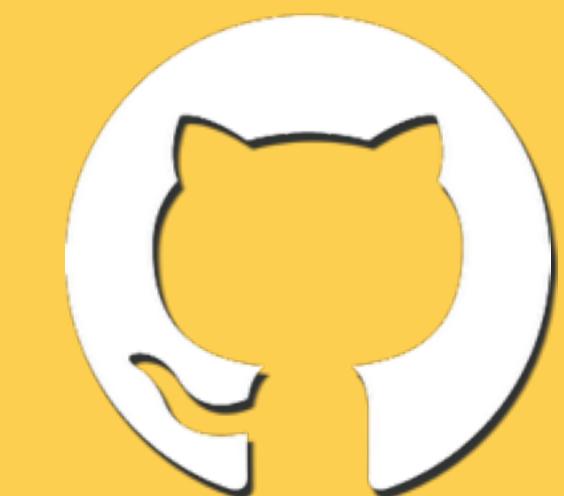


BUILDING YOUR OWN DFIR SIDEKICK

CHATOPS FOR INCIDENT RESPONSE





HI, I'M SCOTT

I DO INCIDENT RESPONSE  GitHub



THIS IS HUBOT

HE DOES BASICALLY EVERYTHING



GitHub



**"MAKING IT EASIER TO WORK TOGETHER THAN
TO WORK ALONE..."**

- CHATOPS & INCIDENT RESPONSE
- HUBOT VARIABLE THREAT RESPONSE
- DEPLOYING & DEVELOPING HUBOT

A BRIEF INTRODUCTION TO CHATOPS

WHAT IS CHATOPS?!

DEVOPS + CHAT = CHATOPS

COLLABORATIVE TERMINAL EXPERIENCE

**SO WHAT REALLY IS
CHATOPS?!**

```
sjr@Tango: ~ - - - zsh - 80x24
→ ~ ls
Applications Documents Library Music Public
Desktop Downloads Movies Pictures test
→ ~ ssh foo@bar
```

MARIO
000000

0x00

WORLD 1-1 TIME



• 1 PLAYER GAME

2 PLAYER GAME

TOP - 000000



GitHub, Inc.

technicalpickles commented on Oct 18, 2013

Looks like test/hello-world_test.coffee was copied from https://github.com/hubot-scripts/hubot-example/blob/master/test/hello-world_test.coffee. I don't expect this would work (but script/test should confirm), so may as well remove it.

technicalpickles commented on an outdated diff on Oct 18, 2013 [Show outdated diff](#)

technicalpickles commented on an outdated diff on Oct 18, 2013 [Show outdated diff](#)

technicalpickles commented on an outdated diff on Oct 18, 2013 [Show outdated diff](#)

sroberts added some commits on Nov 9, 2013

- Added index.coffee per PR comments d0c6fd7
- Made package.json name and description a bit more logical a5b4203
- Removed sample test bf25967

sroberts commented on Nov 11, 2013

@**technicalpickles** Alright, I think I'm more up to date. How's this look?

I'm also wondering what the best way to DL those community scripts is. Do you have a better idea than that shell script?

technoskald commented on Nov 11, 2013

I'm not the Git expert you two are, but with the new structure of the Hubot community script repo, can't you just add the ones you like as subtrees or summat?

Labels None yet

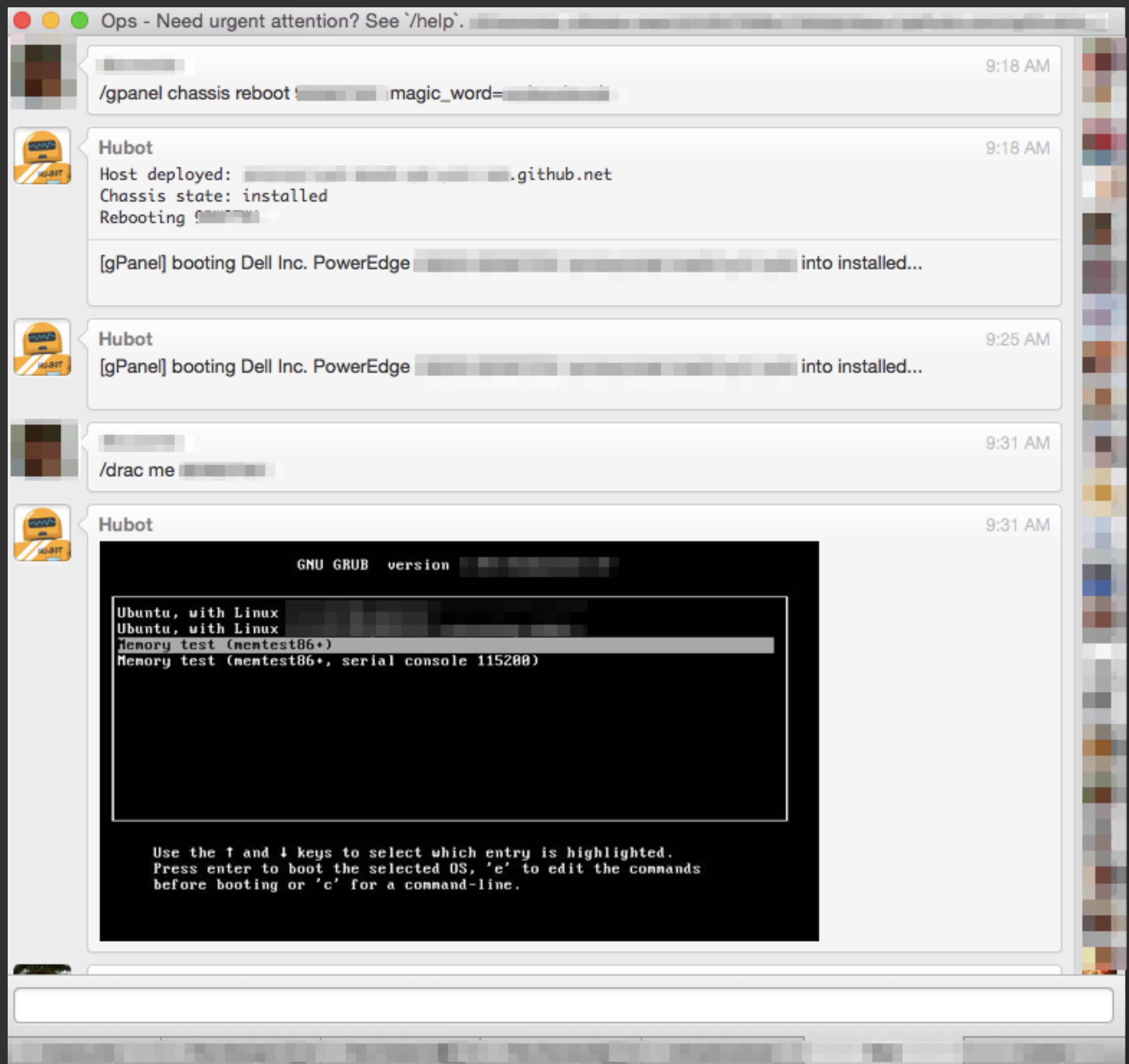
Milestone No milestone

Assignee No one—assign yourself

Notifications [Unsubscribe](#)
You're receiving notifications because you modified the open/close state.

