Install Ubuntu Alongside with Windows

This tutorial describes the installation process of the latest release of **Ubuntu Desktop 18.04**, codename **Bionic Beaver**, on a dedicated machine or a virtual machine alongside a pre-installed **Windows 10** Operating System. The installation process can be done via the **Ubuntu Desktop DVD ISO** image or via a bootable **Ubuntu USB**drive.

The **Ubuntu Bionic OS** will be installed on a **UEFI** motherboard with **Legacy Mode** or **CSM** (**Compatibility Support Module**) option disabled.

Requirements

1. [Download Ubuntu Desktop 18.04 ISO](#) image for x86_64bit architecture.
2. A direct or a proxy internet connection.
3. [Rufus utility](#) in order to create an Ubuntu Desktop bootable USB drive compatible with UEFI motherboards.

Create Free Space on Windows for Ubuntu Install

On a pre-installed machine with a single **Windows 10** partition, you need to create some free space in **Windows**partition in order to install **Ubuntu 18.04**.

First login to the system using an account with administrator privileges, open a **Command Prompt** window with admin rights and execute `diskmgmt.msc` command to open **Disk Management** utility.

`diskmgmt.msc`

Select the **Windows** partition, usually `c:` volume, right click on this partition and select **Shrink Volume** option in order to reduce the partition size.
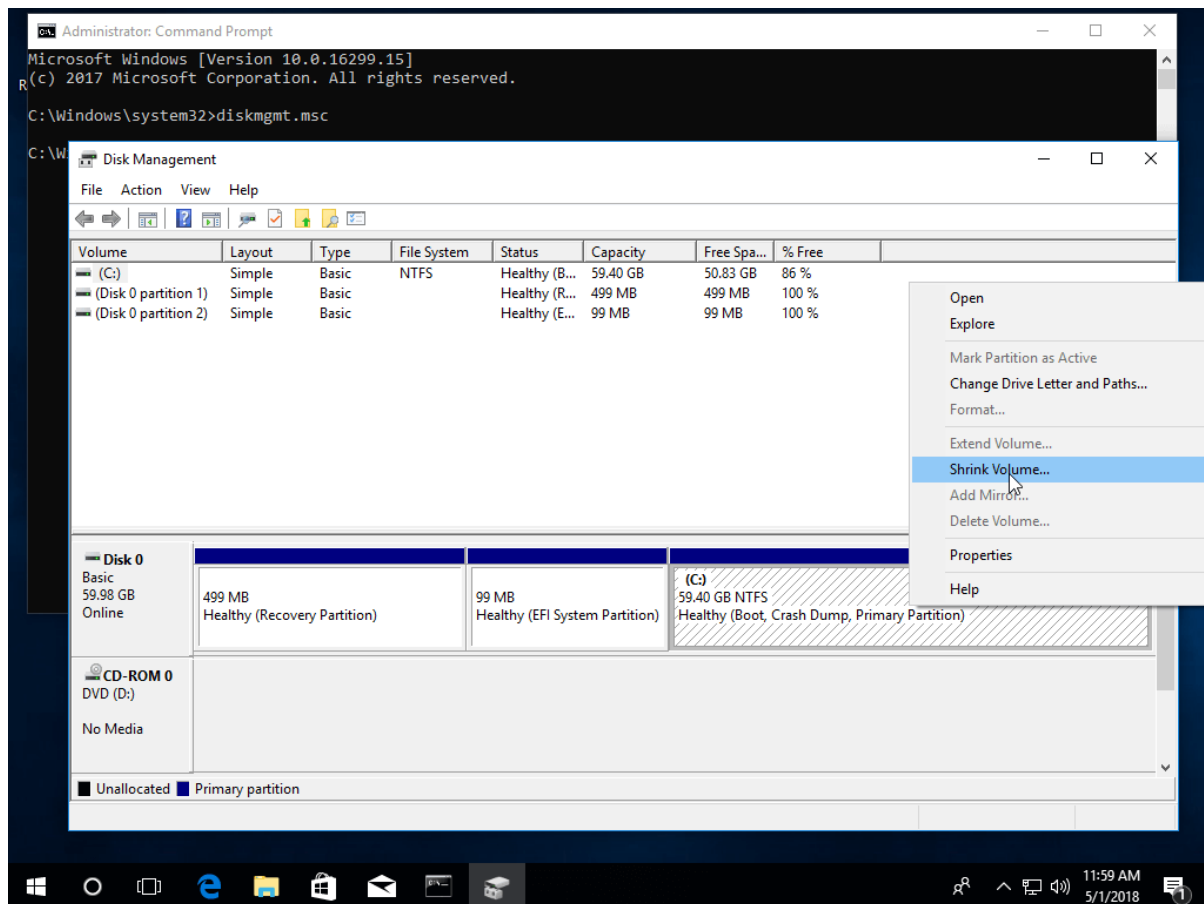
Windows Disk Management Utility

Wait for the system to collect partition size data, add the desired amount of space you want to shrink and hit in **Shrink** button. After the shrink process completes, a new unallocated space will be present in your drive. We'll use this free space to install Ubuntu alongside Windows 10.
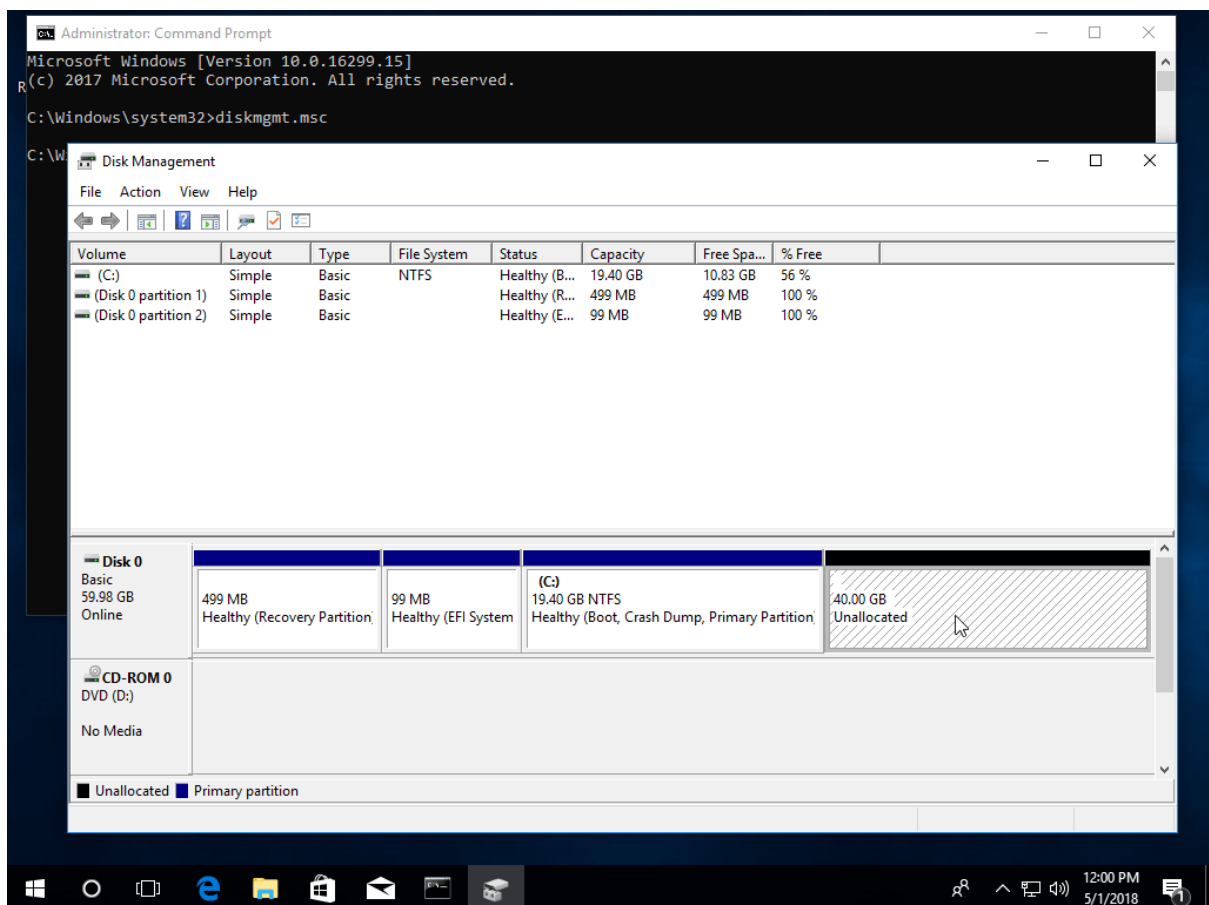
New Windows Partition for Ubuntu Install

