Lessons Learnt Using Github actions in an Apache Project

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ShapeBlue

Committer && PMC @ Apache CloudStack

Employee Owned

Apache CloudStack

- Support
- Implementation
- Development
- Consultancy
- Community Support



Agenda:

- Github Actions
- Motivation
- Past
- Present
- Future
- Learnings



Don't try this at home in Prod

We're innocent!!

TBD

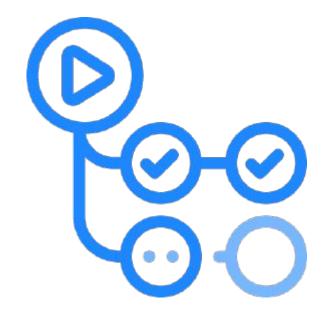


Github Actions ??

Explain

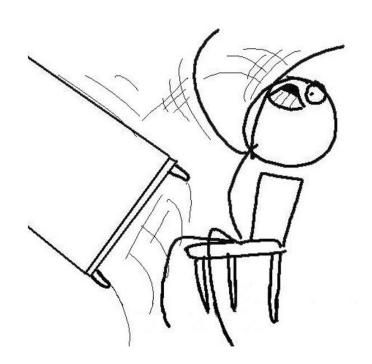
Github Actions ??

- "CI / CD" Platform
- Automate workflow
- Events
- Jobs
- Runner



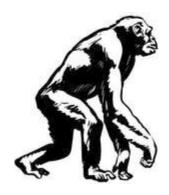
Why are we here?

- Short staffed
- Manual labour
- Hardware reliant
- We just love automation!



Pre-Alpha Build

- Terrible Manual Test workflow
- Bad / Unavailable Infra
- Better than nothing



Alpha Build

- Github Bot
- Respond to comments
- Cron Job
- Kick packages && Tests
- Report Success / Failure (sometimes)



Beta Build

- Github actions
- Boring Cyborg
- Automatically Comments



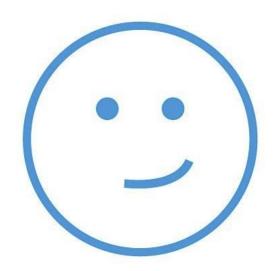
What we have

- Label Assignment Triage
- Linter
- Code Coverage
- Code Quality
- Unit && E2E Tests
- Automatically trigger builds
- Notify users of merge conflicts
- Tests on push



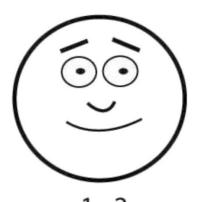
It works (Sorta)

- Triaging
 - Label, Reviewer
 - Ready for review
- Code coverage
- Code quality



It doesn't work (Sorta)

- Test Coverage
 - workflow works, provider doesn't
- All packages and tests



1 - 2 hurts just a little bit

What we've Learnt - The good

- They work!
- Simple
- Super flexible
- Prioritize this



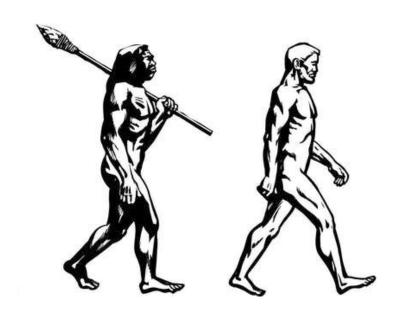
What we've Learnt - The bad

- We have custom infra
- We're human
- Shoulda Woulda Coulda



The future is bright-ish

- Load balancing
- Triggered by tags
- Periodic Healthchecks
- Explore options



Thank You!