

TECHNOLOGY



Ubuntu Fundamentals

TECHNOLOGY

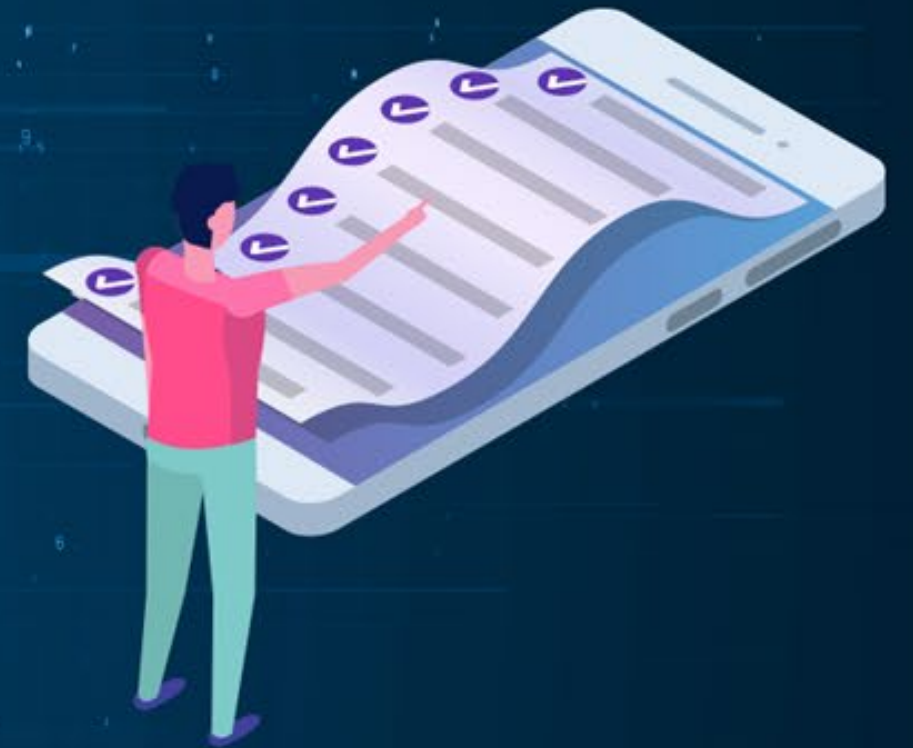
Ubuntu



Learning Objectives

By the end of this lesson, you will be able to:

- 👁️ Install Ubuntu Desktop
- 👁️ Log in to your Ubuntu account
- 👁️ Identify the kernel version



Ubuntu Distribution

Ubuntu and its distributions are always free.

All the distributions of Ubuntu are sponsored by the Canonical.

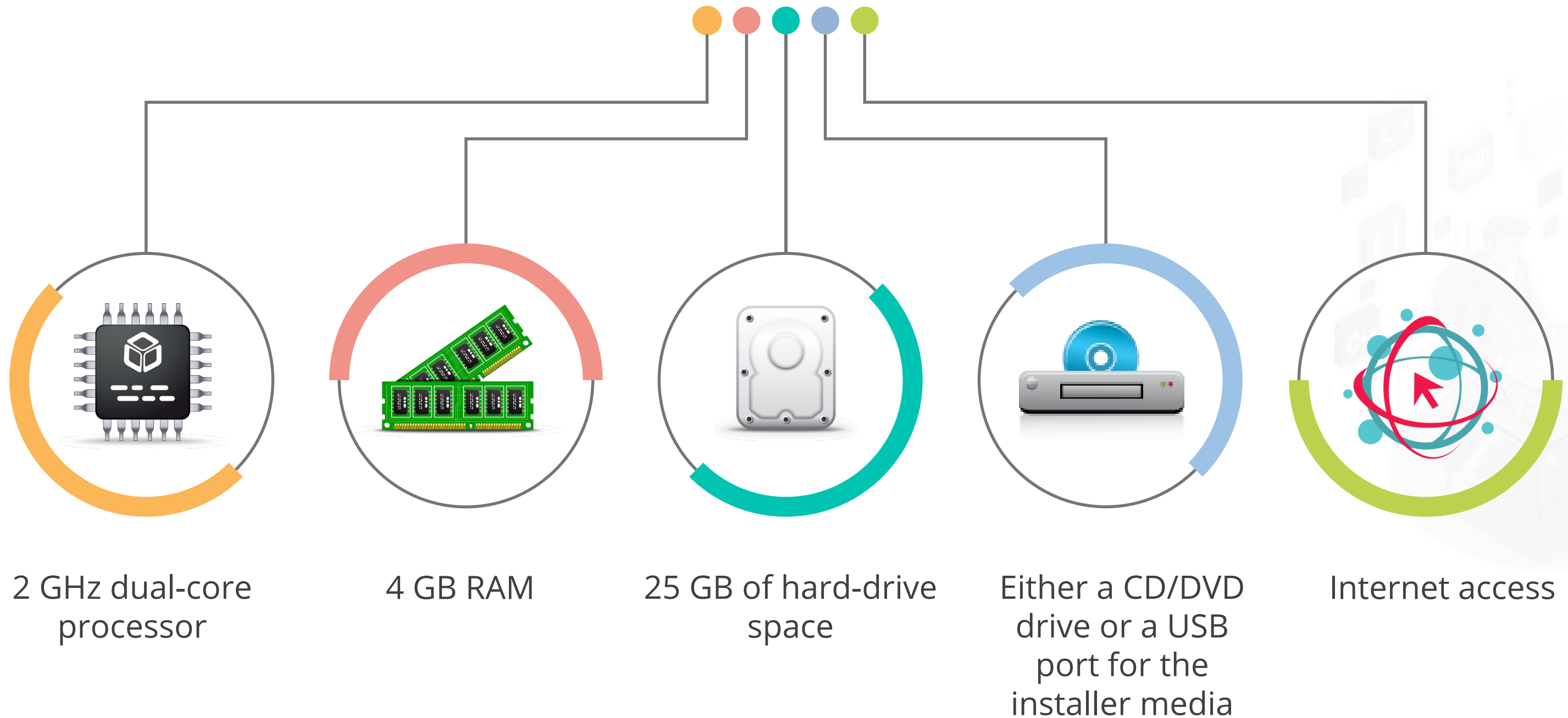


Every two years, an Ubuntu Long Term Support (LTS) is released.

For help, the technical support community is accessed.

Ubuntu Desktop Installation

Minimum hardware requirements:



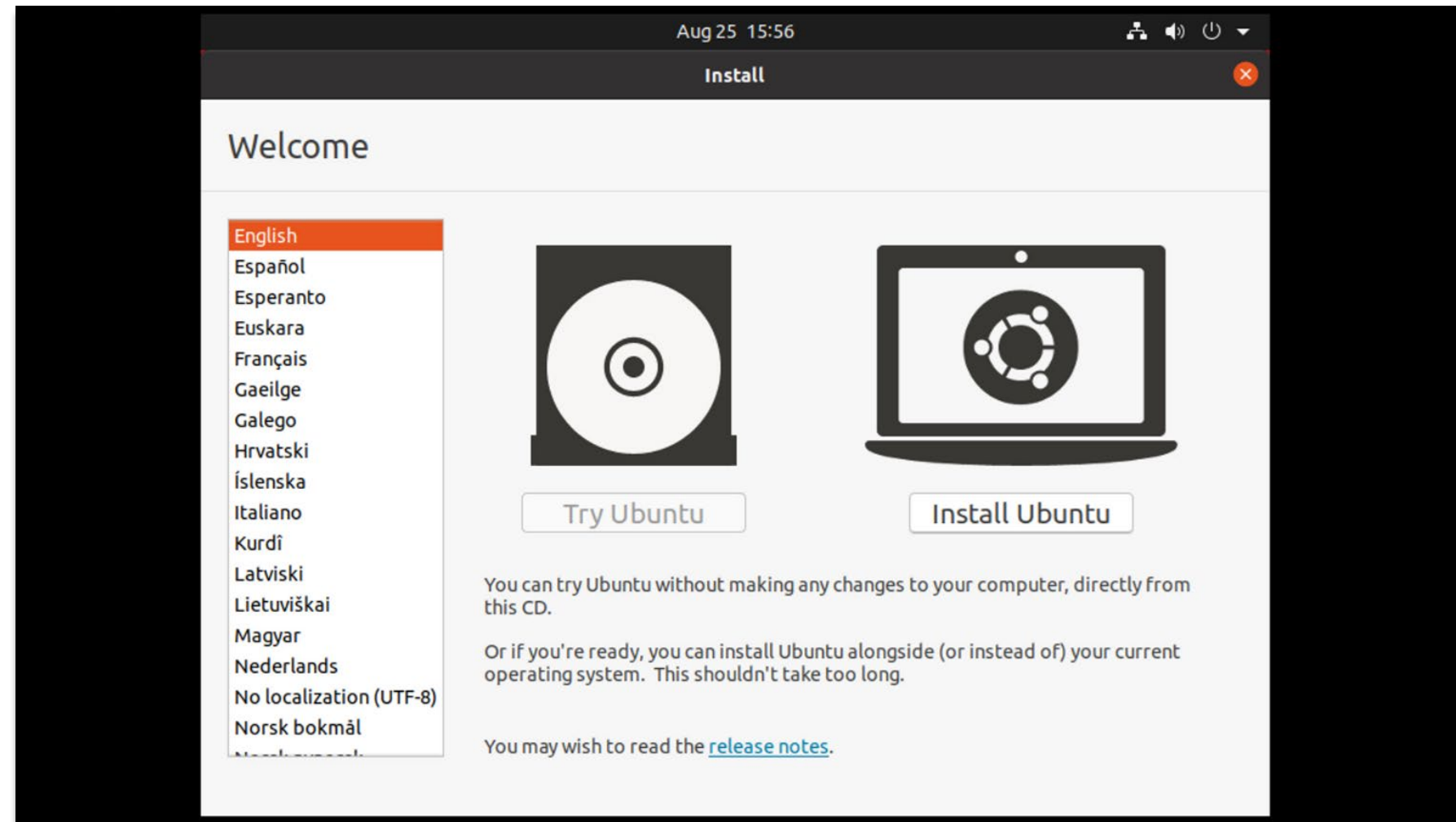
Ubuntu Desktop Installation

Ubuntu can be installed by two methods:



CD/DVD

- Insert the Ubuntu DVD into your optical or DVD drive and follow the steps
- Restart your computer

