iterate and ship

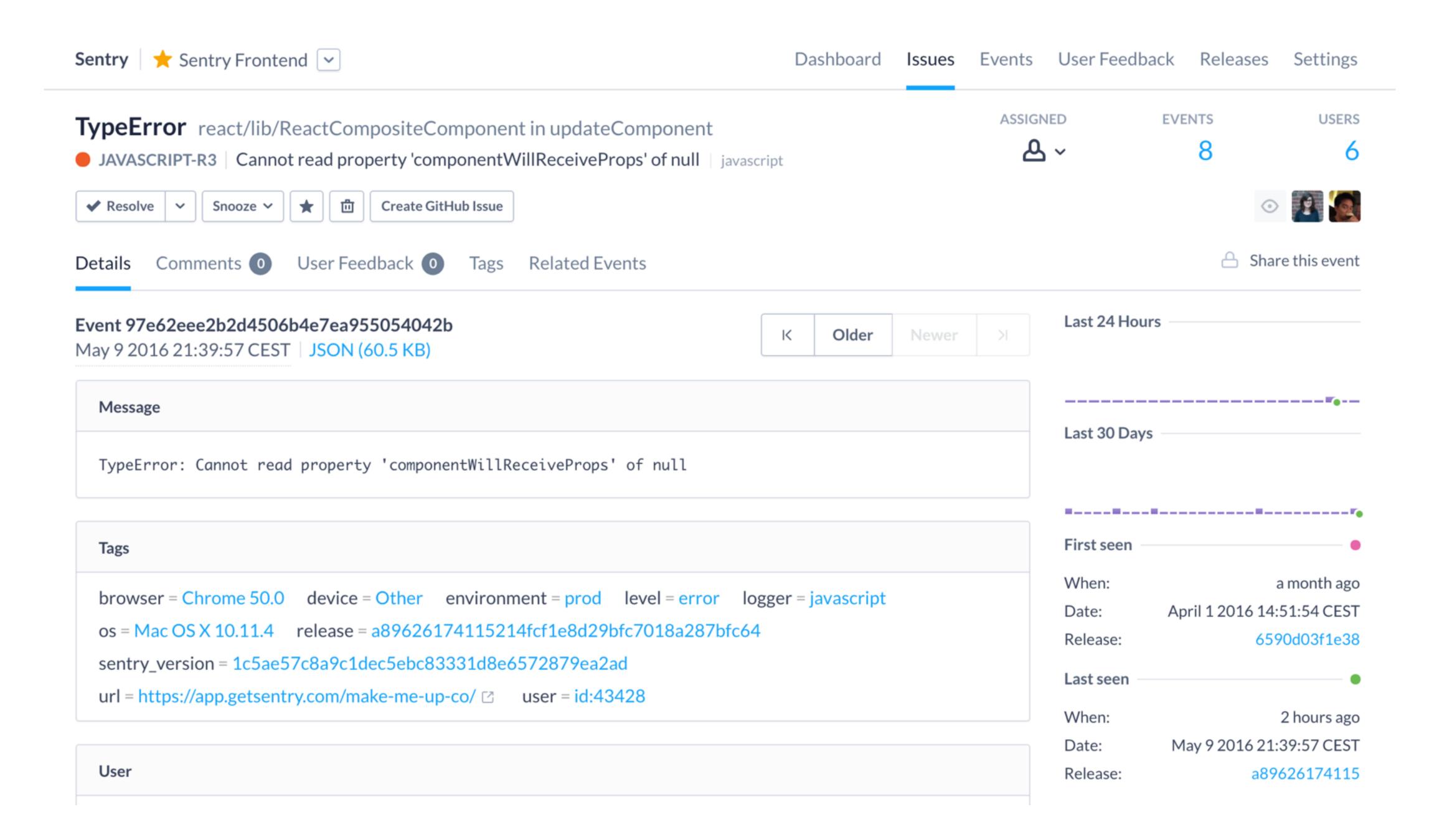
Armin Ronacher

@mitsuhiko

Flask / Sentry / Lektor

SENTRY





Breadcrumbs			
•••	Show 11 collapsed crumbs		
(5)	xhr	GET /api/0/subscriptions/make-me-up-co/ [200]	21:39:46
>_	sentry	TypeError: Cannot read property '_currentElement' of null	21:39:46
(2)	xhr	<pre>GET https://t687h3m0nh65.statuspage.io/api/v2/incidents/unresolved.json? _=1462822786179 [200]</pre>	21:39:46
<u>a</u>	ui.click	<pre>div.col-md-2.org-sidebar > div > ul.nav.nav-stacked > li > a</pre>	21:39:51
>_	navigation to from	<pre>/organizations/make-me-up-co/teams/ /make-me-up-co/</pre>	21:39:51
۶_	sentry	TypeError: Cannot read property '_currentElement' of null	21:39:51
<u>a</u>	ui.click	span.pull-right.org-selector.dropdown > a.dropdown-toggle > span	21:39:54
<u>a</u>	ui.click	ul.dropdown-menu-right.dropdown-menu > li.active > a	21:39:56
>-	navigation to from	/make-me-up-co/ /organizations/make-me-up-co/teams/	21:39:56
(A)	error	TypeError: Cannot read property 'componentWillReceiveProps' of null	21:39:57

BadRequest

```
{u'status': u'invalid event', u'message': u'Event object is invalid', u'errors': [u'Service key is the wrong
length (should be 32 characters)']} (99999): []
sentry/utils/safe.py in safe_execute at line 26 | application
  result = func(*args, **kwargs)
                                                                                                                         +
sentry/plugins/bases/notify.py in rule_notify at line 89 | application
