

DUAL BOOTING WINDOWS AND UBUNTU



Linux distributions are becoming more and more popular. But before completely giving up Windows, many users want to have both OSes on their PCs. That's because they can't find an alternative for their everyday apps on Linux or can't play some games. Several manufacturers also started to sell preinstalled Linux computers. Before wiping the whole HDD to install Windows, consider dual booting.

This post will give solutions to some common situations. Because Ubuntu is one of the most popular Linux distributions, it will be used during this tutorial.

1. My PC came preinstalled with Windows. I want to try Ubuntu (Linux).
2. My PC came preinstalled with Ubuntu. I bought Windows and want to install it.
3. I have successfully set up dual boot. But now I have to reinstall one of the OSes.

What will happen to the other?

4. I want to get rid of one of the OSes. How to keep the other bootable?

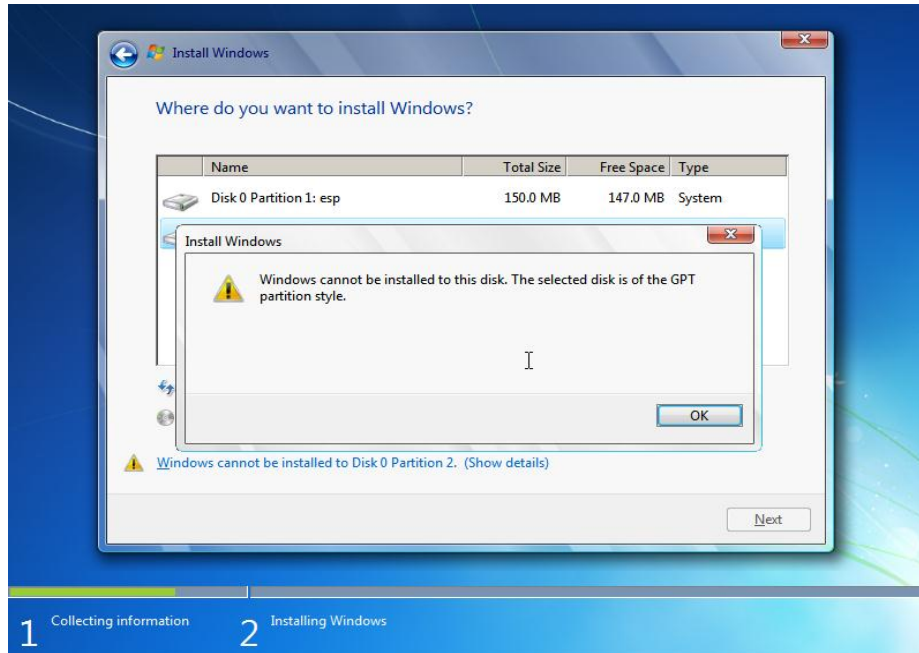
Before discussing each of these situations, it should be mentioned that, unless you want to wipe your entire HDD (and of course the existing OS install), you should know whether it is partitioned with the classical MS-DOS scheme or with the modern GPT.

MS-DOS or GPT

Of course I'm not talking about the operating system. It's just the same partition table information it used, also known as MBR (master boot record). If the OS has been installed in EFI mode, the partition table is GPT. Otherwise, it is very probable to be MBR, no matter if the PC supports UEFI.

