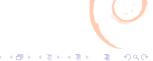
Debian: 18 years of free software

Christian "bubulle" Perrier (with help by Stefano "Zack" Zacchiroli)

October 28th, 2011 India mini-DebConf, Mangalore edition Nitte, Karnataka, India



Outline

- 📵 Initial blah-blah
- What is Debian?
- What's so special about Debian?
- 4 Contribute to Debian
- Debian internationalization and localization



Outline

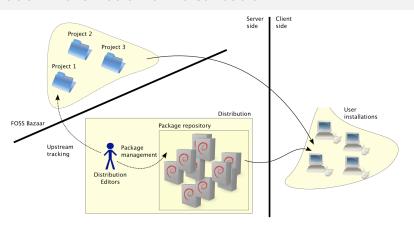
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Who is bubulle?

- user since 1994
- Debian Developer since July 2001
- package maintainer
 - geneweb (genealogy), samba, fonts (many), debian-installer . . .
- self-appointed i18n guru
 - Debian Installer translation leader
 - French translator
 - Admin of i18n.debian.net
- Enjoys talking about Debian in many places of the world
- Speaks English with a funny accent
- "example of non technical Debian Developer" (from Sam Hocevar former Debian Project Leader)

Prelude — the notion of "distribution"



- distributions are meant to ease software management
- key notion: the abstraction of package
- offer coherent collections of software
- killer application: package managers



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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

- 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

trivia: named after **DEB**ra Lynn and **IAN** Ashley Murdock

Since then — 15 releases

- 1993 development snapshots
- 1994 0.91
- 1995 0.93r5, 0.93r6, (1.0)
- 1996 1.1 "Buzz", 1.2 "Rex"
- 1997 1.3 "Bo"
- 1998 2.0 "Hamm"
- 1999 2.1 "Slink"
- 2000 2.2 "Potato"
- 2002 3.0 "Woody"
- 2005 3.1 "Sarge"
- 2007 4.0 "Etch"
- 2009 5.0 "Lenny"
- 2011 6.0 "Squeeze"
- 2012? 7.0 "Wheezy"



trivia:

why does Buzz have a (Debian) swirl on his chin?

What is Debian?

- 3 aspects, interlinked:
- an operating system
 - a project
 - a community



Debian: the operating system

- completely Free Software
 - DFSG
- a dozen architectures
 i386, amd64, armel, powerpc, sparc,
 ia64, mipsel, s390, mips
 - of which: 2 non-Linux ports kfreebsd-i386, kfreebsd-amd64
- features miscellanea...
 ports, stability, packaging system,
 documentation, old hardware support,
 smooth upgrades, i18n/l10n, the
 testing suite, runs anywhere,
 technical policy, a lot of packages, ...

(one of) the largest GNU porting platform(s)

29'000 packages (Squeeze)



Debian: the project

Common goal:

Create the best, free operating system.

Debian Social Contract

(1997)

"Contract" between Project members and the Free Software community

Debian Constitution

(1998)

Structures and rules of a Free-Software-compatible democracy

Strong motive to join: $\approx 1'000$ volunteers, world-wide

- ullet pprox 900 DDs + 120 DMs 8 DDs in India
- Europe > North America > Australia ≈ Japan > Latin American > Asia > Africa

Debian: the project (cont.)



Debian: the community

Open development

- we don't hide problem
- fairly easy to impact the work ("show me the code!")

