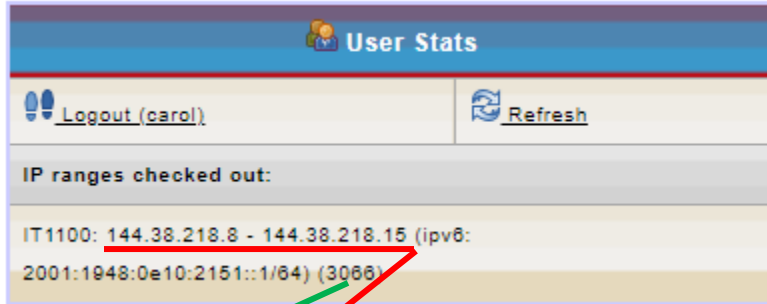


VM-Gui install notes

Part 1

- 1 Go to vm.cs.utahtech.edu
- 2 Fill out VM Worksheet (Match VLAN to correct class if more than one)



VM Worksheet (keep this the entire semester)

VLAN #: 3066

IP's: 144.38.218.8 – 144.38.218.15

Gateway: (Starting IP + 1): 144.38.218.9

GUI Subnet: (256 – 8 (IP's) = 248): 255 . 255 . 255 . 248

CLI Subnet: (CIDR Notation - Starting IP/29): 144.38.218.8/29

Broadcast: (Last IP in range): 144.38.218.15

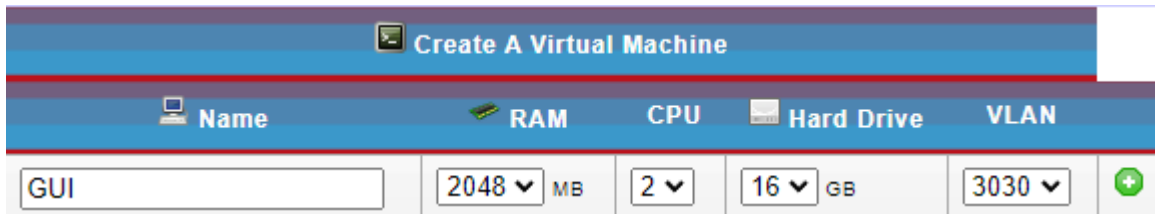
Usable IP's:

1. (starting IP+2): **144.38.218.10** for **GUI Install**
2. (starting IP+3): **144.38.218.11** for _____
3. (starting IP+4): **144.38.218.12** for _____
4. (starting IP+5): **144.38.218.13** for _____
5. (starting IP+6): **144.38.218.14** for _____

