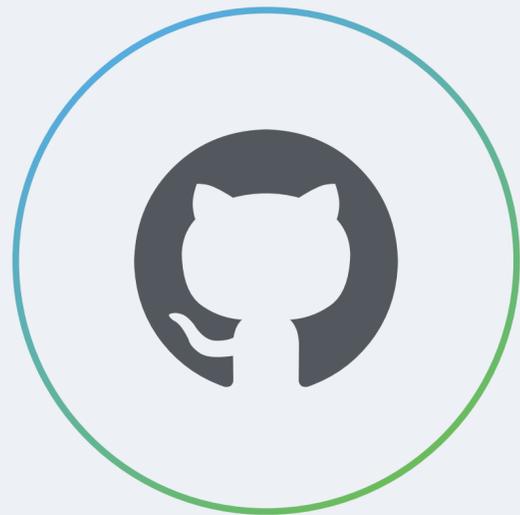


Shipping at Scale

ChatOps at GitHub



Georgi Knox

Platform Engineer

 @GeorgiCodes

 @GeorgiCodes

 georgi.io

What is GitHub?



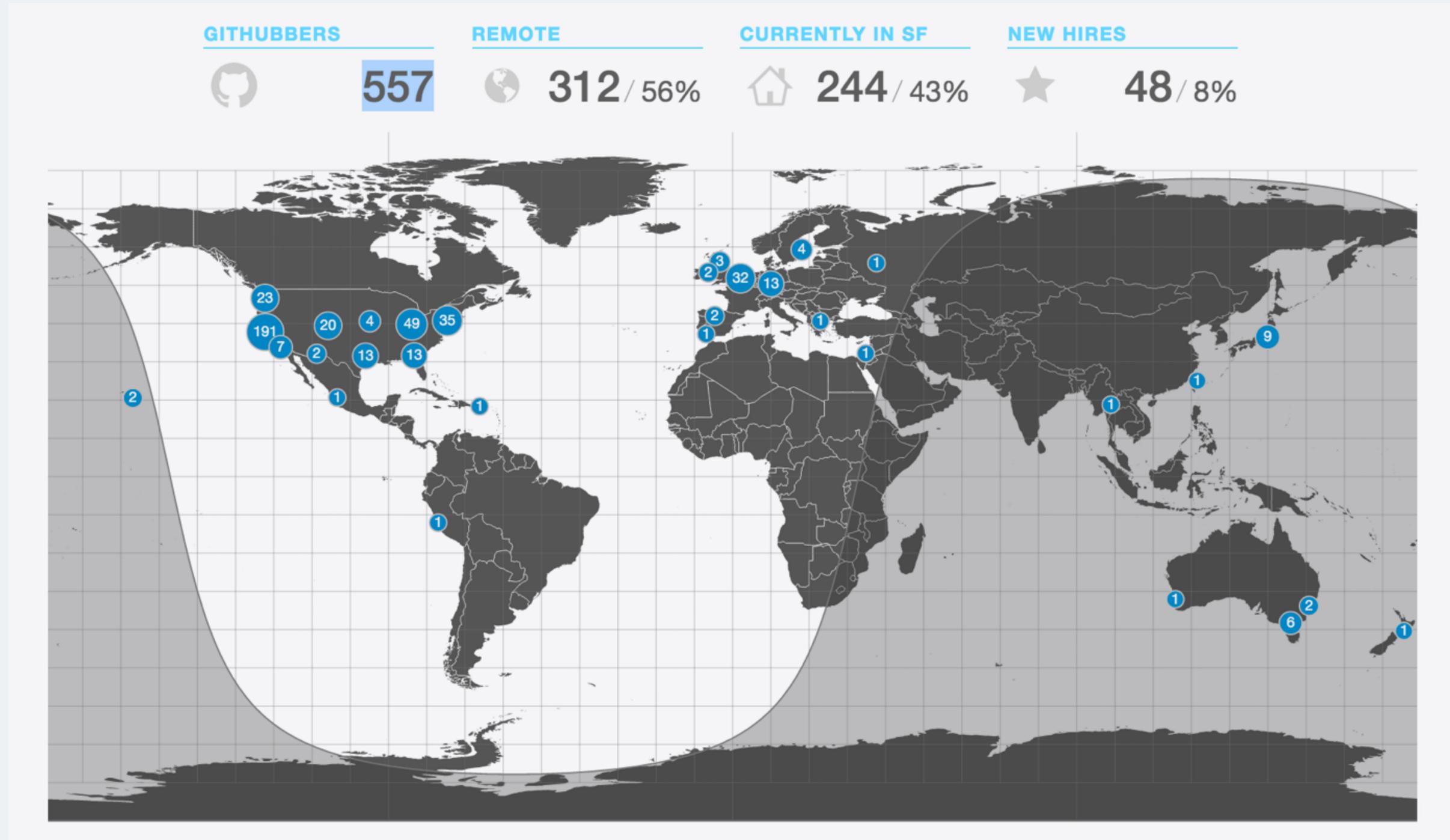
14
million

DEVELOPERS ARE
COLLABORATING ON

35
million

REPOSITORIES ON
GITHUB RIGHT NOW

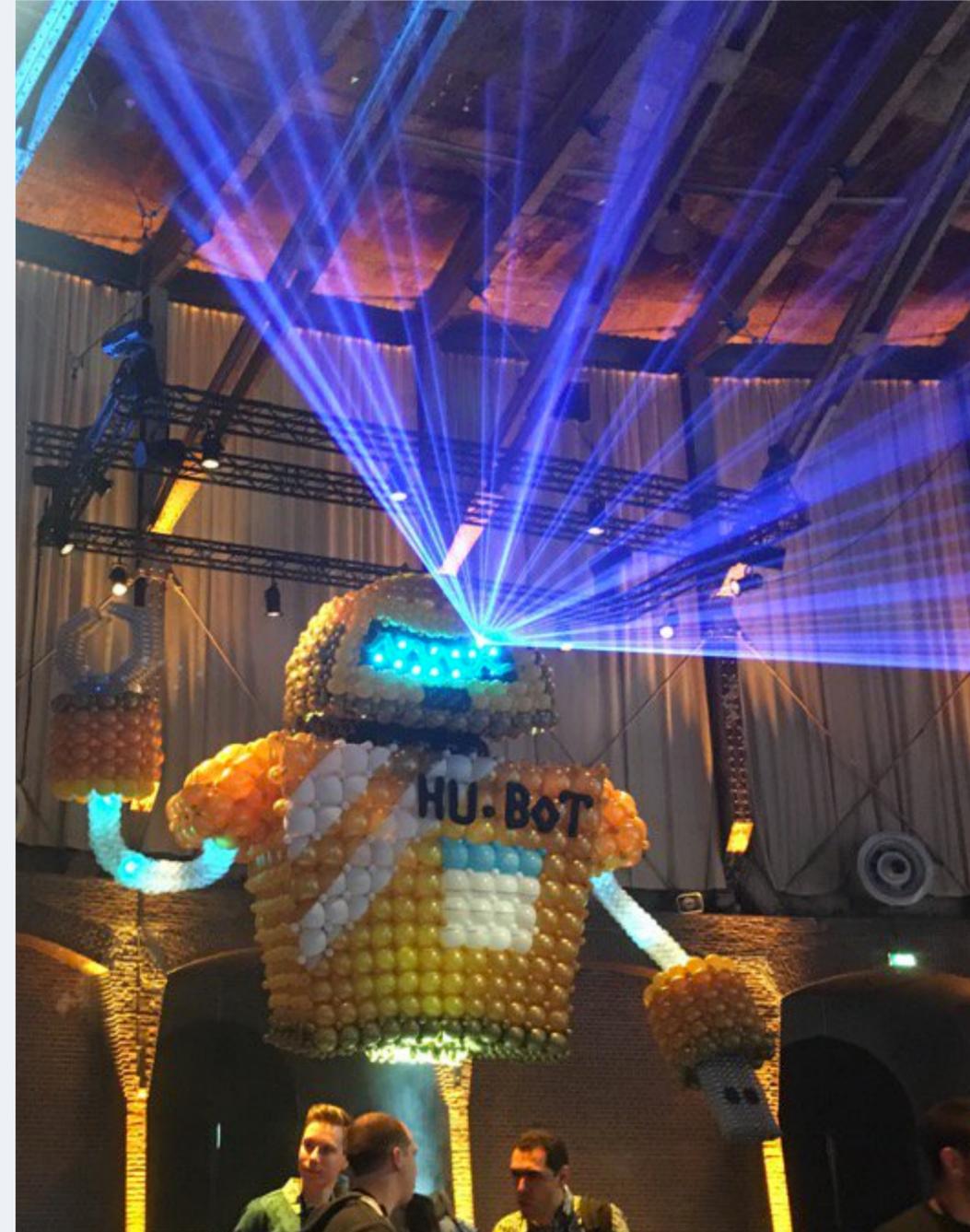
Who is GitHub?

