

OSC



Linux installation Guide

Quick notes :

1. Check if your graphics card is AMD/ATI, its drivers don't support the new versions of Ubuntu so that leaves us to the open source drivers. Open source drivers are not bad as they work for some devices and cause problems for others. So, it is up to you.
2. It is very recommended to take a backup of your device at least the most important data just in case. If you didn't, then be really careful of what you are doing.

Let's get started :

1. On windows, check the disk whether it is a basic disk or dynamic disk.
Unfortunately, Linux doesn't work with dynamic disk
 - a. Open disk management/create and format hard disk partitions

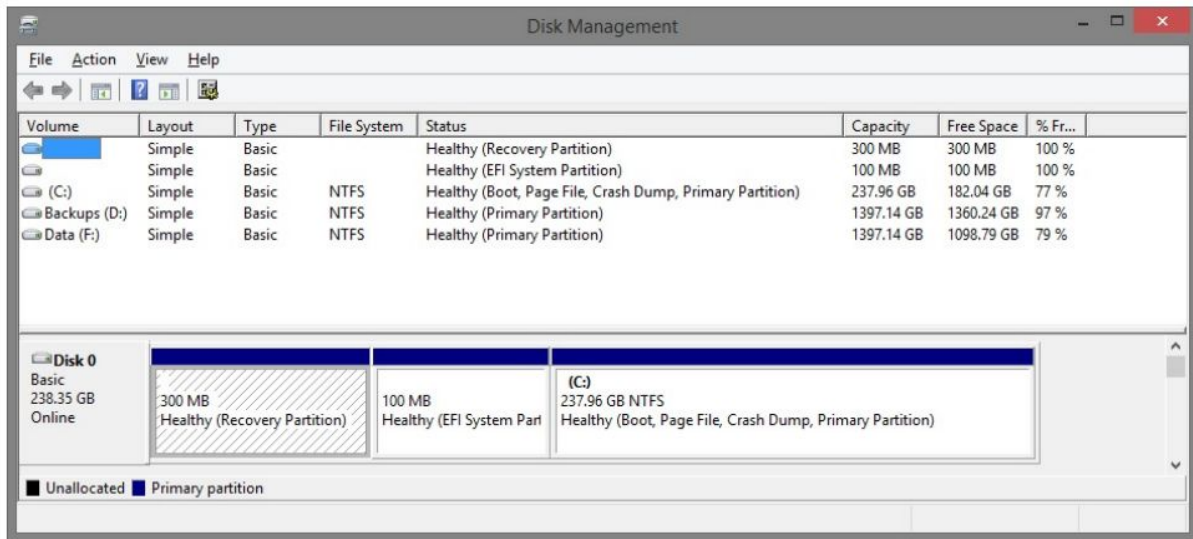
 Disk 0 Basic 40.00 GB Online	<table><tr><th></th><th></th></tr><tr><td>System Reserved 350 MB NTFS Healthy (System, Active, Prin</td><td>(C:) 39.66 GB NTFS Healthy (Boot, Page File, C</td></tr></table>			System Reserved 350 MB NTFS Healthy (System, Active, Prin	(C:) 39.66 GB NTFS Healthy (Boot, Page File, C
System Reserved 350 MB NTFS Healthy (System, Active, Prin	(C:) 39.66 GB NTFS Healthy (Boot, Page File, C				
 Disk 1 Dynamic 1.00 GB Online	<table><tr><th></th></tr><tr><td>Dynamic (E:) 1021 MB NTFS Healthy</td></tr></table>		Dynamic (E:) 1021 MB NTFS Healthy		
Dynamic (E:) 1021 MB NTFS Healthy					

As you can see, there are 2 hard drives. The upper one is basic and the lower one is dynamic

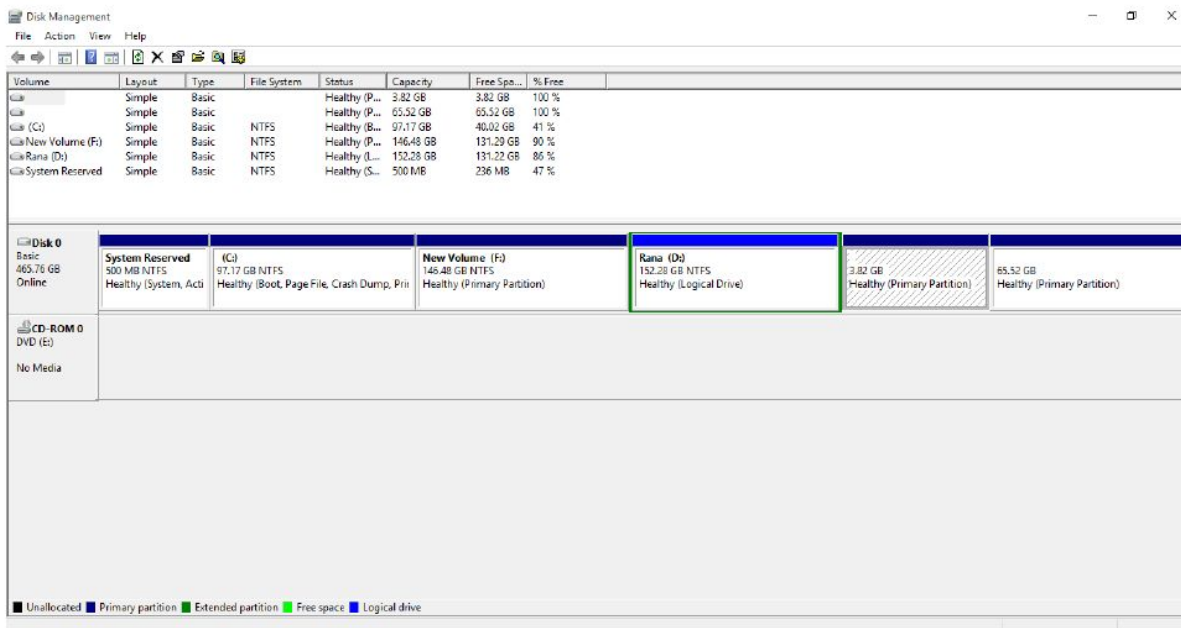
To change from dynamic to basic, you need to format the hard drive so don't forget to backup your data

Dynamic disks are helpful in RAID setups and if you need to merge more than one harddisk into one partition

2. Check if the firmware is BIOS or UEFI
 - a. From disk management, on your disk search for an EFI partition, If found, then it is in EFI mode if not then it is in BIOS mode



This is EFI



This is BIOS

It is a very important step and we will need it later so try to remember it or write it down

