### VPS Benchmarks



# Let's stop guessing and rub some science on it.

### what up!

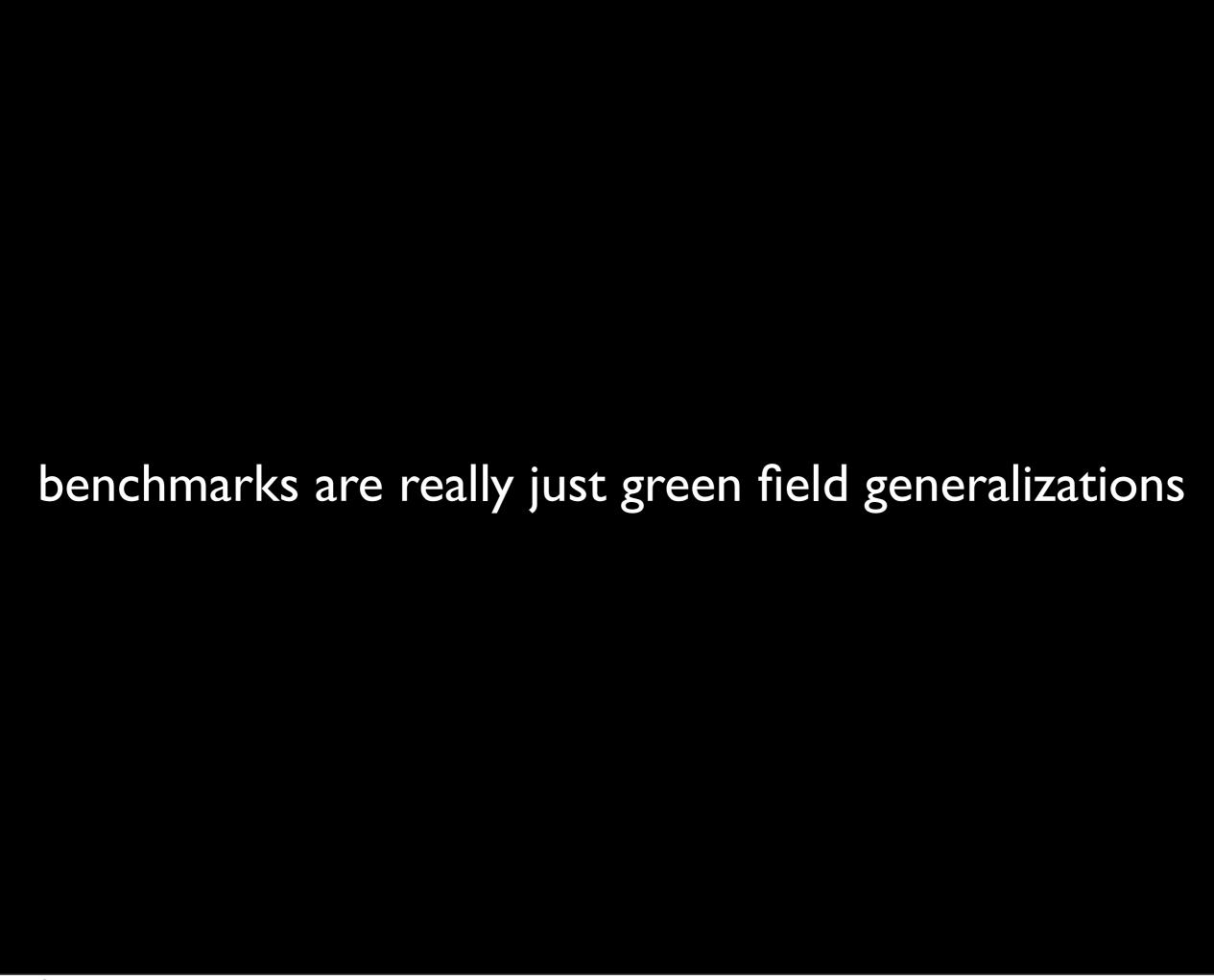
- Michael Gorsuch
- GitHub Ops
- Generalist / Enabler / Sidekick
- Trying to stop swearing so much
- @michaelgorsuch

