

Free and Open Source Software

Mischa Spiegelmock

<2018-10-09 Tue>

Outline

Free and Open Source Software

Meetup

Why should you care?

Definition

Money

Career

Community

Free and Open Source Software

Meetup

- What are we doing here??

Meetup

- New, regular meetup for a community of people interested in open source

 Ukraine Open Source Software 

 Mischa Spiegelmock created an event for the group. 

Ukraine Open Source Software
Public group

About Discussion Members Events Photos Group insights Moderate group

Search this group 

Shortcuts SF IRC Club Open Source Meetup

THURS, 2 AUG
Kyiv Software Drinks!
Barman Dictat · Kyiv
6 went

 Dmitry Kohmanyuk, John Sung Kim and 1 other Seen by 42

Why should you care?

????

All software is built on other software (and hardware)

libraries libjpeg, webkit, react, glibc

operating systems linux+android, macOS, BSD

applications VLC, OpenOffice, nginx, firefox

development LLVM/clang, gcc, vim, VS Code, Atom

media CreativeCommons, wikimedia, freesound

hardware arduino, raspberry pi, esp8266, drones RISC-V,
openSPARC, icarus, eagle

Linux

From: torv...@klaava.Helsinki.FI (Linus Benedict Torvalds)
Newsgroups: comp.os.minix
Subject: What would you like to see most in minix?
Summary: small poll for my new operating system
Keywords: 386, preferences
Message-ID: <1991Aug25.205708.9541@klaava.Helsinki.FI>
Date: 25 Aug 91 20:57:08 GMT
Organization: University of Helsinki
Lines: 20

Hello everybody out there using minix -

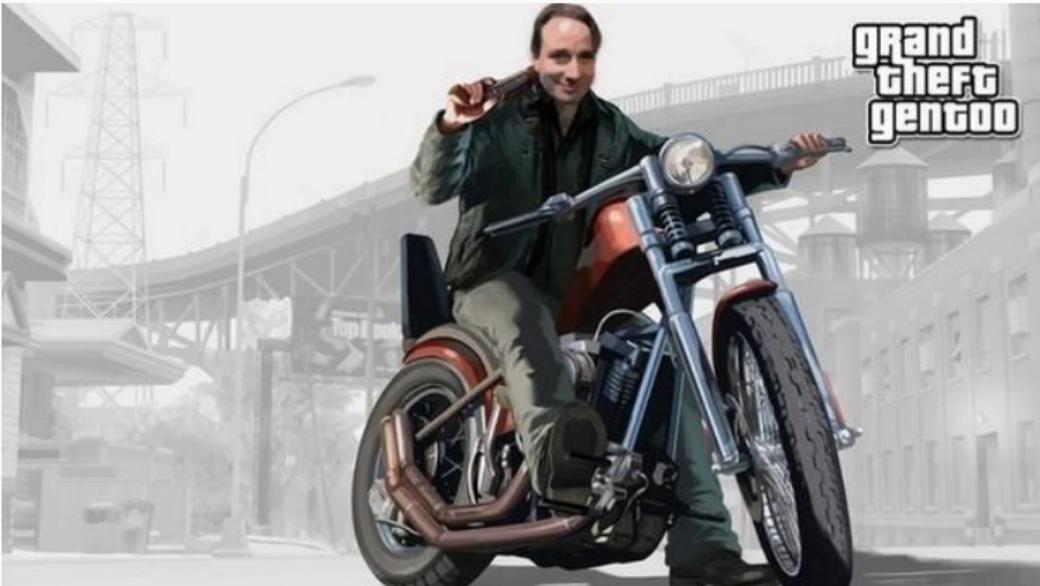
I'm doing a (free) operating system (just a hobby, won't be big and professional like gnu) for 386(486) AT clones. This has been brewing since april, and is starting to get ready. I'd like any feedback on things people like/dislike in minix, as my OS resembles it somewhat (same physical layout of the file-system (due to practical reasons) among other things).

I've currently ported bash(1.08) and gcc(1.40), and things seem to work. This implies that I'll get something practical within a few months, and I'd like to know what features most people would want. Any suggestions are welcome, but I won't promise I'll implement them :-(

Linus (torv...@kruuna.helsinki.fi)

PS. Yes - it's free of any minix code, and it has a multi-threaded fs. It is NOT protable (uses 386 task switching etc), and it probably never will support anything other than AT-harddisks, as that's all I have :-(.

