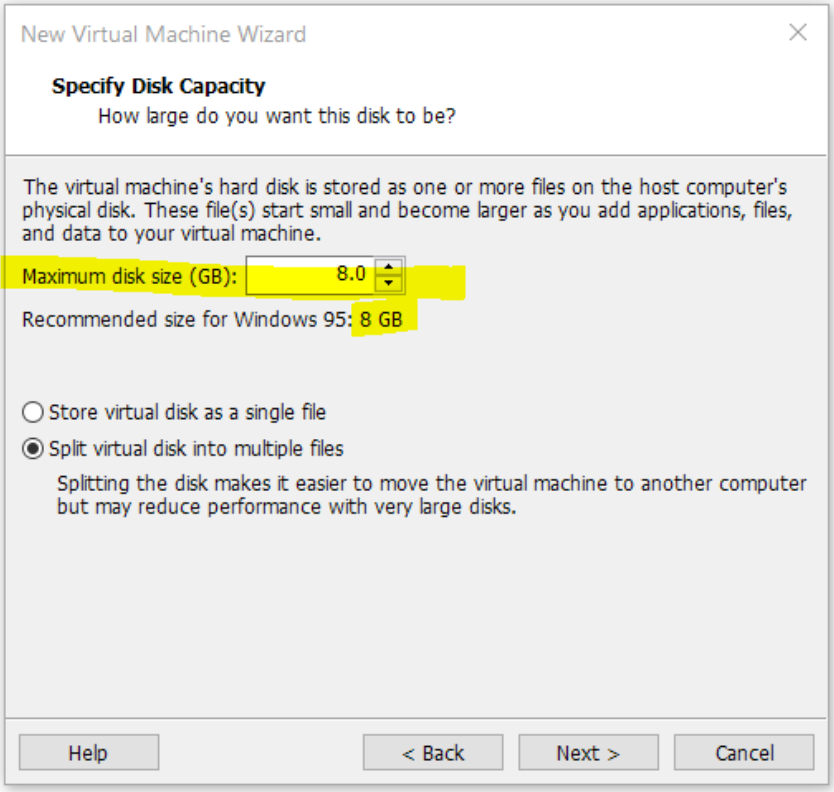
8. Next, open VMware back up.

9. We want to create a new Virtual Machine. So, on the main page, click “Create a New Virtual Machine”, which opens up a new window where we need to specify the location of the ISO we just downloaded. Once chosen, it will automatically detect the OS as Ubuntu.



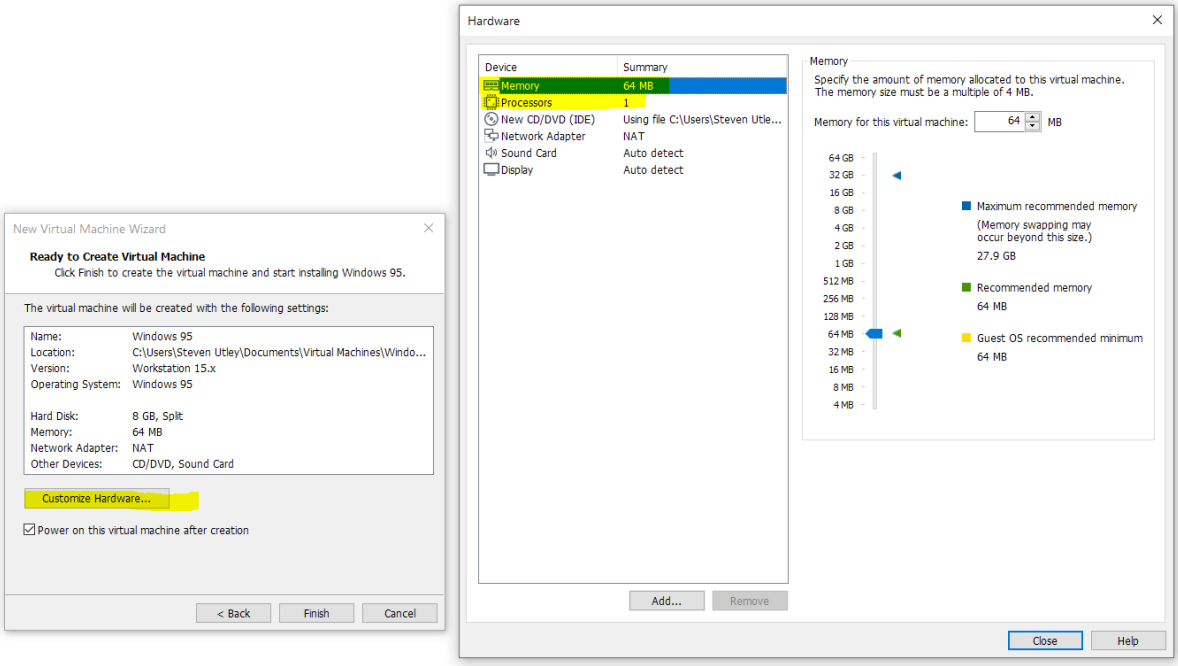
10. Proceed with the setup. The default VM folder is in your documents folder, in case you decide to move or modify it later.

11. The next important page is to specify the disk capacity. For Linux, use whatever recommended amount is specified. Typically, 20Gb or 30Gb is plenty.



12. Do not worry about the disk splitting, use whatever settings are activated.

13. The last thing is to Click on the “Customize Hardware” tab in setup.



14. This an important step if you want your VM to run smoothly. I recommend at least 2 processors allocated. If you will only use Linux at a time and not your host system (MAC or Windows), you can allocate 4. For Memory, 4Gb is sufficient, but if you want you can allocate more. Lastly, click “Finish” and power on the Virtual Machine after creation. This will launch your VM. At first, it will look small. This display can be modified within either Linux or in the Hardware tab in VMware under “Display”, this is the same location where we allocated processor cores.

    ------- VM Creation END ------

15. Proceed with the On-Screen instructions for Linux install.
16. Make sure you update Linux when prompted. If you do not, then you will get errors when installing g++.

17. To install g++, use the command: sudo apt install g++
18. Install the Java JRE and JDK. This is needed for Eclipse. This is done through the terminal:

    sudo apt install default-jre

    sudo apt install default -jdk
19. Then, install Eclipse CDT. This is found at: https://www.eclipse.org/downloads/packages/
20. Make sure to download the Linux (64-bit) for C/C++ Developers.
21. Proceed with the on-screen instructions to install. Remember, this will need to un-zipped to a location, my recommendation is documents or your home folder.
22. As a reminder, all this information, excluding the VM creation can be found on Dr. Perkins page: https://cnuclasses.github.io/CPSC327/