

Debian: a Geeky Quasi-Anarchy that Works

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28 June 2014
Hackmeeting 2014
Bologna, Italy

Outline

1 Debian and Wheezy

2 Specialties

3 Organization

Debian: once upon a time

Fellow Linuxers,

*This is just to announce the **imminent completion** of a **brand-new Linux release**, which I'm calling the **Debian Linux Release**. [...]*

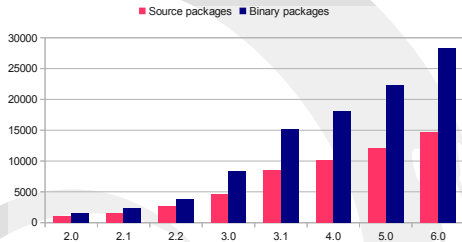
*Ian A Murdock, 16/08/1993
comp.os.linux.development*

- make GNU/Linux **competitive** with commercial OS
- **easy** to install
- built **collaboratively** by software **experts**
- 1st major distro developed “**openly in the spirit of GNU**”
FSF-supported for a while

$\frac{1}{3}$ of Debian: the operating system

flagship product: **Debian stable**

- binary distribution
- completely Free (DFSG)
- released every 24 months (\approx)
- a dozen architectures
 - ▶ with several kernels!
- archive-wide security support
 - ▶ Long Term Support, 5 years



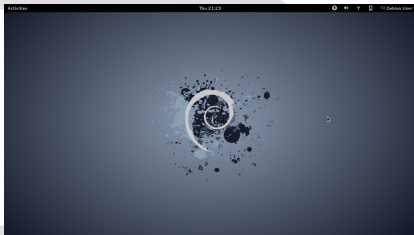
one of the largest Free Software
porting platforms

renowned for

ports, stability, packaging system, old hw support, documentation, smooth upgrades, i18n/l10n, the testing suite, runs anywhere, technical policy, package choice, ...

Debian 7.0 “Wheezy” — highlithgs

- **multiarch**
 - ▶ 3rd party software, easily
 - ▶ cross-compilation
- **private cloud** deployment
 - ▶ OpenStack, Xen/XCP, ...
- **public cloud** support
 - ▶ EC2, Azure, GCE, ...
- **multimedia** codecs & frontends
 - ▶ 3rd party repositories
- new archs: **armhf, s390x**
- **desktop**: GNOME 3.x, KDE Plasma 4.x, XFCE, ...



- upgrades throughout the archive

released: May 4th, 2013

Most popular GNU/Linux on the Web ($\approx 30\%$) overall, 1+ Web server out of 10 ($\approx 11\%$) runs Debian — w3techs.com, June 2014

$\frac{1}{3}$ of Debian: the Project

Common goal:

Create the best, Free operating system.

Debian Social Contract

(1997)

- 100% Free Software
- don't hide problems
- give back
- priorities: users & Free Software

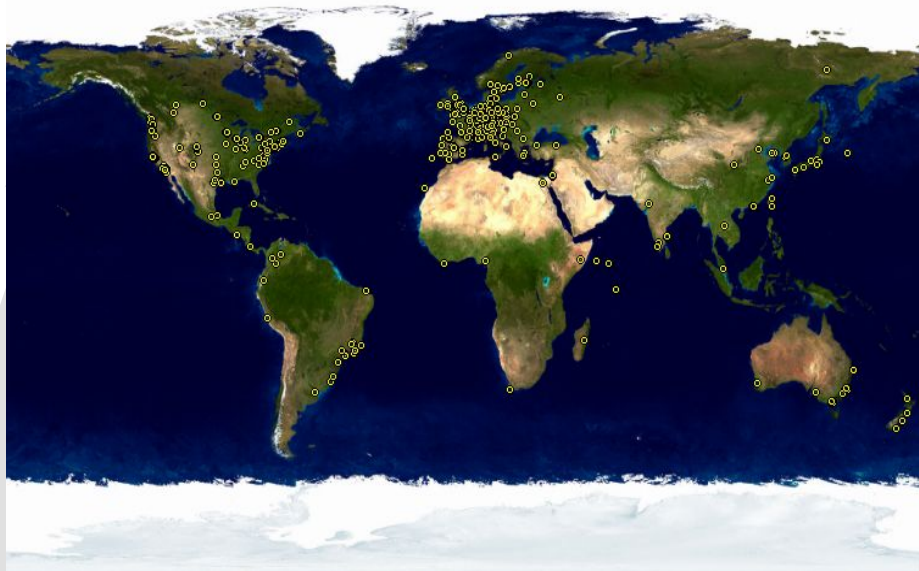
Debian Constitution

(1998)

