Too Many Ports
10 years of porting to BeOS

• Back in the days
  – Tarballs, CVS
    • SVN if you're lucky
      – Not so much as it was dog slow
  – we made patches the hard way

• Each project needs its own stuff
  – SCM
  – Shell variables (paths to dependencies)
  – Build procedure
10+ years of porting to Haiku

• Started as rough as on BeOS
• Then came haikuporter
• And Package Management
• Still, haikuporter slow when working on a port
• Easier to fix Haiku than BeOS!
Tools to handle all this mess

- **dev-perso shell script**
  - dev command
  - Project completion
  - local .profile and .bash_history
  - Adds update action as last command
    - **TODO** Handle setarch
    - **TODO** Port it to ZSH?
Tools to handle all this mess

- [XQ]Emacs + org-mode
  - TODO finish the XEmacs port
  - TODO integrate it with dev-perso?
MHPG: My Huge Project List

- And that's only Haiku-related ones 😊

- Project status
  - ○ Just started
  - ☺ Mostly compiles (or used to compile)
  - ○ Starts but…
  - ☺ Works mostly
  - ● What Else?™

- HaikuPorts status
  - ◆ Patch in
  - ◆ Recipe untested
  - ◆ Works Here™

- Upstream
  - △ Nothing sent
  - △ On its way
  - ▲ All in
The attic

- Projects moved out of $DEVROOT (and command line completion)
- Either finished or completely dropped
bepo ●

- Scripts I wrote to generate initial Haiku Bépo keymap from the Linux keymap file
- Adrien added a lot more keys
- Bépo keymap now in git and working
bzflag ●◆▲ ◐▲

- 3D tank game ported to BeOS
- Used to work in ZETA (but slow in MESA)
- Seems Adrien took over but status is undetermined
caya ●

- IM Client
- Did I even touch it?
- Looks like the only patch I ever did was to try to build it on ZETA…
cfe

• Common Firmware Environment
  - Used on the Amiga X-1000
  - Added support in haiku_loader until I figured out they loaded an OF image to boot Linux 😞
cyassl ☹️▲

- Lightweight SSL lib
- Did some fixing
- Still needs love on newer versions ☹️
darcs ○ △

- Yet another SCM
- Not sure I ever touched it
dmidecode

- Decodes BIOS DMI tables
- Build fixes
- Default mem device to /dev/misc/mem
- Should work fine
dnscrypt □ △

- Some tunneling thing
- Not touched at all
kbuild ● ▲

- Build tool for VirtualBox
- No recipe yet?
- (Bins are in VBox SVN)
nvda ○ △

- Screen reader for win32 (mostly python)
- Probably better to port Orca (Gnome's screen reader) as the GTK interface is better isolated from the core
pbzip2  ○  △

- Parallel BZip2
- Didn't do much; Anyone wants to look at it?
• Secure RM
• Ported to Haiku
• Even the tests work \o/
  – But they need 5GB of disk space 😞
bcc

- Bruce Evans C Compiler
- Used to be **required** by VirtualBox
- I don't even remember what I did on that
  - But it's not needed anymore anyway
curl, cvs, gperf... ???

- Hmm, whatever
“Current” projects

• At least I make sure they compile from time to time, well for most of them
• But it seems I should really clean up this mess
**aranym**

- Atari Running on Any Machine
- 68040 Atari-compatible virtual machine
- Should work
- **TODO** Recipe should be updated to 1.0.2
  - Tried today but they broke it again 😞
beclan

- Some stuff from a group of developers
  - Antique patches
- Should go to attic
• Native documentation browser
  – Now uses NetSurf as replicant
    • But NetSurf replicant is quite broken
  – Documentation parsers must be updated
beshare

- Native chat & file sharing
- Fixed writable paths
  - Looks like someone did it before I upstreamed 😞
  - But differently
cclive ☹ △

- C rewrite of clive (youtube downloader)
- Deprecated by youtube-dl & weboob
contiki ◯ ▲

- FLOSS OS for C64 & the Internet of Things
- Ported wrote the ncurses platform
• Console Password Manager
• Usual ./configure stuff (libm test…)

\texttt{cpm} \  \bigcirc \  \bigtriangleup
csync ○ △

• File synchronization tool
• Part of the Owncloud client
• Just git cloned it yet
dontworry 😓