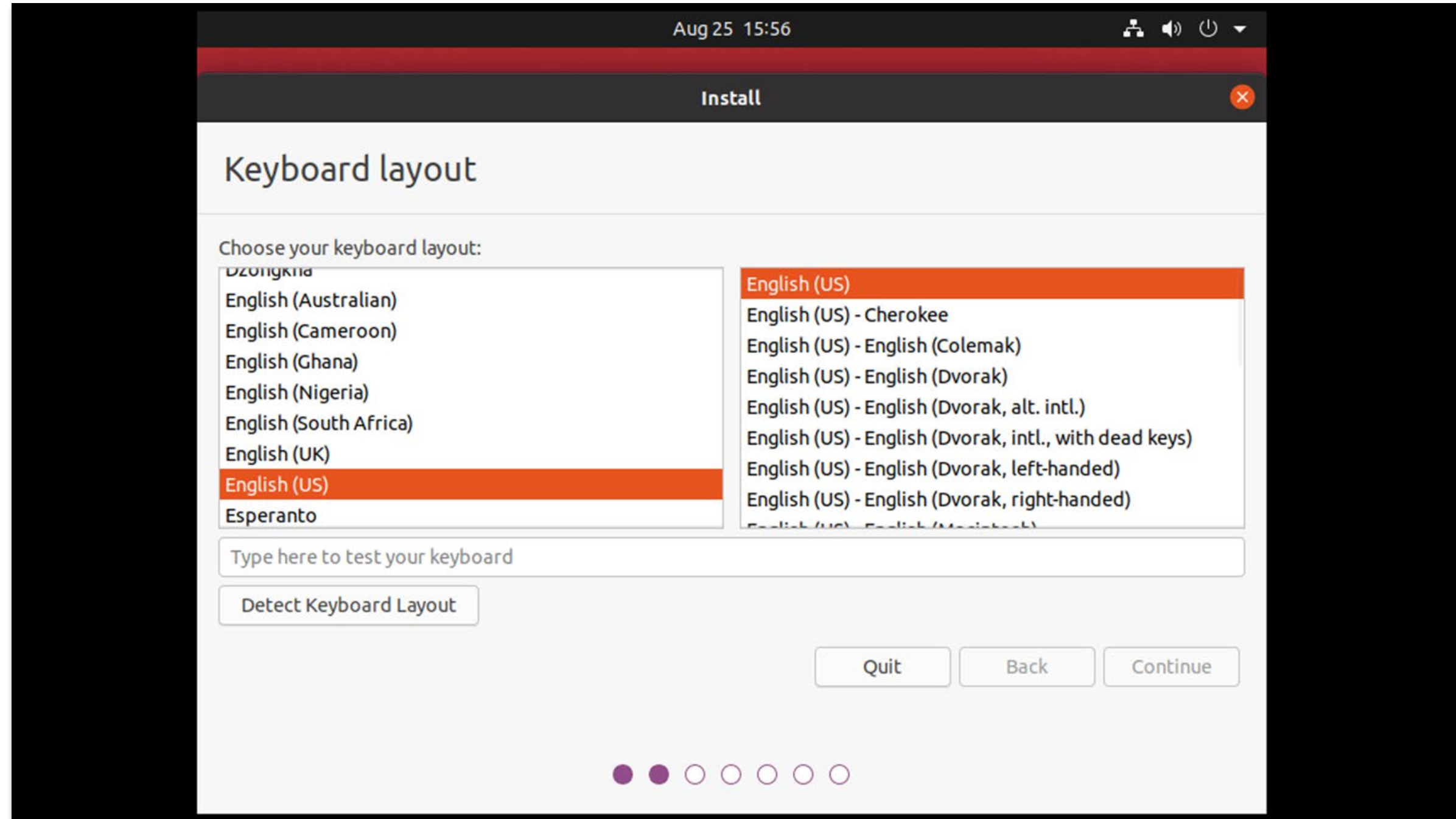


USB

- Most computers will automatically boot from the USB. Simply insert the USB flash drive and either start or restart your computer.

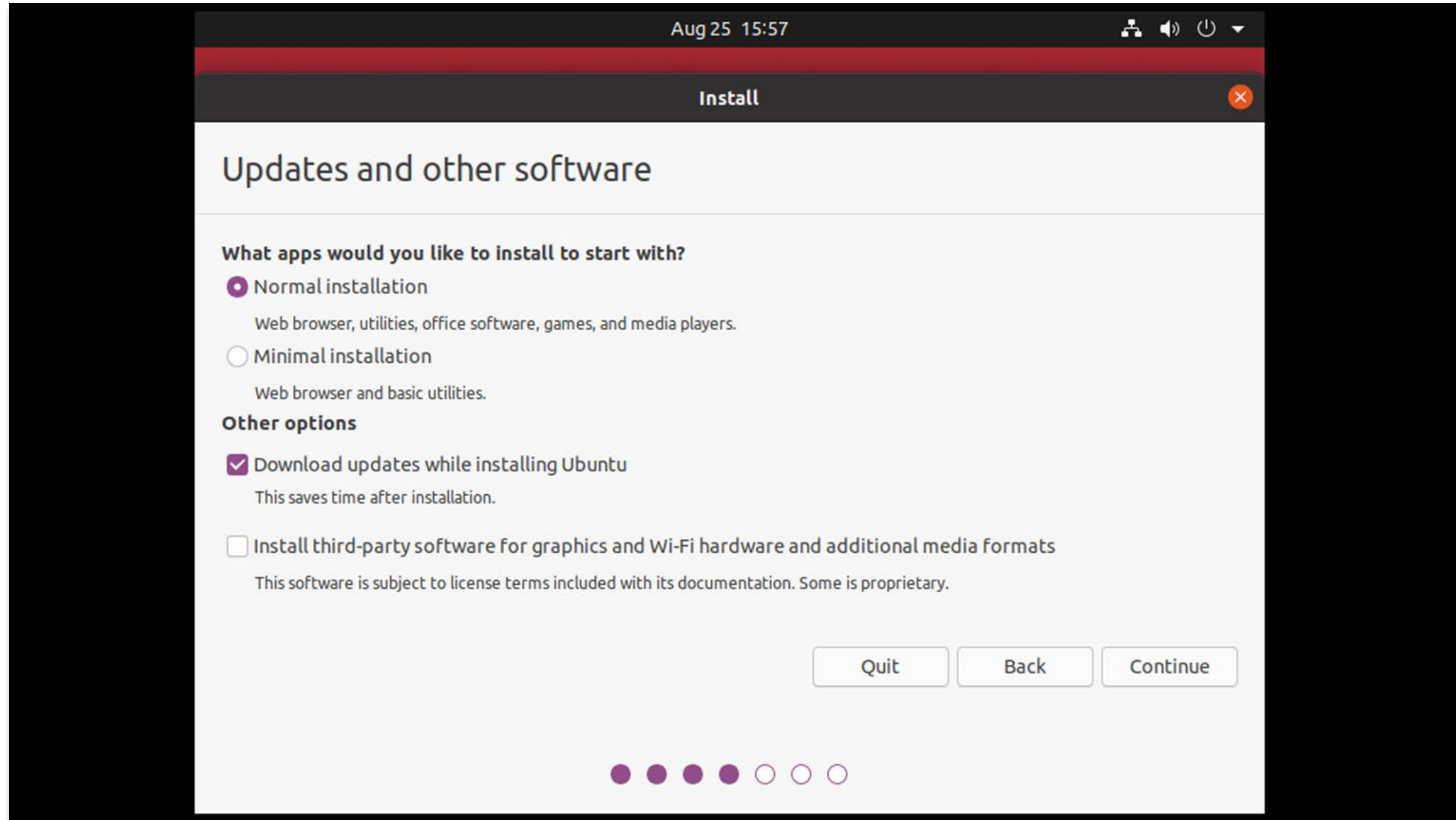
Ubuntu Desktop Installation

Choose your keyboard layout



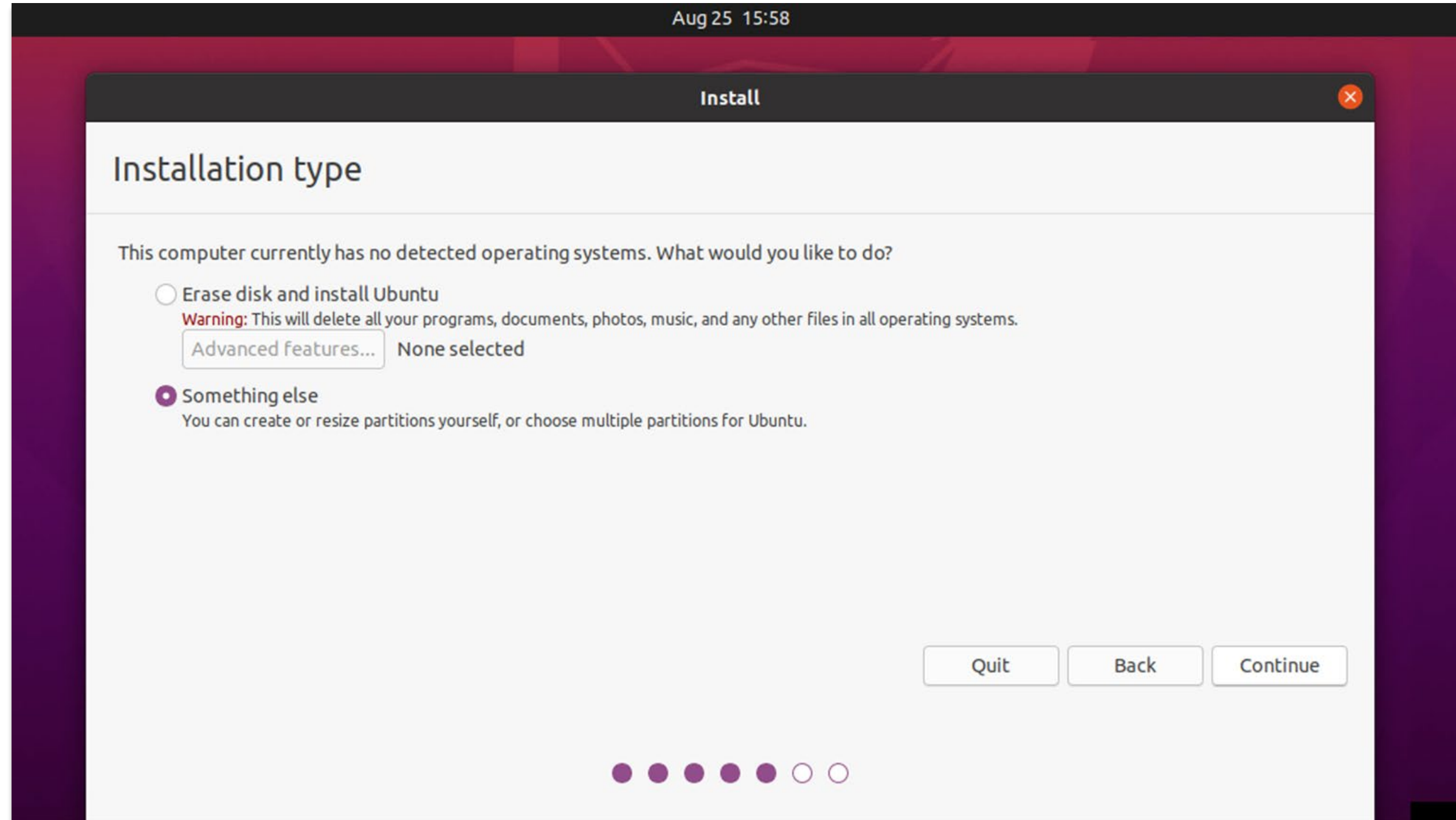
Ubuntu Desktop Installation

Choose the apps you want to install (normal or minimal installation)



