

Welcome to the virtual machine installation guide to do the ROS2 tutorials

(Note: if you can't read the images, just zoom in the doc)

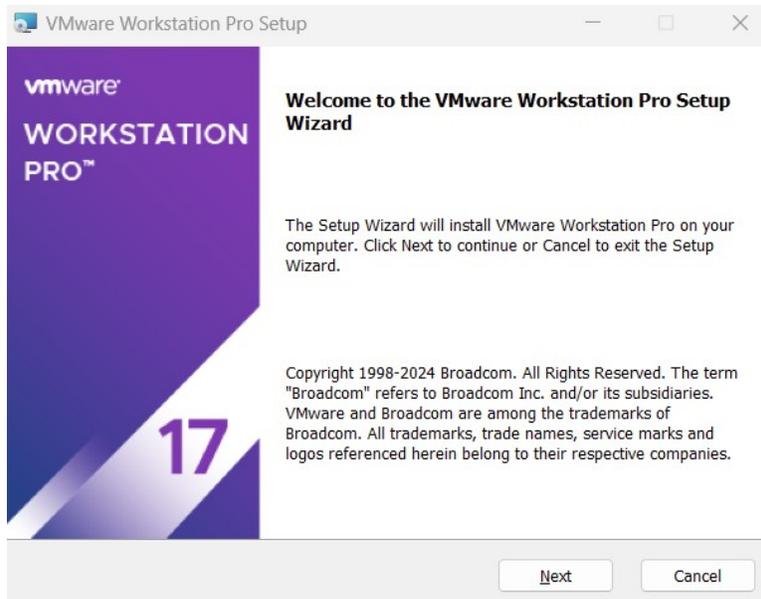
The virtual machine installation will get Ubuntu running on your computer.

The virtual machine (VMware) allows you to run Linux on your Windows computer without having to delete the operating system.

The VMware Workstation Pro 17 is the Virtual Machine workspace. The windows exe file for VMware is in the google drive link here:[ROS2 VMware + Ubuntu](#)

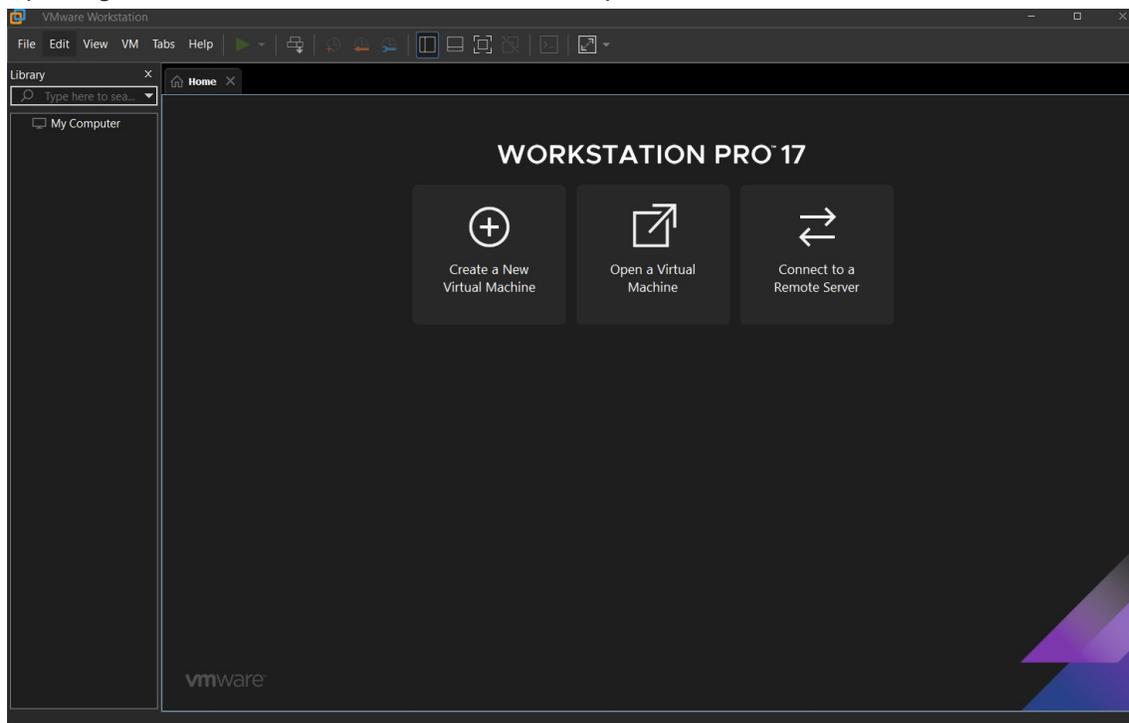
Make sure to use it for personal use when installing/if prompted.

