

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


 **sckott / turtles**  build unknown



Current Branches Build History Pull Requests

 **master**

use travis/appveyor



 Scott Chamberlain

 **#1 received**

 960b52e 



turtles

Current build History Deployments Events Settings

 CANCEL BUILD  LOG

use travis/appveyor

a few seconds ago by Scott Chamberlain

 master  960b52e9

1.0.1

Console Messages Tests Artifacts Events

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>