

Greitaveikos testavimas su JMeter, BlazeMeter, New Relic

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Greitaveika

Ferrari F1 Perfection

<https://www.youtube.com/watch?v=aHSUp7msCIE>

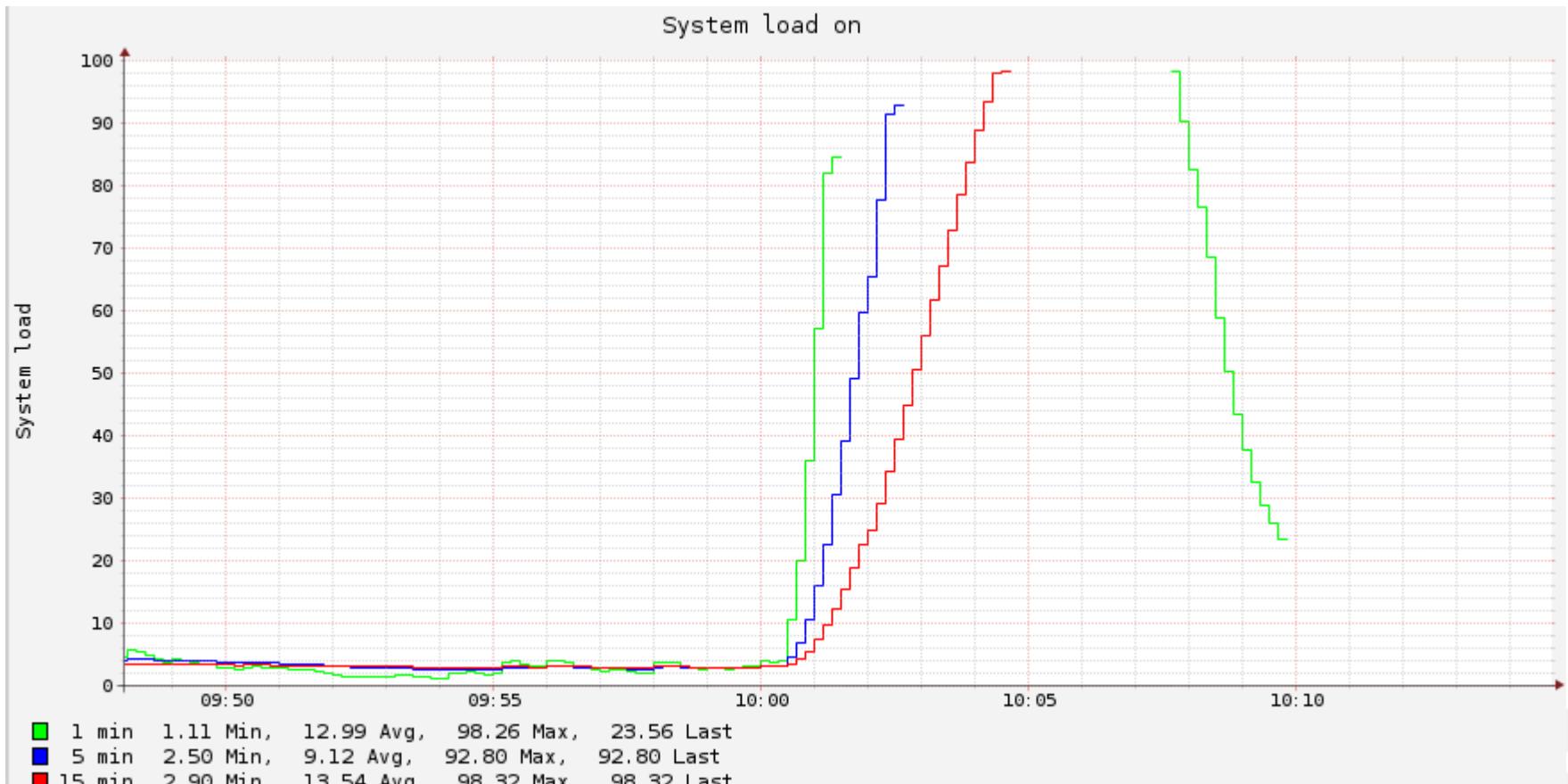
Greitaveikos testai



Ar tai garantuoja pergalę?