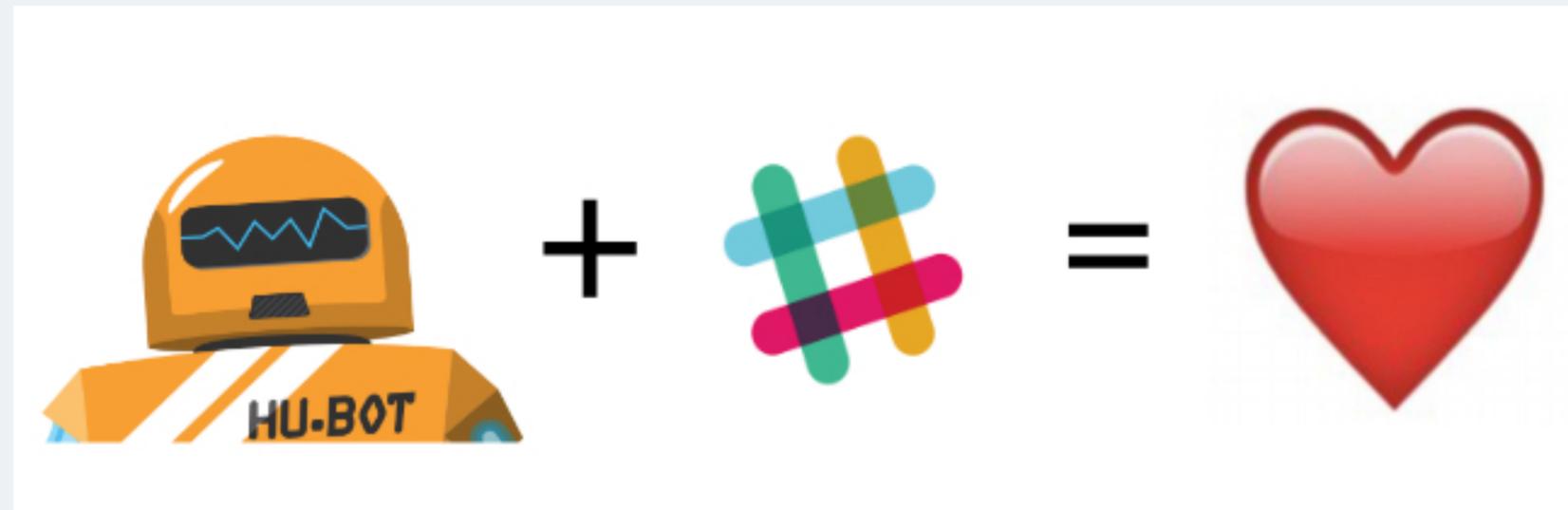


Build and ship whenever and from wherever



Introducing Hubot





WE USE **CHAT** TO RUN **GITHUB**

Hubot: GitHub



- subscribe channel to repo
- open/closed issues are linked
- link Slack chat to issue
- master commits with diff
- automatic deploys on merge
- link to team mentions