Large amounts of communication

- mailing lists
- IRC channels
- (a few) Web services(, growing)
 - social: @debian, !debian on identi.ca

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 17 years later, *lots* of other distros

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: Policyi.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

- promoting the "culture of Free Software" since 1993
- 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
- users trust Debian not to betray software freedom
- high bar for software freedom advocates



Nitte, Karnataka, India

Debian's special #3: independence

Debian is an independent entity

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

... quite remarkable in today "big" distro world

people trust Debian choices not to be "profit-driven"



Debian's special #4: decision making

do-ocracy

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

[Debian Constitution, §3.3.1.1]

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 derivatives

Debian: a base for \approx 120 derivatives

distrowatch.com

 BOSS Linux, 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
            \leftrightarrow
```

- heavily customized/forked in main
- very close to Debian elsewhere

- But, still, as of October 2010:
 - ▶ 7% packages in Ubuntu but not in Debian
 - ▶ 18% packages with (often minor) changes in Ubuntu
 - ▶ 75% packages taken unmodified from Debian



On the relevance of Debian

- Ubuntu is probably the most customized derivative
- ullet other derivatives o even 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



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Legend 1: you have to be a deep hard-core bearded hacker

Legend 2: you have to be a developer



Legend 1: you have to be a deep hard-core bearded hacker

Legend 2: you have to be a developer



Andrew Mc Millan, Debconf 7

Legend 1: you have to be a deep hard-core bearded hacker

Legend 2: you have to be a developer



Jonas Smedegaard hacking in the middleplace of Banja Luka, DebConf $11\,$

Legend 1: you have to be a deep hard-core bearded hacker

Legend 2: you have to be a developer



Vagrant Cascadian, happy despite a grumpy Serbian taxi driver, DebConf 11

Debian is fun!



Bubulle in his typical "Spongebob" attitude



Seven steps to get more involved

Hacker path

- Dummy path
- Station 1: Install
- Station 2: Use
- Station 3: Help using
- Station 4: Fix and help fixing
- Station 5: Maintain and help maintaining
- Station 6: Debian Maintainer

- Station 4: Translate
- Station 5: Document
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Installing Debian: the first contributor experience

Use Debian, learn to use it, ask questions, participate



Installing Debian: the first contributor experience

Use Debian, learn to use it, ask questions, participate



Raphaël Hertzog, Aurélien Jarno, Solutions Linux 2006

Installing Debian: the first contributor experience

Use Debian, learn to use it, ask questions, participate



Meike Reichle's knitting course at DebConf11. Daniel "dkg" Khan Gilmor highly concentrated

Installing Debian: the first contributor experience

Use Debian, learn to use it, ask questions, participate



Old Debian users: Joey Hess, Jeff Licquia, Petter Reinholdstem, Ian Murdock, Konstantinos Margaritis, Debconf 4

Step 2: help using the system

Share experience

Find (and report!) bugs

- As simple as sending a mail
- Use reportbug/reportbug-ng
- Only good systems have many bugs

Make (good) suggestions to enhance the system



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Nicolas François teaching French keyboard to Anthony Tows, Debconf 5

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Meike Reichle, Debconf 6

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Jonas Smedegaard showing the first FreedomBox, DebConf 11

Where are we?

Hacker path

Dummy path

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Report bugs

