

About Libre Software

Presentation of the Systems Course

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we study libre software

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There is a new guy in town

- GNU/Linux, Apache, GNOME, KDE, LibreOffice, etc. are very important, but...
- The really new thing is the libre software model:
 - Unprecedented combination of collaboration and competition.
 - Shift in emphasis from marketing to support and quality.
 - Classical assumptions about intellectual propriety are questioned.
 - End-users recover the control (instead of big software providers)
 - A new model for a new (global, networked) world?
- Last years have shown the feasibility of the model.

What is libre software?

In short free software guarantees:

- Freedom to use
- Freedom to study, and to adapt
- Freedom to redistribute
- Freedom to improve and release improvements

In other words, if you get it, you can...

- use it
- study and adapt it
- redistribute it
- improve it and release improvements

<http://www.gnu.org/philosophy/free-sw.html>

- The definition is from Free Software Foundation, for free software (“Free Software Definition”)
- But same applies to open source software (“Open Source Definition”)
- To avoid discussion and missinterpretations, we will “libre software”
- Important consequence:
To be able of modifying source code, it must be available.
- Lots of licenses: GPL, LGPL, BSD, Apache, MPL, etc.

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<http://opensource.org/docs/osd>

When libre software enters a new niche...

- It can become one of the first choices (GNU/Linux in operating systems, Apache in WWW servers, LibreOffice in office applications, etc.)
- It benefits from a lot of synergy (reuse of code, reuse of knowledge, reuse of distribution channels, etc.)
- Users gain competitive advantage:
 - Availability of source code makes improvements and customization possible in large scale (by in-house or subcontracted teams).
 - Standardization, but maintaining competition between providers.
 - No more per-use licenses.
 - Much more and better support (ensured by competition).
- Competition is the name of the game.

Consequences for the software industry

The software business is changing upside down (still slowly, but gaining momentum):

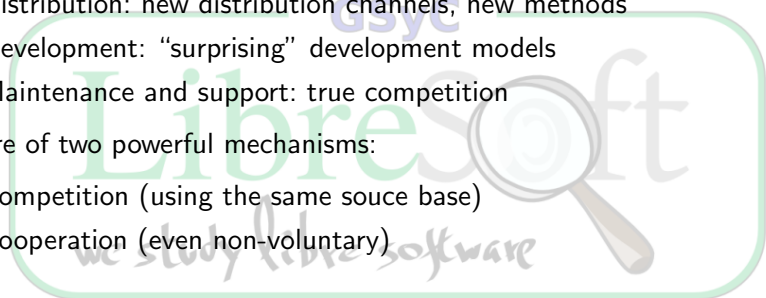
- Traditional software “manufacturers” will have to reinvent themselves completely (no more per-copy incomes).
- A whole new industry (based in support and libre development) will be needed as libre software gains market acceptance.
- It allows for (and encourages) competition in support, and even in the evolution of a piece of software.
- Users are benefited in several ways. Therefore, big pressure from end-users (including big companies) to switch to libre software.

Some specific impacts

- Cost: cost model radically different from proprietary software
- Openness: can be modified, can be inspected, can be studied
- Distribution: new distribution channels, new methods
- Development: “surprising” development models
- Maintenance and support: true competition

Mixture of two powerful mechanisms:

- Competition (using the same source base)
- Cooperation (even non-voluntary)



Different actors, different visions

- End users (persons, companies, public administrations, etc.)
- Developer (or software producer)
- Software integration
- Service provider



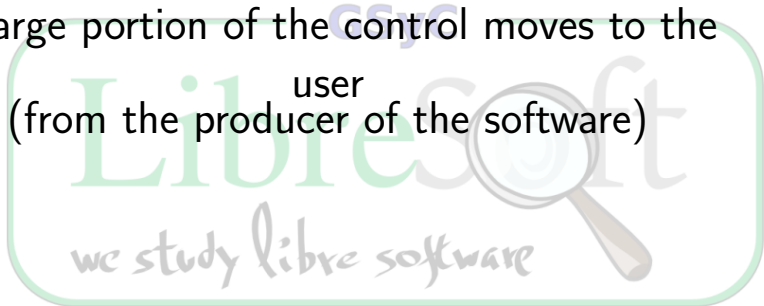
End users can forget about...

- ...company monopolies
(real competition, best products and services)
- ...producer 'reliability'
(future path ensured by product acceptance, source code availability, community dynamics)
- ...decision taking with few elements
(software can be tested in real environments, with near-zero cost)
- ...dependence on provider's strategies
(many providers, community strategies, strategies follow clients)
- ...black boxes
(no longer "blind confidence")

What if users could...

- ...adapt/customize the product at will?
- ...have the latest release with (very) low cost?
- ...fix all the problems (or hire someone to fix them)?
- ...decide on the future evolution of the product?
- ...contract the (complete) integration of the best products in a given area?
- ...buy complete auditing for each product by independent third parties?

A large portion of the control moves to the
user
(from the producer of the software)



Libre software changes the rules of the game:

- Opportunities for competing while being small
- Easier (and cheaper) to acquire front-wave technology
- Can take advantage of the work of your competitors (but they can do the same!)
- External contributors can be found (in many cases, at a fraction of the usual cost, because of win-win relationships)
- Distribution channels are cheaper, and truly global
- Feasible to become reference application in a niche

Maybe the best placed actor:

- All libre software products available (without the constraints of proprietary licences!)
- If products “don’t fit” you can adapt them (source code is available, interoperability is always possible)
- Pieces of products, or full products, or anything in the middle, can be integrated
- No more black boxes: everything is transparent

They can build on top of the work of others, with similar constraints and possibilities to those others

Some conclusions

- Libre software changes the rules of the game
- It is important to understand (and get advantage) of those rules
- Still learning effects and mechanisms
- Many opportunities to discover new effects, and take advantage of them

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