We choose to do the things, not because they are easy...

... but because we want them to be easy.

Any Questions?

Who Am I

- Professional Computer Toucher for ~ 3 decades.
- Sysadmin / DNS Operator at the RIPE NCC for 10 years.
    - Root Zone
    - `in-addr.arpa` / `ip6.arpa` / reverse DNS delegations.

Quote

Complexity is the enemy of uptime.

- Usually 100% uptime.
- ~ 200 Independent Servers on all Continents (except Antarctica).
- Automate what needs automating.
- Don't push all the buttons.

Who (else) Am I

- OpenBSD developer for 13+ years
  - priv'sep daemons for network configuration / DNS
    - `dhcpleased` / `slaacd` / `dhcp6leased` / `unwind`
  - `sysupgrade(8)`
  - deleted 300k LoC from `usr.sbin/bind`
  - …
- previous presentations:
  - BSDCan 2018: slaacd(8)
  - BSDCan 2019: unwind(8)
  - AsiaBSDCon 2023: Dynamic Host Configuration, please
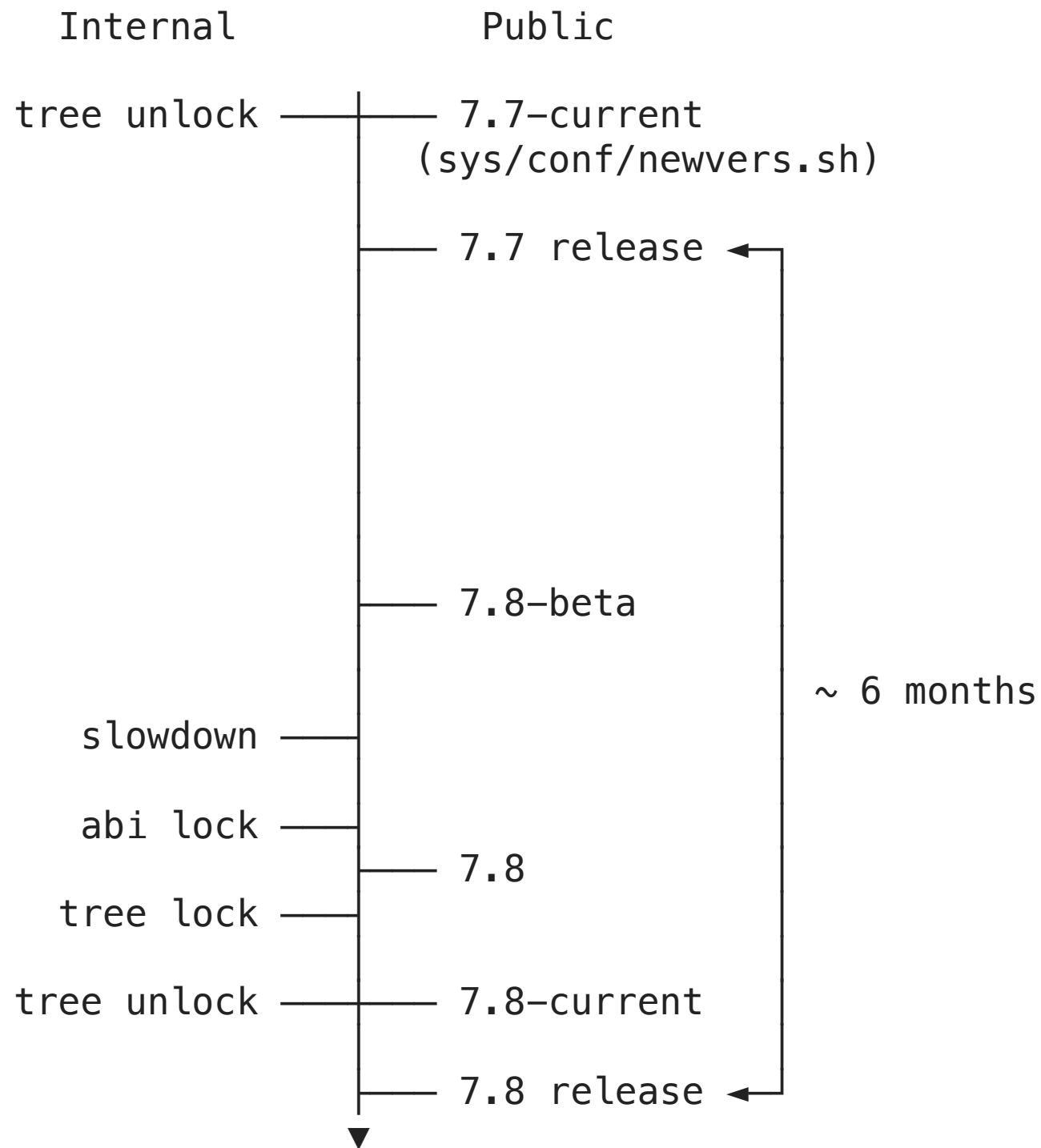 - EuroBSDCon 2024: OpenBSD vs. IPv6

