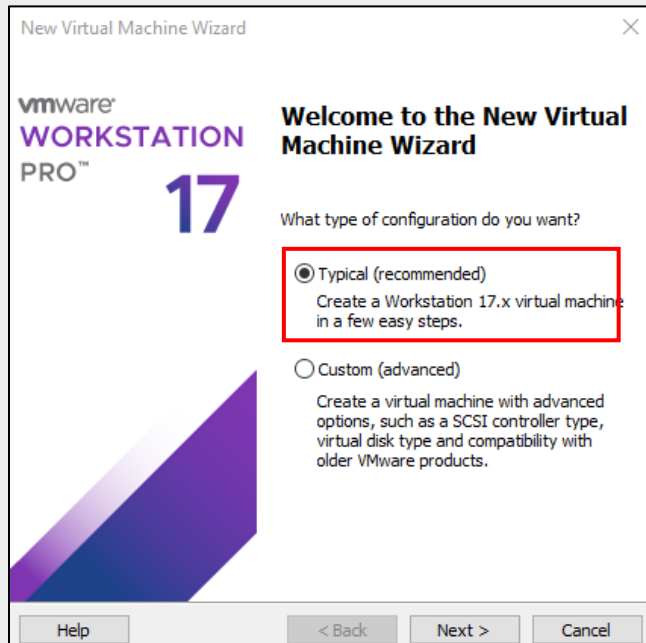
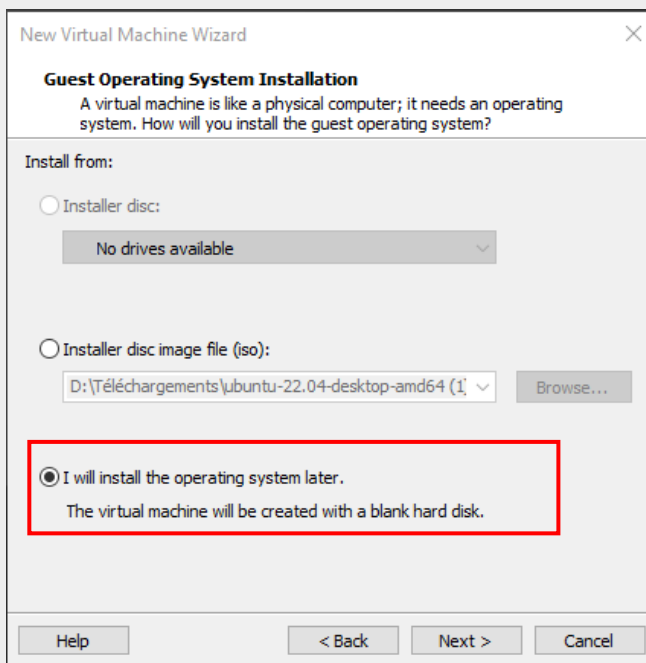


Step 1 – Virtual Machine Creation

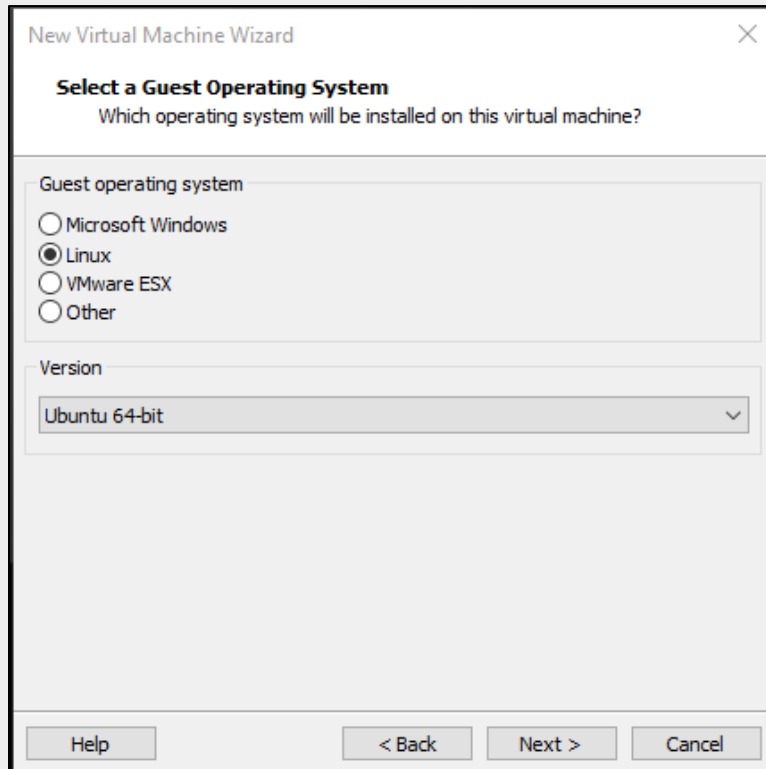
1. Download the Ubuntu Desktop iso image using the following link:
<https://releases.ubuntu.com/22.04.3/ubuntu-22.04.3-desktop-amd64.iso>
2. Once the ISO is fully downloaded, open **VMWare Workstation**.
3. Start **Creating a new VM** → Select a **Typical (recommended)** and click **Next**



