Intro

- initial release at 2006
- independent and non-commercial
- general purpose
  - embedded (network) devices
  - servers and containers
  - desktops (Xfce 4)
- platforms: x86, x86_64, ARMhf, AArch64*

* in edge and upcoming release
Alpine’s motto


for power users
Small and lightweight

- Busybox userland (instead of GNU)
- musl libc (instead of glibc)
- apk-tools (instead of pacman, dnf, apt, …)
- OpenRC
- mdev (instead of udev)
- LibreSSL (in upcoming v3.5)
- …but you can install coreutils, eudev
Small

- Base installation in chroot (container)
  - 8 MiB / 260 files
  - 16 packages (only 6 third-party projects)

- Base installation on virtual server
  - 53 MiB / 1222 files
  - 26 packages

- Base installation on metal server
  - 302 MiB / 4686 files (a lot of kernel modules…)
  - 27 packages
Secure

- designed with security in mind
- kernel with grsecurity/PaX
- binaries compiled as PIE with stack smashing protection
- **no system security disaster** running as PID 1...

* https://www.agwa.name/blog/post/how_to_crash_systemd_in_one_tweet
Releases

- two stable releases per year
- security fixes for stable releases
  - 2 years for main repository
  - 6 months for community repository
- rolling edge branch
Packages

- main – 2 027 aports*
- community – 766 aports*
- testing – 816 aports*

* in edge on 2016-10-07, without subpackages
Who uses it anyway…?

Official **Docker** images*…

…so quite a lot people.

But many also in *real* containers,

**servers**, embedded devices, desktops…

* [https://www.brianchristner.io/docker-is-moving-to-alpine-linux/](https://www.brianchristner.io/docker-is-moving-to-alpine-linux/)
Install in *a second* into chroot

```
$ wget -O- $REPO_URI/x86_64/apk-tools-static....apk \ 
  | tar -xz
$ ./sbin/apk.static -p ./alpine -U --initdb \ 
  --allow-untrusted -X $REPO_URI add alpine-base
# mount -t proc none ./alpine/proc
# mount --rbind /sys ./alpine/sys
# mount --rbind /dev ./alpine/dev
# chroot ./alpine
```

!! Just for demonstration, it’s not secure; always verify signatures !!
Try **alp**ine

on vpsFree.cz
Useful links

- https://alpinelinux.org/
- https://pkgs.alpinelinux.org/
- https://github.com/alpinelinux/aports/
- https://github.com/jirutka/aports/
- http://www.etalabs.net/compare_libcs.html