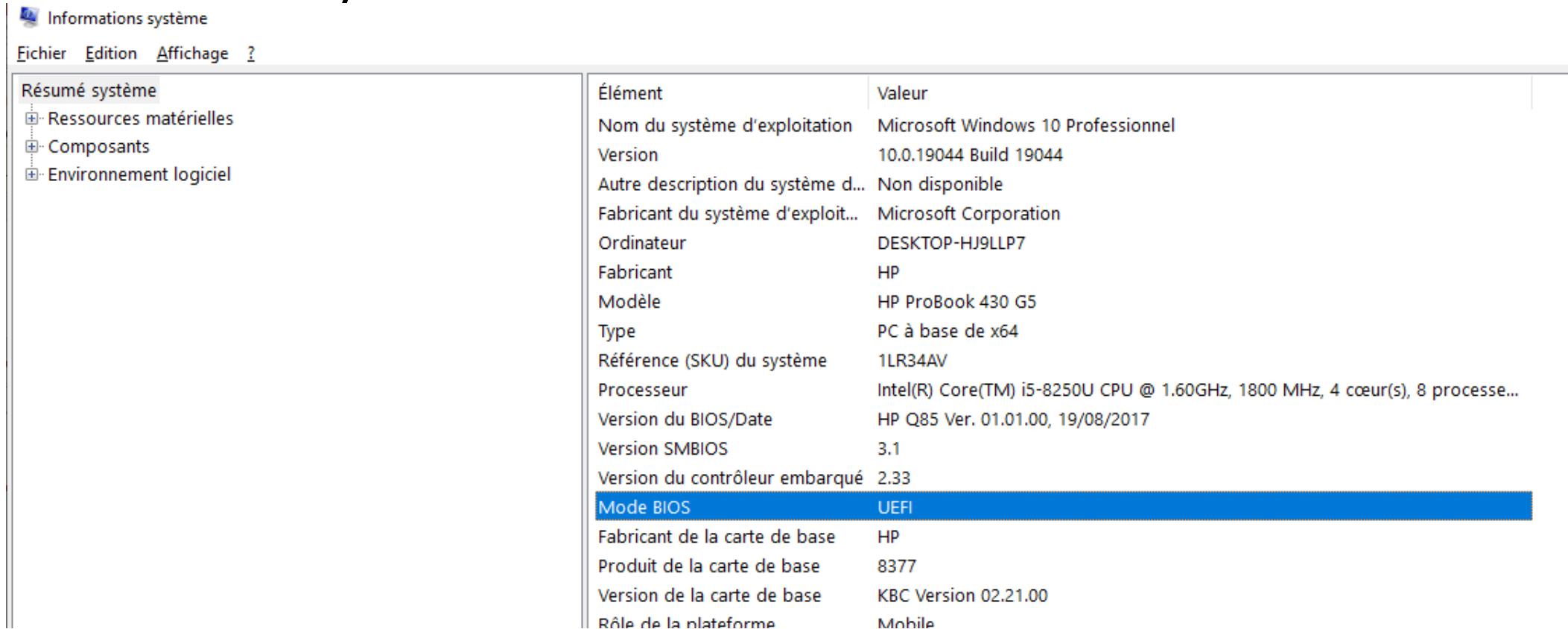


CHAPTER VIII: LINUX OPERATING SYSTEM INSTALLATION

Example Ubuntu Windows Dual Boot

step 1: Check compatibility

- Make sure the system uses UEFI Boot
- Start menu - System information



The screenshot shows the Windows System Information window. The left sidebar has a tree view with 'Résumé système' selected. The main area displays a table of system information. The 'Mode BIOS' row is highlighted in blue, showing the value 'UEFI'.

Élément	Valeur
Nom du système d'exploitation	Microsoft Windows 10 Professionnel
Version	10.0.19044 Build 19044
Autre description du système d'exploit...	Non disponible
Fabricant du système d'exploit...	Microsoft Corporation
Ordinateur	DESKTOP-HJ9LLP7
Fabricant	HP
Modèle	HP ProBook 430 G5
Type	PC à base de x64
Référence (SKU) du système	1LR34AV
Processeur	Intel(R) Core(TM) i5-8250U CPU @ 1.60GHz, 1800 MHz, 4 cœur(s), 8 processe...
Version du BIOS/Date	HP Q85 Ver. 01.01.00, 19/08/2017
Version SMBIOS	3.1
Version du contrôleur embarqué	2.33
Mode BIOS	UEFI
Fabricant de la carte de base	HP
Produit de la carte de base	8377
Version de la carte de base	KBC Version 02.21.00
Rôle de la plateforme	Mobile

Step 2: prepare the necessary

- A computer already containing Windows 10
- A USB key of at least 4GB
- Internet connection
- An external disk (optional) to create a backup copy of data
- Disk for Windows recovery (optional)

Step 3: Download Ubuntu 20.04.2 LTS

- On the official Ubuntu website, you can find the setup ISO file

Download Ubuntu Desktop

The screenshot shows the Ubuntu 20.04.2 LTS download page. A green arrow labeled 'Direct download' points to a green 'Download' button. Another green arrow labeled 'For torrent download' points to a link that says 'see our alternative downloads.' The page content includes the title 'Ubuntu 20.04.2 LTS', a description of LTS support, a link to release notes, and a list of system requirements.

Ubuntu 20.04.2 LTS

Download the latest [LTS](#) version of Ubuntu, for desktop PCs and laptops. LTS stands for long-term support — which means five years, until April 2025, of free security and maintenance updates, guaranteed.

[Ubuntu 20.04 LTS release notes](#)

Recommended system requirements:

- 2 GHz dual core processor or better
- 4 GB system memory
- 25 GB of free hard drive space
- Internet access is helpful
- Either a DVD drive or a USB port for the installer media