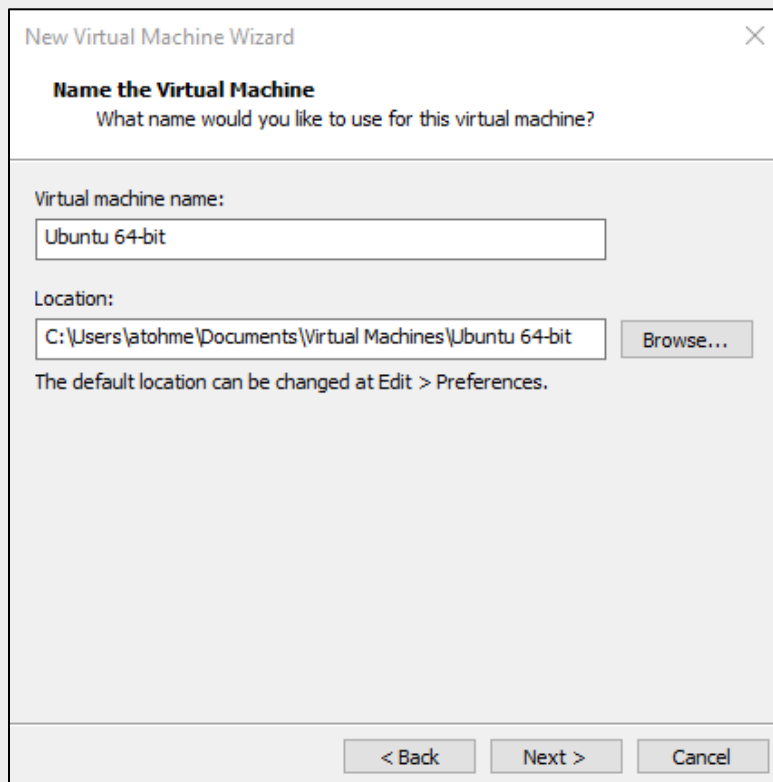
4. Select **I will install the operating system later**, then click on **Next**.



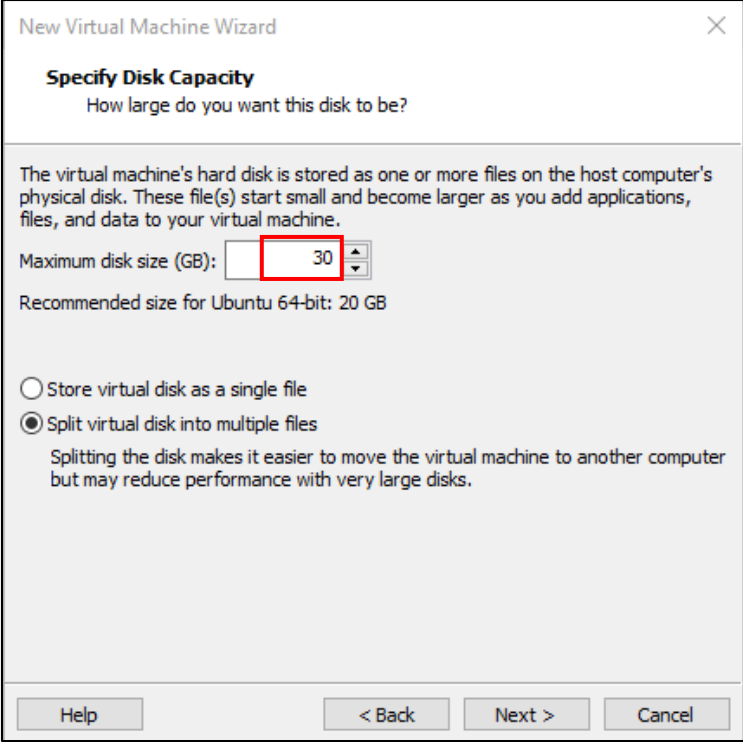
5. Select **Linux 64-bit Ubuntu** version and click **Next**.



6. Keep the **Ubuntu 64-bit** name and then click **Next**.



7. Select **30 GB** disk size, and then click **Next**.



The screenshot shows the 'Specify Disk Capacity' step of the 'New Virtual Machine Wizard'. The title bar says 'New Virtual Machine Wizard' with a close button. The main heading is 'Specify Disk Capacity' with the subtitle 'How large do you want this disk to be?'. A text box explains: 'The virtual machine's hard disk is stored as one or more files on the host computer's physical disk. These file(s) start small and become larger as you add applications, files, and data to your virtual machine.' Below this, 'Maximum disk size (GB):' is followed by a text box containing '30', which is highlighted with a red rectangle. Below that, it says 'Recommended size for Ubuntu 64-bit: 20 GB'. There are two radio buttons: 'Store virtual disk as a single file' (unselected) and 'Split virtual disk into multiple files' (selected). A note below the selected option says: 'Splitting the disk makes it easier to move the virtual machine to another computer but may reduce performance with very large disks.' At the bottom are buttons for 'Help', '< Back', 'Next >', and 'Cancel'.

New Virtual Machine Wizard

Specify Disk Capacity
How large do you want this disk to be?

The virtual machine's hard disk is stored as one or more files on the host computer's physical disk. These file(s) start small and become larger as you add applications, files, and data to your virtual machine.

