# CIS Networking Installing Ubuntu Server on Windows hyper-v

Much of this information was stolen from <u>http://www.isummation.com/blog/installing-ubuntu-server-1104-64bit-on-hyper-v/</u>

Create a virtual machine at your assigned virtual server. Use the following specs

Name the Virtual Machine yourLastName\_ubuntu

Assign 1300 MB of RAM

Connect the network card to the available virtual network

Create a virtual hard disk

Name leave default

Locate at s:\student

Maximum size is 60 GB

Install an operating system from a boot CD/DVD. Choose the latest ISO disk in the directory

#### e:\ISO\Ubuntu\ ubuntu-11.10-server-amd64.iso

Power on the machine by right-clicking it, the choose Start

📜 New Virtual Machine Wiza	ard	💶 🌆 New Virtual Machine V	Vizard X
Rev Virtual Machine Wizz Specify Nam Before You Begin Specify Name and Location Assign Memory Configure Networking Connect Virtual Hard Disk	er and Location  Choose a name and location for this virtual machine.  The name is displayed in Hyper-V Manager. We recommend that you use a name that helps you easily identify this virtual machine, such as the name of the guest operating system or workload.  Name: [Durn_Lburtu2]  You can create a folder or use an existing folder to store the virtual machine. If you don't select a folder. The virtual machine is thorden on four definite for divergence for the server.	Entrew Virtual Machine V     Assign Me     Before You Begin     Specify Name and Location     Assign Memory     Configure Networking     Connect Virtual Hard Disk	Fizard     X       Specify the amount of memory to allocate to this virtual machine. You can specify an amount from 8 MB through 65536 MB. To improve performance, specify more than the minimum amount recommended for the operating system.       Memory:     1300 MB       Image: When you decide how much memory to assign to a virtual machine, consider how you intend to use the virtual machine and the operating system that it will run.
instaladon Uptions Summary	<ul> <li>✓ Store the virtual machine in a different location</li> <li>Location: S: Student\</li> <li>Browse</li> <li>If you plan to take snapshots of this virtual machine, select a location that has enough free space. Snapshots include virtual machine data and may require a large amount of space.</li> </ul>	Installation Options Summary	More about determining the memory to assign to a virtual machine
Rew Virtual Hachine Wiza	<previous next=""> Finish Cancel rd X etworking</previous>	Rew Virtual Machine Wiz	and X
Before You Begin Speafy Name and Location Assign Memory Configure Networking Connect Virtual Hard Disk Installation Options Summary	Each new virtual machine includes a network adapter. You can configure the network adapter to use a virtual network, or it can remain disconnected.	Before You Begin Speafy Name and Location Assign Memory Configure Networking Connect Virbual Hard Disk Installation Options Summary	A virtual machine requires storage so that you can instal an operating system. You can specify the storage now or configure it later by modifying the virtual machine's properties.  C Create a virtual hard disk          Wame:       wirtual hard disk         Name:       wirtual hard disk         Location:       \$:\\$tudent\Dum_Lbuntu2\         Size:       60       GB (Maximum: 2040 GB)         C Use an existing virtual hard disk       wirtual hard disk         Location:       \$:\\$tudent\Disk         Docation:       \$:\\$tudent\Disk         Browse       \$         C Attach a virtual hard disk later
	< Previous Next > Finish Cancel		< Previous Next > Finish Cancel

🏚 New Virtual Machine Wizar	d	×
Installation O	ptions	
Before You Begin Specify Name and Location Assign Memory Configure Networking Connect Virbual Hard Disk Installation Options Summary	You can install an operating system now if you have access to the setup media, or you can install it later.  Install an operating system later  Install an operating system from a boot CD/DVD-ROM  Media  Physical CD/DVD drive: D:	

Double-click or click to highlight your assigned machine name, from the menu that appears at the right, click on Connect.

You are now looking at the virtual machine starting up.

The systematic instructions are below:

The installation begins within the console after the virtual machine is turned on.



Choose English Install Ubuntu Server



United States

### Detect Keyboard? NO

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[] Configure the keyboard		
you can try to nave your keyboard layout detected by press not want to do this, you will be able to select your keyb	sing a series of keys. If you do oard layout from a list.	
Detect keyboard layout?		
(Co Back)	(Vec) (No)	
	(105)	
) moves; (Space) selects; (Enter) activates buttons		2
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#### English (US) English (US)



The system will not find the network card. We will fix this later. Choose Continue

🖳 Dunn_Ubuntu2 on localhost - Virtual Machine Connection	
File Action Media Clipboard View Help	
[!] Configure the network	
No network interfaces detected	
No network interfaces were found. The installation system was unable to find a net	work
device.	
You may need to load a specific module for your network card, if you have one. For	this.
go back to the network hardware detection step.	
(On Deale)	
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<tab> moves; <space> selects; <enter> activates buttons</enter></space></tab>	
Status: Running	🖾 🖄 🔒 .::

