

Ubuntu Linux

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May 2008

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What is Ubuntu

Ubuntu is a Free and [community](#) developed operating system that is perfect for laptops, [desktops](#) and [servers](#).

You get free security updates for at least 18 months on the desktop and server. With the Long Term Support (LTS) version you get three years support on the desktop, and five years on the server. There is no extra fee for the LTS version. But still if you want you can buy support at a very cheap price.

How to get Ubuntu

You can [download](#) Ubuntu from [ubuntu.com](#), or [request a free CD](#).

The current version of Ubuntu is 8.04 which came out on 24th of April 2008.

Ubuntu Features

You should definitely check the features of the new version(8.04) on:
<http://www.ubuntu.com/products/whatisubuntu/804features/>

Linux Advantages

Cost

The most obvious advantage of using Linux is the fact that it is free to obtain, while Microsoft products are not. Microsoft licenses typically are only allowed to be installed on a single computer, whereas a Linux distribution can be installed on any number of computers. The issue of cost also applies to the applications on Linux and Windows.

Other costs related to Windows that do not apply to Linux:

- Dealing with bugs in the operating system
- Dealing with bugs in application software
- Dealing with viruses, worms, Spyware, etc. (big advantage to Linux here)
- Dealing with software upgrades to new versions (both the OS and applications)

Security

Architecturally Linux is safer than windows. The number of viruses specifically written for Linux been reported 863 in 2005 according to [\[2\]](#).

Since Linux is open source, if there were a widespread Linux virus released today, there would be hundreds of patches released tomorrow, either by ordinary people that use the operating system or by the distribution maintainers. We wouldn't need to wait for a patch from a single company like we do with Windows. There are so many free options for increased security, SeLinux and Grsecurity just to name a couple.

Choice

The power of choice is a great Linux advantage. With Linux, you have the power to control just about every aspect of the operating system from Kernel to GUI and applications.

Software

There are so many software choices when it comes to doing any specific task. Regular users and programmers contribute applications all the time. Best of all, the vast majority of Linux software is free and open source. Not only are you getting the software for no charge, but you have the option to modify the source code if you want.

Linux is distributed by several companies, giving consumers to pick and choose the flavour that best suits their needs, Windows is the product of a single company.

Hardware

Linux is perfect for those old computers with barely any processing power or memory you have sitting in your garage or basement collecting dust. Install Linux and use it as a firewall, a file server, or a backup server. There are endless possibilities. Old 386/486 computers with

barely any RAM run Linux without any issue. Good luck running Windows on these machines and actually finding a use for them!

Stability

The architecture of Linux is superior to Windows because critical operation system functions are implemented in such a way that buggy programs can't cause the computer to become unstable and crash. In fairness, though not quite as robust as Linux, Windows 2000/XP are much improved. Boeing selected Wind River's carrier grade Linux product after an evaluation of several commercial Linux solutions. Wind River's Linux platform is based on an unmodified 2.6 kernel and is shipped with complete source code.

Compatibility

Linux is POSIX Compliant which means that applications developed for Linux can be operated on other POSIX compliant Unix derivatives with a minimum of reworking.

Support

With the Open Source Community, the quality of free technical support on the Internet may come as a shock. Sometimes knowing enough to ask the right questions can be a problem, but overall the best and the brightest are there to assist you at no charge when you run into problems that can't be solved by reading the documentation included with Linux.

Rate of Advancement

Linux has and will continue to advance at a rate impossible for a close development project such as Microsoft Windows to sustain. A few factors driving this rate of progress are: the number of active developers; quantity and quality of feedback from the field; short development cycle from development team to the end user; absence of corporate meddling in the design process; independently developed open source subsystems frequently incorporated into Linux,...

Spyware

Not just spyware but none of those funny applications that keep doing things in the background!

Defragment

Linux Doesn't need defragging. The Linux file systems work very efficiently such that it arranges data in a way that it doesn't require defragging. to know more, read [this](#).

Crash

Linux doesn't crash without any apparent reason. In Linux the core operating system (kernel) is separate from the GUI (X-Window) from the applications (OpenOffice.org, etc). So even if the application crashes, the core operating system is not affected. In Windows (Microsoft prefers to call this tight integration) if the Browser crashes, it can take down the entire OS.

Reboot

Linux doesn't require rebooting when a new hardware device is added. Most importantly Linux doesn't reboot on its own! I have had a situation where Windows updated the system and then rebooted on its own, without my knowledge.

