

# GPLv3 自由ソフトウェア活動を続ける

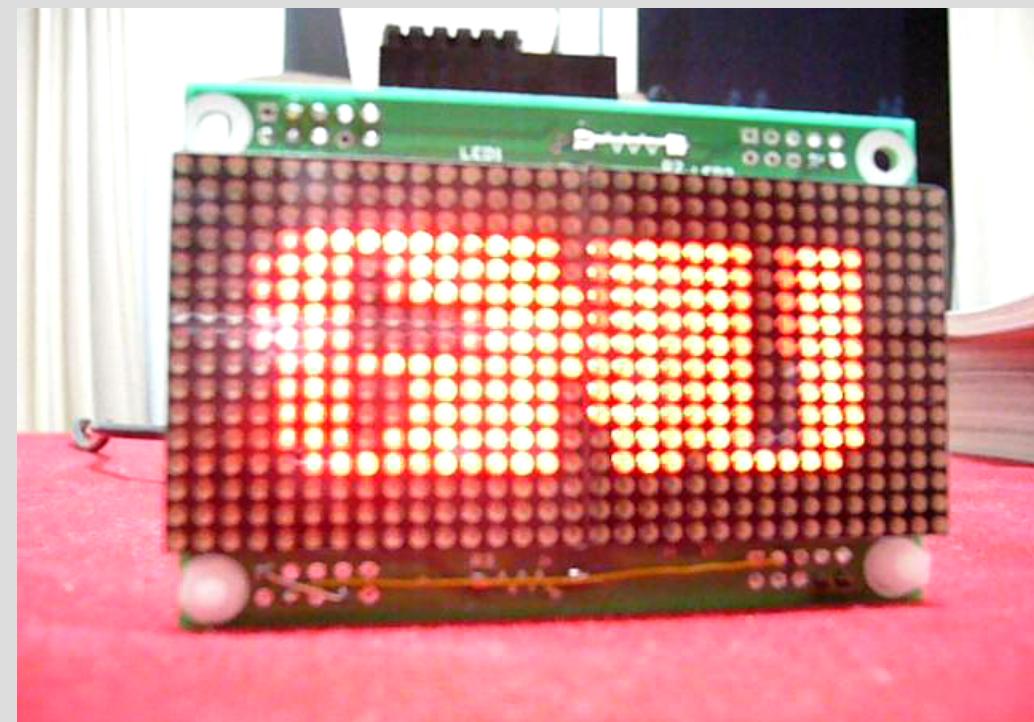
NIIB E Yut aka  
Free Software Initiative of Japan



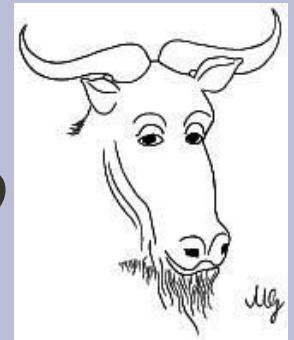
2007-09-14 Japan GNU/Linux Conference 2007

# GNU GPL LED Display v3

- Google SoC 2007
- Cq 出版 Design Wave マガジン
- 秋月電子 LED Matrix
- Xilinx Spartan 3E
- 時間：1時間15分
- 詳しくは 9/19
  - FSIJ 月例会
  - 秋葉原ダイビル



# What's Free Software?



- 0: To run the program, for any purpose.
  - 1: To study how the program works, and adapt it to your needs. (\*)
  - 2: To redistribute copies so you can help your neighbor.
  - 3: To improve the program, and release your improvements to the public, so that the whole community benefits. (\*)
- (\*) Access to the source code is a precondition for this.

# Brief History of FLOSS

1984: GNU Project has started

1985: Free Software Foundation has founded

1991: Linux development has started

1998: Open Source Software Movement

199X--: More and more software

Apache, Mozilla, MySQL, PostgreSQL,  
PHP, Perl, Python, Ruby...

200x: Got Attention by Governments

2003: 1<sup>st</sup> Asia Open Source Software Symposium

2005: 1<sup>st</sup> CodeFest Asia

2007: 9<sup>th</sup> AOSSS, 4<sup>th</sup> CodeFest Asia

# GNU Project (1)

- Richard M. Stallman started the project
- Goal: UNIX compatible replacement of Free (Free as in Freedom) Operating System
- Many software from GNU:
  - GCC (GNU Compiler Collection)
  - GNU Debugger
  - GNU Binutils
  - Bash
  - GNU Coreutils (text, shell, file)
  - and MORE!
- De-facto Standard of Development Environment



# GNU Project (2)

- Actually, GNU Project's most important contribution is the license: ***GNU GPL***
- GNU General Public License
  - which protects freedom
- More than half software projects adopt GNU GPL
  - Linux
  - GNU Project
  - MySQL (dual)