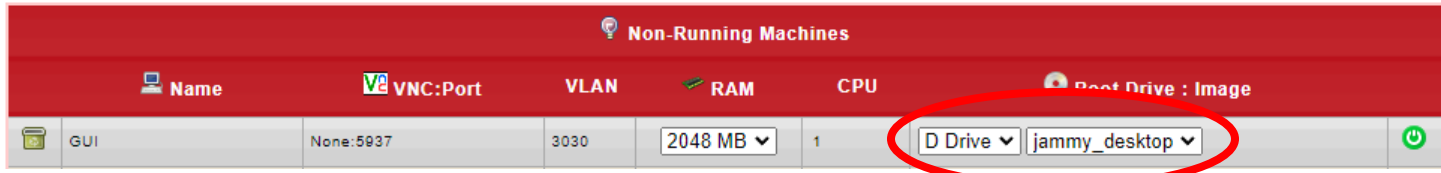
DNS Servers: 144.38.192.2, 144.38.192.3

Search domains: it1100.cs.utahtech.edu

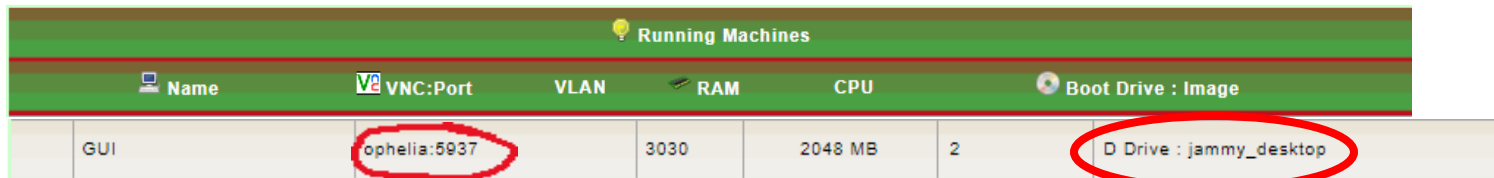
3 Put in the following info: Linux-GUI, RAM 2048, CPU 2, Hard Drive 16



4 Click the green button to create machine. (1 min)



5 Make sure you choose **D-Drive** and **jammy_desktop** Then click Green Button. (2 min)



6 You may need to refresh the screen to see your running machine. Write down the VNC:Port.

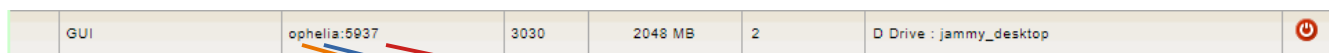
-----END Part 1-----

For part II you will need to use a VNC viewer. This is a non-secure connection to your computer. Your computer is currently trying to install the software that is on the D drive. To see the instillation, you need a monitor to the computer. You get this with a VNC viewer. VNC viewers are generally free.

CREATING A TUNNEL

- 1 Open a terminal (or cmd in windows).
- 2 Make sure you are on your own machine (not ssh.cs.utahtech.edu or scratch.cs.utahtech.edu).
- 3 `ssh <username>@ssh.cs.utahtech.edu -L <port#>:<machine>:<port#>`
- 4 Open your VNC viewer and put the following in the text field.
- 5 `localhost:<port#>`

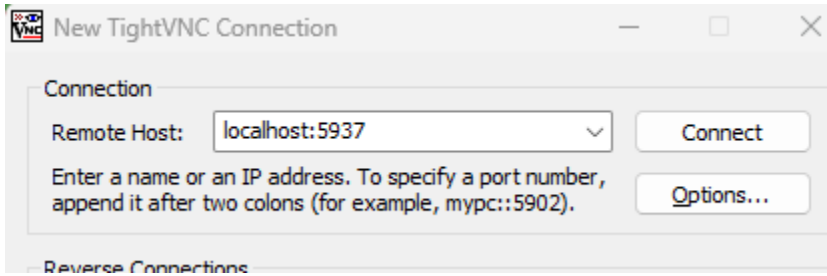
EXAMPLE where VNC:Port is Ophelia:5937



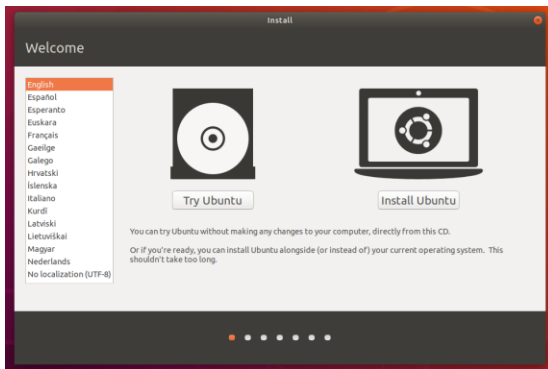
Create Tunnel in terminal

`ssh <username>@ssh.cs.utahtech.edu -L 5937:Ophelia:5937`

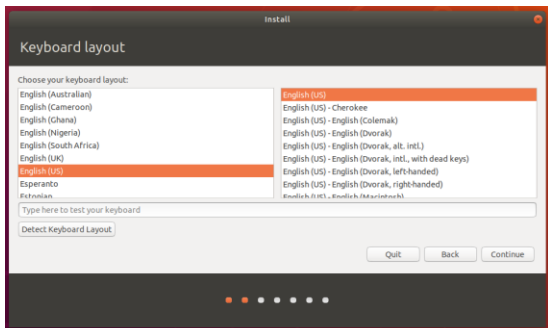
Enter the following in your VNC viewer: **localhost:5937**



