

LINUX GLOSSARY

/

In file management, this symbol refers to the *root* of the file system and separates *directories* in a path listing.

~

In file management, this symbol refers to a *user's* home *directory*.

#

In the *command* prompt, this symbol usually indicates the *user* is currently logged in as *root*.

\$

In the *command* prompt, this symbol usually indicates the *user* is currently logged in as an ordinary *user*.

administrator

Another word for either the *root user* or one who has adopted that *user's* powers temporarily.

applet

A small program that runs as part of a larger program and offers functions that complement the main program. The *GNOME* desktop incorporates several applets in its notification area.

APT

Advanced Packaging Tool. The underlying system by which software is managed and installed on *Ubuntu* and *Debian Linux* systems. *Shell commands* beginning with *apt*, such as *apt-get*, are used to install new software from various repositories. Under *Ubuntu*, the Synaptic Package Manager program provides a *GUI* method of using APT.

closed source

The reverse of *Open Source* in which the *source code* is not available for others to see, share, or modify. See also *proprietary*.

command

Input typed at the *shell* that performs a specific task, usually related to administration of the system and/or the manipulation of files.

community

The general term for the millions of *Linux users* worldwide, regardless of what they use *Linux* for or their individual backgrounds. By using *Linux*, you automatically become part of the community.

copyleft

The legal principle of protecting the right to share a creative work, such as a computer program, using a legally binding license. Copyleft also ensures future iterations of the work are covered in the same way.

CUPS

Common Unix Printing System. A set of programs that work in the background to handle printing under *Unix* and *Linux*.

Debian

Voluntary organization that produces *distributions* of *Free Software* operating systems, including *Linux*. Because it is a nonprofit organization run by passionate *Free Software* advocates, it is considered the most ethically sound of all Linux outfits. Many *distributions*, including *Ubuntu*, use Debian as the basis for their software because of its claimed reliability and relative simplicity.

dependency

A way of referring to system files that a program requires in order to run. If the dependencies are not present during program installation, a program might refuse to install.

directory

Another word for what is commonly referred to as a folder.

distribution

A collection of software making up the *Linux* operating system; also known as a *distro*. The software is usually compiled by either a company or an organization. A distribution is designed to be easy to install, administer, and use by virtue of it being an integrated whole. Examples include *Ubuntu*, *SUSE Linux*, *Red Hat*, and *Debian*.

distro

Shorthand for *distribution*.

Firefox

Web browser program used under *Ubuntu* and produced by the *Mozilla Foundation*.

FLOSS

Free, Libre, and Open Source Software. A term used within the *community* to describe all software or technology that, broadly speaking, adheres to the ethical approach of *Open Source* software and *Free Software*, as well as its legal guidelines.

FOSS

Free and Open Source Software. An alternative term for *FLOSS*.

free

When used to describe software or associated areas of technology, “free” indicates that the project abides by the ethical (if not legal) guidelines laid down by *The GNU Project*. It does not indicate that the software is free in a monetary sense; its meaning is quite different from “*Freeware*.”

Free Software

Software in which the *source code*—the original listing created by the programmer—is available for all to see, share, study, and adapt to their own needs. This differs from the concept of *open source* because the right of others to further modify the code is guaranteed via the *GNU General Public License* (GPL) software license (or a compatible license). For various reasons, Free Software sometimes does not include the *source code* (although the software can still be legally decompiled), but this is rare.

Freeware

Software that is distributed at no cost to the end *user*. The *source code* for Freeware is typically not made available.

GIMP

GNU Image Manipulation Program. A high-powered image-editing program that runs under *Linux*, *Unix*, Windows, and other operating systems. It is often preceded by the definite article: “The GIMP.”

GNOME

GNU Network Object Model Environment. A GUI-based desktop environment used by *Ubuntu*, as well as several other *distributions*. It uses the GTK+ *libraries*. See also *KDE*.

GNU

GNU’s Not Unix. See *GNU Project*, *The*.

GNU/Linux

Another name for the operating system referred to as *Linux*. The name GNU/Linux gives credit to the vast quantity of *The GNU Project* software that is added to the *Linux kernel* within a *distro* to make a complete operating system. As such, GNU/Linux is the preferred term of many *Free Software* advocates.

GNU Project, The

Organization created by *Richard Stallman* in order to further the aims of *Free Software* and create the body of software that makes up the *GNU* operating system.

GNU General Public License

Software license principally created by *Richard Stallman* in order to protect software *source code* against *proprietary* interests and ensure that it will always be shared. It does this by insisting that any *source code* covered by the GNU General Public License (GPL) must remain licensed under the GPL, even after it has been modified or added to by others. The *Linux kernel*, as well as much of the software that runs on it, uses the GPL.

GUI

Graphical User Interface. This term describes the software that provides a graphical system to display data and let you control your PC (usually via a mouse).

