

Tortoise vs the hare

High performance WordPress hosting on the cheap



My original setup

- Slow internet connection
- Multiple Hostgator shared accounts
 - Cost ~US\$9 / month each
 - Got kicked off service



An upgrade ...

- Fully managed VPS
 - 1 GB RAM
 - Immediate speed boost
 - Hardware failure
 - Failed backup

The ÜberHost logo, featuring the word 'ÜBERHOST' in a white, stylized, blocky font with a slight shadow effect, set against a dark background.

Move to Norway



Move to Norway

- Depressing to visit my own site ...

overall PageSpeed Score of **78** (out of 100).



ryanhellyer.net
Tested from Amsterdam, Netherlands on September 22 at 21:56:14

Perf. grade	Requests	Load time	Page size
74/100	16	8.27s	1.6MB


Your website is **slower than 91%** of all tested websites

[DOWNLOAD HAR](#)

[Tweet](#) [Email](#)

Solution?

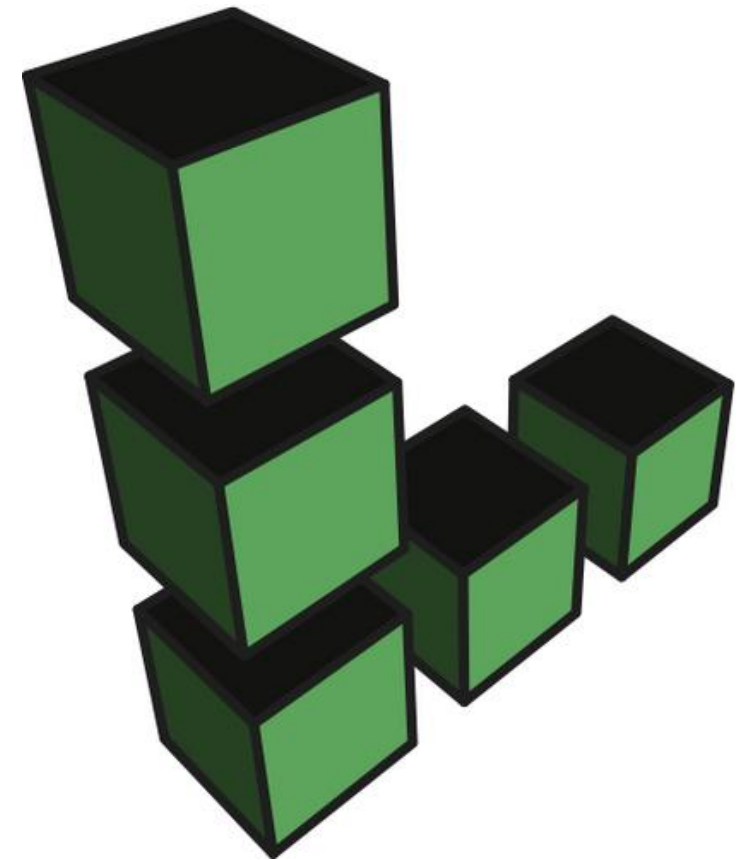
- Managed WordPress host?

WP Engine  FINELY TUNED
WORDPRESS



Unmanaged VPS

- Tried to setup
- Failed
- Tried again
- Tried again
- Gave up :(
- Solution?