- Autocompletion add-on for BeIDE
- Started porting to Pe
- Should probably be rewritten anyway
dtc

- Device Tree Compiler
- Generates DT blobs from DTS files
- Used by our ARM & PPC port (U-Boot)
e2fsprogs  ⊗ △

- Ext2 FS tools
- I actually only needed libuuid
  - Now a separate project
emile ○ △

- Bootloader for Linux on Mac68k
- Just looked at it when starting the 68k port
espeak ☹◆△

• Speech synthesis
• Works offline, not live yet
ffmpeg/libav ●◆△

- Video converter and codec library
- Used by our MediaKit
- I still have 3 of 4 checkouts of this around
fish ◯◆△

- Friendly Interactive Shell
- Starts but has some bugs
flashrom □ △

- BIOS flashing utility
- Needs specific PCI I/O code to work on Haiku
• Free Lossless Image Format
• Just looked at it
• Just a demo anyway
fossil

• SCM used by Tcl/Tk
• Patched upstreamed
• Works fine for checking out tcl & tk 😊
gambas ☹ △

• Graphical development environment based on a BASIC interpreter

• Was it a dependency of another project or did I just do it for fun???
gemrb  ●◆△

- Game Engine Made with preRendered Background
- Ugh, what is this doing here??
  - Oh right, checked the patches for GCI 😞
gnokii ☹ △

- Synchronization conduit for old Nokia phones
- Superseded by the Gammu/Wammu fork
gobe

• My own attempt at reverse-engineering the Gobe format

• Didn't get very far
golang ∘ △

- Google's Go language, old repository
- Others took care of it, thanks! 😊
gophernicus ● △

- Gopher server
- Because it's funny!
- Actually, wanted to test my gopher-to-OpenStreetMap gateway 😊
grub ○ △

- GRand Unified Bootloader
- Just to look at MultiBoot headers
haiku ☽ △

• I actually still have some svn clone around ☹️
haikuporter  ●◆▲

• What, you no know what that is???
haikuports{--cross} •● ▲

• Gee, some stashed stuff there... 😊
hdialog  ●◆▲

• GCI work
• Didn't find anything to patch there 😊
Some context-switch and pipe speed benchmarks from an old IBM article online
– Article disappeared it seems

Linux was like 10 times faster than BeOS back then…
input_methods ☹ ▲

- Some funky ideas like T9 or pen input methods
- Some of that is in git HEAD now
  - Unfinished
    - CGI task? 😊
iodine ⊙ △

- DNS tunnel
irssi ●◆▲

- CLI IRC client
- Had to clean up their configure mess before they'd accept patches for my “non-POSIX obscure OS”
  - Yet they still support HP/UX 😐
jamvm \textbullet\textbullet\triangle

- Java Virtual Machine
• Parser generator
• Used to be used by NetSurf
libmpdclient,mpd

- Music Player Daemon
- Now with native audio output
mpc, ncmpc\{pp\}  ●◆▲

• MPD clients
librevenge ○ △

- Base library for writing document import filters
- Wanted to see if it could help REing Gobe format
libusb  ●◆▲

- Yeah, someone finally made a working port \o/
libxpm ☺ △

- XPM bitmap format handling
- Dependency for XEmacs
- Depends on whole of X11
links ●◆△

- Port of 2.8 with “GUI”
lshw ○ △

• Hardware inspection tool
lud, open-udc

- Open Universal Dividende Currency
- Runs but untested
miniupnp

- Minimal UPnP stack
mirall  ○  △

• Part of Owncloud client
• Good old Moe mascot
• Shame git doesn't know about attributes
• But it works
• Why do I have this around?
nativefiledialog ●▲

- GCI work
- Misses a recipe?
netsurf

- Web browser
- Used by BeHappy
• Web server
• Now runs, needs testing
- OpenCubic Player
- Full port using SDL
- Designed an HVIF icon 😊
oríc ● ▲

- SVN repo with demo sources & SDK
- Patched the SDK to run on Linux and probably Haiku
oricutron

- ORIC emulator
- Uses SDL + native dialogs
os-prober ● ▲

- Made patches to support detection of Haiku properly, including Package-Management
- Debian bug #732696
  - Just needs testing, anyone?
OSS  ●◆▲

- Works quite well
- Except for some annoying bugs
  - KDL on shutdown
  - Audio stops after 6 hours!?
parted ☹ △