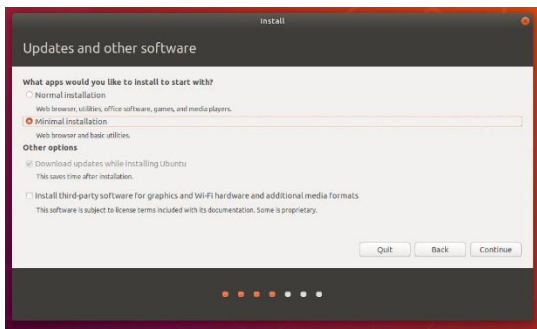
-----Part 2 – Installing Linux -----



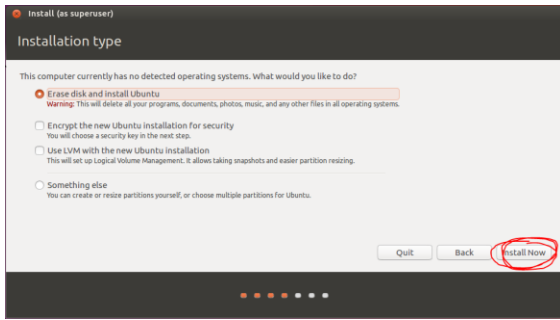
1 Click “Install Ubuntu”



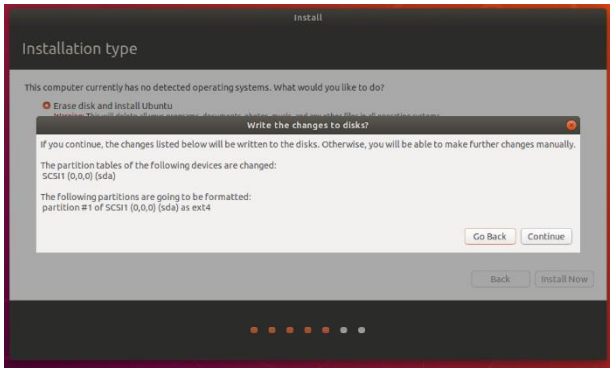
2 Click “Continue”