Shell

Both Linux and Windows has shell environment (command prompt). The shell environments in Linux (such as bash) are more powerful and you can write entire programs using the scripting language. This is extremely useful to automate repetitive tasks such as backup.

Live CD

Linux can run from a CD or can be installed on the hard drive. Windows by default doesn't have any such option. Using live CDs as in Ubuntu/Knoppix, users can try out Linux by booting from the CD, without the need to install the operating system.

Driver

The Linux kernel comes shipped with an enormous load of hardware drivers. On Windows, a lot of hardware doesn't work until you install the driver. On Linux, a huge percentage of today's common hardware works perfectly out-of-the-box.

Vendor Independence

With proprietary operating system, you are dependent on the vendor who developed the operating system. With Linux you have a choice of vendors, so even if the vendor fails to give you support, you can always move to another vendor. Choice of vendors also means more competition, which means better value for the customer.

Low Cost Laptops

An exciting new trend is the appearance of Linux pre-installed in many new low-cost laptop computers. The most popular example of this is the [ASUS Eee PC](#) which was released in November 2007. I have briefly used one and it's very impressive. Prices range from AU \$300 to \$600 I think. Others are [XO laptop](#) , [Everex](#) , [Engadget](#) , [Dell](#),...

Clustering

Linux has been used to make enormous clusters of computers. In October 2002, ComputerWorld magazine [said](#): "Linux clusters provide supercomputer-type performance at a fraction of the expense."

Multiple Users

Linux is a multi-user system, Windows is not. That is, Windows is designed to be used by one person at a time. Databases running under Windows allow concurrent access by multiple users, but the Operating System itself is designed to deal with a single human being at a time. Linux, like all Unix variants, is designed to handle multiple concurrent users. Windows, of course, can run many programs concurrently, as can Linux. There is a multi-user version of Windows called Terminal Server but this is not the Windows pre-installed on personal computers.

Networking

They both do TCP/IP. Linux can do Windows networking, which means that a Linux computer can appear on a network of Windows computers and share its files and printers.

Hard Disk Partitions

Windows must be installed to and boot from a primary partition. Linux can be installed to and boot from either a primary partition or a logical partition.

Linux Disadvantages

Drivers

You can't blame Linux on the driver end!! That has to do with the companies of the product. Thanks to their close source no one is able to truly put together a completely functional open source model of the driver! But anyway you might not be able to find a driver for your new hardware. You might need to work with an older driver with less features or wait for a couple of months!

Understanding

Becoming familiar with the Linux operating system requires patience as well as a strong learning curve. You must have the desire to read and figure things out on your own, rather than having everything done for you. Check out the [20 must read how-to's and guides for Linux](#).

Compatibility

Because of its free nature, Linux is sometimes behind the curve when it comes to brand new hardware compatibility. Though the kernel contributors and maintainers work hard at keeping the kernel up to date, Linux does not have as much of a corporate backing as alternative [operating systems](#).

Alternative Programs

Though Linux developers have done a great job at creating alternatives to popular Windows applications, there are still some [applications](#) that exist on Windows that have no equivalent Linux application. Read [Alternatives to Windows Applications](#) to find out some of the popular alternatives.

Application Installation

The installation of applications under Windows, while not standardized, is generally consistent. Installing software under Linux varies with each distribution and is not nearly as simple, easy or obvious as Windows.

GUI

Microsoft is clearly leading the way in terms of how a user interface should be implemented. This is true in terms of ease of use and cosmetics. In Linux Gnome and KDE are working hard to do the job

The Linux GUI is optional while the Windows GUI is an integral component of the OS.

Games

Windows games are much better and use better graphics than their Linux counterparts. If you love games you should consider VMWare.

You need to read a lot

If you have Linux in your machine you should read a lot! You need to search the Internet to find out how to do what since most of the things are not as easy as they are in Window. You should also be a bit more patient.

I use Linux

I have been using Ubuntu Linux continuously for the past 8 months and rarely needed Windows in these times.

My point was that I have been using Windows for a long time and now it is time for a change! Lets do some Linux, maybe MacOS later!

Further Reading

<http://www.distrowatch.com>

<http://www.ubuntuguide.org>

Comparison table: http://en.wikipedia.org/wiki/Comparison_of_Windows_and_Linux