Install Ubuntu 18.4 Alongside with Windows

On the next step, place **Ubuntu Desktop DVD ISO** image or the bootable USB stick into the appropriate motherboard drive and, **reboot** the machine and hit the appropriate bootable key ((usually `F12`, `F10` or `F2`) in order to boot the Ubuntu installer DVD or USB bootable image.
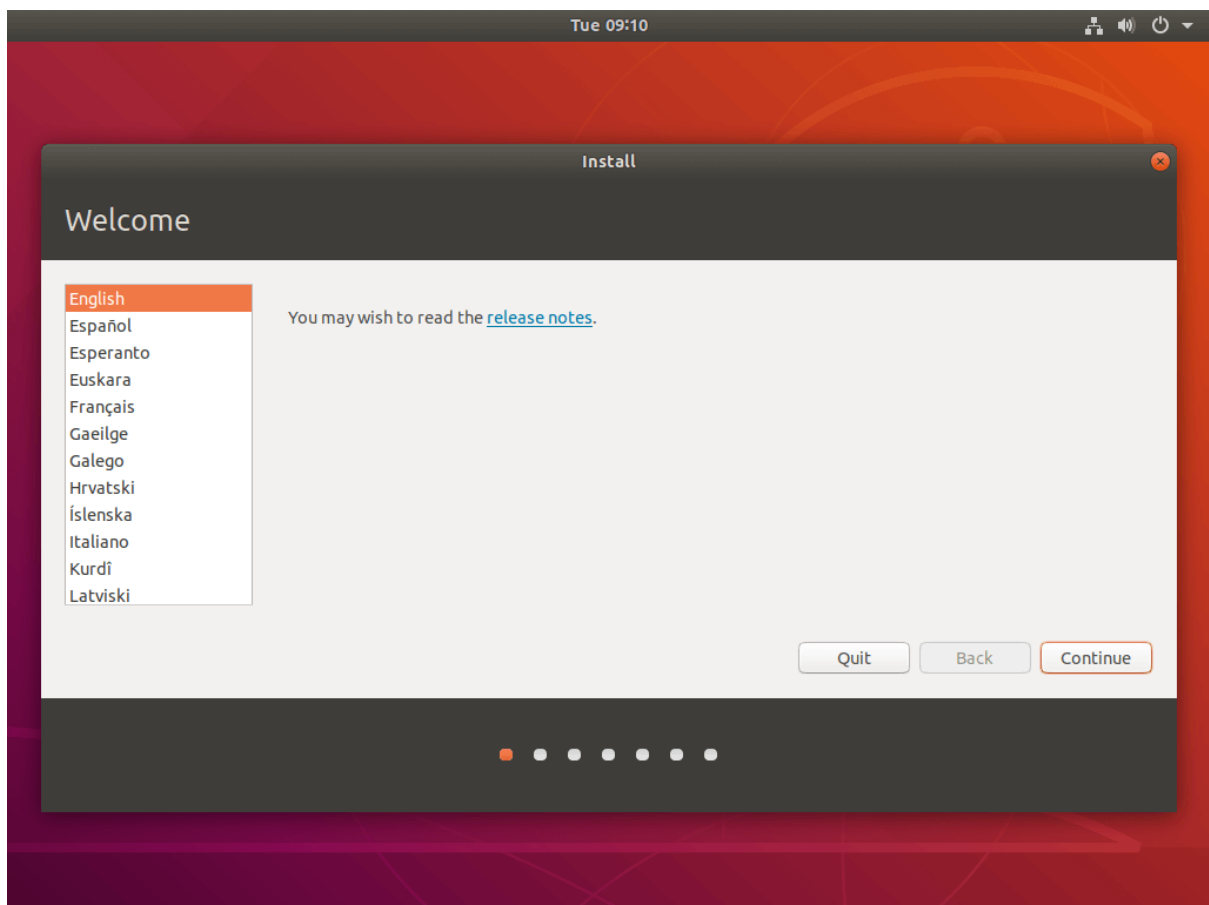
On the first installation screen select **Install Ubuntu** and hit **Enter** key to start the installation process.

```
                    GNU GRUB  version 2.02

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 │ Try Ubuntu without installing                                            │
 │*Install Ubuntu                                                           │
 │ OEM install (for manufacturers)                                         │
 │ Check disc for defects                                                  │