Direct download

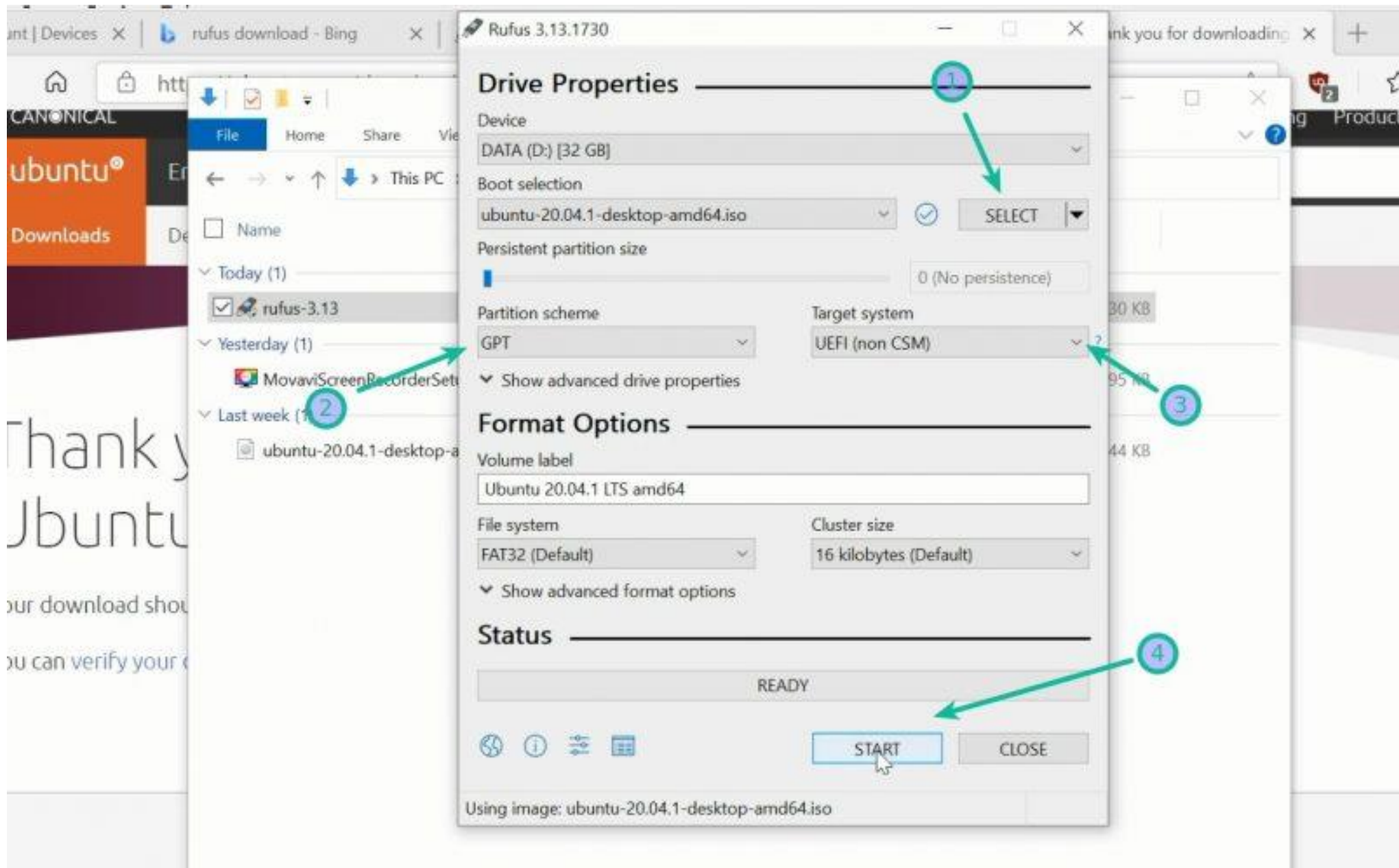
Download

For other versions of Ubuntu Desktop including torrents, the network installer, a list of local mirrors, and past releases [see our alternative downloads.](#)

For torrent download

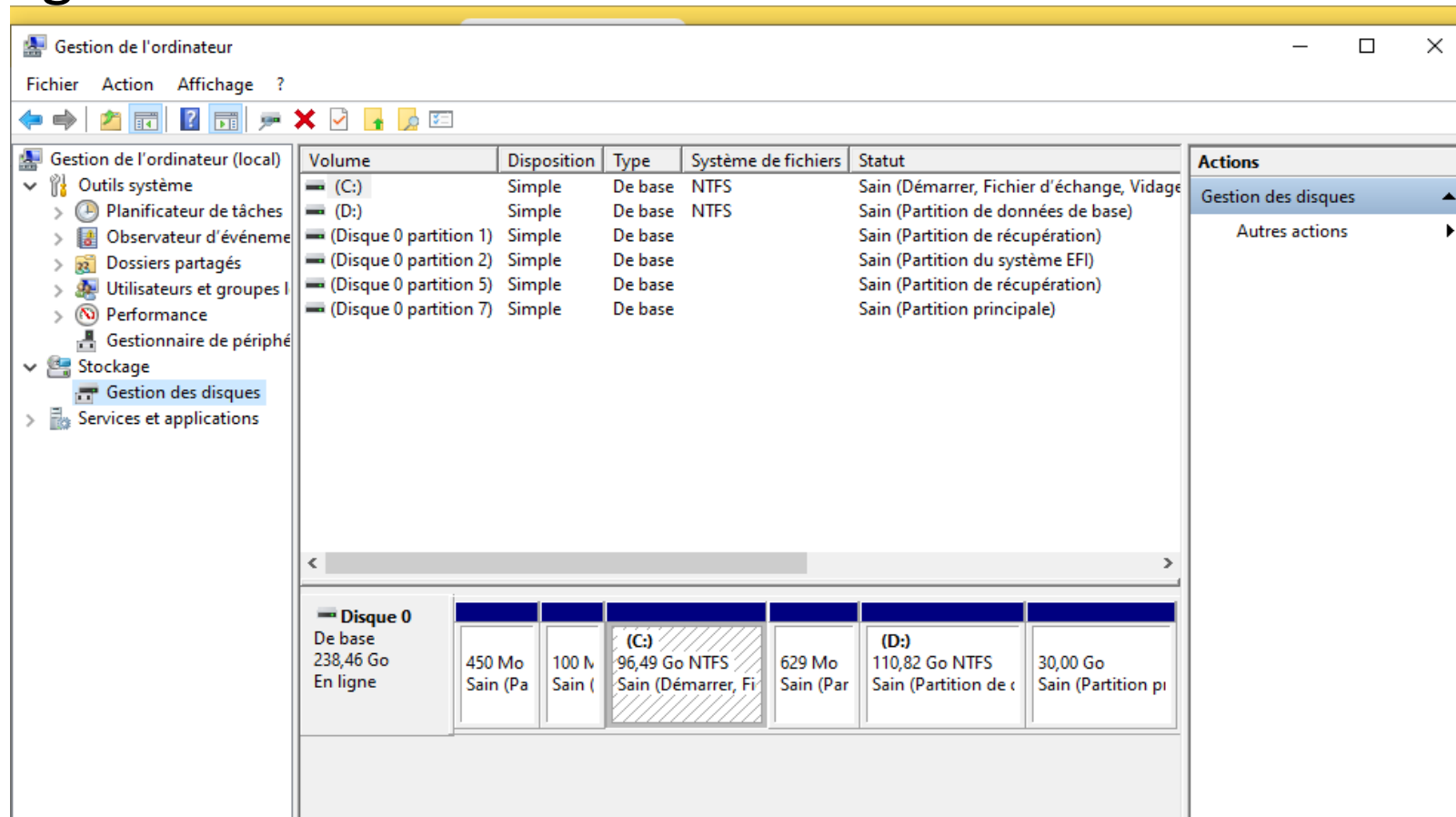
Step 4: Create a bootable USB flash drive

- Use a Windows tool to create this key; the tool suggested by the Ubuntu site is RUFUS
- Download and install Rufus
- Data on the USB stick will be lost