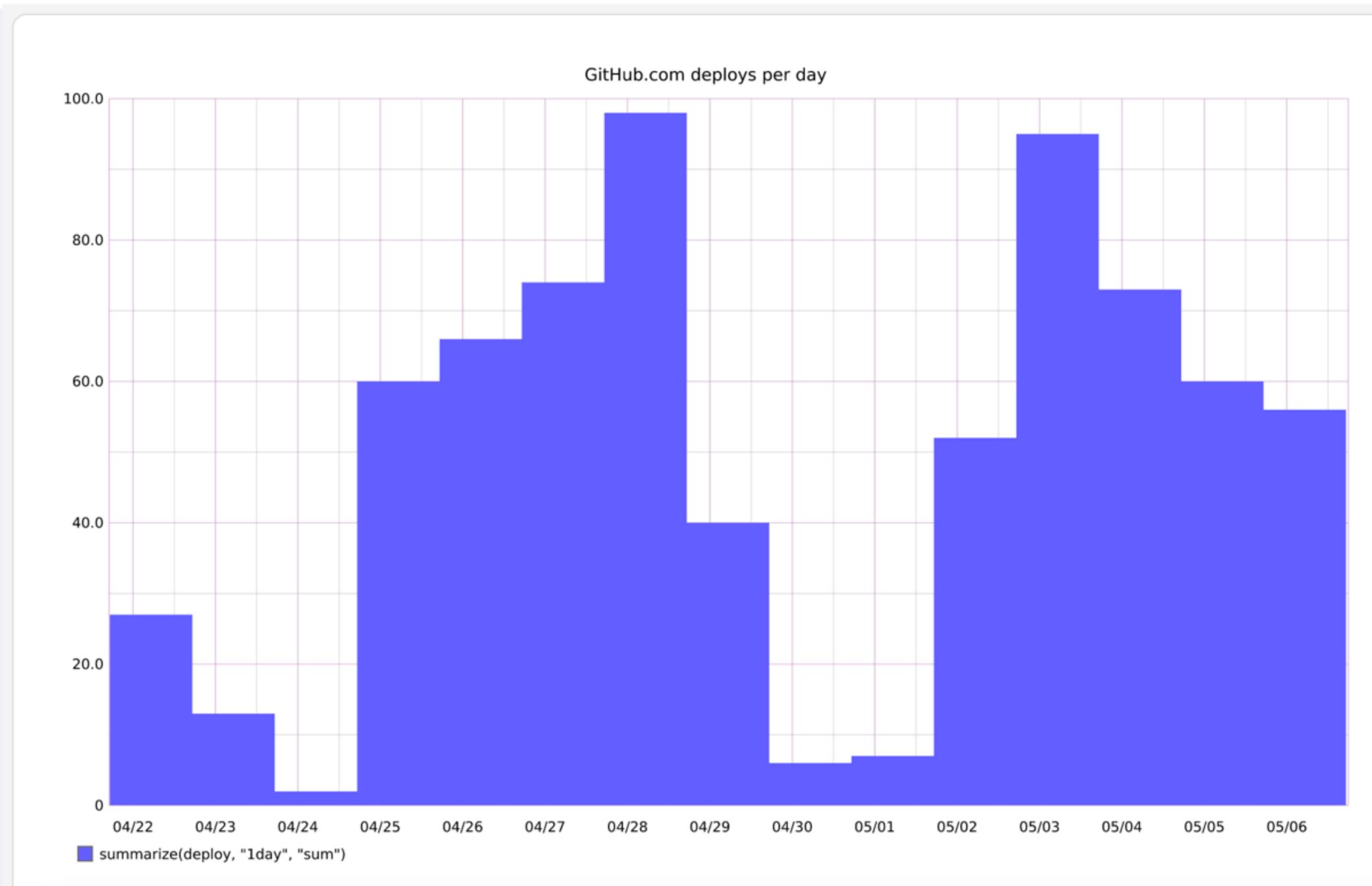
hubot BOT 12:11 AM
ammeep opened [github/high-availability#60](#): Project: DGit Maintenance Task

ammeep opened [github/high-availability#61](#): Project: External data for queued jobs

jnunemaker 9:45 AM


hubot BOT 9:59 AM
[[high-availability:3y-1y-90d-roadmaps](#)]: jnunemaker pushed [1 commit](#)
[0212455](#): Tweak roadmap formatting and add tracking issue for redis – jnunemaker

Hubot: Deploy



Deploys per day over 2 weeks



hubot queue me to deploy my_branch



`hubot deploy my_branch to prod`



hubot deploy my_branch to prod



hubot BOT 6:14 PM

| @georgicodes's production [deployment](#) of github/georgicodes/fix_audit_logs (bc6cfdb) is done! (150s)

| @georgicodes, make sure you watch for exceptions [in haystack](#) and perf issues at [graphme](#)