Greitaveika



Ką testuoti?

1. Regressions

Ramp **VUsers** nuo 1 iki 20

Response time kinta **ne eksponentiškai** = **OK**

2. Pageviews per day/hour/second

Ramp **VUsers** nuo 1 iki **n** (pvz. Nuo 200 ir daugiau)

Response time lūžio taškas – $x\%$ = **OK**

Tada pastovus Load testas su **VUsers** kiekiu lūžio taške.

Response time

Response time is the total amount of time it takes to respond to a request for service.

Observers can recall one specific image in an unbroken series of different images, each of which lasts as little as

13

milliseconds

Client side

Page load timeline

1. Initial request (link clicked): Brown in dashboard chart.

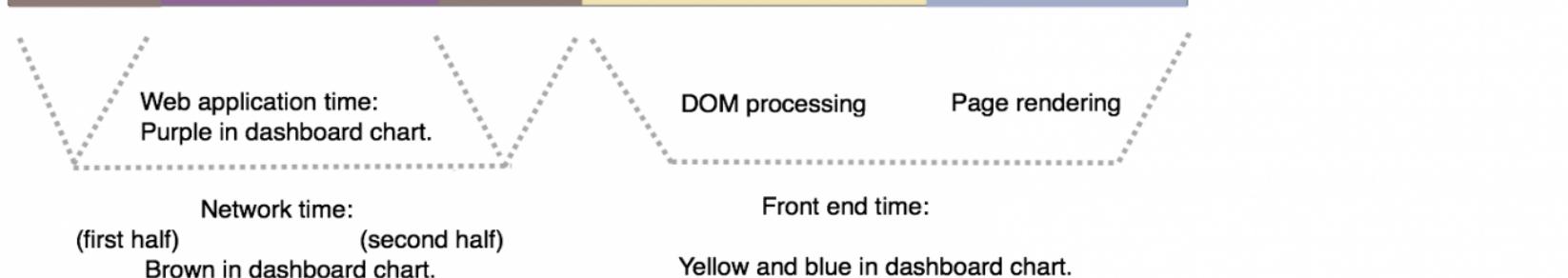
2. Request reaches app server: Purple in dashboard chart.

3. App code finishes execution.

4. Browser receives HTML, begins processing. Yellow in dashboard chart.

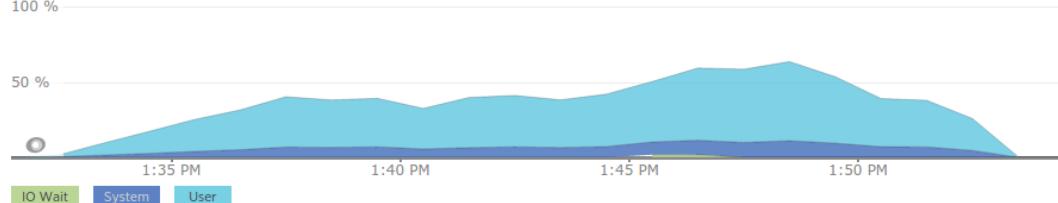
5. HTML processing finished, DOMContentReady event.
Blue in dashboard chart.