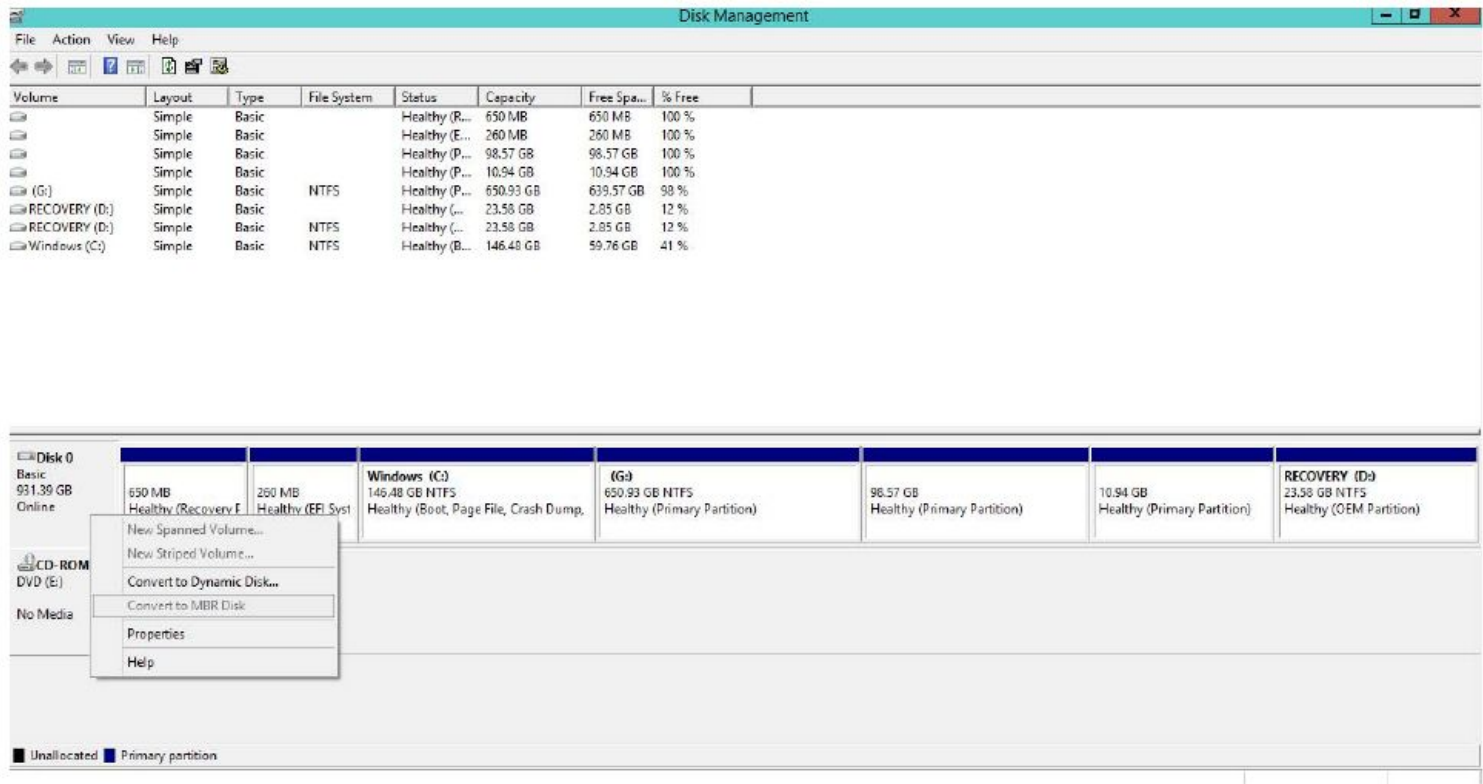
3. Check if windows is MBR or GPT

- a. Right click on the disk you are going to install Linux on. Check if it says convert to MBR or convert to GPT

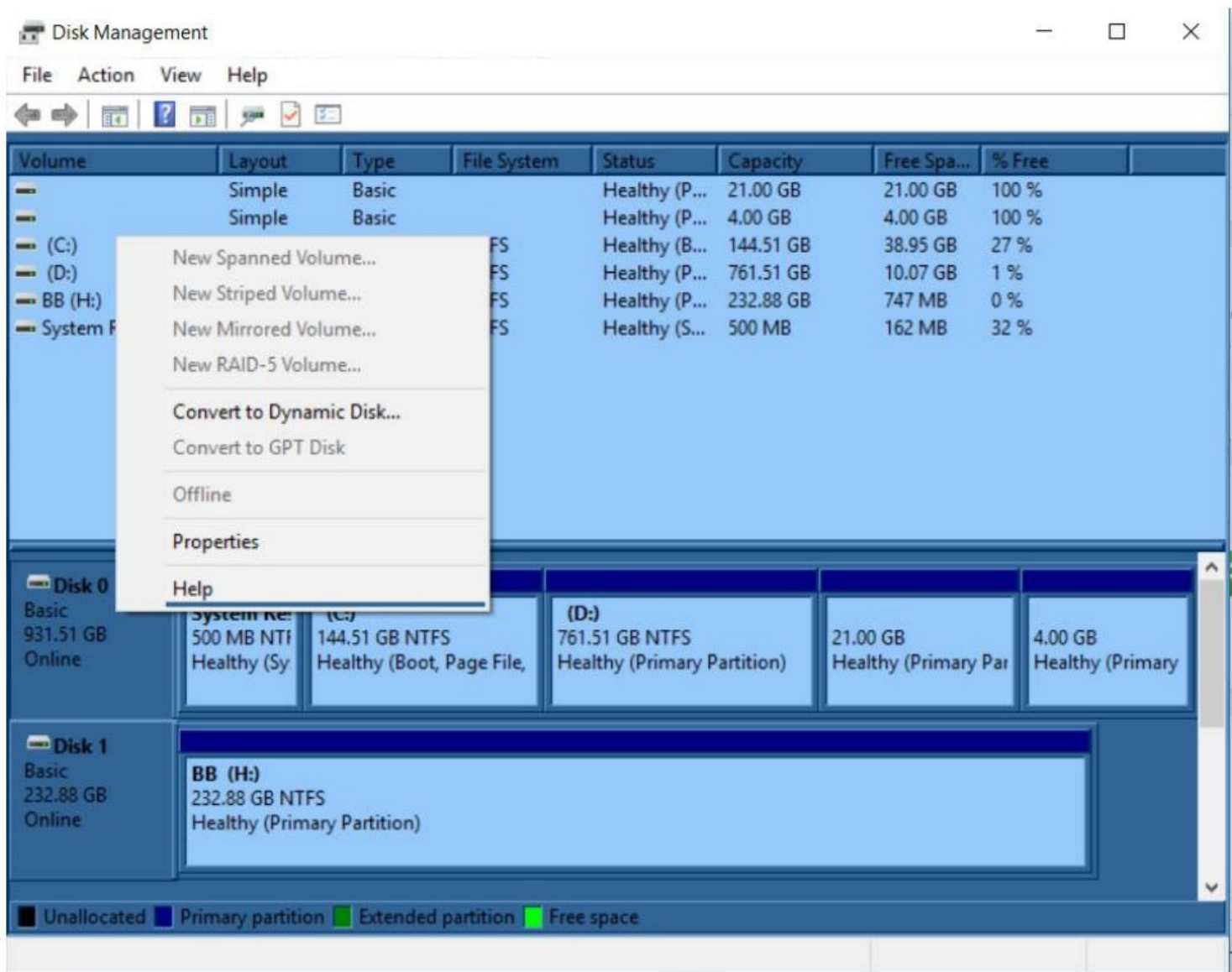
If it says convert to MBR, then windows is on GPT and vice versa