The set up manager should open like this:



The set wizard is straightforward and requires no specific changes. (The only thing I'd suggest is to toggle off VMware updating on startup and only when you open the workstation.)

Opening the Workstation for the first time will open like this:



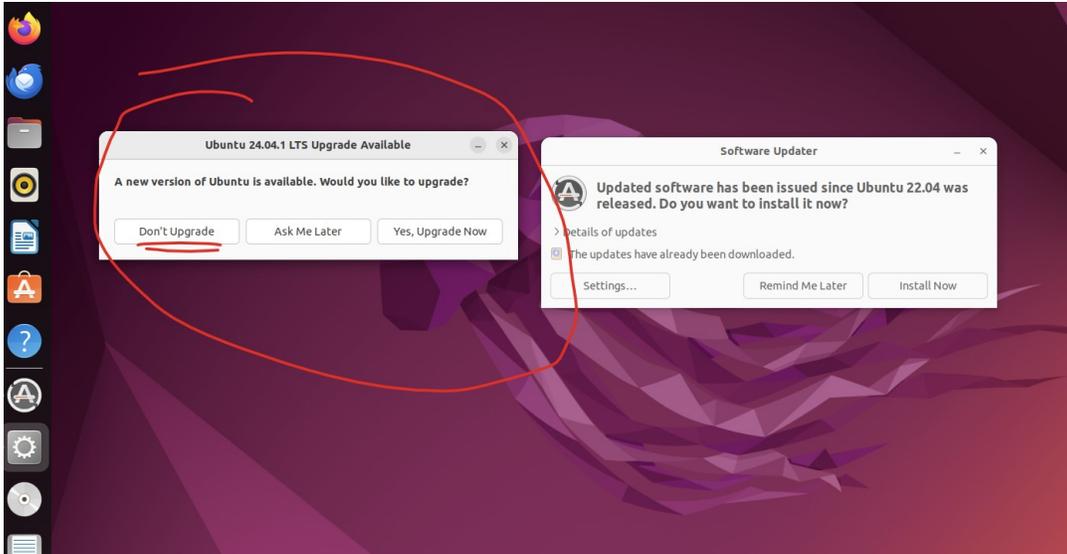
Now we will go quickly to download the disk file for Ubuntu.

For Ubuntu, we use Ubuntu version 22.04.5 (Desktop image): [Ubuntu 22.04.5 LTS \(Jammy Jellyfish\)](#)

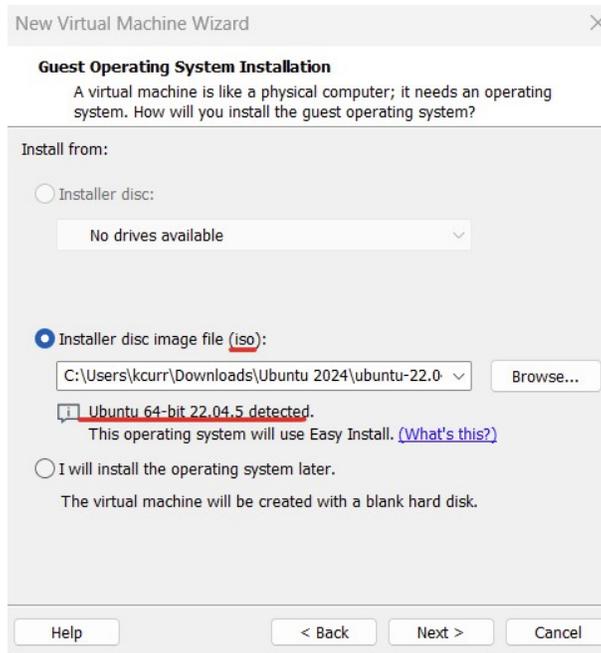
“64-bit PC (AMD64) desktop image”

