

Operating System Installation Project Bahir Dar University - Bahir Dar Institute of Technology

Faculty of Computing : Department of
Information System
3rd Year Students - 2018 E.C.



UBUNTU 22.04 LTS OS INSTALLATION

a. Introduction

Ubuntu is a free and open-source Linux distribution widely used for personal computing, development, and server environments. This project demonstrates the installation of Ubuntu 22.04 LTS in a virtual environment using Oracle VM VirtualBox. The motivation is to gain hands-on experience with operating system setup, virtualization, and system configuration.

b. Objectives

- To understand the process of installing an operating system in a virtual environment.
- To explore Ubuntu's features and filesystem support.
- To identify and resolve installation issues.
- To document the installation process with visual evidence.



c. Requirements

i. Hardware

- Host Machine: Intel/AMD processor
- RAM: Minimum 4 GB
- Storage: Minimum 25 GB free disk space

ii. Software

- Oracle VM VirtualBox
- Ubuntu 22.04 LTS ISO file
- Web browser (for downloading ISO)



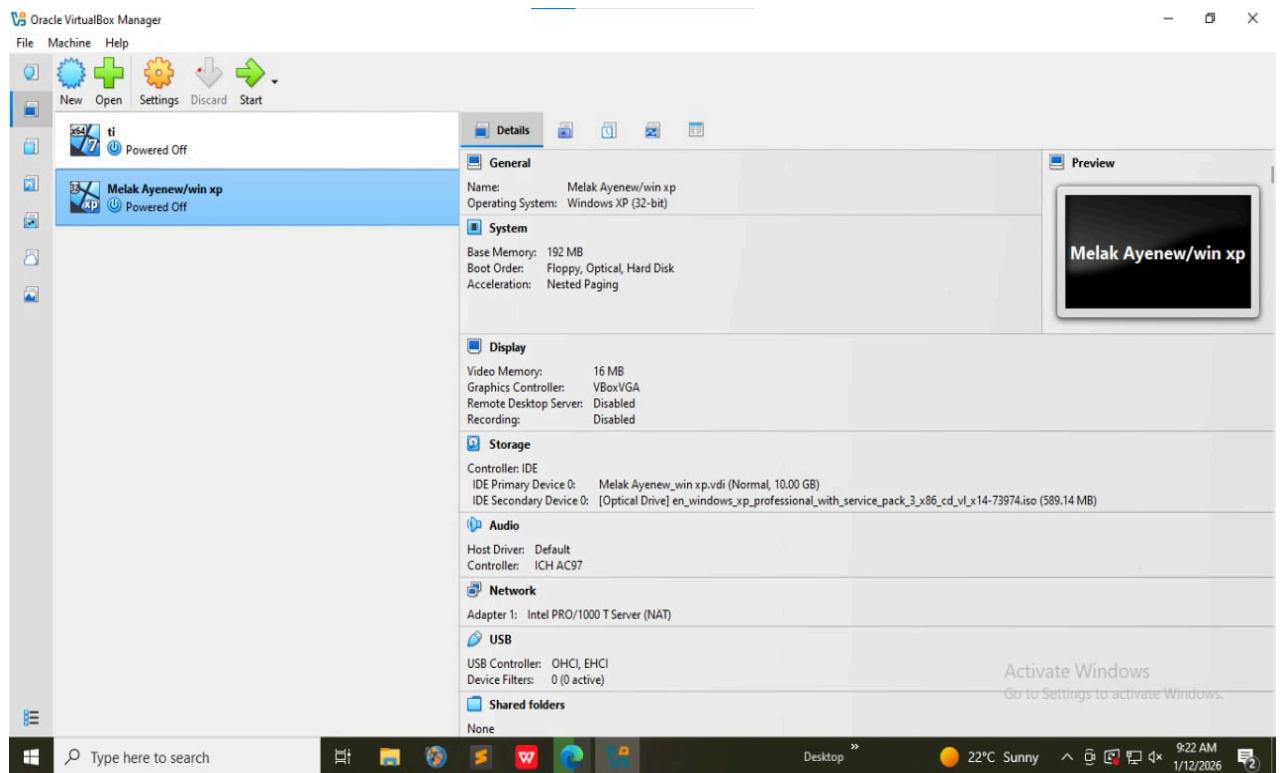
d. Installation Steps

i. Downloading the ISO File

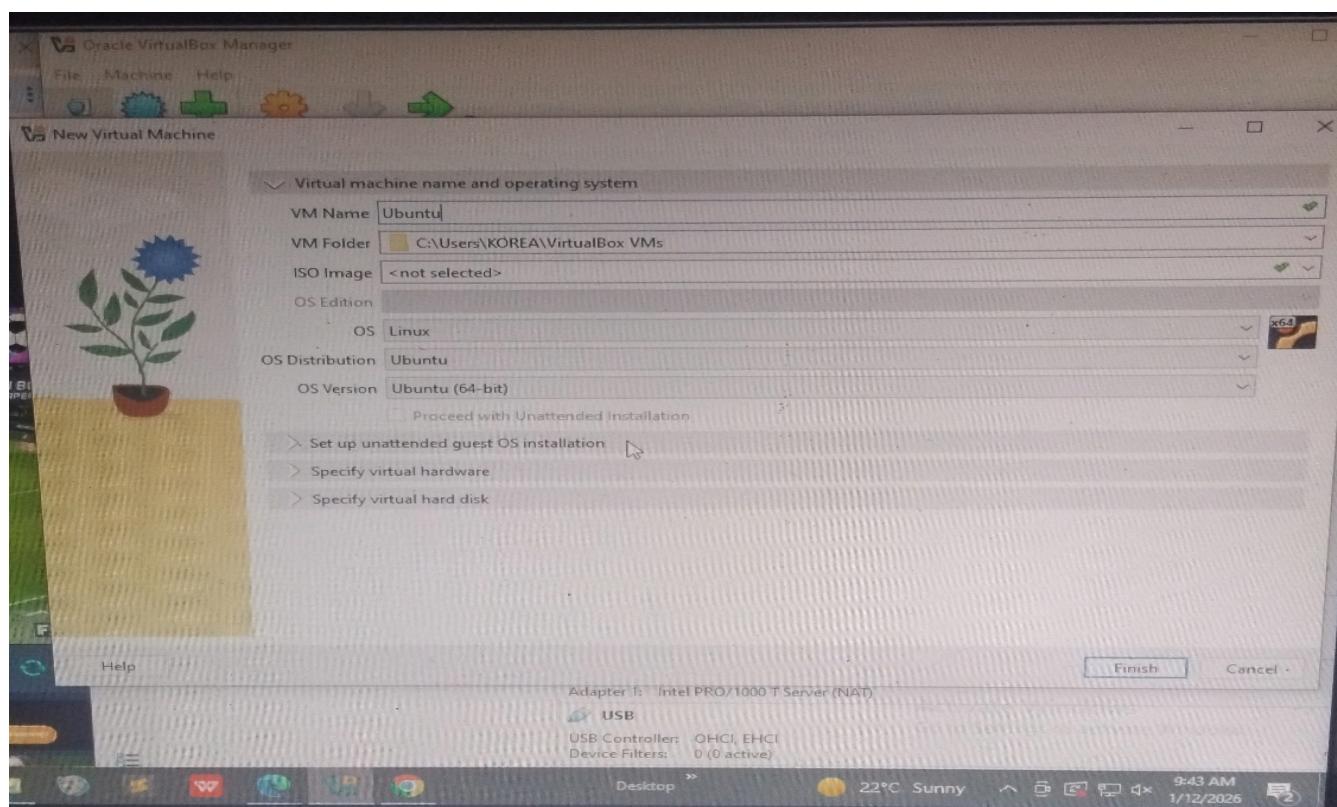
1. Open a web browser.
2. Visit ubuntu.com/download.
3. Select Ubuntu Desktop 22.04 LTS.
4. Click Download and save the ISO file.