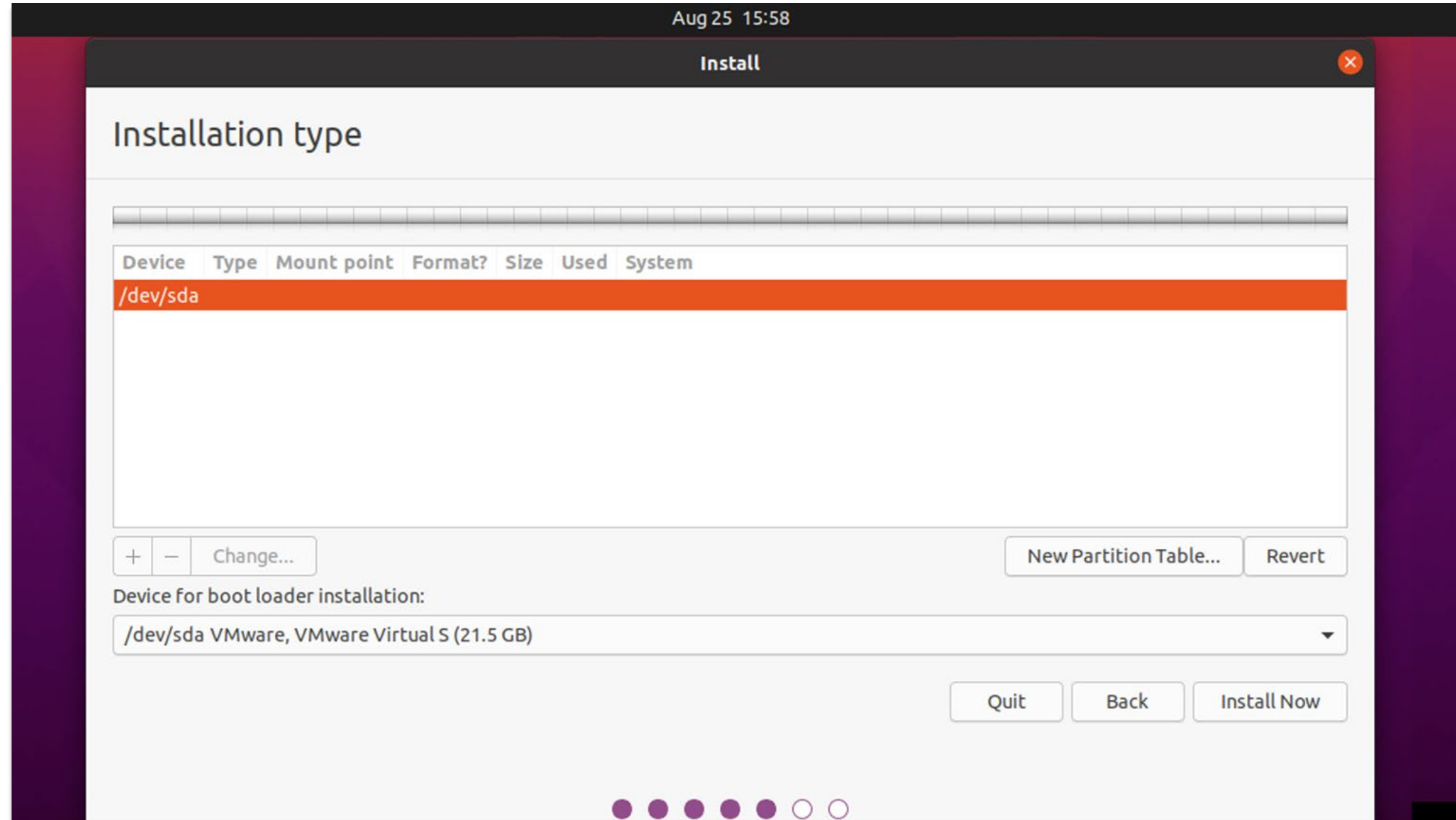
Ubuntu Desktop Installation

Manually set up partitions



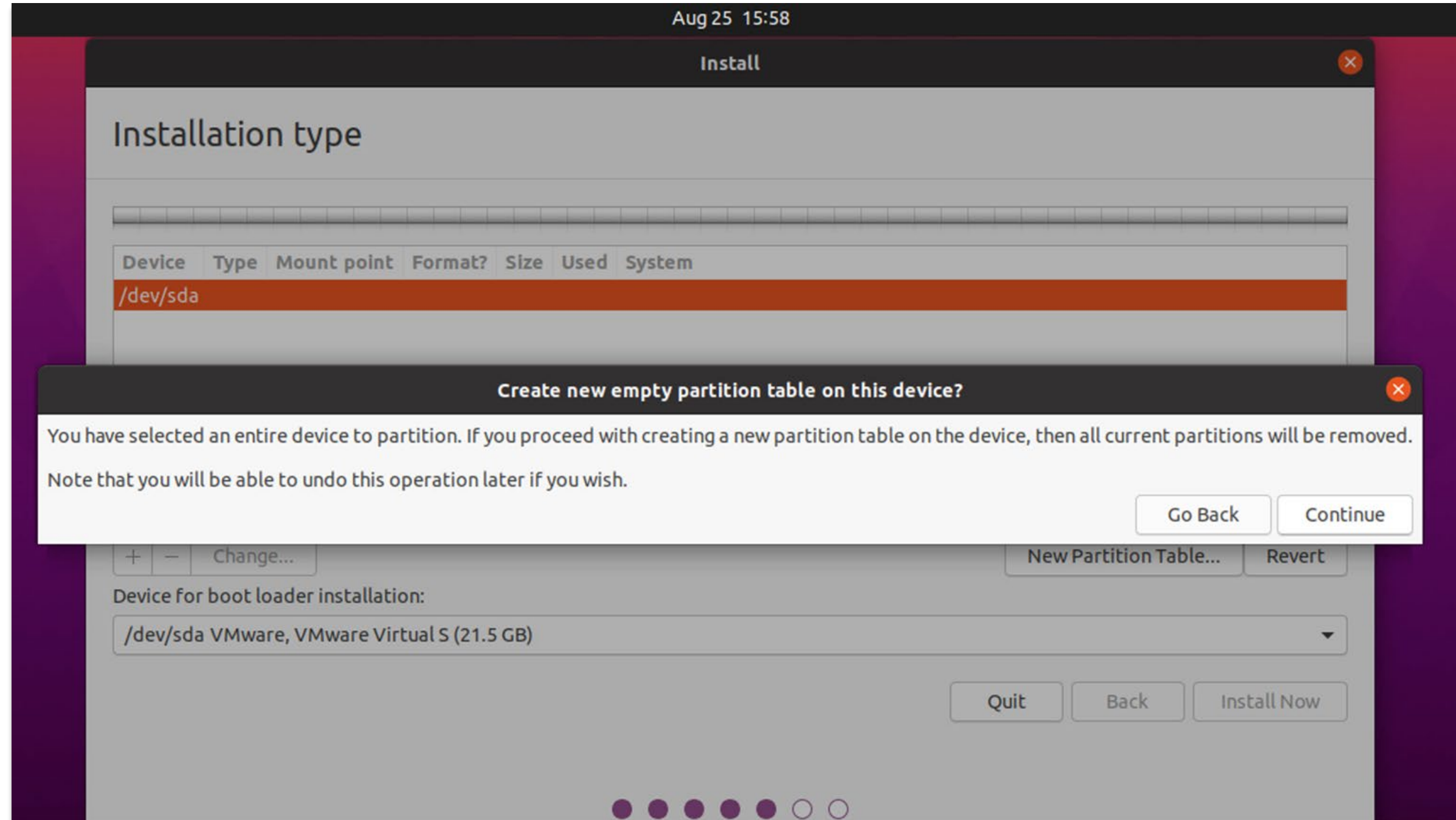
Ubuntu Desktop Installation

In this screen, partition your hard drive for the installation process.



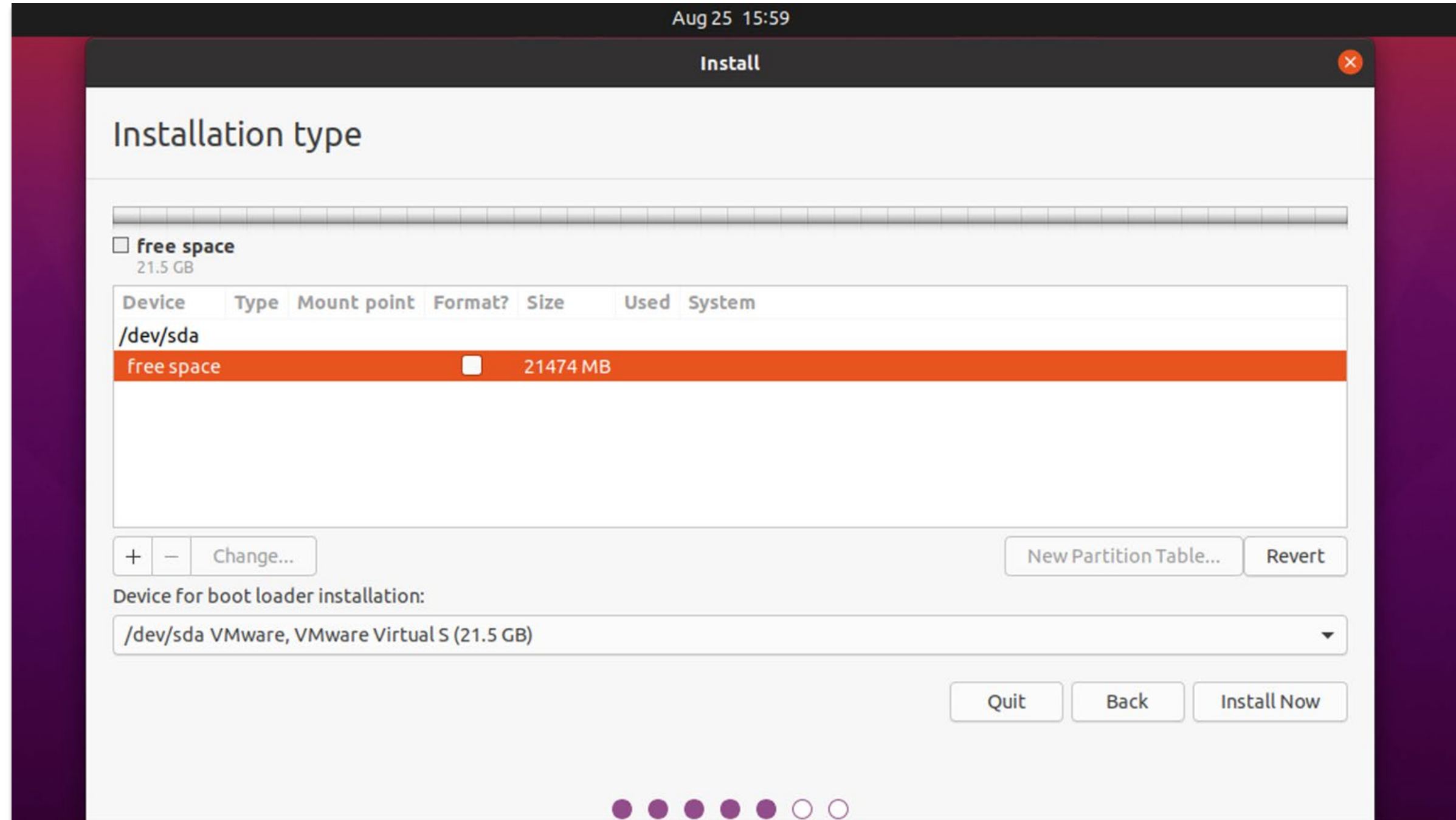
Ubuntu Desktop Installation

Click **Continue** from the pop-up window to create an empty partition table on the device.