The file should be called “ubuntu-22.04.5-desktop-amd64.iso” and will be in your downloads. I would move the file into a special file somewhere on your computer where you know the path directory (for me its: C:\Users\kcurr\Downloads\Ubuntu 2024\ubuntu-22.04.5-desktop-amd64.iso)

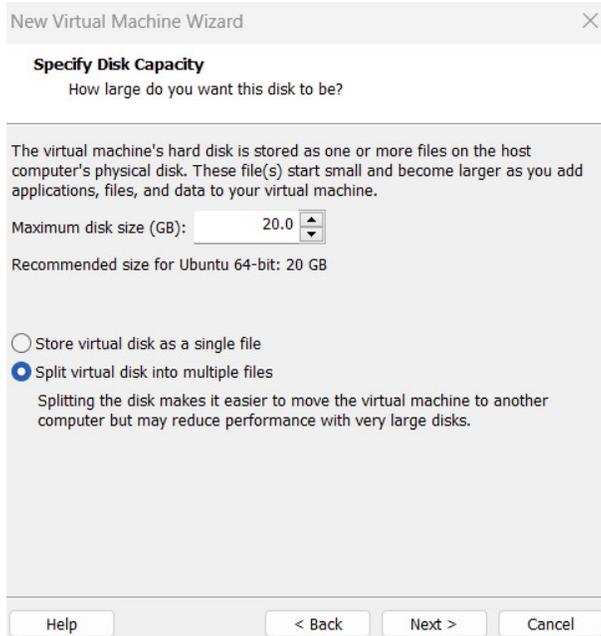
Note: Whenever you are prompted to update Ubuntu, DO NOT, you want to keep it on Ubuntu 22.04.5 to work on ROS2 Humble. It will look something like this later when it prompts you:



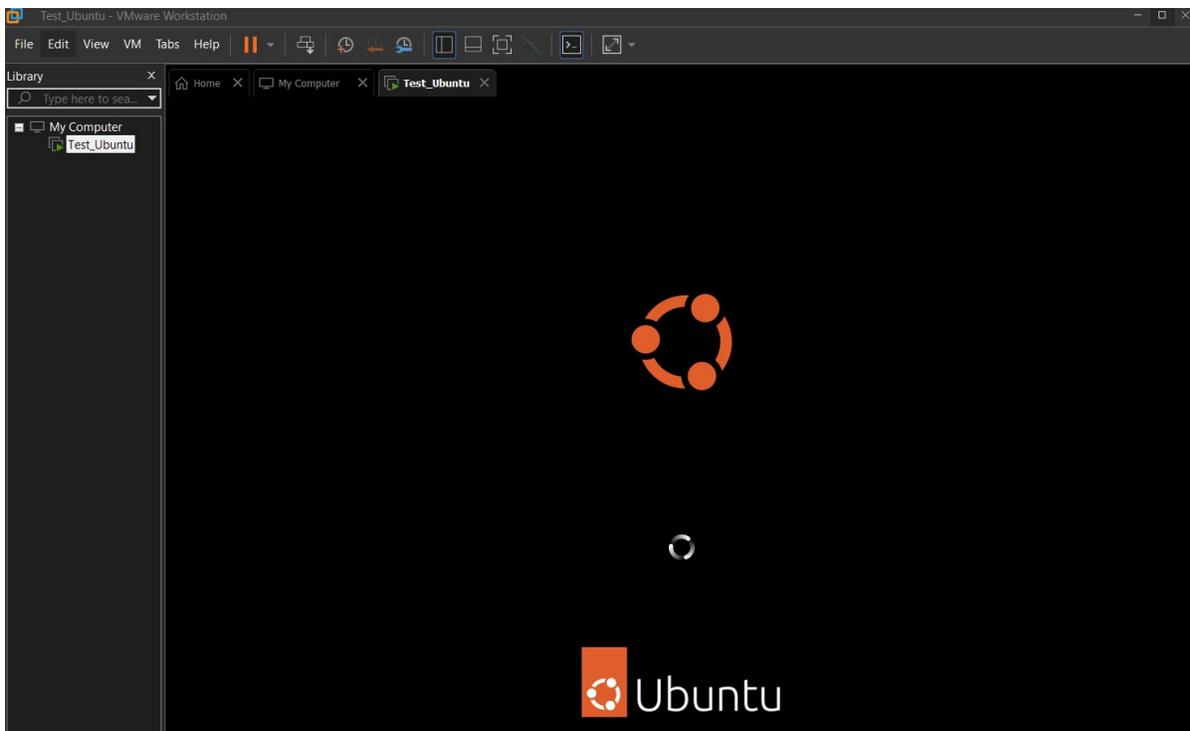
Create a new Virtual Machine and then give the path to the Ubuntu disk image file.