ii. Setting Up VirtualBox

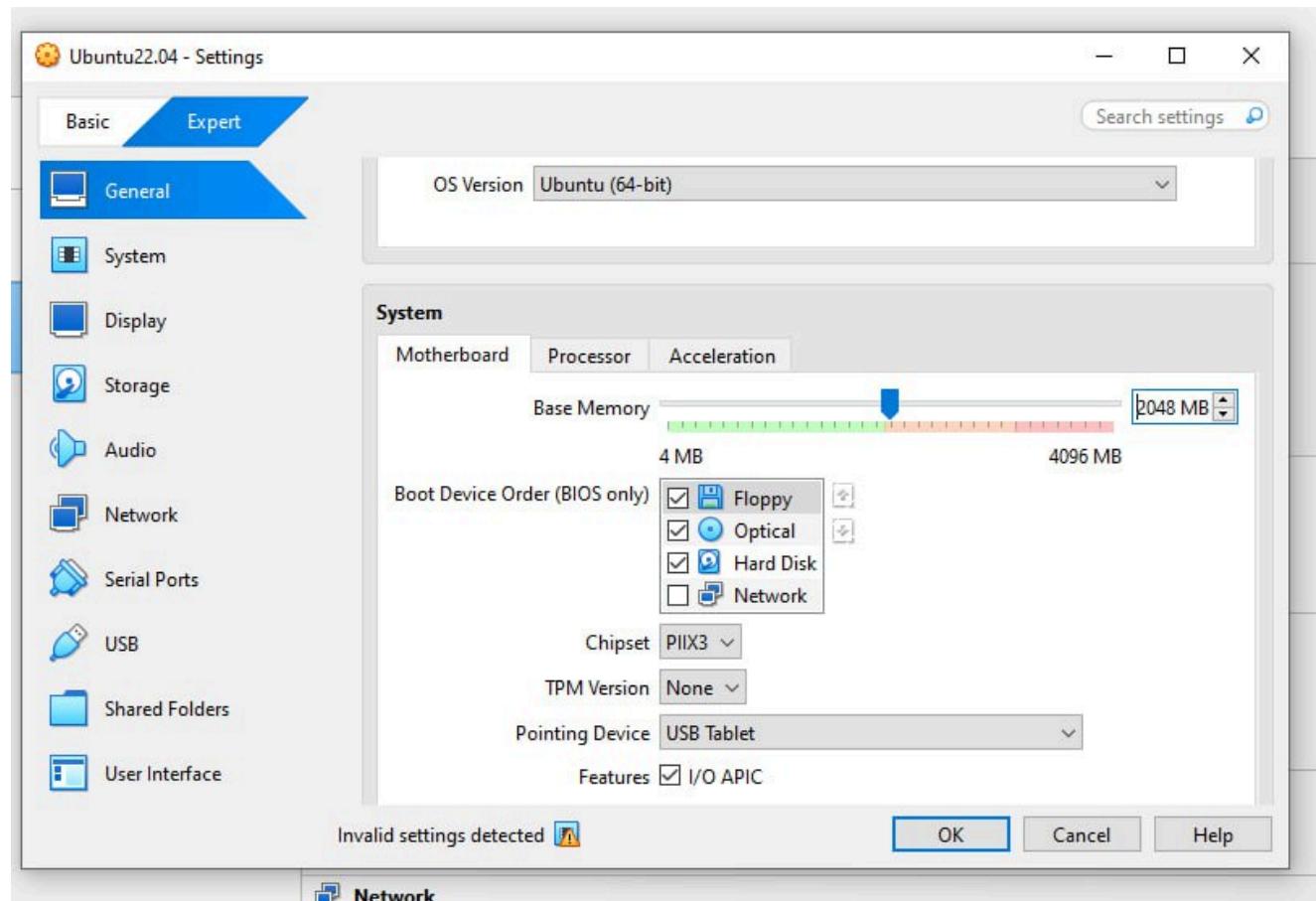
1. Open Oracle VM VirtualBox.

