What Is Linux?

Linux is an independent Unix-like operating system that can be freely modified and redistributed. It works on all major 32-bit and 64-bit computer hardware platforms and is an implementation of the POSIX specification with which all true versions of Unix comply. Linux uses no code from proprietary Unix sources, and much of the software available for Linux is developed by the Free Software Foundation's GNU project. The result of efforts by thousands of programmers coordinating via the Internet, Linux is now recognized as one of the most stable and flexible operating systems available at any price.

What Systems Run Linux?

Desktops

Linux desktops such as GNOME or KDE replace Mac and Windows on the desktop for most users' needs. Many applications are now available, including complete office suites such as OpenOffice and KOffice.

Servers

Linux is an important part of the computer server market. It runs the large majority of the Web through the Apache server and provides email, FTP, SSH, file, printer, and proxy servers with efficient and scalable solutions. Linux also supports many different databases (e.g., MySQL, PostgreSQL, and Oracle) which are the engines of enterprise-level servers.

Development Systems

Linux provides a powerful software development platform, with all standard languages being freely available. Since the source code to the OS, development tools, and most applications can be freely modified and redistributed, Linux is the perfect environment for developers.

Other Systems

An eclectic mix of systems all run on Linux including wristwatches, consumer electronics, point-of-sale terminals, Google, Hollywood animation studios, mainframes, and supercomputer clusters.



Linux applications focus on doing one job well with necessary communications between applications implemented using standard file formats such as the Open Document Format (ODF) and standard protocols such as TCP/IP. This modular design has a number of advantages including flexibility, simplicity, and stability. A particular application can be replaced by any equivalent which follows the same rules. The resulting freedom of choice leads to friendly competition between different development teams and often results in Linux applications that are best-of-breed through Darwinian selection.

What Applications Run on Linux?

The short answer is *lots!* Your distribution of choice will generally have many thousands of popular Linux applications which you can optionally install including the Firefox web browser, Apache web server, OpenOffice suite, GIMP image manipulation program, XMMS audio player, xine video player, FooBillard suite of 5 different pool games, and PySol package of 200+ solitaire games! The following sites will help you find additional apps you might need:

- General apps: freshmeat.net/
- General apps: www.linux.org/apps/
- General apps: icewalkers.com/
- Free development site: sourceforge.net/
- Linux-Windows equivalents: linuxrsp.ru/win-lin-soft/table-eng.html
- KDE apps: kde-apps.org/
- GNOME apps: gnomefiles.org/
- Games: happypenguin.org/

Quotes from Linus

1991: on the start of it all

"I'm doing a (free) operating system (just a hobby, won't be big and professional like gnu) for 386(486) AT clones. This has been brewing since april, and is starting to get ready."

1996: on the Linux logo

"Ok, so we should be thinking of a lovable, cuddly, stuffed penguin sitting down after having gorged itself on herring. Still with me?"

1998: on world domination

'The "World Domination" thing is obviously always a bit tongue-in-cheek, but I think that yes, a five-year time-frame [in 2003] for the free software movement and Linux to make a major noticeable impact is not at all unrealistic.' Good call, Linus!

2003: on the Linux development process

"All of these people make their modifications, and not all of them are accepted. I see it as a kind of ecosystem. You have survival of the fittest."



A Linux distribution consists of the Linux kernel and a combination of other software to make a complete Unix-like environment. Most distributions are available for free download via the Internet or can be purchased in supported form.

Some of the more popular distributions are:

- Ubuntu (amd64, i386, ppc) ubuntu.com/
- Fedora (i386, x86_64, ppc) fedora.redhat.com/
- Debian GNU/Linux (i386, IA64, Alpha, Sparc, m68k, PPC, Arm, HPPA, Mips, S390) debian.org/
- Mandriva Linux (i586, x86_64) mandriva.com/
- SUSE Linux (i586, x86_64, ppc) opensuse.org/
- Yellow Dog Linux (PPC) yellowdoglinux.com/
- Smoothwall Internet firewall/router (i386) smoothwall.org/
- OpenWRT Wireless Router Distribution openwrt.org/

Complete distribution lists can be found at:

- distrowatch.com/
- \bullet lwn.net/Distributions/

Resources

Below are some of the key resources to help you with your Linux questions.

Resource websites

- Loads of Linux Links loll.sourceforge.net/linux/links/
- Freshmeat Linux Applications freshmeat.net/
- Linux Documentation Project tldp.org/
- LinuxQuestions.org linuxquestions.org/
- YoLinux Information Portal yolinux.com/
- Linux Brochure Project (LBP) lbproject.sourceforge.net/

News websites

- LWN lwn.net/
- LXer: Linux News lxer.com/
- Slashdot: News for Nerds; Stuff That Matters slashdot.org/

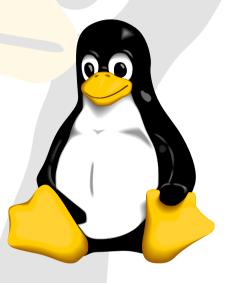
Online Zines

- Linux Journal linuxjournal.com/
- Linux Gazette linuxgazette.net/
- Linux Magazine: Open Source, Open Standards www.linux-mag.com/
- LinuxDevices.com Embedded Linux Resource linuxdevices.com/

Newsgroups

- groups.google.com/groups?group=comp.os.linux
- vlug.org/linux/newsgroups.html

An introduction to Linux; a secure, powerful, and free operating system for computers of all types.



Linux Brochure

Linux is an operating system initially created in 1991 as a hobby project by a young student, Linus Torvalds, at the University of Helsinki in Finland, and then released to the Internet as an Open Source project.

Since then thousands of programmers have contributed to make Linux one of the most stable and full-featured operating systems available in the world.

Tux, the penguin shown above, is the official Linux mascot.