

Who the bloody hell cares about Debian?

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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*

- **non-commercial** distro, competitive in the OS market
- **easy** to install
- built **collaboratively** by volunteer software experts
- 1st major distro developed “**openly** in the spirit of GNU”

Debian, 17 years later

- \approx 30'000 binary packages (amd64/sid/main)
- 12 releases
 - ▶ Squeeze released ... yesterday!
- \approx 900 **DDs** + 120 **DMs** + thousands other **contributors**
- largest n. of **ports** among mainstream distros
 - ▶ 9 in Squeeze (GNU/Linux)
 - ▶ + 2 non-Linux ports: GNU/kFreeBSD
 - ▶ + debian-ports.org \ni GNU/Hurd
- 120 “**derivatives**” distribution (source: distrowatch.com)
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http://dannypbrown.me/wp-content/uploads/2011/01/success_baby.jpg

On the relevance of Debian

1993 — not many distros back then

2011 — *lots* of other distros

openSUSE, Linux Mint, PCLinuxOS, Slackware, Gentoo Linux, CentOS, FreeBSD, Arch, Sabayon, Puppy, Ubuntu, 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, MirBSD, Kongoni, moonOS, LFS, Lunar, Imagineos, Untangle, Fedora, Yellow Dog, aLinux, Yoper, IPFire, BlankOn, Mandriva, PureOS, FreeNAS, Moblin, Linpus, TurboLinux, blackPanther, ...

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some of which:

- ... **release** more frequently
- ... have more **users**
- ... **innovate** more
- ... get more **credit**/press/...
- **\$YOUR_FAVORITE_DEBIAN_FUD**

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Some questions

- *Who the bloody hell cares about Debian anymore?*
- *Is Debian still relevant?*
- *What is **Debian's** role?*

Outline

- 1 Debian does it better
- 2 Debian: the root of a derivatives ecosystem
- 3 Distribution pipelines

Debian's special #1: package quality

“ Culture of technical excellence ”

- package **design**: Policy
- package **testing**: lintian, piuparts, rebuilds (FTBFS), ...
- package maintainers are **sw experts**
- **no 2nd class packages**

Debian release mantra

we release when it's ready

Debian's special #2: freedom

Firm principles: devs 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 services (for developers)

Community awareness, users:

- know
- trust Debian to be faithful to their principles

... all this set a **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

... remarkable, among “big” distro players

Debian choices can be trust 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

- reputation follows work, easy to have an impact
- no benevolent dictator, no oligarchy
- **no imposed decisions**
by who has money, infrastructure, employees, ...

Live long and prosper — take #1



- **good:** sw freedom + independence
- **bad:** company-*only* distro market

... one day, their interests will clash with ours

- invite others to become more and more independent

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Interlude — derivatives how to

Free Software 101

Freedom #2, to **redistribute** copies

Freedom #3, to **improve** the program, and **release** improvements

When applied to distros: derived distributions, AKA **derivatives**

How?

- 1 take existing packages and add extras
- 2 patch & rebuild packages as needed
- 3 sync periodically

Derivatives are game changers

Derivatives have changed the way in which distros are made

- derivatives' focus is on **customization**
- people power is needed “only” for that

everybody wins (if done properly)

- derivative: massive reuse of packaging work
- “mother” distro: reach out to new public
 - ▶ users *and* contributors

Debian derivatives

Debian: a base for ≈ 120 derivatives

distrowatch.com

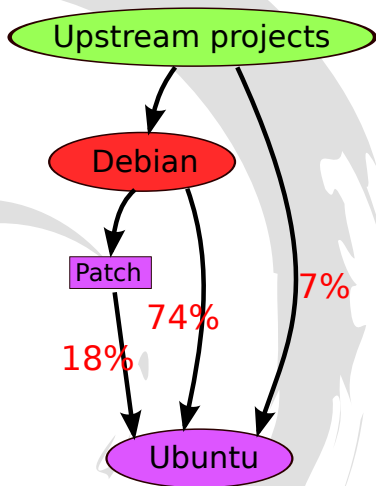
- Linspire, Skolelinux, Liurex, Mint, LiMux, Sidux, gnuLinEx, Grml, MEPIS, Xandros, Ubuntu, Univention, Damn Small Linux, Collax, Euronode, Floppix, Gibraltar, Kanotix, Knoppix, PureOS, gNewSense, 64 Studio, Elive, Freespire, Jolicloud, Kurumin, Maemo, Neopwn, OpenZaurus, Parsix, Xebian, Hackable:1, aptosid, ...

Why?