  self.notify(notification)
sentry/plugins/bases/notify.py in notify at line 61 | application
 56.
  57.
          def notify(self, notification):
  58.
              self.logger.info('Notification dispatched [event=%s] [plugin=%s]',
                               notification.event.id, self.slug)
  59.
              event = notification.event
  60.
              return self.notify_users(event.group, event)
 61.
  62.
  63.
          def rule_notify(self, event, futures):
  64.
              rules = []
  65.
              for future in futures:
  66.
                  rules.append(future.rule)
                          <Event at 0x7f68a2996cd0: id=4158489117L, project_id=66490L, group_id=127894815L>
event
                          <sentry.plugins.base.structs.Notification object at 0x7f68a24cd488>
notification
self
                          <sentry_pagerduty.plugin.PagerDutyPlugin object at 0x7f68a4990188>
sentry_pagerduty/plugin.py in notify_users at line 54 | application
  client.trigger_incident(service_key, description, details=details)
```

THE TWO PRODUCTS _



sentry vs 'getsentry'

sentry

open source repo on-premise monthly releases 'getsentry'

billing & quotas depends on sentry hourly deploys

THE GOALS



deploy in seconds
be unable to screw up
and if you do: instant rollbacks

tag a release once a month

TWORKFLOW _







review



integration



deploy

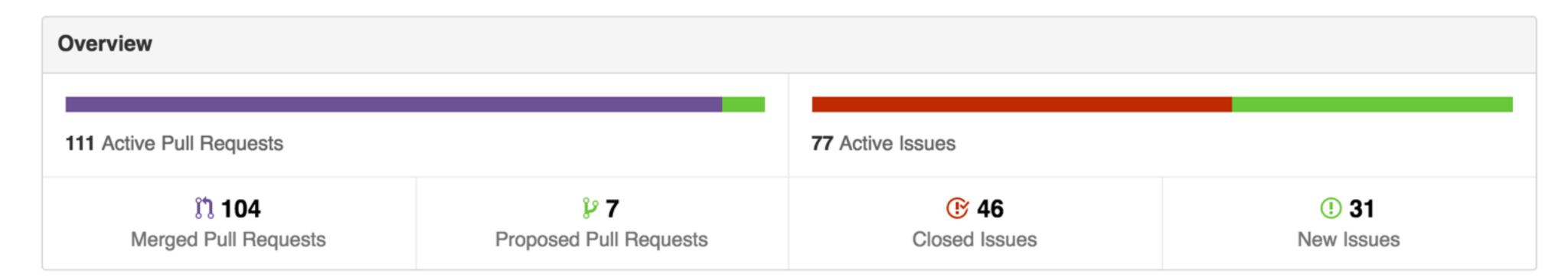
requires good test coverage requires good local setup makes it easier for newcomers

