# **CLI Instructions**

# Guide to a Headless Linux Install

Create a new VM Machine (Look at the instructions for the GUI if you forgot how)

- Name: yourname-CLI
- RAM: 2048
- CPU: 2
- HD: 16G
- VLAN: assigned to you

Booting your machine

- Boot: D Drive
- Image: jamming\_server

Note the VNC:Port of your new machine and have your VM Worksheet with the IP nums available.

Remember that this is keyboard based – your mouse will not work. Use tab and/or arrow keys to navigate and ENTER to select.





If you are asked to use an updated installer, choose Continue without Updating





IMPORTANT – Do not automatically choose Done. You must arrow up and choose ens4 and then press enter to get the little box that allows you to choose 'Edit IPv4'. If you missed this note, you can use "Back" to get back to screen 4.

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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 = <u>Starting\_IP + 2</u>) 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

You must enter the information manually. The subnet is different than on the GUI install. It is in CIDR notation. That means that it will take your first IP address and then add /29 to the end.

Subnet: 144.38.218.8/29 Address: 144.38.218.10 (One of your 5 usable addresses) Name servers: 144.38.192.2, 144.38.192.3 Search domains: it1100.cs.utahtech.edu

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Network connections		
Edit ens4 IPv4 configuration ——————		
Subnet: 144.38.218.8/29	*	
Address: 144.38.218.10	1	
Gateway: 144.38.218.9	1	
Name servers: 144.38.192.2 144.38.192.3_	T	
[Save ] [Cancel ]		
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Select an interface to configure it or select Done to continue		

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Network connections		
Edit ens4 IPv4 configuration ————		
Address: 144.38.218.10		
Gateway: 144.38.218.9		
Name servers: 144.38.192.2, 144.38.192.3 IP addresses, comma separated		
Search domains: it1100.cs.utahtech.edu	v	
[Save ] [Cancel ]		
4 / 11		
Select an interface to configure it or select Done to continue	9	

QEMU (carol-carol-cli-sp19) - TightVNC Viewer × 📲 🔚 🖺 📘 🕂 😏 🔊 🌉 Chri Att 🖹 🖳 🔍 🔍 🍭 🥵 Network connections Configure at least one interface this server can use to talk to other machines, and which preferably provides sufficient access for updates. 144.38.218.10/29 (static) ] [ens4 eth [ Create bond ► ] Done Back 4 / 11 Select an interface to configure it or select Done to continue

### Don't need to enter a Proxy address

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Configure proxy	
If this system requires a proxy to connect to the internet, enter its details here.	
Proxy address: If you need to use a HTTP proxy to access the outside world, enter the proxy information here. Otherwise, leave this blank.	
The proxy information should be given in the standard form of "http://[[user][:pass]@]host[:port]/".	
[Done] [Back]	
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Custom Storage Layout:





For the root, make it 6G, then Create

Adding (	GPT partition to QEMU_HARDDISK_QM00001 —	
Size (max 15.998G):	6G	
Format:	[ext4 T]	
Mount:	[/ •]	
	[Create ] [Cancel ]	

:

Add another GPT partition, this time 3G with /home for the mount point:

Storage configuration		[Help]
FILE SYSTEM SUMMARY		
MOUNT POINT SIZE TYP [/ 6.000G new	E   DEVICE TYPE ext4 new partition of local disk ▶ ]	
AVAILABLE DEVICES		
DEVICE [ QEMU_HARDDISK_QM00001 free space	TYPE SIZE local disk 16.000G ► 9.997G ► Add GPT Pa	rtition 🕨
[ Create software RAID (md) ► [ Create volume group (LVM) ►	]	
USED DEVICES		
Adding	GPT partition to QEMU_HARDDISK_QM000	01
Size (max 9.997G):	3G	
Format:	[ext4 T]	
Mount:	[ <u>/</u> home <b>v</b> ]	
	[Create ] [Cancel ]	

Add another GPT partition. This time a swap, 2G:

FILE SYSTEM SUMM	ARY							
MOUNT POINT [ / [ /home	SIZE 6.000G 3.000G	TYPE new ext4 new ext4	DEVICE TYP new parti new parti	PE tion of loca tion of loca	al disk al disk	.►] .►]		
AVAILABLE DEVICE	S							
DEVICE [ QEMU_HARDDISK_ free space	QM00001			TYPE local	disk	SIZE 16.000G 6.997G	(close)	
[ Create softwar [ Create volume ;	e RAID (n group (L\	nd) ► ] /M) ► ]						Partition ►
USED DEVICES								
DEVICE	nunnnni idding (	APT parti	tion to (	TYPE QEMU_HARDI	oʻlisk_u	SIZE MÓÓOÓÓÍ-	<b>•</b> 1	
Size (max 6.9	997G):	2G						
Fc	ormat:	[ <u>s</u> wap		• ]				
ч	lount:	[ /boot						
		[	Create Cancel	]				

### Your File System Summary should look something like this:

Storage configura	tion								
FILE SYSTEM SUMMA	RY								
MOUNT POINT [ Z [ /home [ SWAP	SIZE 6.000G 3.000G 2.000G	TYPE new ext4 new ext4 new swap	DEVI new new new	CE TYPE partition partition partition	of 1 of 1 of 1	.ocal .ocal .ocal	disk disk disk	▶ ] ▶ ] ▶ ]	
AVAILABLE DEVICES									
DEVICE [ <b>QEMU_HARDDISK_Q</b> free space	M00001				TYP loc	'E ∶al di	lsk	SIZE 16.000G 4.997G	▶ ]
[ Create software [ Create volume g	RAID (m roup (LV	d) ▶ ] M) ▶ ]							
USED DEVICES									
DEVICE [ QEMU_HARDDISK_Q partition 1 ne partition 2 ne partition 3 ne partition 4 ne	MOOOOO1 w, bios_ w, to be w, to be w, to be	grub formatted formatted formatted	as e as e as s	ext4, mount ext4, mount swap	TYP loc ted a ted a	rE ∶al di nt / nt /ho	lsk ome	SIZE 16.000G 1.000M 6.000G 3.000G 2.000G	► ] ► ►

Select Done. Confirm destructive action.



#### Install OpenSSH server:

SSH Setup [	Help]
You can choose to install the OpenSSH server package to enable secure remote access to your ser	rver.
[X] Install OpenSSH server	
Import SSH identity: [ No ▼ ] You can import your SSH keys from Github or Launchpad.	
Import Username:	
[V] Allow preciped outbootication guar 200	

If you are asked to Upgrade to Ubuntu Pro, choose Skip for Now



### Don't choose any of the snaps.

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Installation complete!			
These are popular snap deselect with SPACE, p package, publisher and	s in server environments. Select o ress ENTER to see more details of versions available.	r the	
sabnzbd wormhole aws-cli google-cloud-sdk slcli doctl conjure-up minidlna-escoand postgresql10 heroku keepalived	SABnzbd get things from one computer to a Universal Command Line Interface Command-line interface for Google Python based SoftLayer API Tool. DigitalOcean command line tool Package runtime for conjure-up sp server software with the aim of b PostgreSQL is a powerful, open so CLI client for Heroku High availability VRRP and load-b	nother for Am Cloud eing f urce o alanci	
	[ <u>D</u> one]		
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Install complete			



You must turn your machine off manually and then turn it back on booting off the c drive. Check your machine:port so that you can get back in.

This completes part I of assignment 7. There is much more you need to do. Please refer to the instructions for assignment 7 here: http://computing.utahtech.edu/it/1100/projects.examples/lab7.php