20 years

Marc Espie <espie@lse.epita.fr>

July 7, 2019





Laboratoire Système Epita

20 years

Marc Espie <espie@lse.epita.fr>

July 7, 2019

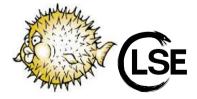




20 years

 ${\sf Marc\ Espie} < \!\!\! {\sf espie@lse.epita.fr} >$

July 7, 2019



Some numbers

github mirror

Thanks to jasper@ and jcs@ for providing that conversion. Roughly:

- My first commit is from '98
- 5500 commits in src
- 11000 commits in ports

The best laid plans

- One commit per year
- Reached 2000: I already had 10 commits
- So I cherry-picked a few things instead



A2000. Mine had a 68040@25MHz. 12MB of memory

OpenBSD 2.4 Multiplatform Ultra-Secure Operating System



My first commit

commit 89f058ab0599cbcc3e84684ab278ca5d9e1e718c

Author: espie <espie@openbsd.org>

Date: Sun Mar 29 22:24:49 1998 +0000

Updated to compile with recent AmigaOS Geek Gadgets toolchain, plus clean-up.

Back then

different times

- a few years away from 64 bits
- no C99 yet, still K&R sometimes
- no global analysis
- a.out and COFF
- ... so nothing from that era compiles without changes

gcc

I was already interested in C++. I ended up workin on gcc:

- from gcc 2.8.1 to egcs
- then gcc 2.95
- then gcc 3.x

```
commit 4e43c760ad4cd5f644ec700462679d05749498d8
```

Author: espie <espie@openbsd.org>

Date: Fri Dec 24 23:51:23 2004 +0000

gcc 3.3.5

commit 95bbc989663e9add5a1c260464efa7a1b0b95a42 Author: espie <espie@openbsd.org>

Code borrowed from egcs-current [libiberty is now aware of mkstemp]

Date: Wed Jan 13 00:13:32 1999 +0000

Fix for security hole in MKTEMP_EACH_FILE.

mkstemp.diff

toolchain

of course things do break

commit b57e10c335683eb72fd17c8f92013b2c5bbdac91

Author: espie <espie@openbsd.org>

Date: Tue Jun 15 10:28:49 1999 +0000

Fix thoroughly broken PIC code.

This removes arbitrary restrictions on label lengths for PIC code.

 \Longrightarrow mangled.diff

toolchain 2

commit 8b65874a69382a5552124a8a146bb226be32a36f

Author: espie <espie@openbsd.org>

Date: Mon May 24 23:22:01 1999 +0000

This patch lets spare ld handle pic/PIC relocations mix, by simply forcing everything to fit into pic mode.

More extensive changes (like tagging relocs with pic/PIC, sorting, and putting pic nearest the beginning of the GOT) would be needed for full handling pic relocs with a sizeable number of PIC relocs.



toolchain 3

GPL v3 and the stop to gcc and binutils That's why we switched to clang/lld $\,$

```
commit 9a5e4aa642dab4767435a3ed1b5d9a6220bdb290
Author: espie <espie@openbsd.org>
```

Date: Tue May 25 20:44:23 1999 +0000

Stub out src/ ports makefile fragments, so that everything is under ports/ (simpler to keep synchronized).

⇒ 1998ports.mk

commit 2d3d95499a882a0ac83675f992552c366238c3e2
Author: espie <espie@openbsd.org>

Date: Tue Jul 11 13:00:48 2000 +0000

Explains how FLAVORS and ${\tt MULTI_PACKAGES}$ work



pkg tools

```
commit 86800b6804a1bd0c39f1a5c704bbf111ef1553d0
Author: espie <espie@openbsd.org>
Date: Mon Apr 2 10:11:16 2001 +0000
```

pkg command: perl frontend to $pkg_{add,info,delete,create}$, and hooks to handle new dependencies.

```
commit eb83e585af9a04a6190013fcf340a016419b507c
Author: espie <espie@openbsd.org>
```

Date: Mon Apr 2 10:13:38 2001 +0000

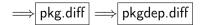
Handle for newdepend.

- recognize the keyword,

- pass all packing lists to 'pkg dependencies solve' for rewriting.

pkg dependencies solve is a no-op in the absence of newdepends.

With newdepends, it rewrites @newdepends -> @pkgdep on the fly, depending on what's actually installed on the machine.



dpb

```
commit 61d822e8d59bb575d149aa2b9bf09574e6df2d74
Author: espie <espie@openbsd.org>
Date: Wed Feb 24 11:33:31 2010 +0000
    work-in-progress: new distributed ports builder.
    will replace old dpb once we're satisfied it works.
    some features:
    - no more waiting, starts building right away, the dependencies discovery
    process is just another job,
    - monitor display that makes it easy to know when jobs get stuck, or machines
    get down.
    - loads of logs.
    - locks that stay around in case of error, and that you can remove when
    the error has been fixed (dpb picks it up),
    - smart choice of which package to build.
    - can take into account previous build times.
    - builds on machines of differing speed, offloading "lighter" jobs to slower
    hoves
    (again, ports is still locked for most people)
```

 \Rightarrow dpb.diff

autoconf

commit 1a15cbca7d402284d9eb1fd51f2e5f3e34c6a93a

Author: espie <espie@openbsd.org>

Date: Mon Sep 6 13:29:32 1999 +0000

Remove STRSPACE limitations.

A bit wasteful, but not too intrusive.

Also remove pushback buffer limitations, as this would be mostly useles otherwise.

Incidentally, pushback buffer overflow detection in pbstr was wrong.

 \Longrightarrow m4.diff

mktemp is back

 $\verb|commit| 01e71e6970af051f87d2a8ca2d534eea4d4b8aea| \\$

Author: espie <espie@openbsd.org>

Date: Tue Sep 14 08:23:09 1999 +0000

mktemp -> mkstemp

 \Longrightarrow m4-2.diff

pledging

commit 7020b4321707d78c1a85bf7ddb61662cb7bd0d93

Author: espie <espie@openbsd.org>

Date: Sun Oct 11 17:39:50 2015 +0000

reorg code to have an array with all the files used apparent.

okay millert@



openbsd-backgrounds

```
commit 276deb092d77bed16656a95552e282b4b53c8105
```

Author: espie <espie@openbsd.org>

Date: Wed May 29 11:42:34 2019 +0000

 ${\tt openbsd-backgrounds: background \ pictures \ taken \ by \ OpenBSD \ devs,}$

CC-BY

okay solene@



Questions

Back in '98

A long long time ago
I can still remember how
That commit used to make me smile
And I knew if I had my chance
That I could make those programs dance
And maybe they'd be happy for a while

Bye, bye gcc without Pie
Drove my clang to the metal but the metal was dry
And them good ole boys were drinking whiskey and rye
Debuggin' this'll be the day that I die
This'll be the day that I die