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     Use the ↑ and ↓ keys to select which entry is highlighted.
     Press enter to boot the selected OS, `e' to edit the commands before booting or `c' for a command-line. ESC to
     return previous menu.
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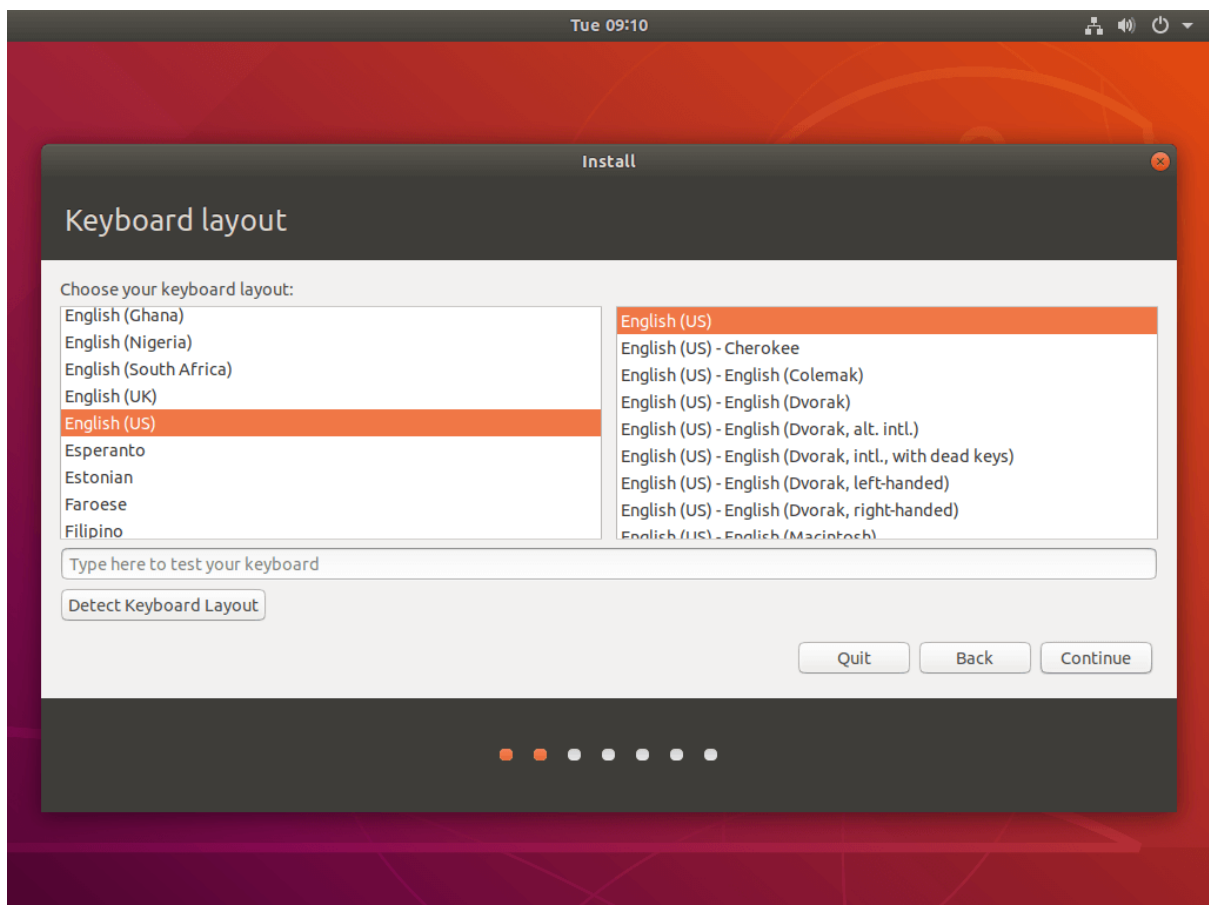
Select Install Ubuntu

In the "**Welcome**" screen, select your installation language and hit
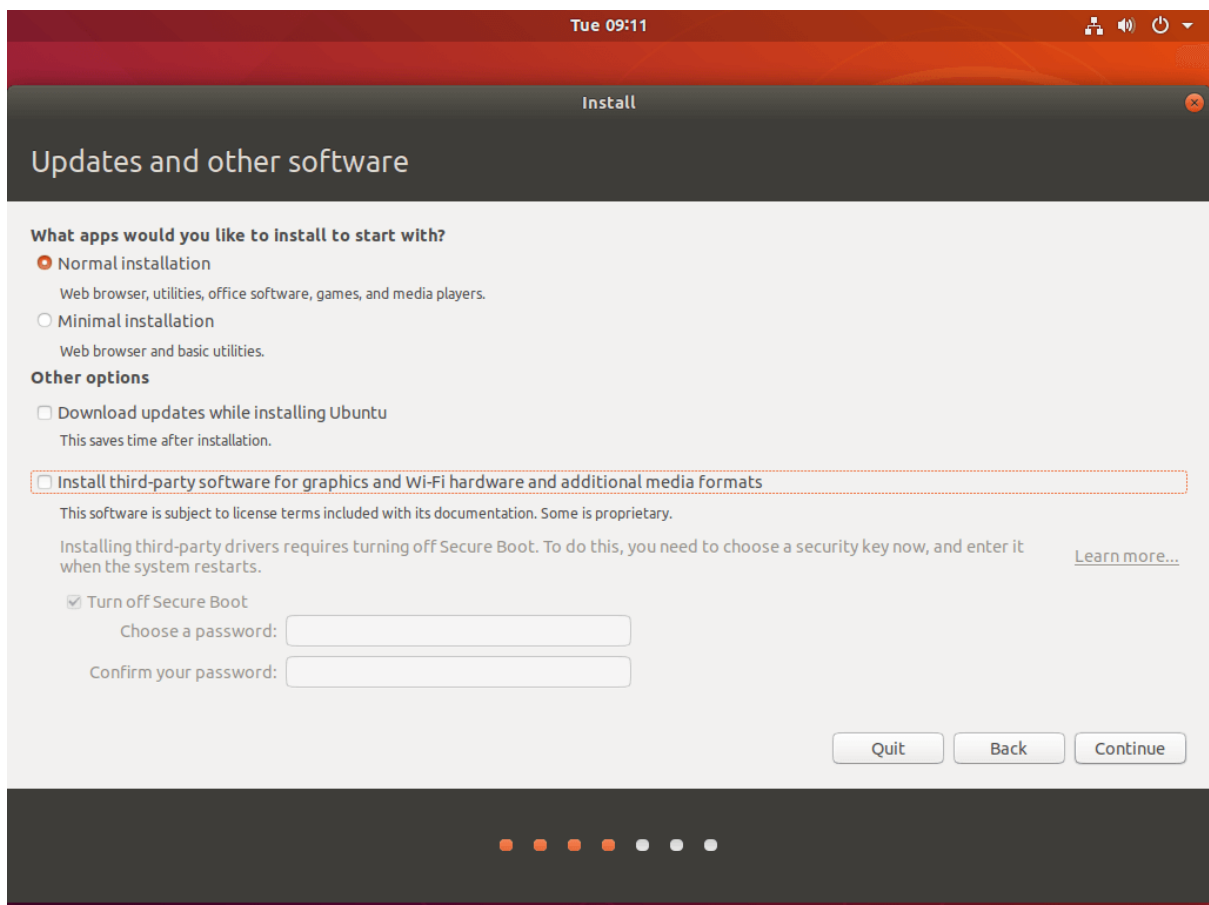on **Continue** button.

Select Ubuntu Installation Language

On the next screen, select the keyboard layout for your system and hit on **Continue** button.

Select Ubuntu Keyboard Layout

In the next installation screen, choose `Normal` installation and hit on **Continue** button. In this screen you also have the option to perform a `Minimal` installation of Ubuntu Desktop, which includes only some basic system utilities and a web browser.