3 participants

Lock pull request





**WHY CHATOPS
ANYWAY?**

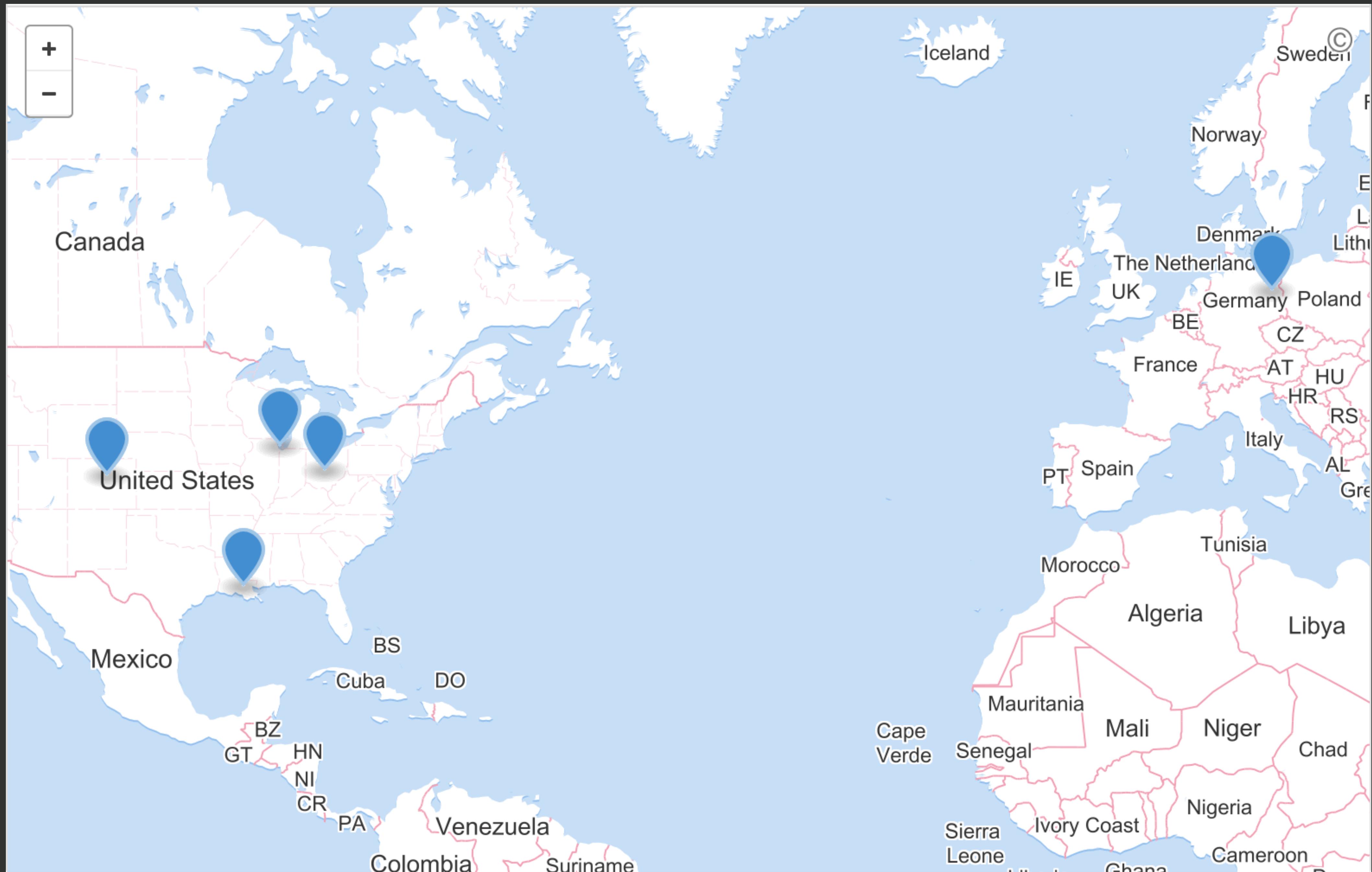
**GEOGRAPHICALLY
DISTRIBUTED**





237 hubbers are spread across **94 cities** right now

531 hubbers are spread across **46 cities** right now



ASYNCHRONOUS



MULTI DEVICE





The Danger Room GitHub has tidy little bit of GUI

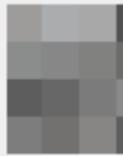


Hubot convert 1 gallon to liters



Hubot

3.78541178 liters



Hubot image me robawt



Hubot



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.

Who's Here?



Latest Documents

JPG 899 Pine St San...

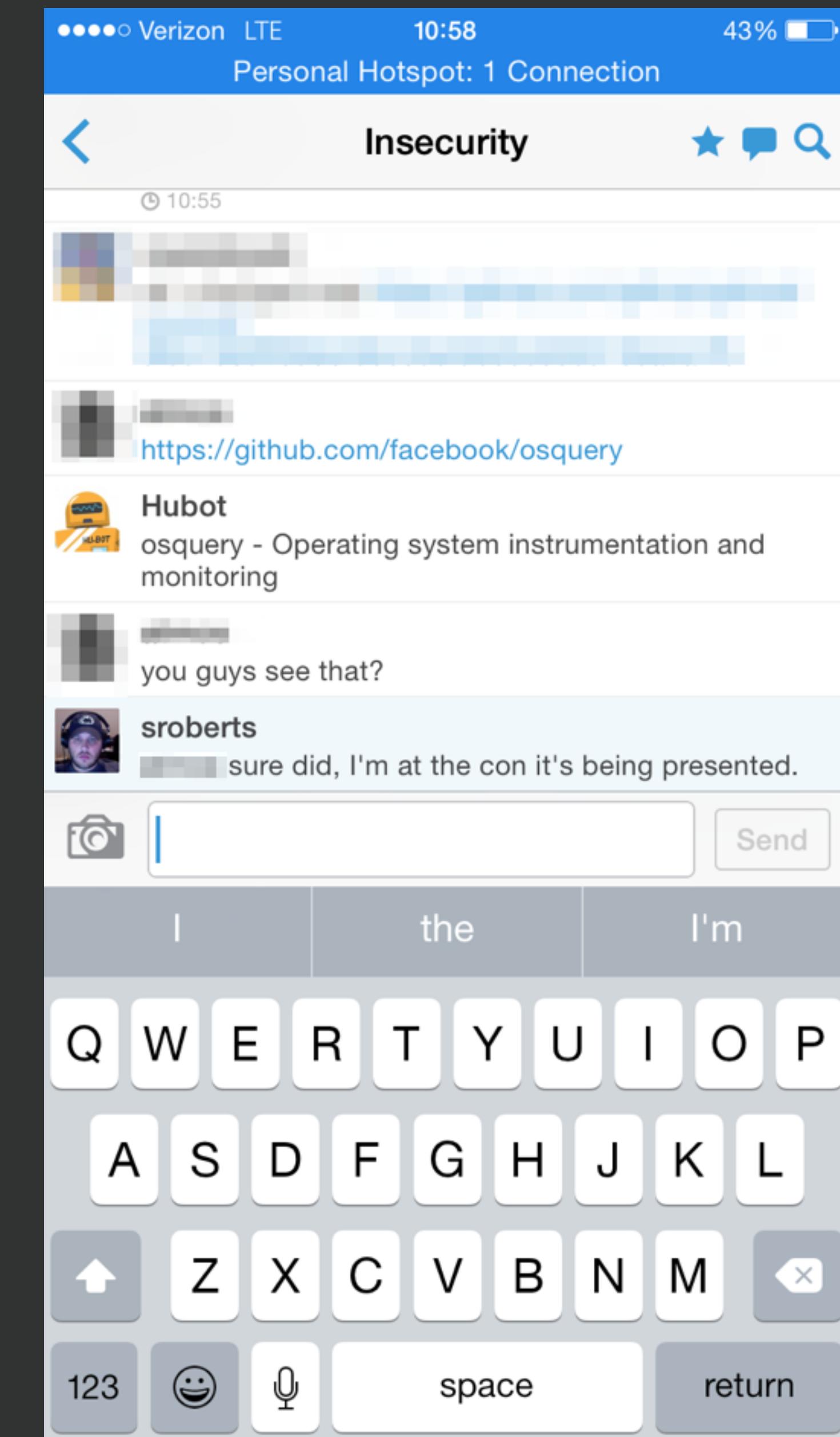
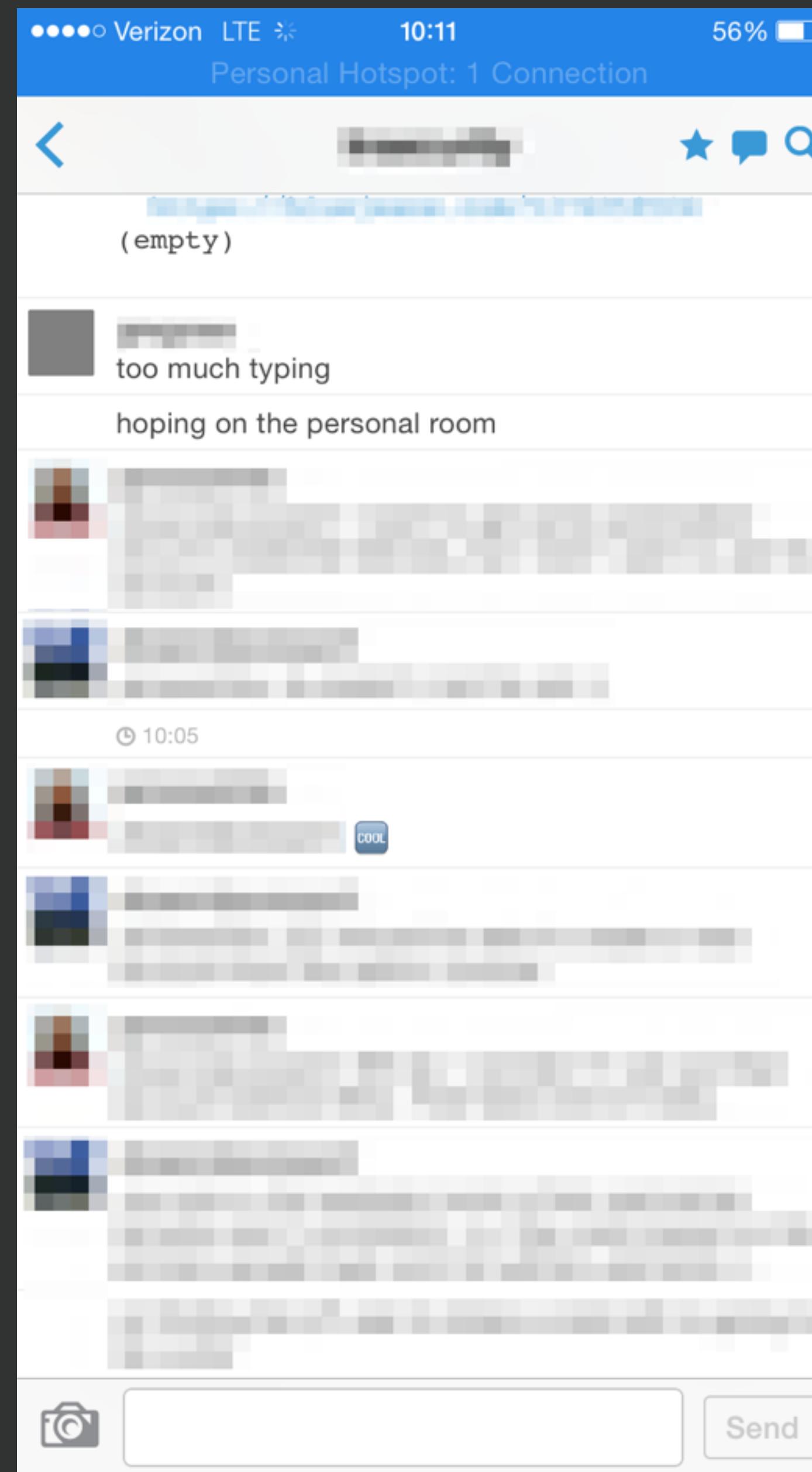
JPG image.jpg