Quote

Your OS is only free if your time has no value.

- Running my own infrastructure
  - 2x DNS, 2x MX, imap, icinga, nextcloud, gitea…
- Automate what needs automating (ansible).
- Don't push all the buttons.
  - Keeps sysmerge(8) happy…
- Run `-current`.
  - Fix or report what is annoying / broken.

Running –current

- Someone has to.
- Only one Thing broken (usually).
- Improve your sysadmin skills.
- Test restore procedure.
- Realistic chance of having a timely fix.
    - Erratas are annoying and only for important fixes.

OpenBSD Development Timeline

Internal   Public

tree unlock ————————— 7.7-current
                             (sys/conf/newvers.sh)

            ————— 7.7 release ◄————┐

            ————— 7.8-beta   │
                                    │
                                    ~ 6 months
slowdown ————   │
                                    │
abi lock ————   │
            ——— 7.8   │
tree lock ————   │
                                    │
tree unlock ————————— 7.8-current   │

            ————— 7.8 release ◄─────┘

            ▼

Running **−current** the Smart Way

- Update ~ once a week
  - Better chance of libraries & packages matching
- Be less aggressive during release → `−current` transition.
  - ~ 1 Week.
- Be more aggressive during `−beta` → release transition.
- Pay attention when hackathons are happening.
  - Flurry of commits / commit to `hackathons.html`
- Subscribe to `bugs@`, `ports@`, `source−changes@`, and `tech@`.
- Be aware of https://ftp.hostserver.de/archive/

Running **−current** the Florian Way

(i.e. The Wrong Way, but faster).

1. Reboot all systems except DNS servers & Orchestrator in the background.
2. Reboot one DNS server.
3. Wait for DNS server to return.
4. Reboot the other DNS server & Orchestrator.
5. Wait for monitoring to come back and recover.

https://sha256.net/move_fast_and_break_things.html

sysupgrade(8)

- ~~bsd.rd~~
- ~~autoinstall(8)~~
- ~~uobsd~~
- sysupgrade(8)
    1. shell script
    2. boot loader
    3. bsd.rd

sysupgrade(8)

- **012: RELIABILITY FIX: October 3, 2019**   *All architectures*
  The sysupgrade utility can be used to upgrade the system to the next release or to a new snapshot.
  A source code patch exists which adds this utility.

sysupgrade(8) bisect.

```
doas sysupgrade -fs https://ftp.hostserver.de/archive/2025-07-14-0105/
```

OpenBSD

- Developed by Volunteers with very specific problems to solve.
    - These might or might not be your problems!
    - Free to work on whatever the volunteers want.
        - The Foundation has no say in this.
    - Asking to speak to a manager and demanding a refund is not going to end well.

Contributing

- Run it and report bugs, including documentation bugs!
  - Go see "Effective Bug Reports…" by Michael Dexter
- Contributing Code
  - Find something that annoys you, fix it, and submit a patch.
    - … and iterate on the patch!

My origin story: `pflow(4)`

- IPv6 for pflow(4)
    - Big-ish, but reasonably sized.
    - Added to something that was already there.

… **want them to be easy.**

- `pledge(2)`
  - What's annoying about `systrace` & `seccomp-bpf`?
  - Fun to use.
  - Full adoption in base within one release cycle.

… want them to be easy.

- dhcp6leased(8)

  - ### dhcpcd.conf

    ```
    interface vio1
        ia_pd 2/::/59 vether0/0/60 vether1/16/64
    ```

  - ### dhcp6leased.conf

    ```
    request prefix delegation on vio1 for {
        vether0/60
        vether1/64
    }
    ```

Any last Questions?

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