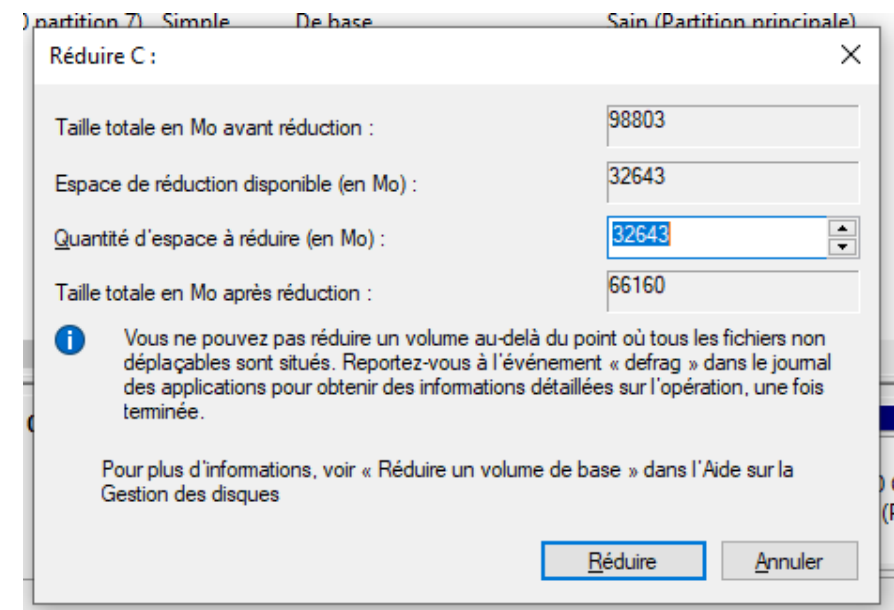
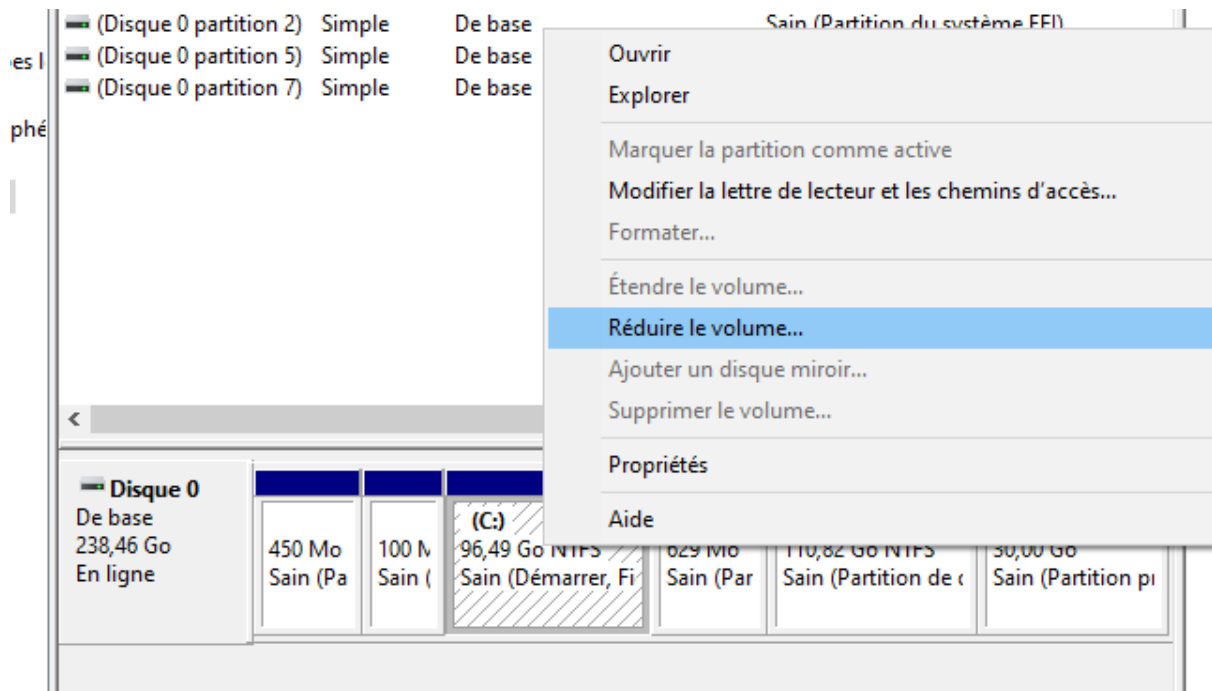


Step 5: Create free disk space

- Start menu - Windows administrative tools - Computer management - Disk management

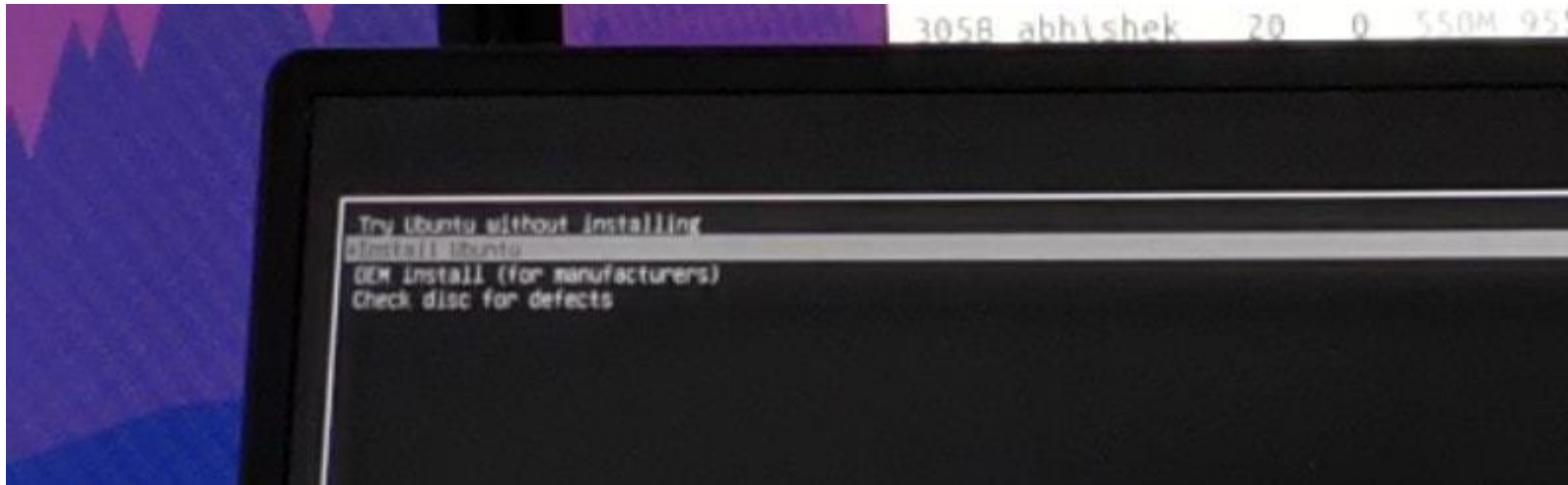


- Select the desired partition and choose - reduce volume from the menu.
- Choose a new partition size of at least 15-20 GB