PNG Screen shot 20...

JPG Photo on 2011...

JPG VISION Consulti...





Today

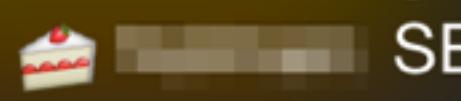
Notifications



Team



Team 14m ago



SECURITY IS IMPORANT

Team 2h ago

8 [REDACTED] this might happen again
as security are making emails more
standardized cc [REDACTED]
[REDACTED]

Team 2h ago



Team 3h ago



Team 06:51



Messages



HIDES THE "UGLY"

OR AT LEAST MAKES INTERFACES
CONSISTENT



**"THIS WAS ALWAYS MY MAIN MOTIVATION
WITH HUBOT - TEACHING BY DOING BY
MAKING THINGS VISIBLE."**

-

aTOMAYKO

HOW GITHUB USES CHATOPS

DEPLOY



MONITOR SERVERS

VIA PUPPET

DEPLOY



MONITOR CODE

VIA CAPISTRANO + JENKINS CI

MONITOR SYSTEMS

VIA NAGIOS

GitHub Notifications

GitHub Notifications Unread All ✓ 🔍 🔊

EVERYTHING PARTICIPATING MENTIONED

REPOSITORIES

google/grr 0

Nagios (██████) - ██████████ 7m

Nagios (██████) - ██████████

closed hubot opened this issue 19m

hubot 19m

Output

CRITICAL - 5.0% ██████████

Nagios check created at puppet scope: 0

/cc ██████████

hubot 19m



GitHub, Inc. github.com/hubot

Search GitHub

Explore Gist Blog Help

sroberts + Follow

Contributions Repositories Public activity

Follow

Popular repositories

Spoon-Knife 1 ★
This repo is for demonstration purposes ...

Repositories contributed to

github/developer.github.com 710 ★
GitHub Developer site

Joined on Nov 14, 2010

87 Followers 0 Starred 0 Following

Contributions

Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep Oct
M W F

Summary of Pull Requests, issues opened, and commits. [Learn more.](#)

Less More

Year of contributions
17,898 total
Oct 27, 2013 – Oct 27, 2014

Longest streak
154 days
May 27 – October 27

Current streak
154 days
May 27 – October 27

Contribution activity

Period: 1 week ▾

-o 28 commits -

**UPDATE OUR
STATUS SITE**

(HOPEFULLY RARELY)

**LOOKUP FUNNY
PICTURES**

AND GIFS TOO!

08:47

kylemxl it is indeed a morning. ☀️

08:48

sroberts ! img me wednesday morning

08:48

mathrmhouse <http://www.desicomments.com/dc2/03/189130/189130.gif> (54KB) ▾



Slack

★ STARRED

general

security_at_scale

CHANNELS
+11 more...

DIRECT MESSAGES
+12 More...

PRIVATE GROUPS
+2 more...

10:07

http://25.media.tumblr.com/tumblr_mcmthISKeN1r0wqrdo1_500.gif (499KB) ▾



sroberts
• online

SHOUTOUT TO MATTJAY

**SO WHAT ABOUT
DFIR?!**

HINT: WE WERE ALREADY DOING IT

MANAGING OUR PAGER ALERTS

VIA PAGERDUTY

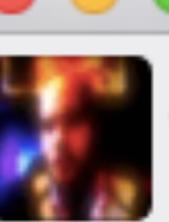
**SHOWING PROCESS
LISTS ON HOSTS**

CHANGING FIREWALL RULES

GETTING WHOIS INFORMATION

GETTING APP LOGS + STATS

VIA SPLUNK + GRAPHITE



sroberts

/help splunk

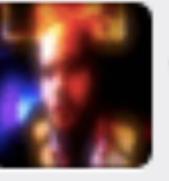
10:46 AM



Hubot

```
/splunk [earliest] [@index] [query]
/splunk explain @[@group.name]
/splunk list
/splunk list @[@group]
/splunk run @[@group.name]
/splunk save [group.name] [earliest] [@index] [query]
/splunk update [group.name] [earliest] [@index] [query]
/splunk-cluster [command] <opts> - manage the splunk cluster
/splunk-index [command] <opts> - manage the splunk indexes
/splunk-license [command] <opts> - run splunk commands (subset currently supported)
```

10:46 AM



sroberts

/splunk -3days @nginx sroberts

10:46 AM



Hubot

sroberts:
[View Results]([http://github.net/en-US/app/search/flashtimeline?
sid=1414604801.6654099](http://github.net/en-US/app/search/flashtimeline?sid=1414604801.6654099)) for search index=nginx earliest=-3days latest=now sroberts
2014-10-29T10:46:19-07:00 [29/Oct/2014:10:46:18 -0700] github.com:9100 - - [29/Oct/2014:10:46:18 -0700]
"POST /sroberts/hubot-vtr-scripts/new/master/src/scripts HTTP/1.1" 200 79816 "<https://github.com/sroberts/hubot-vtr-scripts/tree/master/src/scripts>" "Mozilla/5.0 (Macintosh; Intel Mac OS X 10_9_4) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/38.0.2125.104 Safari/537.36" "208.***.***" "kcreyts" "17659839" 0.137 0.135 .
"D0360591:6073:9C57A:545127E3" github.com
2014-10-29T10:45:12-07:00 [29/Oct/2014:10:45:12 -0700] github.com:9100 - - [29/Oct/2014:10:45:12 -0700]
"GET /sroberts.png HTTP/1...
[View entire paste](#)