MBR allows for a maximum of 4 partitions only

GPT doesn't limit the number of partitions on the disk



It says: "Convert to MBR". Then this is GPT

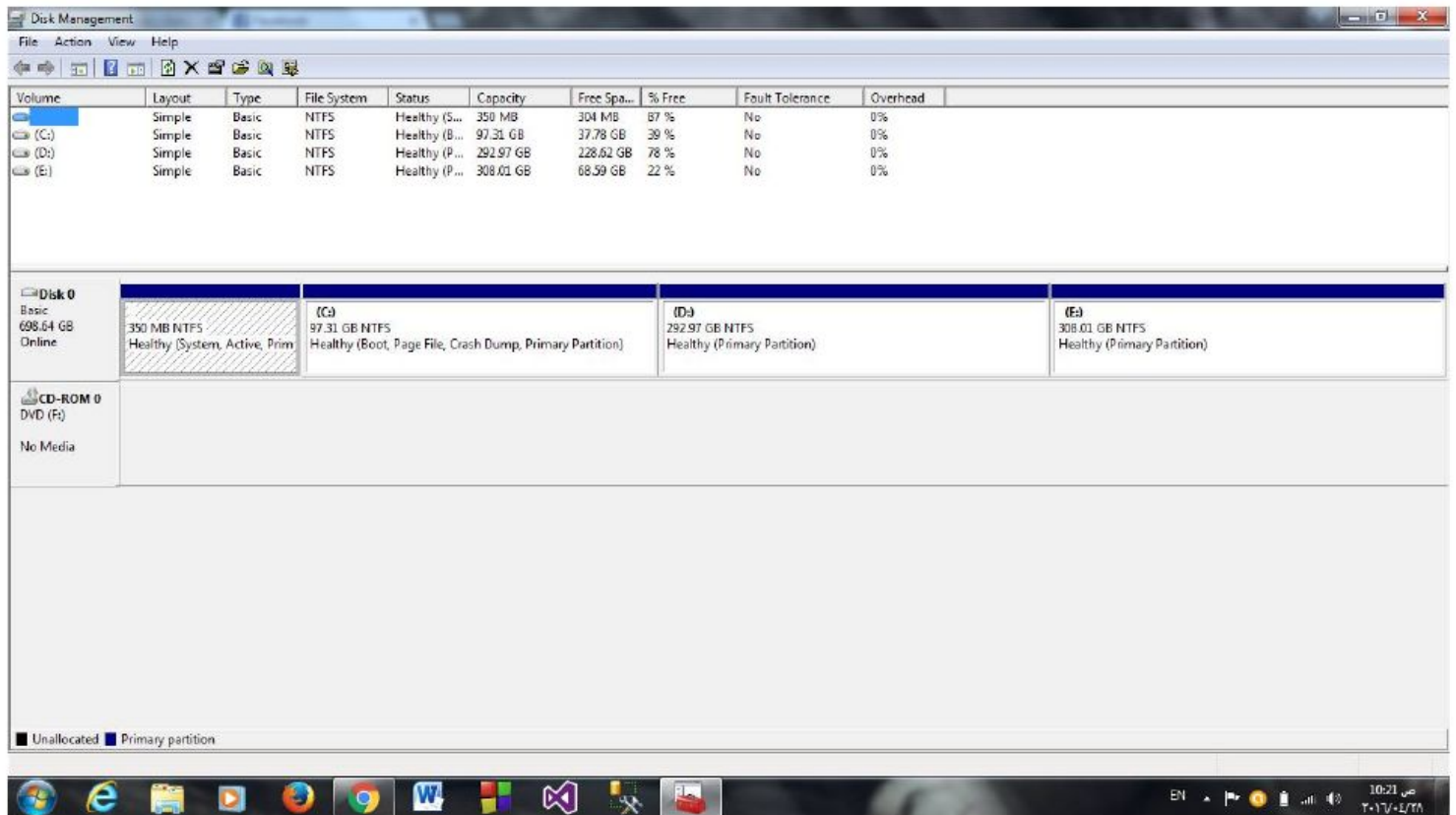


It says: "Convert to GPT". Then it is MBR

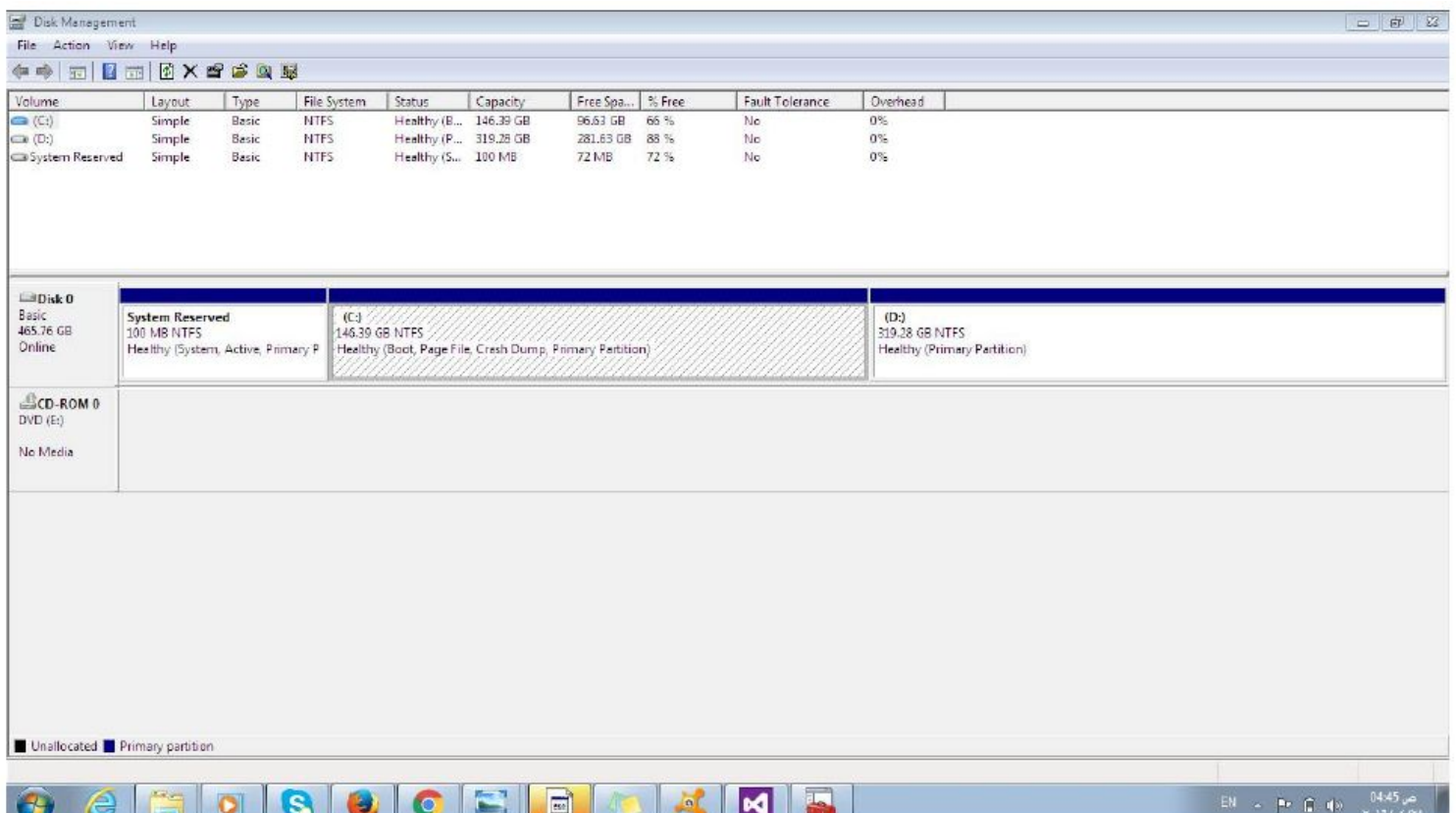
It is also a very important step and we will need it later so try to remember it or write it down

