

Pencil Code tests with Travis-CI

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Background

- Travis-CI: continuous integration service to build and test software projects hosted at GitHub
- Continuous integration for us means:
 - Run tests on new commits
 - Report tests (website, email, slack, ...)
- The tests are already running there:
 - <https://www.travis-ci.com/pencil-code/pencil-code>

- You'll get an email if you may have caused the tests to break.
 - And another one when the tests go green again
 - Email is sent only if committer email is an email address registered with Github:

“By default, a build email is sent to the committer and the author, but only if they have access to the repository the commit was pushed to. This [...] prevents build notifications from going to folks not registered on Travis CI.

The email address is then determined based on the email address in the commit, but only if it matches one of the email addresses in our database. We synchronize all your email addresses from GitHub, solely for the purpose of build notifications.”

- Email looks like this:

```
From: Travis CI <builds@travis-ci.com>  
To: <wdobler@gmail.com>  
Subject: Broken: pencil-code/pencil-code#2 (master - e9d9d7b)  
Date: Sat, 02 Jun 2018 20:56:14 +0000
```

Build Update for pencil-code/pencil-code

Build: #2

Status: Broken

Duration: 13 mins and 23 secs

Commit: e9d9d7b (master)

Author: Wolfgang Dobler

Message: Break test to verify I am getting email.

View the changeset:

<https://github.com/pencil-code/pencil-code/compare/9bbc35803017...e9d9d7be3103>

View the full build log and details:

https://travis-ci.com/pencil-code/pencil-code/builds/75180843?utm_source=email&utm_

Pros

- Tests run on Travis-CI hardware, not ours
- Very straight-forward to configure: Activate on Github and add a file `.travis.yaml`:

```
language: c
sudo: required
```

```
git:
  depth: 3
```

```
before_install:
  - sudo apt-get update
  - sudo apt-get install gfortran
  - sudo apt-get install libopenmpi-dev openmpi-bin
  - sudo apt-get install python-matplotlib
  - gfortran --version
```

```
script:
  - source sourceme.sh
  - pc_auto-test --host-id travis-ci -t --max-level 1 --script-tests=python
```

Cons

- Limited flexibility
 - Limits: Test jobs time out if they
 - * write no output for 10 minutes,
 - * take longer than 50 minutes.
 - Will be hard to integrate IDL
 - * But that holds for any server where IDL is not already installed and licensed