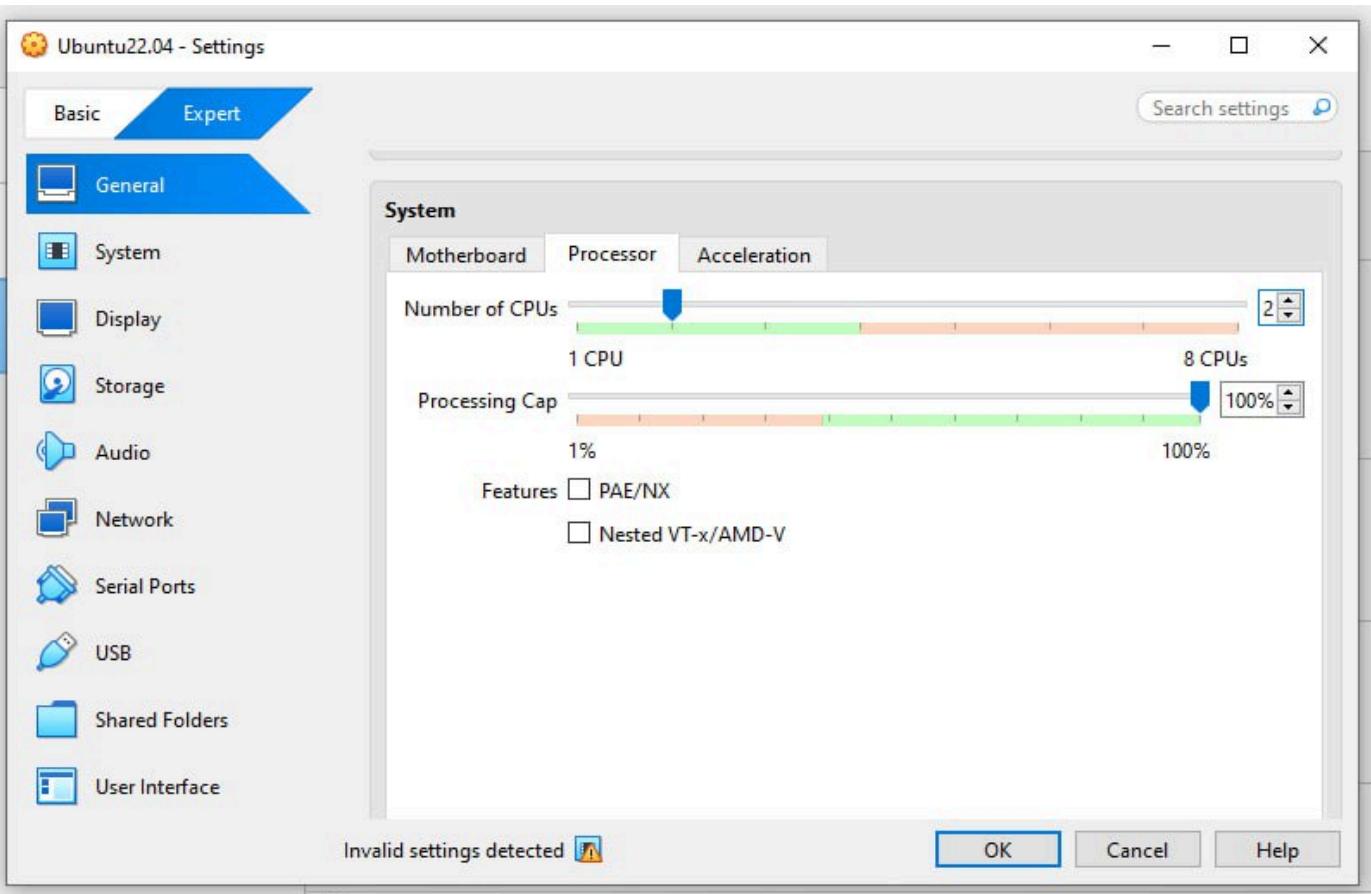


2. Click New → Name: Ubuntu22.04 → Type: Linux
→ Version: Ubuntu (64-bit).



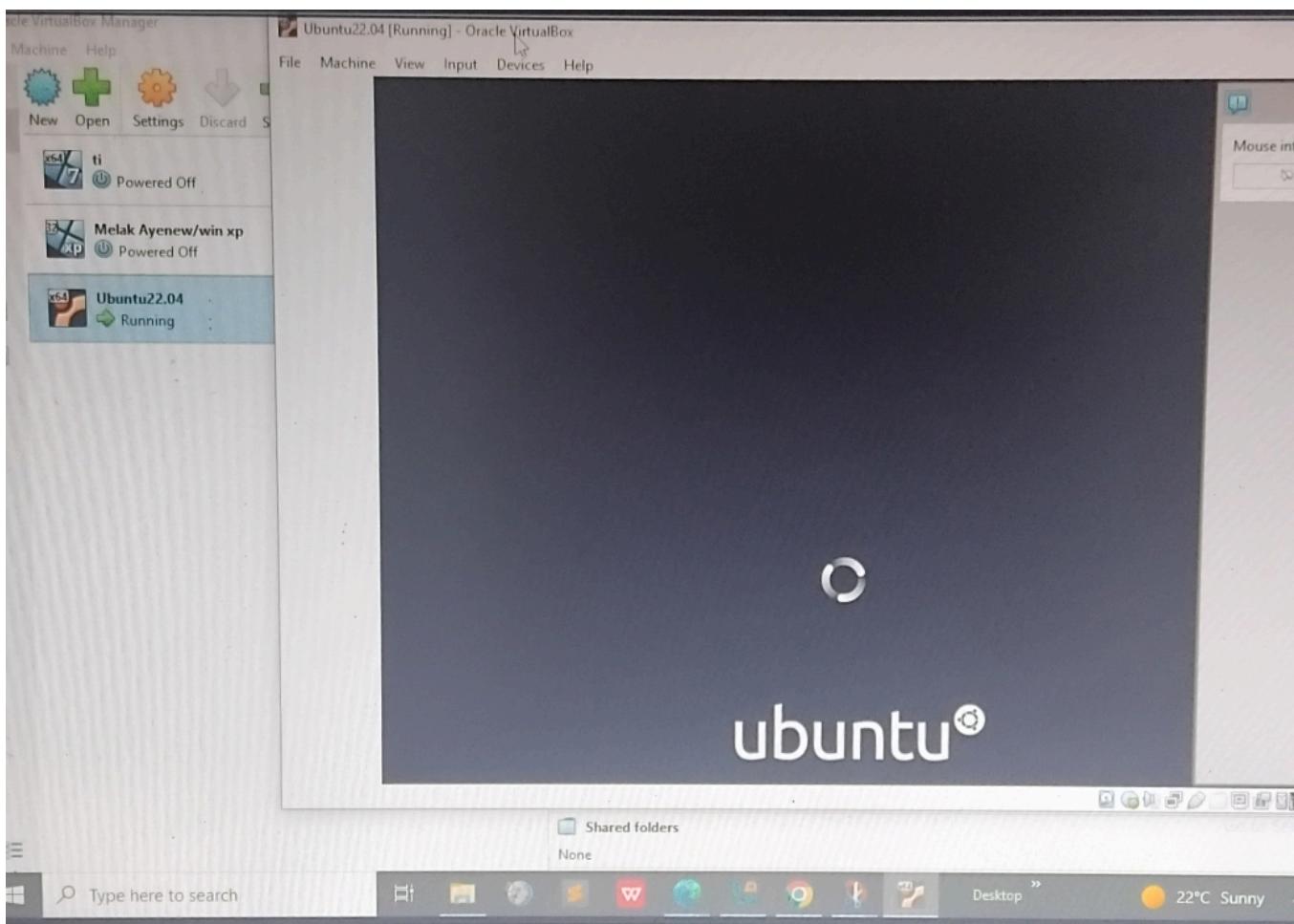
3. Allocate RAM (e.g., 2048MB) and create a virtual hard disk (e.g., 25 GB).



