

Debian dErivatives eXchange (DEX) — BoF

... and other initiatives to improve collaboration with derivatives

Matt Zimmerman Stefano Zacchioli

Debian Project Leader

28 July 2011

DebConf11

Banja Luka, Republic of Srpska
Bosnia and Herzegovina

On gobby

```
# apt-get install gobby-infinote  
gobby-0.5 -c gobby.debian.net  
+ debconf11  
    dc11-derivatives
```

Outline

1 Rationale

2 Initiatives

- Derivatives Front Desk
- DEX — Debian dERivatives eXchange
- Derivatives Census

3 Discussion

Outline

- 1 Rationale
- 2 Initiatives
 - Derivatives Front Desk
 - DEX — Debian dERivatives eXchange
 - Derivatives Census
- 3 Discussion

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 ≈ 130 active derivatives — distrowatch.com

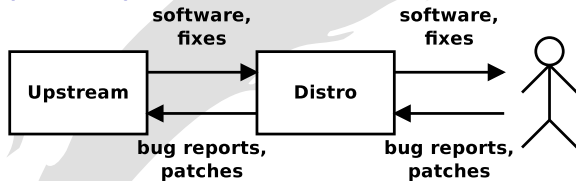
- Linspire, Liurex, Mint, LiMux, Sidux, gnuLinEx, Grml, MEPIS, Xandros, Ubuntu, Univention, Damn Small Linux, Collax, Euronode, Floppix, Gibraltar, Kanotix, Knoppix, PureOS, gNewSense, LMDE, 64 Studio, Elive, Freespire, Jolicloud, Kurumin, Maemo, Neopwn, OpenZaurus, Parsix, Xebian, Hackable:1, aptosid,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

Why?

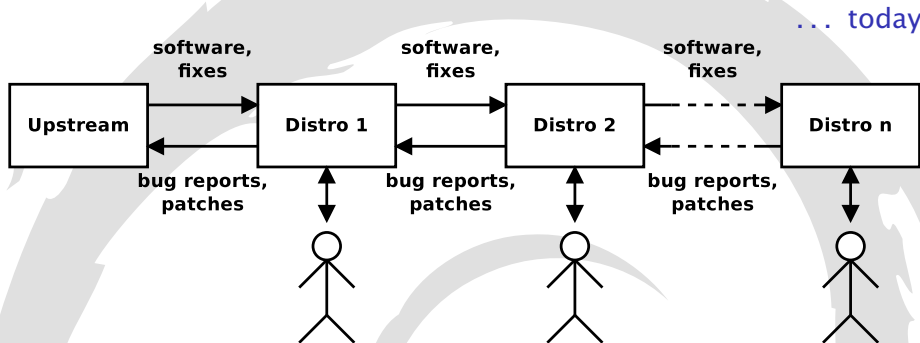
- quality & licensing assurances
- solid base system
- huge package base
- the “*universal OS*”, perfect for customizations

The distribution pipeline

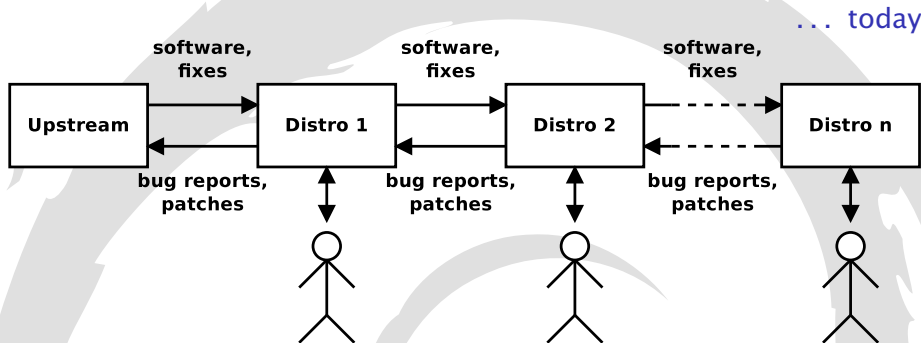
yesterday ...



The *new* distribution pipeline



The *new* distribution pipeline



That's wonderful!

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

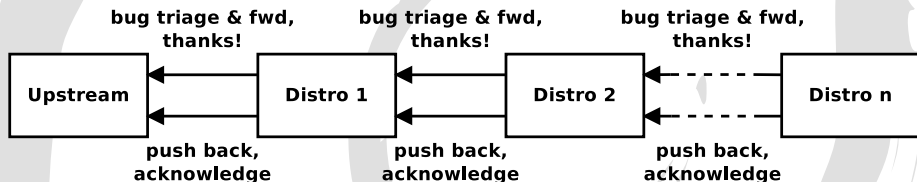
But.

- should be sustainable
- to everybody's benefit

Goal: reducing patch flow *viscosity*

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

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



Outline

1 Rationale

2 Initiatives

- Derivatives Front Desk
- DEX — Debian dERivatives eXchange
- Derivatives Census

3 Discussion

Derivatives Front Desk

- started May 2010
 - ▶ after Debian/Ubuntu discussions during UDS-M
- purpose:
 - 1 **contact point** for derivatives who want to give back work but don't know how or have had issues in doing that
 - 2 **discussion place** among Debian *and* derivatives (share experiences, organize initiatives, share tools, etc.)
- (intended) side-effect: make emerge a **critical mass** of Debian people interested in collaborating with / helping out derivatives

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

debian-derivatives@lists.d.o (discussion place)

derivatives@debian.org (contact point, lands to the list)

debian-derivatives stats



DEX — rationale

Everyone seems to agree that **patches should move upstream** ... and yet — in practice — it often doesn't happen.