Structures and rules of a Free-Software-compatible democracy

Strong motive to join: \approx 1'000 **project members, world-wide**

$\frac{1}{3}$ of Debian: the Project (cont.)



Demography

Developer's per country

2013 statistics:

<http://www.perrier.eu.org/weblog/2013/07/27#devel-countries-201307>

Take a guess: Italy's position?

Demography

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Take a guess: Italy's position?

in terms of...

- total n. of devs: **#5** ↑ 2 wrt 2012
(after: us, de, fr, uk)
- n. of devs *pro capite*: **#20** ↓ 1 wrt 2012
(after: most EU countries, except east and .gr)

$\frac{1}{3}$ of Debian: the community



Open development

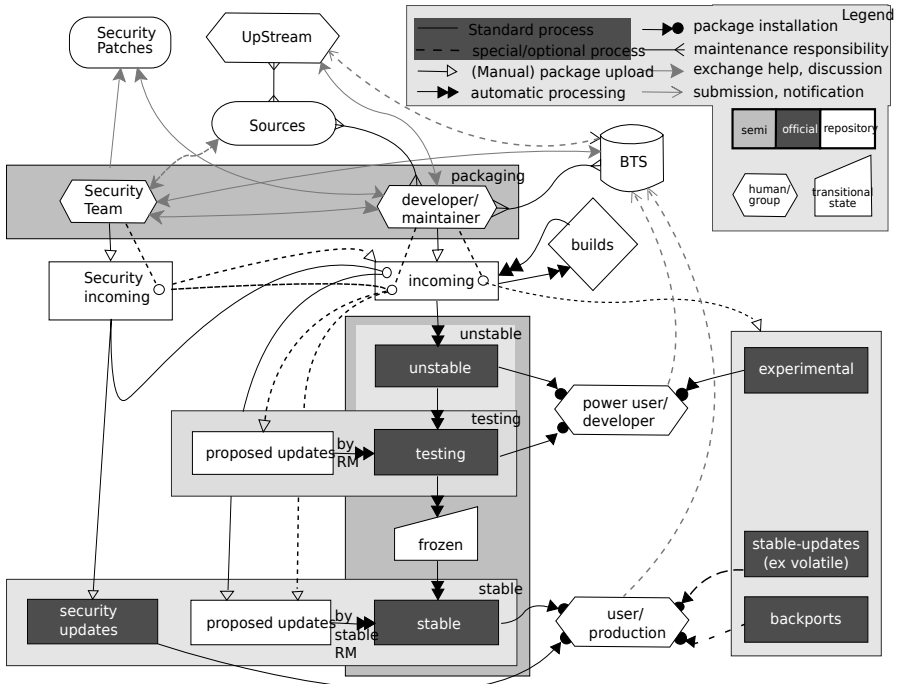
- we don't hide problem
- easy to have an impact (just “show me the code!”)

Large amounts of communication

- mailing lists + IRC
- social media: @debian on identi.ca/pump.io

Large number of tech-savvy users

- users help each other, contribute patches, get involved



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Debian: one of a kind?