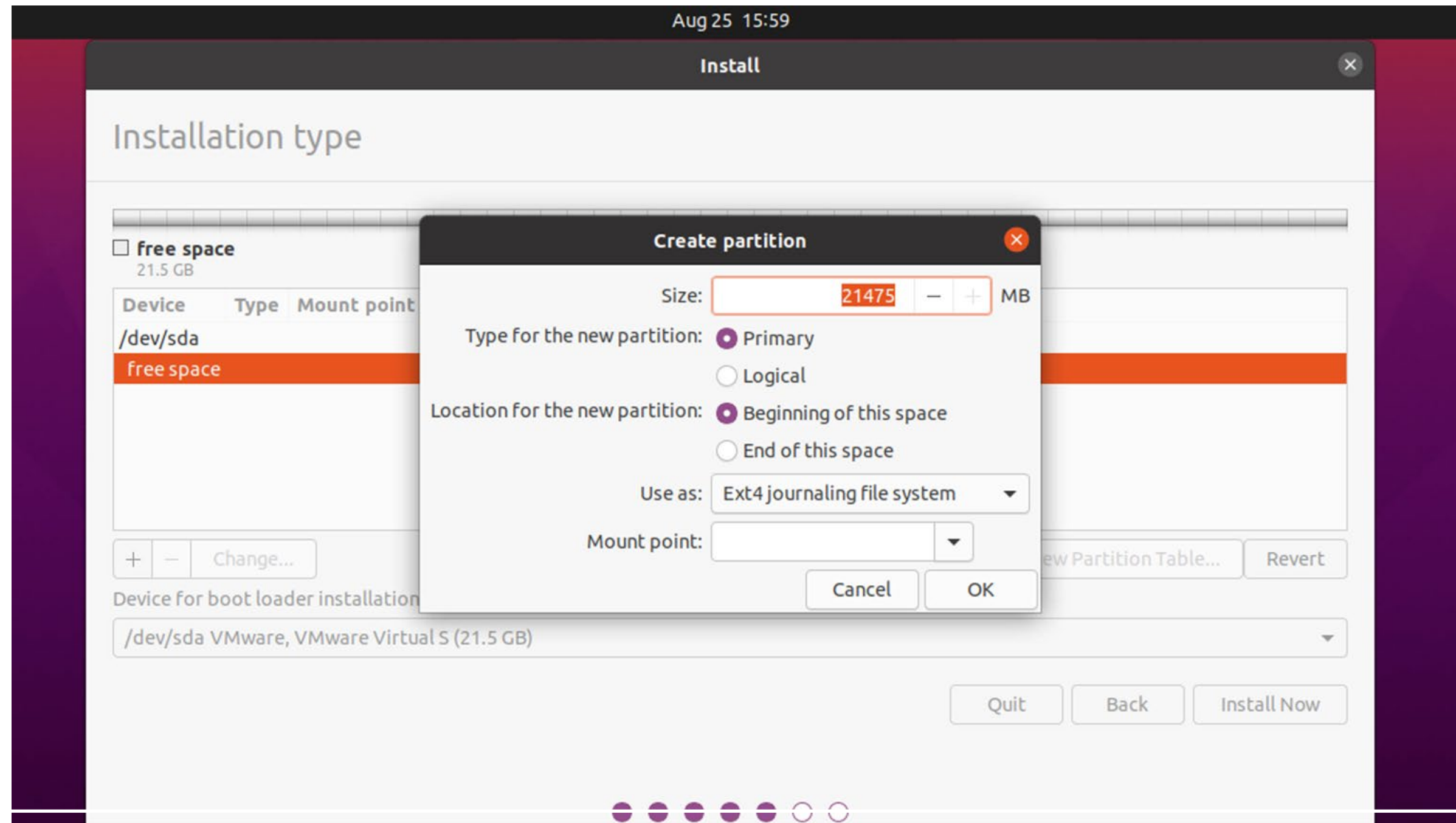
Ubuntu Desktop Installation

Double click on the free space to create a partition.



Ubuntu Desktop Installation

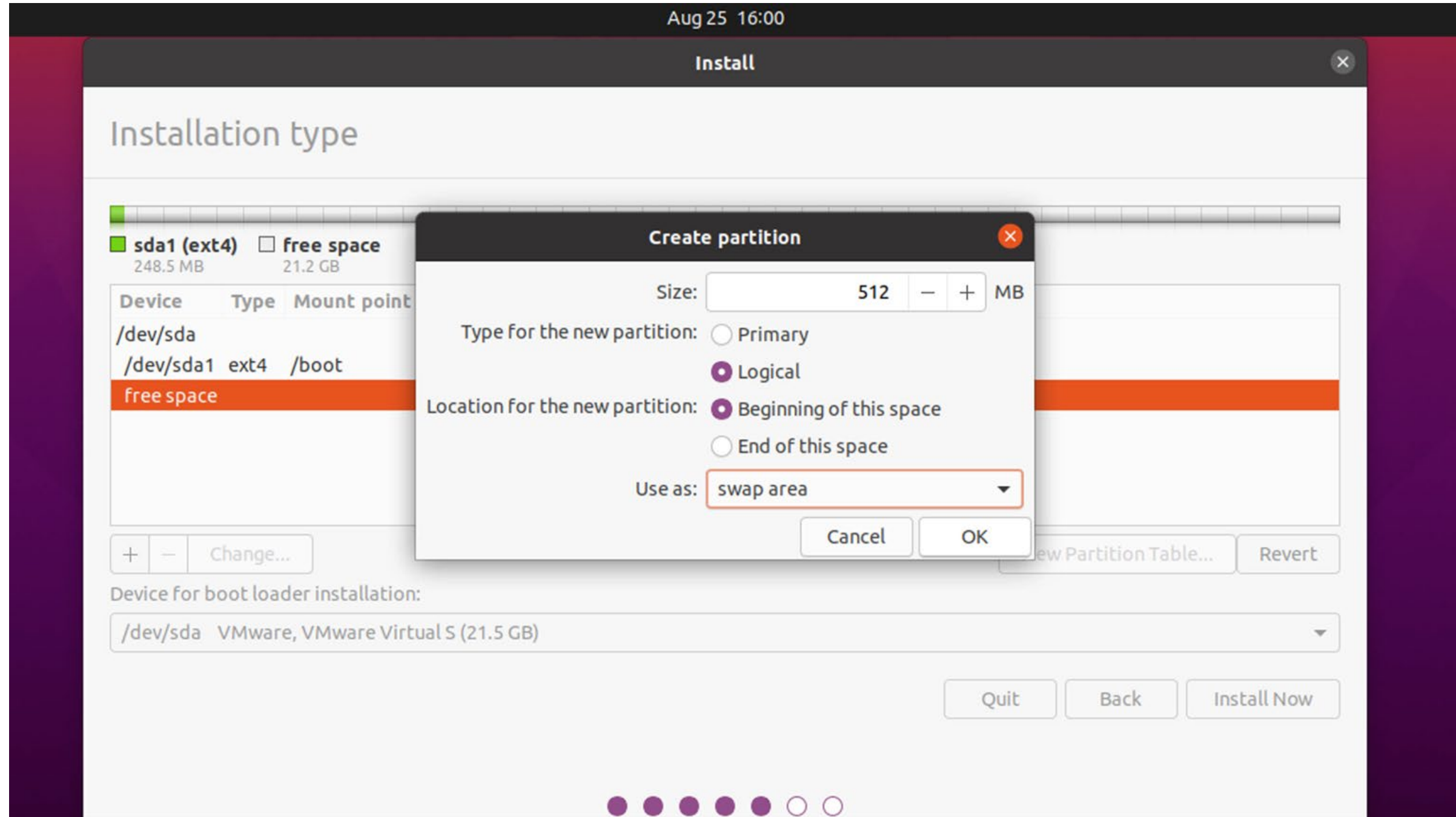
Create a root partition, enter the size of the new partition out of the total free space, and set the file system type to EXT4.



Enter mount point as slash from the drop-down list.

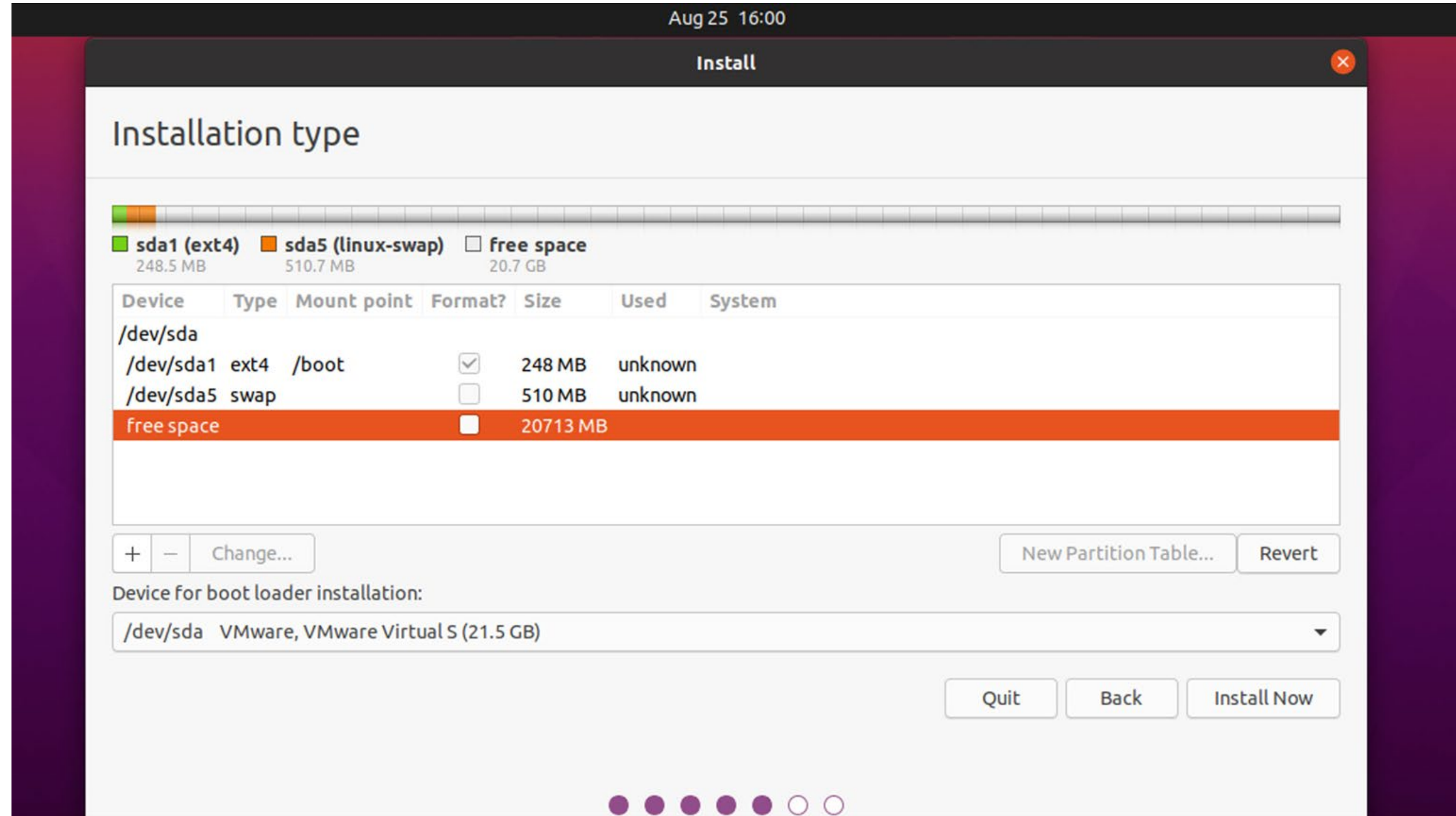
Ubuntu Desktop Installation

Create a swap partition or area.