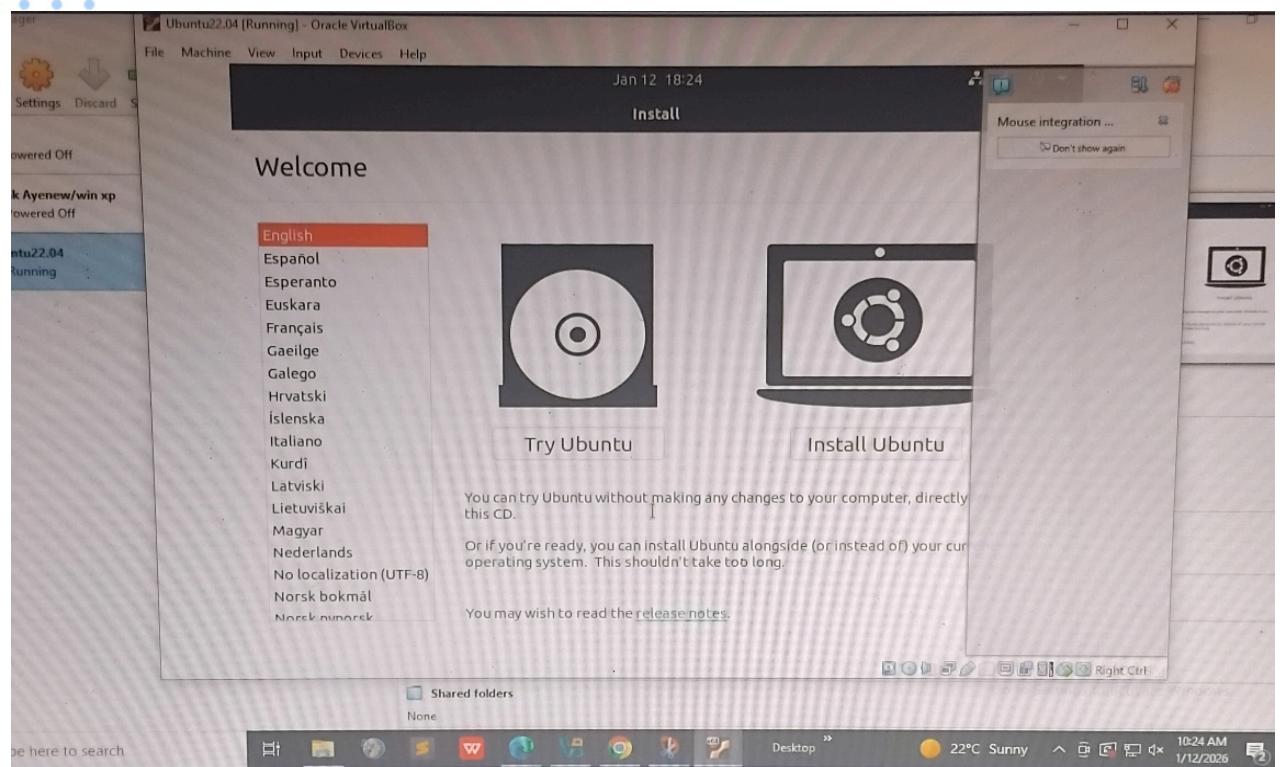


iii. Starting Installation

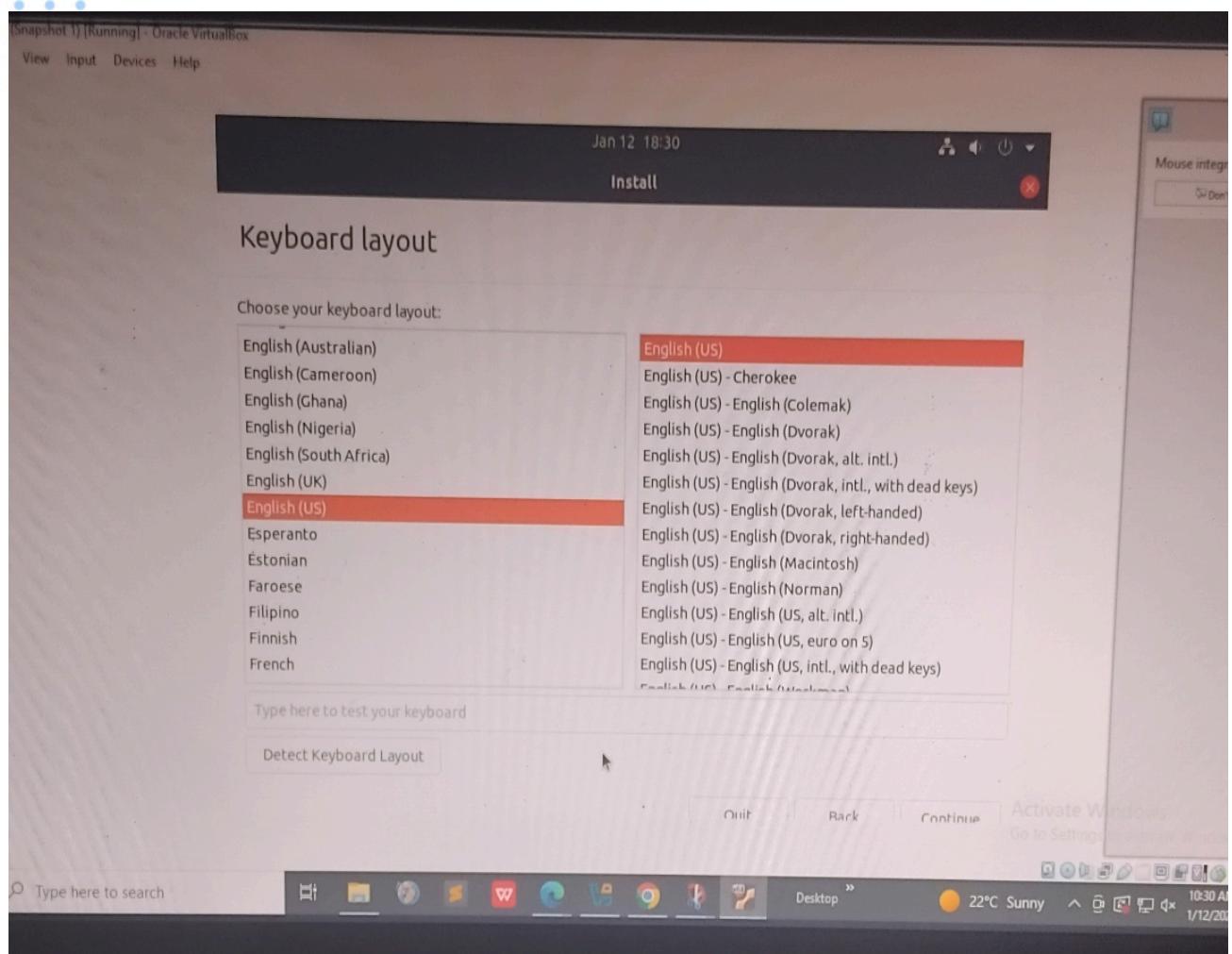
1. Start the VM → Ubuntu boots from ISO.



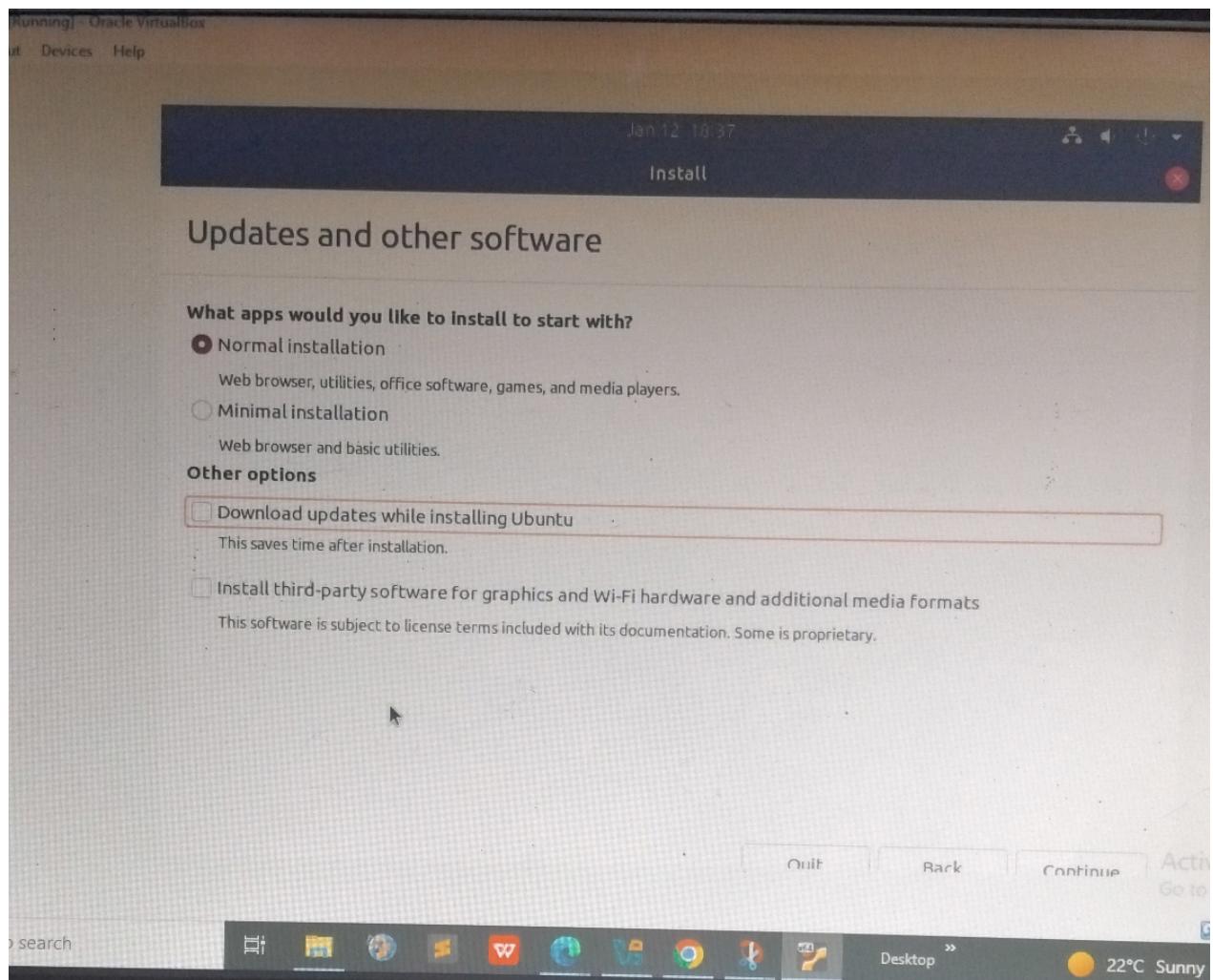
2. Select language → Click Install Ubuntu.