COMMITTING _

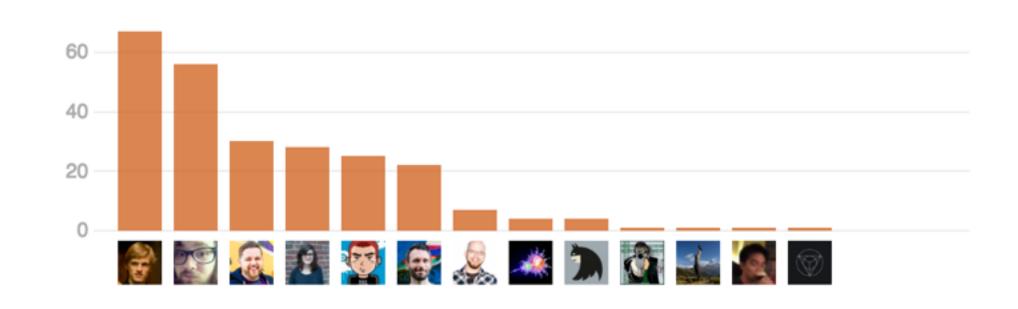
lint on commit!

mitsuhiko at herzog in ~/Development/sentry on git:master+? workon sentry
\$ git ci -am 'Performance improvements to the data scrubber.'
src/sentry/utils/data_scrubber.py:147:1: F401 'unused' imported but unused

On Prem: 1 Release / Month Hosted: 5 Deployments / Day



Excluding merges, 13 authors have pushed 213 commits to master and 247 commits to all branches. On master, 251 files have changed and there have been 8,385 additions and 1,681 deletions.



