

# **Free and Open Source Software**

When we speak of  
free software, we  
are referring to  
freedom, not  
price.

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meetville.com



- Cost-free software
- Free software
- Open Source software

# Technically, what does 'Open Source' mean?

Software for which:

- the source code is available to the end-user;
- the source code can be modified by the end-user;
- there are no restrictions on redistribution or use;
- the licensing conditions are usually intended to facilitate continued re-use and wide availability of the software,
- the cost of acquisition to the end-user is often minimal.

# General Public License

- General Public License is intended to **guarantee your freedom** to share and change free software--to make sure the software is free for all its users....
- When we speak of free software, we are referring to **freedom, not price**. Our General Public Licenses are designed to make sure that you have the **freedom to distribute copies of free software** (and charge for this service if you wish), that **you receive source code or can get it if you want it**, that you can **change the software** or use pieces of it in new free programs; and that you know you can do these things.

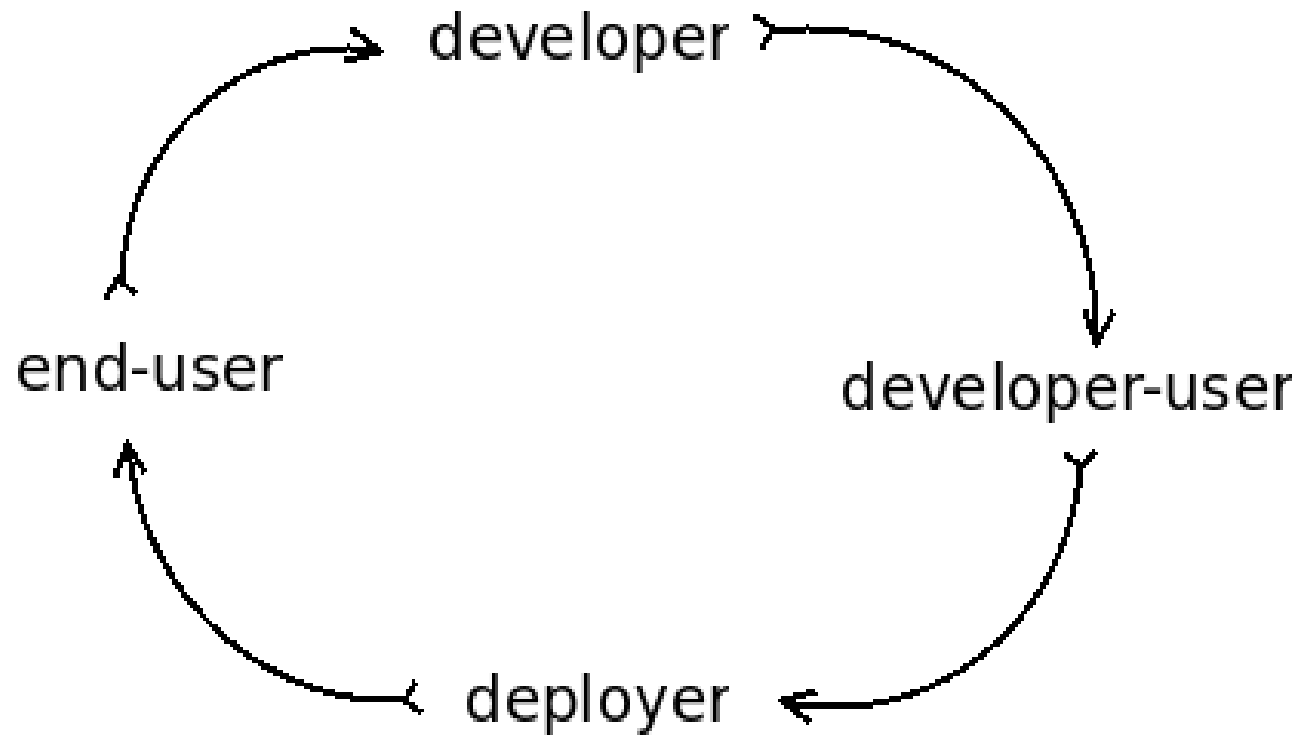
# Free and open source software

- It has no secrets: the innards are available for anyone to inspect
- It is not privately controlled: so likely to promote open rather than proprietary formats
- It is typically maintained by communities rather than single corporations: so bug fixes and enhancement are often frequent and free
- It is usually distributed free of charge (developers make their money from support, training, customisation and specialist add-ons; not marketing)

# The well-known examples

- Linux operating system
- Apache web server
- Mozilla web browser and email client
- Perl, Python and PHP scripting languages
- MySQL database
- OpenOffice office suite
- uPortal portal framework
- Gimp picture editor
- Moodle Virtual Learning Environment
- Ubuntu desktop distribution

# Open source is about community





# Why GNU/Linux ?

- Forget about viruses
- Is your system stable ?
- Enjoy the freedom
- Forget about drivers
- Update all your software with a single click.
- Why copy software illegally if you can get it for free?
- Why does your Windows get slower day after day?
- Too many windows? Use workspaces.
- Let your old computer have a second life

Topic	Command line (CLI)	GUI
Ease	Due to a higher degree of memorization and familiarity needed for operation and navigation, new users find operating a command line interface more difficult than a GUI.	Because a GUI is much more visually intuitive, new users almost always pick up this interface faster than a CLI.
Control	Users have more control over both the file and operating systems in a command line interface. For example, users can copy a specific file from one location to another with a one-line command.	Although a GUI offers ample access to the file and operating systems, advanced tasks may still need to utilize the command line.
Multitasking	Although many command line environments are capable of multitasking, they do not offer the same ease and ability to view multiple things at once on one screen.	GUI users have windows that enable a user to view, control, manipulate, and toggle through multiple programs and folders at same time.
Speed	Command line users only need to utilize their keyboards to navigate a the interface. Additionally, they often only need to execute a few lines to perform a task.	Using both a mouse and keyboard to navigate and control your operating or file system is going to be much slower than someone who is working in a command line.
Resources	A computer that is only using the command line takes a lot less of the computer's <a href="#">system resources</a> than a GUI.	A GUI requires more system resources because of the elements that require loading, such as icons and fonts. Video, mouse, and other <a href="#">drivers</a> need to be loaded, taking up additional system resources.
Scripting	A command line interface enables a user to script a sequence of commands to perform a task or execute a program.	Although A GUI enables a user to create shortcuts, tasks, or other similar actions, it doesn't even come close in comparison to what is available through a command line.

<b>Remote access</b>	When accessing another computer or device over a network, a user can only manipulate the device or its files with a command line interface.	Although remote graphical access is possible. Not all computers and network equipment has this ability.
<b>Diversity</b>	After you've learned how to navigate and use a command line, it's not going to change as much as a new GUI. Although new commands may be introduced, the original commands always remain the same.	Each GUI has a different design and structure when it comes to performing different tasks. Even different iterations of the same GUI, such as Windows, can have hundreds of different changes between each version.
<b>Strain</b>	The command line allows the user to keep their hands on the keyboard, almost never touching the mouse. Moving back and forth between a keyboard and mouse can cause additional strain and may help contribute to <a href="#">Carpal Tunnel Syndrome</a> .	Although <a href="#">shortcut keys</a> can help reduce the amount of times you have move from the keyboard to the mouse, you will still be moving much more between devices in a GUI.