You can also turn off **Secure Boot** option, if this option is enabled in motherboard **UEFI** settings in order to install third-party software for graphic card, Wi-Fi or additional media formats. Be aware that turning off Secure Boot option requires a password.

Select Ubuntu Install Type

Next, In Installation type menu, choose Something else option in order to manually partition the hard disk and hit on **Continue** button.
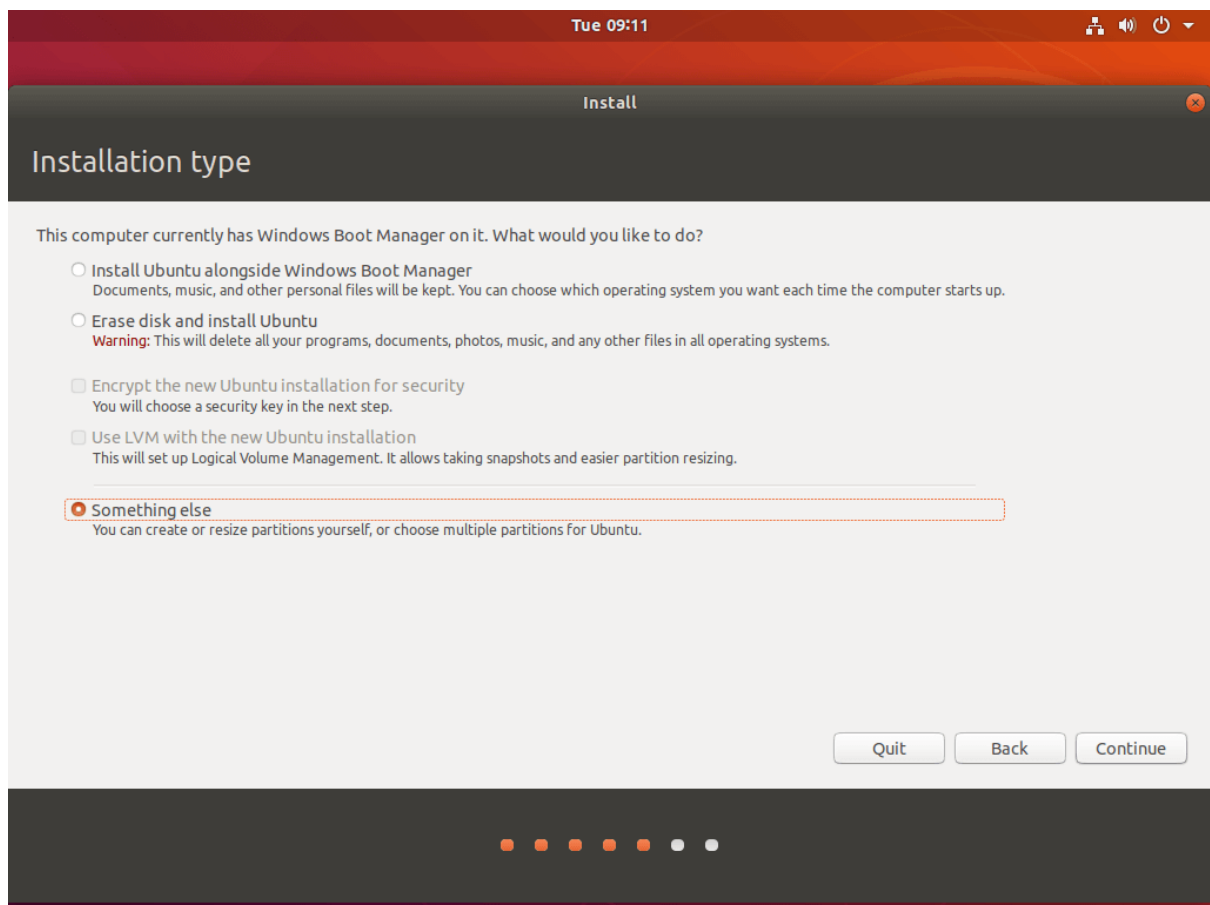
Ubuntu Manual Partition

In hard disk partition table menu, select the hard drive **free space** and hit on + button in order to create the Ubuntu partition.
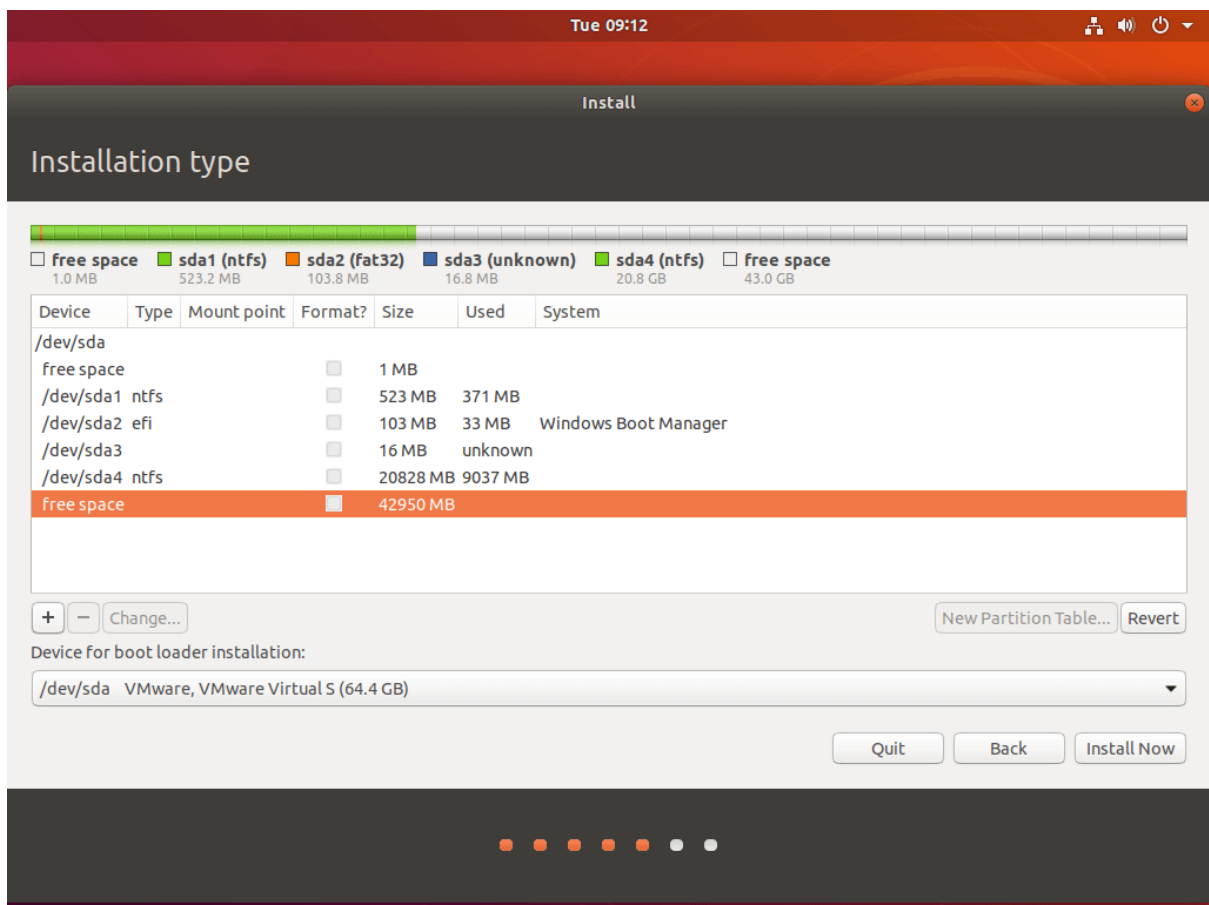
Select Ubuntu Install Drive

In the partition pop-up window, add the size of the partition in MB, choose the partition type as **Primary** and the partition location at the Beginning of this space.

Next, format this partition with ext4 filesystem and use `/` as partition mount point. The `/(root)` partition summary is described below:

- Size = minimum **30000 MB** recommended
- Type for the new partition = **Primary**
- Location for the new partition = **Beginning of this space**
- Use as = **EXT4 journaling file system**
- Mount point = `/`
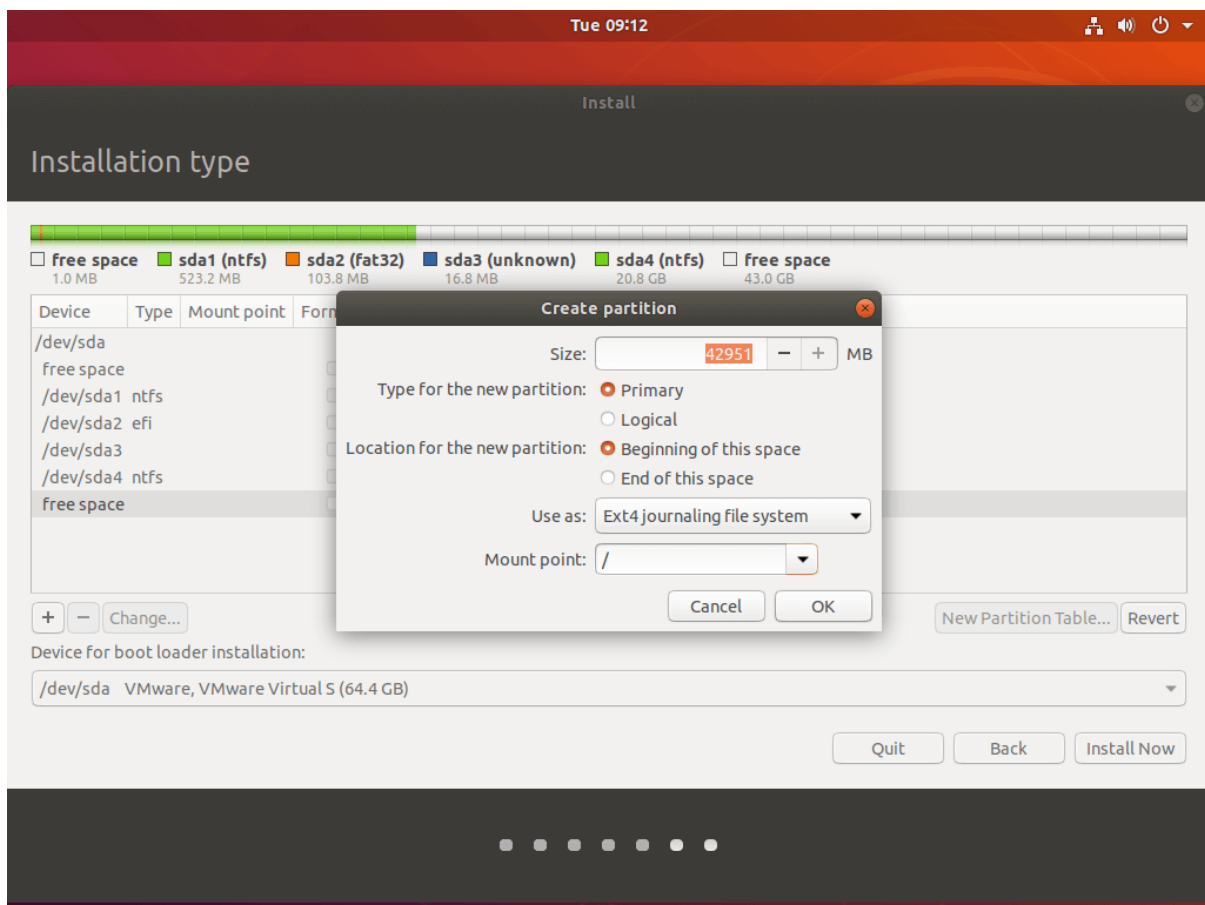
Create Ubuntu Root Partition

After completing this step, hit on **OK** button to return to disk utility. Other partitions, such as `/home` or `Swap` are optional in Ubuntu Desktop and should be created only for special purposes.

However, if you still want to add a home partition, select free space, hit on `+` button and use the below scheme to create the partition.

- Size = size allocated as per your requirements, depending on the size of remaining disk free space
- Type for the new partition = **Primary**
- Location for the new partition = **Beginning**
- Use as = **EXT4 journaling file system**
- Mount point = `/home`

