Free Software
Free as in Freedom

Linux for Teachers

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Outline

Contents

1 Why Free Software?

Why Free Software?

- Okay, I go along with:

  - saving the whales
  - feeding the hungry
  - combatting the ignorance about the evil treatment of aboriginal people
  - caring about slaughter of innocent people in Sudan and Iraq
  - But Free Software?
  - Is it worth getting all *righteous* about free software?

Yes it is!

- Bless your computer, my child!

- To join the Church of Emacs,

- you need only say the Confession of the Faith three times:

- *There is no system but GNU, and Linux is one of its kernels.*

- And Bless you too, Saint IGNUtius.

2 Richard Stallman's Tin Foil Hat

Richard Stallman's Tin Foil Hat

- 18 November 2005: Richard Stallman and Bruce Perens were invited by UN as keynote speakers at the *UN World Summit on the information society* in Tunis, Tunisia

- Richard is opposed to RF ID, because of the many privacy violations possible
  - A promise was given at the 2003 WSIS in Geneva to not issue RFIDs again
  - He was given one on entry

Richard Stallman causes Trouble

- He wrapped *huge amounts* of aluminium foil around it, wearing it very prominently

- Richard offered foil to anyone who would take some

- He willingly unwrapped it to go through any of the visible check-points, he simply objected to the potential that people might be reading the RF ID without his knowledge and tracking him around the grounds.

- UN security would not let him leave for a long time

- Then would not let him in for his next talk, delaying the whole proceeding by a long time.

3 Sony's Rootkit

Sony's Rootkit

- A *rootkit* is a set of software tools frequently used by crackers after gaining access to a computer system.

- These tools are intended to conceal running processes, files or system data

- which helps an intruder maintain access to a system without the user's knowledge.

- Sony Corporation have been distributing rootkits on their music CDs over the last year and a half

- The software is installed on your computer without your permission
  - even if you decline the EULA

- Why? To protect the music industry from piracy.

- Sony have ripped off lots of free software to make the root kit without regard for the license terms, including code written by DVD Jon.

Poor Celine Lovers!

- Foxtrot, 21 November 2005

4 DVD Jon

DVD Jon

- The autumn of 1999 Jon Lech Johansen ("DVD Jon") with others decrypted the copy control system on DVD records to make it possible to view the DVDs at the Linux operating system.

- The program that made this possible was called "DeCSS" and released on the Internet.

- This resulted in him being sued by DVD Copy Control Association in USA,

- arrested by Norwegian police and

- charged by The Norwegian National Authority for Investigation and Prosecution of Economic and Environmental Crime (ØKOKRIM).

5 Digital Milenimum Copyright Act (DMCA)

Digital Milenimum Copyright Act (DMCA)

- This is an effort to use the law to control the copying of files

- Involves making it illegal to write software to circumvent a copy protection system

- Markers should be outlawed

6   Software Patents

Software Patents

- Companies pay to collect software patents

- Use these as a nuclear arsenal to drop on competitors

- These can be a terrible threat to free software. . .

- . . . as well as to non-multi-national software developers

7   So Why do we need Free Software?

So Why do we need Free Software?

- The world is moving to a situation where our ability to back up and use data content is controlled by law

- If all the operating system software we use is provided by big multinationals, then the control will be easily implemented

- Free software is controlled by its users, and cannot be controlled by any corporation, multinational or otherwise

8   What is Free Software?

What is Free Software?

- Defined by Richard Stallman

  - Author of GPL (General Public License)
  - Author of Emacs editor, GNU compiler suite
  - Founder of the Free Software Foundation

- Sometimes viewed (*incorrectly*) as the same thing as Open Source.

- Sometimes viewed (*Very incorrectly!*) as the same thing as Freeware or shareware!!

- The GPL defines four freedoms.

9   The Four Freedoms

GPL: the Four Freedoms

- The freedom to run the program, for any purpose (freedom 0).

- The freedom to study how the program works, and adapt it to your needs (freedom 1). Access to the source code is a precondition for this.

- The freedom to redistribute copies so you can help your neighbor (freedom 2).

- The freedom to improve the program, and release your improvements to the public, so that the whole community benefits. (freedom 3). Access to the source code is a precondition for this.

10   Is the GPL viral?

Why does Microsoft call the GPL "Viral"?

- Microsoft hate the GPL with passion

- Have called the license "viral", even in their legal documents!

- Why do they do this?

- They say that if anyone uses some GPL code in their product, then they are required to distribute all the source code to their product

10.1   GPL and Proprietary Licenses

GPL and Proprietary Licenses

- However, if you

  - view source code Microsoft released under their "shared source" scheme
  - write some software that is related in some way

- Will the Microsoft Legal Department treat you nicely?

- I would not dare view Microsoft source code.

11   Other Free Software Licenses

Other Free Software Licences

- These include the BSD license

- Allows any company to include the code, modify it, keep it all secret.

- People may be less motivated to contribute if their work goes to Microsoft.

- Microsoft like this license.

12   Some Things to Read

References

[1] Sam Williams. *Free as in Freedom: Richard Stallman's Crusade for Free Software*. O'Reilly 2002. `http://oreilly.com/openbook/freedom/`

[2] Bruce Perens. *Friday, November 18: Richard Stallman Gets in Trouble with UN Security for Wearing a Tin-Foil Hat*. `http://perens.sourcelabs.com/` `http://lwn.net/Articles/160913/`

[3] Jon Lech Johansen. *So Sue Me!* `http://nanocrew.net/` `http://efn.no/jonjohansen-en.html`

[4] Electronic Frontier Foundation. *Digital Millennium Copyright Act (DMCA) Archive* `http://www.eff.org/IP/DMCA/`

[5] GNU General Public License. `http://www.gnu.org/copyleft/gpl.html`

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