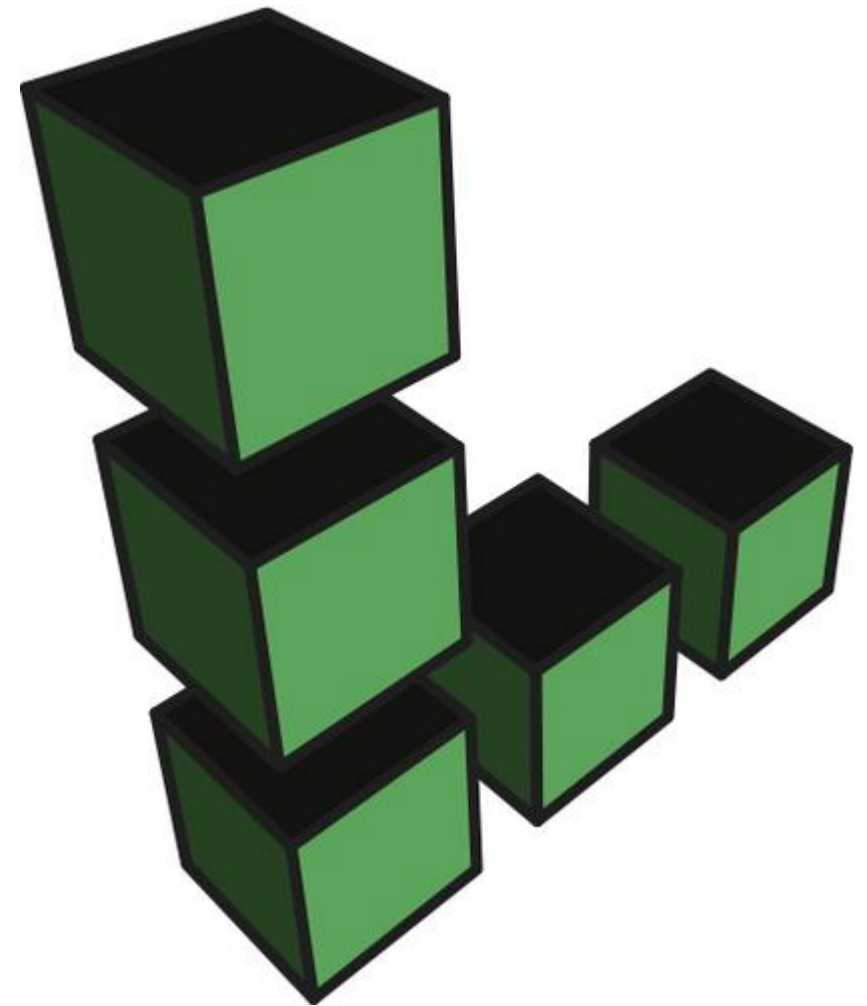
Stubbornness

- Hire expert :)