Maximum disk size (GB):

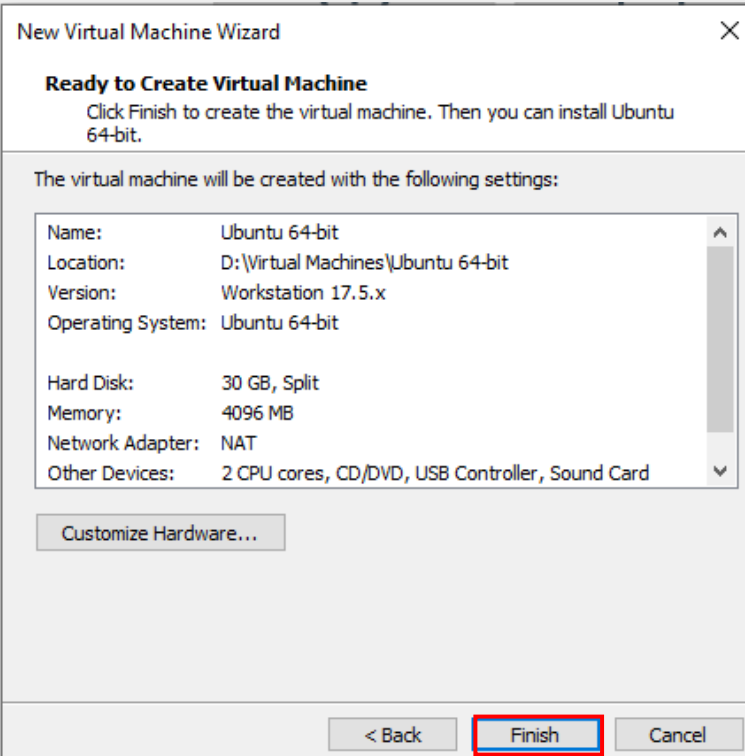
Recommended size for Ubuntu 64-bit: 20 GB

☐ Store virtual disk as a single file
☒ Split virtual disk into multiple files

Splitting the disk makes it easier to move the virtual machine to another computer but may reduce performance with very large disks.

Help < Back Next > Cancel

8. Click on **Finish**



The screenshot shows the 'Ready to Create Virtual Machine' step of the 'New Virtual Machine Wizard'. The title bar says 'New Virtual Machine Wizard' with a close button. The main heading is 'Ready to Create Virtual Machine' with the subtitle 'Click Finish to create the virtual machine. Then you can install Ubuntu 64-bit.' Below this, it says 'The virtual machine will be created with the following settings:'. A list of settings is shown in a scrollable box: Name: Ubuntu 64-bit, Location: D:\Virtual Machines\Ubuntu 64-bit, Version: Workstation 17.5.x, Operating System: Ubuntu 64-bit, Hard Disk: 30 GB, Split, Memory: 4096 MB, Network Adapter: NAT, and Other Devices: 2 CPU cores, CD/DVD, USB Controller, Sound Card. Below the list is a 'Customize Hardware...' button. At the bottom are buttons for '< Back', 'Finish' (highlighted with a red rectangle), and 'Cancel'.

New Virtual Machine Wizard

Ready to Create Virtual Machine
Click Finish to create the virtual machine. Then you can install Ubuntu 64-bit.

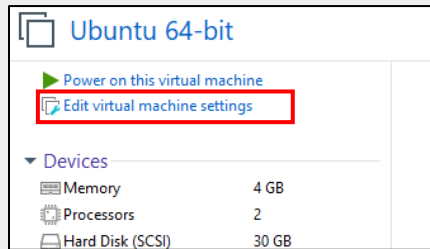
The virtual machine will be created with the following settings:

| | |
|-------------------|---|
| Name: | Ubuntu 64-bit |
| Location: | D:\Virtual Machines\Ubuntu 64-bit |
| Version: | Workstation 17.5.x |
| Operating System: | Ubuntu 64-bit |
| Hard Disk: | 30 GB, Split |
| Memory: | 4096 MB |
| Network Adapter: | NAT |
| Other Devices: | 2 CPU cores, CD/DVD, USB Controller, Sound Card |

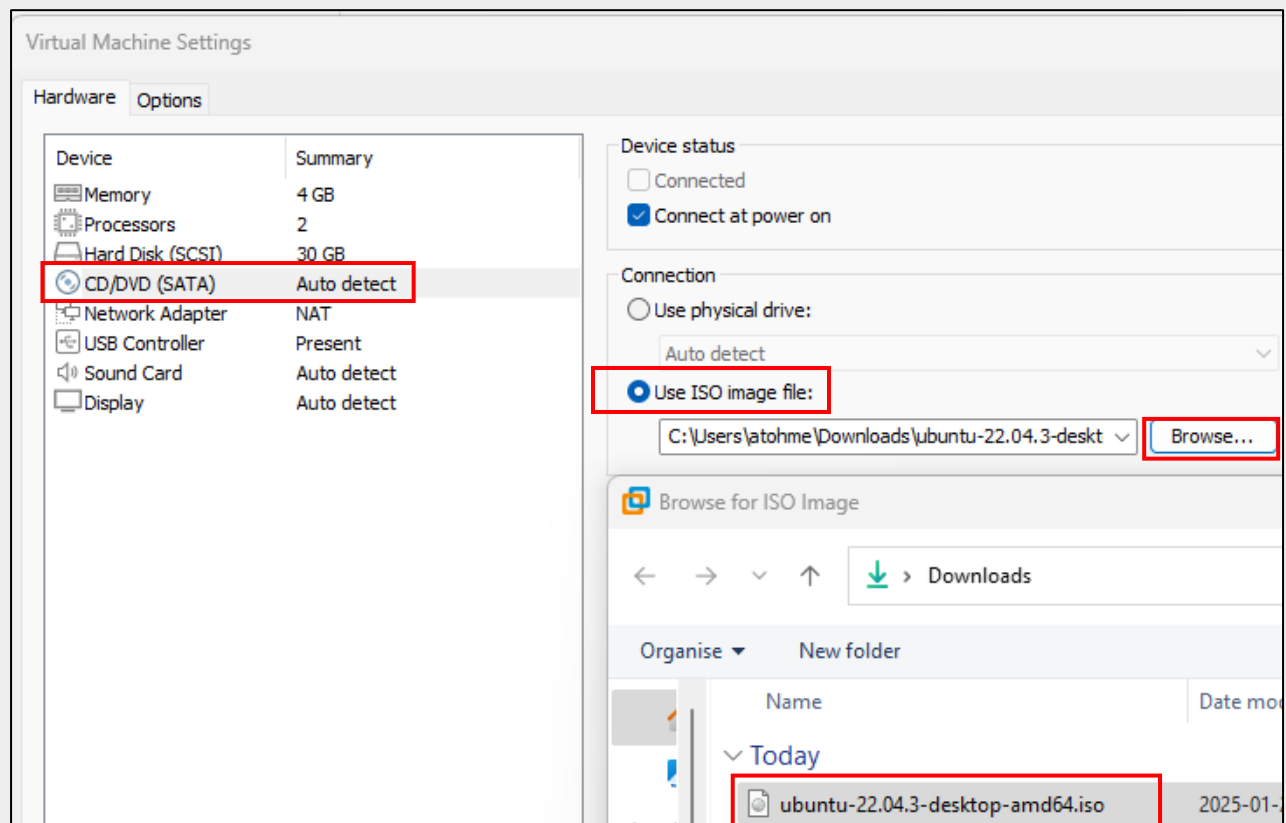
Customize Hardware...