Why is this?

Looking from the **upstream distro**:

- “I can’t keep track of patches in so many derivatives!”
 - “These changes should have been made in Debian first!”
 - “You did it wrong!”
- “It’s not my responsibility. I have enough problems!”
 - “I have no time. I’m a volunteer, you know!”

Looking from the **downstream distro**:

- “I tried to contact the maintainer, but they never responded!”
 - “We tried. The patch has been in the BTS for years!”
 - “We had to solve the problem somehow!”
- “It’s not my responsibility. I have enough problems!”
 - “I have no time. I’m a volunteer, you know!”

DEX — rationale

- It's not just Debian's problem
- It's not just derivatives' problem
- To do this well, we need to work together
- Let's try something different

- history
 - ▶ brainstorming Debian/Ubuntu at DebConf10
 - ▶ announced March 2011
- purpose:
 - ▶ plan, start, and finish (short-lived) **discrete projects**
 - ▶ each project: well-defined **set of “deltas”** to be merged
 - ▶ visible **progress**
 - ▶ allows for derivative-specific sub-projects

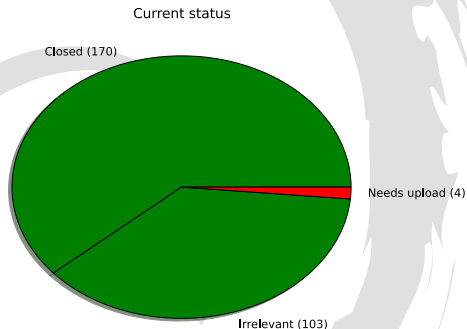
<http://dex.alioth.debian.org/>

Ubuntu DEX team <http://dex.alioth.debian.org/ubuntu/>
(utnubu merger)

Ubuntu ancient patches

There are about 250 old patches from early development of Ubuntu whose status is unclear. Many are probably obsolete, some have been submitted to the Debian BTS but not merged yet, and so on. — Matt Zimmerman

- first completed DEX initiative
- some (expected) bumps:
 - ▶ unresponsive maintainers
 - * DELAYED/15 NMU
 - ▶ “I want upstream ACK before merge”
 - * respect that



GSOC 2011 project “Backend Tools and Infrastructure for DEX”

- by Nathan Handler, mentored by Matt Zimmerman
- progress monitor for DEX initiatives
 - ▶ burndown chart
 - ▶ link to debugs bugs
 - ▶ allow to add extra information, not necessarily stored elsewhere (e.g. comments)
- temporary URL:
`http://dex.aliOTH.debian.org/gsoc2011/projects/dex.html`
- in use for the “python2.7 by default” migration
- potential to become a generic, debugs-linked progress tracker

Derivatives Census

*The Debian derivatives census is an attempt to **gather detailed information about Debian derivatives** that is useful to Debian, for integration of that information into Debian infrastructure and for the development of relationships between Debian and our derivatives. In addition we will be doing some QA on the data that you enter into the census.*

— Paul Wise, on the census wiki page

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

Derivatives Census — current status

- census template
 - ▶ contact points (web, IRC, email, planet, etc.)
 - ▶ dev info (VCS, dev list, doc pointers, popcon, etc.)
 - ▶ /etc/apt/sources.list lines
 - ▶ keep info current: last update, census page maintainer
 - ▶ see <http://wiki.debian.org/Derivatives/CensusTemplate>
- 38 derivatives indexed
- outcomes / fun stuff / byproducts:
 - ▶ planet derivatives <http://planet.debian.org/deriv/>
 - ▶ loads of logos created w/ proprietary software (including Debian!)
 - ▶ “logo inheritance”
 - ▶ some derivatives do not ship source packages
 - ▶ requirement analysis for lintian “profiles”
 - ▶ ...
 - ▶ ask pabs for more :-)

Other and future initiatives

- derivative guidelines
<http://wiki.debian.org/Derivatives/Guidelines>
- integration (i.e. derivatives data warehousing in Debian)
<http://wiki.debian.org/Derivatives/Integration>
 - ▶ {udd,packages,packages.qa.,patch-tracker}.d.o
 - ▶ QA: DDPO, rmadison
 - ▶ bug tracking (i.e. bug cross-references) + PTS & wiki
- Debian/DebConf sponsoring

pabs powered!

Outline

- 1 Rationale
- 2 Initiatives
 - Derivatives Front Desk
 - DEX — Debian dERivatives eXchange
 - Derivatives Census
- 3 Discussion

Questions

- what's your take on the role of Debian wrt derivatives?
- what more we can do to collaborate with derivatives? (or should we do less?)
- what should we “expect” from derivatives? what should they “expect” from Debian?
- what are your experiences in collaboration with derivatives? what can we learn from them?
- do you follow what happens to your packages in derivatives?
- for DEX: which set of patches do you want to see merged back from some derivative? (remember: small / well defined sets)
- assume we have info about all derivatives packages in a big database (e.g. UDD); how can we leverage the info?

Thanks!

Stefano Zacchiroli
Teader@debian.org

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

about the slides:
available at
copyright © 2010–2011
license

<https://gitorious.org/zacchiro/talks/trees/master/2011/201107-dc11-dex>
Stefano Zacchiroli
CC BY-SA 3.0 — Creative Commons Attribution-ShareAlike 3.0