



AGILE, CLOUD COMPUTING, OPEN SOURCE AND WHAT'S IN BETWEEN (backend testing in the agile-age)

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#jenkinsconf

ABOUT THE SPEAKER



Alon Girmonsky

- Hands-On Developer for the Past 20 Years
- Expertise
 - Large-Scale Web and Mobile Applications
 - IP & Internet
- Founder & CEO of  **BlazeMeter**®
- A Load Testing Platform as a Service
 - 100% Compatible with Apache JMeter



TESTS
500,000

USERS
50,000



THE AGILE ENTERPRISE



- All organizational divisions - not just R&D
- It's about survival in a highly competitive business environment
- Innovate in short Iterations – a MUST!
- New DNA
- New IT Infrastructure (a.k.a Devop)

AGILITY ENABLERS



Open
Source



Cloud
Computing



Agile? What it Means?

An Example from a Large Media Company

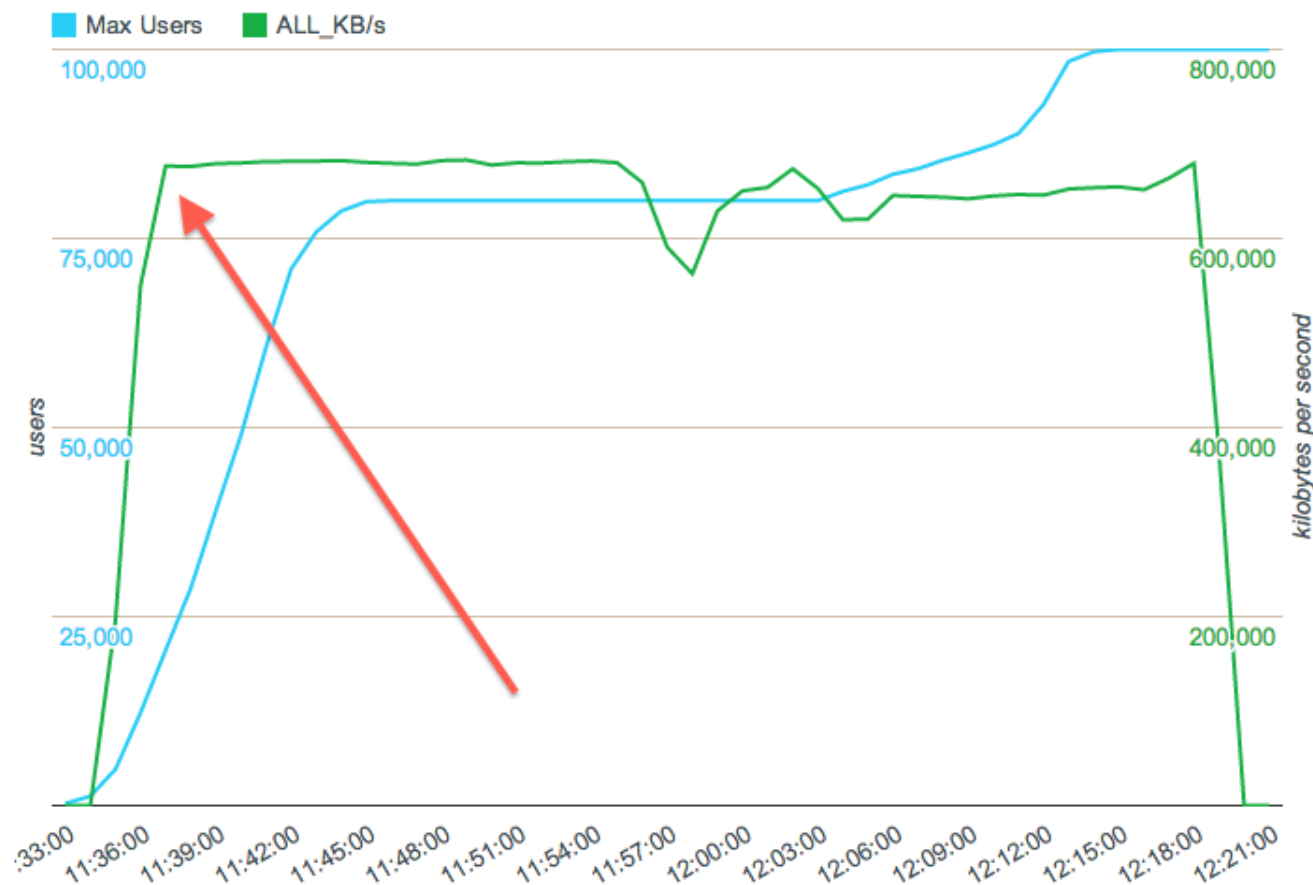


*"We'd like to squeeze in a load test for XXXX's biggest event of the year, Fantasy Football season. Our best opportunity to execute this is **tonight** 3-7am EST. We'd like to generate a constant **40,000** hits/sec for about 1 hour. .."*

* Traditionally this would have taken weeks and cost \$\$\$

Agile? What it Means?