3 Choose “Minimal installation” Then click “Continue”



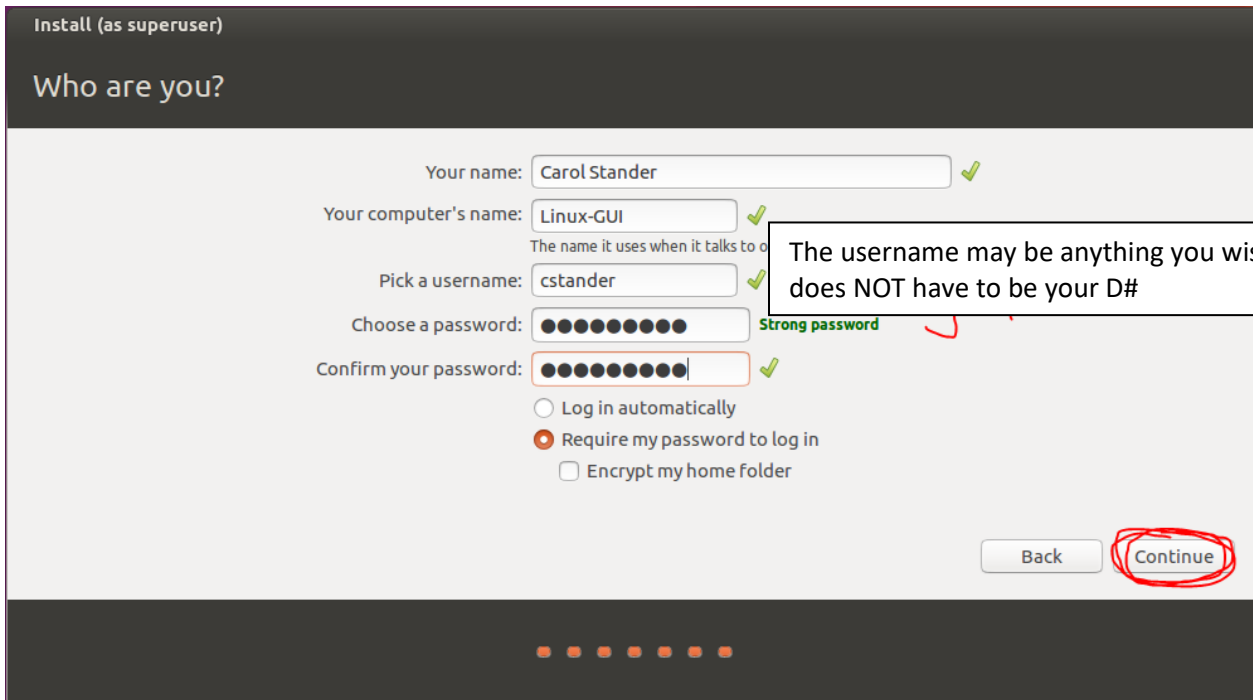
4 Keep first option selected to erase disk and then click “Install Now”



5 Click Continue

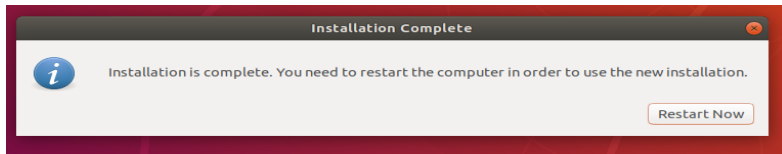


6 Select Mountain Time Zone by clicking near Denver and then click continue

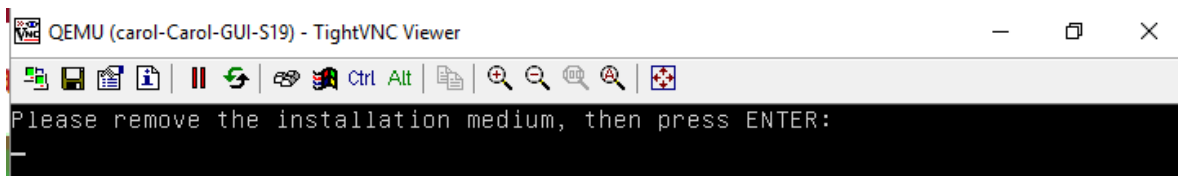


The username may be anything you wish. It does NOT have to be your D#

7 Enter your information and then click "Continue" (Takes a while – at least 6 minutes)



8 Click Restart Now



9 Close VNC Viewer

Running Machines						
Name	VNC:Port	VLAN	RAM	CPU	Boot Drive : Image	
GUI	cordelia:8390	3030	2048 MB	2	D Drive : focal_desktop	⏻

10 Refresh vm.cs.utahtech.edu and then click the red button.

Non-Running Machines						
Name	VNC:Port	VLAN	RAM	CPU	Boot Drive : Image	
GUI	None:8390	3030	2048 MB	2	C Drive	⏻

