

Care and Feeding of OpenBSD Porters

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Me

- Systems Administrator at RIT Software Engineering
- Using UNIX since 1990
- First BSDs were 4.3 and 4.3 Tahoe also in 1990
- Started using OpenBSD about 2.9
- Started serious porting November 2018
- Joined OpenBSD Project April 2019 (kmos@)

What we'll talk about

- Misconceptions
- Ideal Updates
- Porting Realities
- Getting Work Noticed
- Tips
- Tools
- Resources

Some Quick Terms

- Consumers
- Bulk Build
- Current
- Stable
- Linkers
- BUILD/RUN/LIB/TEST DEPENDS
- Arches

Misconceptions

- Porting Something New
- Porting on -current isn't important
- Only porters can review ports
- Maintainer is a prestige status
- OpenBSD porters are just jerks who ignore us on purpose

Porting Something New

- “The very best thing I can do for the project is port something new.”
 - One port isn't super useful
 - There are *hundreds* of ports that need updating
- Porting new stuff is good
- Updating, maintaining, and/or removing existing stuff is *better*

Porting on -current isn't important

- This is something I thought in the past
 - *Me: rolls eyes* “Like it really makes a difference”
- Ports infrastructure changes constantly
 - We constantly improve our tools
 - MODPY_PYTEST
 - PERMIT_PACKAGE_* → PERMIT_PACKAGE
 - New make targets
- A submission from -stable has to be ported to -current

Only porters can review ports

- If this needed to be a one slide presentation: “TEST OUR S#!%”
- Even just “this worked for me” or “this blows up” is helpful
- It gives needed feedback
- It helps tell busy porters whether this port is or isn't worth their limited time
- It exposes you to more ports knowledge
- *Be nice though!*

Maintainer is a prestige status

- Ports are not Pokemon, comic books, or baseball cards
 - There is no award
- MAINTAINER is a promise
 - A point of contact
 - Expected to respond
- An unresponsive maintainer is an *obstacle*
 - “maintainer timeout” → they didn’t respond, we’re going ahead anyway

Porters are jerks who ignore you on purpose

- There are 10715 packages for amd64 in snapshots
- There aren't even 100 OpenBSD porters
- Some porters do bulk builds on top of maintaining their ports and doing work in other areas of the tree
- Generally have day jobs and a non-OpenBSD life
- Only so much time and attention to spare
- Even OpenBSD developers have trouble getting their stuff noticed

Ideal Updates

- Brings software up to date
- Breaks nothing else in ports
- Builds on all architectures
- Just works in bulk builds
- Gets everyone a pony

Ports Realities

- Too many ports, too few porters
- Too much work to be done
- Everything always changes
- It is supposed to be fun
- Lots of emails
- You might just get missed (I do)

Getting Work Noticed

- Tell us
 - What you changed
 - What you tested
 - Impact on any consumers
 - Changelog for software you are updating
 - What architecture(s) you test on
- *Make it easy for others to review your work*
- Consistent, solid work gets noticed

Porter Anti-patterns

- Mr./Mx./Ms. Vague
- Fire hose
- Dishonesty
- Bomb Thrower

Will get you the wrong kind of notice!

Tips

- Always be honest
- Take critique well
 - You could have just been ignored
- Make checklists
- Take it slow; you can't learn everything at once

The OpenBSD Porter's Handbook

- <https://www.openbsd.org/faq/ports/index.html>
 - Intimidating
 - Incomplete in places
 - *Still a good reference*
- Can always be improved because ports keeps changing

Choosing a port to update

- <https://portroach.openbsd.org/>
 - Tracks out of date ports
- Lists are by maintainer
- In particular, look at ports “maintained by” “the openbsd ports mailing-list”
 - They are ports without a listed maintainer

Being OK with abandoning a port

- “Oh, look. CDparanoia needs an update.”
 - (lots of screaming)
- “I’ve used WorkRave in the past.”
 - (more screaming)
- *You are learning. Come back later.*

Porting Tools

- `/usr/ports/infrastructure`
 - `bin/`
 - `portcheck(1)`
 - `portgen(1)`
 - `templates/`
 - `Makefile.template` (intimidating)
 - `mk.conf.template`
 - `rc.template`

Porting Tools (continued)

- <https://github.com/danieljakots/obsd-ports-tools>
 - showvictims.py ← Super Useful
 - kshrc ← Many aliases and shell functions
- <https://github.com/kmosiejczuk/kmos-ports-tools>
 - My own set of aliases and config files
- <https://marc.info>
 - openbsd-ports
 - openbsd-ports-cvs

Python Ports

- Python is a special child in ports
 - Python 2.7 vs 3.x
 - lang/python module (see port-modules(5))
 - MODPY_EGG_VERSION
 - MODPY_SETUPTOOLS
 - MODPY_PYTEST
 - etc.
- Best way to learn? *Look at other python ports*

Questions?

- As a high school teacher of mine said: “Questions? Comments? Cheap shots?”

Thanks

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