Video - https://vimeo.com/161519487

- Password: BIOE3090

Prerequisite:

Git - linux

Winggit - windows

1. Download and install precompiled VirtualBox executable as an administrator

   (Right click→Run As Administrator) – windows, linux just run

2. Download and install precompiled Vagrant executable as an administrator
   (Right click→Run As Administrator) – windows, linux just run
3. Create directory where you would like to store software using the command line
   (cd, ls, mkdir) - linux
   (cd, dir, mkdir) - windows
4. Download Vagrant files from github

   git clone https://github.com/UCDBioe/printer_VM.git

5. Package.box file is too large for github account – will be provided during class
6. Navigate to directory containing box file

5. Add the box using vagrant

   vagrant box add –name Ubuntu_14.04_64 package.box

6. Build the Virtual environment

   a. Navigate to directory containing Vagrantfile

      vagrant up

7. WAIT!!! – wait until completed

8. At process completion, as judged by terminal status, log into Ubuntu

   Username: vagrant

   Password: vagrant

9. Verify Configuration

   python –version

   Output: Python 3.5.1 :: Anaconda 2.5.0 (64-bit)

10. Check what anaconda environments are on the system

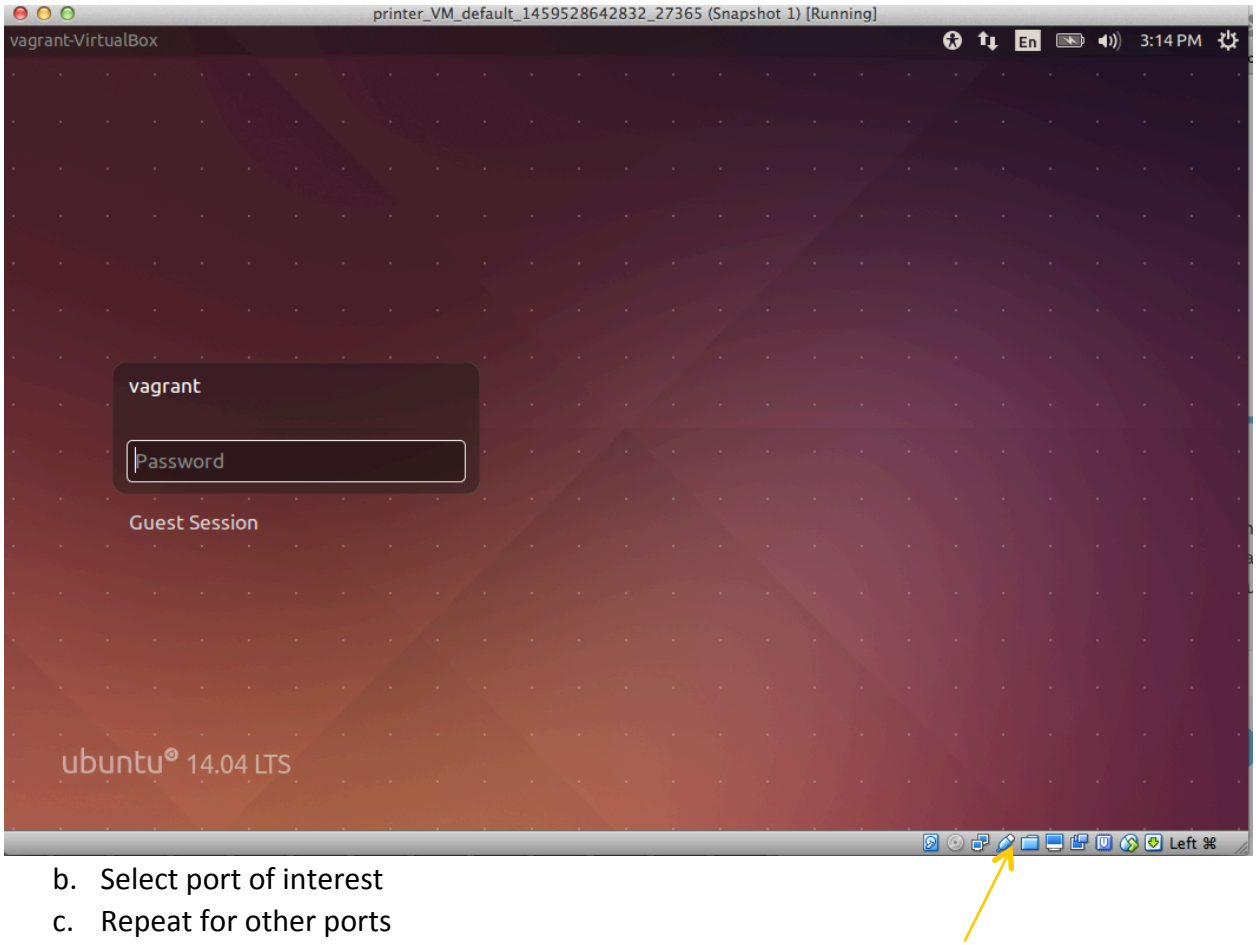
    a. conda info --envs
    b. activate environment
       source activate YourENvname
    c. deactivate environment
       source deactivate

USB Port pass through

USB ports will need to be passed through the virtual machine for Ubuntu to have access to the ports.

10. Pass ports from host OS to Virtual box

    a. Right click on icon below



    b. Select port of interest
    c. Repeat for other ports

    d. Identify port numbers in virtual environment using arduino
    e. Edit GUI python lines for port names using vim and save
       ser=ser.serial(portname,baudrate)

    f. Verify installation by running Bioprinter_Cotrols_GUI while connected to the printer

Python BioPrinter_Controls_GUI.py