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Getting Started With Linux Part One

Through various forums and people I know, I have seen many people start using Linux and then give up, whether through frustration or any other difficulties. I thought I should write an article on what I believe the best strategy is to begin your journey into the fabulous world of Linux.

First a bit of History, for those of you that don't know, Linux does not refer to an operating system as such but a **kernel.** (http://en.wikipedia.org/wiki/Kernel_%28computer_science%29) Windows 2000 used the NT kernel, SUSE (http://www.novell.com/linux/) uses the Linux kernel. I won't go into too much depth on that issue, but it is worth noting the difference although most people will refer to a Linux based Operating System as Linux.

The most important thing is to evaluate why you want to use Linux, it is an alternative not a replacement for Windows. If you are wanting to use Linux for its benefits - stability, Open Source ethos, configurability - then you are making the right decision. If however you are wanting to use Linux because you are fed up of Malware, fed up of MS or similar issues, whilst these are not wrong reasons to use Linux you may encounter a few difficulties. This is purely because it suggests you are planning to use Linux on the basis of having heard rumours, and have not really evaluated the pros and cons.

Before installing Linux I really encourage you to do a bit of groundwork, try a live CD such as **Knoppix.** (http://knoppix.org/) A Live CD is an Operating system that runs entirely from a CD (or indeed a DVD), it does not require you to save anything to your hard drive, although many do have the option to save settings to a USB drive.

I also recommend buying a Linux magazine, try to read through it as you will gain a better understanding, <u>Linux Format</u> (http://www.linuxformat.co.uk/) is particularly good. Many magazines also come with coverdisks including software and Distributions. They do not always include Live CDs but the information that can be gained from within is invaluable none the less.

A live CD will allow you to play around with the OS a bit before making any changes to your system. If you have a specific distribution in mind (i.e. Mandriva (http://www.mandriva.com/) , Ubuntu (http://www.ubuntu.com/) , or even Gentoo (http://www.gentoo.org/)) then I would also recommend trying to obtain a Live CD of that distribution. All three mentioned have live CDs although if you are starting out on Linux I would not recommend jumping straight in with Gentoo, wonderful as it is, it

can be very intimidating. Trying the live CD of your distribution of choice will allow you to decide whether you like that distribution. I usually recommend either Mandriva or Ubuntu for people starting out, to me they are the most 'newbie friendly.' I heavily recommend trying Live CDs of various distributions before deciding which to install, most importantly remember that the distro is running from the CD/DVD so it will run far more quickly once you have installed the distro onto your hard drive.

You may wish to try taking a distro choosing questionnaire such as the one at Zegeniestudios.net, (http://www.zegeniestudios.net
Index.php?firsttime=true) or the one at Yoidofmind.com.

(http://eedok.voidofmind.com/linux/chooser.html) These questionnaires in particular seems to be capable of quite amazing accuracy, answer the questions honestly and it may well suggest the distro you fall in love with. It is also worth looking at www.distrowatch.com to get more information about various distributions.

Once you have tried a live CD then you will most likely want to install a distribution onto your hard drive, this article is not written to be distro specific so there are only a few tips for this section of the article.

- If you intend to keep windows on your computer (a very good idea for the time being) then defragment your hard drive in windows, several times is recommended
- backup any important files
- pay close attention to any help tips the installer offers you

The backup is important in as much as whenever you make any changes to your system you should always ensure you have a backup first, trust me I have been there.

When offered the packages you want to install try to avoid thinking "well I may use that at some point" its far easier to just install it later if needs be, there is nothing worse than sitting waiting for an installation to finish

OK so now theoretically you have Linux installed, but now what do you do? The easy answer is play! The mistake that many people seem to make is expecting it to be like Windows, it isn't. Try and find a task to do, even if its just word processing a quick document. I once read that regular drivers make better drivers, the same goes for Linux users, if you boot into Linux to tinker once in a while you will develop your skills far more slowly than if you regularly use Linux.

The way I committed myself to using Linux was to say that all my GCSE (OK so it was a while back) work was going to be done on a non-MS OS. I struggled at first, but everyone does. Don't let setbacks dishearten you, it is a new system and it takes a little while to adapt.

Linux does have both benefits and drawbacks (as does Windows and any other Operating System).

Package Management is a major benefit for many users; Most Distro's have a package management system whereby you select a package (i.e. A Media Player), click install and then the system installs not only that package but any dependancies (Packages that your package requires to run properly). Packages can often be installed in minutes with just one click. Easy huh? One drawback you may experience with Linux, is that not all distro's support MP3 playback out of the box (most do though), you may have to install support. The reason for this is not a fault of Linux, it is a licensing issue, The MP3 format is owned by the Fraunhover institute. Installing support is usually guite easy however, there is a good guide for doing this on Fedora here. (http://brandonhutchinson.com/Fedora Helper.html) Similarly no Linux distro ships with support for DVD playback, this is due to the contraversial laws such as DMCA (http://en.wikipedia.org /wiki/Digital Millennium Copyright Act) in the US, and the amendments to the Copyright, Designs and patents act (http://www.law.duke.edu /journals/dltr/articles/2004dltr0003.html) in the UK. The library (Decss) used to decrypt an encrypted DVD is perceived as a circumvention of an effective technical measure and is therefore illegal in the UK and the US. This is why no Distro ships with support, however the library is easily installable and available. The library is widely used, and no one I have ever heard of has been prosecuted for its use, its legality is more the result of over zealous Media corporations lobbying for the change in laws.