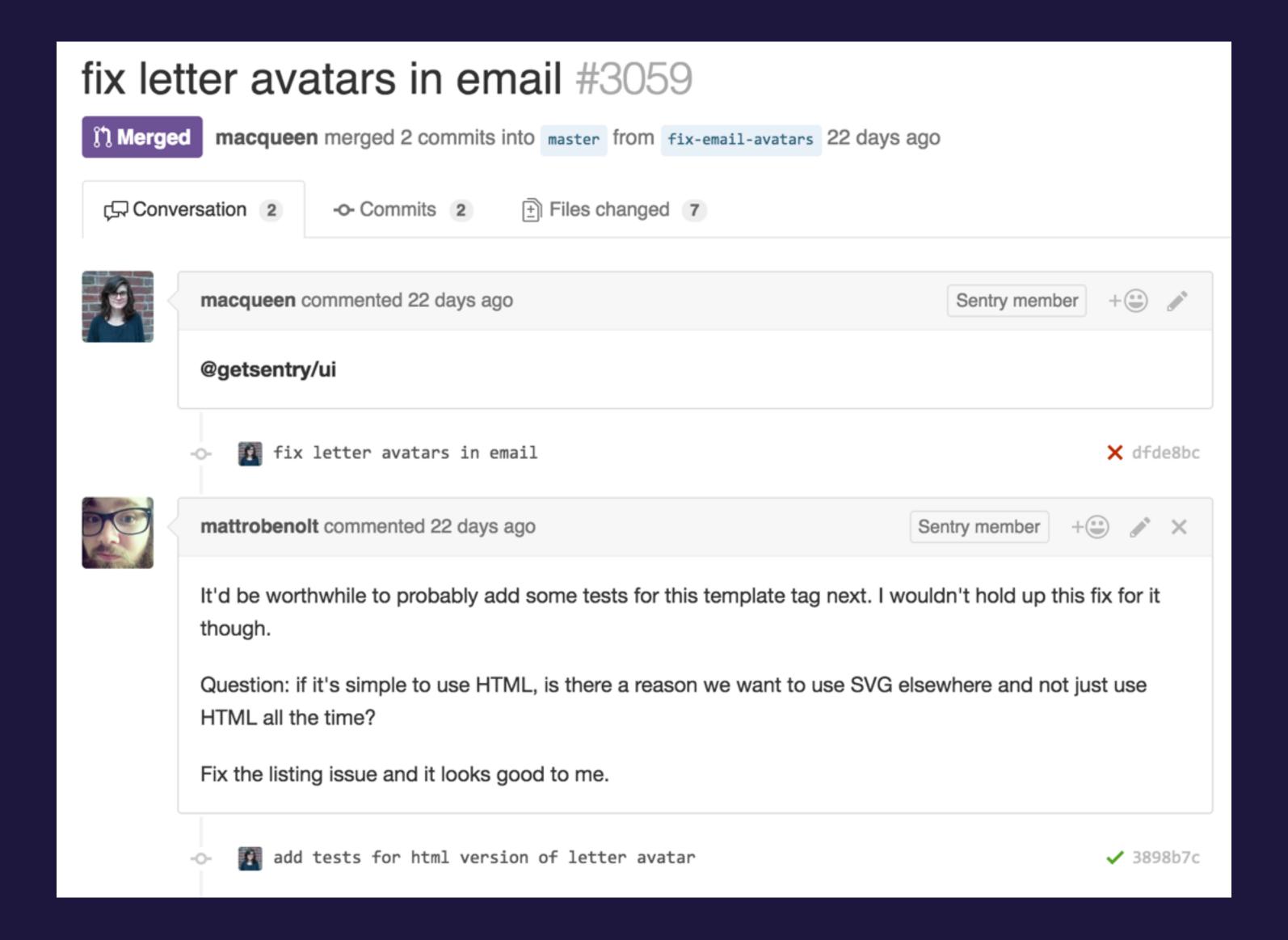


master is stable



- 1. branch off master
- 2. pull request
- 3. merge

all the pull requests



!! AVOID DOWNTIME!!

postgres <3

transactional ddl, concurrent indexes, cheap alter table add nullable columns

bidirectional compatibility

separation of state and connections

CONTINUOUS TESTING J



sentry

travis-ci.org
test all the code

'getsentry'

travis-ci.com

test code relevant for us

CONTINUOUS DELIVERY



FREIGHT

wait for travis > build > ship

freight Deploy **ACTIVE DEPLOYS** docs/production#440 5c0c97a Started a few seconds ago – by armin master **DEPLOY HISTORY** docs/production#439 5c0c97a Finished 2 hours ago – 6 min – by matt master getsentry/production#2061 d3379cc Finished 3 hours ago – 18 min – by matt master getsentry/production#2060 e9e7e4c Finished 3 hours ago – 18 min – by matt master getsentry/production#2059 a896261 Finished 5 hours ago – 3 min – by david@getsentry.com a89626174115214fcf1e8d29bfc7018a287bfc64 getsentry/production#2058 a896261

master

Failed 6 hours ago – 17 min – by dcramer

bidirectional communication with the main slack channel

```
00:48 ☆ armin hubot deploy docs

00:48 Freight BOT [docs/production] Starting deploy #440 (5c0c97a)

[docs/production] Deploy #440 (5c0c97a) was cancelled after 26.41s
```

dev never matches prod :(

thus: fast rollbacks!

