# 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)

	🚷 User Sta	its	
	e Logout (carol)	8 Refresh	
	IP ranges checked out:		
	IT1100: 144.38.218.8 - 144.38.218.15 (ipv	6:	
	2001:1948:0e10:2151::1/64) (3066)		
	VM Worksheet (keep this th	ne entire semester)	
VLAN #: 3066			
IP's: 144.38.218.8 – 2	144.38.218.15		
Gateway: (Starting IP +	1): 144.38.218.9		
GUI Subnet: (256 – 8 (IP	o's) = 248): <u>255.255.255.248</u>		
CLI Subnet: (CIDR Notat	ion - Starting IP/29): 144.38.218.8	3/29	
Broadcast: (Last IP in ra	nge): 144.38.218.15		
Usable IP's:			
1. (starting IP+2): <b>144.3</b>	3.218.10 for GUI Install		
2. (starting IP+3): 144.38	<b>3.218.11</b> for		
3. (starting IP+4): <b>144.38</b>	<b>3.218.12</b> for		
4. (starting IP+5): <b>144.38</b>	<b>3.218.13</b> for		
5. (starting IP+6): <b>144.38</b>	<b>3.218.14</b> for		
<b>DNS Servers:</b> 144.38.	192.2, 144.38.192.3	Search domains: it110	00.cs. <b>utahtech.</b> edu

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

	Create A Virtua	l Machine	•		
🖳 Name	🛩 RAM	СРИ	📟 Hard Drive	VLAN	
GUI	2048 🗸 мв	2 🗸	16 🕶 дв	3030 🗸	0

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

		<b>P</b> 1	Non-Running Mac	hines		
🖳 Name		VLAN	🛩 RAM	CPU	Boot Drive : Im	age
GUI	None:5937	3030	2048 MB 🗸	1	D Drive 🗸 jammy_desktop 🗸	0

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

		<b>?</b>	Running Mac	hines		
🗕 Name	V2 VNC:Port	VLAN	🛩 RAM	СРИ		💿 Boot Drive : Image
GUI	ophelia:5937		3030	2048 MB	2	D Drive : jammy_desktop

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**

	GUI	ophelia:5937	3030	2048 MB	2	D Drive : jammy_desktop	۲
Crea	te Tunnel in termir	nal					

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

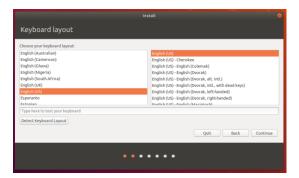
# Enter the following in your VNC viewer: **localhost:5937**

🚾 New TightVNC	Connection	-		$\times$
Connection				
Remote Host:	localhost:5937 v		Connect	
	an IP address. To specify a port number two colons (for example, mypc::5902).	'	Options	
-Reverse Connect	ions			

-----Part 2 – Installing Linux -----



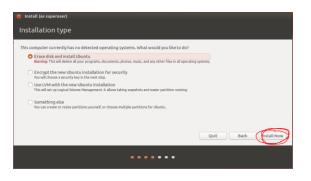
#### 1 Click "Install Ubuntu"



## 2 Click "Continue"

Jpdates and other software				
What apps would you like to install to start with?				
O Normal installation				
Web browser, utilities, office software, games, and modia players.				
O Minimal installation				
Web browser and basic utilities.				
Other options				
Oownload updates while installing Ubuntu				
This saves time after installation.				
Install third-party software for graphics and Wi-Fi hardware and additional media format	5			
This software is subject to license terms included with its documentation. Some is proprietary.				
	Quit	Back	Con	tinue

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

Install (as superuser)	
Who are you?	
Pick a username: Choose a password: Confirm your password:	Linux-GUI The name it uses when it talks to o Cstander Strong password Cstander
	Encrypt my home folder Back Continue

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



#### 8 Click Restart Now

QEMU (carol-Carol-GUI-S19) - TightVNC Viewer	_	đ	×
🖳 🖬 🖺      😏   🛷 🏨 Chri Alt   🛍   🗨 🔍 🔍 🍭   🚱			
Please remove the installation medium, then press ENTER:			

#### 9 Close VNC Viewer

		•	Running Machir	ies		
모 Name		VLAN	<sup>≪</sup> RAM	СРИ	💿 Boot Drive : Image	
GUI	cordelia:6390	3030	2048 MB	2	D Drive : focal_desktop	۲

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

		P 1	Ion-Running Mac	hines	
🖳 Name		VLAN	🛩 RAM	CPU	Boot Drive : Image
GUI	None:6390	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.

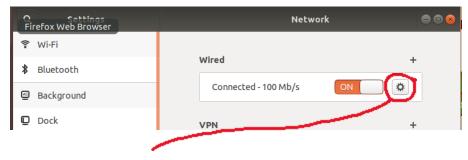
------Enter Network Information -----

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.