- Learn from expert :)



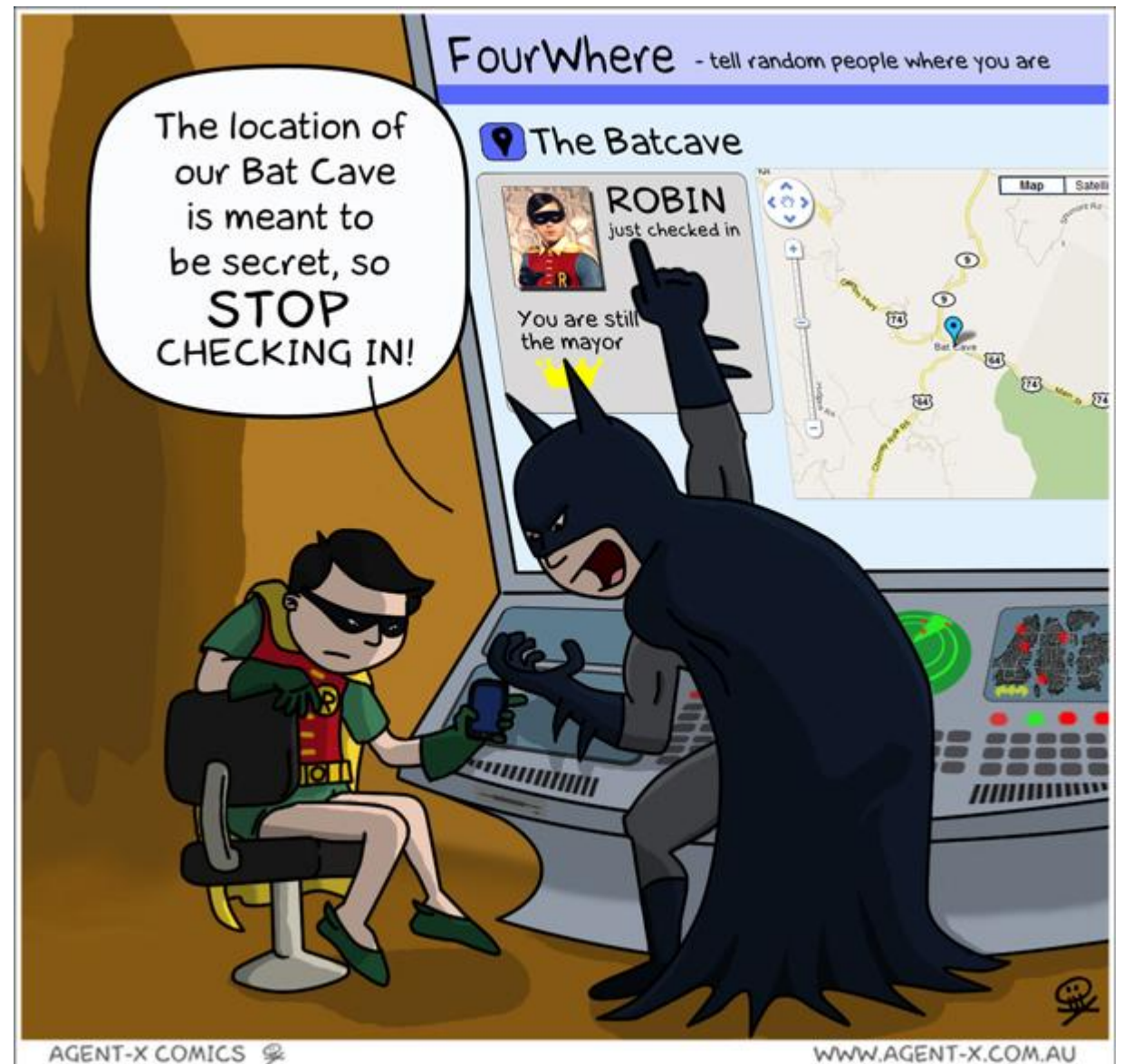
Back to Linode :)