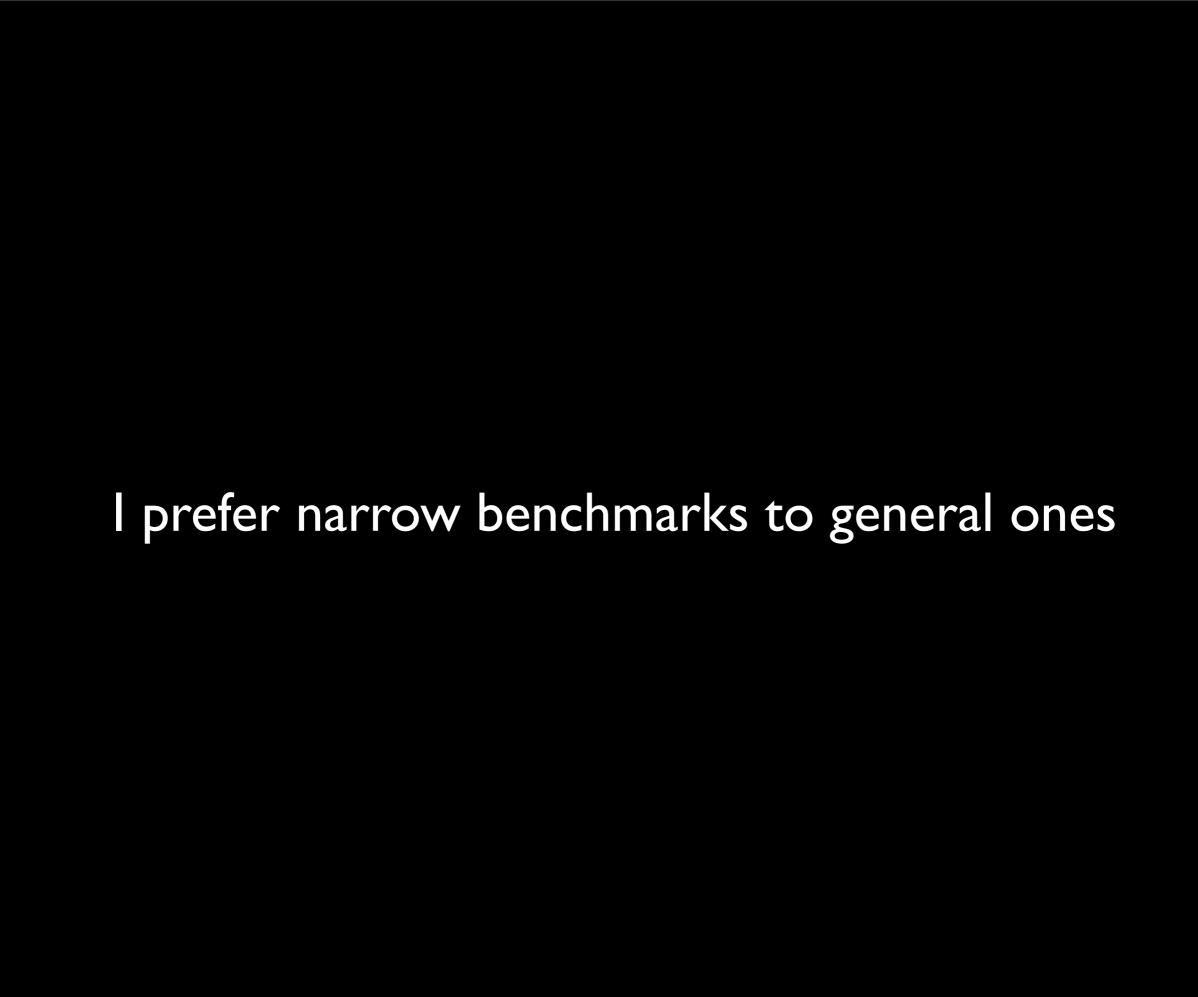


Michael Gorsuch @michaelgorsuch

So my kids invented a game called 'mosquito' in which they bite each other. One even drew blood. I... don't even. #dadops

DISCLAIMER!!!!