< Back Finish Cancel

9. Select **Edit virtual machine settings**



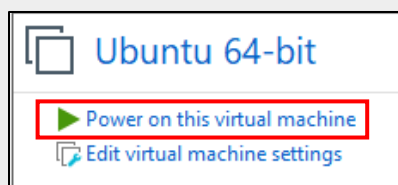
10. Click **CD/DVD** → **Use ISO image file** → **Browse** → Select the **ISO image** you just downloaded and click **Open**.



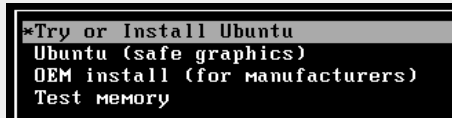
11. Click on **OK** to close this window

Step 2 - Installing Ubuntu Server

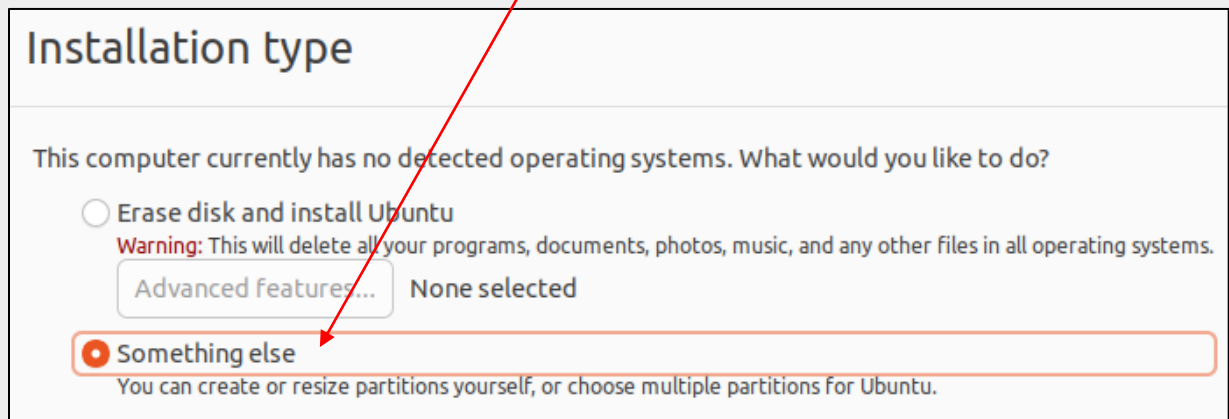
1. Power on the virtual machine.



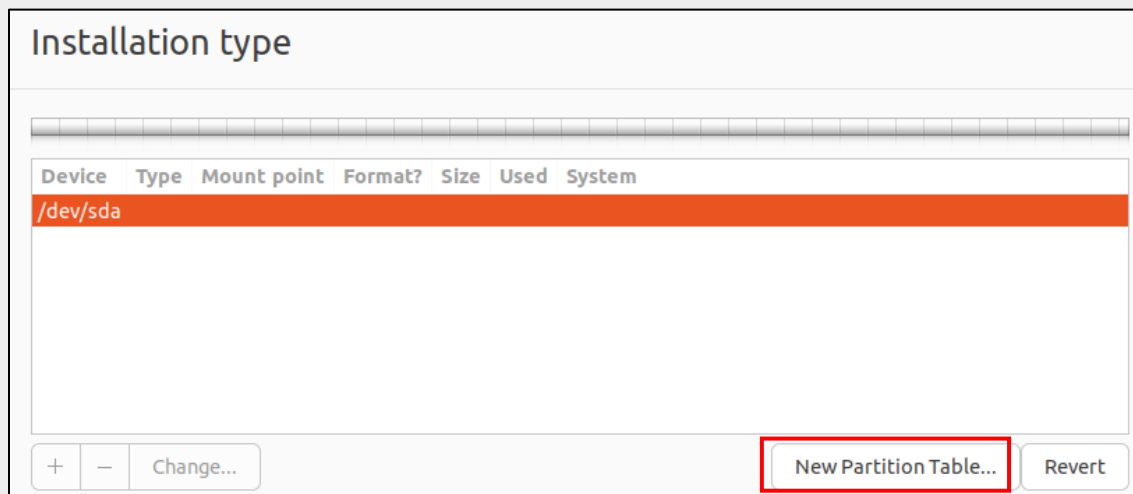
2. Select **Try or Install Ubuntu**.