- US\$20/month
- Half the RAM of old server
- Minimal setup
 - NGINX
 - PHP
 - Fast-cgi or PHP-FPM?
 - APC



APC and Batcache

- Avoid bloated caching plugins
 - Lean, mean
- APC plugin
- Hacking advanced-cache.php
 - Mobile support



CDN

- Content Delivery Network
- Ideal for static files



- Used custom plugin
- Alternatively ... WP Stack by Mark Jaquith

Result

- 100/100 possible?

overall PageSpeed Score of **98** (out of 100).



Varnish caching?



- Load testing service
<http://blitz.io/>
- Test with 50,000 concurrent users

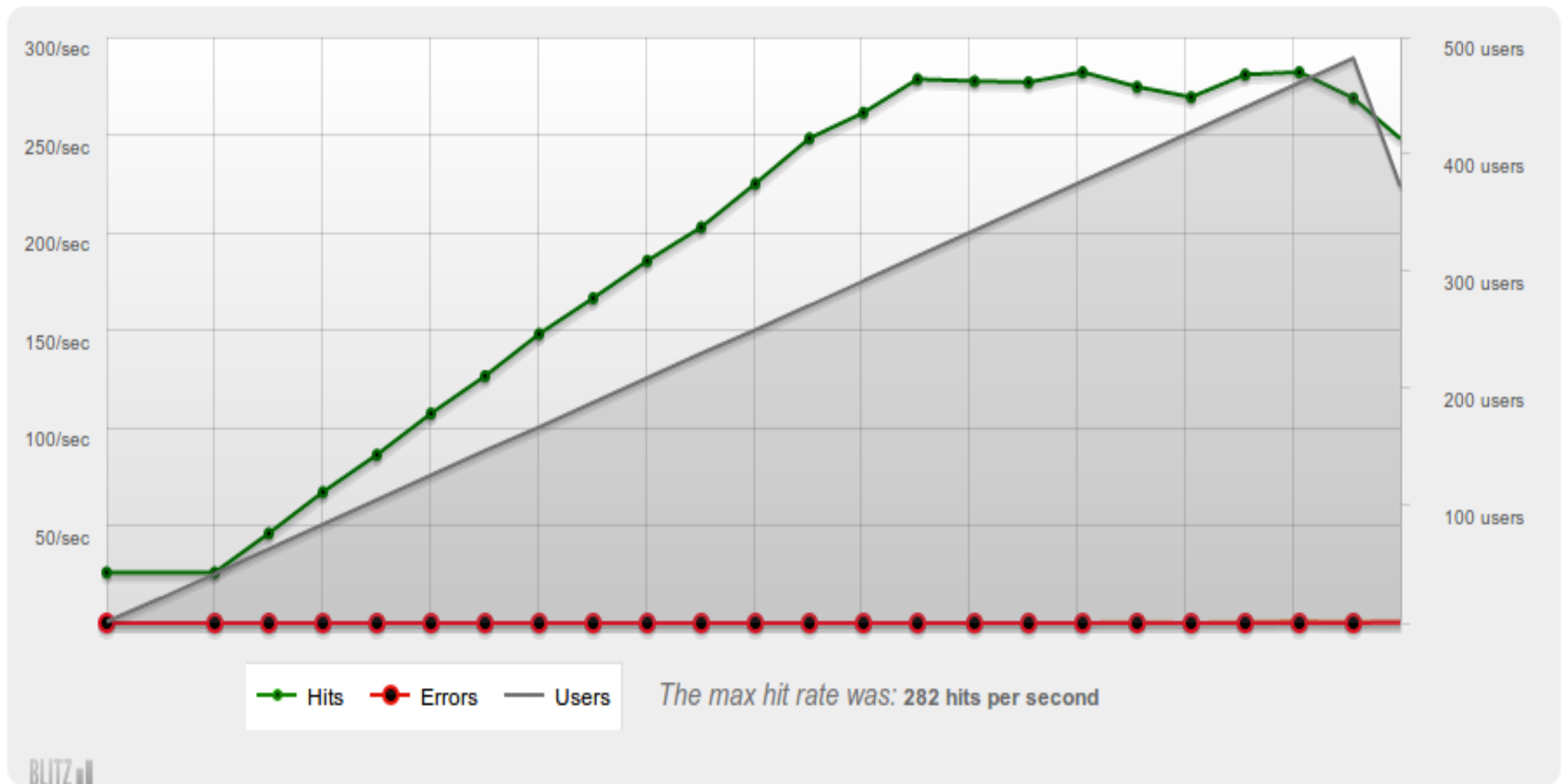
BLITZ MAKES PERFORMANCE TESTING A FUN SPORT

Blitz has powerful yet simple **capabilities** that can be easily integrated into your **DevOps workflow**.

How much traffic?