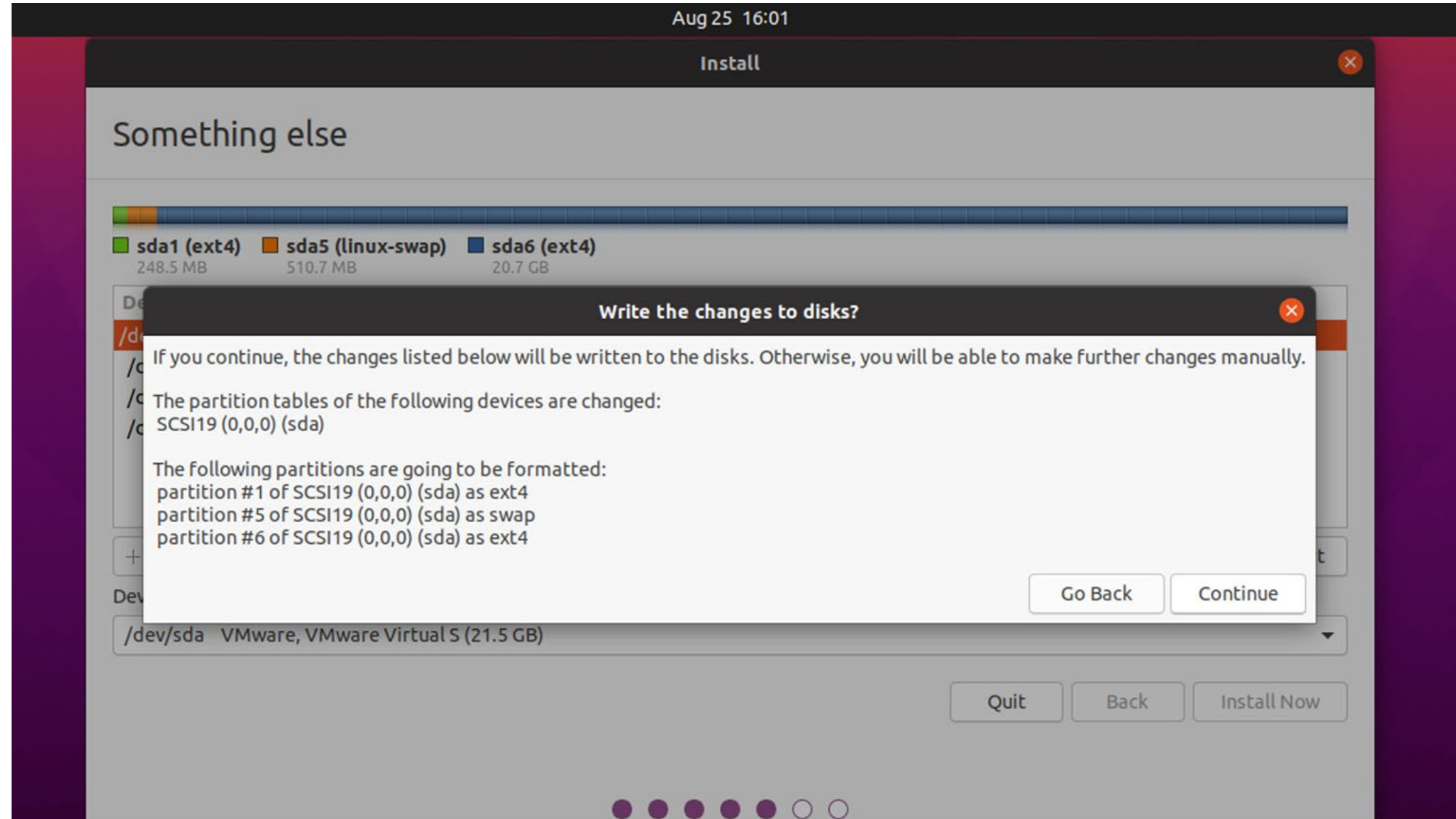
Ubuntu Desktop Installation

Two partitions are created, one is the root partition and the second is the swap partition.



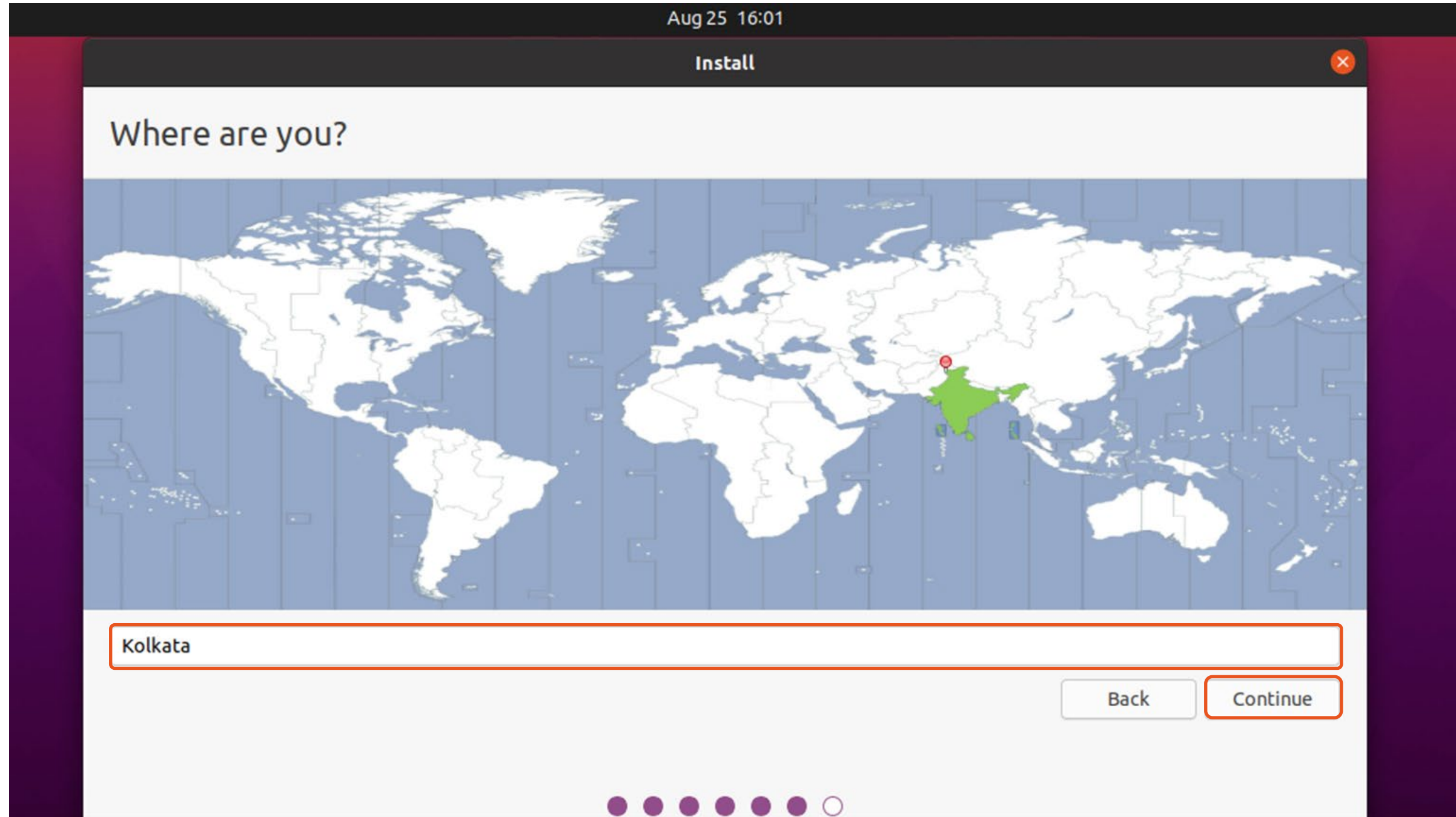
Ubuntu Desktop Installation

Click on **Continue** to permit the installer to write the recent changes concerning the partitioning of the disk.



Ubuntu Desktop Installation

Select the location.



Ubuntu Desktop Installation

Enter your name to generate the username automatically by the installer

Aug 25 21:32

Install

Who are you?

Your name: user100 ✓

Your computer's name: ubuntu-node1 ✓
The name it uses when it talks to other computers.