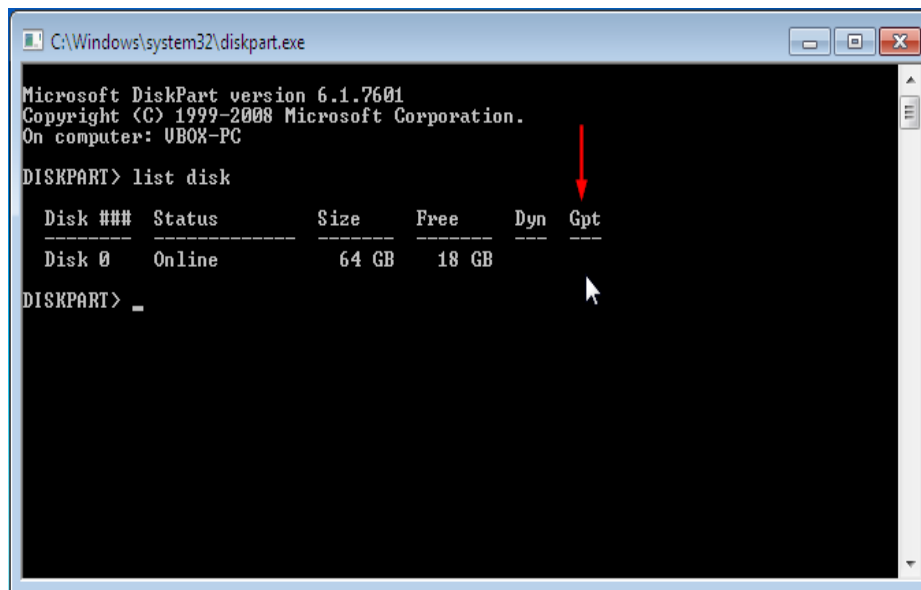
What is the problem here? Well, if you have a GPT partitioned disk (by an installation started in EFI mode) and try to install Windows by booting it in compatibility mode (MBR), it will recognize the drive partitions but will ask you to format the entire HDD.

Modern OSes (Windows newer than 7 and 64 bits; Ubuntu newer than 12.04.2 and 64 bits) can be booted and installed in both EFI and BIOS modes. You just have to know how the primary OS was installed and boot from the installation media of the second one in the right mode.



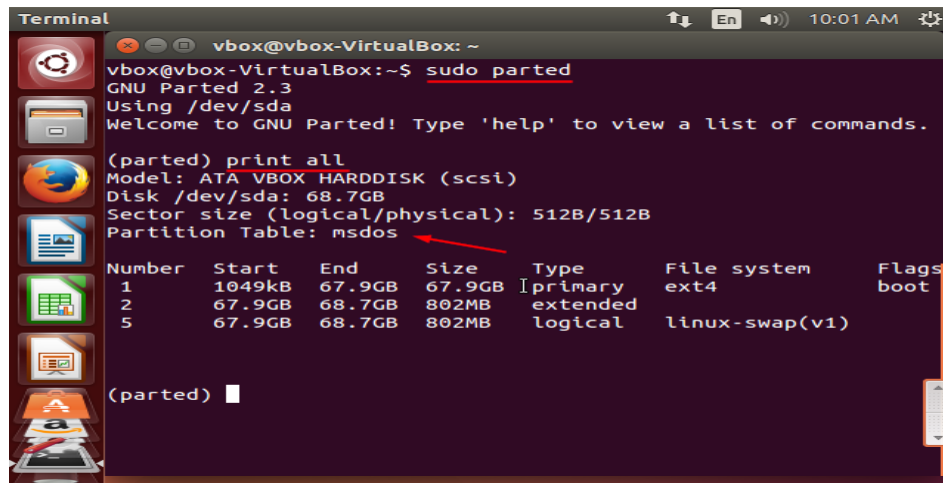
Windows booted from MBR cannot be installed on GPT disk.

Here is how you can check the HDD in Windows. Launch **diskpart** from **cmd** and type **list disk**. If you see an asterisk in the **Gpt** column corresponding to the HDD, then is GPT. Otherwise it is MBR.



Check GPT/MBR on Windows using diskpart. This disk is MBR partitioned.

On Ubuntu you can use diskpart equivalent, **parted**. Run it from a terminal as superuser: **sudo parted**. Then type **print all**. It will tell you the partition table type.



```
vbox@vbox-VirtualBox:~$ sudo parted
GNU Parted 2.3
Using /dev/sda
Welcome to GNU Parted! Type 'help' to view a list of commands.

(parted) print all
Model: ATA VBOX HARDDISK (scsi)
Disk /dev/sda: 68.7GB
Sector size (logical/physical): 512B/512B
Partition Table: msdos
Number  Start   End     Size    Type    File system  Flags
  1      1049kB  67.9GB  67.9GB  primary ext4          boot
  2      67.9GB  68.7GB  802MB   extended
  5      67.9GB  68.7GB  802MB   logical  linux-swap(v1)
```

parted showing disk information and partition table.

Source: <http://onetransistor.blogspot.in/2015/03/dual-boot-windows-and-ubuntu.html>