Running releases.l.o on aarch64
(How we got there, and what next)

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Overview

- This is a two part presentation
  - How the Systems team found themselves running releases.linaro.org on aarch64
  - How it’s working and what talk about other services we could host on aarch64
Background on releases.linaro.org

- One of Linaro’s most heavily used sites.
- A year ago we moved to use Amazon S3 for storage

“There are only two hard things in Computer Science: cache invalidation and naming things.”

-- Phil Karlton
Timeline of Events

https://releases.linaro.org/ (10m 13d)

- S3 deployed
- S3 degrades
- Screaming

Response time for step "https://releases.linaro.org/" of scenario "https://releases.linaro.org/". [avg] 1s 334.43ms 0 1s 433.41ms 14s 976.1ms
What was Happening

- My worst fears realized
- The original complaint was SSL
- It seemed like 2 issues though
  - Apache doesn’t have bugs, right?
  - S3 speed wouldn’t just get 4x slower?
- Could it really be that coincidental?
We Needed Another Server

- Needed to be outside AWS
- Needed to have great internet connection
- Needed it fast
- Guess what I had a bunch of?
What Was It?

- Apache still has bugs!
  - Apache2-mpm-prefork to the rescue
- S3 had become 4x slower
  - The colo’s S3 API performance is still faster than inside AWS
  - I had to create that cache I’d hoped to avoid
ARM Servers Are REAL - What’s Next?

- Releases works great, are there some other good candidates?
- Something with an interesting workload that can either:
  - Be fault tolerant (like releases)
  - Not cause work stoppage if we experience 95% uptime
- Patches.linaro.org? (Postgres and Git)
- Another git mirror?
- ${SOMETHING_ELSE}
Thank You

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