Pick a username: user100 ✓

Choose a password: ●●●●●● Fair password

Confirm your password: ●●●●●● ✓

☐ Log in automatically

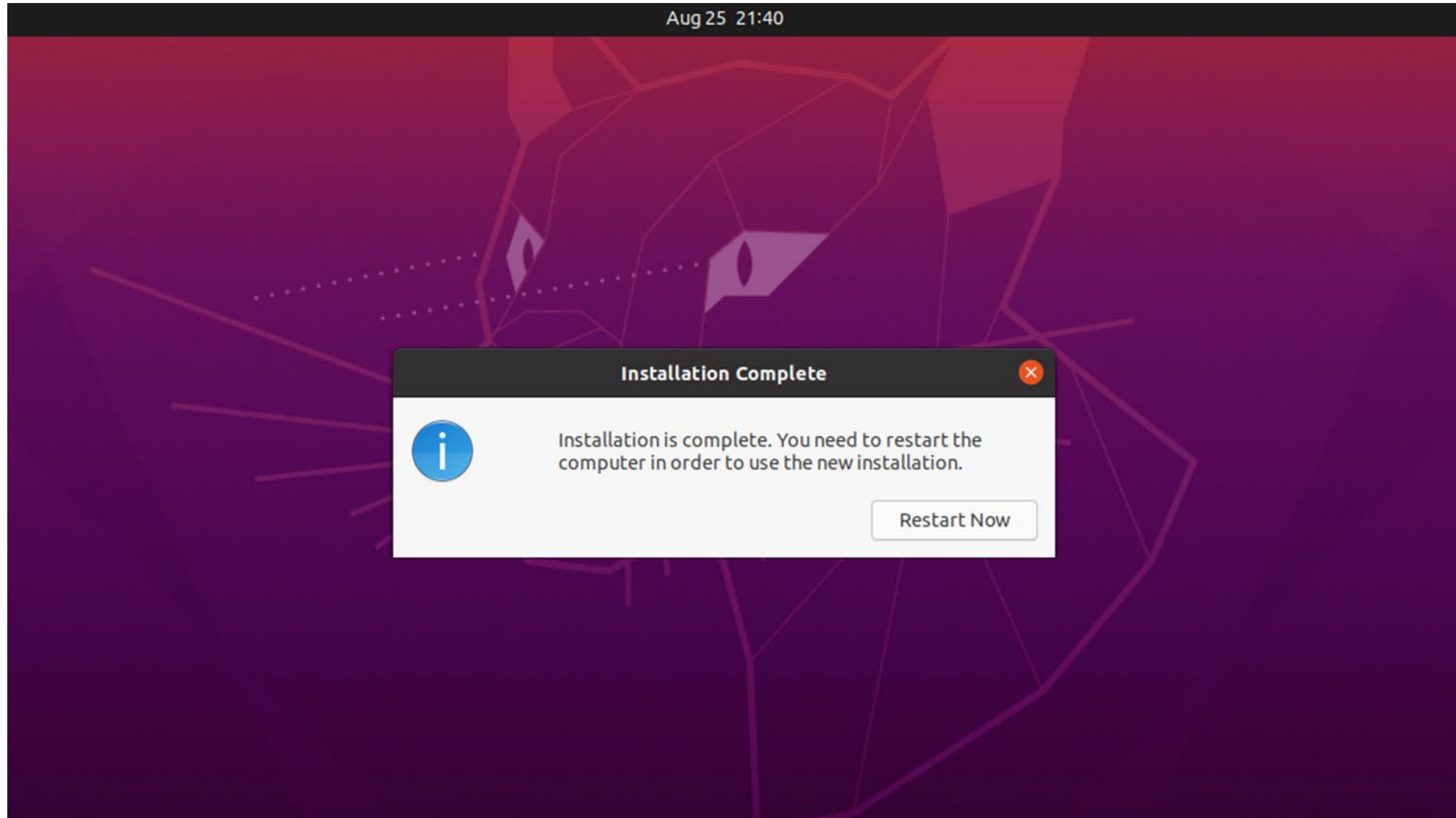
☒ Require my password to log in

Back Continue

● ● ● ● ● ● ●

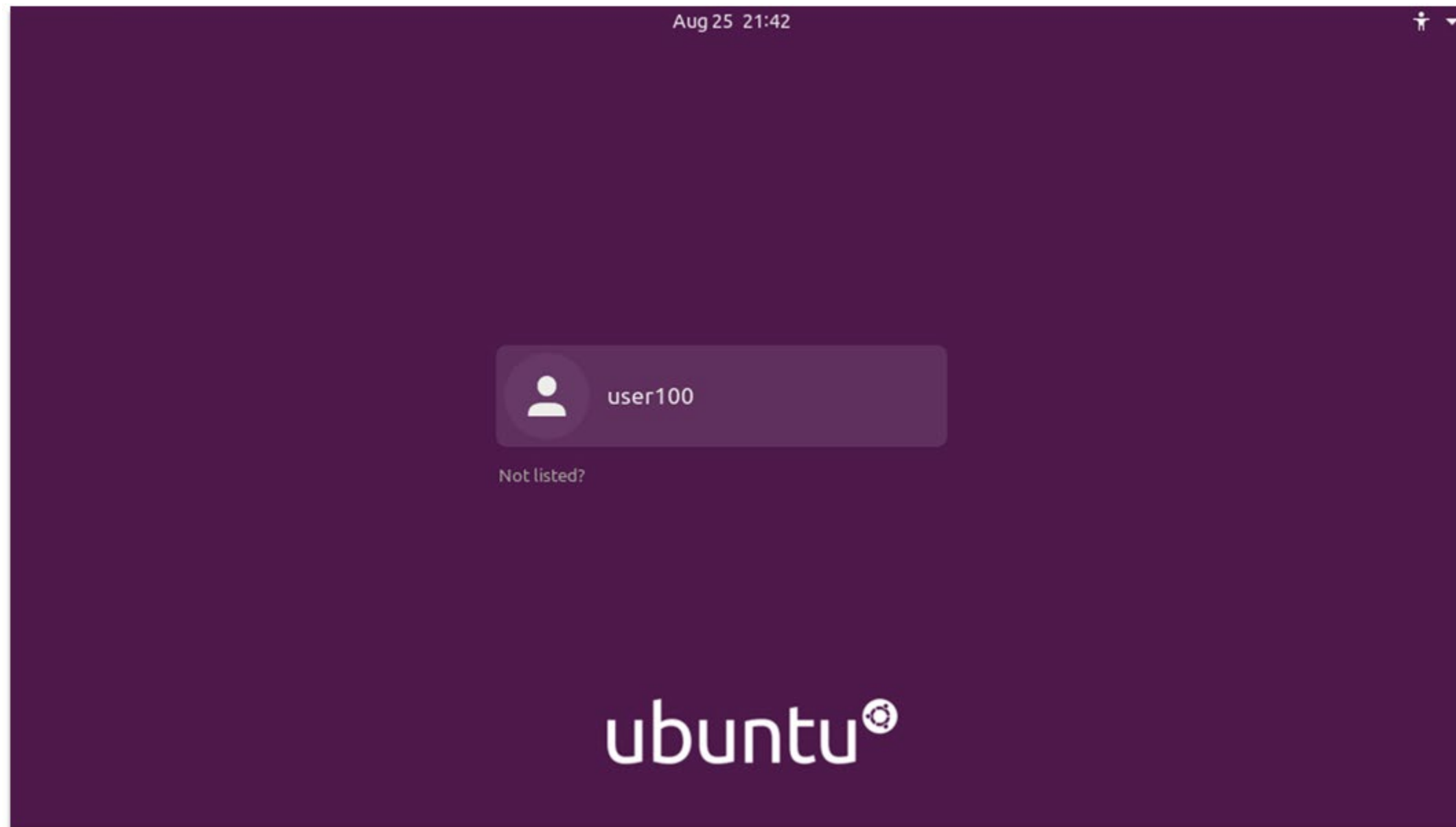
Ubuntu Desktop Installation

You get the installation complete prompt after the installation process.



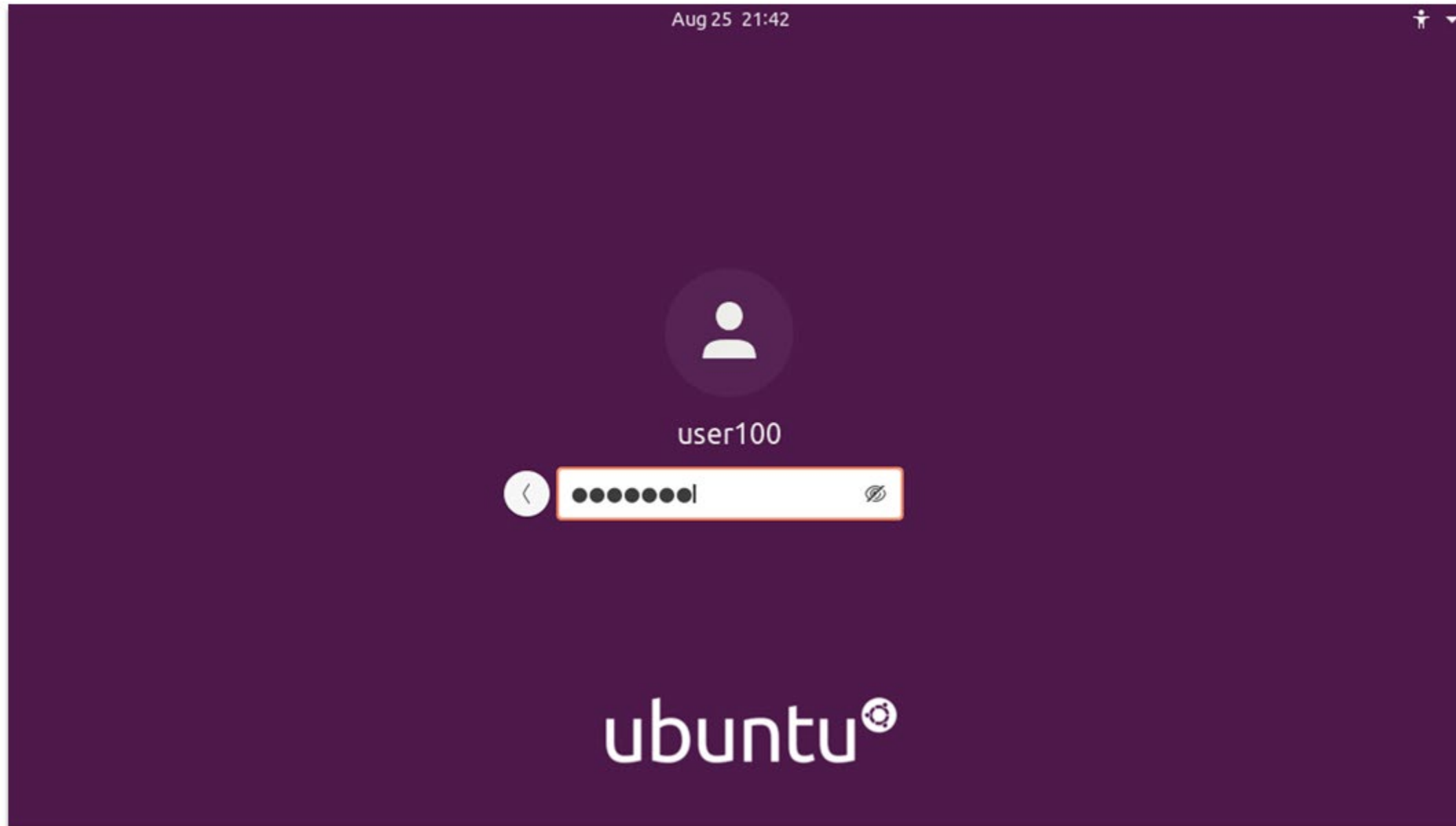
Ubuntu Login

Select the account to login.



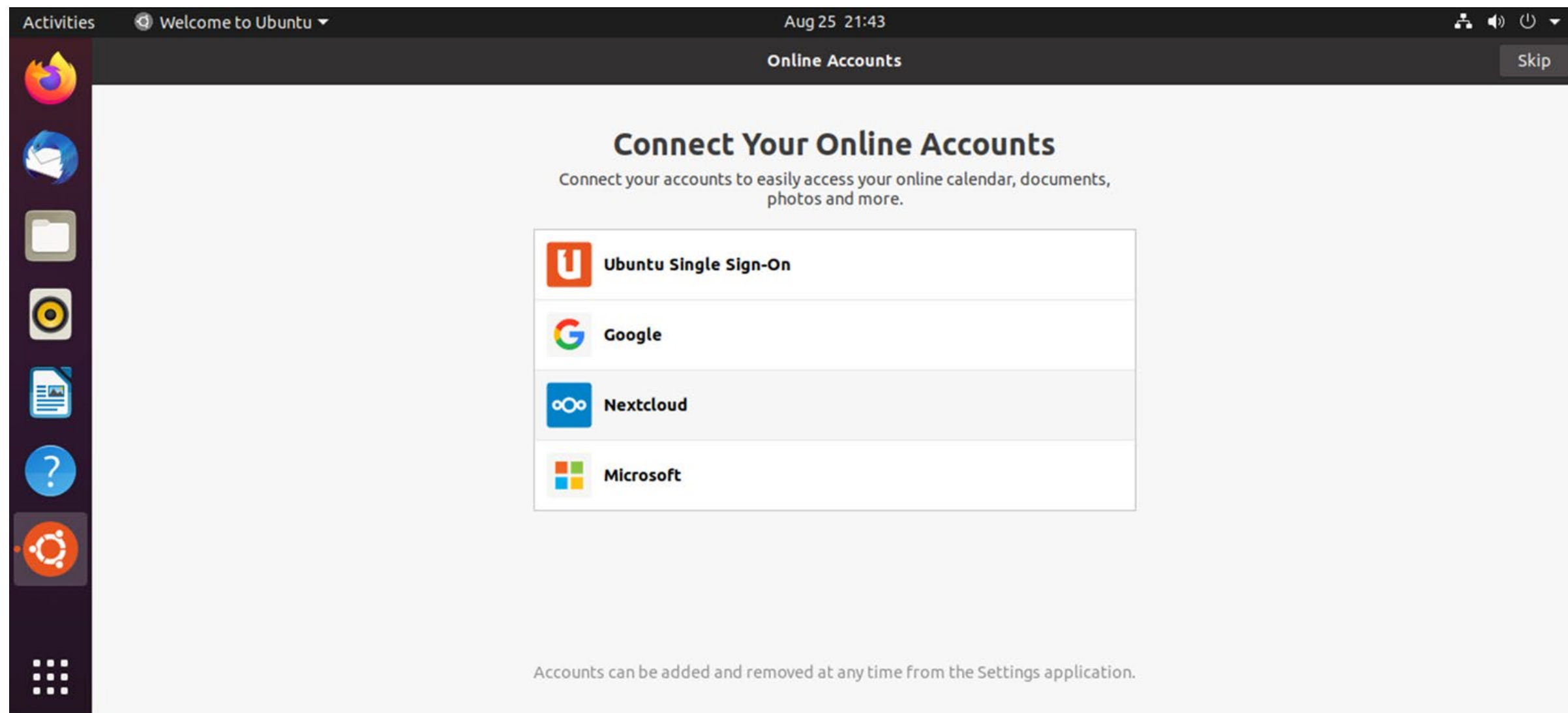
Ubuntu Login

Enter the password used to create the account in the installation process.