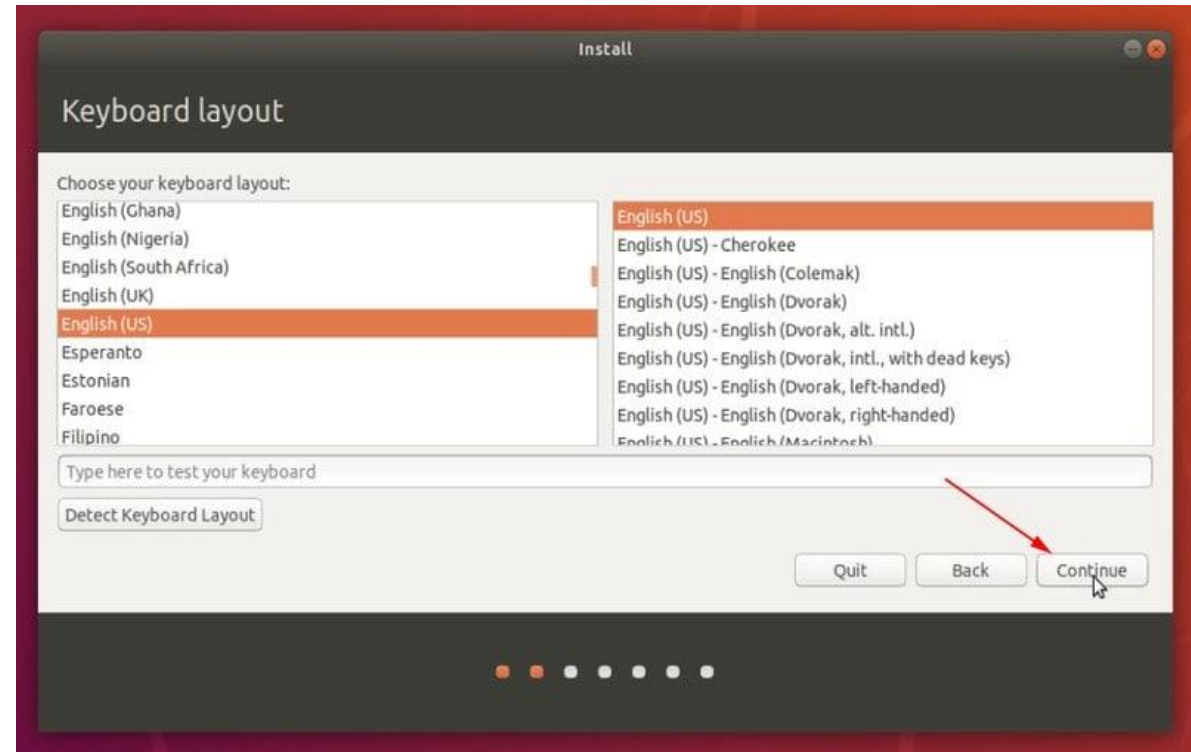
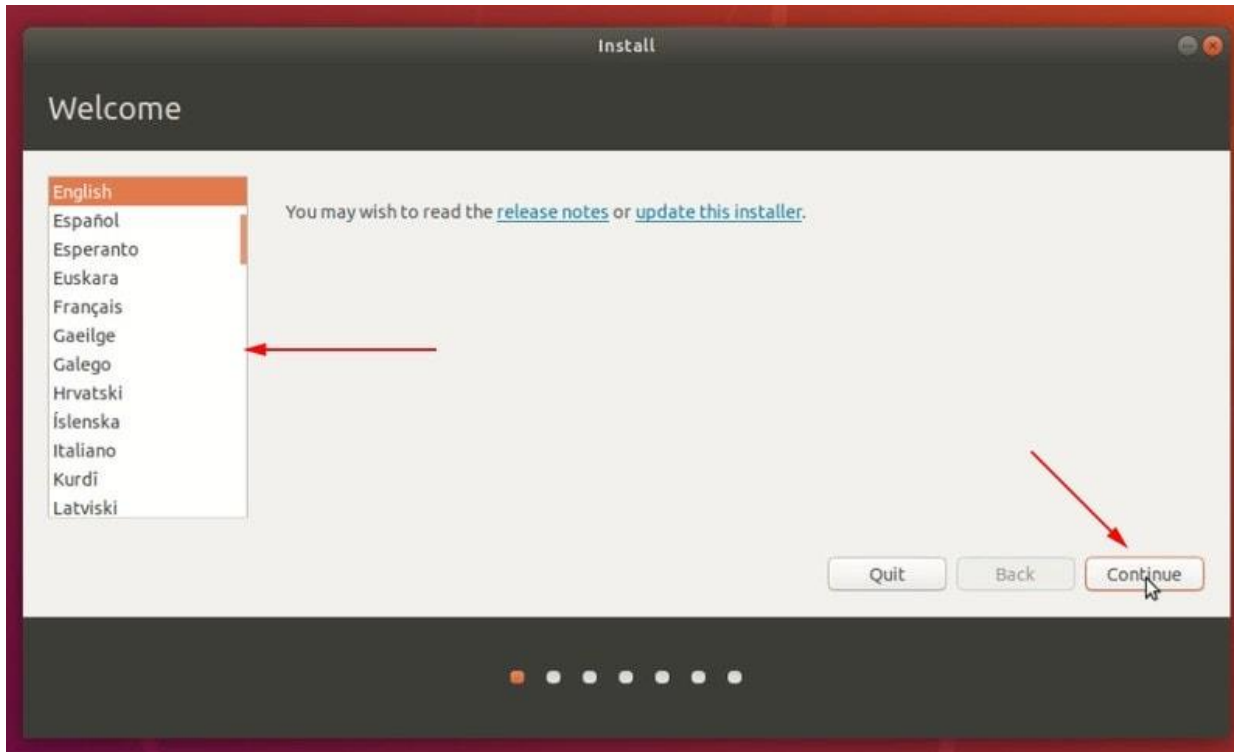
Step 6: Restart from disk

- Go to boot parameters - in PC startup press F12 or F10 - the BIOS program starts - and in Boot parameters change the boot order - 1 USB key 2 Hard disk
- Save and reboot - the PC will be booted by the inserted USB key