10:46 AM

**"SWINGING THE
BANHAMMER"**



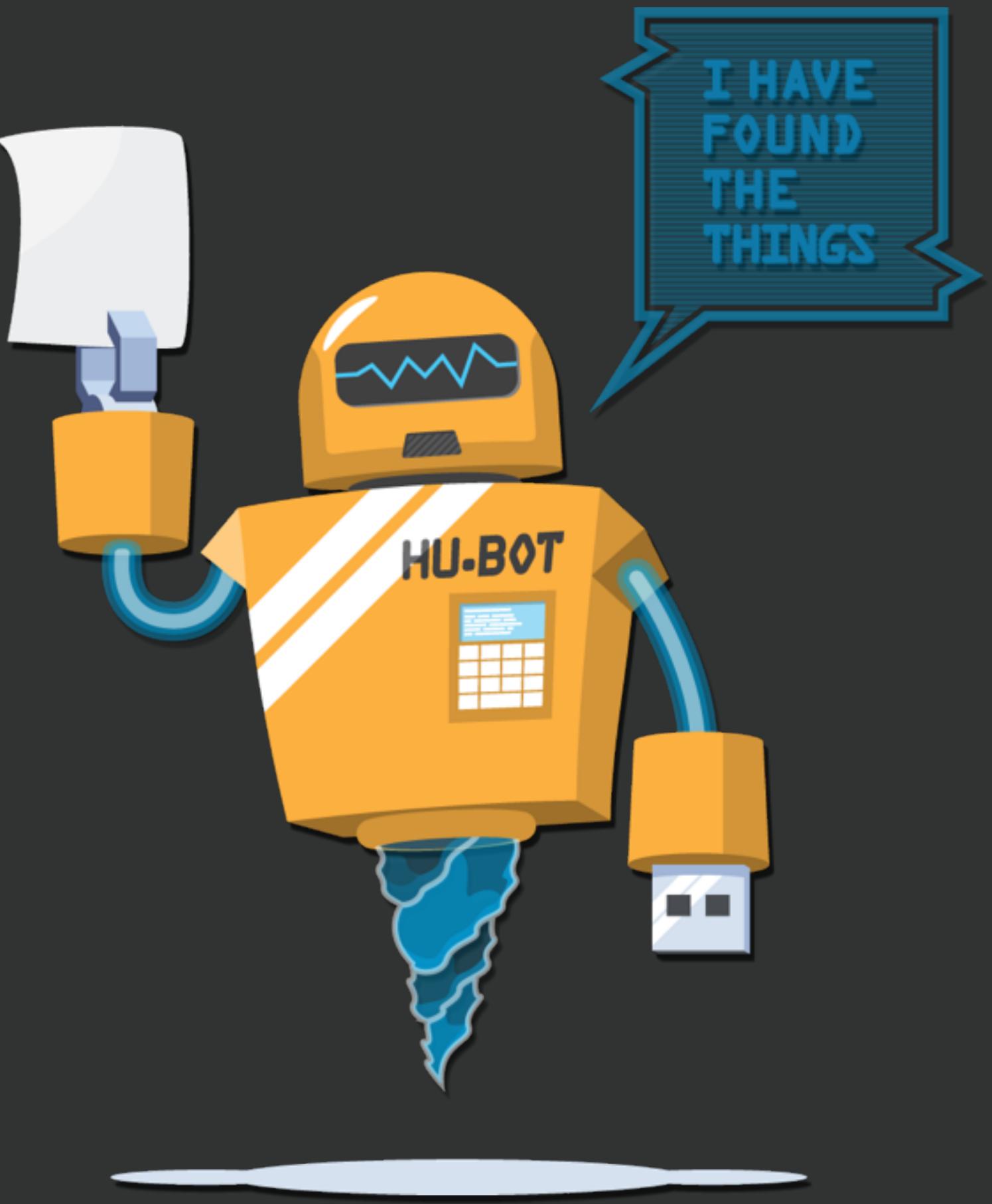
ACHIEVEMENT UNLOCKED
You have been banned

**OTHER "SECRET"
STUFF**

JUST COME ASK ME IF YOU'RE CURIOUS



**"MAKING IT EASIER TO WORK TOGETHER THAN
TO WORK ALONE..."**



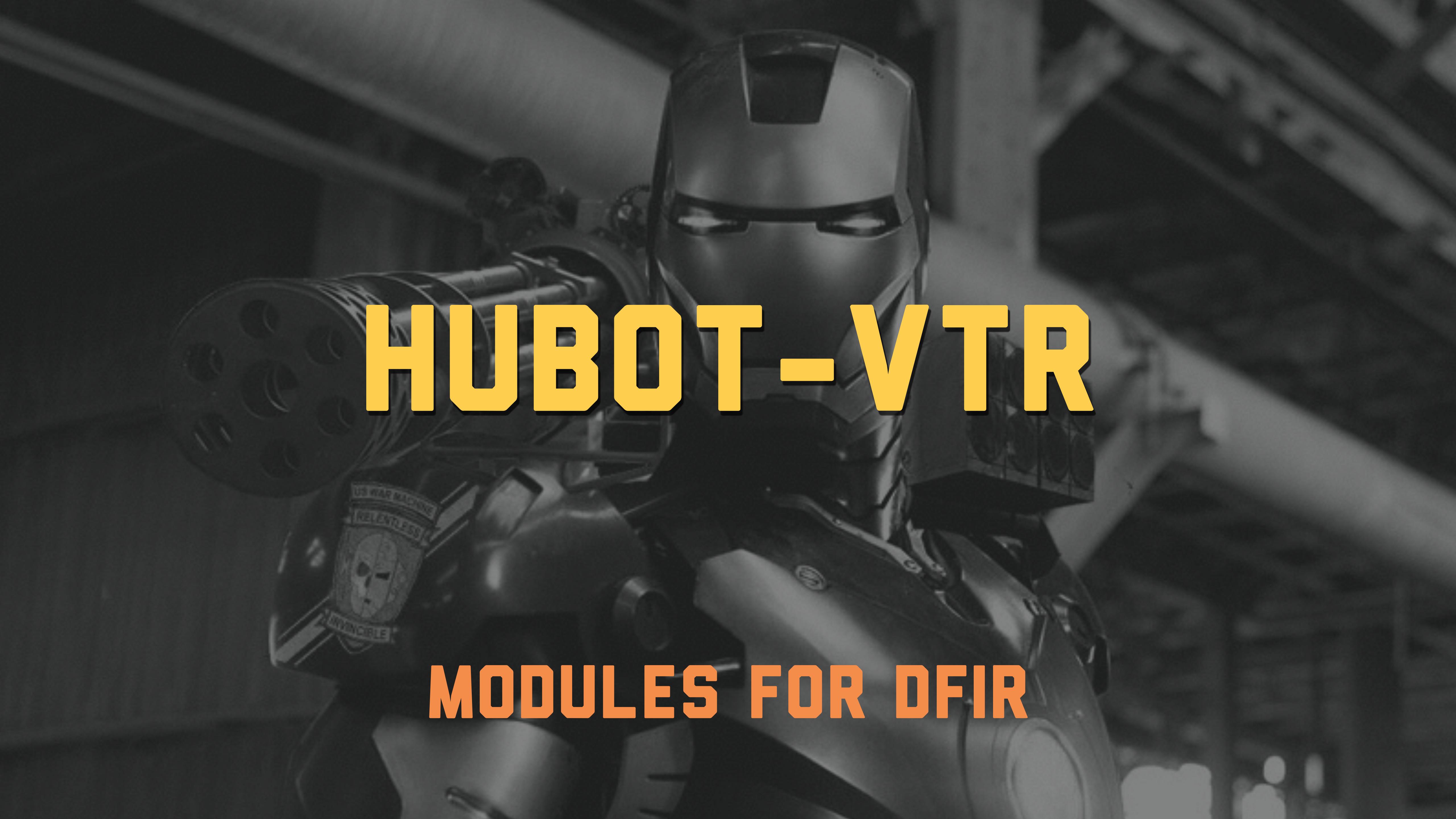
**"MAKING IT EASIER TO RESPOND TO INCIDENTS
TOGETHER THAN TO RESPOND ALONE..."**