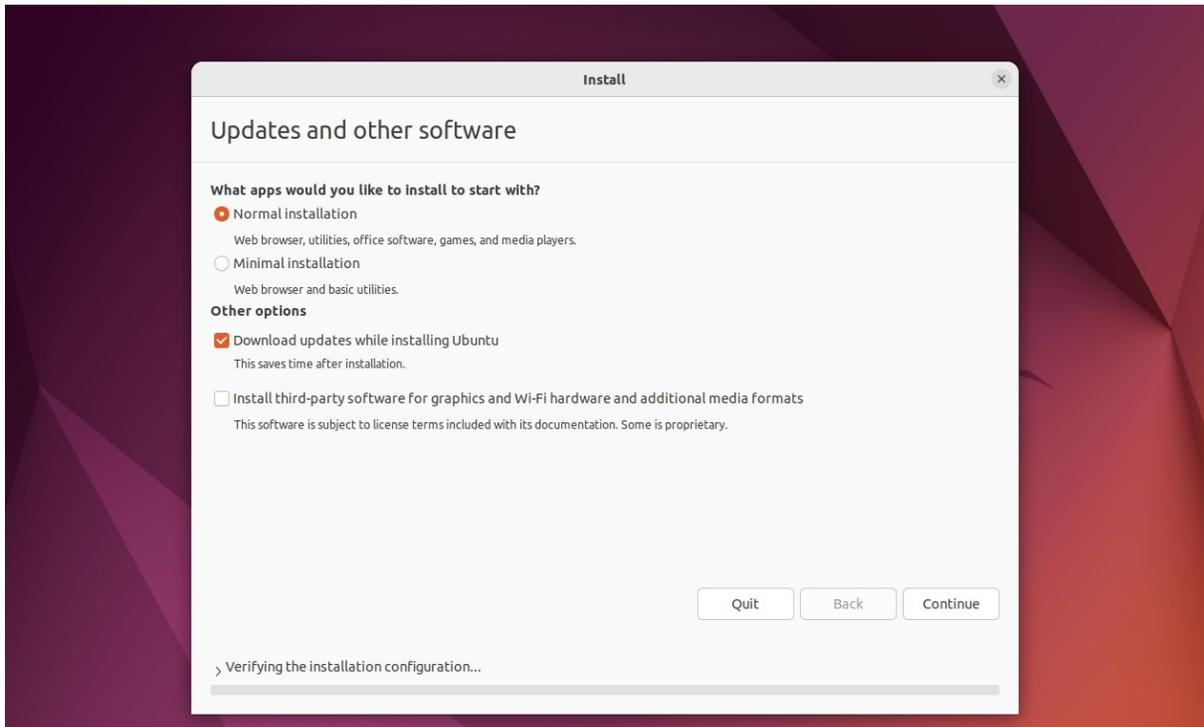
From here, fill in your name, username and password for the virtual machine. It will then prompt you how large you want the disk space to be and leave as standard: (for ROS2 tutorials standard will work, any additional work/simulations may require larger disk size allocation)