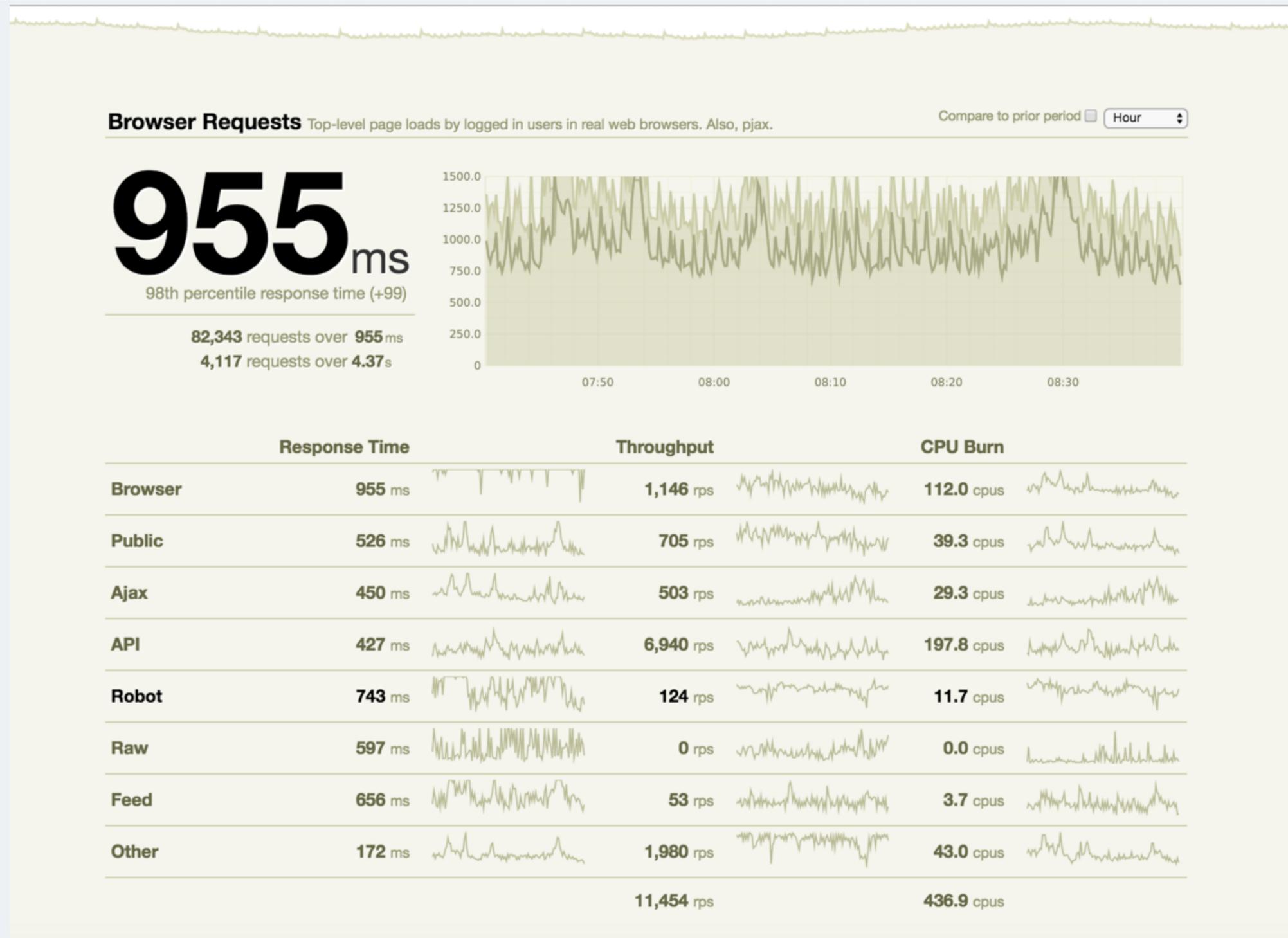
Hubot: Haystack



The screenshot displays the Haystack dashboard interface. At the top, there's a header with the 'HAYSTACK' logo and a 'GITHUB' dropdown menu. Below the header are two horizontal bar charts: 'Browser Response Time' (peaking at 380) and 'Exceptions' (peaking at 0.0). A timeline at the bottom shows user avatars and timestamps from 06:45 to 09:45. The main content area is divided into a left sidebar and a right main panel. The sidebar includes a search bar, navigation tabs for 'Overview', 'Dashboard' (selected), 'Firehose', and 'Experienced by you', and a 'Latest Deploys' section with four entries: 'clear_user_session_for_oauth', 'gist-fix-broken-render-on-search-results', 'member-privs-flash', and 'first_commit_token_scanning_fix'. The main panel is titled 'Dashboard' and shows a list of error types with their counts and recent occurrences:

| Error Type | Count | Last Occurred |
|---------------------------|-------|----------------|
| Yajl::ParseError | 807 | just now |
| Repository::CommandFailed | 27 | 41 seconds ago |
| NoMethodError | 16 | 27 minutes ago |
| GitRPC::Timeout | 16 | 2 minutes ago |
| GitRPC::InvalidRepository | 9 | 41 seconds ago |

