Nightly repositories

Shortening the development feedback cycle

Wer bin ich?

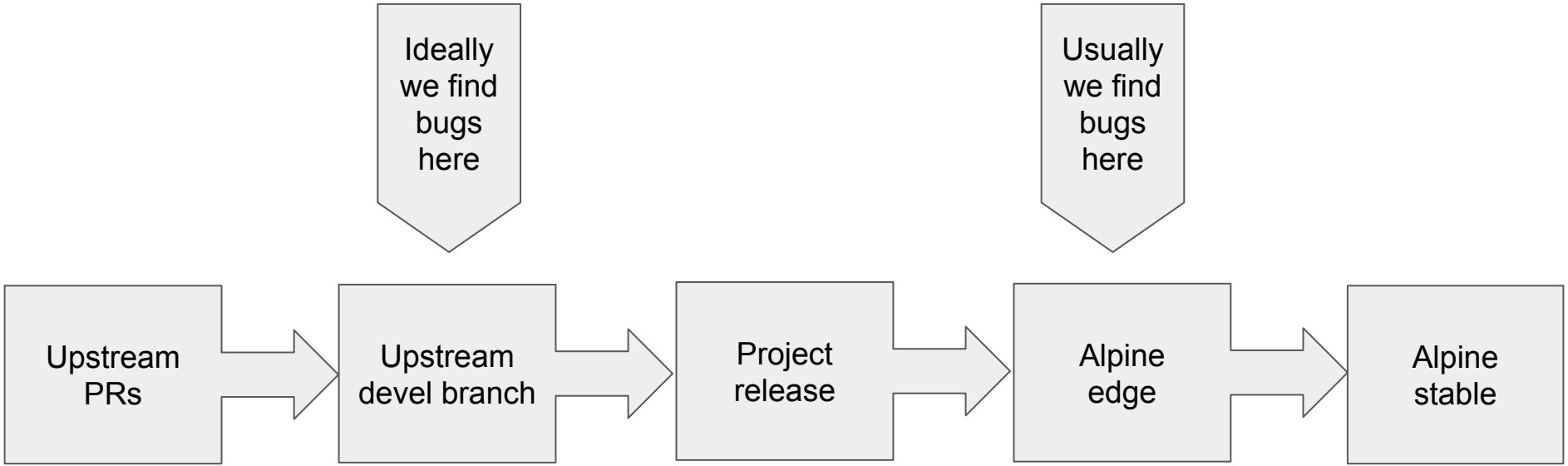
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- CS Student @ RWTH Aachen
- Alpine Linux developer: Maintain ~430 pkgs, co-maintain ~150 pkgs
- postmarketOS developer: Co-maintain UI integration,
  always in-between Alpine & pmOS

Why do we even need to test?

- Alpine
  - musl libc
  - Busybox
  - OpenRC
  - Many architectures (with differences like big endian or 32-bit)
- postmarketOS
  - Smaller form factors
  - Touch screens
  - Less performance (👋 PinePhone)

Process


Ideally we find bugs here
Usually we find bugs here
Upstream PRs
Upstream devel branch
Project release
Alpine edge
Alpine stable

History

- *Semi*-nightly repository for Plasma Mobile (seperated from stable APKBUILDs)
- Mesa changes regularly broke some devices => mesa-nightly
- Nightly repositories of GNOME & Phosh
- Userspace packages for the desktop became a repository: Mesa3D, ModemManager, Flatpak, systemd, polkit, D-Bus, libcamera,..
- Plasma Mobile semi-nightly became a KDE-nightly repo with the new infra

Repositories

`phosh-nightly`	Phosh stack (incl. feedbackd,..)
`gnome-nightly`	GNOME Shell (excl. mobile shell)
`kde-nightly`	Plasma, Plasma Mobile, ..
`desktop-nightly`	ModemManager, libqmi, Flatpak, systemd, polkit, D-Bus, libcamera

What do these scripts do?

1. Copy APKBUILDs from aports
2. Modify pkgver=, source= and builddir= to match git main
3. Patches, makedepends additions, .. to adjust for new changes
4. Build packages with new commits and upload

$ cat gen.phosh-nightly

```
#!/bin/sh

pkgsgrep="team/phosh"
pkgnames="livi"
pkgsskip="phosh-osk-data"
reponame="phosh-nightly"

source ./gen-apkbuilds

pre_setup() {
    apply_apkbuild_patch phoc phoc-no-patches.patch

    rm_source_patch phosh-mobile-settings wheel-group.patch
    rm_source_patch phosh use-after-free-fix.patch
    rm_source_patch phosh extend-timeout-with-pid.patch
    rm_source_patch phosh splash-timeout-flatpak-dbus.patch
}

gen
```

What we’re missing

- Automatic rebuilds of SONAME changes
- Automatically removing patches already applied
- RC/beta/alpha repositories
- Cache failing builds with ccache
- Ship nightly versions of Duranium (Immutable postmarketOS)

It’s your turn 👉

Start testing nightly packages:

```
sudo apk add postmarketos-repo-nightly &&
sudo apk upgrade -Ua
```



And help out fixing broken packages:

`https://gitlab.postmarketos.org/postmarketOS/nightly-builder`