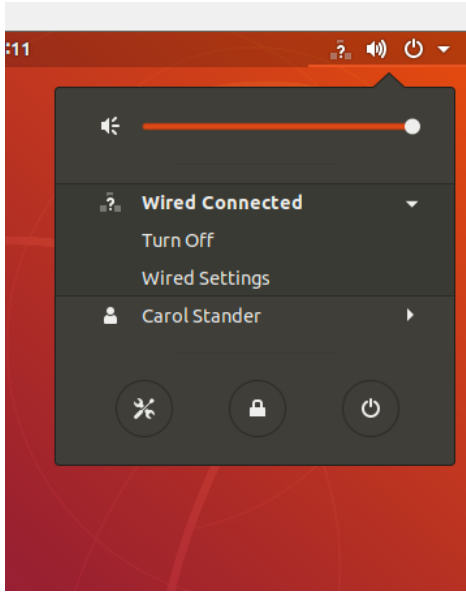
11 Make sure it is on the C Drive! Refresh and then Click the green button

- 12 Check your VNC:Port and use the current one to continue.
- 13 Open your VNC viewer and wait (takes 1-2 min)
- 14 Enter your password when the account comes up and wait.

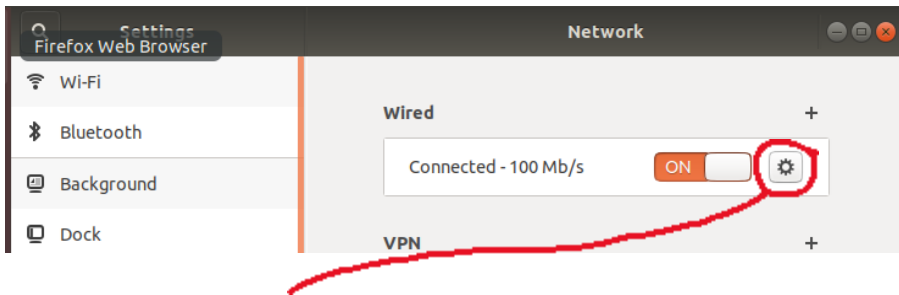
----- Enter Network Information -----

You now need to set up your computer to get to the internet. The computer is connected to a router via a wired connection. We will use the worksheet created earlier to enter the information.

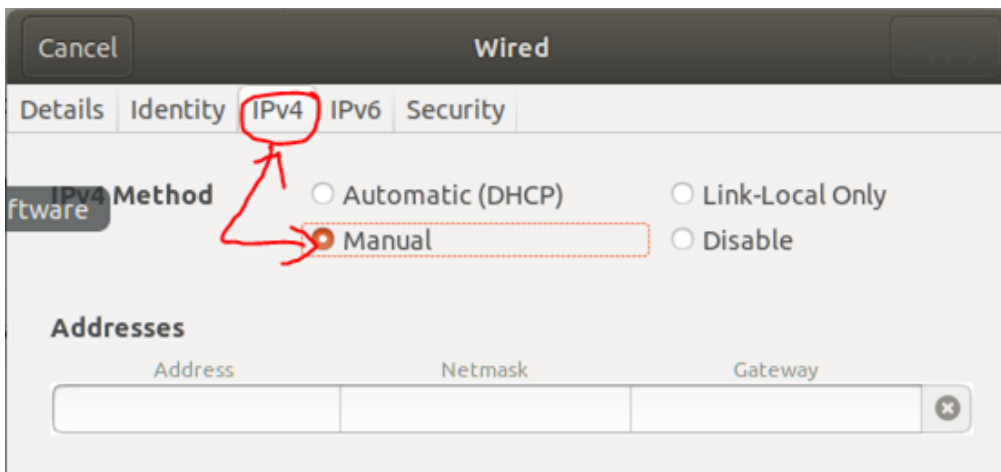
- 1 Click on this icon in the top right of your machine.