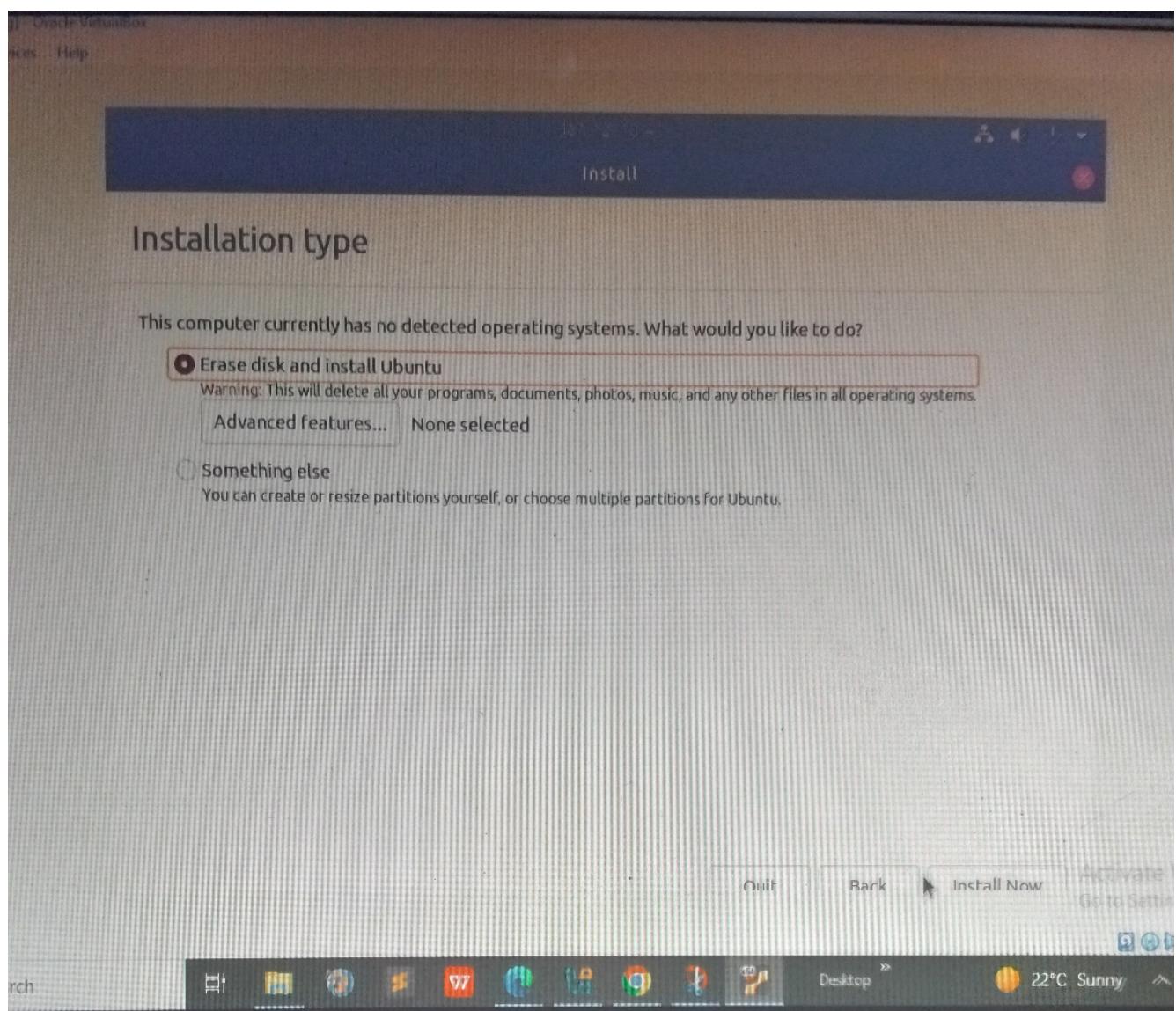
3. Choose keyboard layout → Click Continue.