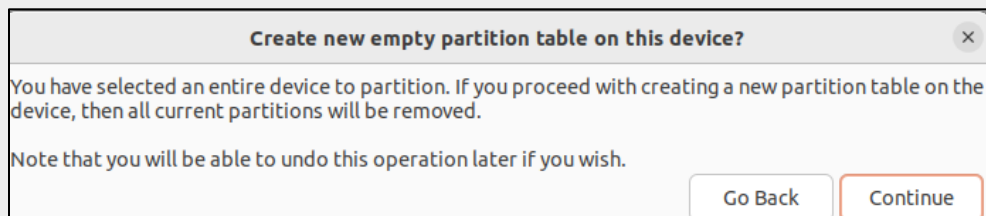
3. Select **English** then click **Install Ubuntu**.
4. Keep **English (US)** then click **Continue**.
5. Click **Continue** on the **Updates and other software** page.
6. On the **Installation type** page select **Something else** and then click **Continue**.



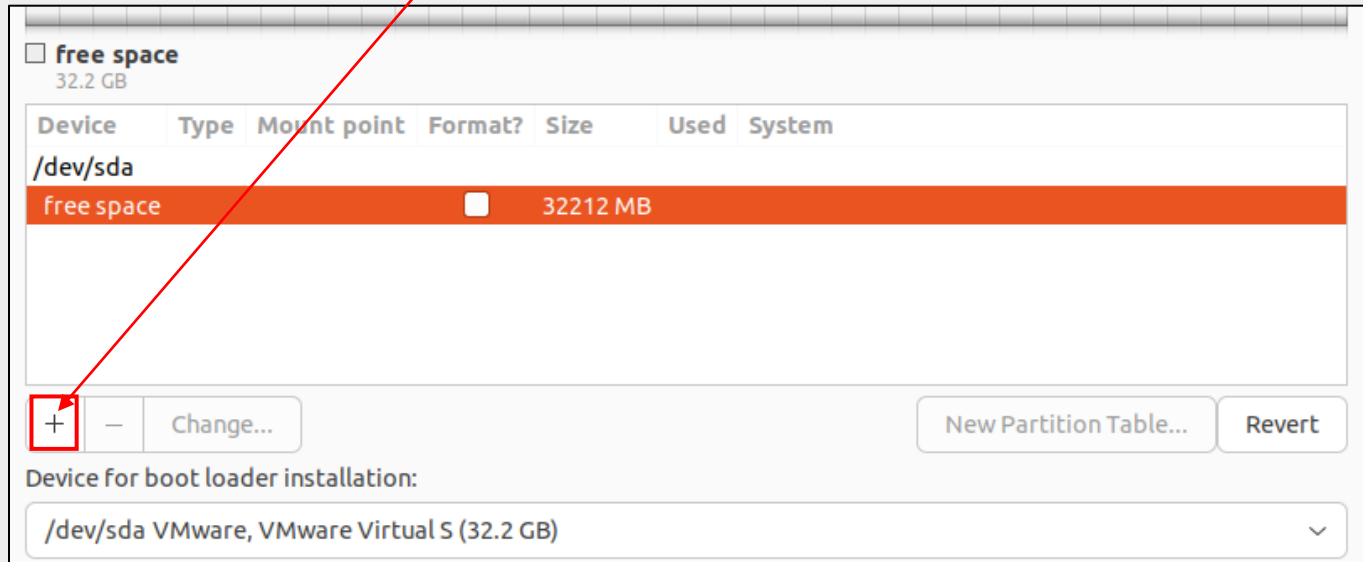
7. Click the **New Partition Table** button...