6. Page rendered, window load event.

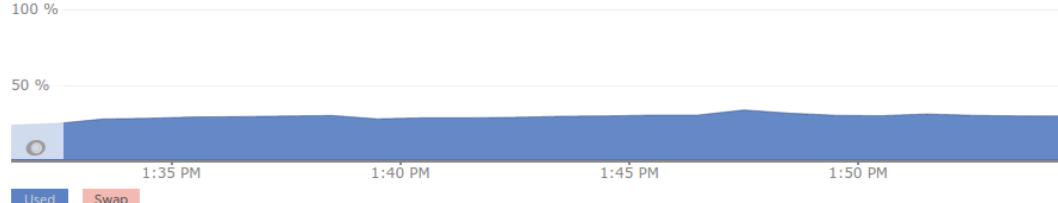


Server Side

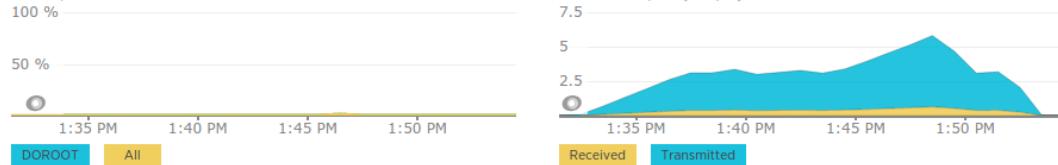
CPU usage



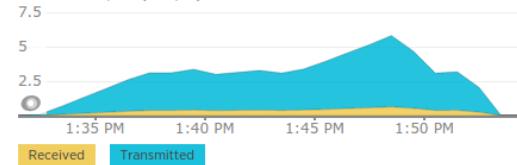
Physical memory



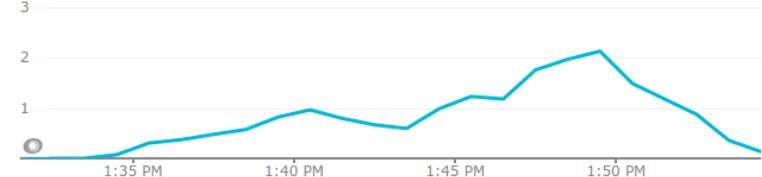
Disk I/O utilization



Network I/O (Mb/s)



Load average



CACA



1 cores
497 MB RAM



7.9

Intel Xeon

Linux 3.2.0-4-amd64 x86_64
New Relic agent 2.2.0.125

Apps

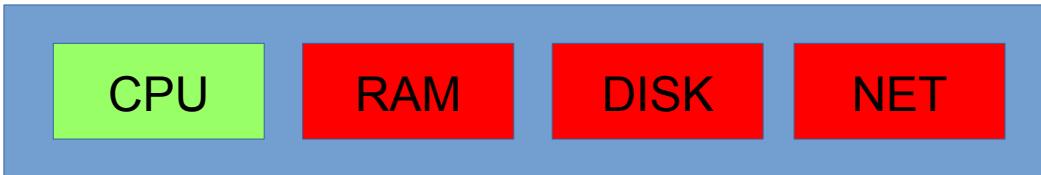
PHP Application (CACA)	Response time	Throughput	Errors
	454 ms	95.7 rpm	99.90%

Processes	User	Count	CPU	Memory
apache2	www-data	9	26.5%	114 MB
mysqld	mysql	1	1.3%	54.1 MB
newrelic-daemon	root	2	0.1%	22.3 MB
apache2	root	1	0.0%	10.8 MB
rsyslogd	root	1	0.0%	5.75 MB

Show 7 more...

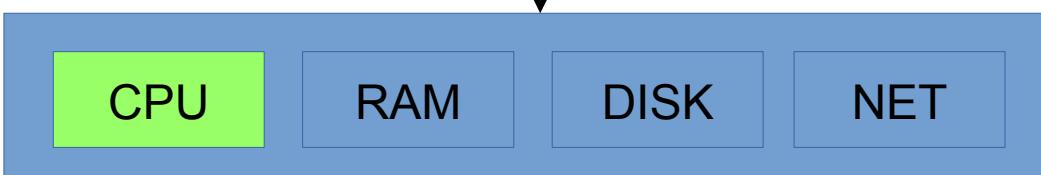
Anatomy of Your Test

Laptop



Network latency
Limits by ISP
Firewalls
Load balancers
Cost of Traffic

AP server



No dedicated network
Hostnames instead of IP

DB server



Load

An idle computer has a **load** number of 0.

Each process using or waiting for CPU (the ready queue or run queue) increments the **load** number by 1.