HUBOT VTR

HUBOT

- NODE.JS BASED CHAT BOT
- COFFEESCRIPT BASED ACTIONS
- DEPLOYABLE ANYWHERE YOU CAN RUN
NODE.JS [UNIX, WINDOWS, HEROKU, ETC]

- DISK FORENSICS
- NETWORK FORENSICS
- OPEN SOURCE INTELLIGENCE
- MALWARE ANALYSIS



HUBOT-VTR

MODULES FOR DFIR

CODE NAME GENERATOR

BECAUSE YOU CAN'T CALL IT
"THAT THING FROM JANUARY" FOREVER

GEOLOCATING IPS

BUT NOT FOR ATTRIBUTION...

REVERSE DNS LOOKUPS

CHECKING RESOURCE REPUTATIONS

MYWOT, GOOGLE, VIRUSTOTAL, + OPENDNS

Slack

★ STARRED

JUMP 119 new messages since 10:32 MARK AS READ X

4

CHANNELS

+8 more...

DIRECT MESSAGES

sroberts online

#general

Search

?

≡

◀

woodhouse whats up with google.com

woodhouse 14:50 google.com seems legit.

kylemxl 14:50 woodhouse whats up with agaliarept.com

woodhouse 14:50 That agaliarept.com looks bad. It'll probably own your box.

kylemxl 14:50

sroberts 14:50 woodhouse opendns rr 8.8.4.4

woodhouse 14:50 ★ So I found 112 records:
- A Record: 0265.verycdn.cn.
- A Record: 7liveasia.net.
- A Record: ba42.org.
- A Record: backup-resolver.jitsi.net.
- A Record: ext.wisetuner.com.
- A Record: fehx.com.
- A Record: google-public-dns-b.google.com.
- A Record: ip.jeroy.vizvaz.com.
- A Record: mx1.1npf.com.
- A Record: ns1.llamaservers.com.

RESEARCH LINKS GENERATOR

**ROBTEXT, CENTRALOPS, HURRICANE
ELECTRIC...**

SERVER PROFILING

VIA SHODAN

DW %1

I %2

g %3

STARRED

CHANNELS +11 more...

DIRECT MESSAGES +13 More...

PRIVATE GROUPS +2 more...

#general

15:48 ! shodan 79.97.250.59

15:48 woodhouse Shodan Result for 79.97.250.59

- IP: 79.97.250.59
- Geo: null, null, Ireland

~ 79.97.250.59

- Hostname: 79.97.250.59
- Organization: UPC Ireland
- Port: 21
- Banner:
- 220-FileZilla Server version 0.9.41 beta
220-written by Tim Kosse (Tim.Kosse@gmx.de)
220 Please visit <http://sourceforge.net/projects/filezilla/>
- 530 Login or password incorrect!
- 214-The following commands are recognized:
USER PASS QUIT CWD PWD PORT PASV TYPE
LIST REST CDUP RETR STOR SIZE DELE RMD
MKD RNFR RNTO ABOR SYST NOOP APPE NLST
MDTM XPWD XCUP XMKD XRMD NOP EPSV EPRT
AUTH ADAT PBSZ PROT FEAT MODE OPTS HELP
ALLO MLST MLSD SITE P@SW STRU CLNT MFMT
HASH
214 Have a nice day.

~ 79.97.250.59

- Hostname:
- Organization: UPC Ireland
- Port: 23
- Banner:
-
System administrator is connecting from 174.79.246.153
Reject the connection request !!!

~ 79.97.250.59

- Hostname:
- Organization: UPC Ireland
- Port: 23
- Banner:
-

sroberts online

MALWARE RESEARCH

VIA VIRUSTOTAL

PASSIVE DNS

VIA VIRUSTOTAL

DETECTION GENERATION

VIA YARA + SNORT



FORCE MULTIPLIER

DEPLOYMENT



DEVELOPMENT

DEPLOYMENT

LOCAL

OR

HEROKU

3 COMPONENTS

BRAIN



CONNECTOR



SCRIPTS

DEVELOPMENT

COFFEESCRIPT

ON

NODEJS

```
opendns-umbrella.coffee – /Users/sjr/Documents/src/hubot-vtr-scripts
```

```
opendns-umbrella.coffee
```

```
1 # Description:
2 # OpenDNS Umbrella Passive DNS & Reputation
3 #
4 # Dependencies:
5 # None
6 #
7 # Configuration:
8 # OPENDNS_KEY - Sign up at https://investigate.opendns.com
9 #
10 # Commands:
11 # hubot opendns whats up with <domain> - Gets OpenDNS Domain Reputation
12 #
13 # Author:
14 # Scott J Roberts - @sroberts
15
16 OPENDNS_KEY = process.env.OPENDNS_KEY
17
18 module.exports = (robot) ->
19   robot.respond /whats up with (.*)/i, (msg) ->
20
21   if OPENDNS_KEY?
22     artifact = msg.match[1].toLowerCase()
23
24     msg.http("https://investigate.api.opendns.com/domains/score/#{artifact}")
25       .headers('Authorization': 'Bearer ' + OPENDNS_KEY)
26       .get() (err, res, body) ->
27
28       if res.statusCode is 200
29
30         opendns_json = JSON.parse body
31
32         for key, value of opendns_json
33
34           switch value
35             when "1" then msg.send "#{key} seems legit. :+1:"
36 ▲             when "0" then msg.send "Not sure about that #{key}. Use at your own risk."
37 ▲             when "-1" then msg.send "That #{key} looks bad. It'll probably own your box. :-1:"
38             else
39               "No clue. You're on your own."
40
41           else
42             msg.send "Doh! #{res.statusCode}: Which means that didn't work."
43         else
44           msa.send "OpenDNS API key not configured."
```

src/scripts/opendns-umbrella.coffee* 12,1 CoffeeScript opendns-umbrella Send Feedback

```
opendns-umbrella.coffee - /Users/sjr/Documents/src/hubot-vtr-scripts
```

```
opendns-umbrella.coffee
```

```
1 # Description:  
2 #   OpenDNS Umbrella Passive DNS & Reputation  
3 #  
4 # Dependencies:  
5 #   None  
6 #  
7 # Configuration:  
8 #   OPENDNS_KEY - Sign up at https://investigate.opendns.com  
9 #  
10 # Commands:  
11 #   hubot opendns whats up with <domain> - Gets OpenDNS Domain Reputation  
12 #  
13 # Author:  
14 #   Scott J Roberts - @sroberts  
15  
16 OPENDNS_KEY = process.env.OPENDNS_KEY  
17  
18 module.exports = (robot) ->  
19   robot.respond /whats up with (.*)/i, (msg) ->  
20  
21     if OPENDNS_KEY?  
22       let domain = msg.match[1].toLowerCase()  
23       const options = {  
24         url: "https://investigate.opendns.com/dns/lookup/score/[${domain}]"  
25       }  
26       const auth = "Authorization: Bearer ${OPENDNS_KEY}"  
27       const res = await request(options, {  
28         headers: {  
29           Authorization: auth  
30         }  
31       })  
32       if res.statusCode is 200  
33         msg.send(`The domain ${domain} has a score of ${res.body}`)  
34       else  
35         msg.send(`There was an error getting the domain ${domain}`)  
36     }  
37   }  
38  
39   if res.statusCode is 200  
40     msg.send(`The domain ${domain} has a score of ${res.body}`)  
41   else  
42     msg.send(`There was an error getting the domain ${domain}`)
```