Linux



- 2.7 billion Android users
- cars, routers, TVs, embedded systems
- most popular and most complex open source project

macOS

- macOS kernel (XNU) and components

macOS 10.13.3 Source	
Project	Downloads
AppleFileSystemDriver-23	
AppleRAID-15	
AppleUSBirdA-145.2.4	
AvailabilityVersions-32.30.1	
BerkeleyDB-21	
BootCache-128	
CPAN-60	
Chess-322	
CommonCrypto-60118.30.2	
CrackLib-37765	
Csu-85	
DiskArbitration-297.1.1	
Heimdal-520.30.1	
ICU-59152.0.1	

New Microsoft

- GitHub

 Microsoft Report abuse

Open source, from Microsoft with love

📍 Redmond, WA | [https://opensource.microsoft...](https://opensource.microsoft.com) | [opensource@microsoft...](mailto:opensource@microsoft.com) | Verified

Repositories 2,012 | People 4,027 | Projects 0

Pinned repositories

vscode
Visual Studio Code

● TypeScript ⚡ 59.9k ⚡ 7.7k

TypeScript
TypeScript is a superset of JavaScript that compiles to clean JavaScript output.

● TypeScript ⚡ 39.3k ⚡ 5.6k

dotnet
This repo is the official home of .NET on GitHub. It's a great starting point to find many .NET OSS projects from Microsoft and the community, including many that are part of the .NET Foundation.

● HTML ⚡ 10.1k ⚡ 1.6k

api-guidelines
Microsoft REST API Guidelines

★ 8.9k ⚡ 976

monaco-editor
A browser based code editor

● JavaScript ⚡ 11.2k ⚡ 896

ChakraCore
ChakraCore is the core part of the Chakra Javascript engine that powers Microsoft Edge

● JavaScript ⚡ 7.4k ⚡ 994

Web

- jQuery
- React
- Vue
- Ruby on Rails
- Flask & Django
- nginx
- libcurl
- node.js
- npm
- emscripten

Code you can use to build things

- NPM
- PyPI
- GitHub
- brew
- apt
- yum

Science

- numpy
- scipy
- tensorflow (google)
- openCV

Slides

- Emacs with Spacemacs
- LATEX

The screenshot shows an Emacs window with a presentation slide and a code block.

Slide Content:

- **GPL**
- **GNU** GNU's Not Unix (yes it's recursive)
- **GPL** GNU Public License ("Copyleft")
- **AGPL** Affero GPL
- Linux is licensed under GPL 2

Code Block:

```
1 #+OPTIONS: 'full wit -t lit -t H3 Annot -n archiveheadline authorit
2 #+OPTIONS: broken-links-mail cimail cimarkdown diction DODGSONS' dataset eit
3 #+OPTIONS: toc2 toc3 toc4 toc5 toc6 toc7 toc8 toc9 toc10 toc11 toc12 toc13
4 #+OPTIONS: tasklist text timestamp ttitle toc1 toc2 toc3
5 #+TITLE: Free and Open Source Software
6 #+DATE: 2018-09-23 Tue
7 #+AUTHOR: Michael Mischke<mschm@stg.biz>
8 #+VERSION: 1.0
9 #+OPTIONS: toc2 toc3 toc4 toc5 toc6 toc7 toc8 toc9 toc10 toc11 toc12 toc13
10 #+FORMAT: org export
11 #+EXCLUDE_TAGS: noexport
12 #+INCLUDE_DIRS: Emacs 27.0.50 (Org mode 9.1.14)
13 #+STARTUP: toc
14 #+LATEX_CLASS: beamer
15 #+LaTeX_CLASS_OPTIONS: [beamer, presentation]
16
17
18     • Free and Open Source Software
19         ○ Why should you care?
20         ○ All software is built on other software...
21         ○ Linux...
22         ○ ...
23         ○ New Microsoft...
24         ○ Web...
25         ○ Code you can use to build things...
26         ○ ...
27         ○ Collaboration
28         ○ Get to work with smart people from all over the world
29         ○ Run your business
30         ○ ...
31         ○ Definition...
32         ○ Free Software Foundation (FSF)...
33         ○ ...
34         ○ Licenses...
35         ○ ...
36         ○ Licenses and copyright determine how your software can be used
37         ○ If your company uses software without a license, it cannot be acquired
38         ○ ...
39         ○ Do Licenses Matter?
40         ○ In Ukraine, maybe not much
41         ○ ...
42         ○ Selling software outside of Ukraine
43         ○ Free/Libre Licenses...
44         ○ ...
45         ○ Money
46         ○ ...
47         ○ It's not about money
48         ○ ...
49         ○ ...
50         ○ Is There Money in open Source Business?
51         ○ Redhat...
52         ○ Google...
53         ○ ...
54         ○ Careful!
```

Emacs status bar: n 529k opensource.pdf DiscView Helm@8 edit no-conversion | 3671: 0 All 0 = 3.4k opensource.org Org edit unix | 182:43 Top

Collaboration

- Get to work with smart people from all over the world
- Fun conferences

Definition

Definition :: Free Software

free Not free as in "free beer"

free As in "freedom"

F/LOSS Free/Libre Open Source Software

(FR) libre vs gratis

(UA)

(RU) vs

Free Software Foundation (FSF)



Freedom

A program is free software if the program's users have the four essential freedoms: [FSF]

1. The freedom to run the program as you wish, for any purpose.
2. The freedom to study how the program works, and change it so it does your computing as you wish.
Access to the source code is a precondition for this.
3. The freedom to redistribute copies so you can help others.
4. 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.