ryanhellyer.net: ~270 page views per second, max load time = 700

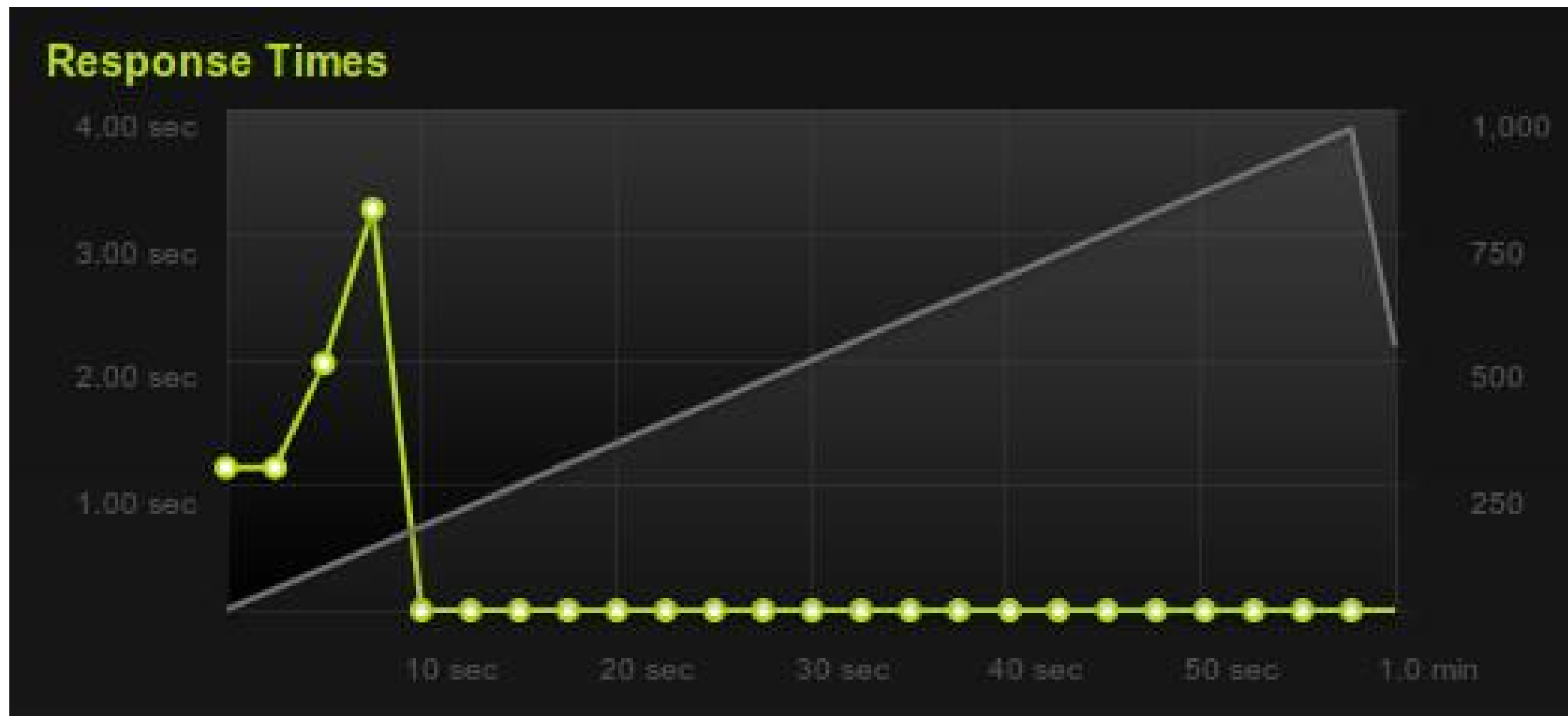
HIT RATE



Old and new comparison

Old: **29** page views **per minute** (server locked up under initial load)