1993 — not many distros back then

20 years later — *lots* of other distros

(≈ 250 — DistroWatch)

openSUSE, Linux Mint, PCLinuxOS, Slackware, Gentoo Linux, CentOS, FreeBSD, Arch, Sabayon, Puppy, Lubuntu, MEPIS, Ultimate, NetBSD, Tiny Core, Zenwalk, CrunchBang, Dreamlinux, Vector, Kubuntu, Maemo, Red Hat, aptosid, Peppermint, PC-BSD, Chakra, Salix, ClearOS, KNOPPIX, Xubuntu, Super OS, BackTrack, gOS, TinyMe, Zentyal, EasyPeasy, Frugalware, Clonezilla, Pardus, Meego, OpenBSD, Quirky, PC/OS, Zorin, **Debian**, SystemRescue, Element, Unity, SliTaz, Macpup, wattOS, Scientific, Mythbuntu, Slax, DragonFLY, Elive, linux-gamers, 64 Studio, Ubuntu, mageia, Nexenta, Parisx, NuTyX, GhostBSD, Kongoni, moonOS, LFS, Lunar, Imagineos, Untangle, Fedora, Yellow Dog, aLinux, Yoper, IPFire, BlankOn, Mandriva, PureOS, FreeNAS, Moblin, Linpus, TurboLinux, blackPanther, ...

with many **differences**:

- technical choices
- release management
- release schedule
- target user
- community
- support
- packaging system
- user base
- look & feel
- ...

How is Debian different?

Debian's special #1: package quality

“ Culture of technical excellence ”

- package **design**: Policy
i.e. “how a package should look like”
- package **testing**: lintian, piuparts,
archive rebuilds (FTBFS), ...
- package maintainers are **software experts**
- **no 2nd class packages**, all are equal

Debian release mantra

we release when it's ready

Debian's special #2: freedom

Firm principles: developers and users bound by the *Social Contract*

- 1 promoting the “culture of Free Software” since 1993
- 2 **Free the bottom up**
 - ▶ in its software
firmware included !
 - ▶ in its infrastructure
no non-free web services (for users)
no non-free infrastructure (for developers)

Community awareness

- users know
- users trust Debian not to betray Free Software principles
- **high bar for software freedom** advocates

Debian's special #3: independence

Debian is an **independent** project

- no (single) company babysitting us
- living up on:
 - 1 donations (money & hardware)
 - 2 gift-economy

... truly remarkable in today “big” distro world

people trust Debian choices not to be “profit-driven”

Debian's special #4: decision making

1 do-ocracy

An individual Developer may make any technical or nontechnical decision with regard to their own work;

— Debian Constitution, §3.3.1.1

2 democracy

Each decision in the Project is made by one or more of the following:

1. The Developers, by way of General Resolution [...]

— Debian Constitution, §2

that means:

- reputation follows work
- no benevolent dictator, no oligarchy
- **no imposed decisions**
by who has money, infrastructure, people, ...

Debian's special #5: derivatives

Definition (Derivative distribution)

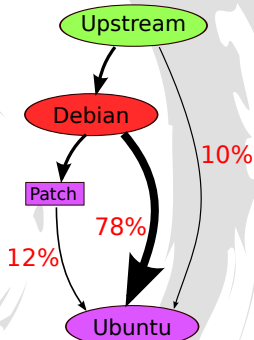
Apply software freedoms 2 (redistribute) and 3 (improve) to an entire distro.

Debian: a base for ≈ 140 active distros, 50% of total (DistroWatch)

Tucunare, LinEx, Inquisitor, Grml, UniventionCorporateServer, Vanillux, Emdebian, Crunchbang, PureOS, StormOS, Ubuntu, GNUSTEP, gNewSense, Debathena, Maemo, LMDE, SPACEflight, BCCD, Bayanihan, semplice, ArchivistaBox, Knoppix, Tails, BlankOn, AlienVault-OSSIM, DoudouLinux, Vyatta, Symbiosis, VoyageLinux, Lihuen, LinuxAdvanced, Aptosid, Canaima, siduction, ZevenOS-Neptune, BOSSlinux, Parsix, AstraLinux, ProgressLinux, Finnix, SprezzOS, CoreBiz, Epidemic-Linux, MetamorphoseLinux, Debian, Xubuntu, Linux Mint, Ubuntu Studio, Mythbuntu, ArtistX, Asturix, Peppermint OS, TurnKey Linux, Kubuntu, Caixa Mágica, Lubuntu, ...

Why?