Hubot: GraphMe



Hubot: Incident Management



Hubot: Incident Management



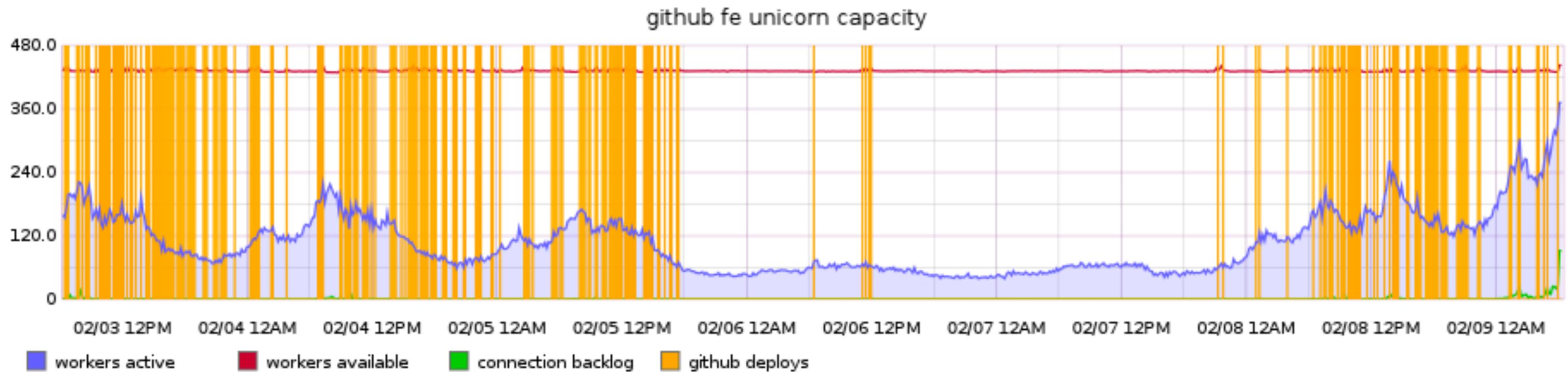
hubot ack 12345

Hubot: Incident Management



hubot ack 12345

hubot graph me -1w @unicorn.listeners.github

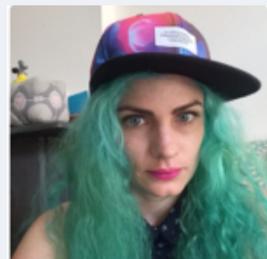
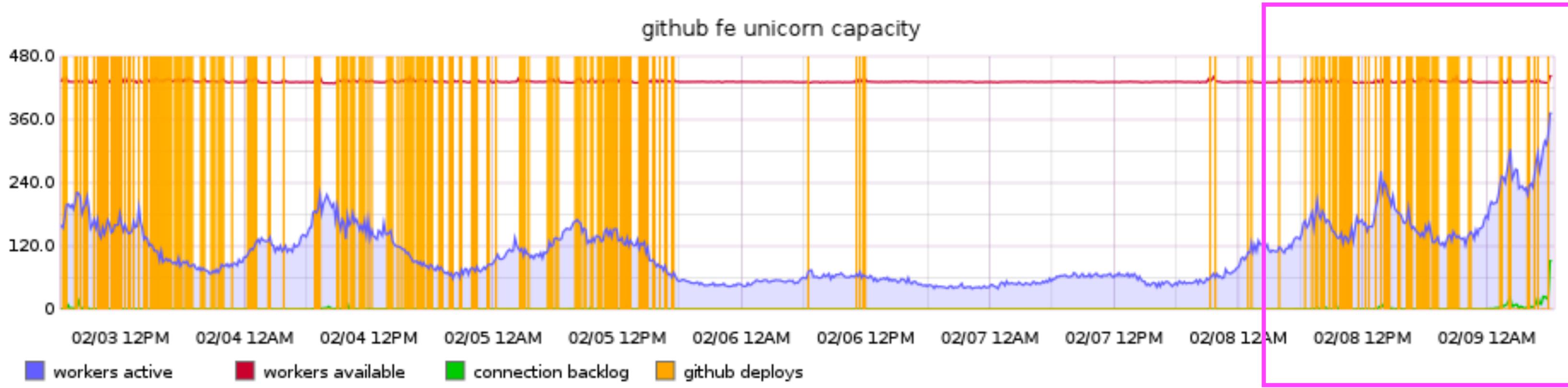


Hubot: Incident Management



hubot ack 12345

hubot graph me -1w @unicorn.listeners.github



These unicorn listener warnings are going to cause problems soon and we're hurting for capacity right now