New: **270** page views **per second**



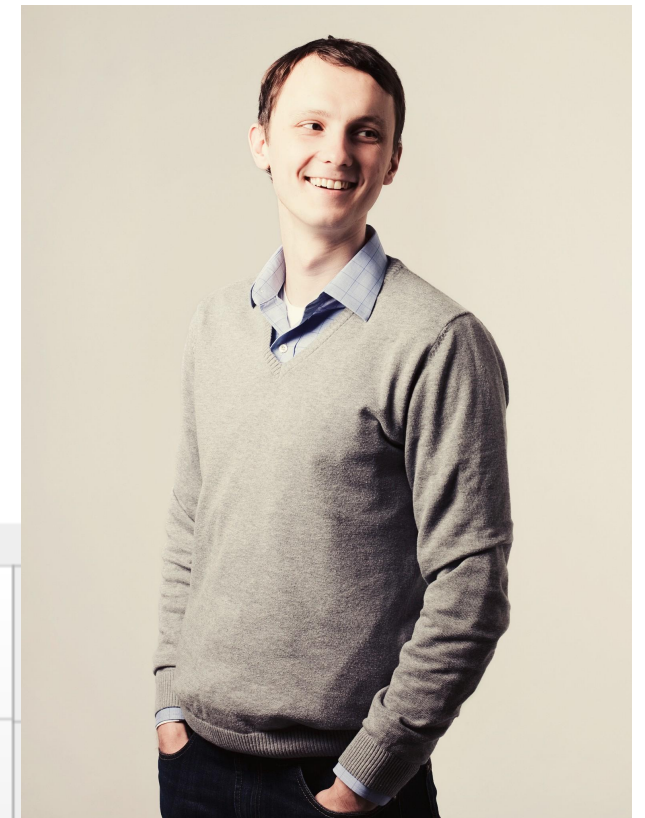
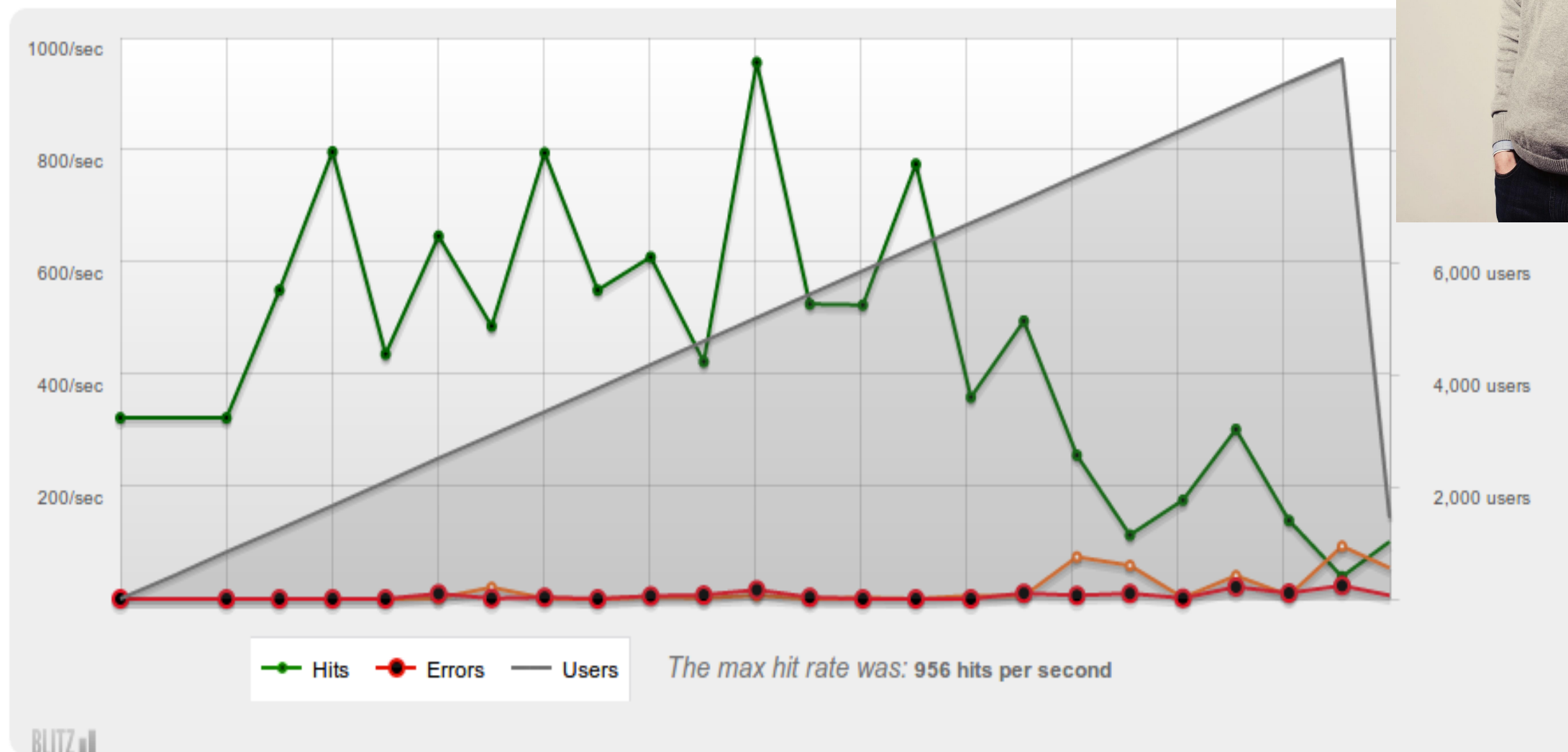
Will Varnish allow more traffic?

- Bandwidth at 282 page views per second = ~54 Mbps
- Maximum bandwidth on Linode tested = ~60 Mbps max.
- Varnish would offer little increase in capacity
- Potential decrease in load time

Lean HTML?

konstruktors.com = ~700 page views per second

HIT RATE



BLITZ

*

Metronet

MOAARRR power!!!



Already using the solution!