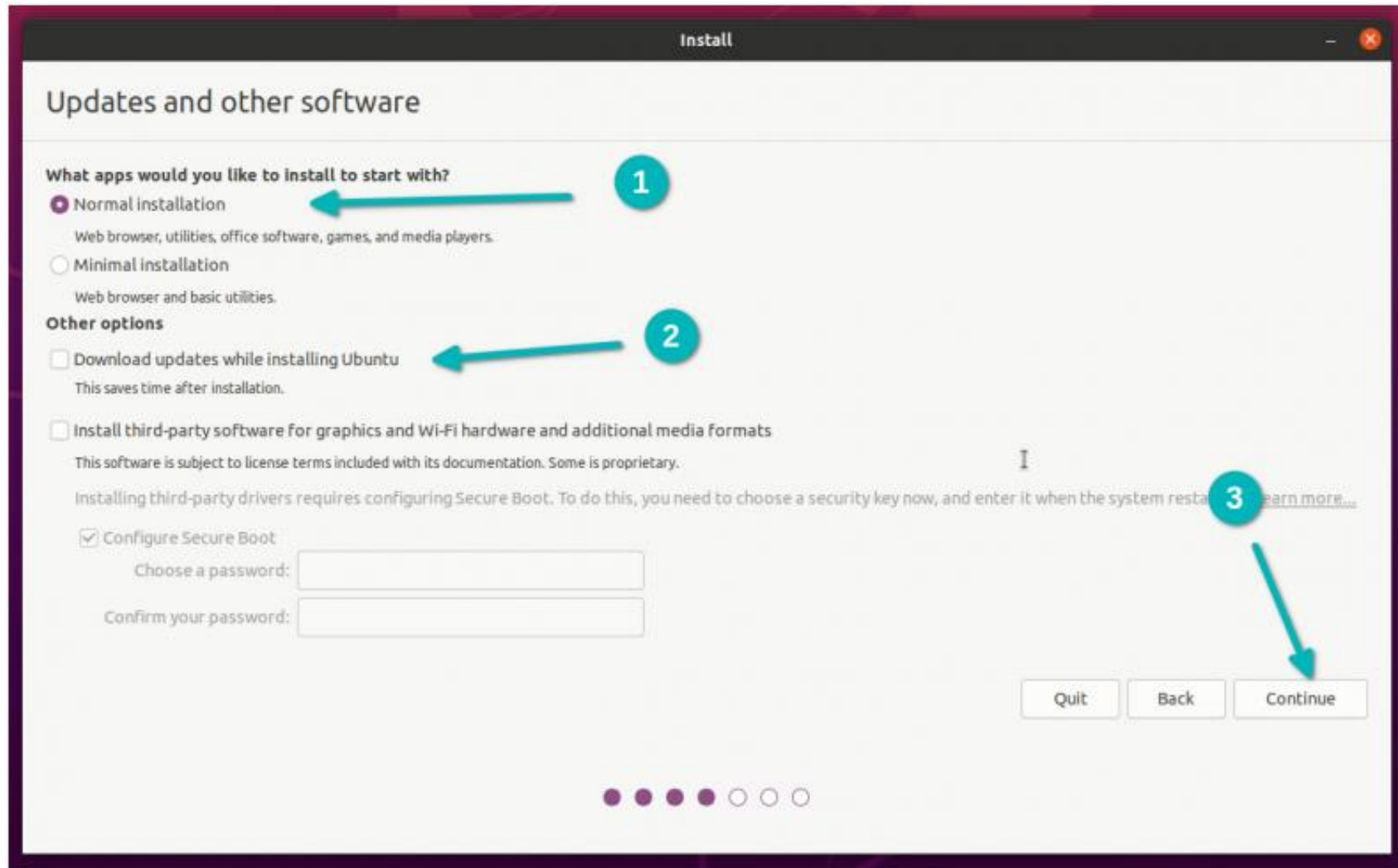


Step 7: Start installation

- Choose language and keyboard

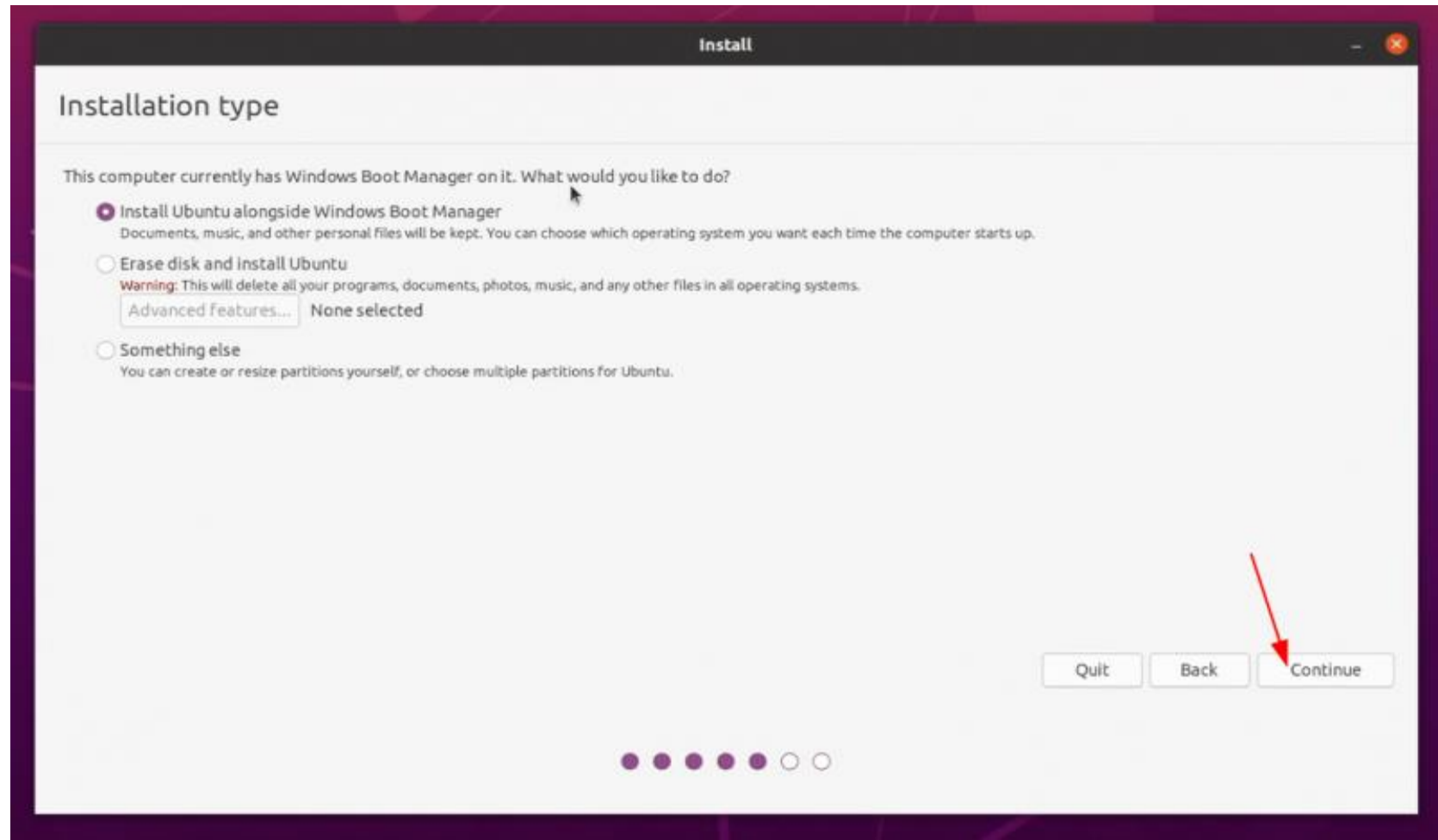


- Choosing a standard installation

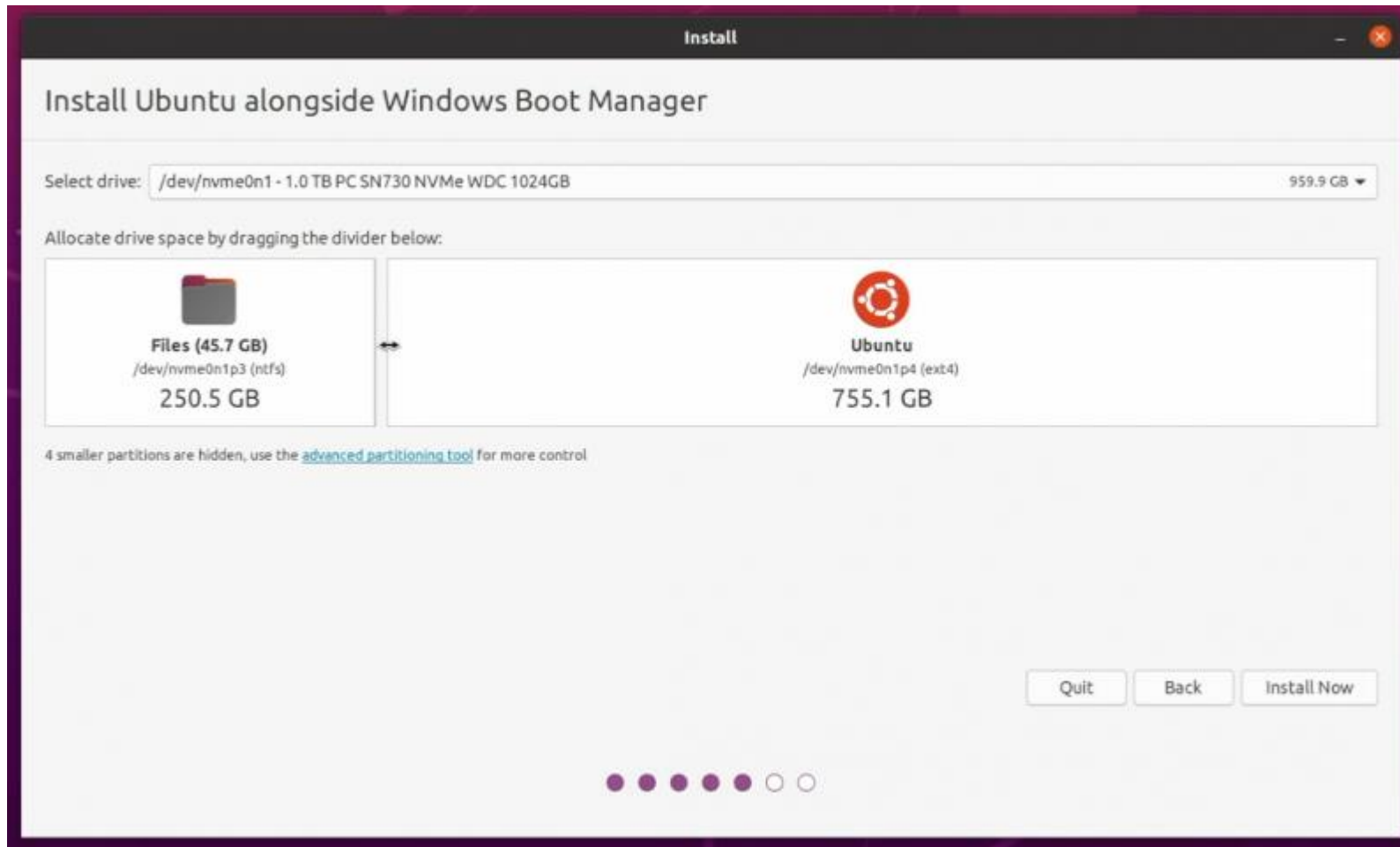


Step 8: two approaches to installation

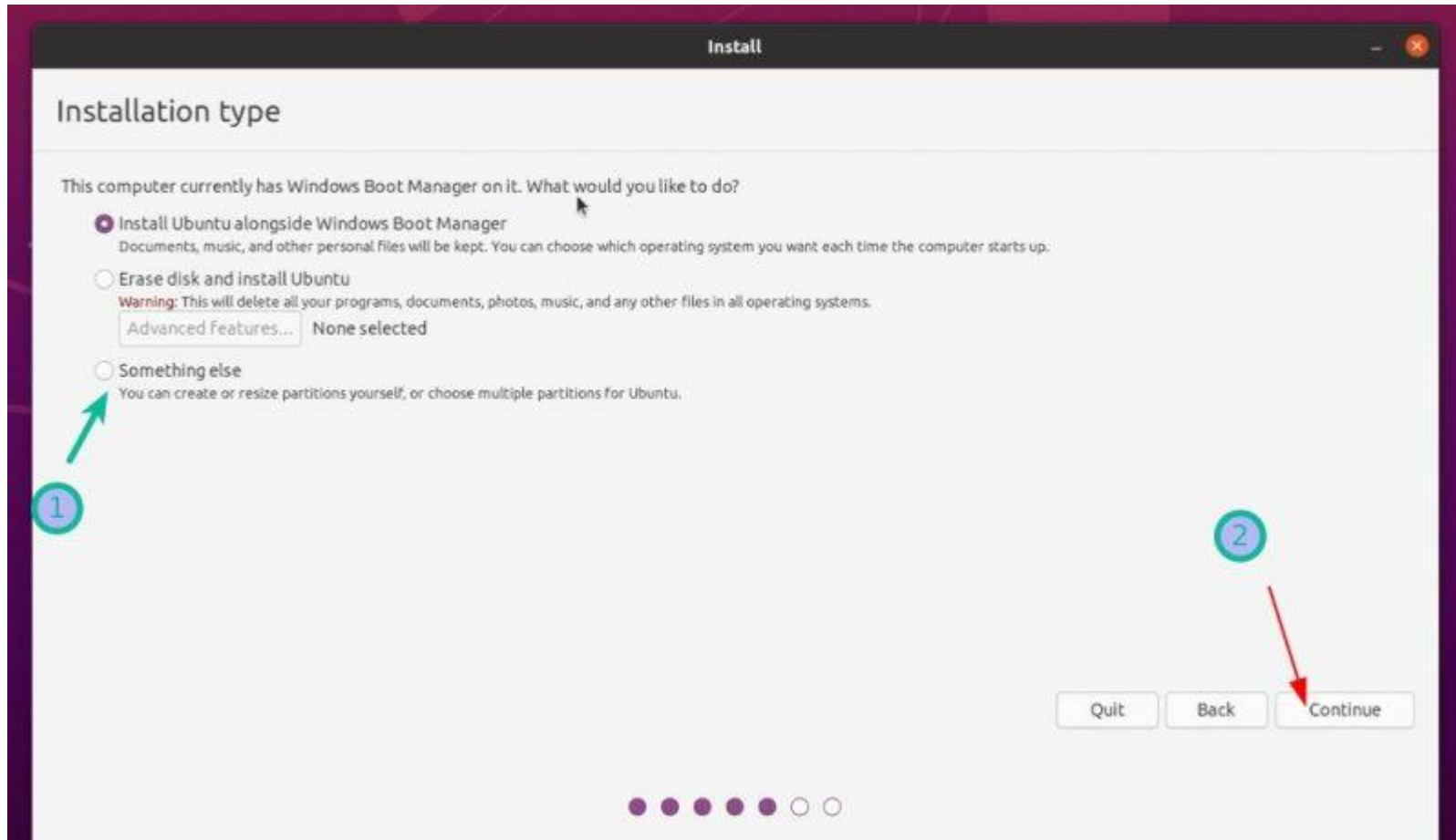
- Approch 1: if you see this screen - the installation chooses to install Ubuntu alongside Windows without user intervention -- continue



- The next screen - to choose the partition where Ubuntu will be installed - this step may no longer appear, and the installation automatically makes the choice in the partition already created.



- Approch 2: the 'install ubuntu alongside windows boot manager' option does not appear
- Choose – something else
- We'll move on to the partitioning screen - choose the partition you want to create



Installation type

free space 1.0 MB sda1 (fat32) 524.3 MB sda2 (fat32) 41.9 MB sda3 (unknown) 134.2 MB sda4 (ntfs) 513.8 MB sda5 (ntfs) 119.9 GB free space 118.0 GB sda7 (ntfs) 8.4 GB

Device	Type	Mount point	Format?	Size	Used	System