DOCSMATTER

passivetotal.org

PassiveTotal Account Notifications API

Search 

 Summary  Statistics  WHOIS  Unique  Malware  Certificates

Focus	github.com
First	2013-08-15 00:00:00
Last	2013-10-19 00:00:00
Count	6
Tags	 parked  historic: 375  test
Primary	github.com
TLD	.com

Classify	 Targeted  Crime  Multiple  Benign
Watch	
Tag	Tags 
Dynamic	 True  False

Activity

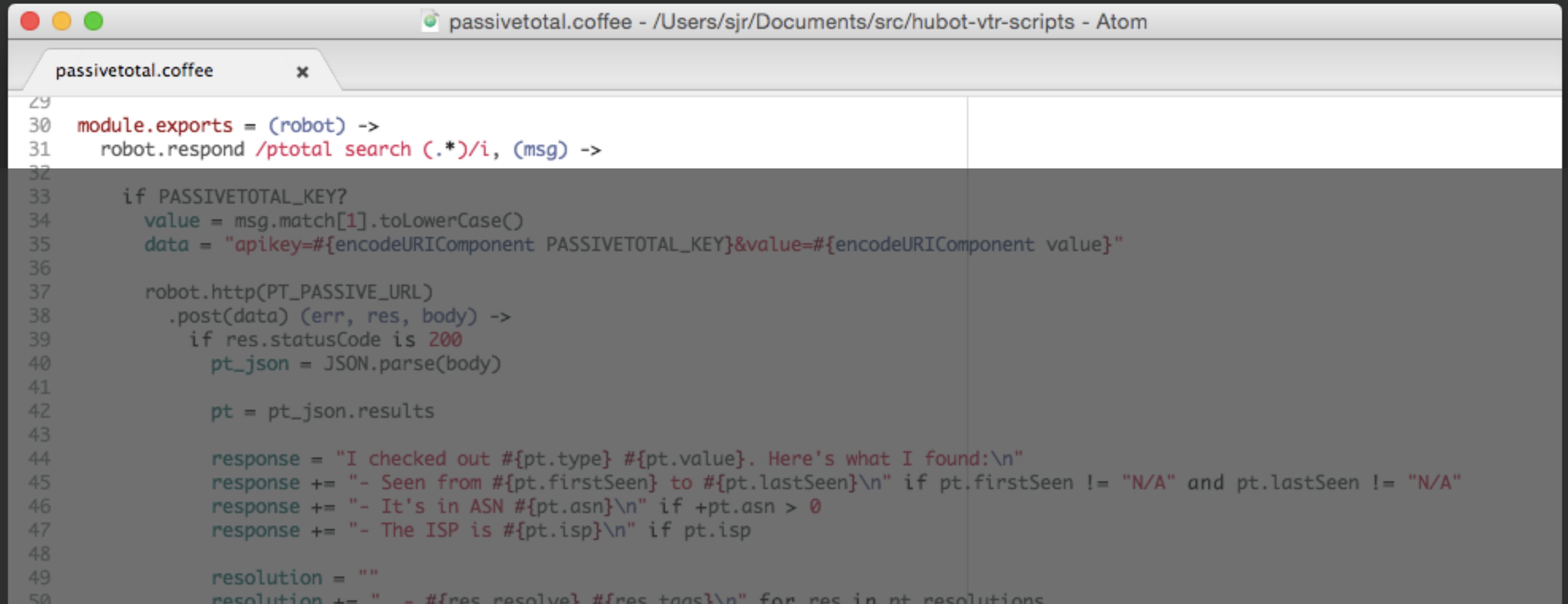
Filter: Print

Resolve	Location	Network	First	Last	Source	Tags	Classify
192.30.252.131	US	192.30.252.0/24	2013-10-19 00:00:00	2013-10-19 00:00:00	virustotal		   
192.30.252.129	US	192.30.252.0/24	2013-10-19 00:00:00	2013-10-19 00:00:00	virustotal		   
192.30.252.130	US	192.30.252.0/24	2013-10-17 00:00:00	2013-10-17 00:00:00	virustotal		   
192.30.252.128	US	192.30.252.0/24	2013-09-11 00:00:00	2013-09-11 00:00:00	virustotal		   

passivetotal.coffee - /Users/sjr/Documents/src/hubot-vtr-scripts - Atom

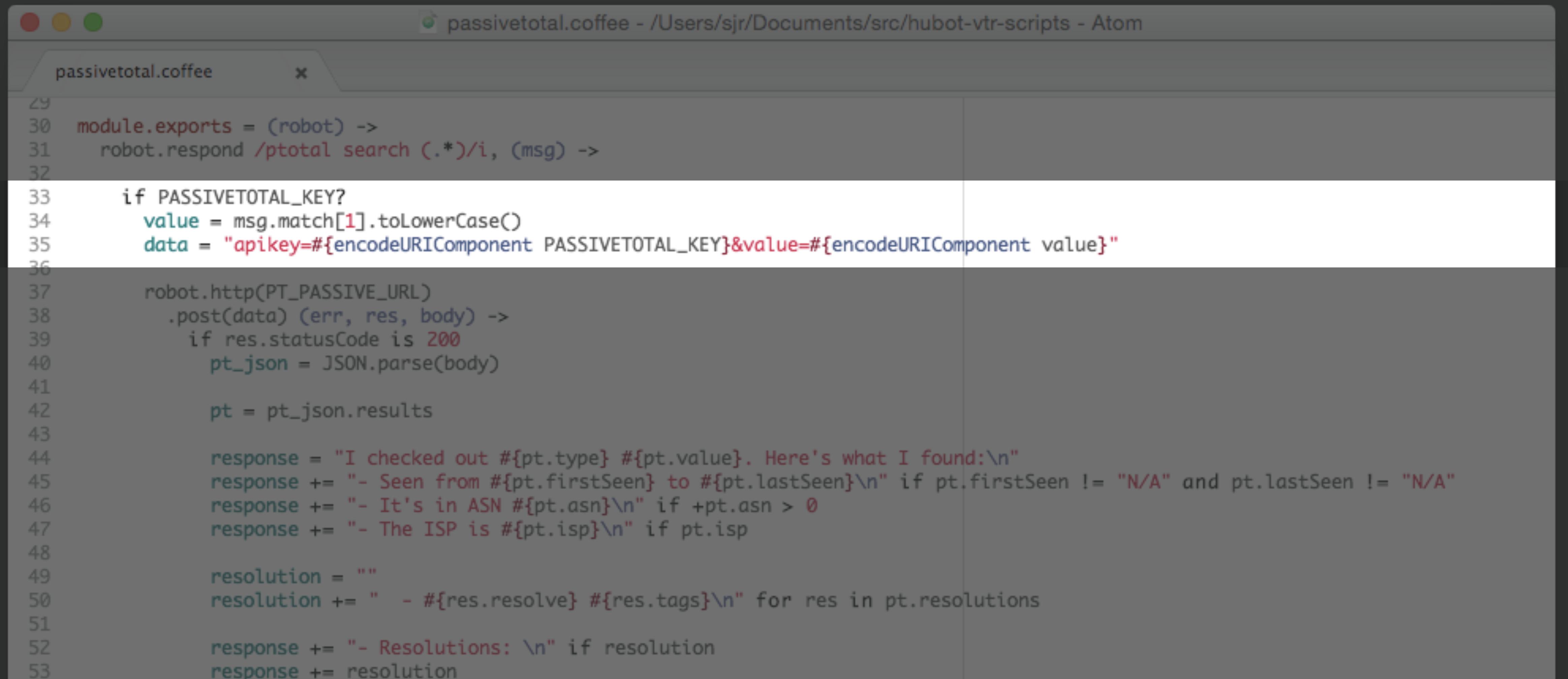
```
passivetotal.coffee x

29
30 module.exports = (robot) ->
31   robot.respond /ptotal search (.*)/i, (msg) ->
32
33   if PASSIVETOTAL_KEY?
34     value = msg.match[1].toLowerCase()
35     data = "apikey=#{encodeURIComponent PASSIVETOTAL_KEY}&value=#{encodeURIComponent value}"
36
37     robot.http(PT_PASSIVE_URL)
38       .post(data) (err, res, body) ->
39         if res.statusCode is 200
40           pt_json = JSON.parse(body)
41
42           pt = pt_json.results
43
44           response = "I checked out #{pt.type} #{pt.value}. Here's what I found:\n"
45           response += "- Seen from #{pt.firstSeen} to #{pt.lastSeen}\n" if pt.firstSeen != "N/A" and pt.lastSeen != "N/A"
46           response += "- It's in ASN #{pt.asn}\n" if +pt.asn > 0
47           response += "- The ISP is #{pt.isp}\n" if pt.isp
48
49           resolution = ""
50           resolution += " - #{res.resolve} #{res.tags}\n" for res in pt.resolutions
51
52           response += "- Resolutions: \n" if resolution
53           response += resolution
54
55           response += "- Wow... that was a lot of resolutions!\n" if pt.resolutions > 10
56           response += "- Users tagged this as #{pt.userTags}\n" if pt.userTags.length > 0
57           response += "- #{res.value} is classified as #{pt.classified}\n" if pt.classified
58           response += "- Pretty sure it's a sinkhole though...\n" if pt.sinkhole is true
59           response += "\nFor full results see https://www.passivetotal.org/passive/#{pt.value}"
60
61           response = "No joy sparky, PassiveTotal didn't find any resolutions but feel free to check https://www.passivetotal.org/p
62
63             msg.send response
64           else
65             msg.send "Doh! #{res.statusCode}: Which means that didn't work."
66           else
67             msg.send "PassiveTotal API key not configured."
68
69   robot.respond /ptotal classify (targeted|crime|multiple|benign) (.*)/i, (msg) ->
70
71   if PASSIVETOTAL_KEY?
72     classification = msg.match[1].toLowerCase()
```