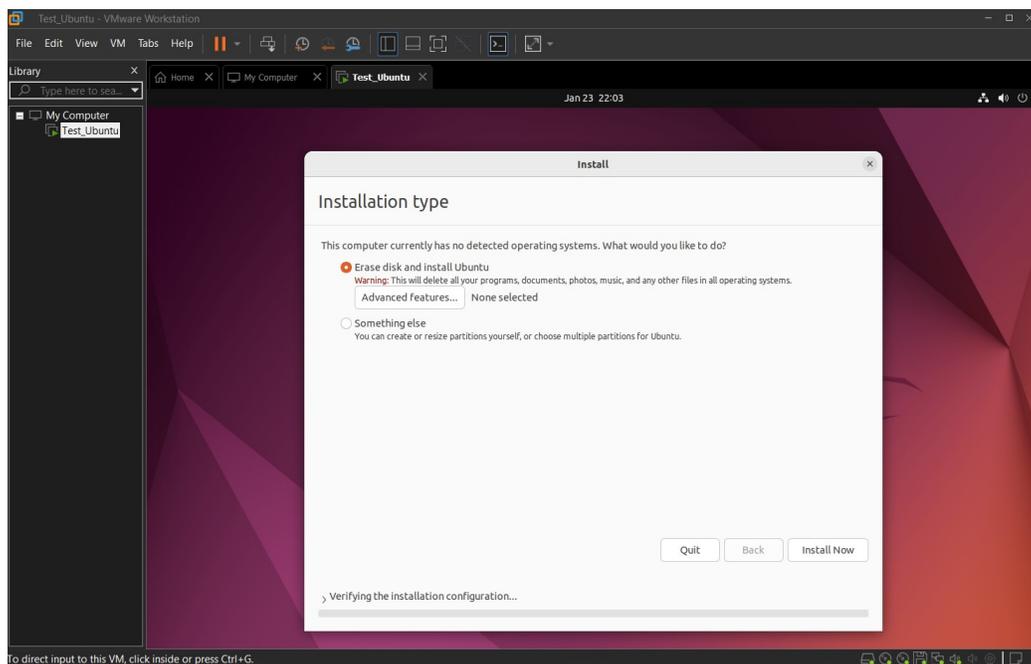
From here, the virtual machine should boot up and then the Ubuntu installation will happen. If everything is working with the virtual machine, it should load in like this:



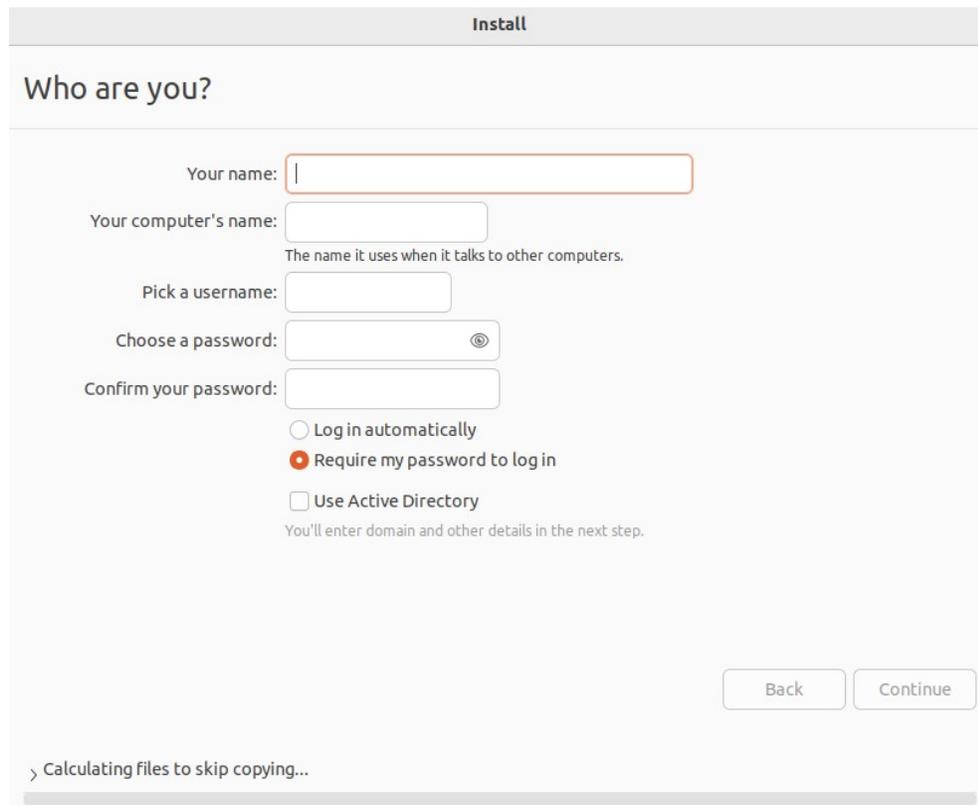
Next we will go over the Ubuntu installation. The installation should use standard setting if you are planning to do ROS2 tutorials and to learn ROS2.



