CONTINUOUS INTEGRATION WITHOUT LOCK-IN

DEMONSTRATING R-CI: A SIMPLE AND PORTABLE SETUP

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R4 Video Lightning Talk
January 7, 2021
Continuous Integration

- A ‘staple’: We all use it to assess commits, pull requests, ...
- A popular setup was Travis ...
- but as it goes with commercial services it is (mostly) gone
This Talk

- We present a simple script that works at
  - Travis (if you have credits)
  - GitHub Actions which is popular
  - Azure DevOps which is also popular
  - and *locally* in Docker allowing easy debugging
- **No vendor lock-in** because *why should we?*
- We expect it to also work at GitLab and other CI providers
Basic Setup

We need

• Fetch Script
• Bootstrap System
• Fetch Dependencies
• Build and Test

We use

• curl ...UrlHere...
• ./run.sh bootstrap
• ./run.sh install_deps
• ./run.sh run_test
r-ci

- The script lives on GitHub at r-ci
- Documentation lives at eddelbuettel.github.io/r-ci/
- Derived from r-travis started years ago by Craig Citro
- I was an early contributor and like its simplicity
- So I continued to use it at Travis for all these years
- r-ci is an updated simplification which can use bspm
- See prior blog posts of mine for why you want to use bspm
**dang package**

- We use a really small package of mine
- It has a bunch of suggested packages
- In the repo you see all files and
  - Travis in `.travis.yml`
  - GitHub in `.github/workflows/ci.yaml`
  - Azure in `.ci/ci.yaml`
- And we will demo Docker live next!
- (And my 60+ package repos have plenty more examples)
Demo Time
Portable CI Highlights

- Straightforward Shell Script
- Runs in just about any sane Ubuntu environment
- Underneath takes advantage of Rutter PPAs and BSPM
- Three simple steps: bootstrap, deps, test
- Plus more
  - use `install_all` to fetch Suggests: too
  - optional package installation via apt as needed
  - it Linux so it’s flexible
  - just read the source :)
  - or file issues at the `r-ci repo`
THANK YOU!

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