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

A Debian derivative example: Ubuntu

- started in 2004 by Canonical
target: desktop
- **Debian derivative**
- very popular (20x Debian?)
- historical/past correlations
 - main ↔ corporate
 - universe ↔ community
- ▶ heavily customized/forked in main
- ▶ very close to Debian elsewhere



Data for Lucid Lynx, main + universe
picture is courtesy of Lucas Nussbaum

Drowning in (Debian) derivatives

Not only Ubuntu ...

rather, a whole tree /of derivatives (of derivatives)* .../

Debian derivatives (≈ 120)

Linspire, Skolelinux, Liurex, Mint, LiMux, Sidux, gnuLinEx, Grml, MEPIS, Xandros, Ubuntu, Univention, Damn Small Linux, Collax, Euronode, Floppix, Gibraltar, Kanotix, Knoppix, PureOS, gNewSense, 64 Studio, Elive, Freespire, Jolicloud, Kurumin, Maemo, Neopwn, OpenZaurus, Parsix, Xebian, Hackable:1, aptosid, ...

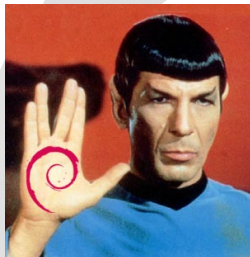
Ubuntu derivatives

Ubuntu Studio, Mythbuntu, ArtistiX, Asturix, Goobuntu, LinuxMCE, nUbuntu, Peppermint, TurnKey Linux, Zenix, ...

\$distro derivatives

...

Live long and prosper — take #2



- Ubuntu is probably the most customized derivative
- other derivatives: higher no. of unmodified packages

if you are running a Debian derivative, chances are **you heavily depend on Debian** and on its well-being

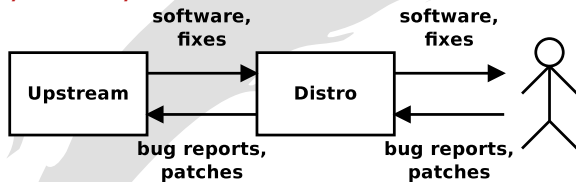
*yes,
even if your distro hasn't told you*

Outline

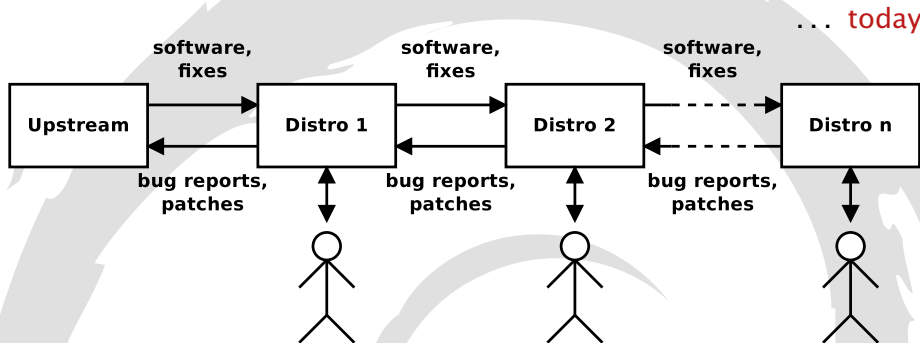
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The distribution pipeline

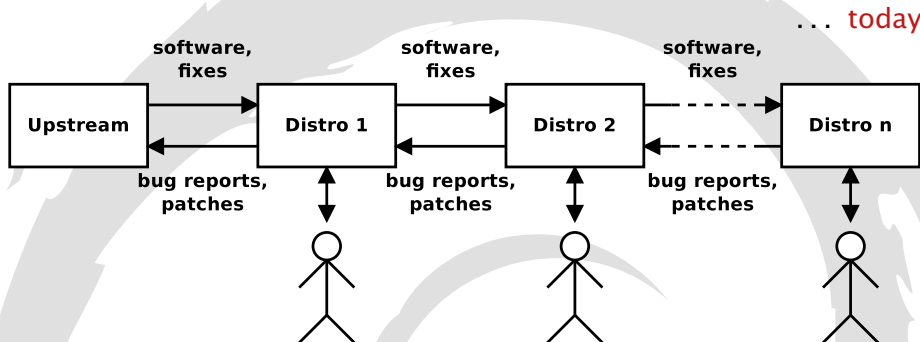
yesterday ...



The new distribution pipeline



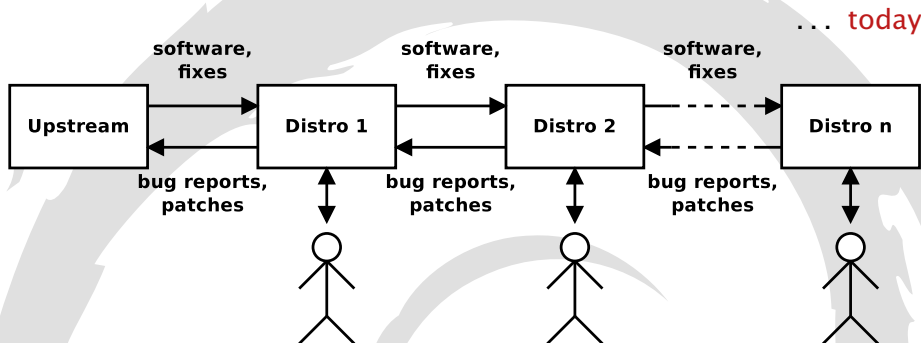
The new distribution pipeline



That's wonderful!