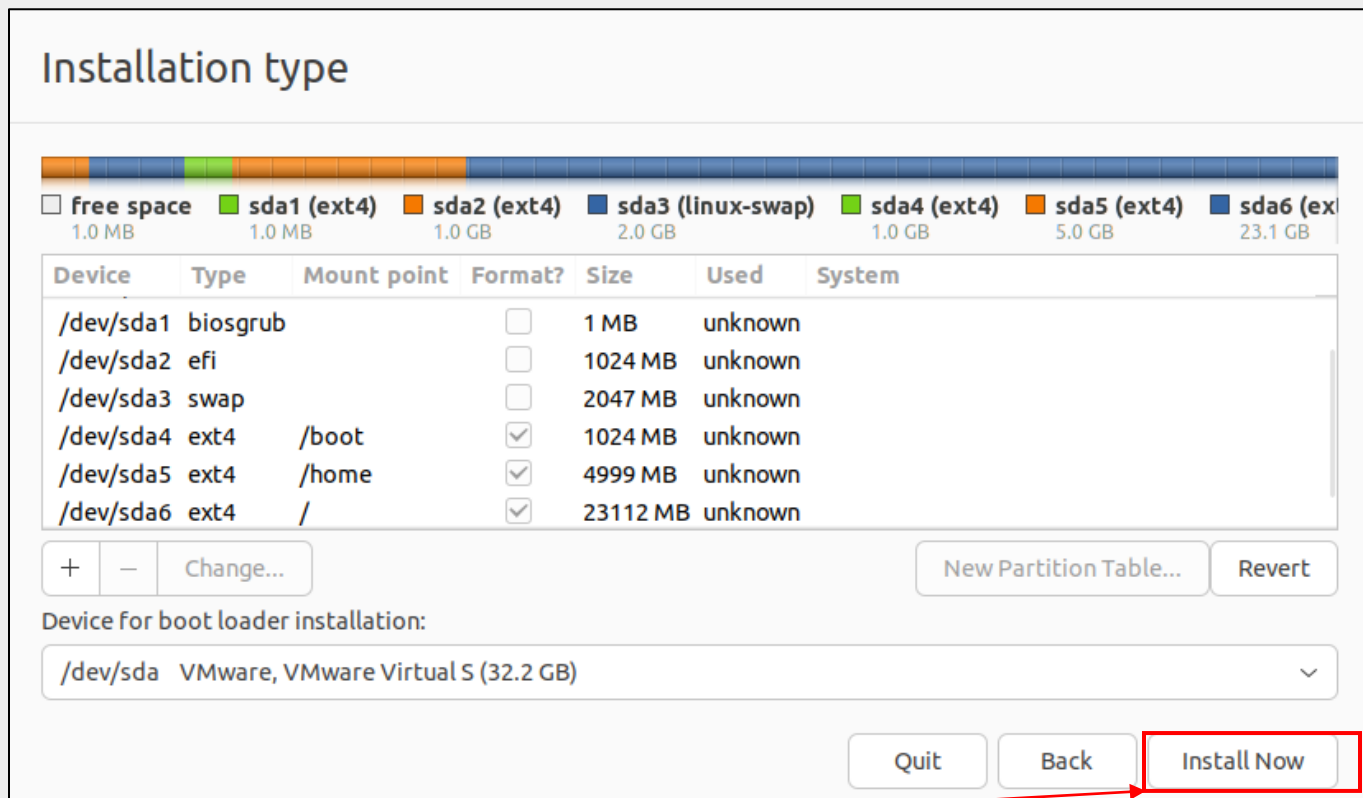
8. Click on **Continue**.



9. Select **free space** and click the **+** button to add **new partition**.

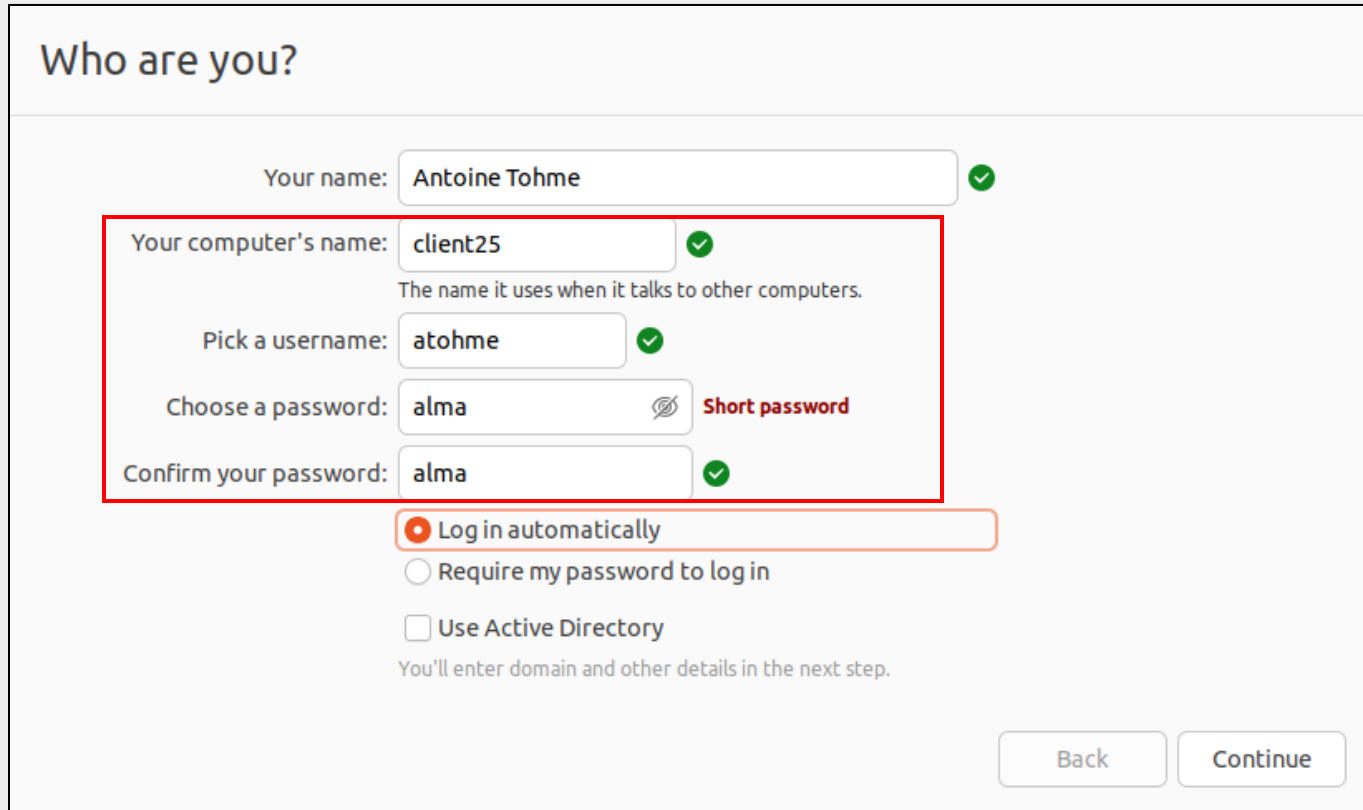


10. Create partitions to get the following result: **(Remember to click on free space each time before creating a new partition).**



11. Once complete, click **Install Now** and then **Continue**.
12. On the **Where are you page?** Type **Montreal** and select **Montreal, Quebec**, then click **Continue**.