You may think differently, but for me the best way to learn was to try and learn the commands for everything rather than relying on the GUI's. That is however just my learning style, I prefer to go in head first and try to sort out my broken neck later, if you prefer to ease yourself in take that method.

Just try to find yourself tasks (even if you have to invent nonsensical tasks) to do from within Linux, and gradually increase the difficulty of the tasks. Below is an example of a list you could use

- Word process a document
- browse the internet
- Listen to music
- view the network settings of your computer
- Set up a webserver easier than it sounds
- Configure your printer again can be easier than it sounds but not always
- View the boot parameters for your system
- Install updates for your system

Now at first glance parts of that list are very intimidating, however you need to remember that there is a vast amount of resources on the Internet,

<u>Google searches (http://www.google.com/)</u> are invaluable, as are forums such as <u>those on Linux Format. (http://www.linuxformat.co.uk/)</u> In the same way you relied on information from other people when you first used Windows you can do so with Linux.

You will find the online community very helpful and supportive so long as you do a bit of the work yourself, that means read any relevant available documentation before posting a question to a forum. If you cannot find a question then ensure you post the question to a forum where it will not be Off-topic (asking about a graphics card in a Discussion forum when there is a Hardware forum readily available, is not a good idea), and include any relevant information you have, these should include

- Details of any hardware (especially if its that you are having problems with)
- Which Distro you are running (i.e. Gentoo, Mandriva, Fedora, Ubuntu etc.)
- Which Desktop Environment you are running (i.e. KDE, Gnome, XFCE etc.)
- The results of running uname -r from a console
- Details of the problem, including any error messages you have got
- Ensure your post has an informative title or it may not get read
- Try to avoid saying "it should work like it does on Windows," this will only irritate people

The Linux community is here to help you, however you do need to provide enough information when you have a problem that someone may better be able to help you. A good (if rather arrogant) guide to how to ask questions properly can be found here. (here. (here. (<a href="http://www.catb.org/esr/faqs/smart-questions.html) The forum that is most likely to be best able to help you is the forums for your distro, Ubuntu, Gentoo and Mandriva all have their own forums. Many other distros do as well, although you may find that it is also helpful to ask on a non distro specific forum such as Linux Format. (http://www.linuxformat.co.uk/) Before posting remember to search the Forums with relevant keywords in case someone else has experienced the issues you are experiencing.

Many people are put off using Linux by stories of "Linux is really difficult to use", its not so much a case of being difficult to use as being different. When helping someone start with Linux I usually categorise them within one of three groups

Basic user

This user uses the Computer as a device, they do not know or care how it works overly, they just want to be able to boot up and use a word processing application, listen to music, or browse the internet.

Power User

This user knows exactly how to use Windows, they can configure IIS, change user settings, manage accounts and much much more. Generally these users proclaim that they know exactly how to use a computer when asking for help.

Advanced User

This user knows exactly how a computer works, they can explain what an IRQ is, know how to resolve IRQ conflicts whether through the OS or the BIOS. They can use Windows to the same or higher level as a Power user, but they have a good understanding of computer technology.

Of the three the person who suffers more when migrating to Linux is the Power user, s/he believes they know how to use a computer when what they in fact know is how to use Windows. They often get frustrated and say things like Windows can do it why can't Linux? 99% of the time Linux can but they are trying to do it in the way you would with Windows. Before using Linux you need to understand that Windows and Linux are very different, Linux is an Alternative not a replacement. (http://linux.oneandoneis2.org/LNW1.htm)

Many have said that Linux is not ready for the Desktop, this is not true, I use Linux on all of my machines, servers and Desktops alike and no longer even have Windows installed. There were a few setbacks on my journey through the world of Linux it is true, in fact there were a number of times I gave in and just used Windows, but I persevered with trying to find a distro I like. Once you find a distro that just kind of clicks it is easy, for me it was Gentoo. I have to admit though the experience gained through using other distros was invaluable, trying to use Gentoo without a basic knowledge of Linux is very intimidating although the learning curve does do one good.

To Summarise if you wish to begin using Linux there are a number of things you should do.

- 'shop around' for a Distro that you like, Live CDs are particularly useful for this.
- Once you have installed your distro of choice, set yourself tasks to do, this will allow you to get used to the system
- Make good use of the resources available whenever you encounter difficulties
- Don't be afraid to ask questions
- Remember that Linux is not Windows!
- Above all, persevere!

I hope this article has been of some use to you, and that you enjoy using Linux

Shifty Ben (../about.html)

<u>Getting Started With Linux Introduction - Why use Linux? (http://benscomputer.no-ip.org/Articles/getting startedintro.html)</u>

<u>Getting Started with Linux Introduction Part 2 - Hardware (http://benscomputer.no-ip.org/Articles/getting startedintro2.html)</u>

Getting Started With Linux (http://benscomputer.no-ip.org/Articles/getting_started.html)
Getting Started With Linux Part 2 - Installing Software (http://benscomputer.no-ip.org/Articles/getting_started2.html)