- quality & licensing assurances
- solid base system
- huge package base
- the “*universal OS*”, perfect for customizations



Data for Raring Ringtail, Jan 2013,
main + universe

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Day-to-day organization

- **completely informal**: spontaneous teams form around **common interests** and adopt their **own rules**/tools/processes

<http://wiki.debian.org/Teams/>

- ▶ e.g.: **packaging teams** for related packages, archive team, release team, security team, kernel team, installer team, etc.
- ▶ teams grow as the job gets bigger

- **common forge** (non-mandatory)

<https://alioth.debian.org/>

- ▶ VCS, mailing lists, BTS, etc.
- ▶ **FusionForge**, *de facto* maintained by Debian (Roland Mas)
- ▶ **per-team ACL**, with the possibility of opening them up

Constitution (1998)

structure and rules for **decision making** in a **Free Software-compatible democracy**

- volunteers
- minimal “people management”
- “do-ocracy”
 - ▶ anybody can decide how to do their job
 - ▶ nobody can impose to others what to do
- relationships with the real “fiscal” world

<http://www.debian.org/devel/constitution>

Constitution — bodies

- individual “developers” (AKA **project members**)
- **Debian Project Leader** (DPL) elected each year
- **technical committee** (tech-ctte)
- **secretary**
- **trusted organizations**

Constitution — decision making

golden rule

“do-ocracy,” no formal processes

formally, decisions are taken by:¹

- 1 developers as a whole
 - ▶ with **general resolutions** or elections
- 2 the DPL
- 3 the technical committee (CTTE)
- 4 individual developers working on some task ← **default**
- 5 DPL delegates
- 6 the project secretary

¹overruling from top to bottom, sort of

Project members

- akin to Debian Project **citizens**
- everybody can work on Debian without being a project member...
- ...but project members do have specific rights:
 - ▶ **voting** rights (active and passive)
 - ▶ right to use project **technical infrastructure**
 - ▶ **upload access** to the official archive (for packagers)

Project leader

- represents Debian
- can delegate “area of ongoing responsibility” to members
 - ▶ AKA **appoint delegates**
- coordinate project activities, “lead discussions”
- decide upon **project assets**
 - ▶ money
 - ▶ hardware
 - ▶ “intellectual property,” e.g. trademarks
- **decision “garbage collector”**
 - ▶ urgency
 - ▶ lack of other responsables

Technical committee

*[tech-ctte] has a role similar to that of the US Supreme Court: it makes the final pronouncement on **disputes that cannot be resolved otherwise***
— <https://lwn.net/Articles/603350/>

- “tribunal” for *technical* disputes, 4–8 members
- the only formalized dispute resolution body in Debian
 - ▶ everything else dealt with via consensus/mediation
- members: skilled, (project-)elderly, well-respected developers
 - ▶ appointed by DPL

Example (recent tech-ctte issues)

- #727708 which init system to default to
- #681419 alternative deps. on non-free packages in main
- #614907 node: name conflicts with node.js interpreter
- #573745 Python interpreter packages maintainership
- #552688 how Debian should enable hardening build flags

General resolutions

Decision making heavy weapon, not to be abused.

- used (seldomly) for project-wide decisions and statements
 - culture: *“thou shalt not use GRs for technical decisions”*
- 1 **initial proposal**
 - ▶ post to the debian-vote mailing list
 - ▶ requires **seconds**, depend on n. of developer
 - 2 **discussion** period
 - ▶ might lead to alternative proposals
 - ▶ can put “on hold” decisions of specific bodies
 - 3 vote with Condorcet-based method
 - 4 single winner
 - ▶ super majority (3:1) required to change foundation documents

Voting method

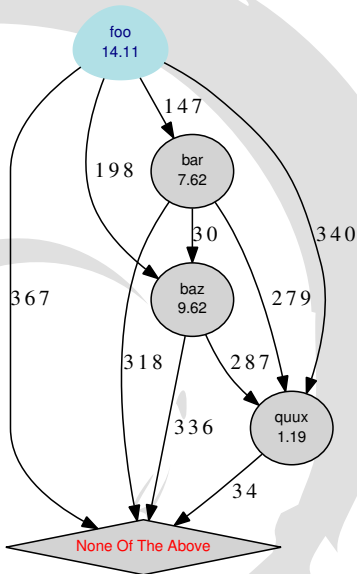
Sample ballot:

```
[4] bar
[2] baz
[1] foo
[2] quux
[3] None Of The Above
```

Definition (Condorcet winner)

A candidate that would win majority against any *single* other candidate.