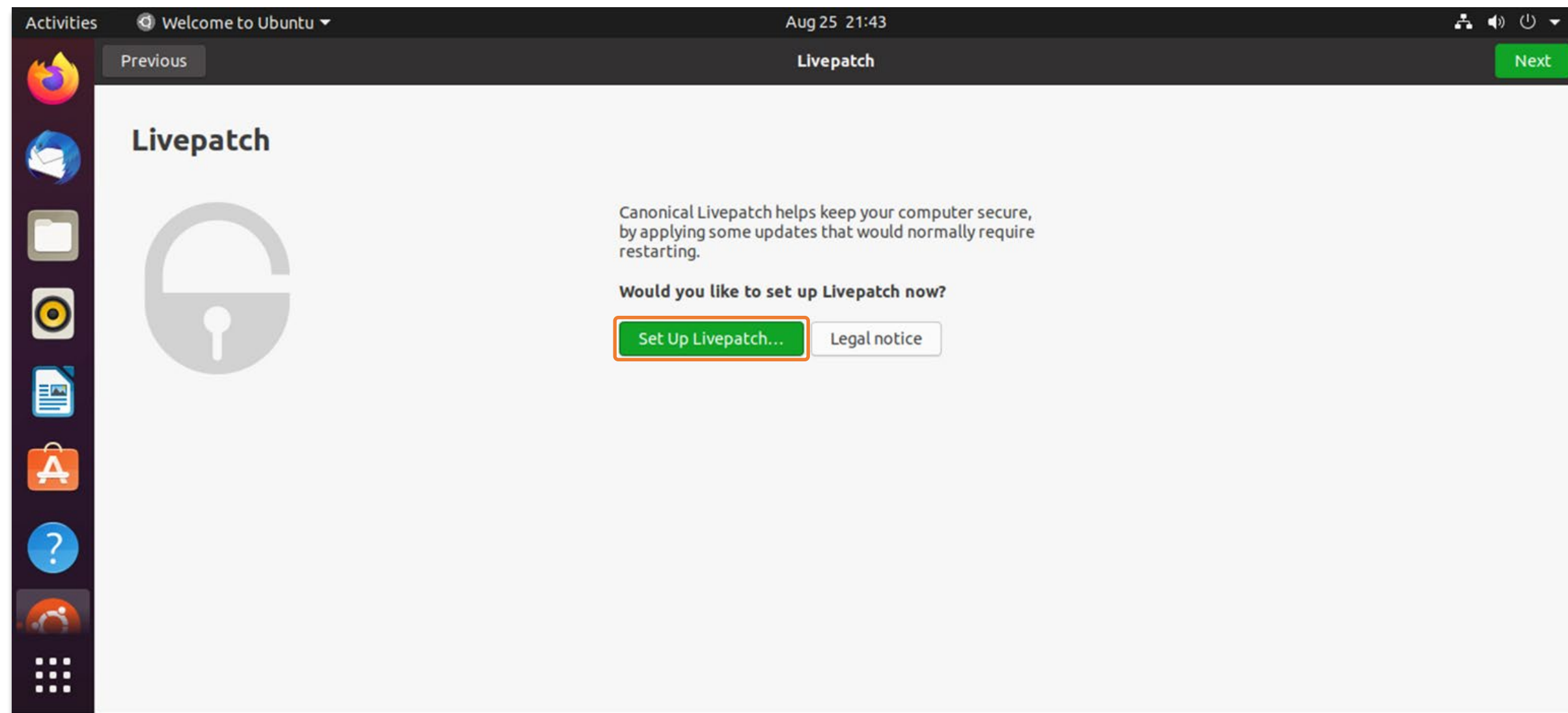
Ubuntu Login

After you login, you can connect to different online accounts.



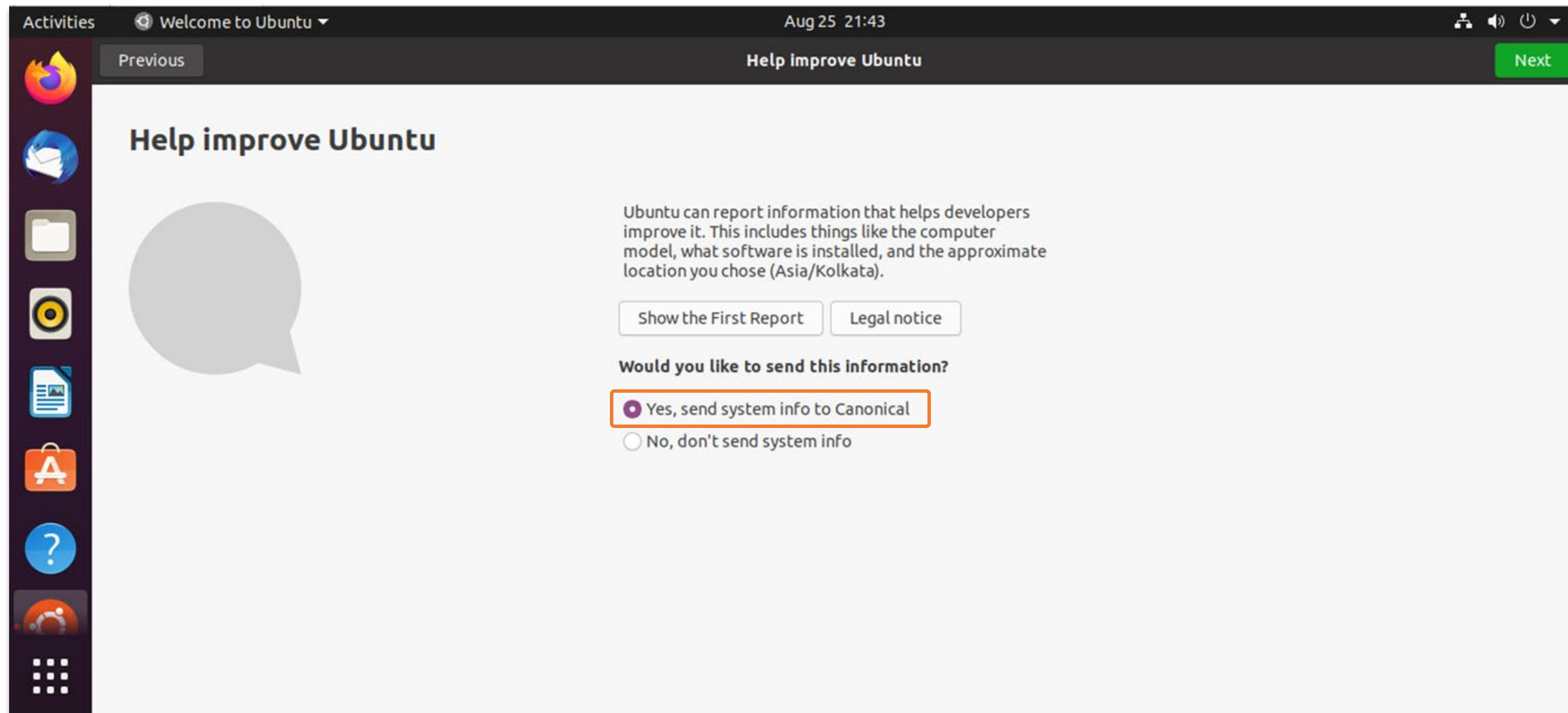
Ubuntu Login

If needed, set up Livepatch to keep your computer secure.



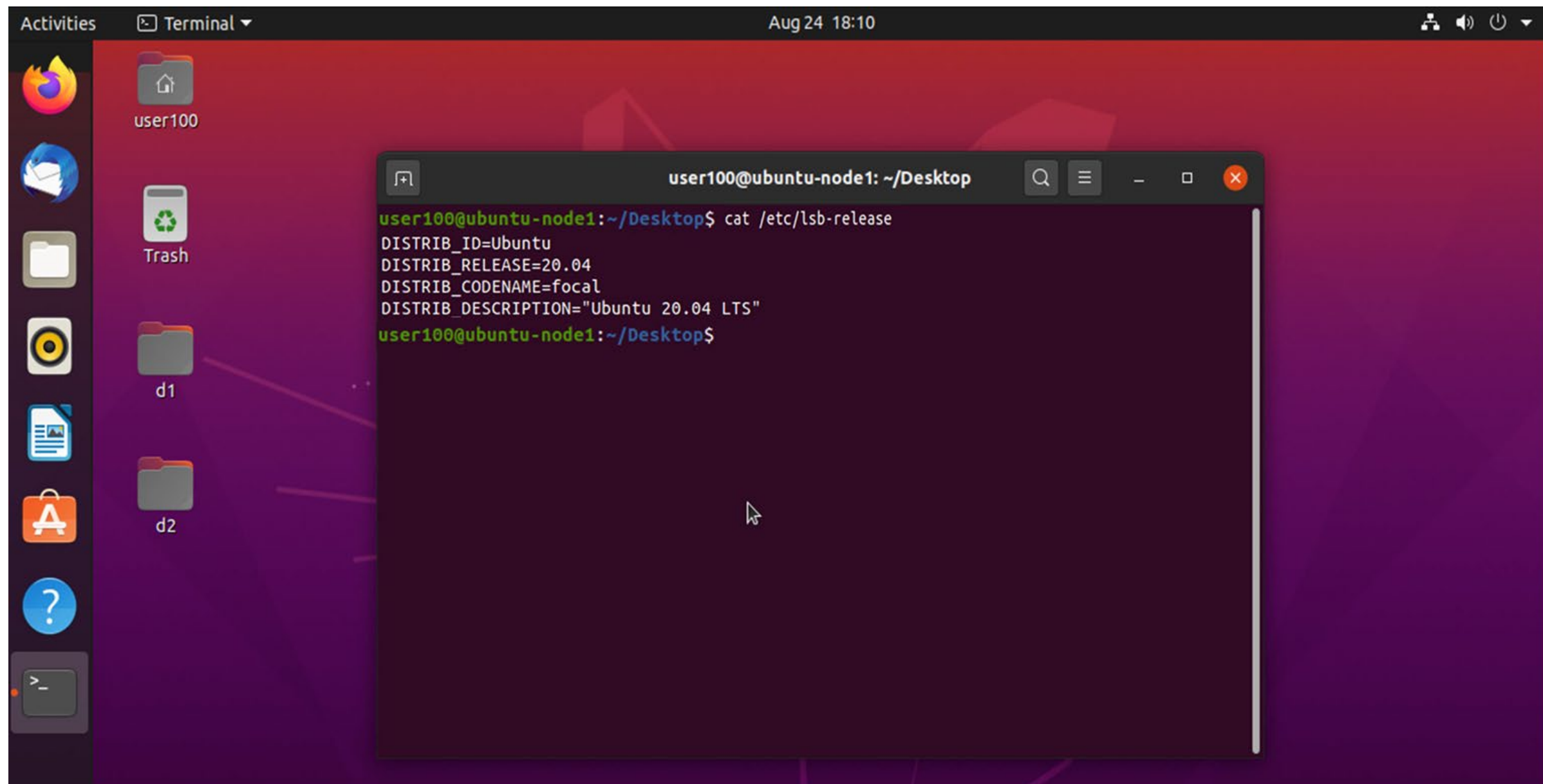
Ubuntu Login

Select yes or no to send usage information to Canonical and click on **Next**.