In this guide we'll install Ubuntu alongside Windows 10 with only the `/(root)` partition set. After you've created the required root partition on the disk, select Windows boot Manager as device for the boot loader installation and hit on **Install Now** button.
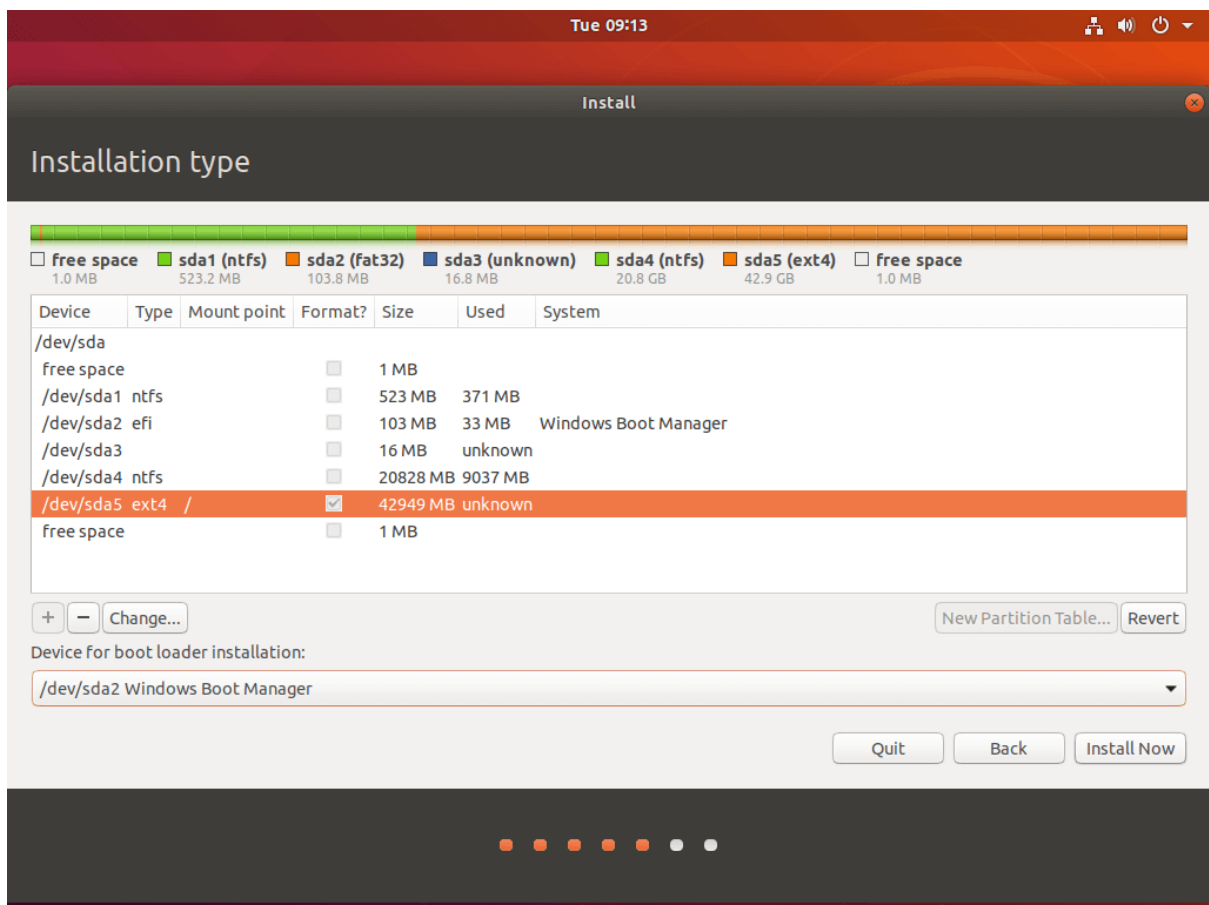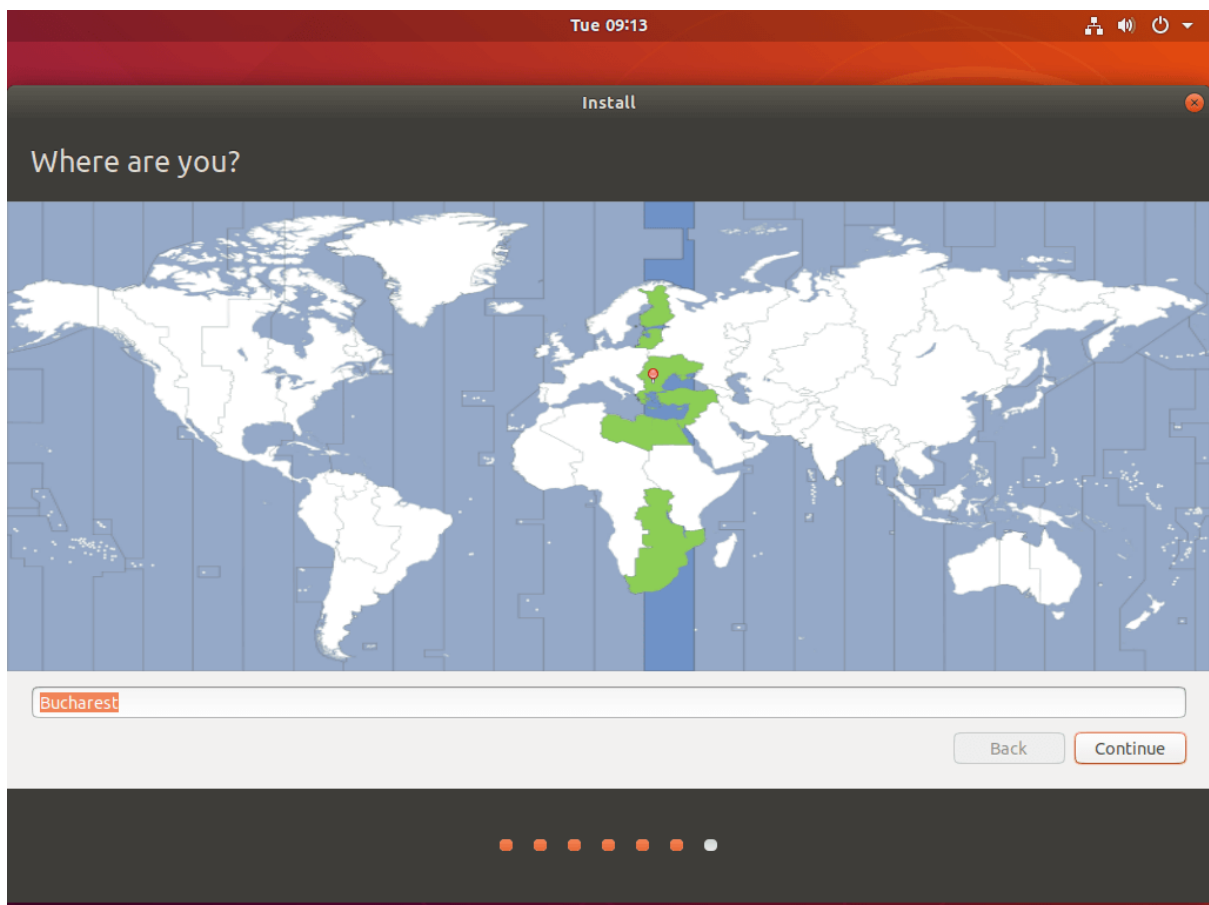
Select Ubuntu Boot Manager

In the pop-up window, hit on **Continue** button in order to commit the changes that will be written to disk and start the installation.
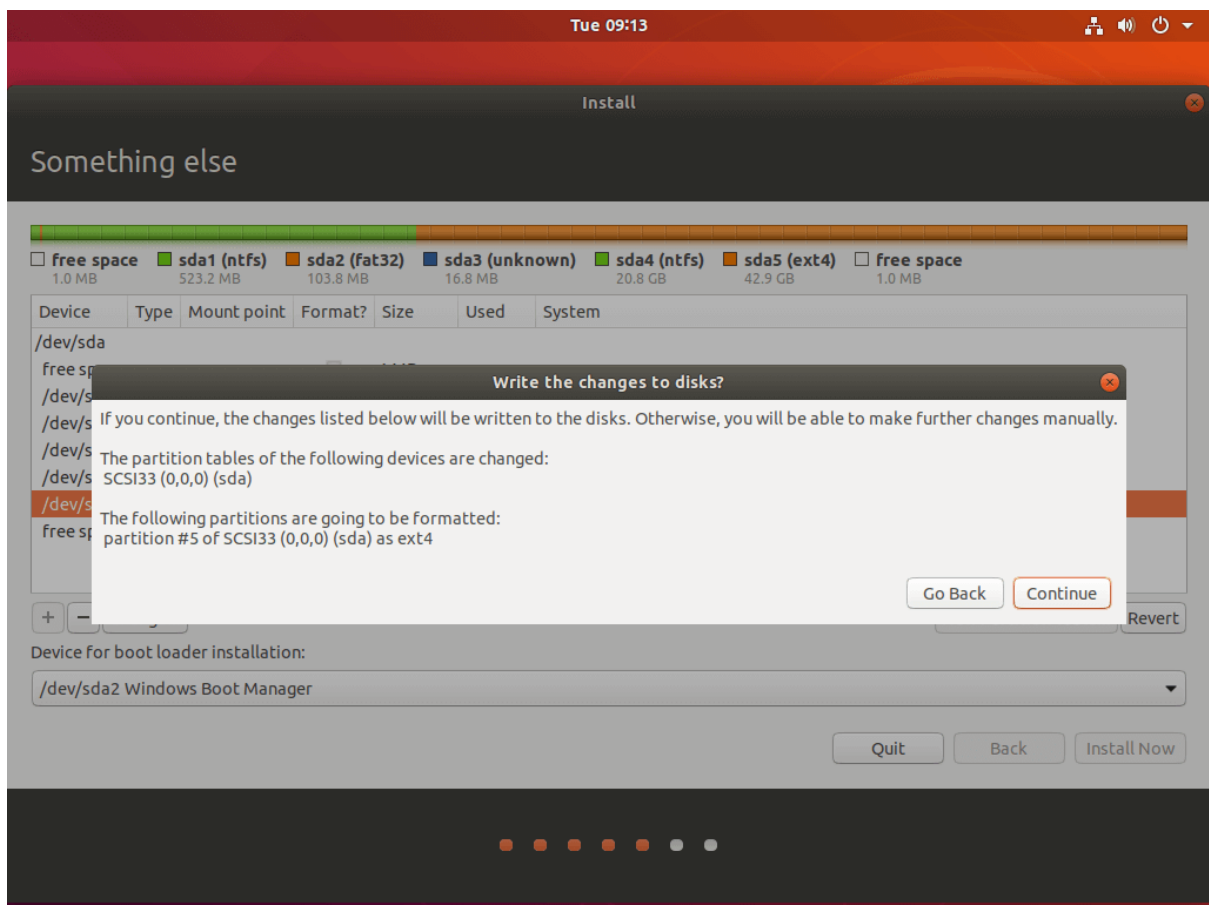
Confirm Ubuntu Partition Changes

On the next screen, select your location from the provided map and hit on **Continue** button.

Select Your Country Location

Next, insert your name, the name of your desktop, a **username** with a strong password and choose the option with '**Require my password to log in**'. When you finish, hit on **Continue** button and wait for the installation process to complete.

Create Ubuntu User Account