Load < 10 ≈ OK



Load



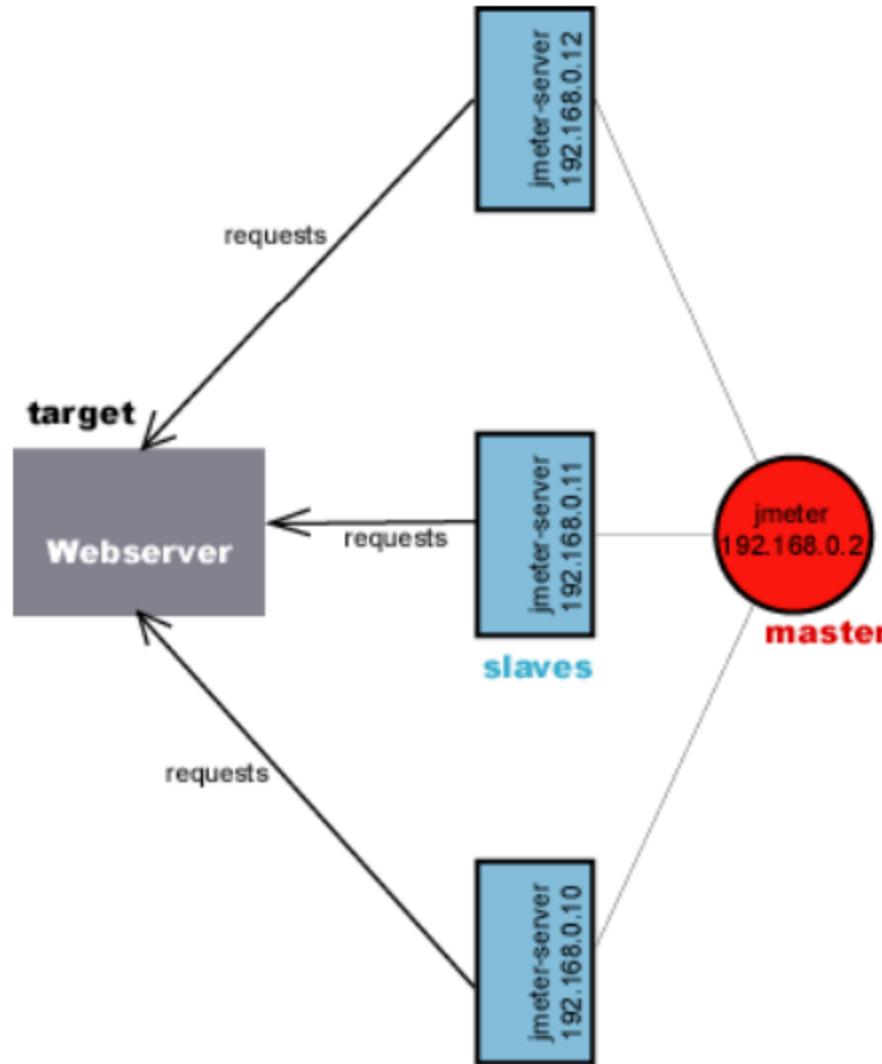
http://www.pipedija.com/images/0/04/Sovietmetis_parduotuve.jpg

JMeter

Load test functional behavior and measure performance.
<http://jmeter.apache.org/>



Distributed JMeter



BlazeMeter

Continuous performance testing platform.

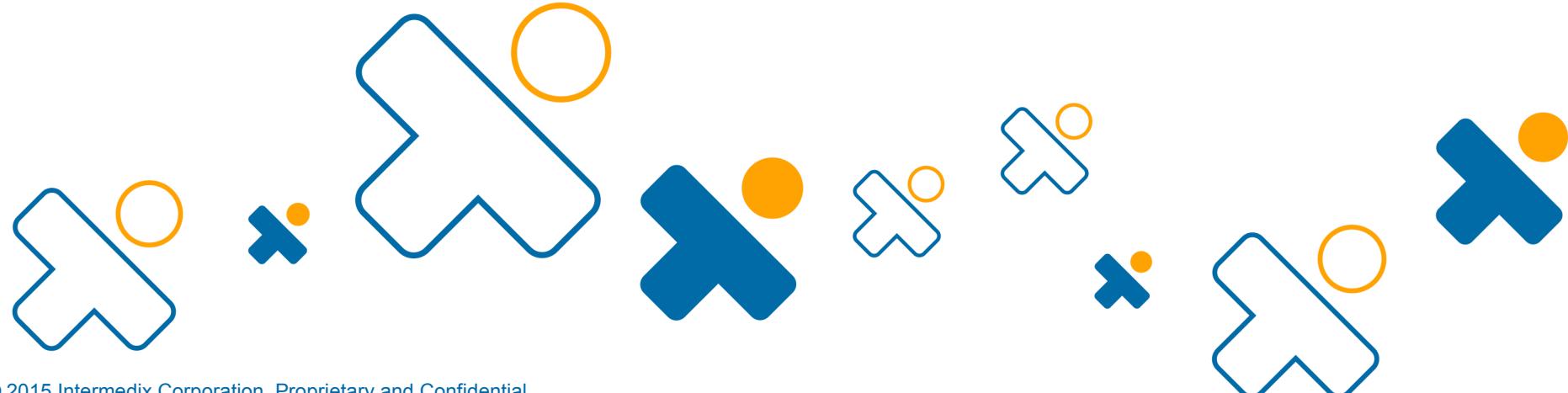
Over **1 million VUsers** in USA, Europe and Asia Pacific multiple locations