KDE

K Desktop Environment. The *GUI* and set of additional programs used on various *distros*, such as *Mandriva* and a variation of *Ubuntu* called *Kubuntu*.

kernel

Essential but ordinarily invisible set of programs that run the computer's hardware and provide a platform on which to run software. In the *Linux* operating system, the kernel is also called *Linux*, after its creator, *Linus Torvalds*.

mount

To add a file system so that it is integrated (and therefore accessible) within the main file system. This term applies to external file systems, such as those available across networks, as well as those on the *local* PC, such as the hard disk or CD/DVD-ROMs.

Mozilla Foundation

Organization founded by Netscape to create *open source* Internet software, such as web browsers and e-mail clients; originally based on the Netscape *source code*. At the time of writing, it produces the *Firefox* and *Camino* web browsers, the *Thunderbird* e-mail and *Usenet* client, the *Bugzilla* bug-tracking software, as well as other programs.

open source

(1) Method and philosophy of developing software whereby the *source code*—the original listing created by the programmer—is available for all to see. Note that open source is not the same as *Free Software*; describing software as open source does not imply that the code can be shared or used by others (although this is often the case).

(2) A *community of users* or any project that adheres to open-source values and/or practices

partition

Subdivision of a hard disk into which a file system can be installed.

proprietary

Effectively, software for which a software license must be acquired, usually for a fee. This usually means the *source code* is kept secret, but it can also indicate that the *source code* is available to view but not to incorporate into your own projects or share with others.

Red Hat

Well-known company that produces *distributions* of *Linux*. Acquired by IBM in 2019, Red Hat now functions as its independent subsidiary.

root

(1) The bottom of the *Linux* file system *directory* structure, usually indicated by a forward slash (*/*).

(2) The *user* on some versions of *Unix* or *Linux* who has control over all aspects of hardware, software, and the file system.

(3) Used to describe a *user* who temporarily takes on the powers of the root *user* (via the *sudo command*, for example).

RPM

Red Hat Package Manager. The system used to install and administer programs under *Red Hat*, *SUSE Linux* and some other *distributions*. See also *APT*.

RTFM

Read the freaking manual/*man page*. An exclamation frequently used online when a *newbie* asks for help without having undertaken basic research.

server

(1) Type of computer designed to share data with other computers over a network.

(2) Software that runs on a computer and is designed to share data with other programs on the same PC or with other PCs across a network.

shell

Broadly speaking, a shell is any program that creates an operating environment in which you can control your computer. The *GNOME* desktop can be seen as a shell, for example. However, it is more commonly understood within *Unix* and *Linux* circles as a program that lets you control the system using *commands* entered at the keyboard. In this context, the most common type of shell in use on *Linux* is *BASH*.

source code

The original program listing created by a programmer. Most programs that you download are precompiled—already turned into *binary executables* ready for general use—unless you specifically choose to download and *compile* the source code of a program yourself.

sudo

Program that runs under *Unix* and *Linux* by which ordinary *users* are temporarily afforded *administrator* rights. *Ubuntu* relies on *sudo* as the exclusive way for *users* to administer the system.

swap

Area of the hard disk that the *Linux kernel* uses as a temporary memory storage area. Desktop or *server Linux* differs from Windows in that it usually requires a separate hard disk *partition* in which to store the swap file.

Torvalds, Linus

Finnish programmer who, in 1991, created the initial versions of the *Linux kernel*. Since then, he has taken advantage of an international network of volunteers and staff employed by various companies who help produce the *kernel*. Torvalds himself contributes and oversees the efforts.

Tux

The name of the penguin character that is the *Linux* mascot. The original Tux graphic was drawn by Larry Ewing.

Ubuntu

Linux distribution with several unique characteristics. Ubuntu is designed primarily for desktop use, although several *server* versions are available. It is intended for use by individuals in any location in the world, so it has strong multiple language support. It is run by the *Ubuntu Foundation*, which is financially backed by *Mark Shuttleworth*. Each release is guaranteed to be supported for 18 months (5 years in the case of *server* releases).

Ubuntu Foundation

Organization set up by *Mark Shuttleworth* and his company, Canonical, Ltd., to administer and provide support for the *Ubuntu distribution* of *Linux*.

Unix

Seminal operating system created as a research project in 1969 by Kenneth Thompson and Dennis Ritchie at Bell Labs (later AT&T). Because it was initially possible to purchase the *source code* for a fee, subsequent revisions were enhanced by a variety of organizations and went on to run many mainframe and minicomputer systems throughout the 1980s, 1990s, and up to the present. Nowadays, Unix is fragmented and exists in a variety of different versions. Perhaps most popular is its *Open Source* rendition, *BSD Unix*, which has seen many developments since the *source code* was first released. This means that *BSD Unix* no longer exists but has instead diversified into a number of separate projects. *Proprietary* versions are also available, including *Solaris*, *HP-UX*, and *AIX*.

user

The way the operating system refers to anyone who accesses its resources. A user must first have a user account set up, effectively giving that user his or her own private space on the system. In addition to actual human users, an average *Linux* system has many other user accounts created to let programs and *services* go about their business. These are usually not seen by human users.

WINE

Wine Is Not an Emulator. Software that re-creates the Windows Application Programming Interface (API) layer within *Linux* and lets *users* run Windows programs.

workspace

X terminology referring to a *GUI* desktop.