4. Get some unallocated/free space

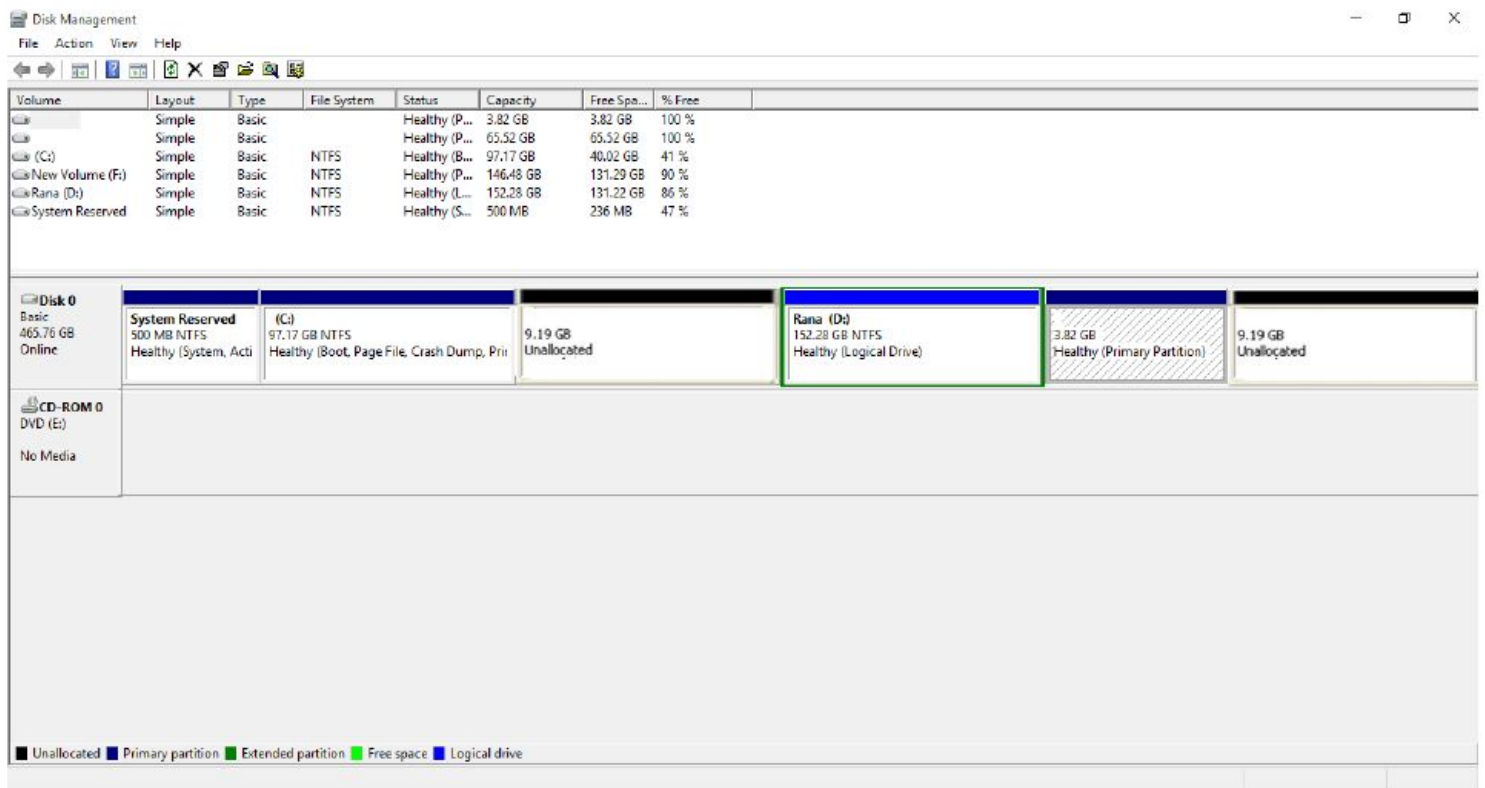
- a. To install Linux, we need a continuous unallocated space on the disk minimum 30 GB, the bigger the better. To achieve that we will either delete a partition or shrink it
 - i. If the disk is GPT, you can shrink any partition and use the unallocated space
 - ii. If the disk is MBR ,
 1. If you have 4 partitions, you need to delete any one of them so you can actually use the unallocated space so make sure to backup your data and of course, do not delete C partition



2. If you have 3 or less partitions you can shrink any of them



- Freeing space is not formatting. Don't format the space where you want to put Linux
- The unallocated space must be continuous



This one has 2 free spaces each of size 9.19 GB but that doesn't mean it has 18.38 GB. The 2 spaces can't be merged like that

5. Turn off fast startup

- Click on power options
- Choose what closing lid does
- Change settings that are currently unavailable
- Unmark fast startup



Control Panel

Hardware and Sound

Power Options

Control Panel Home

Require a password on wakeup

Choose what the power buttons do

[Choose what closing the lid does](#)



Create a power plan



Choose when to turn off the display



Change when the computer sleeps

Select a power plan

Power plans can help you maximize your computer's performance by selecting it, or choose a plan and customize it by [about power plans](#)

Plans shown on the battery meter

☒ Samsung Optimized

Maximizes performance on AC power and minimizes power consumption

☐ Power saver

Saves energy by reducing your computer's performance

Show additional plans



Define power buttons and turn on password protection

Choose the power settings that you want for your computer. The changes you make to the settings on this page apply to all of your power plans.



[Change settings that are currently unavailable](#)

Power button settings



When I press the power button:

Shut down



Password protection on wakeup

- ☒ Require a password (recommended)

When your computer wakes from sleep, no one can access your data without entering the correct password to unlock the computer. [Create or change your user account password](#)

- ☐ Don't require a password

When your computer wakes from sleep, anyone can access your data because the computer isn't locked.

Shutdown settings

- ☒ Turn on fast startup (recommended)

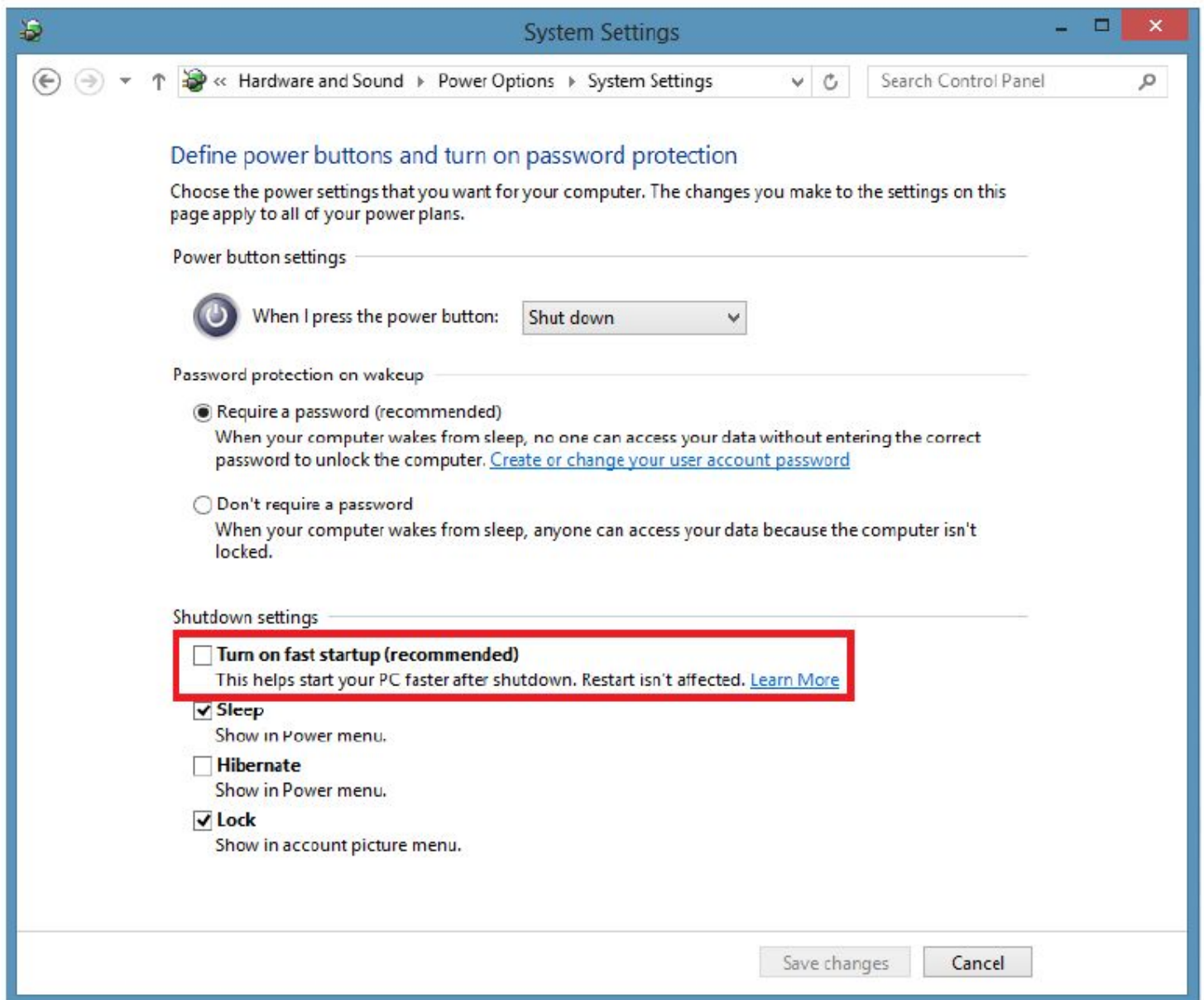
This helps start your PC faster after shutdown. Restart isn't affected. [Learn More](#)

