Open Source Software

A breif Introduction

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Who am I?

- 26 years old.

- B.Sc. in Software Engineering, Salahaddin University 2006

- Currently, M.Sc. student at Uppsala University.

- I am working against copyright infringement.

- I am also active in promoting for open source products in our society.

The expected outcome from this presentation

- Get a general view about Open Source Software (OSS).

- Diffrentiate between OSS and stolen (or cracked) software.

- Get rid from your installed stolen software.

- Learn how to find a legal and free alternative for your illegal software.

Open Soruce Software - OSS

- Is a computer software that is available in source code form.

- Its license permits users to study, change, and improve the software.

- Is very often developed in a public, collaborative manner.

Richard Stallman

- Sept 1983 started the GNU project and thus the free software movement.

- Pioneered concept of copyleft.

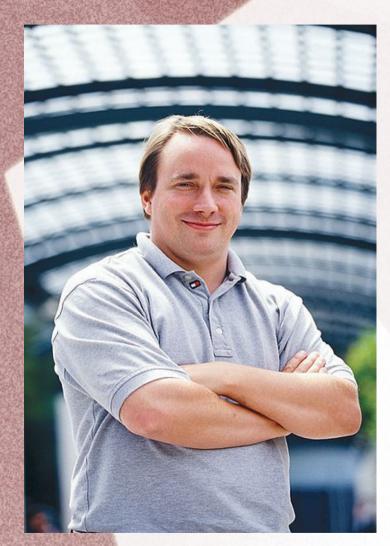- Wrote Emacs, GCC compiler.

- MacArthur 'Genius Grant' recipient.

Free Software Foundation

- Is a non-profit corporation founded by Richard Stallman on 4 October 1985.

- Is aimed to support the free software movement.

- Supports a copyleft-based movement which aims to promote the universal freedom to create, distribute and modify computer software.

GNU Project

- Is a free software, mass collaboration project, announced on September 27, 1983, by Richard Stallman.

- It initiated the GNU operating system, software development which began in January 1984.

- The founding goal of the project was, in the words of its initial announcement, to develop "a sufficient body of free software [...] to get along without any software that is not free."

Linus Torvalds

- Initiated development of the Linux kernel.

- Now acts as project coordinator.

- Implementor of GIT, a distributed version control system.

Linux a Unix-like OS

- Is a Unix-like computer operating system, based on the Linux kernel.

- It's development is one of the most prominent examples of free and open source software collaboration.

- The Linux kernel runs on a highly diverse range of computer architectures.

- It is widely used on servers, for its reliability, scalability and security.

Software licence

- Is a contract between the "licenser" and purchaser of the right to use software.

- The license may define ways under which the copy can be used.

- Many form contracts are only contained in digital form, and only presented to a user as a click-through where the user must "accept".

- These documents often call themselves end-user license agreements (EULAs).

Free software licence

- Is a software licence which grants recipients rights to modify and redistribute the software.

- Free software licence grants, to the recipients, freedom in the form of permissions to modify or distribute copyrighted work.

- Like: GPL, BSD, CDDL, MIT, MPL...etc.

Copyleft

- The free software licenses written by Richard Stallman in the mid-1980s pioneered a concept known as copyleft.

- Ensuing copyleft provisions stated that when modified versions of free software are distributed, they must be distributed under the same terms as the original software.

- Thus, all enhancements and additions to copylefted software must also be distributed as free software.

Illegal Software

- Or software piracy

- Pirated software hurts everyone.

- From software developers to retail store owners, and ultimately to all software users.

- Furthermore, the illegal duplication and distribution of software has a significant impact on the economy.

Linux vs. Windows

- Linux is free, while Windows costs about 150 USD.

- Linux, unlike Windows is welknown for its reliability, security and scalability.

- Most of Linux applications are free.

- Unlike Windows, Linux is rapidly developed.

- Linux has more than an option for its Desktop Environment, like, GNOME, KDE or XFCE.

Real world examples

- Over the past decade, open source software (OSS) has seen a surge in popularity.

- This newfound interest has led to crossovers in the application of open source ideas to real world projects.

- Including everything from film making to fizzy drinks.

Mozilla Foundation

- Is a non-profit organization that exists to support and provide leadership for the open source Mozilla project.

- Develops many products, like: Firefox, Thunderbird e-mail client, Sunbird and lightning calendar clients, Fennec.

- Also develops, many development tools and components, like: Gecko layout engine, BugZilla, and XUL-runner.

Wikipedia

- Is a free, web-based, collaborative, multilingual encyclopedia project supported by the non-profit Wikimedia Foundation.

- Wikipedia's 15 million articles (3.2 million in English) have been written collaboratively by volunteers around the world.

- Almost all of its articles can be edited by anyone with access to the site.

- It was launched in 2001 and is currently the largest and most popular general reference work on the Internet.

OpenOffice.org suit - OOo

- Is an open-source software application suite available for a number of different computer operating systems.