/dev/sda3			<input type="checkbox"/>	134 MB	unknown	
/dev/sda4	ntfs		<input type="checkbox"/>	513 MB	293 MB	
/dev/sda5	ntfs		<input type="checkbox"/>	119900 MB	43263 MB	
free space			<input type="checkbox"/>	117982 MB		
/dev/sda7	ntfs		<input type="checkbox"/>	8383 MB	7566 MB	
/dev/sda6			<input type="checkbox"/>	8596 MB	unknown	
free space			<input type="checkbox"/>	0 MB		

Change...

New Partition Table... Revert

Device for boot loader installation:

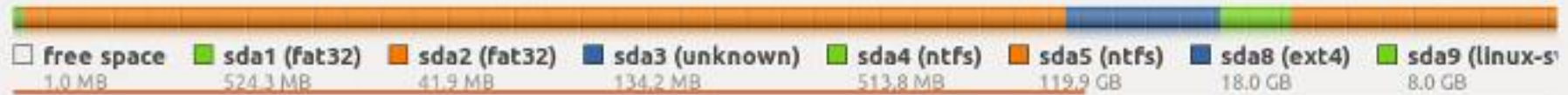
/dev/sda ATA SAMSUNG SSD PM84 (256.1 GB)

Quit

Back

Install Now

Installation type



Device	Type	Mount point	Format?	Size	Used	System
/dev/sda5	ntfs		<input type="checkbox"/>	119900 MB	43263 MB	
/dev/sda8	ext4	/	<input checked="" type="checkbox"/>	17983 MB	unknown	
/dev/sda9	swap		<input type="checkbox"/>	7999 MB	unknown	
/dev/sda10	ext4	/home	<input checked="" type="checkbox"/>	91999 MB	unknown	
/dev/sda7	ntfs		<input type="checkbox"/>	8365 MB	7566 MB	
/dev/sda6			<input type="checkbox"/>	8596 MB	unknown	
free space			<input type="checkbox"/>	0 MB		

+ - Change...