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File Action Media Clipboard View Help		See Anten Marke Coheneral Virtual Hachine Connection	
	_		
(1) Configure the network          Please enter the hostname for this system.         The hostname is a single word that identifies your system to the network. If you don't know what your hostname should be, consult your network administrator. If you are settin up your own home network, you can make something up here.         Hostname:         Sumn usuntug. <go back=""></go>	g	A line of the clock is a constraint of the clock is a constrated of the clock is a constraint of the clock is a constraint	
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Hostname: xxUbuntu (replace xx with your student number) Installation proceeds - setting up the clock, set the time zone to Pacific

Partition Method: Guided - the disks using the entire disk and set up LVM



Select the available disk. Choose YES to write changes to the disk. Use the entire disk. Yes again to write changes.



Choose the name for new user - use your full name

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	[!!] Set up users and passwords	
	Please enter the same user massword again to verify you have typed it correctly.	
	Re-enter password to verify:	
	(Continue)	
(Tab) mo	vac: /Snaca) salects: /Entar) activates huttons	
Chatan David		0.0.
Status: Runn		11 <b>- 1</b> .:

Choose the username for new user - your mySVC username. Use your original mySVC password

Encrypt your home directory? Choose NO

HTTP Proxy Information -leave blank. Choose Continue

### Install Security Updates Automatically



Software Selection: Choose DNS Server, OpenSSH server, Samba File Server, Ubuntu desktop. Choose Continue

Install the GRUB boot loader

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File Action Media Clipboard View Help	
[1] Install the GRUB boot loader on a hard disk It seems that this new installation is the only operating system on this computer. If so it should be safe to install the GRUB boot loader to the master boot record of your firs hard drive. Warning: If the installer failed to detect another operating system that is present on your computer, modifying the master boot record will make that operating system temporarily unbootable, though GRUB can be manually configured later to boot it. Install the GRUB boot loader to the master boot record? <go back=""></go>	ı, it
<tab> moves; <space> selects; <enter> activates buttons</enter></space></tab>	
Status: Running	<b>B</b> - <b>P</b> :

Allow the system to reboot.

Log into Linux and make the following adjustments:



Create the root user: at the terminal prompt, type sudo passwd root When prompted, enter your password, and then enter the password **cislstheBest!** twice to assign the password to the root user.

Help Ubuntu find a network card:

sudo vi /etc/initramfs-tools/modules add below lines to the end of the file hv\_vmbus hv\_storvsc hv\_blkvsc hv\_netvsc

(once vi editor is opened press "i" & start adding above lines, on completion press "Esc" & type ":wq")

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File Action Media Clipboard V	/iew Help	
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<pre># Syntax: module_name #</pre>	[args]	
# # You must run update-	initramfs(8) to effect this change.	
#		
# Examples:		
# # raid1		
#_sd_mod		
Nu_umbus		
hv_storvsc hv_blkusc		
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" oto (initranfo_tesle (	noduloo" 151 2060 unitton	
dum@00ubuntu:~\$ sudo	update-initramfs -u	
update-initramfs: Gene	rating /boot/initrd.img-3.0.0-12-server	
dunn@00ubuntu:~\$ sudo	reboot_	
Status: Running		<u> </u>

Set the IP numbers to static. At the command prompt, type

### sudo vi /etc/network/interfaces

Enter the your password account as directed on the screen



Once you have made these changes you will need to run sudo update-initramfs –u sudo reboot

Using vi, open the file /etc/network/interfaces with root privileges. Make any changes necessary in the eth0 section. Replace xx with the assigned IP number. Note: in the line eth0, the 0 is a zero.

auto eth0 iface eth0 inet static address 192.168.9.xxx netmask 255.255.255.0 network 192.168.9.0 gateway 192.168.9.1 # dns-\* options are implemented by the resolvconf package, if installed nameserver 192.168.9.100 search cis.local

ESC :wq to write and quit the VI editor.

restart the networking to use your new configurations:

# sudo /etc/init.d/networking restart Verify your connective ping 192.168.9.1 Make sure you get a reply ping www.google.com Make sure you get the ip address of Google (you will not receive a reply) Get and install the updates sudo apt-get update sudo apt-get upgrade Get the remote desktop service sudo apt-get install xrdp Install the desktop sudo apt-get install ubuntu-desktop reboot sudo reboot

# If you are receiving errors, check your interfaces file again, verify the pings. One misplaced letter, or as I did, add a capital A in auto and nothing will work.

Initial setup is complete. The problem with Ubuntu and Hyper-V is that the mouse drivers will not install properly. The workaround is to use remote desktop to connect. You installed xrdp, which will run a Windows Remote Desktop session. At the Windows Machine, open the Remote Desktop Connection Manager. Add a server with the IP number of the Ubuntu machine. Then the real magic happens!