- If there is a Condorcet winner, it will win in any **Condorcet method** election
- Debian: **Schulze method** (popular Condorcet method)



- appointed conjointly by DPL and incumbent secretary
- **responsible for election procedures**
 - ▶ *de facto* authority for Constitution interpretation in electoral matters
- maintains and run the voting software **devotee**
 - ▶ voting artifacts (software, ballots, etc.) available for review
 - ▶ software allows to **rerun and verify election results**, e.g.:
 - ★ http://www.debian.org/vote/2010/vote_001_tally.txt
 - ★ http://www.debian.org/vote/2010/vote_002_tally.txt
 - ▶ note: all **votes are public**, except for DPL elections

Fiscal sponsorship

Do **Free Software projects** exist in the “**real world**”, the one made of money, laws (and lawyers), taxes, etc?

They do have **needs** that relate them to it, e.g.:

- receive (tax exempt) **donations**
 - ▶ ... and provide (tax deductible) receipts
- own **hardware**, potentially expensive
 - ▶ Debian hardware cost per year: ≈ 30 kUSD
- own **copyright** and **trademarks**
 - ▶ that might want/need to enforce...
- use donated money to **reimburse** (or **pay**) **developers**
- developers might **get sued**
 - ▶ \$evil_proprietary_software_company
 - ▶ patent trolls
 - ▶ ...

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Fiscal sponsorship (cont.)

Definition (Fiscal sponsorship)

Fiscal sponsorship is the practice of non-profit organizations (NPO) to offer legal and tax-exempt status to groups related to the organization's missions.

By extension, in Free Software it commonly refers to providing all the “real world”-related needs that a project needs.

- high-profile FOSS projects have set up their own NPO
- but it is a lot of work!
... and hackers are not necessarily good at it
- **umbrella organizations** that do fiscal sponsorship for Free Software projects are more and more common, e.g.:
 - ▶ Software Freedom Conservancy, <http://sfconservancy.org/>
 - ▶ **Software in the Public Interest (SPI)**, <http://spi-inc.org/>
 - ▶ Apache Software Foundation, <http://apache.org/>
 - ▶ ...

Trusted Organization

- 1997 Debian founds SPI for the needs of Free Software projects
 - ▶ including Debian itself, but with the usual “give back” intent
- 1998 the Constitution entrusts SPI to handle Debian assets
- 2006 Constitution amended to not special case SPI introducing the notion of. . .

Trusted Organizations (TO):

- hold assets “in trust” for the Project
 - ▶ DPL as liaison / decision maker
- link with the real bureaucratic world
 - ▶ donations, legal advice, tax exemption, reimbursements, . . .
- SPI (us), FFIS (de), debian.ch (ch), . . .

Joining — an ethical moment

1993 as most FOSS projects, Debian incubated as 1-man-show

1994 Debian manifesto to explain Debian values

1995–1997 easy to join: send a mail!

- small numbers, project members in the tens

1998-1999 **ethical crisis**

- we need manpower!
- new developers accepted too quickly
- disagreement on **core values**

*to be more competitive with other distros,
we should accept non-free components*

- (lack of needed **technical skills**)

Debian Account Manager (DAM) stops accepting new members

Joining — an ethical moment (cont.)

1999 creation of the **NM process** (New Maintainer) and **NM team** to accept new members

DPL stated requirements to be on the NM team (excerpt):

- needs to have a **strong** opinion for free software
- needs to have a **strong** opinion for free software
- he needs to know what he's doing, that new people need some guidance, we have to prevent ourselves from trojans, etc.
- we need to trust him more than we trust **any** other active person
- he **has to** understand that new-maintainer is **more** than just creating dumb accounts on N machines



E. Gabriella Coleman

Three Ethical Moments in Debian

SSRN, 2005. <http://ssrn.com/abstract=805287>

<http://www.debian.org/devel/join/>

1 identification

- ▶ via GPG key, available in the **Web of Trust (WoT)**
- ▶ signed by at least 2 project members
- ▶ correspondence: Internet identity ↔ real person
- ▶ Debian people: largest connected group in the WoT