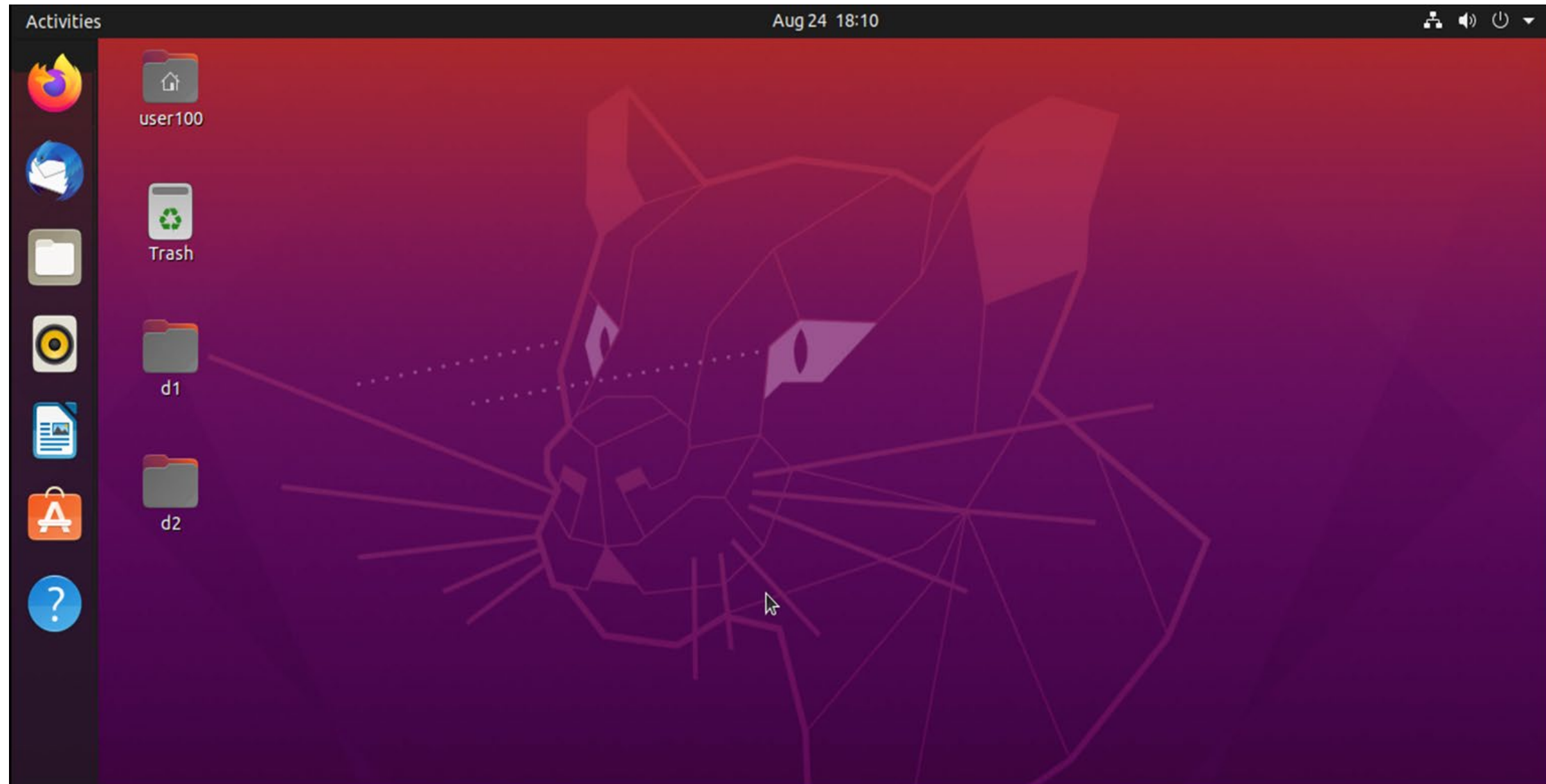
Ubuntu Login

Check the release of the installed product from the terminal window.



Terminal and Console

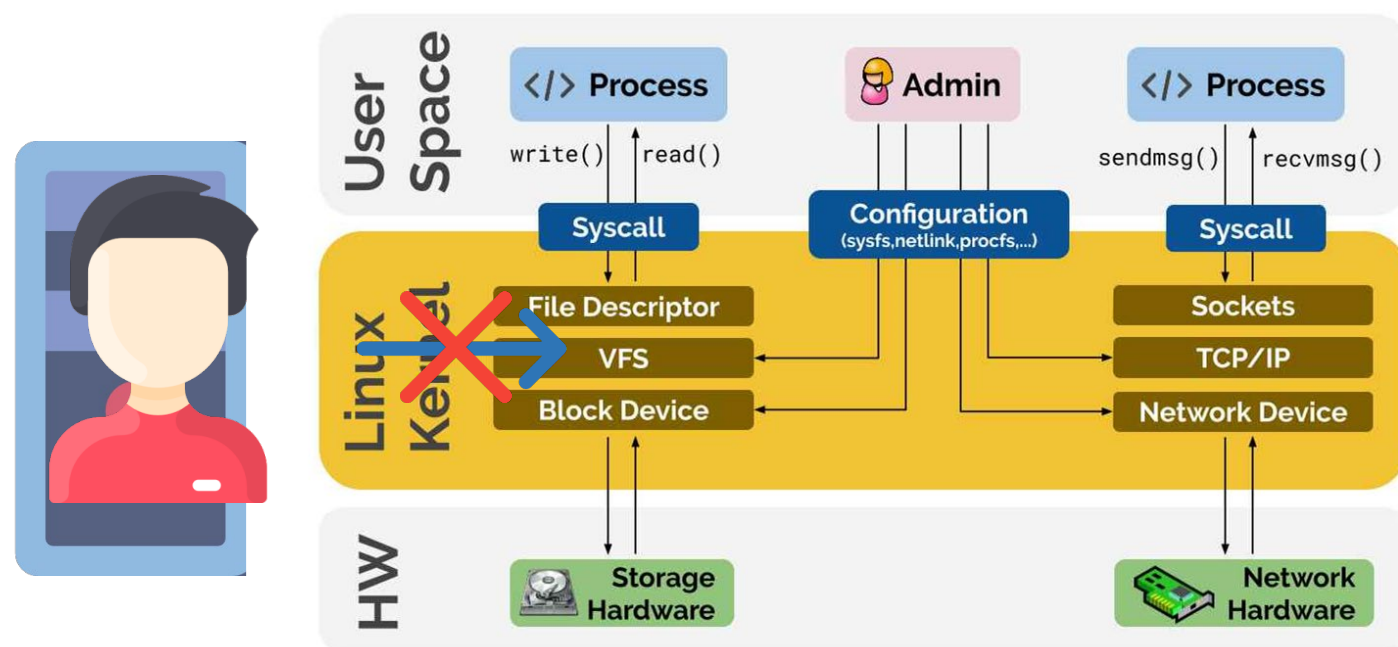
Terminal is an input interface offered by the Ubuntu OS.



Console is a special type of terminal which is used when the operating system is not functioning.

Kernel Architecture

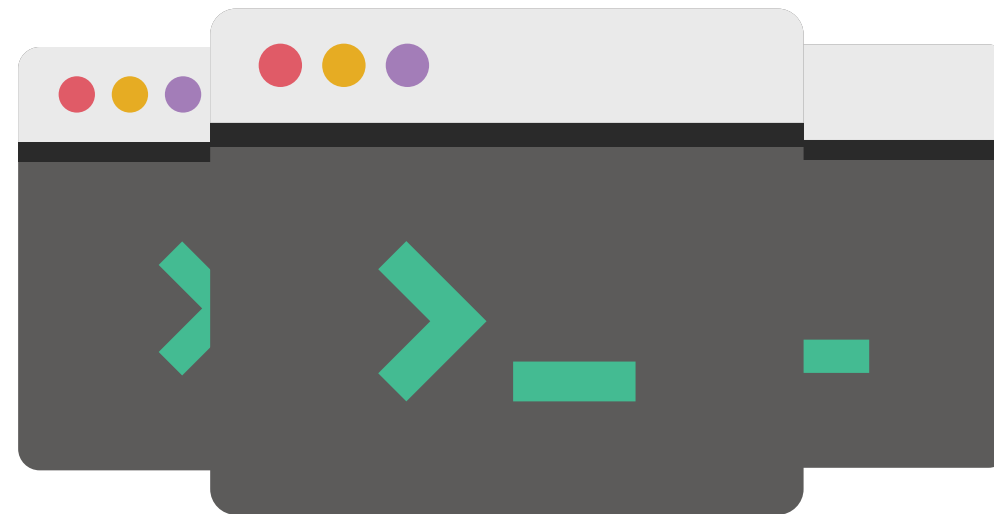
The image represents the architecture of a kernel.



- Kernel is the core component of an operating system.
- Kernel provides user interface between applications and hardware of the system.
- The main functions of the kernel architecture include managing CPU, memory, and IO devices.

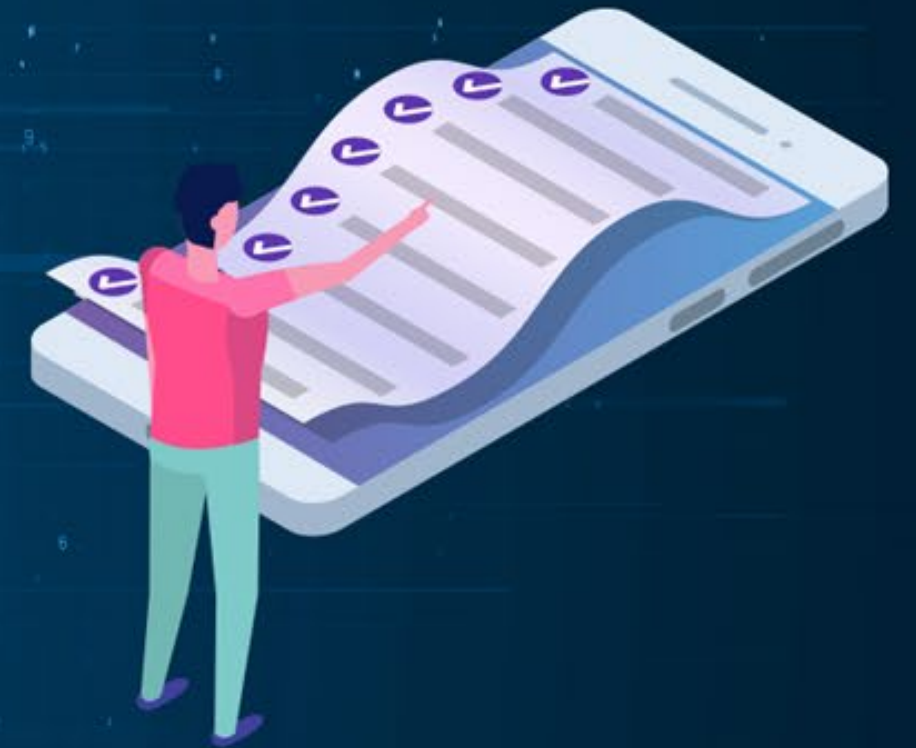
Kernel Version

uname - r command is used to find the kernel version.



Key Takeaways

- Ubuntu distributions are sponsored by the company Canonical..
- Minimum 4GB of RAM is required to install Ubuntu in a system.
- Ubuntu can be installed either by booting from a DVD drive or USB.
- Kernel is the core component of the operating system.





Knowledge Check

Knowledge Check

1

Which of the following is the recommended hard-drive space required to install Ubuntu?

- A. 1 GB
- B. 5 GB
- C. 25GB
- D. 100GB



Knowledge
Check

1

Which of the following is the recommended hard drive space required to install Ubuntu?

- A. 1 GB
- B. 5 GB
- C. 25 GB
- D. 100 GB



The correct answers is **C**

Minimum required hard-drive space to install Ubuntu is 25 GB.

Knowledge Check

2

Ubuntu is a version (or distribution) of which of the following operating systems?

- A. Linux
- B. Windows
- C. Android
- D. DOS



Knowledge
Check

2

Ubuntu is a version (or distribution) of which of the following operating systems?

- A. Linux
- B. Windows
- C. Android
- D. DOS



The correct answer is **A**

Ubuntu is a version of the Linux operating system.

Knowledge
Check

3

Which of the following is the file type of the Ubuntu download package?

- A. zip
- B. jar
- C. iso
- D. tar



Knowledge
Check

3

Which of the following is the file type of the Ubuntu download package?

- A. zip
- B. jar
- C. iso
- D. tar



The correct answer is **C**

The Ubuntu download package is an iso file type.

Knowledge Check

4

Which of the following commands is used to verify the current kernel?

- A. `uname -r`
- B. `uname -s`
- C. `Uname -p`
- D. `dmesg`



Knowledge
Check

4

Which of the following commands is used to verify the current kernel?

- A. `uname -r`
- B. `uname -s`
- C. `Uname -p`
- D. `dmesg`



The correct answer is **A**

`uname-r` is the command used to verify the current kernel installed in the system.