During the installation process, a series of screens which describe Ubuntu Desktop and the installation progress bar will be displayed on your screen. You cannot interfere with the installation process in this final stage.
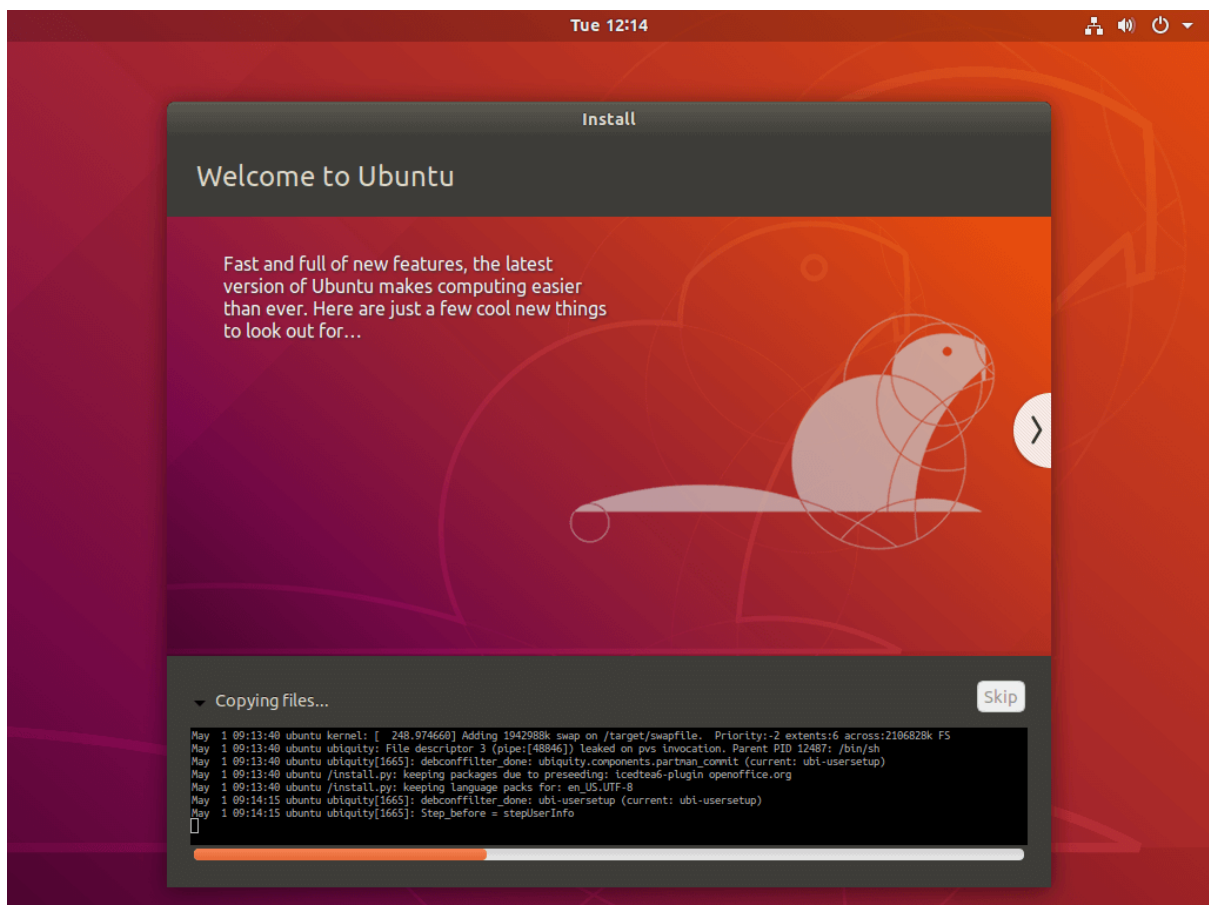
Ubuntu Installation Progress

After the installation completes, eject the installation medium and hit on **Restart now** button in order to reboot the machine.
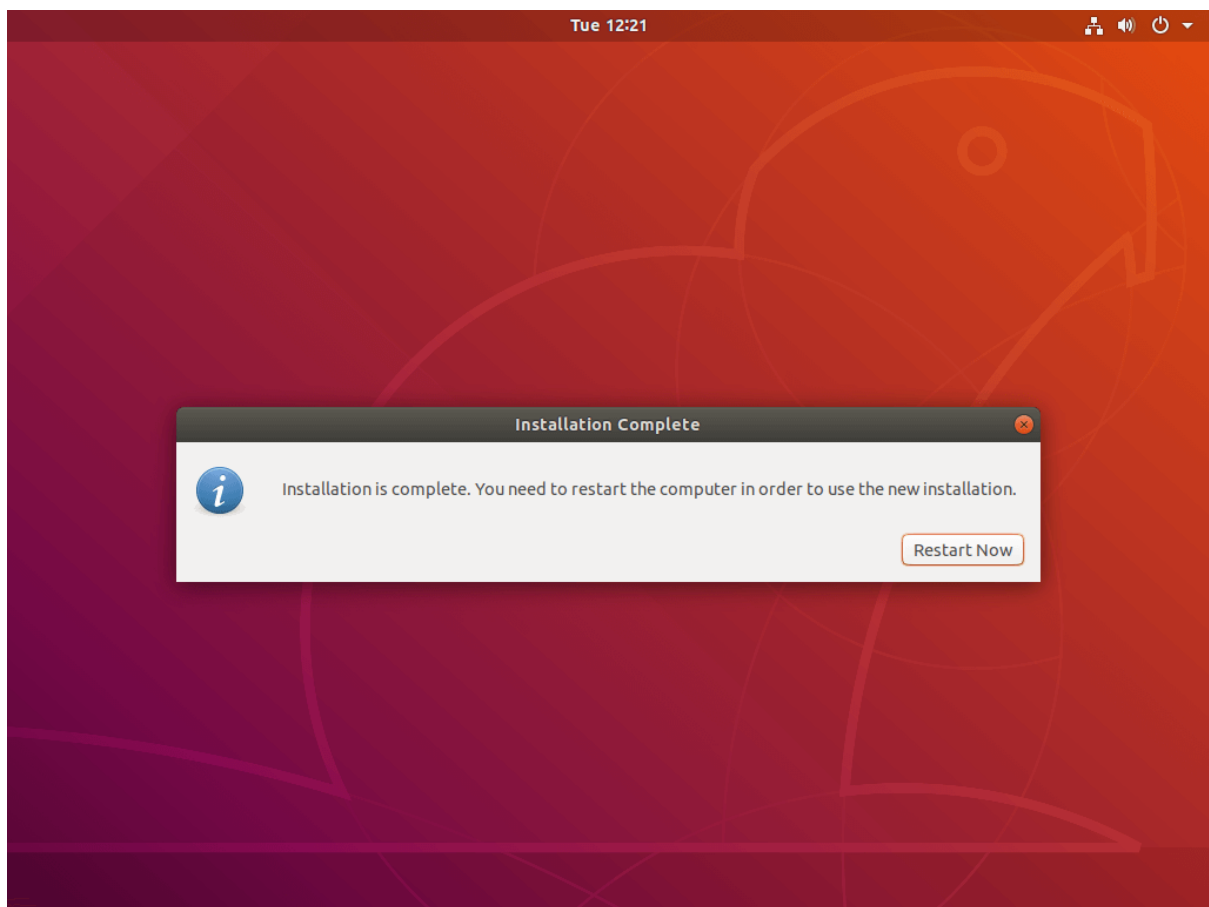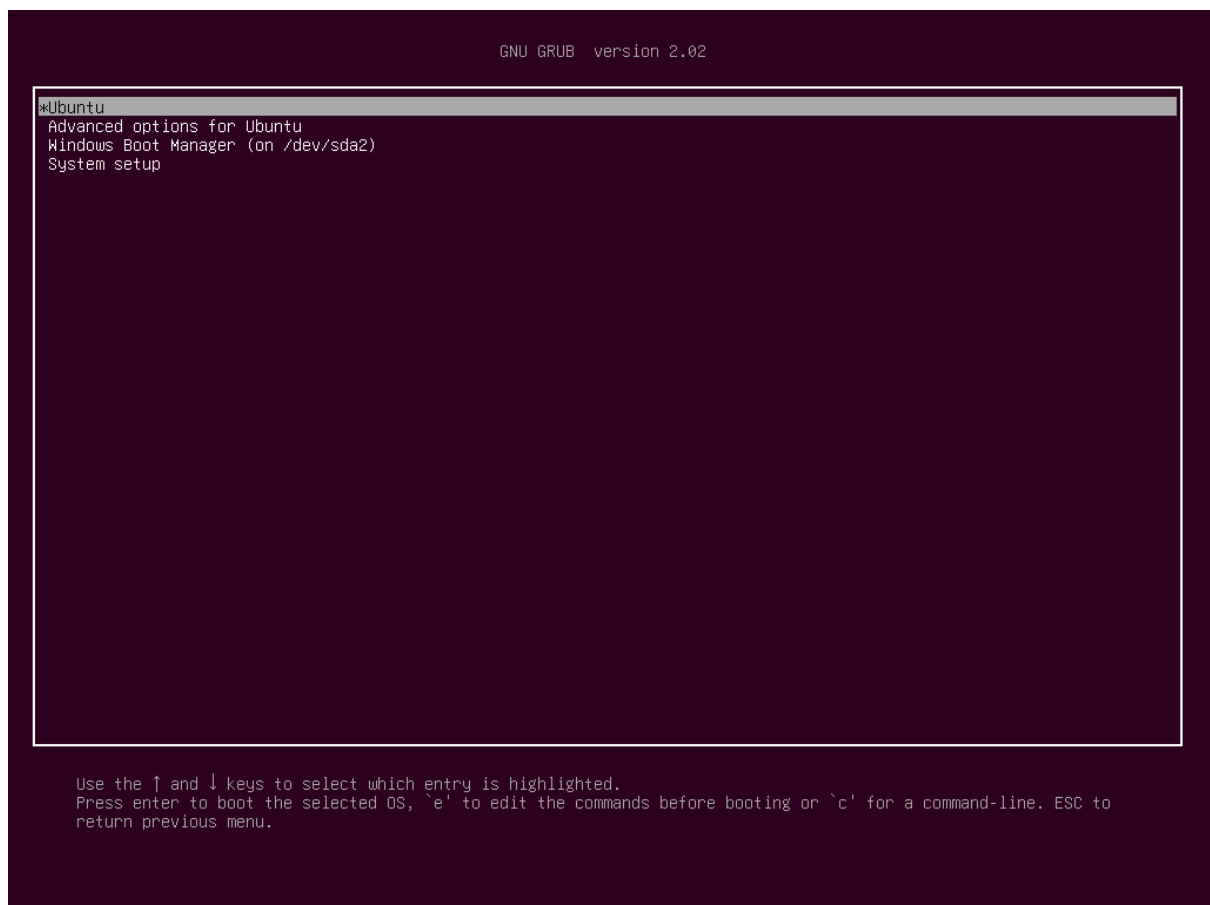
Ubuntu Installation Finishes

After reboot, the system should boot into **GNU GRUB** menu. In case the GRUB menu is not displayed, restart the machine, go to motherboard **UEFI** settings and change boot order or **Boot Options -> BBS priority**.

The settings to enable GRUB menu highly depends on your machine motherboard **UEFI** settings. You should consult motherboard documentation in order to identify the settings that need to be changed in order to display GRUB menu.