- ☐ Hibernate

[Show in Device Manager](#)

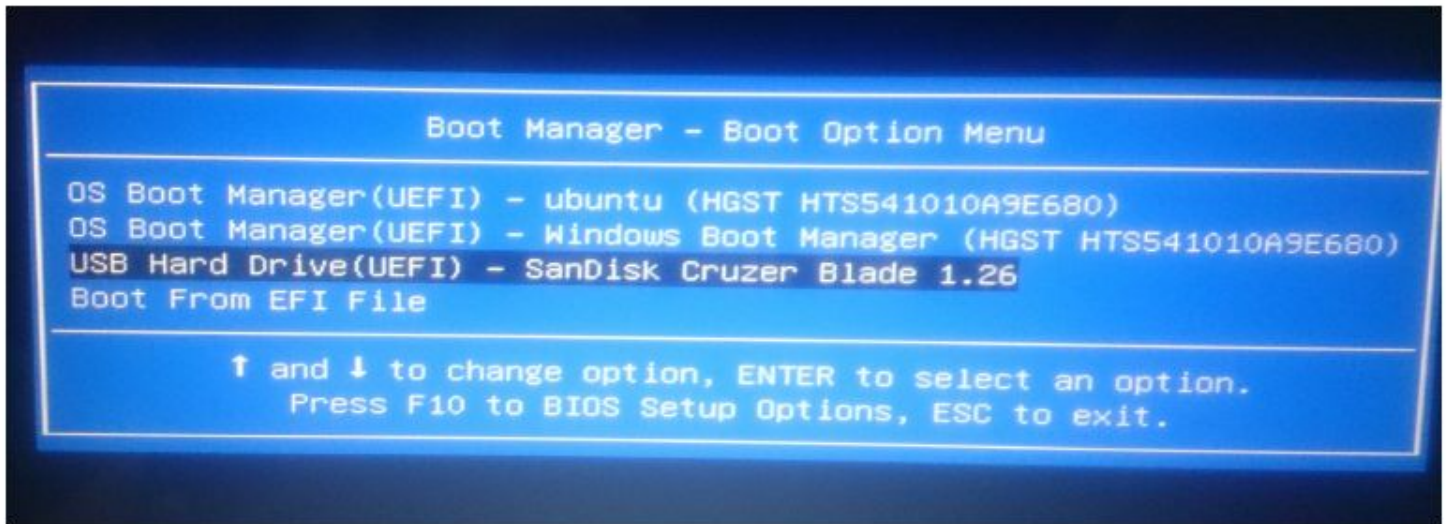
Save changes

Cancel

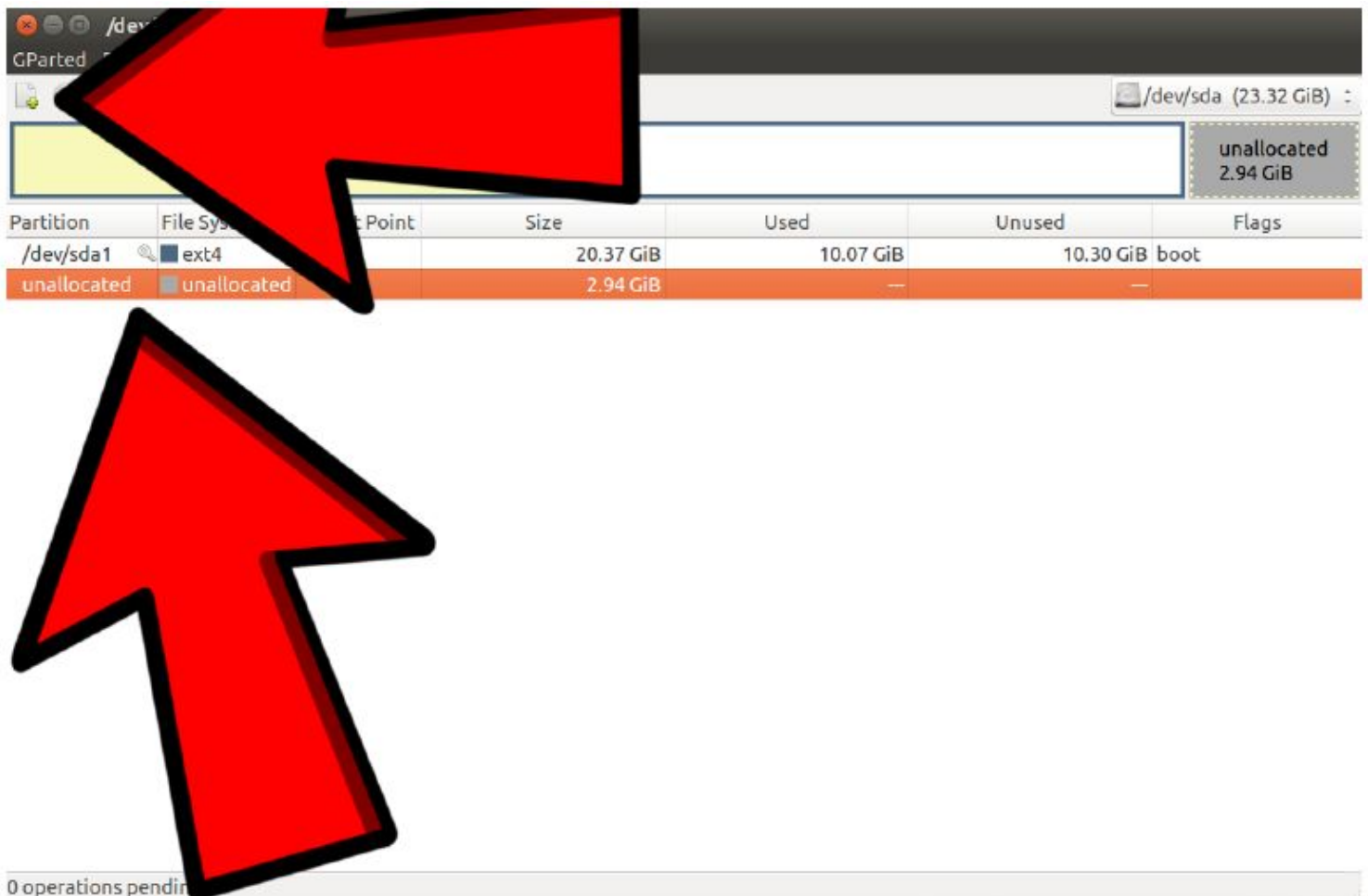


Get a usb with Ubuntu burned on it and ON TO UBUNTU

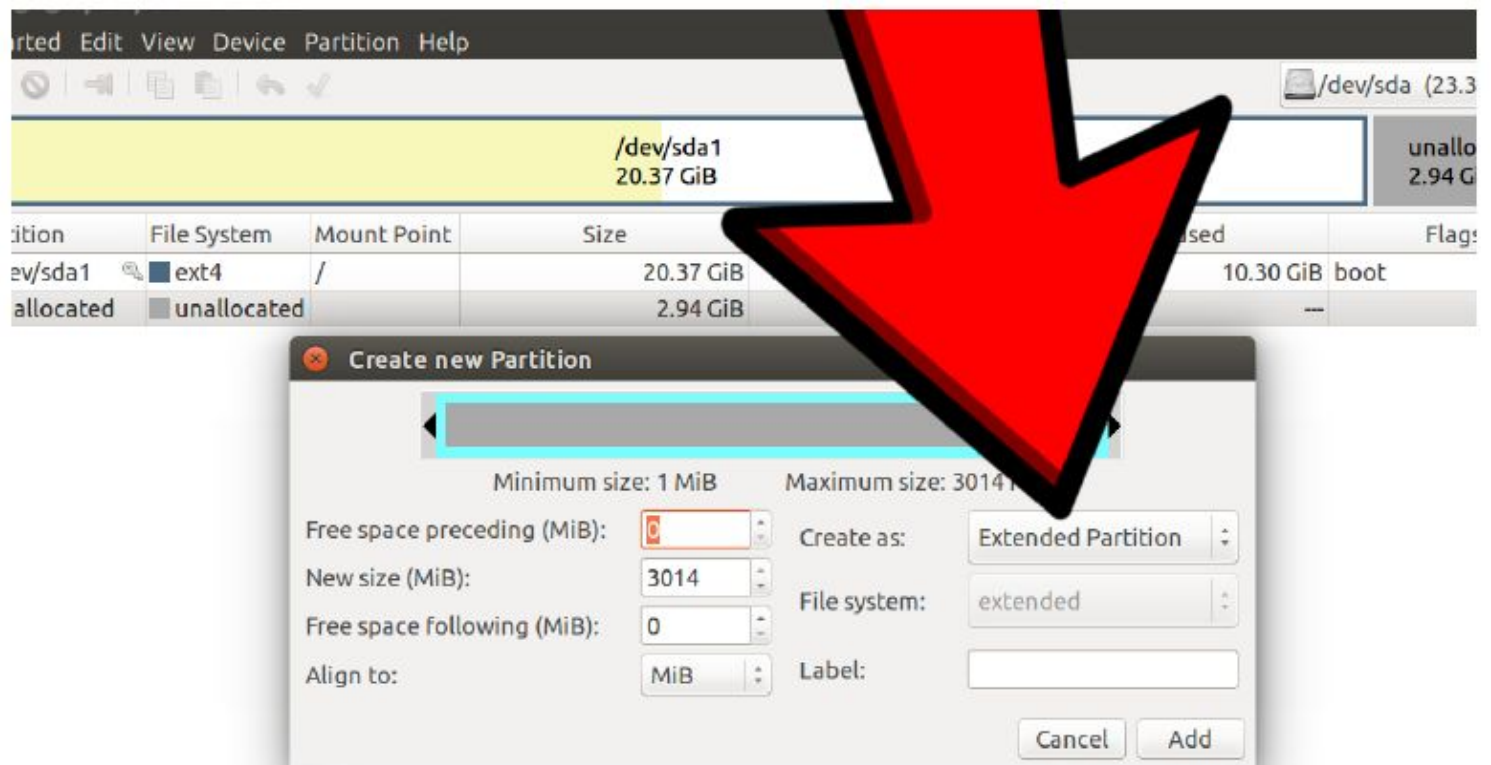
1. Boot from usb
2. If your device is UEFI *step 2 in windows*, choose the usb option with the word UEFI before it