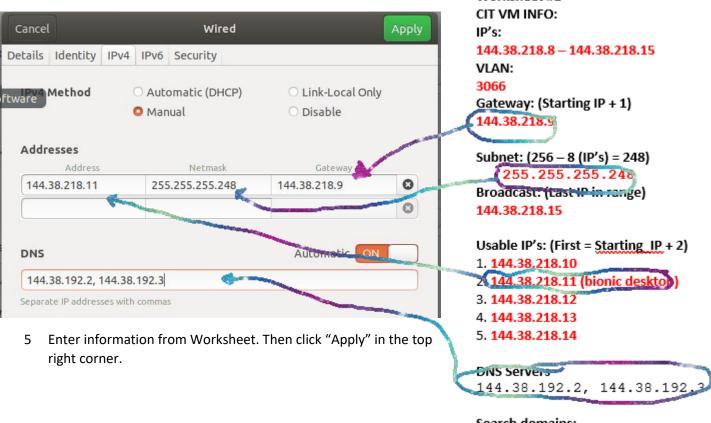
2 Choose Wired Connected and then Wired Settings.



3 Click on the settings wheel.

ancel	Wired		
ails Identity (IPv4)	IPv6 Security		
Rea Method	Automatic (DHCP)	O Link-Local Only	
re		-	
-	Manual	<ul> <li>Disable</li> </ul>	
	Manual	○ Disable	
Addresses Address	Manual Netmask	Gateway	

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



Search domains: it1100.cs.dixie.edu

Worksheet #1

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

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••) ① -
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16 Go to vm.cs.utahtech.edu and turn off your VM by clicking the red button.

🤗 Running Machines								
🖵 Name		VLAN	🛩 RAM	СРИ	💿 Boot Drive : Image			
GUI	cordelia:6390	3030	2048 MB	2	C Drive : None	٢		

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

	unvei								
			ę.	Non-Running Ma	chines				
	💂 Name	VNC:Port	VLAN	🛩 RAM	CPU		📀 Boot Dri	ve : Image	
	GUI	None:6390	3030	2048 MB 🗸	2	C Drive 🗸		~	۲
6	Your VNC:Port ca	an change so check	it and the	n get into th	e VNC vi	ewer with th	ne curren	t port.	
7	The network but	ton should be show	ving the ne	etwork witho	out the ?	A.			
8	To test your net	work connections la	unch firef	ox.					
		Pa	art 3 Insta	ll ssh					
stalli	ing SSH								
1	open terminal by	v clicking on the dot	s in the b	ottom left co	orner and	then typing	g "termin	al" in the sea	arch bar.
2									
3	sudo apt install o	openssh-server							
		Part 4	Change y	our theme -					
1	Click on the dots	in the bottom left o	corner and	d you should	see the	settings who	eel. Click	on the settin	igs wheel.
2	Choose Background								
	-	you click and hold o ee more of the wind	•						
		Part 5	5 Downloa	d GVIM					
1	open terminal by GVIM and choos	y clicking on the dot e install.	s in the bo	ottom left cc	orner and	l then typinរ្	g "gvim" i	n the search	bar. Click
2	You can right-clie task bar.	ck on the icon and it	t will give	you the opti	on to "A	dd to Favori	tes" whic	h will put it i	n the left
S	CREENSHOT	<b>1</b> – Take screen sho	ot of chan	ged backgro	und with	GVIM in tas	skbar		
		Part 6 Add ι	user Joe						
1	Click on the dots	in the bottom left o	corner and	d you should	see the	settings who	eel. Click	on the settin	igs wheel.
2		eed to scroll down t		tom of the le	eft menu	and choose	"Details"	,	
3		menu choose "Users							
Л	in the ten right t	noro ic an liniocli hi	ITTOD CUC		no ocko	a tor vour p	acciviord)		

- 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.

Cancel	Add User		Add						
			_						
Account Type	Standard	Administrator							
Full Name	Joe	•	•						
Username	joe	· ·	•						
	This will be used to name your home folder and can't be changed.								
Password									
<ul> <li>Allow user</li> <li>Set a pass</li> </ul>	to set a password when word now	they next login							
Password	••••••		•						
	Adding more letters, number the password stronger.	s and punctuation will mak	e						
			_						
Confirm	•••••		·						

6. You will need to log out.

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

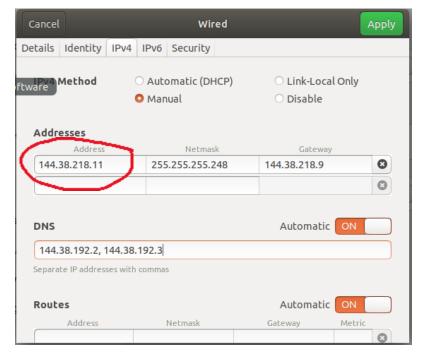
----- Part 7 ssh into Joe and list directory ------

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 Is -al

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