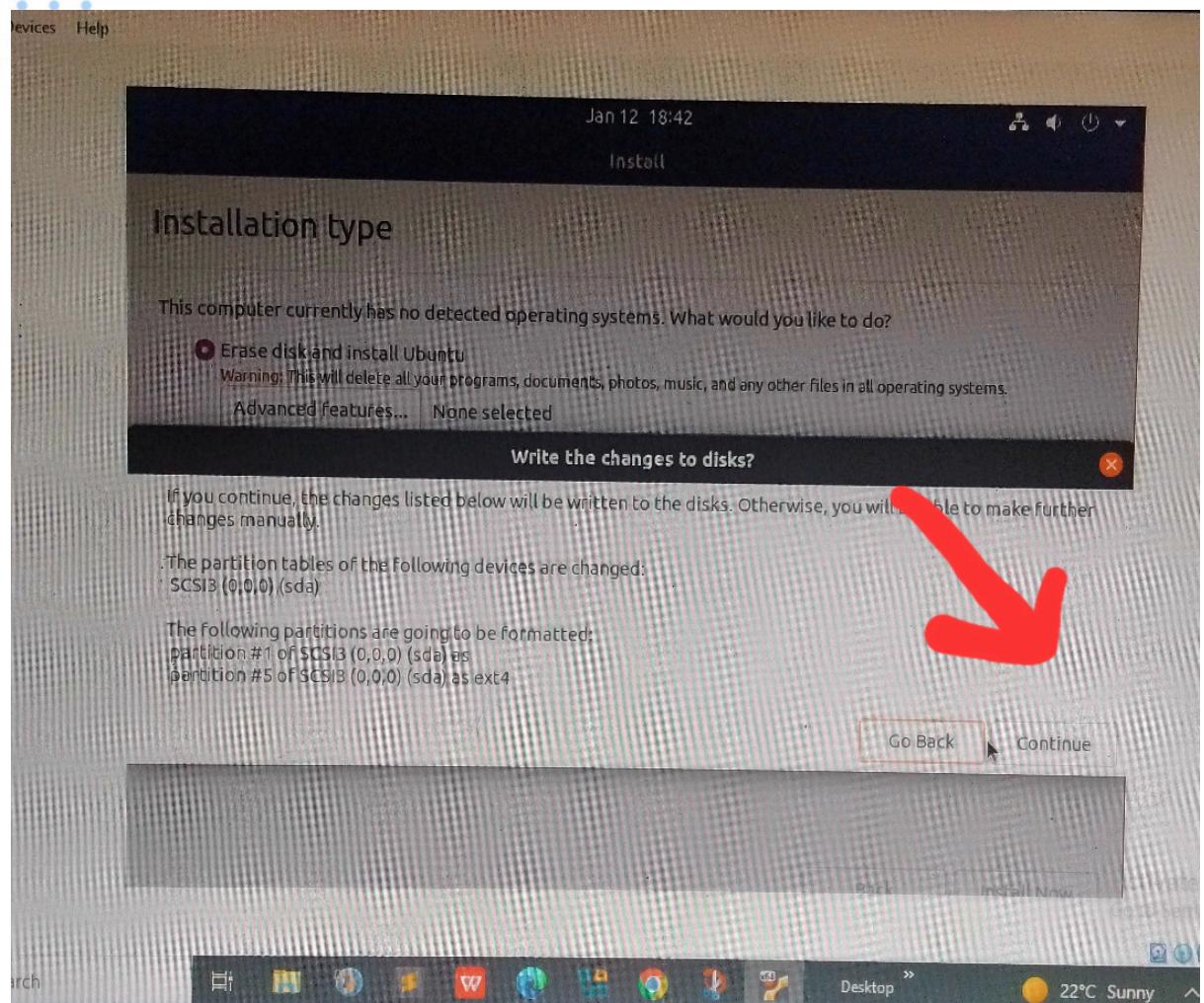


4. Select Normal installation → Uncheck update options → Click Continue.

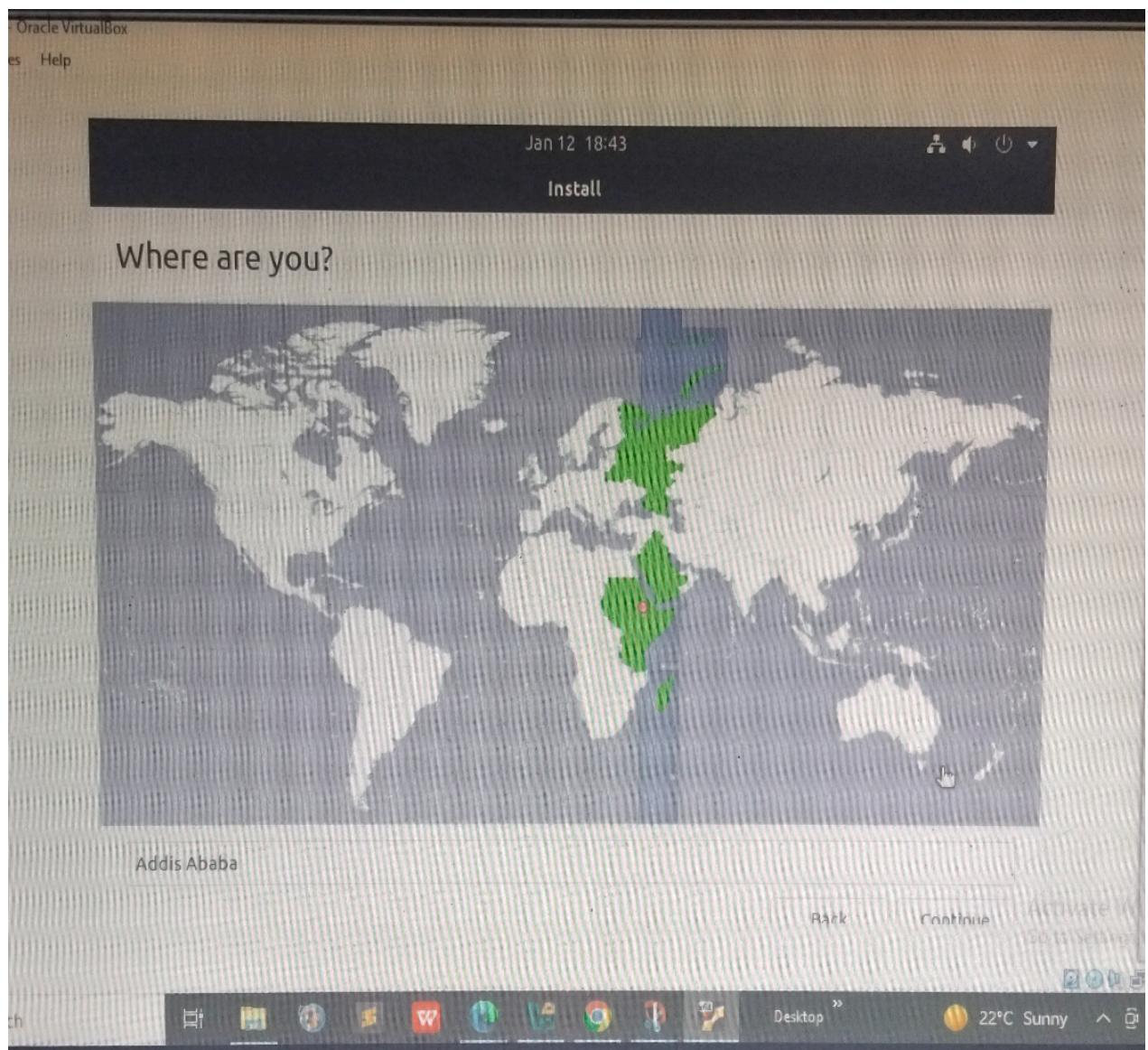


5. Choose Erase disk and install Ubuntu → Confirm changes.

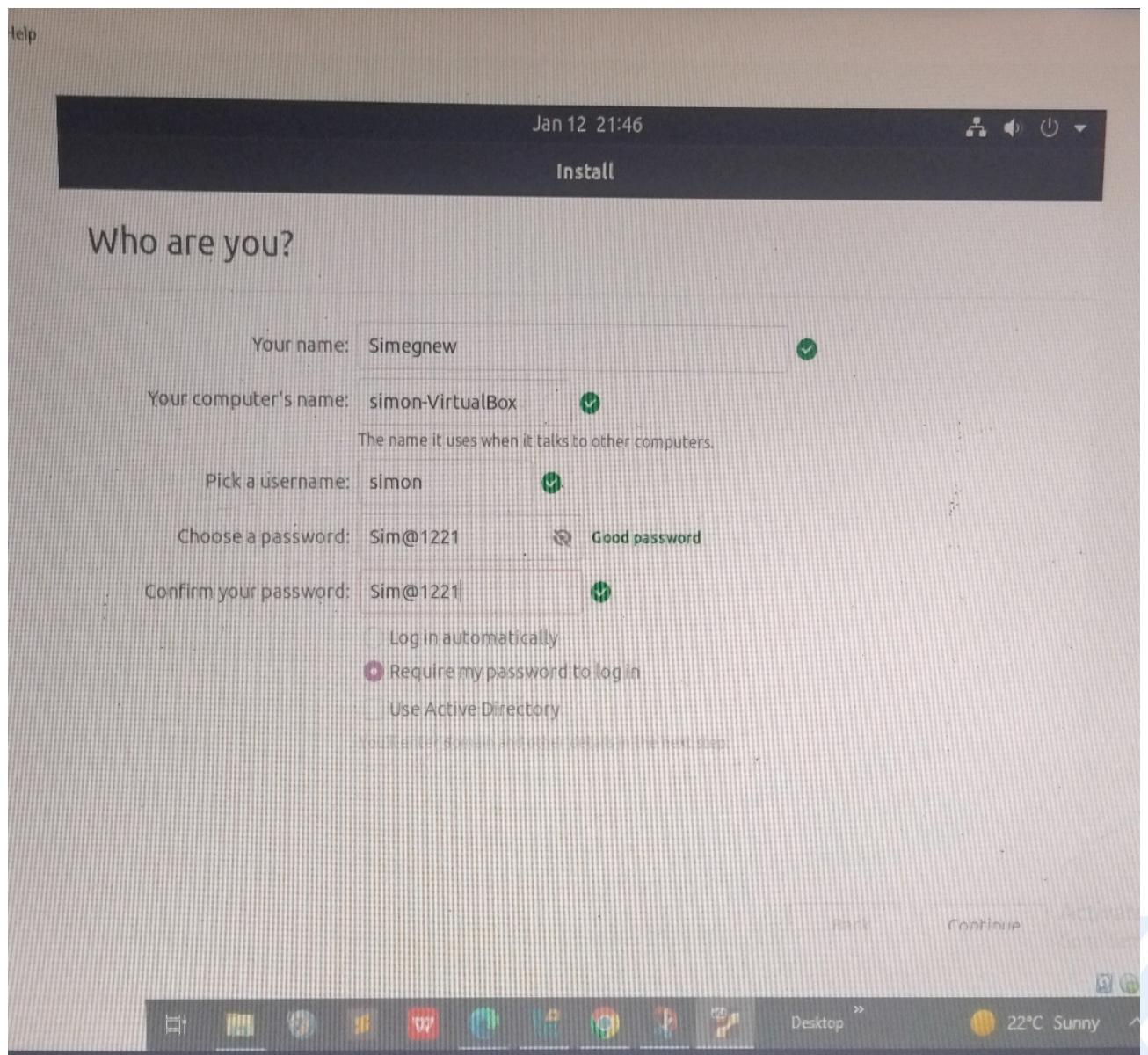




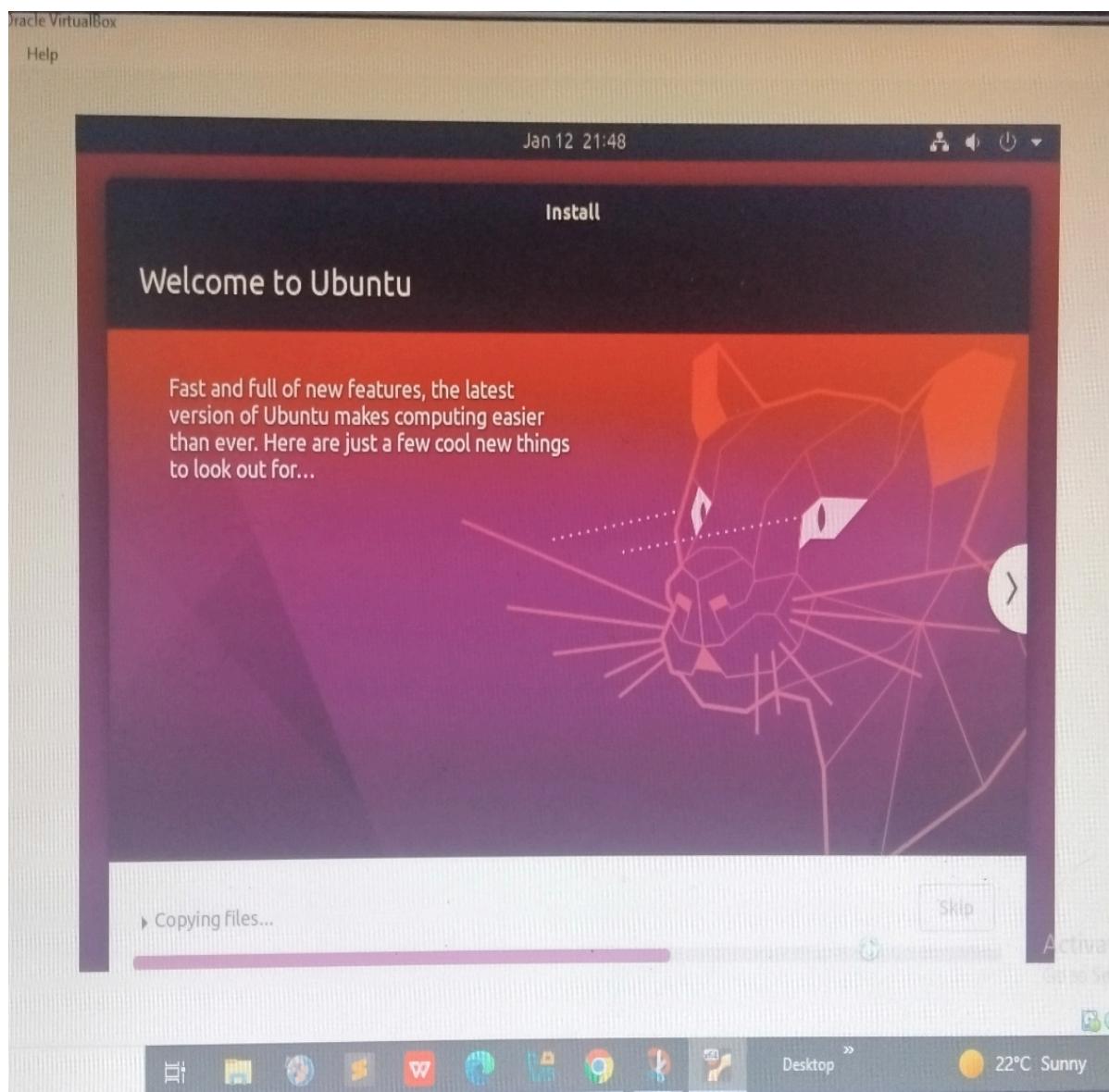
6. Select time zone (e.g., Addis Ababa) → Click Continue.



7. Enter full name, computer name, username, and password → Click Continue.



8. Wait for installation to complete → Click
Restart Later.



VirtualBox

Help

Jan 12 22:26



Installation Complete



Installation is complete. You need to restart the computer in order to use the new installation.