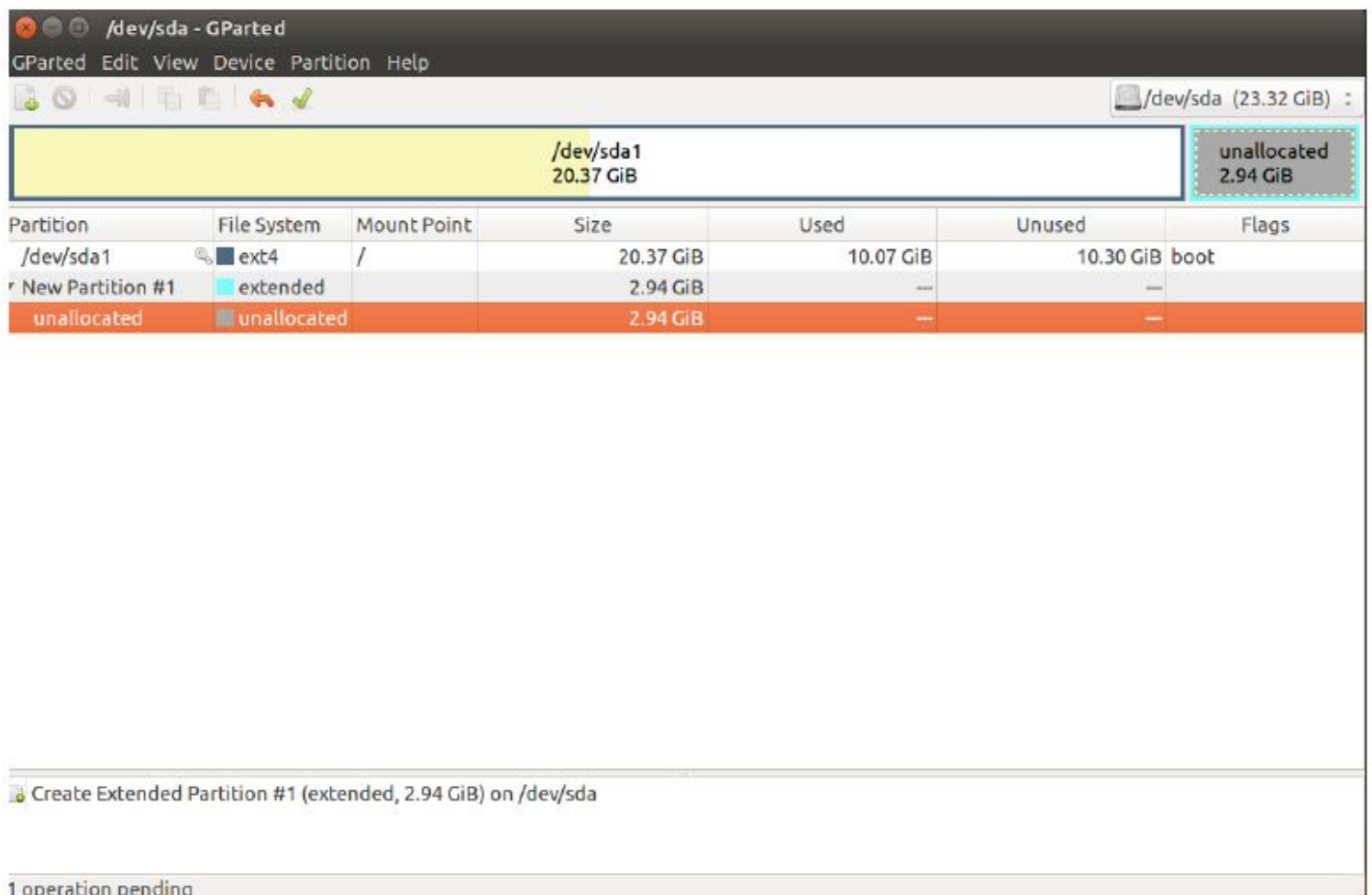
3. Choose to boot Ubuntu. *we have a couple more steps to do before installing.*
4. Preparing the unallocated space
 - a. Search for gparted from activities on the upper left corner and open it
 - b. If your disk is MBR *step 3 in windows*



