

What does "Open Source" mean?



GPLv2 (General Public License version 2)



GPLv2 (General Public License version 2)

- OSCAR cannot be bought or sold
- OSCAR has to be shared for free
- Modifications of OSCAR cannot be bought or sold, and have to be shared
- AGPL (new license) = is also applied to OSCAR running in "the cloud"

What does that mean?



Freedom



"free" ≠ "freedom"

- "Free as in free beer" ≠ "Freedom as in free speech"
- Freedom doesn't always come cheap
- Freedom has to be fought for, achieved, maintained and defended!
- Freedom has value. It enables functional free societies.

The Free Software Foundation: http://www.fsf.org/

Freedom and Software



The Four Software Freedoms:

- Freedom 0: The freedom to run the program, for any purpose.
- **Freedom 1**: The freedom to **study** how the program works, and **change** it to make it do what you wish. Access to the source code is a pre-condition for this.
- **Freedom 2**: The freedom to redistribute **copies** so you can help your neighbour.
- Freedom 3: The freedom to distribute copies of your modified versions to others. By doing this you can give the whole community a chance to benefit from your changes. Access to the source code is a pre-condition for this.

...hence the term "open source"

Richard Stallman defined the 4 Freedoms http://www.gnu.org/philosophy/free-sw.html

Freedom and Software

"Intellectual Property" = Applied Knowledge

The freedom to share applied knowledge without being compelled to buy or sell it



- I still don't get it!
- How can anyone run a business and make any profit this way?
- How can it be profitable to give away a product for free?
- I need to earn money...a paying job...my kids need shoes etc.

Analogy:

Toll road versus public highway



Private Toll Road:

- Belongs to a private corporation
- Maintained by private corporation
- You have to pay to use it to get to work

Public Highway:

- Not the exclusive property of any single entity
- Maintained by a trusted authority with public funds
- You can use it to get to work for free

OSCAR = Infrastructure



OSCAR = Infrastructure

Economic activity depends on infrastructure



OSCAR = *Public* infrastructure

Economic activity depends on infrastructure



Open Source removes barriers



Open Source removes barriers to widespread use and deployment of infrastructure

Examples of **barriers**:

Cost
Copyright & Licensing Issues
Legal Liability
Availability
Usability
Stagnation in Development

Open Source IT Infrastructure

Examples:

- **Linux OS** (running most of the world's web servers, as well as many wireless household routers, car navigation systems, tivos, smart TVs...)
- Android OS
- Apache / Tomcat (web server software)
- Java (language & platform), Python language
- MySQL (the database for Wikipedia, Google, Facebook...and OSCAR)
- Mozilla Firefox (web browser)
- LibreOffice (formerly Open Office)

Open Source Medical IT Infrastructure

A number of open source **health IT projects** in widespread use:

- WorldVistA (USA Veterans' Affairs) http://worldvista.org
- OpenEMR (USA) http://www.oemr.org/
- OpenMRS (Regenstrief + South African Medical Research Council), widely deployed in the developing world, http://openmrs.org/

Open standards for medical data exchange including

- HL7 (Health Level 7) http://www.hl7.org/
- LOINC (Logical Observation Identifiers Names and Codes) Regenstrief Institute: http://loinc.org/
- Mirth (HL7 interface engine) http://www.mirthcorp.com/

Business Interests and Open Source

• Frequent false allegation:

"Open Source is just not business friendly"

- The truth: Open Source discourages business monopolies
- Open source actually enables an effective business community

Business Interests and Open Source

Case Study: The Android OS project

- An open source Linux distribution tailored to smart phone handsets
- Humble beginnings by a few visionary enthusiasts in 2003
- Development taken over, centrally backed and coordinated by large corporation (Google) commencing 2005
- Open Source licensing: Apache 2.0 and GPLv2
- After commercial launch in Nov 2007, rapid gains in market share despite formidable competition from incumbent proprietary product (iOS)
- Currently runs 75% of all smart phones worldwide, 1.5 million new/day
- 500 million active devices, 700 000 apps, 25 billion app downloads
- This makes Android OS the most widely deployed end user computer OS in the world...by far... ~ 10% of humanity has an Android device, not one has paid a license fee for the OS

Business Interests and Open Source

Case Study: The Android OS project

How does Android generate profit?

Supports an extensive community of:

- OEM businesses (open handset alliance)
- Wireless service providers
- Application developers
- Internet businesses
- Leverages huge advertising revenue for Google

A business success story!

Business Interests and Open Source

Case Study: The Android OS project

So....what if, one day Google were to decide to "close" Android OS?

Then there are other open source Linux based mobile handset OS projects waiting in the wings:

- Firefox OS
- Ubuntu for phones
- Tizen

Open Source keeps Google honest and "not evil"

Cost



Cost versus Value



The "currency" of open source:

- Volunteer effort and engagement
- Donated time and ongoing commitment
- Shared ability and skill
- And...yes...money when needed to support the above

The reward: Appreciation, acknowledgement, reputation

The "currency" of open source:

Remember to pay for all that volunteer effort, engagement, time, commitment, ability, skill and development funding with the appropriate measure of appreciation, acknowledgement and respect!



"Product" versus "Project"



"**product**"
Traded commodity

"project"
Collaborative effort towards common goals

We prefer to talk about OSCAR as an "open source project".

Leadership



Leadership:

- Leadership is not an award, right, or title; it is a privilege, a responsibility and a mandate.
- A leader will only retain their authority as long as they retain the support of those who delegated that authority to them.



From the Ubuntu code of conduct 2.0

Leadership:

- Need for coordinated "project management"
- Need for coordinated quality control and code maintenance
- Need for coordinated jurisdictional certification efforts
- Good leadership enables effective collaboration

Leadership

"We trust McMaster and OSCAR EMR to be the bearers of *the precious*"

Quote: Tracy Monk



Collaboration



Collaboration

- Collaboration reduces redundancy and improves the quality of our work.
- Internally and externally, we celebrate good collaboration.
- Wherever possible, we work closely with upstream projects and others in the free software community to coordinate our efforts.
- We prefer to work transparently and involve interested parties as early as possible.

From the Ubuntu code of conduct 2.0

"Co-opetition"

- We collaborate with our competitors!
- We do this for purely selfish reasons
- If you do not practise effective "co-opetition", then you might still succeed...

...but, you will be working alone, and it will be so much harder for you

Pragmatism

Pragmatism = Compromising when necessary

- Value shared long term success over short term financial advantage.
- Value shared long term success over short term competitive advantage.
- Value shared long term success over ideological absolutes.
- Value community success over isolated corporate and enterprise interests.
- Be open to business interests where appropriate. Businesses are crucial members of the community ecosystem...if they behave accordingly.

Code of conduct:

- Be respectful
- Be considerate
- Take responsibility
- Be collaborative: Share your work, practise effective "co-opetition"
- Be pragmatic: Value long term goals over short term advantages
- Value decisiveness, clarity and consensus

Loosely pilfered from the Ubuntu code of conduct 2.0

"Ubuntu"

"I am what I am because of who we all are"

(Wikipedia)



Remember, OSCAR is a gift

...so don't forget to say thank you...