Fix bugs

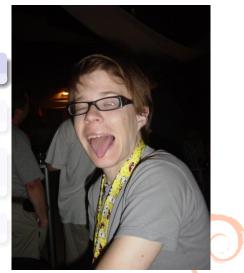
Participate to Bug Squashing Parties



Report bugs

Fix bugs

Participate to Bug Squashing Parties



Riku Voipio (after a few dozens of spanish beers), Debconf 9

Report bugs

Fix bugs

Participate to Bug Squashing Parties



The Debconf 7 organ

Report bugs

Fix bugs

Participate to Bug Squashing Parties



Report bugs

Fix bugs

Participate to Bug Squashing Parties



Margarita Manterola, Maximiliano Curia squashing pancakes, Debconf 6

Report bugs

Fix bugs

Participate to Bug Squashing Parties



Debian QA meeting, Extremadura 2006

Spot abandoned/poorly maintained packages

Join maintenance teams



Spot abandoned/poorly maintained packages

Join maintenance teams



Debian developers spotting abandoned bottl\(^\text{W}\) packages, Debconf 6 (Enrico Zini, Daniel Glassey, Miriam Ruiz, Kenshi Muto)

Spot abandoned/poorly maintained packages

Join maintenance teams



Tollef Fog Heen, Neil McGovern, Steve Langasek (back), Ian Jackson, Colin Watson, Santiago Vila and others, Debconf 11, poste cheese and wine party meeting

Spot abandoned/poorly maintained packages

Join maintenance teams



Zack and Iwamatsu-san triaging fondue, DebConf 11 cheese and wine party. Bania Luka



Simplified procedure to maintain packages

Can only maintain specified packages

No other rights (vote, debian-private...)



The sea lions team, Debconf 8, Mar del Plata

Simplified procedure to maintain packages

Can only maintain specified packages

No other rights (vote, debian-private...)

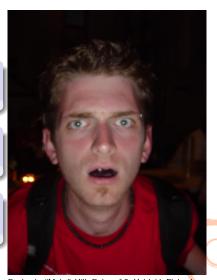


Phil "mine is smaller than yours" Hands, Debconf 6

Simplified procedure to maintain packages

Can only maintain specified packages

No other rights (vote, debian-private...)



Benjamin "Mako" Hill, Debconf 5, Helsinki, Finland

Where are we?

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Join existing localization teams

- debian-i18n
- debian-l10n-french
- debian-l10n-spanish
- .../...
- debian-l10n-english

Learn about team processes

Review, translate



Join existing localization teams

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Learn about team processes

Review, translate



Table with SA, ES, US, IN, BE, UK, LV, IR, FR, BR. Extremadura i18n 2006

Join existing localization teams

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Learn about team processes



Mao game at DebConf 11

Join existing localization teams

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Learn about team processes

Review, translate

Debian installer in Punjabi, Solutions Linux 2006

ਪੈਵੇਜ ਫਾਇਲਾਂ ਮਤ ਪ੍ਰਾਪਤ ਕਰ ਰਿਹਾ ਹੈ: Found additional base



Write documentation

Review documentation and texts



Write documentation

Review documentation and texts



Joey Hess writing doc, Debconf 7, Edinburgh, Scotland

Write documentation

Review documentation and texts



bubulle reviewing D-I documentation, Mexico airport, Cokemachine close to VIP lounge, free WiFi.

Write documentation

Review documentation and texts



Joey Hess and Frans Pop, Debian Installer release managers for sarge and etch, DebConf 6, Oaxtepec, Mexico

Where are we?

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Eh, I forgot about the damn beer!



Holger Levsen resting after setting up video at Debconf 11, Banja Luka, Bosnia and Herzegovina



Where are we?

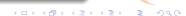
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Station 7: become a Debian Developer

Join the dance!





Moray Allan, Christine Spang, Debconf 7, Edinburgh, Scotland (you guessed that from the kilt, didn't you?)

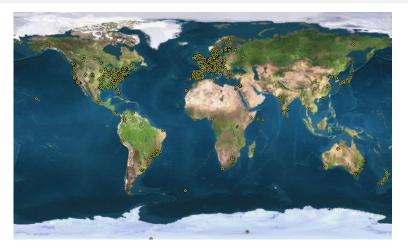
4 D F 4 D F 4 D F 4 D F

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Are we *that* international?



Africa: 6, North America: 263, South America: 33, Asia: 51, Africa: 6, Europe: 577, Oceania: 45

Nitte, Karnataka, India

How is Debian Installer translated:



Potato (2000): 1

Countries are red when their most widely spoken language is covered in Debian Installer

How is Debian Installer translated:



Woody (2002): 16

Countries are red when their most widely spoken language is covered in Debian Installer



41 / 48

How is Debian Installer translated:



Sarge (2005): 40

Countries are red when their most widely spoken language is covered in Debian Installer

How is Debian Installer translated:



Etch (2007): 56

Countries are red when their most widely spoken language is covered in Debian Installer

We are *that* international

How is Debian Installer translated:



Lenny (2009): 61

Countries are red when their most widely spoken language is covered in Debian Installer



We are *that* international

How is Debian Installer translated:



Squeeze (2011): 70

Countries are red when their most widely spoken language is covered in Debian Installer



We are *that* international

How is Debian Installer translated:

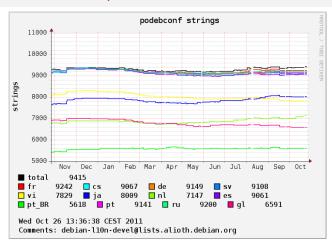


Wheezy (2012?): 71

Countries are red when their most widely spoken language is covered in Debian Installer



Debconf templates



Good tools - More tools

English reviews: 242 pkgs

NMU campaign for debconf translations (304/700)

Native Debian packages

	fr	84%
Wide internationalization	ja	58%
Wide internationalization	de	43%
	pt	42%
Good tools	es	34%
	SV	25%
Huge and difficult work (dpkg,	ru	24%
apt, aptitude)	vi	19%
apt, aptitude)	cs	13%
	nl	11%



Packages descriptions (DDTP)

Category Required Important Standard Optional Extra Popcon500 PopconRank 64 (100%) 56 (100%) 97 (100%) 13763 (53%) 3017 (34%) 64 (100%) 56 (100%) 97 (100%) 9342 (36%) 2291 (26%) 482 (96%) pt BR (Brazilian Portuguese) 50 (78%) zh CN (Simplified Chinese) zh TW (Traditional Chinese) 24 (37%)

Supported since Lenny

Improved infrastructure (DDTP+DDTSS

Improve methods and **English**

Now flowing to the archive

Lang

it (Italian)

de (German)

ia (lapanese) da (Danish) uk (Ukrainian)

fr (French) pl (Polish)

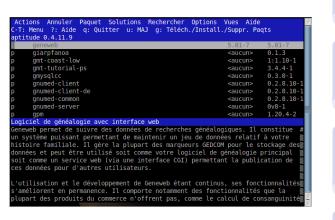
sk (Slovak) pt (Portugese) ru (Russian) ko (Korean) cs (Czech)

es (Spanish) fl (Finnish)

sv (Swedish)

nl (Dutch)

Packages descriptions (DDTP)



Supported since Lenny

Improved infrastructure (DDTP+DDTSS

Improve methods...and English

Now flowing to the archive

Packages descriptions (DDTP)



Paquet: geneweb (5.01-7)

Logiciel de généalogie avec interface web

Geneweb permet de suivre des données de recherches généalogiques. Il constitue un système puissant permettant de maintenir un jeu de données relatif à votre histoire familiale. Il gère la plupart des margueurs GEDCOM pour le stockage des données et peut être utilisé soit comme votre logiciel de généalogie principal soit comme un service web (via une interface CGI) permettant la publication de ces données pour d'autres utilisateurs.

L'utilisation et le développement de Geneweb étant continus, ses fonctionnalités s'améliorent en permanence. Il

Liens pour geneweb

Resources Debian :

- Rapports de boques
- Informations pour les développeurs (PTS)
- Iournal des modifications Debian · Fichier de licence

Télécharger le paquet source geneweb:

- [geneweb 5.01-7.dsc] • [geneweb_5.01.orig.tar.qz]

Supported since Lenny

Improved infrastructure (DDTP+DDTSS

Improve methods and **English**

Now flowing to the archive

Documentation

Large documents

often native SGML or XML

Manpages

PO4aize them all



Web site

Longstanding effort

Wiki i18n/l10n

PO4aize?







GNOME (3.2)

Tamil leads





KDE (4.7)

Punjabi leads





LibreOffice (3.3)

Telugu leads





Debian Installer

Gujarati, Tamil, Telugu all lead (100%)



Thanks!

And thanks to Zack!

Christian Perrier bubulle@debian.org

about the slides: soon available at and largely inspired by Stefano Zacchiroli copyright © 2010–2011 license

 $\verb|http://www.perrier.eu.org/debian/talks||$

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