- Pointing your primary domain at cloudfront will not work
- Doesn't support \$_POST
 - wp-admin will fail
 - comments will fail



How to avoid breaking site

- Seperate front and back domains

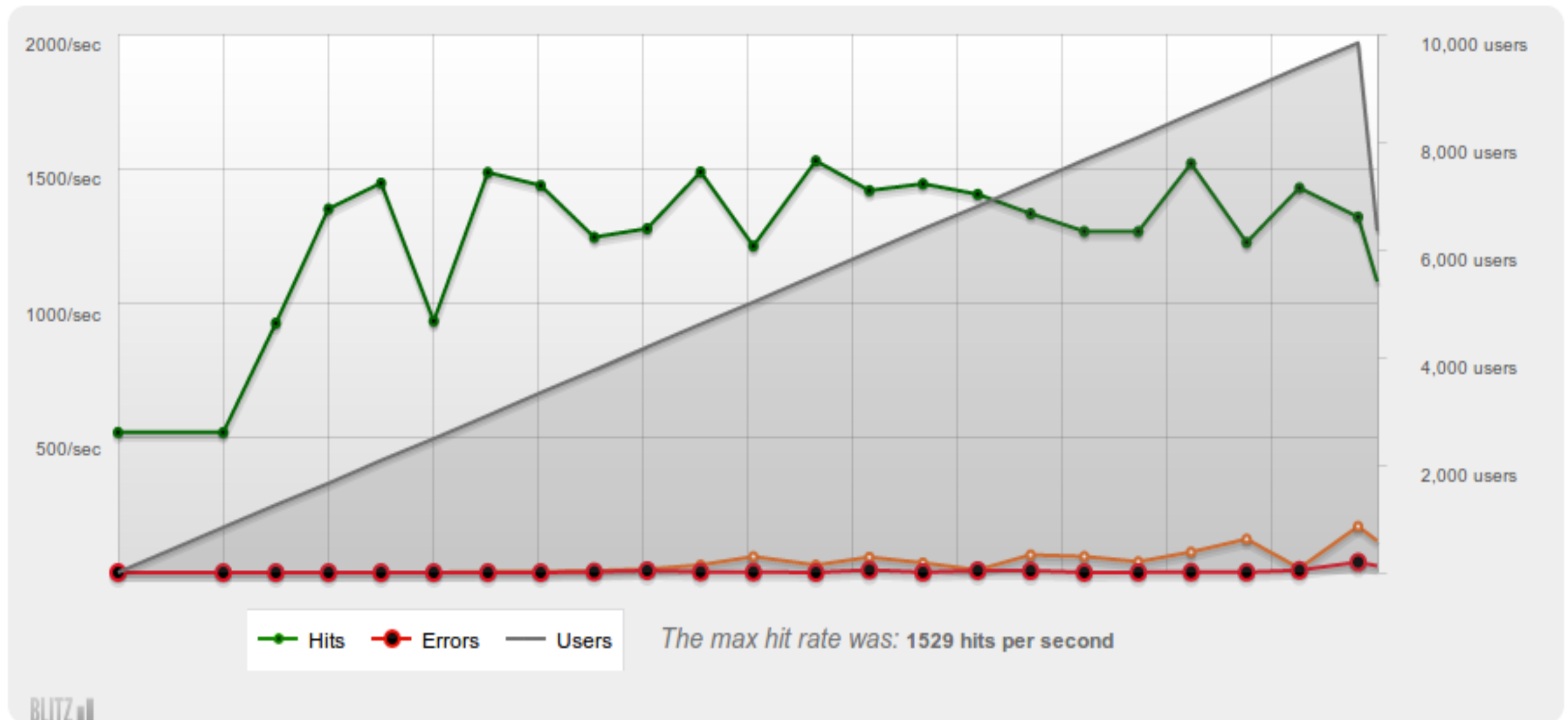


- <http://cloudfront.ryanhellyer.net/>
<http://clouddemo.ryanhellyer.net/>

Performance?

1500 page views per second
Initial page loads within 6 ms!!!!

HIT RATE



Comments?

- Set low Cloudfront expiry time
- Submit comments form to other domain
 - Redirect user back to same page, with query var
- Disqus

DISQUS

Advantages to Cloudfront

- Crazy fast load times ... 6 ms
- Serves files from edge location
- Massive capacity
- Extremely cost-effective



Ultimate test?

- Botnet attack
- Mission accomplished