- Supports many different file formats, like: ODF (ISO standard), MS office formats and OpenXML.

- Includes a bunch of useful applications: Writer for word processing, Impress for presentation, Calc for spreadsheets, Base DBMS and Draw for graphics.

Netbeans & Eclipse

- De facto IDEs for Java and other languages.

- GUI builder for Java and some other languages.

- Provide a wide range of plug-ins.

- Highly customizable.

- Their platform can be used as a base of custom applications.

MySQL Community Server

- Wolrd's most widely used open source DBMS.

- Many web applications use MySQL as their database.

- Several high-traffic web sites (including Flickr, Facebook, Wikipedia, Google (though not for searches), Nokia and YouTube) use MySQL for data storage and logging of user data.

Apache Software Foundation

- Is a non-profit corporation to support Apache software projects.

- Runs a bunch of projects, like Apache server, Tomcat server, Maven and many others.

- Apache server, is the most widely used server.

- Apache server is used with Linux, MySQL and PHP to implement the LAMP stack.

JSF and GWT

- Are frameworks for web developement.

- JSF is a server side framework, while GWT is a client side framework.

- They provide a rich UI component set and a wide range of support for AJAX.

- GWT is mainly used in Google's products, like Gmail, Google maps and Google docs and others.

- JSF is used in Oracle's Developer Network and others.

Revision Control

- Is the management of changes to documents, programs, and other information stored as computer files.

- It is most commonly used in software development, where a team of people may change the same files.

- Like, GIT, Mercurial, SVN and CVS.

- Is used in project hosting websites, like Project Keani (soon Java.net), SourceForge and Google code.

GNOME and KDE

- Most widely used Desktop Environment software for Unix-like systems.

- Most of the distros use both or one of them.

- Ubuntu uses GNOME, while Kubuntu uses KDE.

- They include a bunch of useful free applications.

- GNOME aims for easiness and reliability, while KDE aims for eye candies.

GIMP and Inkscape

- GIMP a free open source alternative for Adobe Photoshop.

- Inkscape a free open soruce alternative for Adobe Illustrator.

- GIMP is a raster graphics editor.

- Inkscape is a vector graphics editor.

GCC and developer tools

- GCC is the most widely used set of compilers.

- Supports almost any language, C, C++, Fortran, Java, Google Go, Objective-C, Pascal, Ada and many others.

- Provides a set of developer tools, like: make and GDB for debugging.

- Supports different Operating systems and hardware architectures.

And many more

- Mobile OSs, like Android and WebOS.

- ZFS file system and OpenSolaris.

- DTrace, tracing tool.

- OpenJDK, an open source Java.

- PHP and other languages, like Python, Ruby and Scala.

- WebKit and Chromium web browser.

- Internet and OpenDNS.

- Much more!

OSS alternative for your properietry aplication

- Google the name of the application + alternative, like:

    - MS Office + alternative

- Search for the application's name in these two sites:

    - http://www.osalt.com

    - http://www.alternativeto.com

- Ubuntu as an example.

- Installing packages.

- Wine as a bad solution.

- Using Command line.

- Man and help in command line.

- Some fancy stuffs in compiz.

Useful links

- OSI: http://www.opensource.org

- GNU project: http://www.gnu.org

- Linux Kernel: http://www.kernel.org

- Ubuntu: http://www.ubuntu.com

- Mozilla: http://www.mozilla.org

- Wikipedia: http://www.wikipedia.org

- OOo: http://www.openoffice.org

- Netbeans: http://www.netbeans.org

- Eclipse: http://www.eclipse.org

- MySQL: http://dev.mysql.com

- ASF: http://www.apache.org

- JSF:
  http://java.sun.com/javaee/javaserverfaces/

- GWT: http://code.google.com/webtoolkit/

- Audacity: http://audacity.sourceforge.net/

- GNOME: http://www.gnome.org/

- KDE: http://www.kde.org

Useful links 3

- GIMP: http://www.gimp.org/

- Inkscape: http://www.inkscape.org/

- GCC: http://gcc.gnu.org

- SourceForge: http://www.sourceforge.net/

- Project Kenai (soon java.net): http://kenai.com/

- Google Code: http://code.google.com

Useful links 4

- Wine: http://www.winehq.org/

- Compiz: http://www.compiz.org/

- OpenSolaris: http://www.opensolaris.org

- A good documentation for command line:

  http://www.computerhope.com/unix.htm#04

Contact me 🙂

- Email me if you have any question, via:

  amanjpro@gmail.com

- My personal blog:

  http://amanj-kos.blogspot.com/

- Follow me on twitter:

  http://twitter.com/amanjpro

- Facebook: http://facebook.com/amanj

- Finally, LinkedIn:

  http://se.linkedin.com/in/amanjpro

References

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- Google summer of code, 2009:
  http://code.google.com/soc/

Questions