2 assignment of an **Application Manager (AM)**

- ▶ both mentoring and examination
- ▶ requirement: not a newbie project member

3 philosophy & procedures

- ▶ **adherence to project core values**
- ▶ license/legal knowledge
- ▶ knowledge of common procedures
- ▶ Q&A via email

<http://www.debian.org/devrel/join/>

- 4 tasks and skills
 - ▶ technical (packaging or other) ability
 - ▶ with **evidence of previous work** → trivial
- 5 DAM review & approval
 - ▶ DAMs are DPL delegates, (indirect) formal blessing of new members by the Project as a whole
 - ▶ special casing in the Constitution:
Leader's Delegates [...] may make certain decisions which the Leader may not make directly, including approving or expelling Developers
- 6 account creation
 - ▶ and setup of related permissions

Diversity

The Debian Project is an association of individuals who have made common cause to create a free operating system.

- but you have the New (Package) Maintainer process
- is that a problem?

Yes

- technical: there's **much more than packaging** to a Free OS
 - ▶ translation, infrastructure, porting, bug triaging, artwork, communication, management, testing, legal advice, QA, ...
- ethical: first/second class citizen split
 - ▶ no **sense of belonging** for non-packagers results in lack of motivation

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Diversity (cont.)

2010 GR “Debian project members”

To pursue Debian goals, package maintenance as well as a wide range of other technical and non-technical contributions are all valuable

2011 rename: New Maintainer (NM) Process → New Member

2012 GR “Diversity statement”

The Debian Project welcomes and encourages participation by everyone. [...]

While much of the work for our project is technical in nature, we value and encourage contributions from those with expertise in other areas, and welcome them into our community.

2014 GR “Code of conduct”

The Debian project decides to accept a code of conduct for participants to its mailing lists, IRC channels, and other modes of communication within the project.

Want to know more?

- on the **web**
 - ▶ <http://www.debian.org>
 - ▶ <http://wiki.debian.org>
- **social media**: <http://identi.ca/debian>
- **mailing lists**: <http://lists.debian.org>
- **IRC**: #debian-* channels on irc.debian.org

- **ask me!**

Thanks!

Questions?

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<http://epsilon.cc/zack>
<http://identi.ca/zack>

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<https://gitorious.org/zacchiro/talks/trees/master/2014/20140628-hackmeeting>
Stefano Zacchioli
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Outline

4 **Contribute**

5 Dark Ages

Donate to Debian

even if completely volunteer-driven, Debian needs **resources**

- **hardware** for essential services
 - ▶ archive, buildbots, devel. machines, ...
- money for **hardware-related services**
 - ▶ guarantees, shipments, hosting, ...
- money to **sponsor developer meetings**
 - ▶ strengthen the community
 - ▶ get work done

Donations

- donations: <http://www.debian.org/donations>
- partners program: <http://www.debian.org/partners>

Contributing #1 — using Debian

- 1 test, report, triage, fix **bugs**
 - ▶ reportbug on your Debian, <http://bugs.debian.org>
- 2 monitor packages you care about
 - ▶ subscribe on <http://packages.qa.debian.org>

The screenshot shows the Debian package page for `dpkg`. At the top, there is the Debian logo and the package name `dpkg` with the subtitle "source package". A search box labeled "jump to" is visible in the top right corner.