```
                         GNU GRUB  version 2.02

 *Ubuntu
  Advanced options for Ubuntu
  Windows Boot Manager (on /dev/sda2)
  System setup


















     Use the ↑ and ↓ keys to select which entry is highlighted.
     Press enter to boot the selected OS, `e' to edit the commands before booting or `c' for a command-line. ESC to
     return previous menu.
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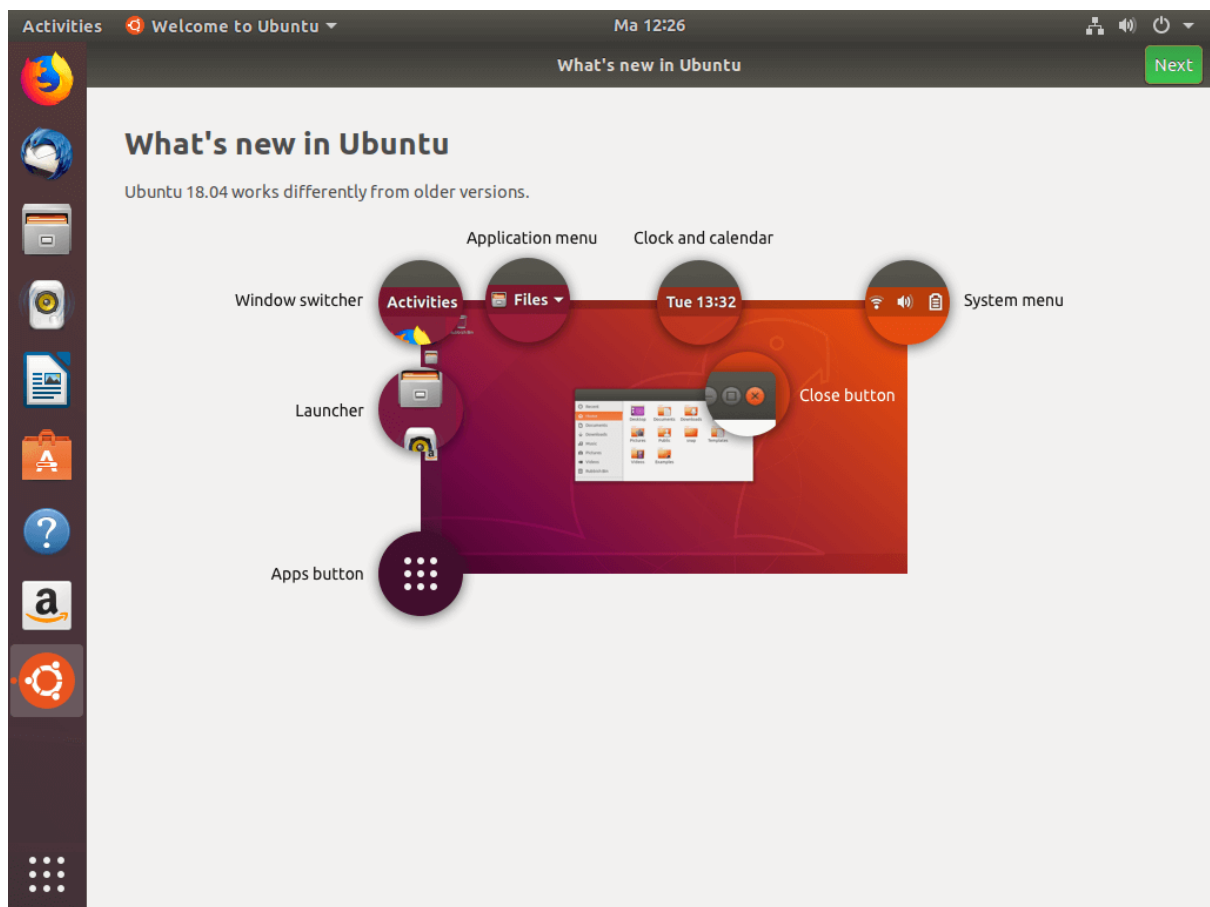
Ubuntu Boot Grub Menu

Finally, login to **Ubuntu 18.04 Desktop** with the credentials configured while installing the system and follow the initial Ubuntu welcome screen in order to start using Ubuntu Desktop.
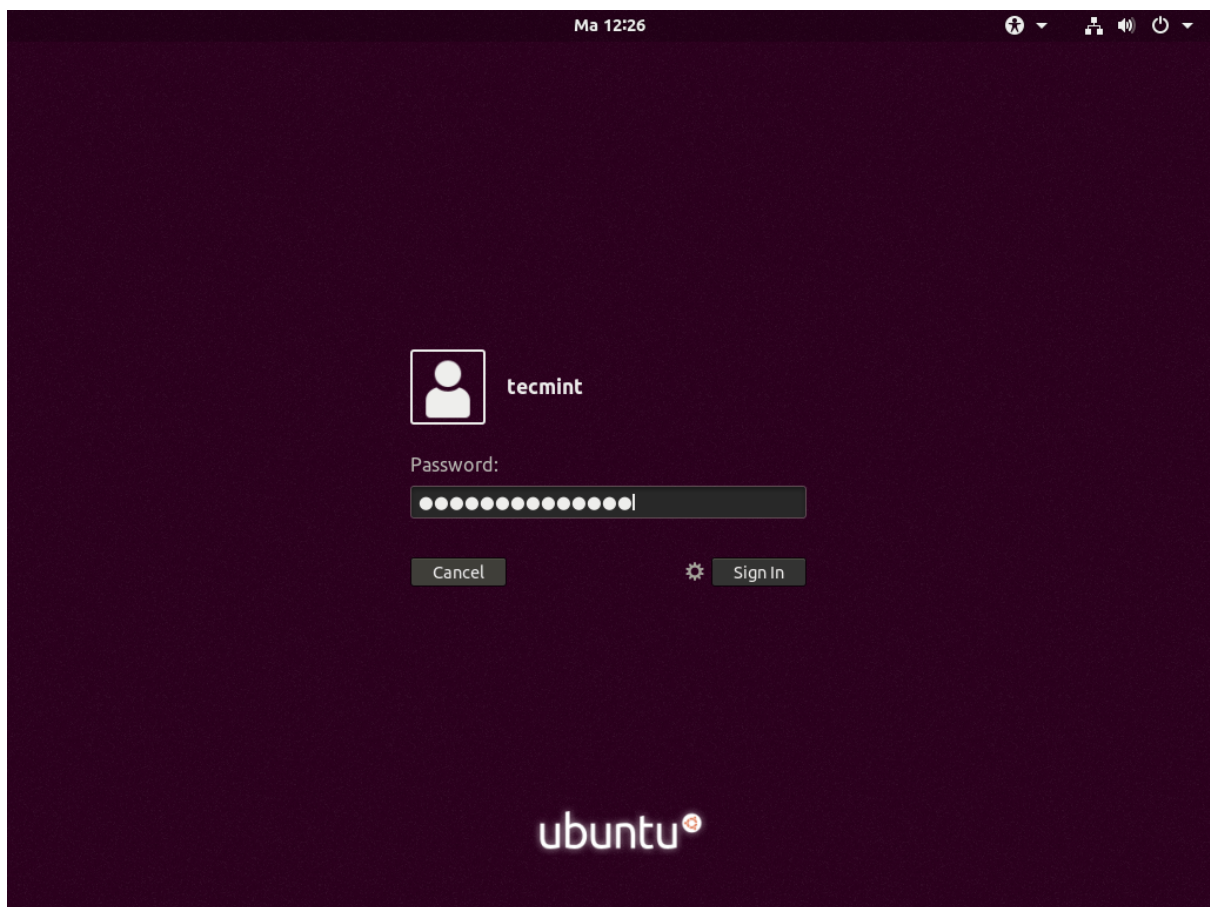
Ubuntu Login Screen

Ubuntu New Features

Congratulations! You have successfully installed **Ubuntu 18.04 Bionic Desktop** alongside **Windows 10** on your machine.