(backwards + forwards compatibility)

CODE STRUCTURE



large systems are organisms

not all things will run the same code at the same time

data schema ~ code behavior

break up larger features

feature flag it!

(we shipped some code to on-prem we backed out)

「MOVING PARTS」

keep dev basic: fewer parts

do not diverge dev from prod too much

virtual machines and docker are not an acceptable dev environment

REPRODUCIBLE BUILDS



pip freeze / npm shrinkwrap

nothing is more frustrating than a failed deploy because a dependency of a dependency of a dependency of a dependency pushed out a broken release build once > ship to many

MONITOR FAILURES



associate failures to users

map support requests to failures

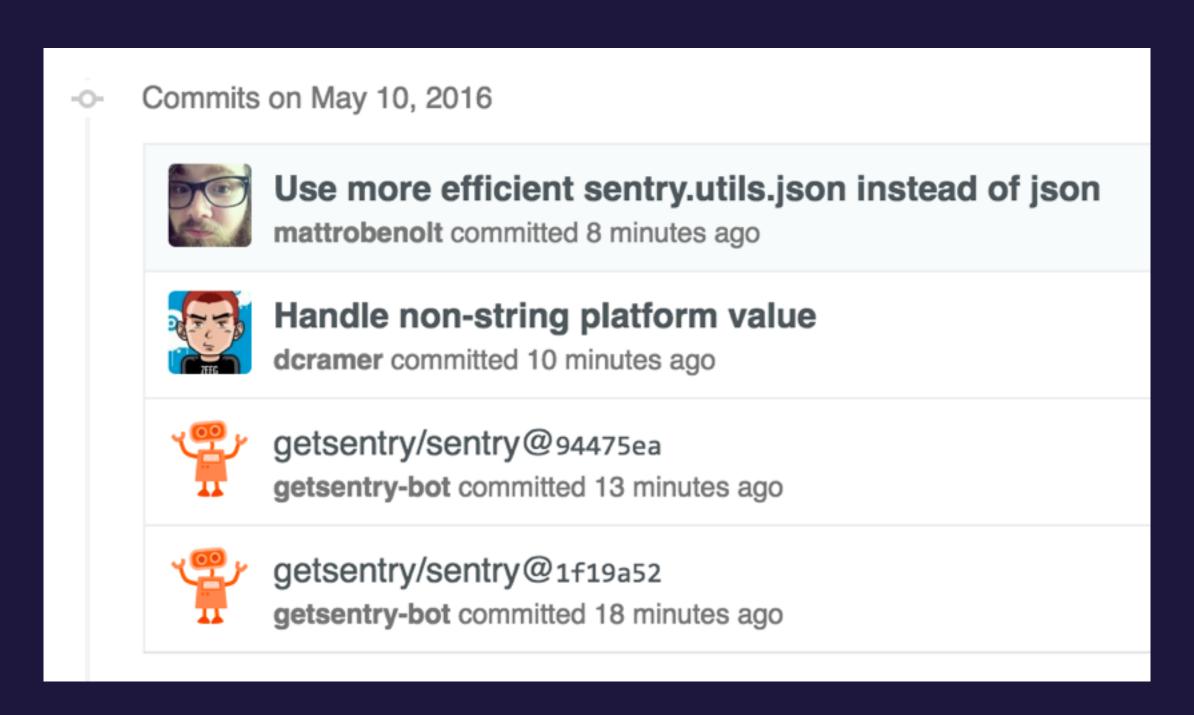
use sentry:-)