The screenshot shows a window of the Atom code editor. The title bar reads "passivetotal.coffee - /Users/sjr/Documents/src/hubot-vtr-scripts - Atom". The main area displays a block of CoffeeScript code. The code is a module export for a robot, which responds to a command to search for a specific value in the PassiveTotal database. It constructs a query string, sends a POST request to the database URL, parses the response, and then formats a response message based on the results. The code uses several variables and functions from the robot and JSON modules.

```
29
30 module.exports = (robot) ->
31   robot.respond /ptotal search (.*)/i, (msg) ->
32
33   if PASSIVETOTAL_KEY?
34     value = msg.match[1].toLowerCase()
35     data = "apikey=#{encodeURIComponent PASSIVETOTAL_KEY}&value=#{encodeURIComponent value}"
36
37     robot.http(PT_PASSIVE_URL)
38       .post(data) (err, res, body) ->
39         if res.statusCode is 200
40           pt_json = JSON.parse(body)
41
42           pt = pt_json.results
43
44           response = "I checked out #{pt.type} #{pt.value}. Here's what I found:\n"
45           response += "- Seen from #{pt.firstSeen} to #{pt.lastSeen}\n" if pt.firstSeen != "N/A" and pt.lastSeen != "N/A"
46           response += "- It's in ASN #{pt.asn}\n" if +pt.asn > 0
47           response += "- The ISP is #{pt.isp}\n" if pt.isp
48
49           resolution = ""
50           resolution += " - #res.resolve! #{res.tags}\n" for res in pt.resolutions
```



The screenshot shows a dark-themed Atom code editor window. The title bar indicates the file is 'passivetotal.coffee' located at '/Users/sjr/Documents/src/hubot-vtr-scripts'. The editor has two tabs: 'passivetotal.coffee' (the active tab) and another unnamed tab. The code in the editor is a Node.js script using the 'robot' module to respond to messages containing '/ptotal'. It constructs a POST request to a PassiveTotal API endpoint, parses the JSON response, and then generates a response message based on the results. The code uses template literals and several conditional statements.

```
29
30  module.exports = (robot) ->
31    robot.respond /ptotal search (.*)/i, (msg) ->
32
33      if PASSIVETOTAL_KEY?
34        value = msg.match[1].toLowerCase()
35        data = "apikey=#{encodeURIComponent PASSIVETOTAL_KEY}&value=#{encodeURIComponent value}"
36
37        robot.http(PT_PASSIVE_URL)
38          .post(data) (err, res, body) ->
39            if res.statusCode is 200
40              pt_json = JSON.parse(body)
41
42              pt = pt_json.results
43
44              response = "I checked out #{pt.type} #{pt.value}. Here's what I found:\n"
45              response += "- Seen from #{pt.firstSeen} to #{pt.lastSeen}\n" if pt.firstSeen != "N/A" and pt.lastSeen != "N/A"
46              response += "- It's in ASN #{pt.asn}\n" if +pt.asn > 0
47              response += "- The ISP is #{pt.isp}\n" if pt.isp
48
49              resolution = ""
50              resolution += " - #[res.resolve] #[res.tags]\n" for res in pt.resolutions
51
52              response += "- Resolutions: \n" if resolution
53              response += resolution
```

passivetotal.coffee - /Users/sjr/Documents/src/hubot-vtr-scripts - Atom

passivetotal.coffee

```
29
30 module.exports = (robot) ->
31   robot.respond /ptotal search (.*)/i, (msg) ->
32
33   if PASSIVETOTAL_KEY?
34     value = msg.match[1].toLowerCase()
35     data = "apikey=#{encodeURIComponent PASSIVETOTAL_KEY}&value=#{encodeURIComponent value}"
36
37     robot.http(PT_PASSIVE_URL)
38       .post(data) (err, res, body) ->
39         if res.statusCode is 200
40           pt_json = JSON.parse(body)
41
42           pt = pt_json.results
43
44           response = "I checked out #{pt.type} #{pt.value}. Here's what I found:\n"
45           response += "- Seen from #{pt.firstSeen} to #{pt.lastSeen}\n" if pt.firstSeen != "N/A" and pt.lastSeen != "N/A"
46           response += "- It's in ASN #{pt.asn}\n" if +pt.asn > 0
47           response += "- The ISP is #{pt.isp}\n" if pt.isp
48
49           resolution = ""
50           resolution += " - #{res.resolve} #{res.tags}\n" for res in pt.resolutions
51
52           response += "- Resolutions: \n" if resolution
53           response += resolution
54
55           response += "- Wow... that was a lot of resolutions!\n" if pt.resolutions > 10
56           response += "- Users tagged this as #{pt.userTags}\n" if pt.userTags.length > 0
```