Hubot: Incident Management



hubot ack 12345



Hubot: Incident Management

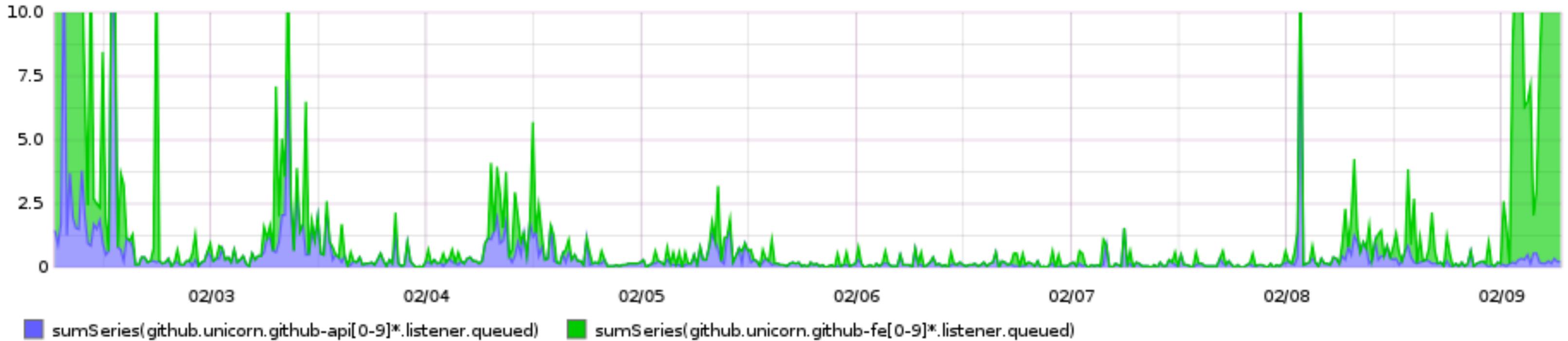


hubot ack 12345

hubot graph me -1w @unicorn.listeners.api.v.dotcom



unicorn backlog by api



Hubot: Incident Management

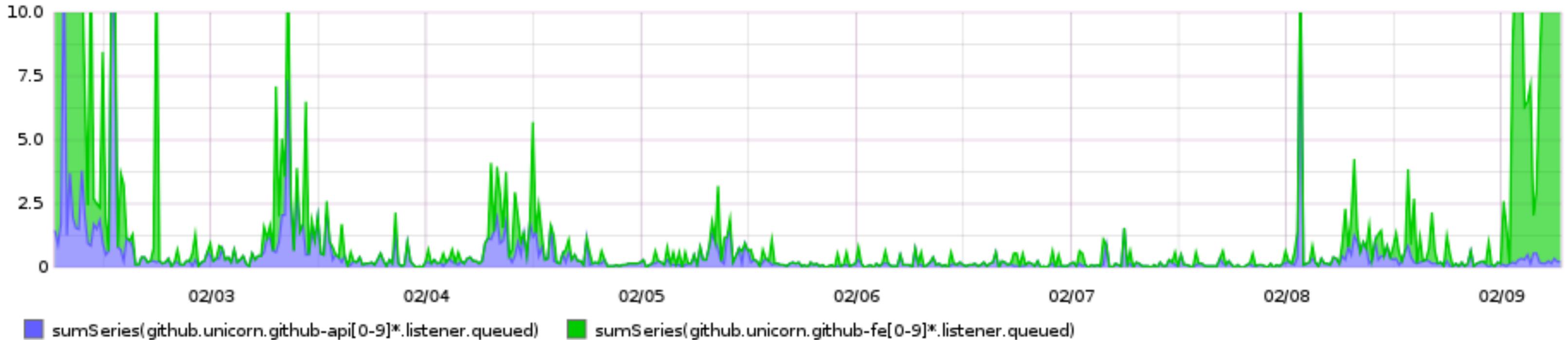


hubot ack 12345

hubot graph me -1w @unicorn.listeners.api.v.dotcom



unicorn backlog by api



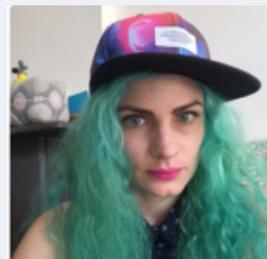
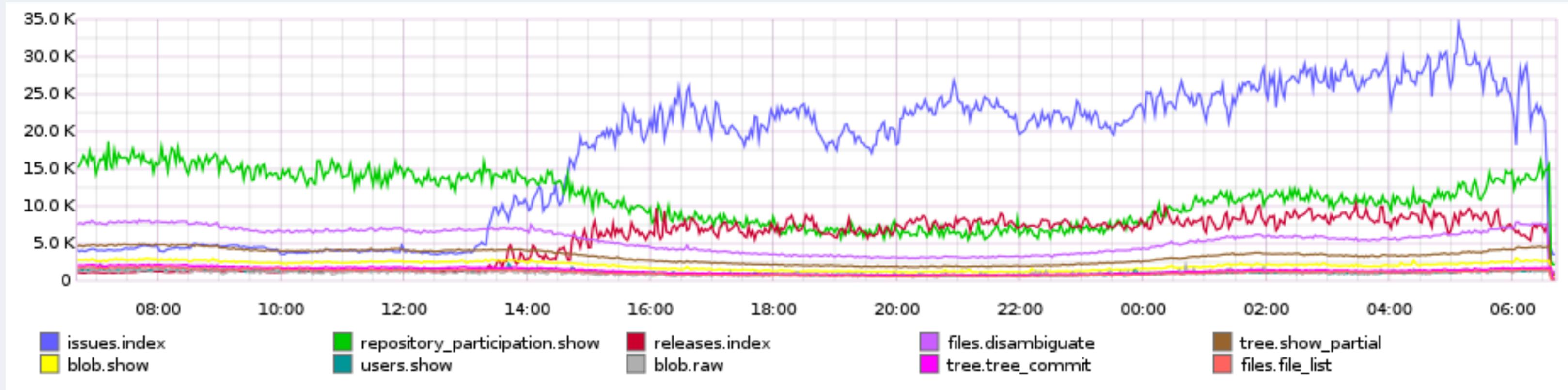
Whatever it is, its doesn't seem to be impacting the API.



Hubot: Incident Management



hubot graph me -1day @github.browser.response.times