13. On the next page, use the same **username/password** you created on AlmaLinux, **clientXX (XX is your remote computer number)**, enter the rest of the information and click **Continue**.



Who are you?

Your name: ✓

Your computer's name: ✓
The name it uses when it talks to other computers.

Pick a username: ✓

Choose a password: ✖ Short password

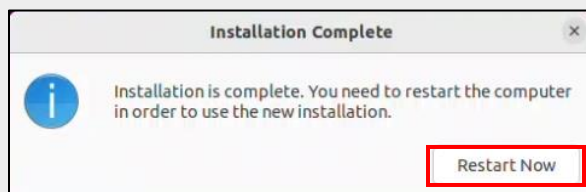
Confirm your password: ✓

☒ Log in automatically
☐ Require my password to log in
☐ Use Active Directory
You'll enter domain and other details in the next step.

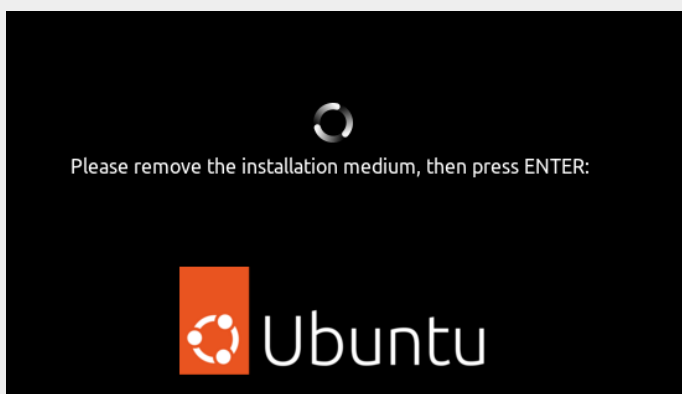
Back Continue

14. The installation will start.

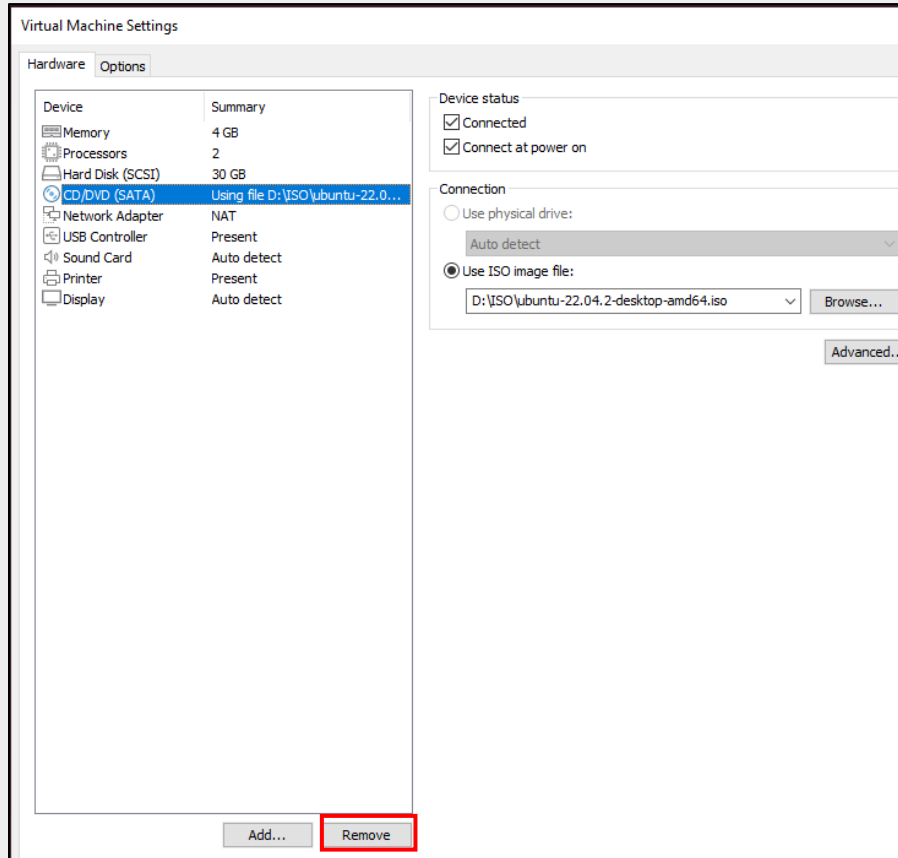
15. At the end of the installation, click **Restart Now**.