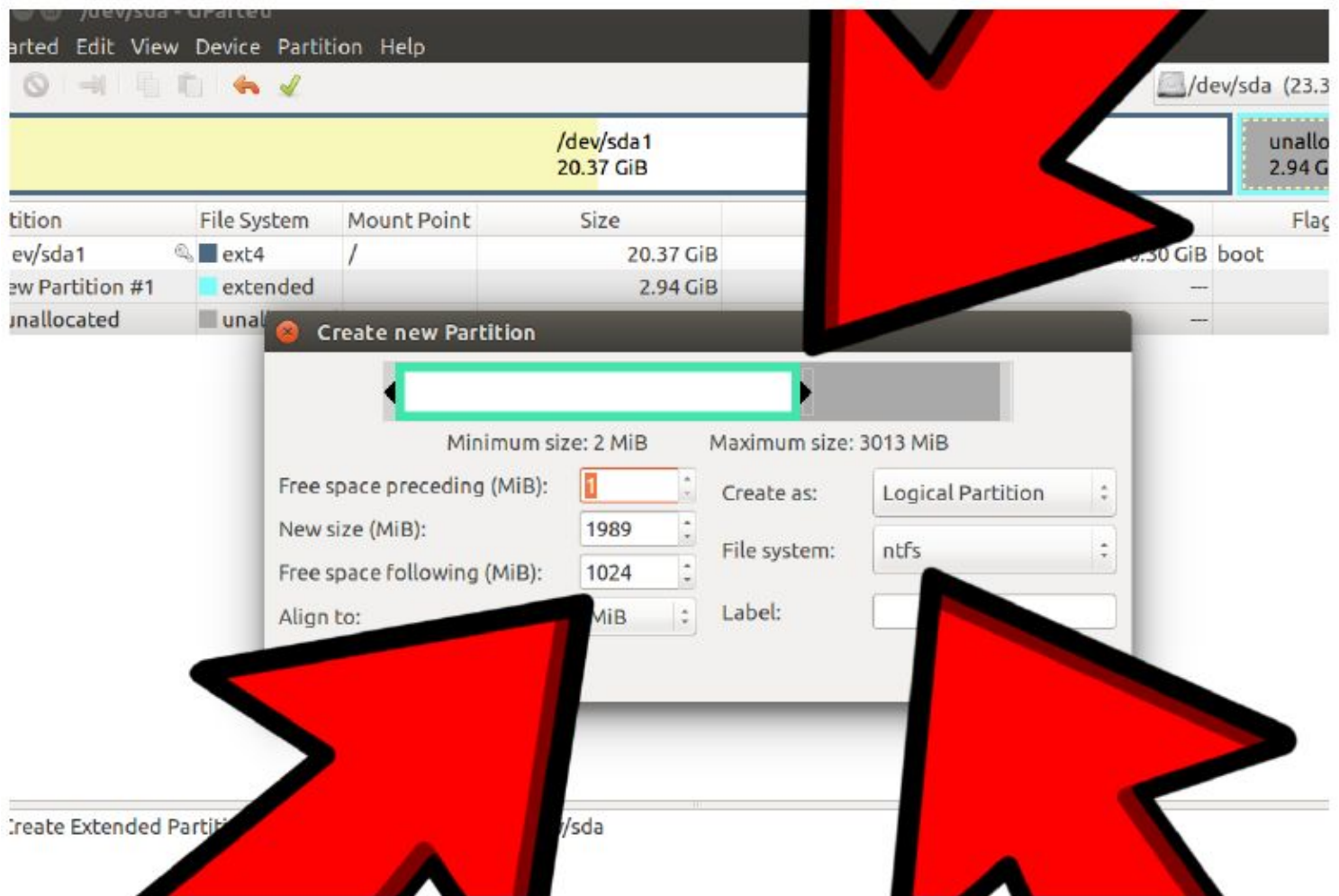
Select the unallocated space , create a new partition and we are going to make an extended partition



After it is created, it should look something like this

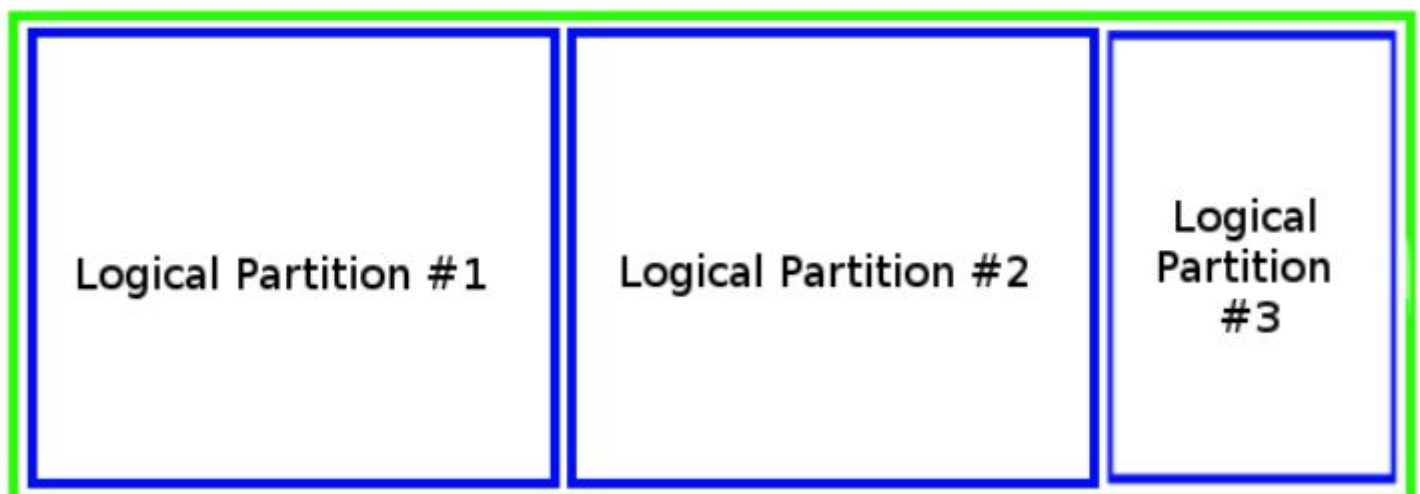


After that we can create logical partitions inside of it if you want, but leave the space for linux unallocated



