CI for R

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#### What's CI?

#### CI: Continuous Integration

ref: https://www.thoughtworks.com/continuous-integration

Continuous Integration (CI) is a development practice that requires developers to integrate code into a shared repository several times a day. Each check-in is then verified by an automated build, allowing teams to detect problems early.

### What's CI?

# make sure your software doesn't just work on your machine

- & works on other operating systems
- & works on other R versions
- & works in XXX other contexts

## usethis approach

create a package, use git

```
usethis::create_package("turtles")
usethis::use_git()
```

create repo on github, push up

```
cd turtles
hub create sckott/turtles
git push --set-upstream origin master
```

use travis and/or appveyor

```
usethis::use_travis()
usethis::use_appveyor()
```

## yaml files

.travis.yml

language: R
sudo: false

cache: packages

.appveyor.yml

Looks similar-ish

Travis R docs https://docs.travis-ci.com/user/languages/r/

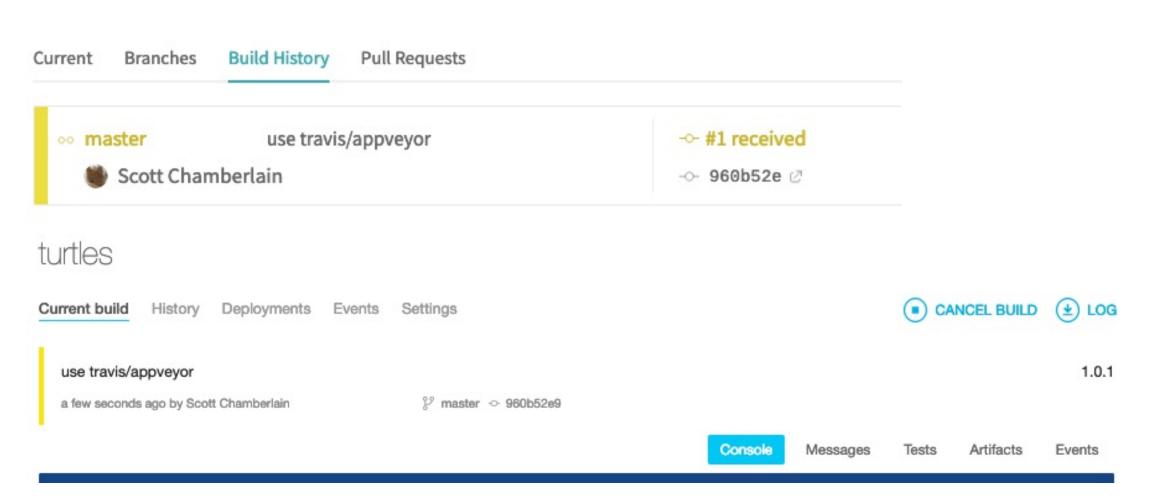
Appveyor sort of docs https://github.com/krlmlr/r-appveyor

## yaml: more complicated

```
language: r
matrix:
  include:
    - os: linux
     r: oldrel
    - os: linux
      r: release
      env: R_CODECOV=true
    - os: linux
      r: devel
      env: _R_CHECK_LENGTH_1_LOGIC2_=TRUE
    - OS: OSX
      osx_image: xcode7.3
      r: oldrel
r_binary_packages:
  - covr
  - httr
after_success:
  - if [[ "${R_CODECOV}" ]]; then R -e 'covr::codecov()'; fi
```

### CI in action





### seealso: tic and travis

https://github.com/ropenscilabs/tic

https://github.com/ropenscilabs/travis

```
# install.packages("remotes")
remotes::install_github("ropenscilabs/tic")
remotes::install_github("ropenscilabs/travis")
```

### CRAN checks

https://cran.rstudio.com/web/checks/check\_results\_vcr.html

### CRAN checks API

https://github.com/ropensci/cchecksapi