Continuous Integration without Lock-In

Demonstrating r-ci: a Simple and Portable Setup

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Continuous Integration

- A 'staple': We all use it to assess commits, pull requests, …
- A popular setup was Travis …
- but as it goes with commerical 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`

The repo

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: bootstrp, 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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