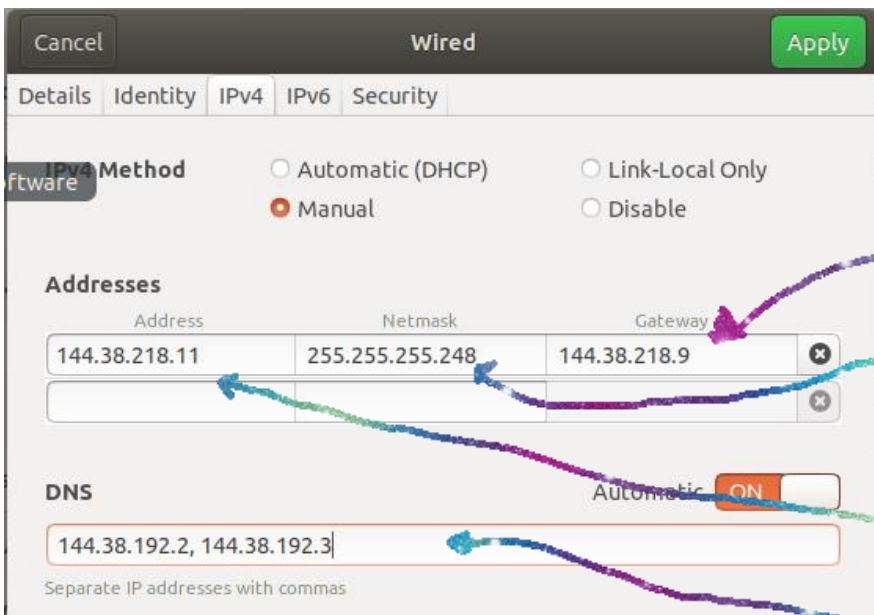
- 2 Choose Wired Connected and then Wired Settings.



- 3 Click on the settings wheel.



4 Click on IPv4 and Manual to get to this screen.



Worksheet #1

CIT VM INFO:

IP's:

144.38.218.8 – 144.38.218.15

VLAN:

3066

Gateway: (Starting IP + 1)

144.38.218.9

Subnet: (256 – 8 (IP's) = 248)

255.255.255.248

Broadcast: (Last IP in range)

144.38.218.15

Usable IP's: (First = Starting IP + 2)

1. **144.38.218.10**

2. **144.38.218.11 (bionic desktop)**

3. **144.38.218.12**

4. **144.38.218.13**

5. **144.38.218.14**

DNS Servers

144.38.192.2, 144.38.192.3

Search domains:

it1100.cs.dixie.edu

5 Enter information from Worksheet. Then click "Apply" in the top right corner.

15 Have your virtual machine turnoff by clicking on the icon in the top right corner and choosing shutdown.



16 Go to vm.cs.utah.edu and turn off your VM by clicking the red button.

Running Machines						
Name	VNC:Port	VLAN	RAM	CPU	Boot Drive	Image
GUI	cordelia:6390	3030	2048 MB	2	C Drive	None

17 Refresh vm.cs.utahtech.edu and then click the green button to restart your machine. Make sure it is on the C drive!

Non-Running Machines						
Name	VNC:Port	VLAN	RAM	CPU	Boot Drive : Image	
GUI	None:8390	3030	2048 MB	2	C Drive	

6 Your VNC:Port can change so check it and then get into the VNC viewer with the current port.

7 The network button should be showing the network without the ?



8 To test your network connections launch firefox.

----- Part 3 Install ssh -----

Installing SSH

- 1 open terminal by clicking on the dots in the bottom left corner and then typing “terminal” in the search bar.
- 2 sudo apt update
- 3 sudo apt install openssh-server

----- Part 4 Change your theme -----

- 1 Click on the dots in the bottom left corner and you should see the settings wheel. Click on the settings wheel.
- 2 Choose Background
 - 2.a HINT (If you click and hold on the top of the task bar it will detach from full screen mode. This will allow you to see more of the window which will then enable you to change the settings on the Lock Screen.