Ok, the next part is important. Ubuntu will then prompt you to erase your entire disk. Because we are using a virtual machine and already allocated the free hard drive disk space on the virtual machine, this is ok. Make sure that you have followed all the steps to this point and have Ubuntu opened on your VMware Workstation like this:



Ok from here start the installation, and proceed to the next steps. You will be prompted to give your name, computer name, and username and password for logging into Ubuntu. I would keep the computer name brief and easy to remember because you will be using that inside the terminal when working in Linux and ROS2 (Say your name is Bob Murray, so the computer name can be something like bmurr). Next is the username and password you use to log into Ubuntu when the virtual machine is turned on or when inactive. Make it easy to remember (like your UF login or something)



The screenshot shows the 'Install' window for Ubuntu. The title bar says 'Install'. Below the title bar, the heading 'Who are you?' is displayed. The form contains the following fields and options:

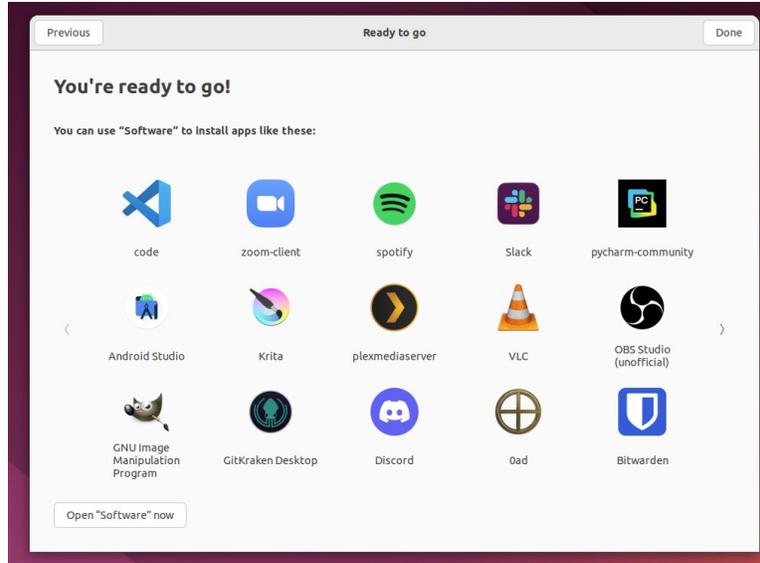
- Your name:** A text input field with a cursor.
- Your computer's name:** A text input field. Below it, the text reads: 'The name it uses when it talks to other computers.'
- Pick a username:** A text input field.
- Choose a password:** A text input field with a visibility icon (an eye) to the right.
- Confirm your password:** A text input field.
- Log in options:**
 - Log in automatically
 - Require my password to log in
 - Use Active Directory

Below the 'Use Active Directory' option, there is a note: 'You'll enter domain and other details in the next step.'

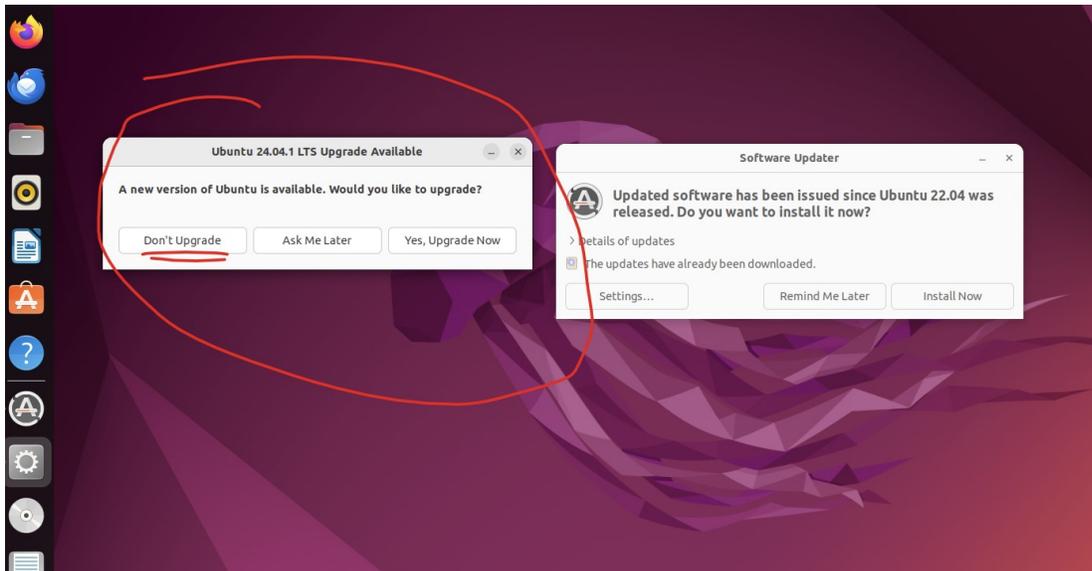
At the bottom right, there are two buttons: 'Back' and 'Continue'.