Extended partition allows you to create more than one logical partition inside of it we will see how

extended partition



c. If it is GPT, you can shrink any partition and create a new primary partition

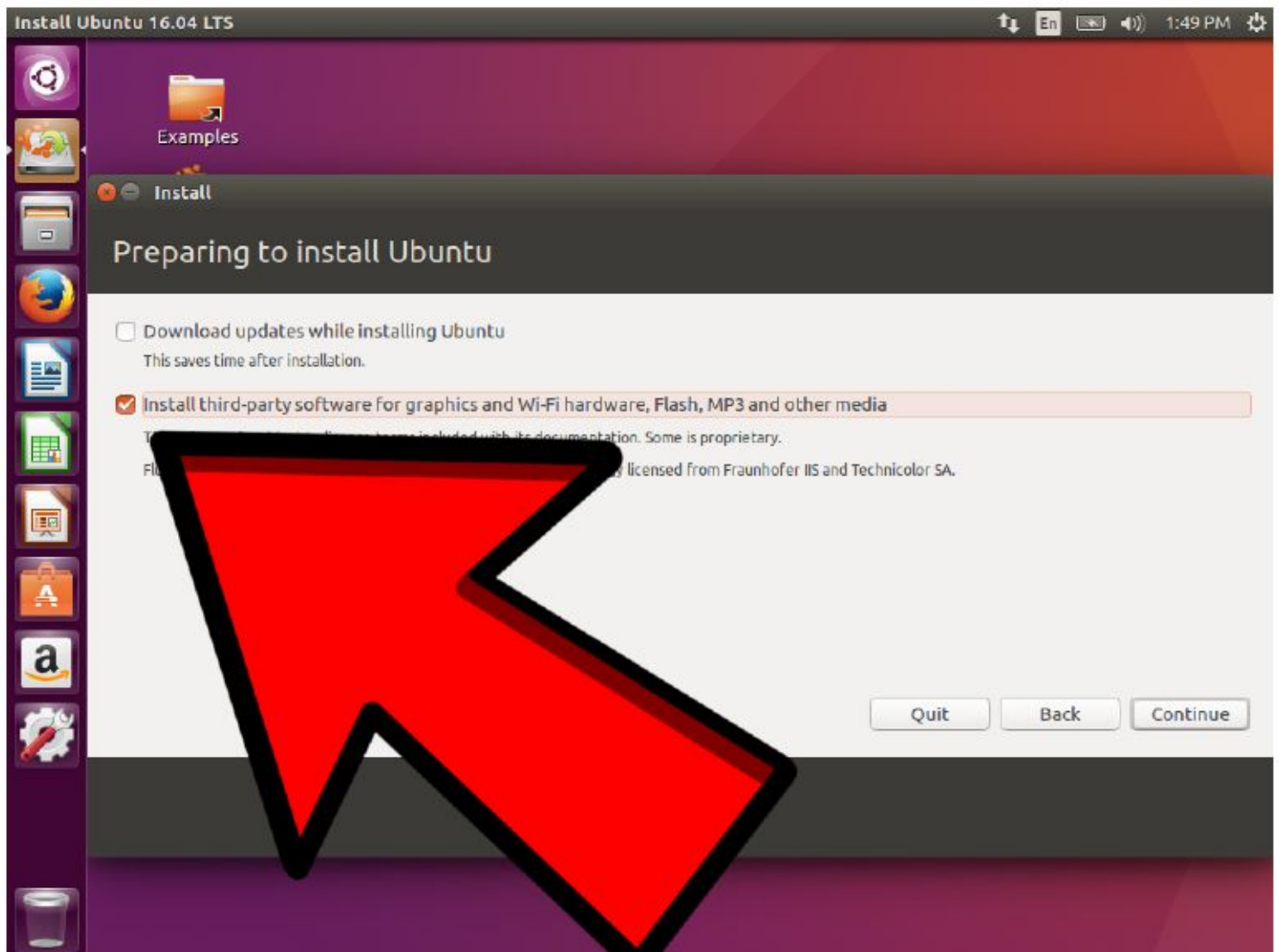
NEVER move any partition from its place

- d. When you shrink, you'll have to convert the space you'll give to Ubuntu to MB so if it is 30 GB multiply it by 1024 and put the product in the "free space following"

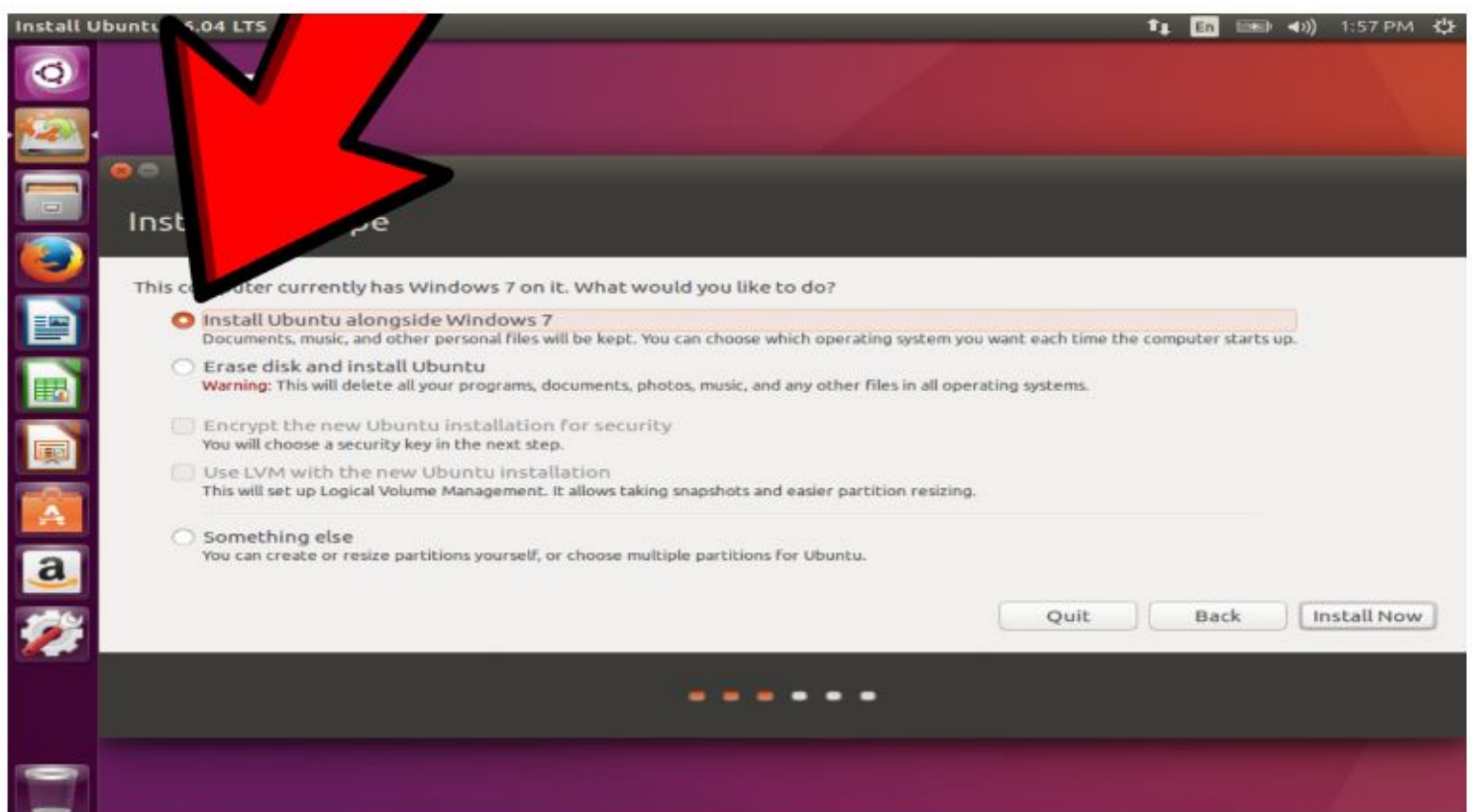
- 5. Close gparted and go to the installation



- 6. Tick the install third-party software checkbox



7. Now it is the most important step so please be really careful. If you follow along each step carefully, you should be faced with a window like this



If you didn't find install alongside windows, please close the installation and make sure that you chose the correct mode (efi or bios) and make sure that the space for linux is unallocated/free

DO NOT choose erase disk unless you really know what you are doing , it will erase the whole disk and make it for linux only (you'll erase windows and all your data on C , D or any other partition)

If you found this window **CONGRATS** choose it and continue the installation normally