general	todo	bugs
source: dpkg (source, admin) version: 1.16.9 maint: Dpkg Developers, Guillem Jover (u), Raphaël Hertzog (u) arch: any all std-ver: 3.9.3 VCS: Git (browse)	<ul style="list-style-type: none">• Lintian reports 2 warnings about this package. You should make the package lintian clean getting rid of them.• Build log checks report 1 warning about this package.• The BTS contains patches fixing 16 bugs (29 if counting merged bugs), consider including or untagging them.	all 412 (542) RC: 0 ISN: 143 (187) M&W: 265 (351) F&P: 4
versions	news	links
oldstable: 1.14.31 stable: 1.15.8.13 stable-bpo: 1.16.9~bpo604 testing: 1.16.9 unstable: 1.16.9	<ul style="list-style-type: none">• [2012-10-31] dpkg 1.16.9 MIGRATED to testing (Britney)• [2012-10-20] Accepted 1.16.9 in unstable (low) (Guillem Jover)• [2012-09-19] Accepted 1.15.8.13 in stable (low) (Guillem Jover)• [2012-08-20] dpkg 1.16.8 MIGRATED to testing (Britney)• [2012-07-21] Accepted 1.16.8 in unstable (low) (Guillem Jover)• [2012-07-02] Accepted 1.16.7 in unstable (low) (Raphaël Hertzog)• [2012-06-30] Accepted 1.16.6 in unstable (low) (Guillem Jover)• [2012-06-30] Accepted 1.16.5 in unstable (low) (Guillem Jover)• [2012-06-28] dpkg 1.16.4.3 MIGRATED to testing (Britney)• [2012-06-17] Accepted 1.16.4.3 in unstable (low) (Guillem Jover)• [2012-06-10] Accepted 1.16.4.2 in unstable (low) (Guillem Jover)• [2012-06-08] Accepted 1.16.4.1 in unstable (low) (Guillem Jover)• [2012-06-08] Accepted 1.16.4 in unstable (low) (Guillem Jover)• [2012-05-08] dpkg 1.16.3 MIGRATED to testing (Britney)• [2012-04-27] Accepted 1.16.3 in unstable (low) (Guillem Jover)• [2012-03-30] dpkg 1.16.2 MIGRATED to testing (Britney)	<ul style="list-style-type: none">• homepage• changelog / copyright• build: logs, ports• build log checks• debcheck: unstable testing stable• lintian (6, 2)• popcon• 110n (67, 71)• debtags• screenshots: 1, 2• RDF/XML description
binaries		
<ul style="list-style-type: none">• dpkg (595 bugs: 0, 134, 198, 31)• dpkg-dev (102 bugs: 0, 17, 84, 11)• dselect (99 bugs: 0, 34, 65, 0)• libdpkg-dev (1 bugs: 0, 0, 1, 0)• libdpkg-perl (4 bugs: 0, 1, 3, 0)		

- ▶ try to reproduce bug and provide **patches**
- ▶ (eventually, become co-maintainer)

Contributing #2 — adopt packages in need of love

- find the ones you use:

```
apt-get install devscripts ; wpp-alert  
apt-get install how-can-i-help
```

- learn **packaging** with the **Debian packaging tutorial**

```
http://www.debian.org/doc/manuals/  
packaging-tutorial/packaging-tutorial.en.pdf
```

or:

```
apt-get install packaging-tutorial
```

(aussi disponible en français!)

Contributing #3 — join packaging teams

- many teams
- focused on a **programming language** or on a **field of use**
 - ▶ Python, Java, Perl, Ruby, OCaml, . . .
 - ▶ Bluetooth, Cloud, Games, Med, Science, VoIP, . . .
- excellent way to **learn from experienced contributors**

http://wiki.debian.org/Teams#Packaging_teams

Contributing #4 — hack *on* the Debian infrastructure

- suitable for all **programmers**
- opportunity
 - ▶ complex and heterogeneous infrastructure
 - ▶ **impact** on millions of users
- services provide **link to source code** in page footer

Example (<http://buildd.debian.org>)

*The source code for wanna-build is available as a **Git repository** (**Gitweb**). [...] **sbuild** and **buildd** live together in the **sbuild.git repository** (**Gitweb**) in the **buildd-tools** Alioth project.*

Example (<http://sources.debian.net>)

*Debsources — Copyright (C) 2011–2013 **Matthieu Caneill**, **Stefano Zacchiroli**, and **contributors**. License: **GNU AGPLv3**. [...] Source code: **Git**. Contact: **info@sources.debian.net**.*

Contributing #5 — work on non-development tasks

- translation
- design (themes, websites)
- communication (newsletters & press releases)
- events (DebConf, mini-DebConf)
- videoteam
- documentation
- accounting
- ...

Fundamental activities for the Debian Project to live long and prosper.

