EdgeBSD: Status report

FOSDEM 2015
Brussels, Belgium

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January 31st 2015

About myself

- Pierre Pronchery

- Freelance IT-Security Consultant

- DeforaOS project as a hobby since 2001

- NetBSD developer since May 2012 (khorben@)

- And now EdgeBSD as well!

Why EdgeBSD?

- NetBSD is a modern (and cool!) Operating System alright

- Full power for R&D (RUMP! Minix!)

- It runs everywhere! (or almost)

- But modern coders no longer use CVS

- In other words, broaden the NetBSD community with freedom to experiment with development (Git!)

So what's up?

- Introduced the project in further details at FrOSCon 2013, FOSDEM 2014, EuroBSDcon 2014 and on BSD Now

- Ongoing election of the project leader

- Only candidate is myself

- Time for introspection obviously

- Preparing the next release

Self-patting in the back

7 official developers (kudos to all!)

- 3 official NetBSD developers

- 1 official FreeBSD developer

- 2 in process of becoming NetBSD developers

<blink>We're hiring :p</blink>

Technical Report #2015-001

- We always want to achieve more…

- Right now edgebsd-6 does not build release for amd64 and i386 (my bad)

- Some processes automated; some still pending, among which:

  - Building releases after pushes

  - Building packages after pull-ups

  - Test infrastructure

  - Better and more communication tools…

Major achievements thus far

- Stable rolling EdgeBSD 6 release
- Extra features compared to NetBSD:
  - ALSR (amd64, i386)
  - SSP (all supported platforms)
  - Signed binary packages (amd64, i386)
  - LTS support (350+ updates)
  - Root filesystem encryption (amd64, i386)
- Not least, Git as the SCM

Working with Git

- Great for access control: (gitolite!)

  - Release control

  - Branch management

  - User groups

- Great for pull-ups and automation

  - Hooks

  - Tool integration

- Great for working offline

Our current limitations of Git

- Repository size (edgebsd-src is > 4 GB)
  - Result of importing objects from force pushes on our upstream
  - We should re-group the netbsd-src and edgebsd-src repositories
- Unclear branching hierarchy and policy
  - I suggest switching to a "directory" per user
- In other words, I am calling for a reset

Git conversions: new possibilities

1. Starting again from joerg's conversion (cherry-picking new commits on the reference branches?)

2. Giving a shot to IIJ's conversion: https://github.com/IIJ-NetBSD/netbsd-src

3. Working with ESR on his conversion: http://esr.ibiblio.org/?p=6406 (thanks kooda@ for the heads-up!)

Back to the drawing board :)

Git conversion: and NetBSD?

- There is an ongoing discussion among developers

- There is an unofficial working group, separate initiative from EdgeBSD

- Of course we are trying to participate, bring our experience and help prepare potential migration plans

Please contact me offline for more details, or use the Q&A session (if I can answer)

Converting NetBSD to Git (1/2)

- First of all, Git may not be the best answer and Mercurial could work too:
  - http://thechangelog.com/facebook-mercu
  - https://code.facebook.com/posts/218678
- Among concerns:
  - Working with less performant architectures
  - Migration period from CVS
  - Usability...

Converting NetBSD to Git (2/2)

More interrogations:

- Include the whole history?

- Prepend the known history that was removed for legal concerns?

- Include Git in the base system?

- Break down the repository in sub-modules or sub-projects?

- What of the development workflow?

The list goes on…

Towards EdgeBSD 7

- EdgeBSD 7 is based on the netbsd-7 branch:

  - Already possible to test and report bugs

- We are already providing binaries (amd64, i386) ...but not continuously :(

  - So please check if any bug you may want to report could have been fixed already

- We are still missing dedicated packages (they will be based on pkgsrc 2015Q1)

Release blocker for NetBSD 7.0

- Lua 5.3 (almost there, if not already)

- Most issues related to DRMKMS support

- Full list at
  http://releng.netbsd.org/pr-list.html

- I won't say any additional regression observed is welcome on the list, but any help spotting and fixing them is :)

(I won't mention GNATS now; we know)

Changes in NetBSD 7

- And thus in EdgeBSD 7!

- DMSKMS, OSS 4, entropy collection, GCC 4.8, better Xen, more ports, drivers, and much more…

- Full list: http://www.netbsd.org/changes/changes-7.

- Fuller list: edgebsd-7 branch, edgebsd-src.git:/doc/CHANGES-7.0

My objectives for EdgeBSD 7

- Cross-compiling packages

- pkg-ng as the package format (but still generated by pkgsrc)

- Strengthen signing support (signify?)

- In the back of my mind:

  - Libressl,

  - shrinking base,

  - Git reset and repository splitting...

Thanks for your attention

I can answer questions now, or the usual:

- IRC Freenode #EdgeBSD

- Mailing-lists at http://lists.edgebsd.org/

- Website at https://www.edgebsd.org/

- Myself directly at khorben@edgebsd.org

Use BSD!