<https://blazemeter.com/>



New Relic

Application Performance Management & Monitoring.
<http://newrelic.com/>

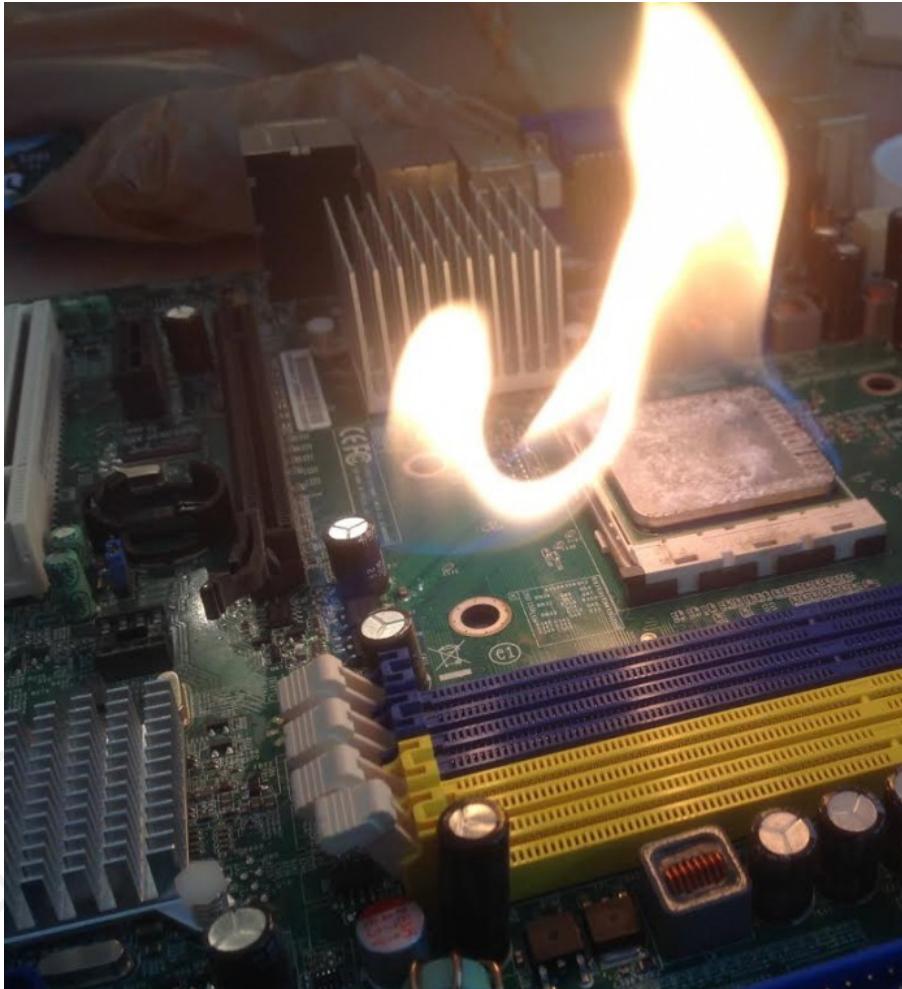


Ką stebėti?

- I Response time reikšmę
 - Response time reikšmės grafiką
 - Užklausų kiekį testo metu
 - Atsakymų turinį testo metu
 - Klaidų kiekį
 - Aparatūrinę dalį



Respect Hardware



<http://zifunny.com/content/uploads/images/201507/cpu0-possible-thermal-failure-cpu-on-fire.jpg>

Klausimai?

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<https://m.do.co/c/a1c0bd9bc8be>