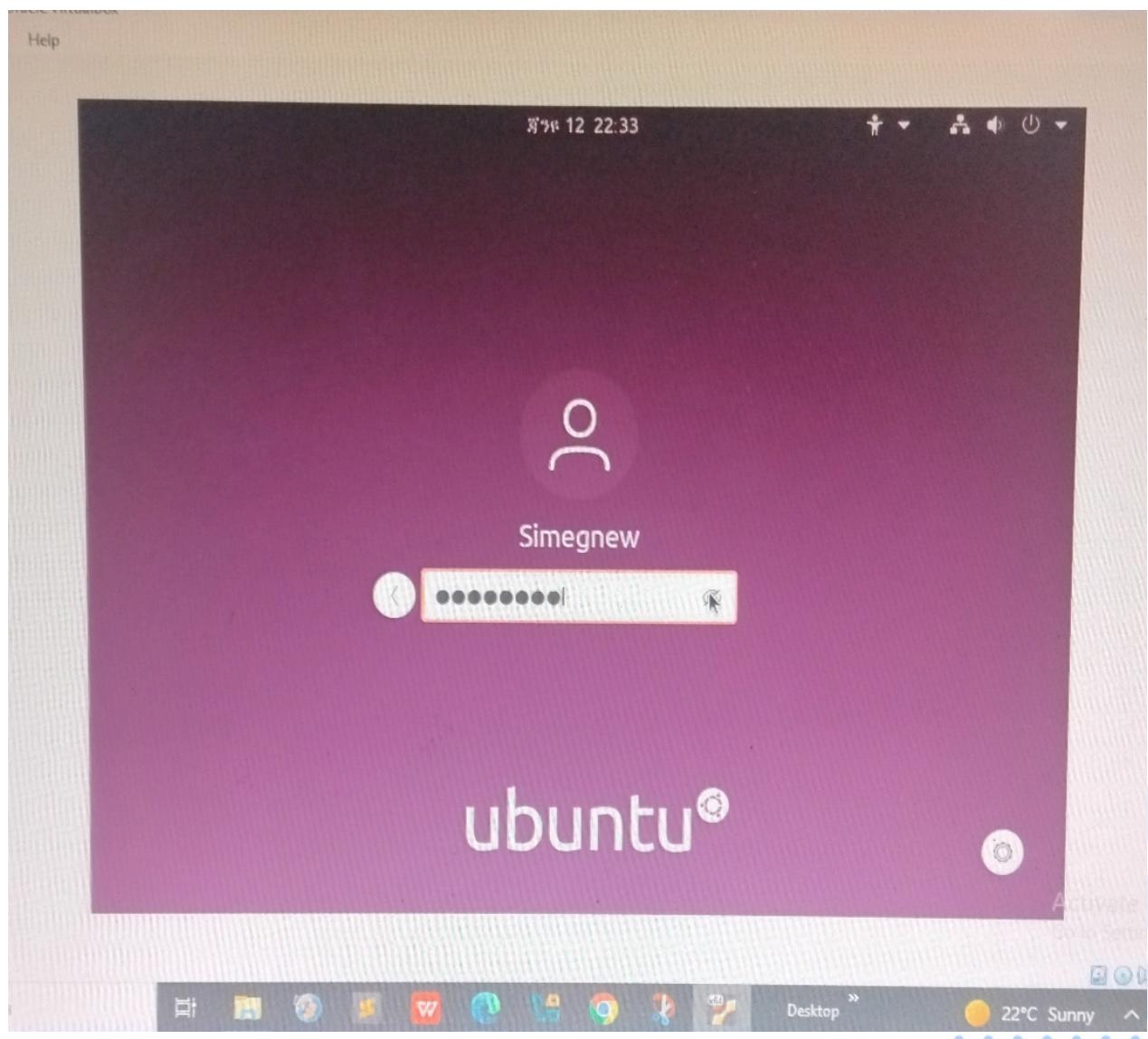
[Restart Now](#)

Activate

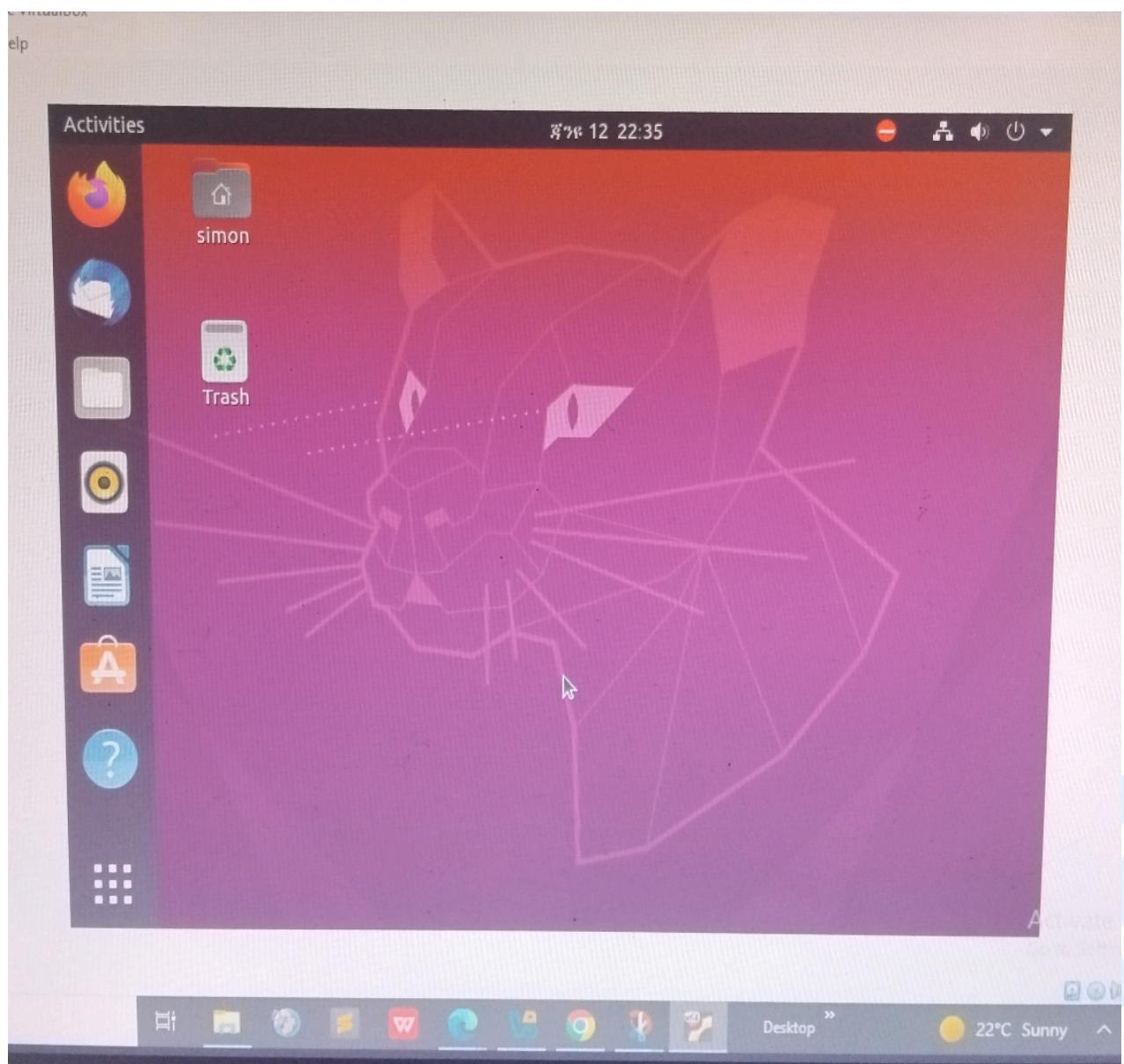
Edition



Now our Ubuntu 22.04 os installation has been completed and now i will enter ,using the password i have entered before



»»»» this is the final result, after I entered.....



e. Issues Faced

- Slow installation during “Checking for packages to install.”
- No “Take Screenshot” option in VirtualBox menu.

f. Solutions

- Wait patiently during package check; avoid clicking “Skip” unless stuck.
- Use my phone  to take an image, instead of screenshot.

g. Filesystem Support

Ubuntu supports multiple filesystems:

- ext4: Default for Ubuntu; journaling, reliability, and performance.
- NTFS/FAT32/exFAT: Supported for external drives and dual-boot setups.
- btrfs/ZFS: Advanced features like snapshots and compression.

Chosen Filesystem: ext4 – optimized for Linux environments, stable and well-supported.

h. Advantages and Disadvantages

Advantages:

- Free and open-source
- Secure and customizable
- Large community support

Disadvantages:

- Limited support for proprietary software
- Learning curve for new users

Conclusion

Installing Ubuntu in VirtualBox provides a safe and flexible way to explore Linux. The process enhances understanding of operating systems, virtualization, and system configuration.

j. Future Outlook / Recommendation

- Explore advanced features like dual-booting and custom partitioning.
- Learn terminal commands and package management.
- Try other Linux distributions for comparison.

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Submitted to:Lec.Alemitu

Username: simon

System: Ubuntu 22.04 LTS in Oracle VM

VirtualBox