The screenshot shows a window of the Atom code editor. The title bar indicates the file is 'passivetotal.coffee' located at '/Users/sjr/Documents/src/hubot-vtr-scripts'. The code itself is a Node.js script for a Hubot bot, specifically for the 'passivetotal' command. It uses the 'request' module to make a POST request to the PassiveTotal API with an API key and a search term. It then parses the JSON response to extract results and resolutions, and constructs a response message. The code includes logic to handle multiple resolutions and optional user tags.

```
29
30 module.exports = (robot) ->
31   robot.respond /ptotal search (.*)/i, (msg) ->
32
33   if PASSIVETOTAL_KEY?
34     value = msg.match[1].toLowerCase()
35     data = "apikey=#{encodeURIComponent PASSIVETOTAL_KEY}&value=#{encodeURIComponent value}"
36
37     robot.http(PT_PASSIVE_URL)
38       .post(data) (err, res, body) ->
39         if res.statusCode is 200
40           pt_json = JSON.parse(body)
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43
44           response = "I checked out #{pt.type} #{pt.value}. Here's what I found:\n"
45           response += "- Seen from #{pt.firstSeen} to #{pt.lastSeen}\n" if pt.firstSeen != "N/A" and pt.lastSeen != "N/A"
46           response += "- It's in ASN #{pt.asn}\n" if +pt.asn > 0
47           response += "- The ISP is #{pt.isp}\n" if pt.isp
48
49           resolution = ""
50           resolution += " - #{res.resolve} #{res.tags}\n" for res in pt.resolutions
51
52           response += "- Resolutions: \n" if resolution
53           response += resolution
54
55           response += "- Wow... that was a lot of resolutions!\n" if pt.resolutions > 10
56           response += "- Users tagged this as #{pt.userTags}\n" if pt.userTags.length > 0
57           response += "- #{res.value} is classified as #{pt.classified}\n" if pt.classified
58           response += "- Pretty sure it's a sinkhole though.\n" if pt.sinkhole is true
```

```
33 if PASSIVETOTAL_KEY?
34     value = msg.match[1].toLowerCase()
35     data = "apikey=#{encodeURIComponent PASSIVETOTAL_KEY}&value=#{encodeURIComponent value}"
36
37     robot.http(PT_PASSIVE_URL)
38         .post(data) (err, res, body) ->
39             if res.statusCode is 200
40                 pt_json = JSON.parse(body)
41
42                 pt = pt_json.results
43
44                 response = "I checked out #{pt.type} #{pt.value}. Here's what I found:\n"
45                 response += "- Seen from #{pt.firstSeen} to #{pt.lastSeen}\n" if pt.firstSeen != "N/A" and pt.lastSeen != "N/A"
46                 response += "- It's in ASN #{pt.asn}\n" if +pt.asn > 0
47                 response += "- The ISP is #{pt.isp}\n" if pt.isp
48
49                 resolution = ""
50                 resolution += " - #{res.resolve} #{res.tags}\n" for res in pt.resolutions
51
52                 response += "- Resolutions: \n" if resolution
53                 response += resolution
54
55                 response += "- Wow... that was a lot of resolutions!\n" if pt.resolutions > 10
56                 response += "- Users tagged this as #{pt.userTags}\n" if pt.userTags.length > 0
57                 response += "- #{res.value} is classified as #{pt.classified}\n" if pt.classified
58                 response += "- Pretty sure it's a sinkhole though...\n" if pt.sinkhole is true
59                 response += "\nFor full results see https://www.passivetotal.org/passive/#{pt.value}"
60
61                 response = "No joy sparky, PassiveTotal didn't find any resolutions but feel free to check https://www.passivetotal.org/po
62
63                 msg.send response
64             else
65                 msg.send "Doh! #{res.statusCode}: Which means that didn't work."
66             else
67                 msg.send "PassiveTotal API key not configured."
68
69     robot.respond /ptotal classify (targeted|crime|multiple|benign) (.*)/i, (msg) ->
70
71         if PASSIVETOTAL_KEY?
72             classification = msg.match[1].toLowerCase()
```

```
45     response += "- It's in ASN #\{pt.usn\} if \{pt.usn\} > 0"
46     response += "- The ISP is #{pt.isp}\n" if pt.isp
47
48     resolution = ""
49     resolution += " - #{res.resolve} #{res.tags}\n" for res in pt.resolutions
50
51     response += "- Resolutions: \n" if resolution
52     response += resolution
53
54
55     response += "- Wow... that was a lot of resolutions!\n" if pt.resolutions > 10
56     response += "- Users tagged this as #{pt.userTags}\n" if pt.userTags.length > 0
57     response += "- #{res.value} is classified as #{pt.classified}\n" if pt.classified
58     response += "- Pretty sure it's a sinkhole though...\n" if pt.sinkhole is true
59     response += "\nFor full results see https://www.passivetotal.org/pas
60
61     response = "No joy sparky, PassiveTotal didn't find any resolutions but feel free to check https://www.passivetotal.org/pa
62
63     msg.send response
64   else
65     msg.send "Doh! #{res.statusCode}: Which means that didn't work."
66   else
67     msg.send "PassiveTotal API key not configured."
68
69   robot.respond /ptotal classify (targeted|crime|multiple|benign) (.*)/i, (msg) ->
70
71     if PASSIVETOTAL_KEY?
72       classification = msg.match[1].toLowerCase()
```

```
test - node - 117x24
node          bash          fish          +
"recordHash": "24f6a4fad2c8c81d77bce647ec206f4436c88a7a32543745f161346590bfa8cf", "resolve": "reorganizesingleband.biz", "tags": [], "userTags": [], "classified": "", "dynamic": false, "value": "reorganizesingleband.biz", "subdomains": [], "source": ["virustotal"], "lastSeen": "2013-05-14 00:00:00", "tld": ".biz", "primaryDomain": "reorganizesingleband.biz", "firstSeen": "2013-05-14 00:00:00"}, {"recordHash": "55238db0e81e2b6081454aa7419345f34a02fe03d3d1cc6f38c922a3c074eb62", "resolve": "massetoolbars.biz", "tags": [], "userTags": [], "classified": "", "dynamic": false, "value": "massetoolbars.biz", "subdomains": [], "source": ["virustotal"], "lastSeen": "2013-05-12 00:00:00", "tld": ".biz", "primaryDomain": "massetoolbars.biz", "firstSeen": "2013-05-12 00:00:00"}, {"recordHash": "3edbe7f2ff8229cbde83e3fe905517ad88aa507da6b32887da2c1013d53ed9a", "resolve": "dbt10.lida-med24.biz", "tags": [], "userTags": [], "classified": "", "dynamic": false, "value": "dbt10.lida-med24.biz", "subdomains": [], "source": ["virustotal"], "lastSeen": "2013-04-29 00:00:00", "tld": ".biz", "primaryDomain": "lida-med24.biz", "firstSeen": "2013-04-29 00:00:00"}, {"recordHash": "33a9fea0807a998f00151858915dbc1f041b258469baa7ff845ff48666539d23", "resolve": "claco.hopto.org", "tags": ["dynamic"], "userTags": [], "classified": "", "dynamic": true, "value": "claco.hopto.org", "subdomains": [], "source": ["virustotal"], "lastSeen": "2013-04-01 00:00:00", "tld": ".org", "primaryDomain": "hopto.org", "firstSeen": "2013-04-01 00:00:00"}, {"637210760594ab4889d6b1d8254072d08cef7864dedbeda87044eb342fc51bd3": 107, "network": "8.8.4.0/24", "userTags": [], "sourcesUsed": ["mnemonic", "dnsres", "virustotal", "domaintools"], "type": "ip", "tags": [], "lat": 38.0, "asn": "15169", "firstSeen": "2013-04-01 00:00:00", "country": "US", "classified": "", "value": "8.8.4.4", "sinkhole": false, "as_name": "GOOGLE - Google Inc.", "rawCount": 107}, "success": true, "error": ""}

Hubot> I checked out 8.8.4.4. Here's what I found:- Seen at 2013-04-01 00:00:00 to 2014-10-10 00:00:00
Hubot> exit
Tango:test sjr$ cp ~/Documents/src/hubot-vtr-scripts/src/scripts/passivetotal.coffee scripts/
Tango:test sjr$ bin/hubot
Hubot> ptotal 8.8.4.4
Hubot> hubot ptotal 8.8.4.4
Hubot>
```

```
test - node - 117x24
node                                bash                                fish
+-----+
- Seen from 2013-07-12 00:00:00 to 2014-05-06 00:00:00
- Resolutions:
  - 146.186.157.8
  - 146.186.15.17
  - 146.186.16.57
  - 128.118.146.135
  - 128.118.142.105
  - 128.118.142.114
  - 128.118.146.130

For full results see https://www.passivetotal.org/passive/psu.edu
Hubot> hubot ptotal search 146.186.157.8
Hubot> I checked out ip 146.186.157.8. Here's what I found:
- Seen from 2014-05-06 00:00:00 to 2014-08-01 00:00:00
- It's in ASN 3999
- Resolutions:
  - r02n08-fddi.cac.psu.edu
  - psu.edu

For full results see https://www.passivetotal.org/passive/146.186.157.8
Hubot> ptotal classify benign psu.edu
Hubot> hubot ptotal classify benign psu.edu
Hubot> Classifying psu.edu as benign: :+1: Check out https://www.passivetotal.org/passive/psu.edu.
Hubot>
```

HUBOT'S "VOICE"

**IN
CONCLUSION.**

CHATOPS CAN MAKE INCIDENT RESPONSE COLLABORATIVE

E

HUBOT VTR PUTS DFIR TOOLS
E TASKS IN CHAT

FIND OUT MORE

[HUBOT.GITHUB.COM](https://hubot.github.com)

E

[GITHUB.COM/SROBERTS/HUBOT-VTR-SCRIPTS](https://github.com/sroberts/hubot-vtr-scripts)

CONTACT ME

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THANKS!!!