# Free Software and Licenses

- *Copyright* matters, take care of it
  - We can use/study/redistribute/modify
  - It is untrue: no copyright issues
- Three major category of Free Software:
  1. Public Domain
    - no copyright
  2. Permissive Licenses (BSD, MIT, ...)
  3. *Copyleft*
- Best practice:
  - Never write your own license,  
But use well-known license

# Copyleft and GNU GPL

- Copyleft: The method to protect the freedom to use/study/redistribute/modify software
- GNU GPL: An implementation of Copyleft
  - GNU General Public License
- Version 1: 1989
- Version 2: 1991
- Version 3: 2007





# DFSG

- Debian Free Software Guideline
  - From the viewpoint of Distribution
  - 10 guideline
    1. Free Redistribution
    2. Source Code
    3. Derived Works
    4. Integrity of The Author's Code
    5. No Discrimination Against Persons or Groups
    6. No Discrimination Against Fields of Endeavor
    7. Distribution of License
    8. License Must Not Be Specific to Debian
    9. License Must Not Contaminate Other Software
    10. Example Licenses: GPL, BSD, and Artistic



# OSI Approved Licenses

- Open Source Definition (from DFSG)
- 58 licenses (as of Sep. 2007)
  - GPL, LGPL
  - BSD, MIT, Apache
  - Python, PHP, Zope
  - Qt, Mozilla, Eclipse
  - IBM, Apple, Sun, Nokia, Intel
  - ...

# Practice of GNU Project

- Require developers to assign copyrights to Free Software Foundation
- Legal paper work is needed to join the development
- While it's annoying for developers (especially for maintainers), it is easy for users to make sure it's *free*
- Practice: AUTHORS, COPYING, ChangeLog, INSTALL, NEWS, README



# Linux and SCO problem

- Linux style
  - No assignment to central organization
  - Each developer has copyright
    - ... and copyright was not well managed
- SCO attack
  - Inclusion of portion of SCO UNIX
- Current Practice:
  - While copyrighted by each developer  
Make sure to record who did what
  - Add: Sign-off: Field in every patch



# Practice and Experience

- Copyright Management is needed
  - Identify each developer
  - Record every changes
- Big issues: Software Monopoly,  
Software Patent,  
Digital Restrictions
- For problems and concerns:
  - Software Freedom Law Center
  - GPL compliance lab at FSF
  - GPL seminar by FSF

# GNU GPL History

- ...1988 Each GPL (Emacs, GCC, ...)
- 1989 GNU GPL version 1 10
- 1991 GNU GPL version 2 12
  - + Software Patents, Geo limitation
- 2007 GNU GPL version 3 17
  - + Anti-Circumvention Law
  - + Licence Compatibility
  - + Software Patents
  - + GNU Affero GPL
  - + Note on Warranty & Liability
  - Geographical limitation

# GNU GPLv3

Freedom to protect

Tivoization

DMCA, EUCD

Software Patents (MS&Novel deal)

License Compatibility

Apache

Internationalization

一年半の活動

五回の国際会議

委員会による意見収集

# ソフトウェアの自由 に対する脅威

Proprietary Software Business

No freedom of users

Monopoly of Software industry

distribution with no source code

Control of Development Environment

“Java Trap”

Software patents

which makes software proprietary

Tivoization

No modification possible

# Tivoization

- 暗号技術によりソフトウェアを検証
- 製造者の鍵のデジタル署名により、利用者の改変を許さない
- GPLv3 は利用者の自由を奪わない
- Section6
- Corresponding Source
  - Installation Information
  - 鍵も利用者に教えましょう

# 不自由なコンテンツと DMCA

- 著作物を許可無く配布 - 違法
- コピープロテクト（技術的手段）の回避  
これも違法になってます。えー。
- GPLv3 は利用者の自由を奪わない
- Section3 によって下記を避ける
  - 移植をすると DMCA に抵触する可能性
  - 改変すると DMCA に抵触する可能性
- コンテンツ配布に独自フォーマットと独自プレイヤーを GPL covered work で実装し、DMCA の保護を期待することはできません

# ソフトウェア特許

- ソフトウェア特許を悪意でもって入れられることを防止
  - コミュニティの分断を避ける
  - Section 11
- 
- 注： ソフトウェア特許に反対しましょう

# Code, License, Campaign

GNU Project

Code it, if none

GNU General Public License

Let propagate our effort

World Wide Cooperation for Free Software

Movement

FSF, FSFE, FSFLA, FSF India

# Discussions

Abuse study team(s) against GNU GPL  
Consumer Electronics Products

Digital TV?

Embedded System

ROM is OK? and How?

User Product

Elevator?

Who is "User"?

# References

- <http://www.gnu.org/philosophy/philosophy.html>
- <http://www.gnu.org/philosophy/free-sw.html>
- <http://www.gnu.org/licenses/licenses.html>
- <http://www.gnu.org/licenses/gpl-faq.html>
- <http://www.opensource.org/>
- <http://www.gnu.org/licenses/license-list.html>
- <http://www.softwarefreedom.org/>