

# Ubuntu Linux Fundamentals

## USB Installation Method

In this lesson, we'll discuss how to install Ubuntu from a USB Drive.

If you recall, from the CD/DVD installation lesson, you can't just copy an .iso file to a storage medium, boot to it, and install Ubuntu.

You have to use software designed to make the .iso usable.

The software for creating a bootable USB from an .iso is different from what was used for the CD/DVD lesson, but other than that, the process is quite similar.

### Windows

For Windows, you'll be downloading an application called Rufus to create a bootable USB from the Ubuntu .iso file you downloaded earlier.

Open a web browser, and go to [rufus.akeo.ie](http://rufus.akeo.ie).

Scroll down to the Download section, and click on the link to the latest version of Rufus (2.17 at the time I'm making this).

Double click the downloaded file to run Rufus.

You'll need a 2 GB or larger USB drive to install your .iso onto.

It should be free, or you should be OK with formatting it, which **will remove all data stored there**.

**Again, be sure you're OK with losing all data on the USB drive!**

Plug the USB device you intend to use into your Windows computer.

Rufus will detect your USB drive and fill in information about it.

Under Create a bootable disk using, click on the folder and locate your downloaded .iso file.

Click on it, then click on Open.

Rufus will fill in a new volume name for the device based on the image name provided.

You may, or may not get the additional warning I received stating that some files would have to be downloaded from the Internet. I clicked on Yes to download.

Leave Write in ISO Image mode selected and click on OK.

Be sure you're OK with deleting all the data on the USB drive, then click on OK to continue.

The creation of your bootable USB will commence, and the USB will be made into a bootable device you can use to install Ubuntu from it.

I find it a little confusing for such an app, but Start will still be highlighted when the image is done. The status bar just above it will say READY. Just click on Close to close Rufus.

Browse to your newly created bootable USB device, and you'll see the file structure looks very similar to that on the CD/DVD you burned in the last lesson, if you decided to complete that.

In the next lesson, we'll see how to change BIOS settings if needed, to boot to CD/DVD or USB for a hardware install.

## MAC OS X

The MAC OS X process is similar, but will use Etcher instead of Rufus.

Browse to [etcher.io](http://etcher.io) and download the installer.

After the download completes, double click on the installer to open it.

Follow the instructions, adding the installation file to your Applications folder.

Open it by going to Launchpad and finding it, or browsing to it in your applications folder.

You'll get a warning saying Etcher.app was downloaded from the Internet. Are you sure you want to open it? Click Open.

Click on Select Image, then browse to your downloaded .iso file.

If you don't already have it, you can get it by going to [ubuntu.com/download](http://ubuntu.com/download).

If you have a USB Drive plugged in, Etcher will detect it. Use caution here! If you have multiple USB Drives plugged in, **whichever one you choose will be overwritten!**

I strongly recommend having only one USB Drive plugged in at this time, and that is the one you want to format for use as your bootable device.

If you don't have one plugged in, you'll be prompted as shown here.

Plug in the device you want to use, **remembering that your device will be erased and any information on it will be lost.**

The device will be detected, and you can click on Continue.

Click on Flash, and the drive will be made bootable and have the Ubuntu .iso installed on it.

Enter your password if prompted.

The image will be installed, then validated.

You'll get a message saying that the disk is not readable by your mack. Click Eject to safely remove the USB drive.

You'll likely have to make BIOS changes to the target system before it will boot to the USB device.

Making the required BIOS changes is covered in the next lesson.

**More Information**

Ubuntu tutorial for making a bootable USB in Windows

<https://tutorials.ubuntu.com/tutorial/tutorial-create-a-usb-stick-on-windows#0>

Rufus, bootable USB creator for Windows

<https://rufus.akeo.ie/>

Ubuntu tutorial for making a bootable USB in MAC OS X

<https://tutorials.ubuntu.com/tutorial/tutorial-create-a-usb-stick-on-macos>

Etcher, bootable usb creator for MAC OS X

<https://etcher.io/>