New Partition Table... Revert

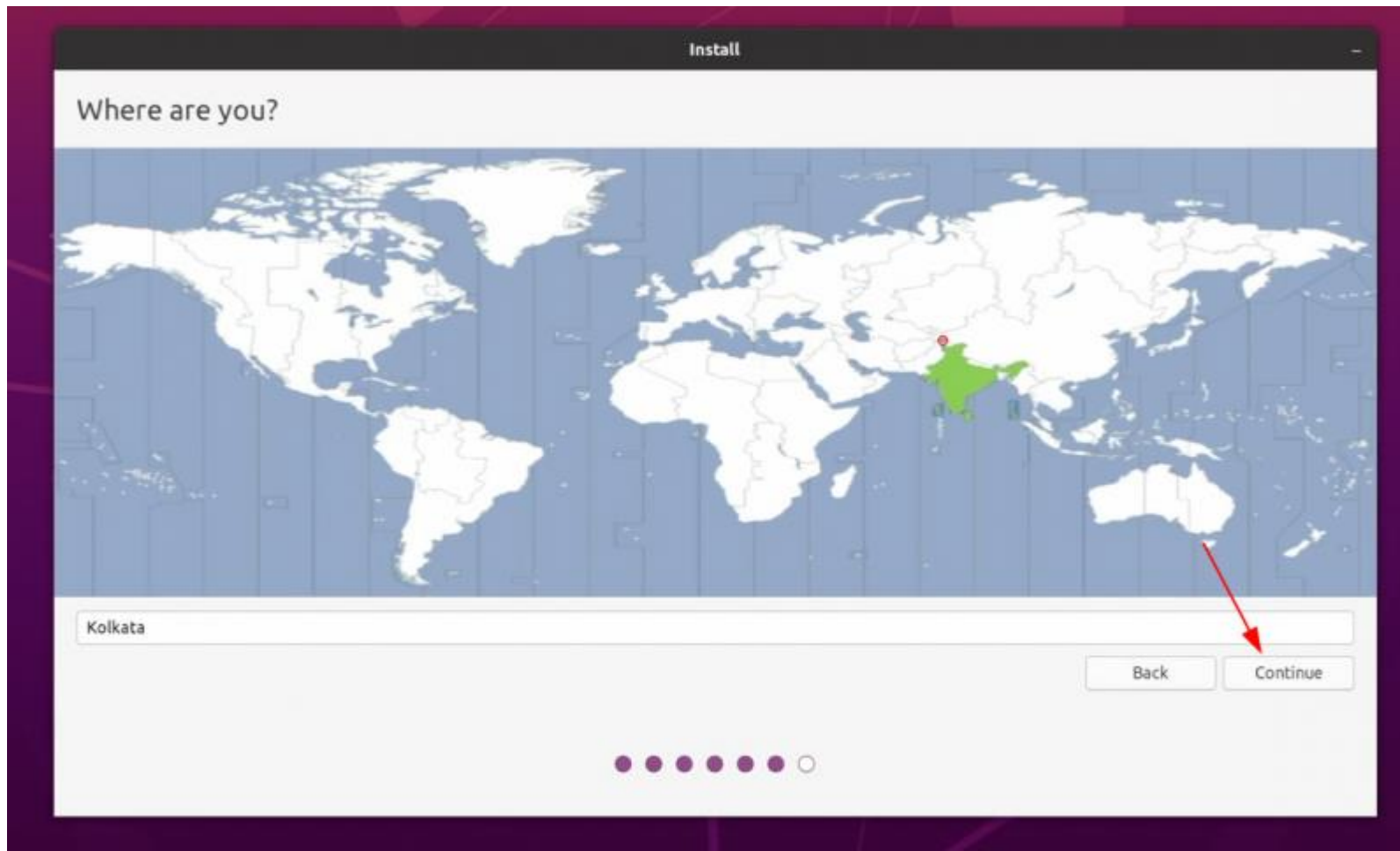
Device for boot loader installation:

/dev/sda ATA SAMSUNG SSD PM84 (256.1 GB)

