



This penguin is “Tux” – the happy Linux mascot.



Pronounce the name Linux with a short “i” – so it’s “li-nucks”, not “lie-nucks”.



Many web servers are said to have a “LAMP” configuration – an acronym for **L**inux, **A**pache, **M**ySQL, **P**HP, which combines operating system, web server, database, and server-side scripting.

# Introducing Linux

Linux is a computer operating system that can run on a variety of hardware including the popular Intel system found on most desktop computers. It is a modern derivation of the powerful Unix operating system that was introduced way back in 1969. In recent years the popularity of Linux has increased dramatically as computer users have discovered its many benefits:

- Linux is released under the GNU General Public License that ensures it remains free to all users – no-one can charge for this operating system so you will never have to pay for it. It’s available as a free download on the internet, but you may have to pay a distribution charge if you prefer a copy on CD/DVD.
- Access to the source code of Linux is unrestricted and it may be changed. This has allowed thousands of programmers around the world to refine the code to improve performance.
- Linux is truly a multi-user, multi-tasking operating system that allows multiple users to simultaneously work with multiple applications without experiencing any traffic problems. Many of the world’s web servers run on Linux for this very reason.
- Linux is an extremely stable operating system – continuous uptimes of more than a year are not uncommon. It can be upgraded “on the fly” so it only needs a reboot to add hardware.
- There are a large number of quality applications available to run on the Linux platform. These are comparable to commercial applications that run on other operating systems but, like Linux, these too are free of charge. For instance, the free LibreOffice suite offers similar functionality to the commercial Microsoft Office suite.
- With open-source software an administrator can know exactly what a program can do and the security dangers it presents. An open-source application cannot secretly gather information about the user or send confidential information to third parties.

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## The Evolution of Linux

In 1983 a visionary programmer named Richard Stallman began a movement called the GNU Project. Its philosophy was that software should be free from restrictions against copying or modification in order to make better and more efficient programs. This inspired programmers around the world to create programs driven by efficiency rather than by financial incentive.

By 1991 the GNU Project had created a lot of software tools including the GNU C Compiler written by Stallman himself. At that time many of these tools were incorporated into a Unix-compatible operating system by a 21-year old student at the University of Helsinki. His name was Linus Torvalds and he named the operating system Linux (**L**inus – **U**nix).

Linux was made available for download on the internet so other programmers could test and tweak the source code, then return it to Linus Torvalds. After a period of enthusiastic development, Linux 1.0 was made available globally under the GNU General Public License, which ensured it would remain free.

Programmers were keen to explore Linux and soon found some amazing uses for it. In April 1996, researchers at Los Alamos National Laboratory used Linux to run 68 PCs as a single parallel processing machine to simulate atomic shock waves. At \$150,000 this supercomputer cost just one-tenth the price of a comparable commercial machine. It reached a peak speed of 19 billion calculations per second, making it the 315th most powerful supercomputer in the world. It proved to be robust too – three months later it still didn't have to be rebooted.

Linux continued to grow in popularity as a text-based operating system, while Windows became the dominant graphical desktop operating system. Recognizing that most PC users want the point-and-click convenience of a graphical environment, the Linux camp began to develop a system comparable to the Windows desktop.

From a handful of enthusiasts in 1991 to millions of users now – Linux has come of age. Today's sleek K Desktop Environment (KDE) and the Gnome desktop environment now offer a user-friendly alternative for Windows users – Linux for the desktop!



The term “GNU” is a recursive acronym for **G**NU’s **N**ot **U**nix.



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Discover more about the Gnome desktop online at [gnome.org](http://gnome.org)