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

1. Download and install precompiled Vagrant executable as an administrator

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

1. Create directory where you would like to store software using the command line

(cd, ls, mkdir) - linux

(cd, dir, mkdir) - windows

1. Download Vagrant files from github

git clone https://github.com/UCDBioe/printer\_VM.git

1. Package.box file is too large for github account – will be provided during class
2. 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

1. conda info --envs
2. activate environment

source activate YourENvname

1. deactivate environment

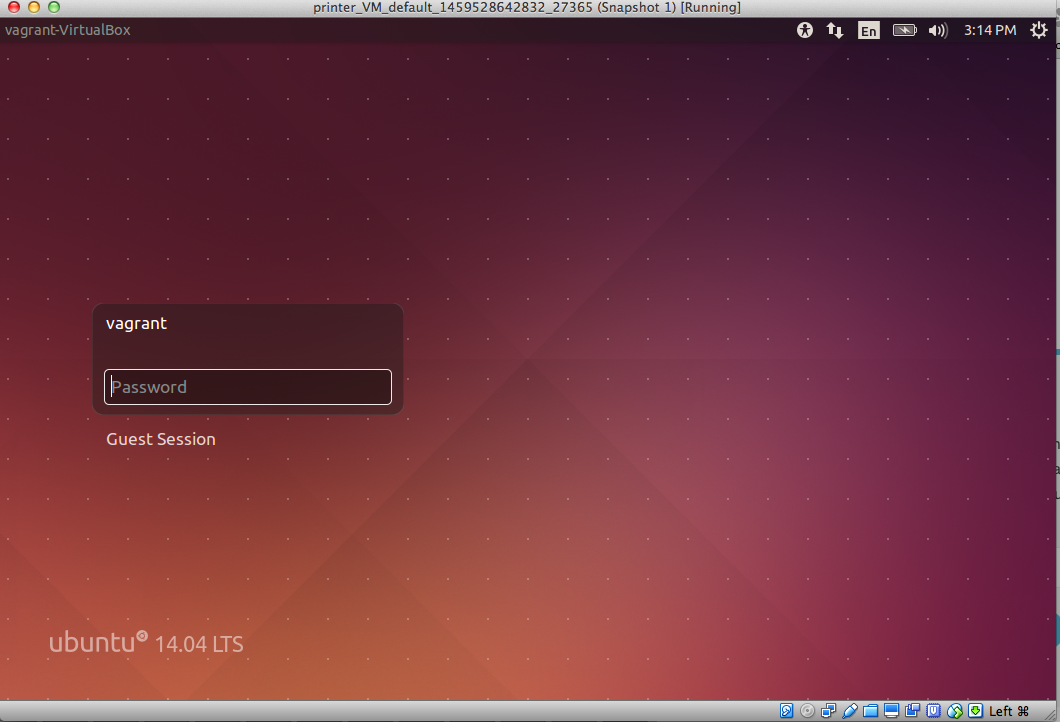
source deactivate

# 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

* 1. Right click on icon below



* 1. Select port of interest
  2. Repeat for other ports

1. Identify port numbers in virtual environment using arduino
2. Edit GUI python lines for port names using vim and save

ser=ser.serial(portname,baudrate)

1. Verify installation by running Bioprinter\_Cotrols\_GUI while connected to the printer

Python BioPrinter\_Controls\_GUI.py