At the bottom left, there is a status indicator: 'Calculating files to skip copying...' with a right-pointing arrow.

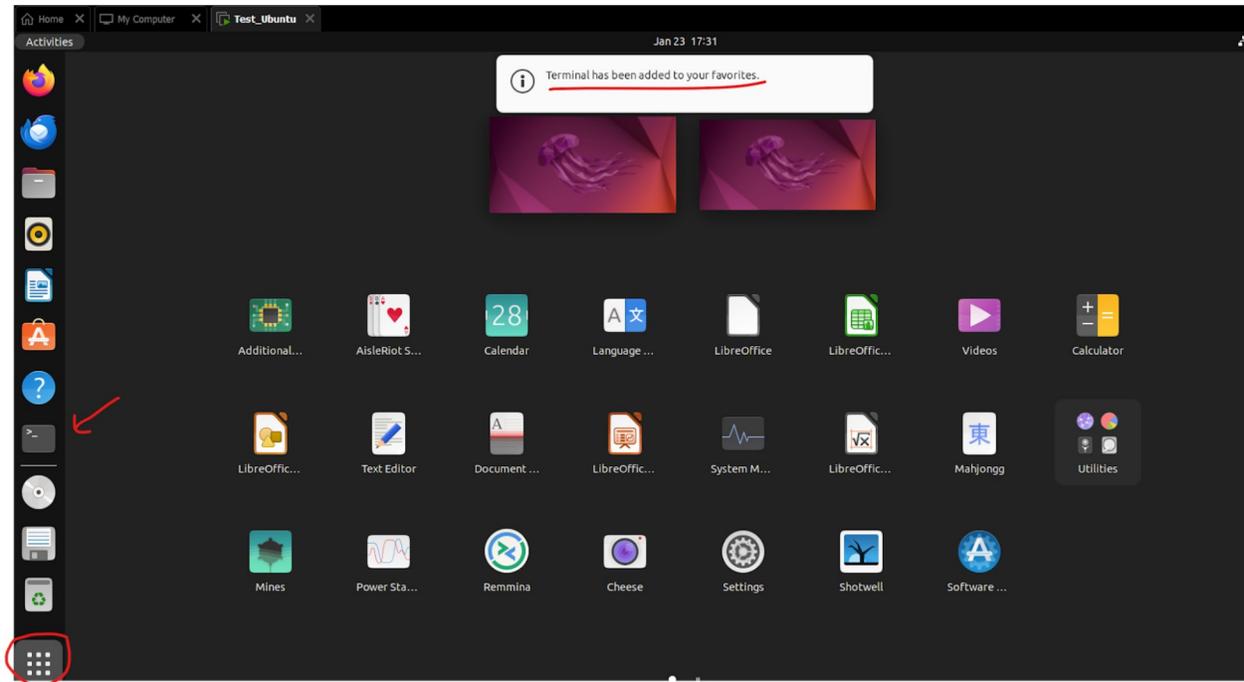
Keep the installation going and it will restart your virtual machine. It will then ask you to log in with the username and password you set. Continue the installation process and you should get this when you are done:



Note: This is the point where it will prompt you to update Ubuntu. When you are prompted to update Ubuntu, **DO NOT, you want to keep it on Ubuntu 22.04.5 to work on ROS2 Humble. It will look something like this when it prompts you:**



From here Ubuntu is fully installed and you can start the ROS2 Tutorials. I'd suggest favoriting the terminal so its on the taskbar (click the "Show Applications" button on taskbar and favorite the terminal)



You can then boot up the terminal and download ROS2 (following the ROS2 installation and tutorials here: <https://docs.ros.org/en/humble/index.html>)

Here's a video on how to work through the installation:

 Easily and Correctly Install ROS2 Jazzy (Newest ROS2) in Linux Ubuntu and Run Hello ...
(this video uses Jazzy, but the steps should be identical for Humble)

From here, the ROS2 Tutorials can be found here: <https://docs.ros.org/en/humble/Tutorials.html>