16. A message will appear asking you to remove the CD/DVD from the installation.

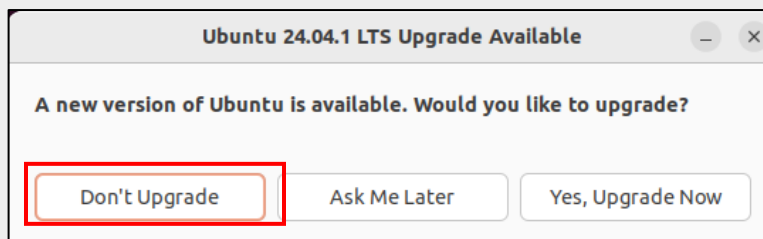


17. Open the **VM Settings** and remove the **CD/DVD (SATA)**, then click **OK**.

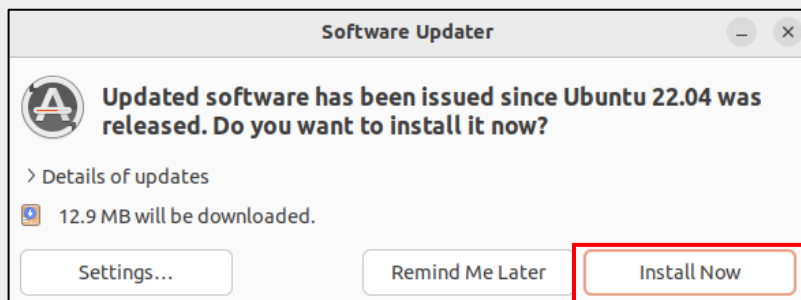


18. Then, click using the mouse into the VM window. Click on **Enter** to start the machine.

19. Once started, **wait for a minute** a message will appear to upgrade the version of Ubuntu, click on **Don't Upgrade**.



20. Another message will appear to upgrade the software, click **Install Now**, to install those updates.



21. Once the update installation is complete, click **Restart Now.**
22. Once connected, open a **Shell terminal** and run the following commands, to uninstall the **snapd** application. We don't need for this course:

```
sudo snap remove --purge firefox
sudo snap remove --purge snap-store
sudo snap remove --purge gnome-3-38-2004
sudo snap remove --purge gnome-42-2204
sudo snap remove --purge gtk-common-themes
sudo snap remove --purge snapd-desktop-integration
sudo snap remove --purge bare
sudo snap remove --purge core20
sudo snap remove --purge core22
sudo apt purge -y squashfs-tools
```

```
atohme@client25:~$ sudo snap remove --purge firefox
Command 'udo' not found, but can be installed with:
sudo apt install udo
atohme@client25:~$ sudo snap remove --purge firefox
[sudo] password for atohme:
firefox removed
atohme@client25:~$ sudo snap remove --purge snap-store
snap-store removed
atohme@client25:~$ sudo snap remove --purge gnome-3-38-2004
gnome-3-38-2004 removed
atohme@client25:~$ sudo snap remove --purge gnome-42-2204
gnome-42-2204 removed
atohme@client25:~$ sudo snap remove --purge gtk-common-themes
gtk-common-themes removed
atohme@client25:~$ sudo snap remove --purge snapd-desktop-integration
snapd-desktop-integration removed
atohme@client25:~$ sudo snap remove --purge bare
bare removed
atohme@client25:~$ sudo snap remove --purge core20
core20 removed
atohme@client25:~$ sudo snap remove --purge core22
core22 removed
atohme@client25:~$ sudo apt purge -y squashfs-tools
Reading package lists... Done
```

23. Install **Google Chrome** by running these two commands:

```
wget https://dl.google.com/linux/direct/google-chrome-stable_current_amd64.deb
```

```
sudo apt -f install ./google-chrome-stable_current_amd64.deb
```

```
atohme@client25:~$ wget https://dl.google.com/linux/direct/google-chrome-stable_current_amd64.deb
--2025-03-10 11:12:25-- https://dl.google.com/linux/direct/google-chrome-stable_current_amd64.deb
Resolving dl.google.com (dl.google.com)... 142.251.41.78, 2607:f8b0:400b:807::200e
```

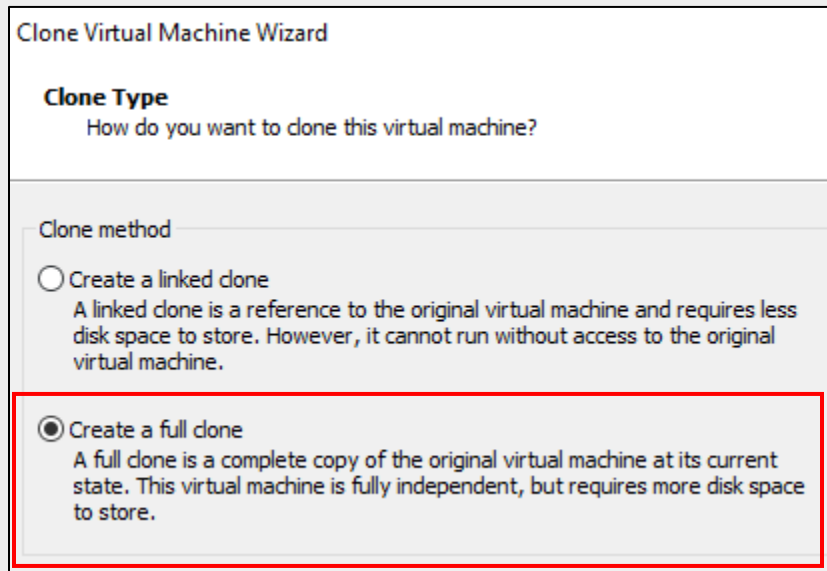
```
atohme@client25:~$ sudo apt -f install ./google-chrome-stable_current_amd64.deb
Reading package lists... Done
```

Validation:

Finally, run the **lsblk -f** command to list the partitions, the file system, their mount point, and their size.

Take a screenshot of this command and place it in the Lab 1 Word document.

24. Shut down the **Ubuntu VM** and make a **complete clone of the VM**.



25. Take also a **Snapshot** of the VM.