Licensing

Licenses and copyright determine how your software can be used

If your company uses software without a license, it cannot be acquired

Developers can choose how to license their software

Do Licenses Matter?

In Ukraine, maybe not much

Potential acquirers

Selling software outside of Ukraine

Free/Libre Licenses

GNU Public License (GPL aka Copyleft)

Massachusetts Institute Of Technology (MIT)

Berkeley Software Distribution (BSD)

Apache

Anyone But Richard M. Stallman (ABRMS)

Do Whatever The Fuck You Want Public License
(WTFPL)

GPL

GNU GNU's Not Unix (yes it's recursive)

GPL GNU Public License ("Copyleft")

Linux is licensed under GPL v2

Money

- It's not about money
- But it's hard to beat free (gratis)

Is There Money In Open Source Business?

RedHat

Revenue 2.9 billion USD (2017)

Google

- Android
- Go
- Kubernetes
- Google Cloud
- LLVM
- Chromium

LiveJournal :: Open Source Driven



LiveJournal

- LJ released lots of FOSS software:
 - memcached** memory cache daemon
 - perlbal** http load balancer / reverse proxy
 - TheSchwartz** reliable job queue
 - Gearman (Manager)** unreliable job system
 - mogileFS (omg files)** file storage
 - djabberd** distributed jabber daemon
 - lots more stuff on CPAN

Good For Your Career

Employers like it

Can get help with problems

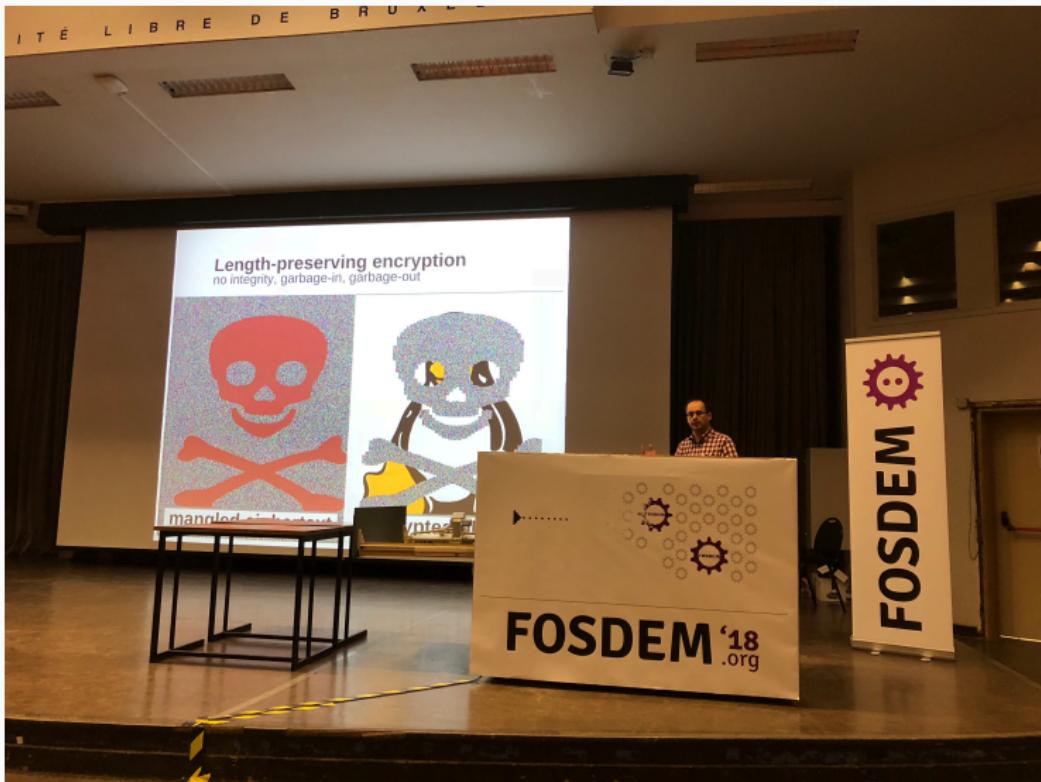
Can file issues on projects

Can contribute

Conferences



Conferences



Chat

IRC Freenode

Get Involved!

noncode Don't have to code to contribute - at all!

meatspace Start meetups, drinkups, talks