

THE COMPUTER CORNER

No. 294: How To Dual Boot – Win and Linux

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This article will show you an *approach* to setting up a dual boot machine with Windows 10 and Linux. It should work for other versions of Windows as well as 10. I am writing it over a period of days during the installation on a desktop computer (yes, it will also work on a laptop).

I. Windows MUST BE INSTALLED FIRST! Don't even think about installing Linux first, because Microsoft's products do not play well with other operating systems and if Linux is on the hard drive first, it will be overwritten by Windows. Install Windows and get it running the way you like it, FIRST. Then install Linux and all will be well.

a. Decide on how much space to allocate for Windows and Linux. For example, if you have a 1 TB hard drive, you might want to allocate half to Windows and half to Linux. Thus, 500 GB is way more than enough for Linux and will do nicely for Windows as well.

b. Wipe the hard drive using disk wiping software such as free DBAN (Derik's Boot And Nuke) or other drive wiping software which you may find at our old friend, <https://www.majorgeeks.com/> or elsewhere. The aim here is to remove any malware or glitches from the drive, show up any errors in surfaces or logic and begin with a clean, empty slate. This is definitely best practice. When you are done wiping, there will be nothing on the drive, and that includes no partitions of any kind. It definitely will not boot at this stage!

c. Use EaseUS Partition Master Home Edition 16.5 (free, 2022 edition), available at majorgeeks, or other some other partitioning software to partition the Windows half of the drive. Leave the Linux half unallocated. Make the part for Windows all NTFS, which is what Windows uses. If you like, make it just one big C: drive. What I suggest, however, is to make it three approximately equal partitions. Read on for at least 30 years of tried and true reasons.

1. C: for Windows itself and any software that absolutely insists on being installed on the C: drive (many programs try to do that, though most can be convinced not to do so).

2. D: for programs, such as DBAN, EaseUS Partition Master, drawing or graphics software, ham logging programs, or any of the myriad of programs you might wish to have, all isolated on the D: drive.

3. E: for stuff you create. Drawings, programs you write, documents you author, and so on. This makes it incredibly easy to back your stuff up. Just burn a CD once a month or so, with all the contents of the E: drive! You may eventually have enough stuff so it won't fit

on a CD, so just use a DVD. I promise, unless you are a professional photographer and have thousands of pictures, you will be over 100 years of age before you overrun the space on a DVD with your personal creations! It is not necessary to back up Windows or programs – you can always get these from disks or downloads or whatever. But you cannot afford to lose stuff you author, and once they are on CD or DVD, you are safe.

Now after partitioning is done, be careful. Take the time to double check the partitions to be sure that the unallocated half for Linux is still there. In the setup I am doing now for this article, I had Windows hog all of it for the C: drive, leaving no unallocated space for Linux, and it did this without notifying me or asking my permission. If necessary, redistribute the partitions the way you originally intended, before you install Linux. You can use Windows itself for this purpose once it is installed, but better to use EaseUS because it will do what you tell it to do without any sneaky, underhanded shenanigans. Remember, Microsoft Windows is no friend of Linux, and it may do to you what it did to me. EaseUS will give you a list of partitions, and a graphic map showing all of them, which you can tweak (make smaller or larger) as you prefer. Your aim is to wind up with something close to this for a disk partition map of a 1 terabyte drive:

WIN C: NTFS 167 GB	WIN D: NTFS 167 GB	WIN E: NTFS 166 GB	UNALLOCATED {for LINUX installation} 500 GB
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II. You can use EaseUS to rearrange drive letters as you wish to conform to the above. Or, you can just have a C: drive for Windows, which I claim is not ideal. Once you have something akin to the above, or at least a good chunk of unallocated space for Linux, you are ready to install it. Although there are many, many “distros” of Linux, I suggest Linux Mint Cinnamon (64-bit) 20.3 (“Una”). If you are familiar with Windows, this release will not present many learning curve changes. And, its a snap to install. You just shove a Live DVD into the drive and reboot with it. After a bit, you will have Una’s desktop showing, and you can play with it as you wish. When ready to install, note the icon for **Install Linux Now** on the desktop and click it. The installation is smooth and easy and quite intuitive. Need that Live DVD for installation? Contact me to arrange to pick a free one up. And, by the way, Happy Computing!