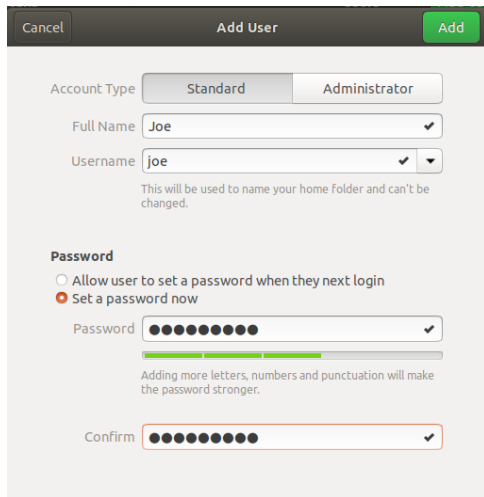
----- Part 5 Download GVIM -----

- 1 open terminal by clicking on the dots in the bottom left corner and then typing “gvim” in the search bar. Click on GVIM and choose install.
- 2 You can right-click on the icon and it will give you the option to “Add to Favorites” which will put it in the left task bar.

SCREENSHOT 1 – Take screen shot of changed background with GVIM in taskbar

----- Part 6 Add user Joe -----

- 1 Click on the dots in the bottom left corner and you should see the settings wheel. Click on the settings wheel.
- 2 In settings you need to scroll down to the bottom of the left menu and choose “Details”
- 3 In the “Details” menu choose “Users”
- 4 In the top right there is an unlock button, click it. (You will be asked for your password)
- 5 The unlock button changes to a green “Add User” button. Click it.

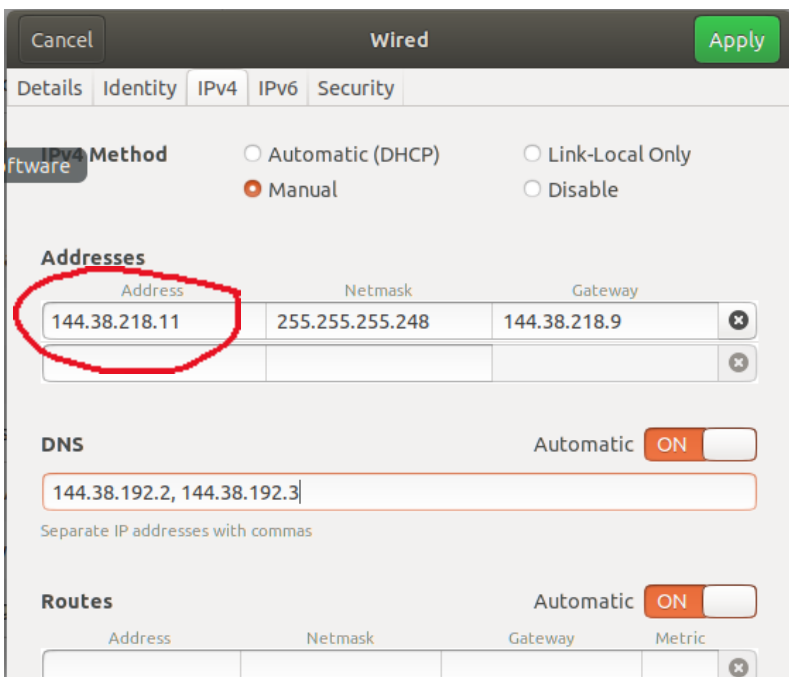


6. You will need to log out.

SCREENSHOT 2 – Show the login screen with your account and Joe’s account.

----- Part 7 ssh into Joe and list directory -----

- 1) Log in to your VM as Joe. This is important or the next step won’t work.
- 2) Open a terminal on your local machine. (NOT in the new Linux VM)
- 3) Get into scratch.
- 4) ssh into your new Linux VM. You will use the ip address you gave your VM.



Example: `d00123456@scratch:~$ ssh joe@144.38.218.11`

Run the command `ls -al`

SCREENSHOT 3 – Take a picture of the results of running `ls -al` as the user `joe` on your virtual linux VM.