- **freedom** spreads
- more **eyeballs** swallow more bugs
- more potential **contributors**

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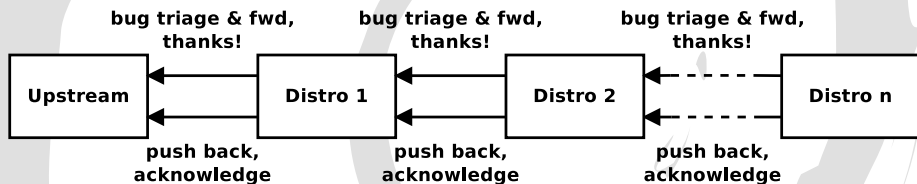
But.

- should be sustainable
- and benefit Free Software as a whole

Free Software is **bigger** and more important than Debian, Ubuntu, and any other distro or project

if we care about Free Software, then we should *all*

- 1 **give back**, i.e. reduce patch flow viscosity
- 2 **give credit** where credit is due



Who the bloody hell cares about Debian?

You should

- 1 Debian offers a cocktail of pretty **rare features**;
- 2 Debian is the root of a huge tree of **derivatives**;
- 3 ultimately, Free Software is better served by **sharing**.

Thanks!

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SPAM #1 — Debian derivatives census

Get your favorite Debian derivative into:

- <http://wiki.debian.org/Derivatives/Census>

let us know your derivative exists, how to contact you, how to find your patches, etc.

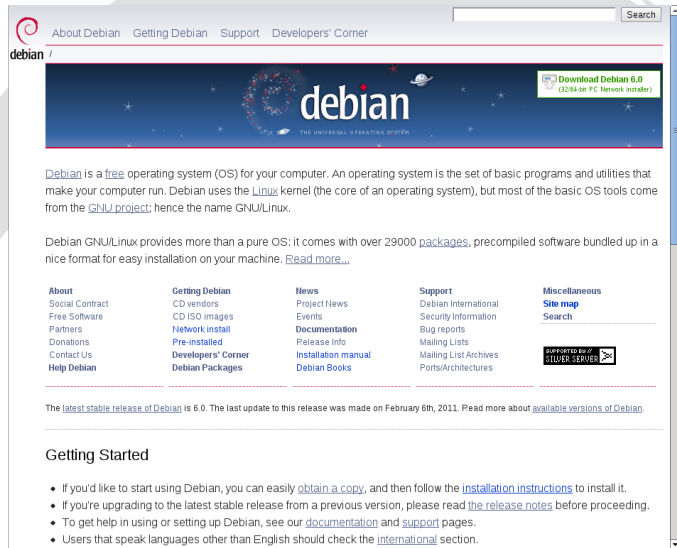
- <http://wiki.debian.org/DerivativesFrontDesk>

discussion place for derivatives, to coordinate changes with Debian and get them “back home”



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

SPAM #2 — Debian Squeeze



The screenshot shows the Debian website homepage. At the top, there is a navigation menu with links for "About Debian", "Getting Debian", "Support", and "Developers' Corner". A search bar is located in the top right corner. Below the navigation is a large blue banner with the Debian logo and the text "THE UNIVERSAL OPERATING SYSTEM". A button for "Download Debian 6.0 (32/64-bit PC Network Installer)" is visible in the top right of the banner. The main content area contains a paragraph describing Debian as a free operating system, followed by a paragraph about Debian GNU/Linux providing more than a pure OS with over 29000 packages. Below this is a grid of five columns of links: "About", "Getting Debian", "News", "Support", and "Miscellaneous". A "SUPPORTED BY SILVER SERVER" logo is also present. At the bottom, there is a section titled "Getting Started" with a list of bullet points.

[About Debian](#) [Getting Debian](#) [Support](#) [Developers' Corner](#)

debian /

Download Debian 6.0
(32/64-bit PC Network Installer)

Debian is a [free](#) operating system (OS) for your computer. An operating system is the set of basic programs and utilities that make your computer run. Debian uses the [Linux](#) kernel (the core of an operating system), but most of the basic OS tools come from the [GNU project](#); hence the name GNU/Linux.

Debian GNU/Linux provides more than a pure OS: it comes with over 29000 [packages](#), precompiled software bundled up in a nice format for easy installation on your machine. [Read more...](#)

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SUPPORTED BY SILVER SERVER

The [latest stable release of Debian](#) is 6.0. The last update to this release was made on February 6th, 2011. [Read more about available versions of Debian.](#)

Getting Started

- If you'd like to start using Debian, you can easily [obtain a copy](#), and then follow the [installation instructions](#) to install it.
- If you're upgrading to the latest stable release from a previous version, please read [the release notes](#) before proceeding.
- To get help in using or setting up Debian, see our [documentation](#) and [support](#) pages.
- Users that speak languages other than English should check the [international](#) section.

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