(another) DISCLAIMER!!!!



| 1GB                            | 2GB                            | 4GB                             | 8GB                              | 16GB                             |
|--------------------------------|--------------------------------|---------------------------------|----------------------------------|----------------------------------|
| 1 GB RAM                       | 2 GB RAM                       | 4 GB RAM                        | 8 GB RAM                         | 16 GB RAM                        |
| 8 CPU (1x priority)            | 8 CPU (2x priority)            | 8 CPU (4x priority)             | 8 CPU (8x priority)              | 8 CPU (16x priority)             |
| 24 GB Storage<br>48 GB Storage | 48 GB Storage<br>96 GB Storage | 96 GB Storage<br>192 GB Storage | 192 GB Storage<br>384 GB Storage | 384 GB Storage<br>768 GB Storage |
| 2 TB Transfer                  | 4 TB Transfer                  | 8 TB Transfer                   | 16 TB Transfer                   | 20 TB Transfer                   |
| \$20 / month                   | \$40 / month                   | \$80 / month                    | \$160 / month                    | \$320 / month                    |
| Sign Up!                       | Sign Up!                       | Sign Up!                        | Sign Up!                         | Sign Up!                         |

| \$5/mo.                           | \$10/mo.                          | \$20/mo. <b>2GB</b> Memory         | \$40/mo.  4GB Memory                 | \$80/mo.                             |
|-----------------------------------|-----------------------------------|------------------------------------|--------------------------------------|--------------------------------------|
| 1 Core 20GB SSD Disk 1TB Transfer | 1 Core 30GB SSD Disk 2TB Transfer | 2 Cores 40GB SSD Disk 3TB Transfer | 2 Cores  60GB SSD Disk  4TB Transfer | 4 Cores  80GB SSD Disk  5TB Transfer |
| Sign Up                           | Sign Up                           | Sign Up                            | Sign Up                              | Sign Up                              |

a real life app, a real life story

#### canary.io

- URL Visibility from First Principles
- sensor (ruby / curl)
- core (node.js / redis / fs)
- client (html / css / js)

#### contenders

- Linode
- Digital Ocean







#### systems

- digital ocean \$5 / mo plan
- digital ocean \$80 / mo plan
- linode \$20 / mo plan
- linode \$80 / mo plan

#### focus on core

- evented app
- single processor
- cpu bound
- same story for redis

## we'll base core perf on redis

- redis-benchmark
- 2.6.16
- \$ redis-benchmark -q

#### redis GET results

| lin-20 | lin-80 | so-5   | so-80  |
|--------|--------|--------|--------|
| 28,985 | 37,174 | 67,114 | 82,644 |

#### Postmark

- file system transactions
- generally used to simulate email systems like postfix
- generate 50,000 files of between I and IOKB, perform I00,000 transactions

# postmark transactions per second

| lin-20 | lin-80 | do-5 | do-80 |
|--------|--------|------|-------|
| 769    | 4000   | 6666 | 14285 |

#### postgres

- why not?
- \$ pgbench -c 8 -j 2 -T 600 chompy
- \$ pgbench -c I -j I -T 600 chompy

## pgbench, -c 8, tps

| lin-20 | lin-80 | do-5 | do-80 |
|--------|--------|------|-------|
| 1334   | 2241   | 1257 | 1095  |

## pgbench, -c 1, tps

| lin-20 | lin-80 | do-5 | do-80 |
|--------|--------|------|-------|
| 645    | 960    | 1187 | 1008  |

#### unixbench scores

| lin-20 | lin-80 | do-5 | do-80 |
|--------|--------|------|-------|
| 1847   | 2153   | 1545 | 3231  |

## things I wish I had tested

- standard deviation
- standard deviation at different time periods
- EC2
- Joyent
- hardware (softlayer / baremetalservers)