ChatOps at GitHub
Jesse Newland
jnewland
ChatOps at GitHub
Hubot image me robawt

Ben
hubot tell me the rules

Hubot
1. A robot may not injure a human being or, through inaction, allow a human being to come to harm.
2. A robot must obey any orders given to it by human beings, except where such orders would conflict with the First Law.
3. A robot must protect its own existence as long as such protection does not conflict with the First or Second Law.
git checkout -b git-gh13

# bump version number

git commit -am 'bump git version'

git push origin git-gh13

# create pull request
Build #108816
(5fe75932f26ea62cb5fc5e3d0cb302cc2461d11e)
of puppet/git-gh13 was successful (421s) github/
puppet@567ea48...5fe7593
hubot deploy puppet to production

puppet noop git-gh13 fs1
puppet force git-gh13 fs1
graph me -1h @collectd.load(fs1)

# merge pull request
# ci runs
# auto-deploy

hubot puppet force production fs
graph me -1h @collectd.load(fs*)
log me hooks github/github
Bootstrapping...
Gem environment up-to-date.
Running librarian-puppet...
Generating puppet environments...
Cleaning up deleted branches...
Done!

Sending 'restart' command
The following watches were affected:
puppetmaster_unicorn
hubot deploy puppet to production

puppet noop git-gh13 fs1

puppet force git-gh13 fs1

graph me -1h @collectd.load(fs1)

# merge pull request
# ci runs
# auto-deploy

hubot puppet force production fs

graph me -1h @collectd.load(fs*)

log me hooks github/github
** [out :: fs1a.rs.github.com] info: Applying configuration version '8fb1a2716d5f950b836e511471a2bdac3ed27090'

** [out :: fs1a.rs.github.com] notice: /Stage[main]/Github::Common_packages/Packag[git]/ensure: would have changed from '1:1.7.10-1+github12' to '1:1.7.10-1+github13'
hubot deploy puppet to production

puppet noop git-gh13 fs1

puppet force git-gh13 fs1

graph me -1h @collectd.load(fs1)

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...
hubot deploy puppet to production
puppet noop git-gh13 fs1
puppet force git-gh13 fs1

graph me -1h @collectd.load(fs1)

# merge pull request
# ci runs
# auto-deploy

hubot puppet force production fs

graph me -1h @collectd.load(fs*)
log me hooks github/github
The graph shows the @collectd.load(fs1 {a,b}) over time. The data is divided into two lines, one for fs1a_rs_github.com and another for fs1b_rs_github.com. The time axis runs from 13:05 to 14:00, with intervals at 5-minute intervals.
hubot deploy puppet to production
puppet noop git-gh13 fs1
puppet force git-gh13 fs1
graph me -1h @collectd.load(fs1)

# merge pull request
# ci runs
# auto-deploy

hubot puppet force production fs
graph me -1h @collectd.load(fs*)
log me hooks github/github
[puppet/master] Merge pull request #8406 from github/git-gh13 – Jesse Newland
( github/puppet@567ea48 )
hubot deploy puppet to production
puppet noop git-gh13 fs1
puppet force git-gh13 fs1
graph me -1h @collectd.load(fs1)

# merge pull request
# ci runs
# auto-deploy

hubot puppet force production fs
graph me -1h @collectd.load(fs*)
log me hooks github/github
Build #108817
(5fe75932f26ea62cb5fc5e3d0cb302cc2461d11e)
of puppet/master was successful (399s)
hubot deploy puppet to production

puppet noop git-gh13 fs1
puppet force git-gh13 fs1

graph me -1h @collectd.load(fs1)

# merge pull request

# ci runs

# auto-deploy

hubot puppet force production fs

graph me -1h @collectd.load(fs*)

log me hooks github/github
jnewland is deploying puppet/master (863f7ff..567ea48) to production [#37789]
Bootstrapping...

Gem environment up-to-date.

Running librarian-puppet...

Generating puppet environments...

Cleaning up deleted branches...

Done!

Sending 'restart' command

The following watches were affected:

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hubot deploy puppet to production

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graph me -1h @collectd.load(fs*)

# merge pull request
# ci runs
# auto-deploy

hubot puppet force production fs

graph me -1h @collectd.load(fs*)
log me hooks github/github
** [out :: fs2a.rs.github.com] info: Applying configuration version '8fb1a2716d5f950b836e511471a2bdac3ed27090'

** [out :: fs7b.rs.github.com] info: Applying configuration version '8fb1a2716d5f950b836e511471a2bdac3ed27090'

** [out :: fs2a.rs.github.com] notice: /Stage[main]/Github::Common_packages/Package[git]/ensure: ensure changed '1:1.7.10-1+github12' to '1:1.7.10-1+github13'

** [out :: fs7b.rs.github.com] notice: /Stage[main]/Github::Common_packages/Package[git]/ensure: ensure changed '1:1.7.10-1+github12' to '1:1.7.10-1+github13'

...
hubot deploy puppet to production
puppet noop git-gh13 fs1
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hubot puppet force production fs
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hubot puppet force production fs
hubot graph me -1h @collectd.load(fs*)
hubot log me hooks github/github
Hubot
https://papertrailapp.com/events?q=hooks%2B...