- Already had a BeOS backend
- Pending patch to use it on Haiku
pass ☐ △

• CLI password store
pciutils ●◆▲

- Flashrom uses its PCI config library
 Always need a Pe clone around
pearpc ● ▲

• Old PPC Mac emulator
portaudio ●◆△

• Oh, I happen to have some patches for a native audio output lying around !!
portland ○ △

- XDG (FreeDesktop) utils (xdg-open…)
  - Mostly shell scripts
- I think they moved somewhere else
• Very small editor with Emacs bindings
qemu  ●◆△
que\textbf{x}  ○  △

- Some dependency for Owncloud client IIRC
radare ☹ △

- Reverse Engineering toolkit
re2c ● △

- Regexp compiler
- Used to be used by NetSurf
rhapsody ●◆△

- CLI IRC client
rtmpdump ●◆△

- Dump rtmp:// streams
sane ☹ △

• Got this old CVS checkout here
• Anyone happens to know where the are hosted now?
screen  ◀◆▲

• Terminal multiplexer
• Starts but then screws up
• Started adding support for reading data from resources
seeks

- P2P search engine
- Deprecated in favor of Searx
shatag  ○  △

- Tool to add SHA-256 sums as attributes to find file duplicates
shok ○ △

- Some interactive shell part of something else
- Just cloned the repo
• Antique (PDP11 & friends) emulator
• Ported + recipe
sleepyhead ⏳ △

• CPAP machine data visualization tool
  – (Sleep apnea treatment)
• Uses Qt5
• Just got the splash screen last week \o/
smartmontools ○ △

- Mostly untouched
snowman  ○  △

• Native code to C/C++ decompiler
• Untouched
soundplay-plugins ● ▲

- Should make a recipe for those (and for SoundPlay)
sphinx

- CMU Sphinx is a speech recognition engine
- Old C-based version
- Works offline
I sent a patch long ago (Sylk column layout)
supertux ●◆△

• Updated patch & recipe
swfdec ○ △

- Some Flash decoder (like Gnash)
- I don't really care about Flash anyway
synergy

- I'm happy someone ported it first!
• Tcl language interpreter
• Edited locally + patch in HaikuPorts...
• GUI toolkit for Tcl
• Might compile with X11
• Just started native port long ago
testdisk ◐◆▲

- Disk recovery tool
- Runs but not really tested yet
thememanager

• Native Theme Manager application by me
• Pending recipe update
transmission ○ △

- We already have a recipe for it
twin ○ △

- Text UI window manager
• UnderC C++ interpreter
• Very old port
unicode_im

- GCI work from puckipedia
- Already in git HEAD
A lot compiles now, but we lack ptrace()
• Wrote initial Guest Additions port and some more
• Much more done on GSOC 2011 by scgtrp
• Some GA are missing or buggy
  – KDL on SMP (wrong locking)
vibrant

- Demo game written in D
- Released at Alchimie in 2009
- Requires Digital Mars D compiler
vision ●◆▲

- Started adding support for irc:// URI scheme
- Upstreamed but unfinished
vncviewer ☿ △

• My own antique port of the VNC client…
weboob

- Web outside of browsers
  - CLI/GUI client for the web
  - Videos, bank accounts, forum posts…
- Runs locally, lacks a recipe
- Many modules work
- Others missing python packages
wget

- IIRC, I wanted to...
  - **TODO** add support the saving the download url as an attribute
wipe ○ △

- Like srm, securely remove files
- Not touched yet
• wxWidgets
• Just scratched the surface
• Was it needed for a port?
• Variant of Emacs
  - aka Escape Meta Alt Control Shift
• Worked quite well years ago
• Waiting for libXpm to get the toolbar buttons back
• Not upstreamed
  - But got a public branch somewhere
xemacs-packages ○ △

- The text editor and everything running on the Emacs OS 😊
- Mostly lisp, but some OS-dependent code
xorg-macros, xproto

- Were needed by libXpm, which is needed by XEmacs...
- Xorg-macros renamed to util-macros
zeta ●◆▲

• Some obscure operating system I wrote stuff for a long long time ago in a galaxy far away…
zsh

- Did the initial port to BeOS
- Should probably try to use it someday 😊
- “Oh My Zsh” seems to be quite nice…
Now you're happy there are only 26 letters in the Latin alphabet.
Wanna Help?
Questions?