Hmm, looks like lots of requests to list repository issues and releases

Hubot: Incident Management



I'm going to add 10 more FEs until we figure this thing out.



Hubot: Incident Management



I'm going to add 10 more FEs until we figure this thing out.

```
hubot gpanel host bulk-install app=github role=fe count=10
```



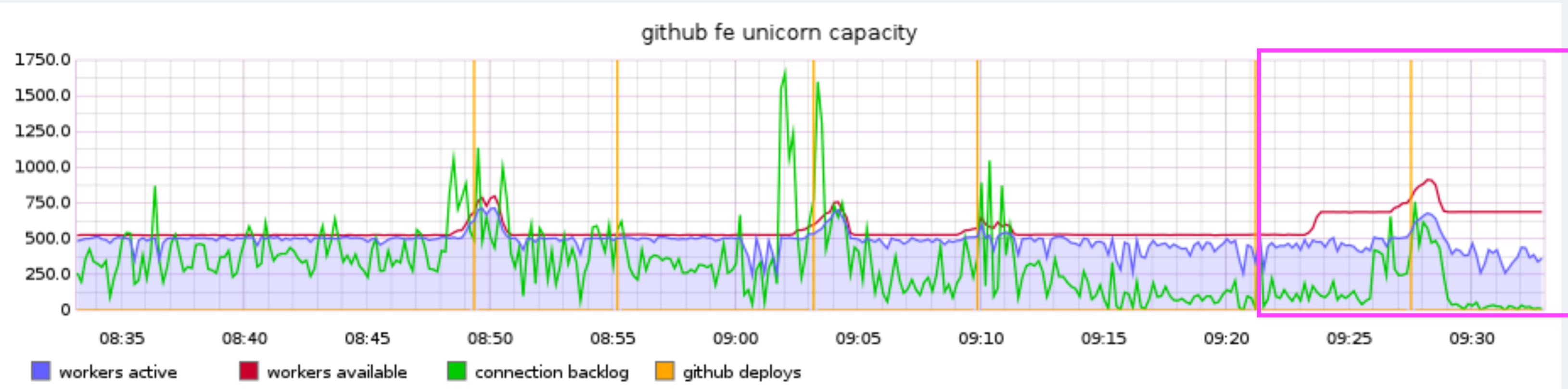
Hubot: Incident Management



I'm going to add 10 more FEs until we figure this thing out.

```
hubot gpanel host bulk-install app=github role=fe count=10
```

```
hubot graph me -1h @unicorn.listeners.api.v.dotcom
```





SHARED CONTEXT



KNOWLEDGE EXPERTS CAN
EMPOWER **EVERYONE**



WHAT'S NEXT?



THANK YOU