<http://wiki.debian.org/Teams>

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Everything is fine

After 30 years, Free Software is finally becoming trendy!

- **web server** market share of Apache+nginx $\approx 61\%$
— Netcraft report, October 2013
- **web browser** market share of Firefox+Chrome+Android $\approx 58\%$
— StatCounter, July 2013
- *Google's Android seizes **smartphone** market: software was on nearly 80% of devices shipped in Q2*
— Wall Street Journal, 8 August 2013
- in **education**:
1.75 million RaspberryPi sold so far — Oct. 2013
- **desktops** — Ubuntu (most popular GNU/Linux desktop): 20 million users in 2011 (estimate), recurrent large scale migrations (200'000 in Spain, 180'000 in Macedonia, China agreement in 2013, ...)
- ...

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- **desktops** — Ubuntu (most popular GNU/Linux desktop): 20 million users in 2011 (estimate), recurrent large scale migrations (200'000 in Spain, 180'000 in Macedonia, China agreement in 2013, ...)
- ...

Total word domination, at last!

Everything is fine

After 30 years, Free Software is finally becoming trendy!

- **web server** market share of Apache+nginx $\approx 61\%$
— Netcraft report, October 2013
- **web browser** market share of Firefox+Chrome+Android $\approx 58\%$
— StatCounter, July 2013
- *Google's Android seizes **smartphone** market: software was on nearly 80% of devices shipped in Q2*
— Wall Street Journal, 8 August 2013
- in **education**:
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Or is it?

Dark ages

We have many reasons *not* to be happy. A common one: “they are not 100% Free systems.” True.

But I'm more worried about the upcoming...

Free Software dark ages

We have Free Software systems at our fingertips. But our **relevant computations** are moving away from those systems to **remote, centralized systems** which **we don't control**.



<https://en.wikipedia.org/wiki/File:>

Patrarch by Savilla.jpg

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And **very few hackers seem to care!** :- (



...



[https://en.wikipedia.org/](https://en.wikipedia.org/wiki/File:Petrarch_by_Bargilla.jpg)

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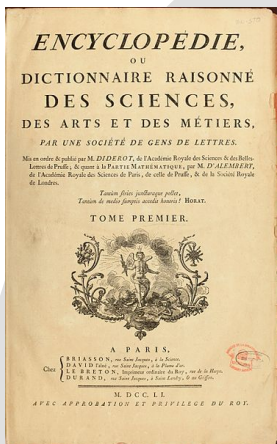
[Petrarch_by_Bargilla.jpg](https://en.wikipedia.org/wiki/File:Petrarch_by_Bargilla.jpg)

Have we lost sight of Free Software goal?

Towards a new enlightenment

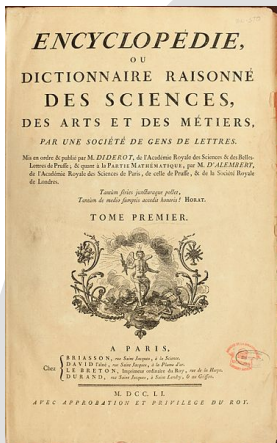
Getting out of this will be very difficult.

- we need **cultural shifts**
non-free to make Free? No, thanks.
release webapps under AGPL
- we might need to **redefine freedoms**
“services raise other issues” no longer enough
- **technical work** on **Free, federated services**
we lag behind big time on these
getting them right is hard



https://it.wikipedia.org/wiki/File:Encyclopedie_de_D%27Alembert_et_Diderot_-

Towards a new enlightenment



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But we do have hope:



Nice list at <http://prism-break.org/>

A role for distributions

Goal

Free Software distributions should offer **click-button installation** of all **Free federated services** that you need to interact with your peers without the mediation of centralized or non-free services.

Out of the box:

- anonymous browsing / censorship evasion
- mail handling
- web hosting
- “cloud” storage, calendar, contacts, etc.
- encrypted P2P backup
- ...

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Getting there **will be difficult**:

- for most services we **don't have the software** (yet)
- sane automatic configuration is hard, if possible at all
- to have an impact, we need to make it **dead simple**

But we're trying!, e.g.

<https://freedomboxfoundation.org/>