

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 OS and Windows on the desktop for most users' needs. Many applications are now available, including complete office suites such as LibreOffice, web browsers like Firefox, and email programs like Evolution and Thunderbird.

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, News, 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.com, Amazon.com, Hollywood animation studios, mainframes, and supercomputer clusters.

Awesome Applications



Linux applications (apps) focus on doing one job well with communications between applications implemented using well-defined public protocols and file formats. 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 natural 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, LibreOffice suite, GIMP image editor, 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 applications you might need:

General apps: www.usinglinux.org/

General apps: www.icewalkers.com/

Free development site: www.sourceforge.net/

Windows equivalents or alternatives:

<http://alternatives.rzero.com/>

<http://www.osalt.com/>

Compatibility mode for Windows apps:

www.winehq.com/

KDE apps: <http://kde-apps.org/>

GNOME apps: <http://gnomefiles.org/>

Games: www.linuxgames.com/

Quotes from Linus Torvalds:

1991: on the start of it all

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

1991: on copyrights

"Most of the tools used with Linux are GNU software and are under the GNU copyleft."

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?"

1997: on license

Making Linux GPL'd was definitely the best thing I ever did.

????: on cost

When I made Linux, I wanted it to be easily available, and I did not want it to be too expensive.

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."

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."

2003: on Microsoft

To be a nemesis, you have to actively try to destroy something, don't you? Really, I'm not out to destroy Microsoft. That will just be a completely unintentional side effect.

?????: on commercialism

What commercialism has brought into Linux has been the incentive to make a good distribution that is easy to use and that has all the packaging issues worked out.

Many Distributions



GNU/Linux distributions (distros) consist 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 as a boxed set of CD-ROM s with printed documentation.

Some of the more popular distributions:

AntiX – for old hardware (32 bit)

<http://antix.mepis.com/>

Debian GNU/Linux

www.debian.org/

Fedora [Core] (was Red Hat)

www.fedoraproject.com/

KNOPPIX – Live/recovery

www.knoppix.org/

* LinuxMint – from freedom came elegance

www.linuxmint.com/

Mageia - from Mandriva (was Mandrake)

www.mageia.org/

MEPIS – Live/installation/recovery

www.mepis.org/

* PCLinuxOS – Live/installation

www.pclinuxos.com/

* Puppy – easy install - extremely friendly

www.puppylinux.org/

Slackware – Simplicity and stability

www.slackware.com/

openSUSE - consumers and small business

www.opensuse.org/

Ubuntu – Popular, tablet touch screen style

www.ubuntulinux.org/

Yellow Dog Linux (for Apple Power CPUs)

www.yellowdoglinux.com/

* Zorin – Smooth transition from Microsoft

www.zorin-os.com/

*** Beginner Friendly**

Listings of Linux distributions:

www.distrowatch.com/

www.livecdlist.com/

www.lwn.net/Distributions/

en.wikipedia.org/wiki/List_of_Linux_distributions

Other Resources:

The Linux Documentation Project

www.tldp.org/

GNU Operating System – Free as in Freedom

www.gnu.org/

Loads of Linux Links

<http://loll.sourceforge.net/linux/links/>

Linux (the Operating System)

<http://en.wikipedia.org/wiki/Linux>

Linux kernel

http://en.wikipedia.org/wiki/Linux_kernel

Linux Guide

http://en.wikibooks.org/wiki/Linux_Guide

Linux Online – Linux Information

www.linux.org/

Linux Screen Shots

linuxscreenshots.org

News Websites:

Linux Weekly News (with daily updates)

www.lwn.net/

Linux Today

www.linuxtoday.com/

Slashdot: News for Nerds, Stuff That Matters

www.slashdot.org/

The Free Software Foundation

www.fsf.org/

Online Magazines:

Linux Journal – since 1994

www.linuxjournal.com/

Linux Voice

...gives back to the free software community

<http://linuxvoice.com/>

Linux Magazine

...Open Source, Open Standards

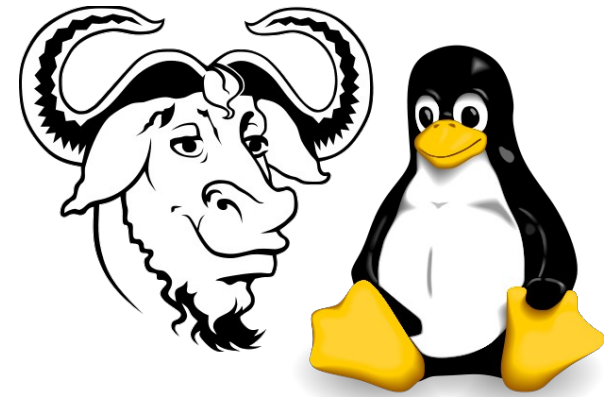
www.linux-mag.com/

Linux Productivity Magazine

www.troubleshooters.com/lpm/

An introduction to GNU/Linux:

a secure, powerful, & free
operating system
for computers of all types.



GNU/Linux for Beginners

Brought to you by the

Hazelwood Linux Users Group

<http://hzwlug.sluug.org/>

A Special Interest Group of the

St. Louis Unix Users Group (SLUUG)

www.sluug.org

Linux is the kernel initially created in 1991 as a hobby project by a young student, Linus Torvalds, at the University of Helsinki in Finland, and then released onto the Internet as an Open Source project. Since then thousands of people have contributed to make Linux (combined with GNU software) one of the most stable and full-featured operating systems available.

Tux, the penguin shown above, is the official Linux mascot. Gnu/Wildebeest/Ibex shown above, an unofficial mascot.