

# Flatcar Container Linux Community Meeting



17 December 2021

# Agenda

Welcome

News

Share your ARM64 story!

Q&A / Discussion

**Welcome!**  
(please say "hi")

**FLAT  
CAR**



# News

## The latest on Flatcar Linux



# NEWS

## Flatcar releases - just out!

- LTS-2021 2605.24.1, Stable 3033.2.0, Beta 3066.1.0
  - Stable 3033.2.0 - new major Stable release
    - **ARM64 support**
    - Systemd-249, iptables → nftables (backwards compatible)
    - Maaaaany package updates and CVE fixes
  - Beta 3033.1.0 - new major Beta release
    - OpenSSL 3.0
    - Maaaaany package updates and CVE fixes

New Alpha 3087.0.0 coming soon w/ Kernel 5.15

- Currently stuck in QA, needs more polishing



# NEWS

ClusterAPI on track to support Flatcar in CAPI v1.1

- Foundational [PR to support Ignition in the bootstrap provider](#) was merged
- Image-builder includes Flatcar support (for some time now)

Support for [AWS](#) and [Azure](#) provider likely included

Speak up on our [tracking issue](#)

if you would like to join the effort





# ARM64 is in Stable now

- All releases fully tested on
  - ☐ Graviton2 (AWS) [Graviton 3 access requested]
  - ☐ Ampere eMAG (Equinix Metal) [Ampere Altra coming soon]
  - ☐ Qemu (HW-virtualised on ARM64 host)



# It took us a while...

- CoreOS had started an arm64 port but removed it again
- End of 2019 we ported the old patches and then had to fix a lot
- Cross-compilation pitfalls:
  - ❑ While standard build systems work, “customized” or hand-rolled build systems forget cross-compilation
  - ❑ Some build systems assume they can do a test compilation and run the resulting binary → qemu-user emulation through binfmt (sticky bit 'F')... and since they don't chroot into the target root, setup QEMU\_LD\_PREFIX
  - ❑ Rust has good cross-compilation with rustup, but Gentoo uses Rust differently and we needed workarounds for linker selection and treating it as a semi-toolchain package
- Higher layers: application errors (e.g., with mozjs), multiarch container images...

# Share your ARM64 story!

It's "you" time - please speak up and share.

All stories are welcome, no Flatcar relation required.

(or let us know in the chat if you want to share and someone else is speaking right now)



# Calls to Action

Spread the word

Become a contributor ([github.com/flatcar-linux/Flatcar](https://github.com/flatcar-linux/Flatcar))

Join the community ([Matrix, email list](#))

Join us for the next community call

Share your feedback - how can we better support and grow the community? What should we cover in future community calls?



# Thank you!

Github: [flatcar-linux/flatcar](https://github.com/flatcar-linux/flatcar)

Twitter: [flatcar](https://twitter.com/flatcar)