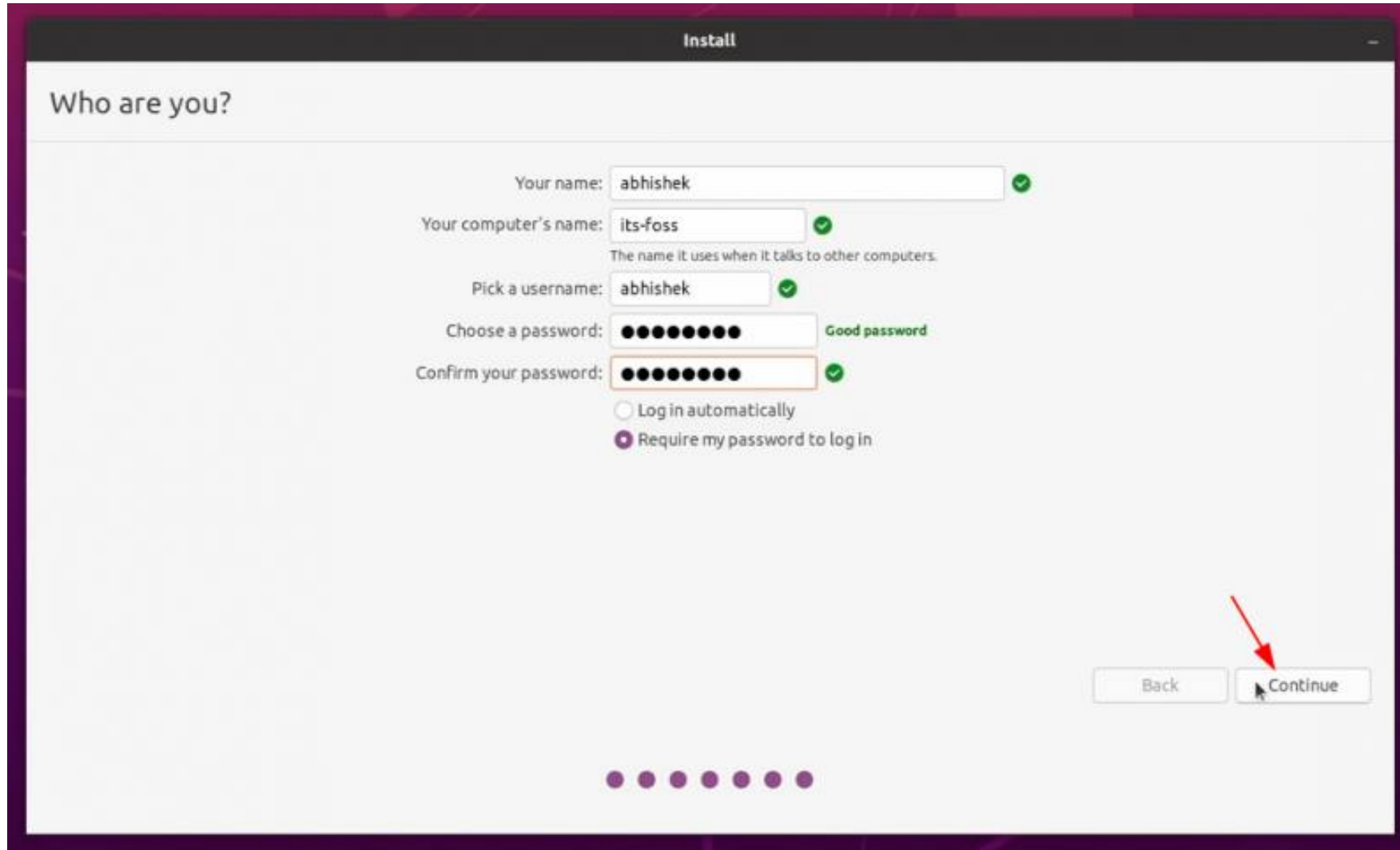
Quit Back **Install Now**

Step 9: the rest of the installation

- Select regional options



- Enter user information

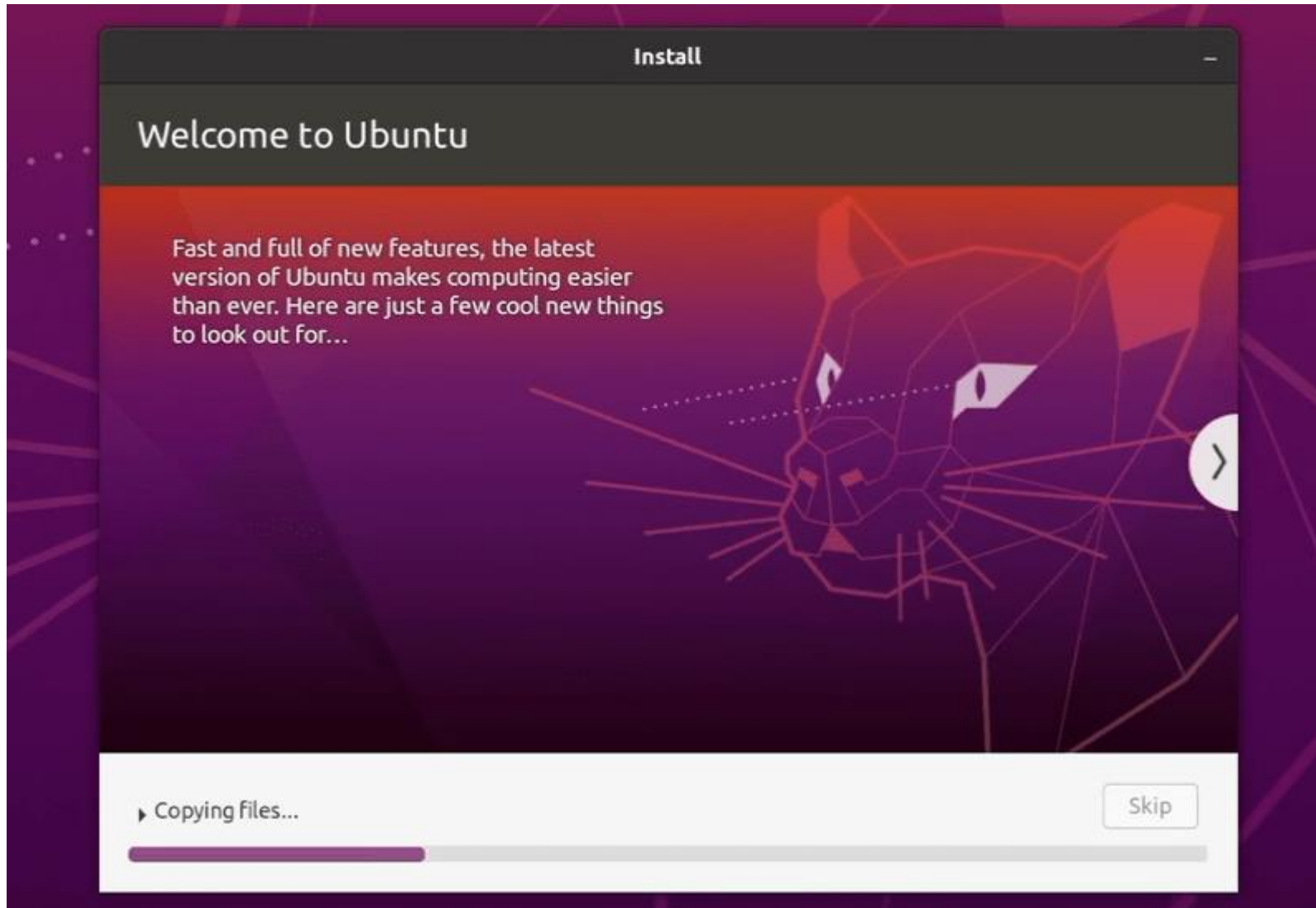


The image shows a screenshot of the Ubuntu installer window titled "Install". The main heading is "Who are you?". The form contains the following fields and options:

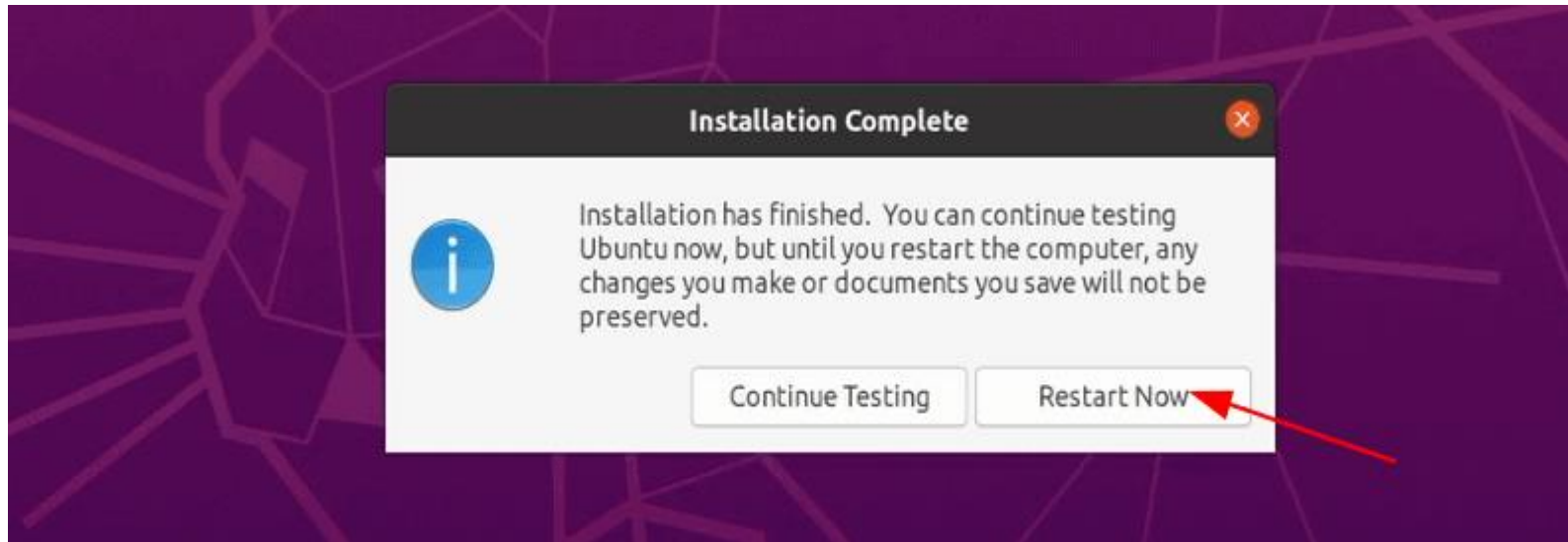
- Your name:** Input field with "abhishek" and a green checkmark.
- Your computer's name:** Input field with "its-foss" and a green checkmark. Below it, the text "The name it uses when it talks to other computers." is displayed.
- Pick a username:** Input field with "abhishek" and a green checkmark.
- Choose a password:** Password field with 10 dots, a green checkmark, and the text "Good password" to its right.
- Confirm your password:** Password field with 10 dots and a green checkmark.
- Log in options:** Two radio buttons: "Log in automatically" (unselected) and "Require my password to log in" (selected).

At the bottom right, there are two buttons: "Back" and "Continue". A red arrow points to the "Continue" button. At the bottom center, there is a progress indicator consisting of seven purple dots, with the first one being larger and filled, indicating the current step.

- Ubuntu is here to copy files and create directories



- Reboot and remove USB key



- The boot list for choosing to start Windows or Ubuntu

