

Open Source Philosophy

It was all open source

- ◆ Software sharing has been around as long as software itself
- ◆ Competitive advantages were to be had mainly in hardware innovation, not softwares
- ◆ The diversity of computing architectures meant that everything was incompatible with everything else. Thus, software written for one machine would generally not work on another

And then ...

- ◆ Selling software, or treating it as an integral part of hardware sales, began to look like a good strategy
- ◆ Manufacturers had to start enforcing the copyrights on their code more strictly
- ◆ The world of unrestricted code swapping slowly faded away

The beginning of proprietary softwares

- ◆ Richard Stallman who worked in the AI Lab at the MIT in the 1970s and early '80s, saw the larger pattern :
 - ◆ The modern computers of the era, had their own OS, but none of them were free software
 - ◆ The rule made by the owners of proprietary software was, "If you share with your neighbor, you are a pirate. If you want any changes, beg us to make them.

RMS started the resistance

Free Unix!

Starting this Thanksgiving I am going to write a complete Unix-compatible software system called GNU (for Gnu's Not Unix), and give it away free (1) to everyone who can use it. Contributions of time, money, programs and equipment are greatly needed...

- Richard Stallman; Posting to net.unix-wizards;
27 Sept. 1983.

GNU Projects

- ◆ The GNU Project, started in 1984, had the goal of creating a "complete Unix-compatible system" made entirely of free software.
- ◆ In 1985, Richard Stallman created the Free Software Foundation and developed the GNU General Public License (GNU GPL).
- ◆ Many of the programs required in an OS (such as libraries, compilers, text editors, a Unix shell, and a windowing system) were completed by the early 1990s, although low level elements such as device drivers, daemons, and the kernel were stalled and incomplete.

Free Software
Philosophy -> four
freedom

Last block of the building

- ◆ GNU Project was not able to make a complete OS
- ◆ In 1991, Linus Torvalds, a college student at the University of Helsinki wrote the kernel -- original code -- for a new system for his x86 PC that was later dubbed Linux
- ◆ He thought it would not be a big project
- ◆ He got helps from developers of many parts of the world

Linus' email

Hello everybody out there using minix - I'm doing a (free) operating system (just a hobby, won't be big and professional like gnu) for 386(486) AT clones...

I'd like to know what features most people would want. Any suggestions are welcome, but I won't promise I'll implement them :-)

- Linus Torvalds; Posting to comp.os.minix; 25 Aug. 1991.

Today

- ◆ GNU Softwares + Linux -> GNU/Linux
- ◆ GNU/Linux grows and arise as stable OS
- ◆ GNU/Linux is used in numerous domains, from embedded systems to supercomputers, and has secured a place in server installations with the popular LAMP application

What is it all about?

- ◆ It's about freedom
- ◆ It's about access to the source code
- ◆ It's about sharing
- ◆ It's about obeying the rules
- ◆ It's about good deed

Financial issue

Education issue

Legal issue

Education issue

Do it yourself
Help the others
Respect the others



Thank you

It's about freedom

- ◆ free redistribution
- ◆ source code
- ◆ derived works
- ◆ integrity of the author's source code
- ◆ no discrimination against persons or groups
- ◆ no discrimination against fields of endeavour
- ◆ distribution of license
- ◆ license must not be specific to a product
- ◆ license must not restrict other software
- ◆ license must be technology neutral