View paste (1 more line)

Sep 25 22:48:20 fs9b.rs.github.com hooks/post-receive { "pid":7150, "ppid":1498029 }
Sep 25 22:48:36 fs9b.rs.github.com hooks/post-upload-pack { "pid":12300, "ppid":7150 }
Boom
ChatOps
ALL OF THE APIS
Why is this stupid chat bot so important to Ops?
deploy puppet to production
puppet noop git-gh13 fs1
puppet force git-gh13 fs1
graph me -1h @collectd.load(fs1)

# merge pull request
# ci runs
# auto-deploy

puppet force production fs
graph me -1h @collectd.load(fs*)
log me hooks github/github
Everyone sees all of that happen
Everyone sees all of that happen on their first day
OBJECT ACQUISITION DEVICE
3,000,000 PSI
"DEATH PROOF" CLAW ARM

VISUAL ACQUISITION SENSOR
1M DPI RETINAL TRANSCEIVER WITH
HIGH FIDELITY SQUIGGLY LINE OUTPUT

EXTERNAL INPUT TERMINAL
PREDICTIVE LOGIC
MINI-QUERY TECHNOLOGY

PLASMA ARM
HYPOTHETICAL TERMINUS
POINT RETENTION TECHNOLOGY

USB 12 NANO CONNECTOR
HIGH EFFICIENCY
INSERT/RETRACT POLYMER
hubot ci status github/smoke-perf
hubot deploy github/smoke-perf to prod/fe1
hubot graph me -10min @app-perf
hubot procs unicorn
hubot resque critical
hubot graph me -10min @collectd.load(fe*)
hubot conns fe1
hubot log me smoke fe1
hubot lbctl disable fe1
hubot status yellow Bad deploy. Reverting now.
hubot who’s on call
hubot pingdom checks
hubot upset me

there is no need to be upset
hubot deploy github to prod/fe1
hubot log me smoke fe1
hubot air drum me
hubot status green All systems go.
hubot whois 4.9.23.22
hubot khanify spammers
hubot play in the air tonight
ChatOps
By placing tools directly in the middle of the conversation
Everyone is pairing all of the time
Teaching by doing
This was always my main motivation with hubot - teaching by doing by making things visible. It's an extremely powerful teaching technique - @rtomayko
sr
jnewland how do you get that list of big repos? disk_hogs or something

jnewland
/disk-hogs
Communicate by doing
THINGS I HAVEN’T ASKED RECENTLY
THINGS I HAVEN'T ASKED RECENTLY

how's that deploy going?
THINGS I
HAVEN'T ASKED
RECENTLY

are you deploying that or should i?
how's that deploy going?
THINGS I

HAVEN'T ASKED

RECENTLY

are you deploying that or should I?

how's that deploy going?

is anyone responding to that nagios alert?
is that branch green?
are you deploying that or should i?
how's that deploy going?
is anyone responding to that nagios alert?
is that branch green?
are you deploying that or should I?
how’s that deploy going?
is anyone responding to that Nagios alert?
how does load look?
THINGS I HAVEN’T ASKED RECENTLY

did anyone update the status page?

is that branch green?

are you deploying that or should I?

how’s that deploy going?

is anyone responding to that nagios alert?

how does load look?
did anyone update the status page?

is that branch green?

are you deploying that or should I?

how's that deploy going?

is anyone responding to that Nagios alert?

how does load look?

did that deploy finish?
Whoa, 83/148 meatbags are remote (56%)
Hide the ugly
hubot nagios ack fs3b/syslog

# fix stuff

nagios check fs3b/syslog
nagios status fs3b/syslog

hubot nagios downtime fs3b/syslog 90
nagios mute fs3b/syslog
nagios unmute fs3b/syslog
Dashboard

Your open incidents
0 triggered 0 acknowledged

Incidents in Your Account

Resolve Acknowledge Reassign

Opened On Status Incident Details
jnewland  Jesse Newland
/pager sup

Hubot
Chillin
Mobile

FTW
**jnewland**

/nagios status fe1/http

**Hubot**

<table>
<thead>
<tr>
<th>Service</th>
<th>Status</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>fe1/http</td>
<td>OK</td>
<td>HTTP OK HTTP/1.1 200 OK - 232 bytes in seconds</td>
</tr>
</tbody>
</table>

Send a message
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3,000,000 PSI
“DEATH PROOF” CLAW ARM

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HIGH EFFICIENCY INSERT/RETRACT POLYMER
Hubot

CHATOPS

ALL THE THINGS
Work at GitHub
jesse@github.com