FRIENDLY ROBOTS

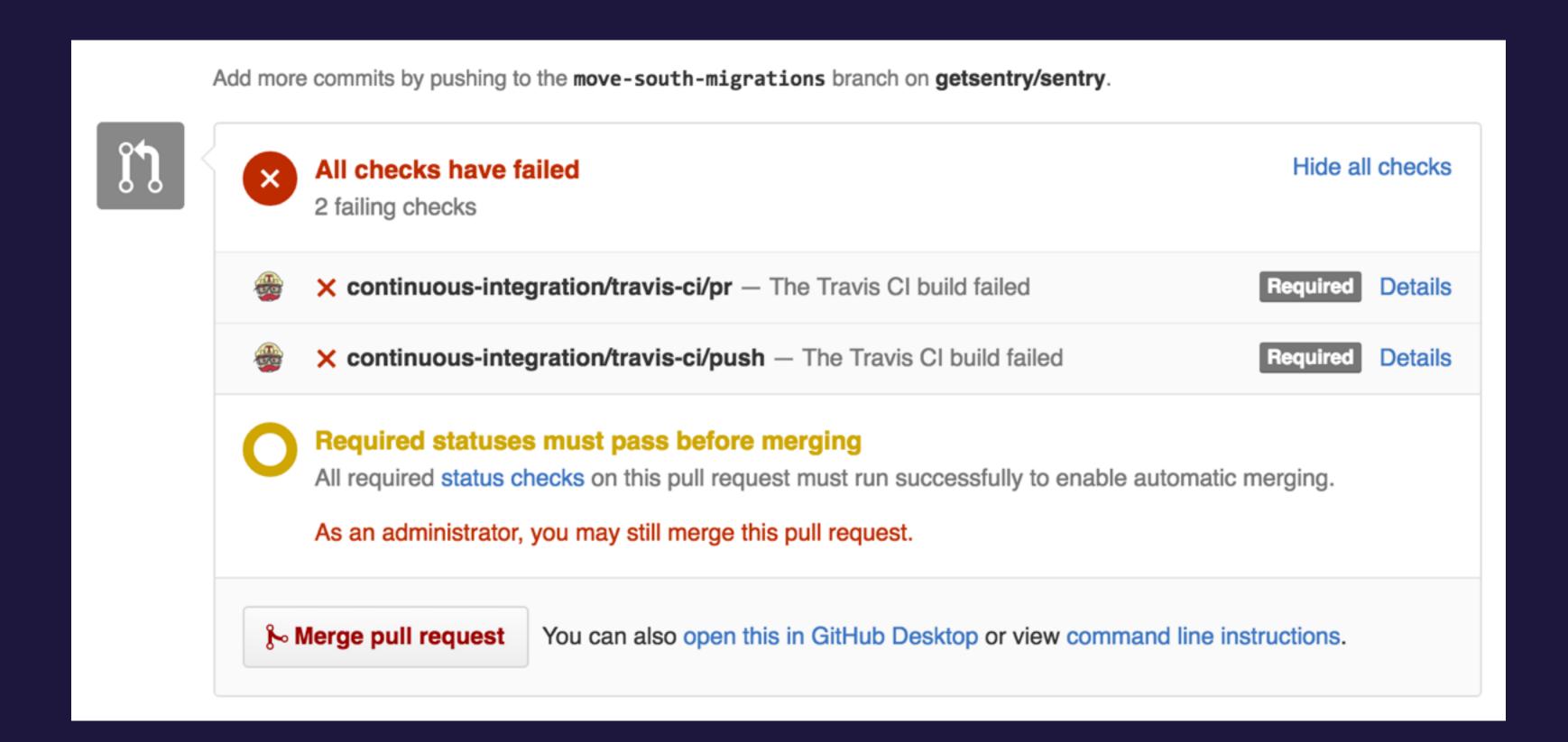


replace yourself!

bots and webhooks



github hooks



notify to communication hub

```
jtcunning and seeing as how we have 500k+ pulls, we're probably part of that list

Freight BOT [getsentry/production] Successfully deployed #2060 (e9e7e4c) after 1082.96s

matt Yeah, I have no way to gauge that scale.

Like, that seems like a super crazy amount, haha
```

BETTER CLIMATE

the more robots,
the better the integration,
the smaller the fear of doing damage

If you can launch a feature on your first day of work that's motivating

also: happy customers