Network Bottleneck Identified



* Traditionally this would have taken weeks and cost \$\$\$

PERFORMANCE TESTING

In The Agile Age



Waterfall

Functional

Load

Agile

Front end

Back-end

E.G. Java
Script

E.G API

2005

2010

2014

100% BACKEND TESTING



WHAT CAN YOU TEST?

API

Mobile

Web

WHAT DO WE TEST FOR?

FUNCTIONALITY
(API)

PERFORMANCE
(Response Time, Errors)

STABILITY
(System)

WHAT TYPE OF TESTS?

UNIT
(Troubleshooting)

INTEGRATION
(Regression, CI)

PRE PROD
(Load, SOAK)

POST PROD
(Monitoring)

Meet Apache JMeter

(The Open Source Choice for Backend Testing)

- API
- Web services
- Mobile
- HTTP / HTTPS
- Login / Signup
- Form POSTing / Credit card transactions
- Parameters extraction
- Mongo, MSSQL, Oracle SQL, MySQL
- Multiple user profiles



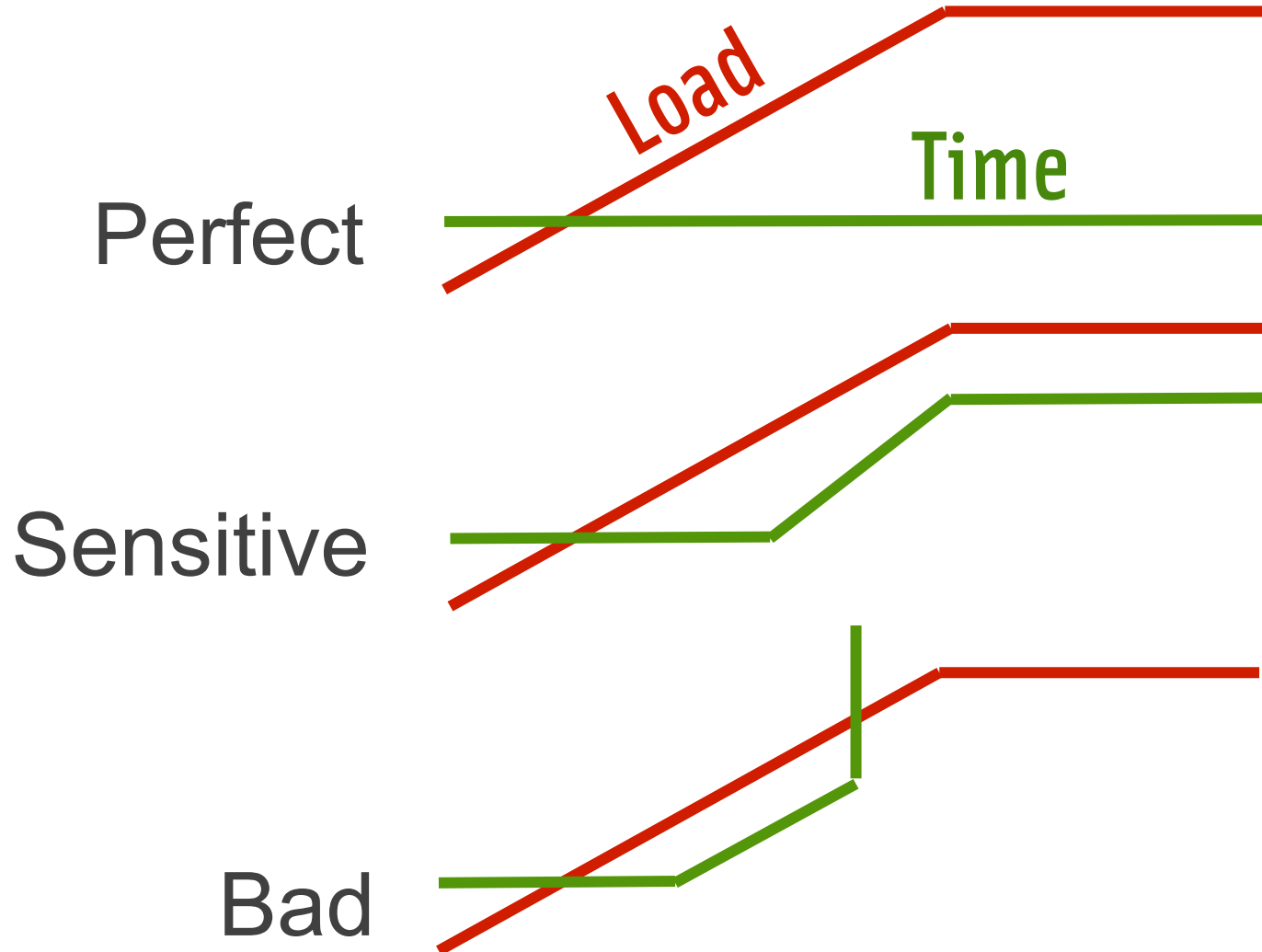
»Any script
»Any scenario
»Any protocol



Performance

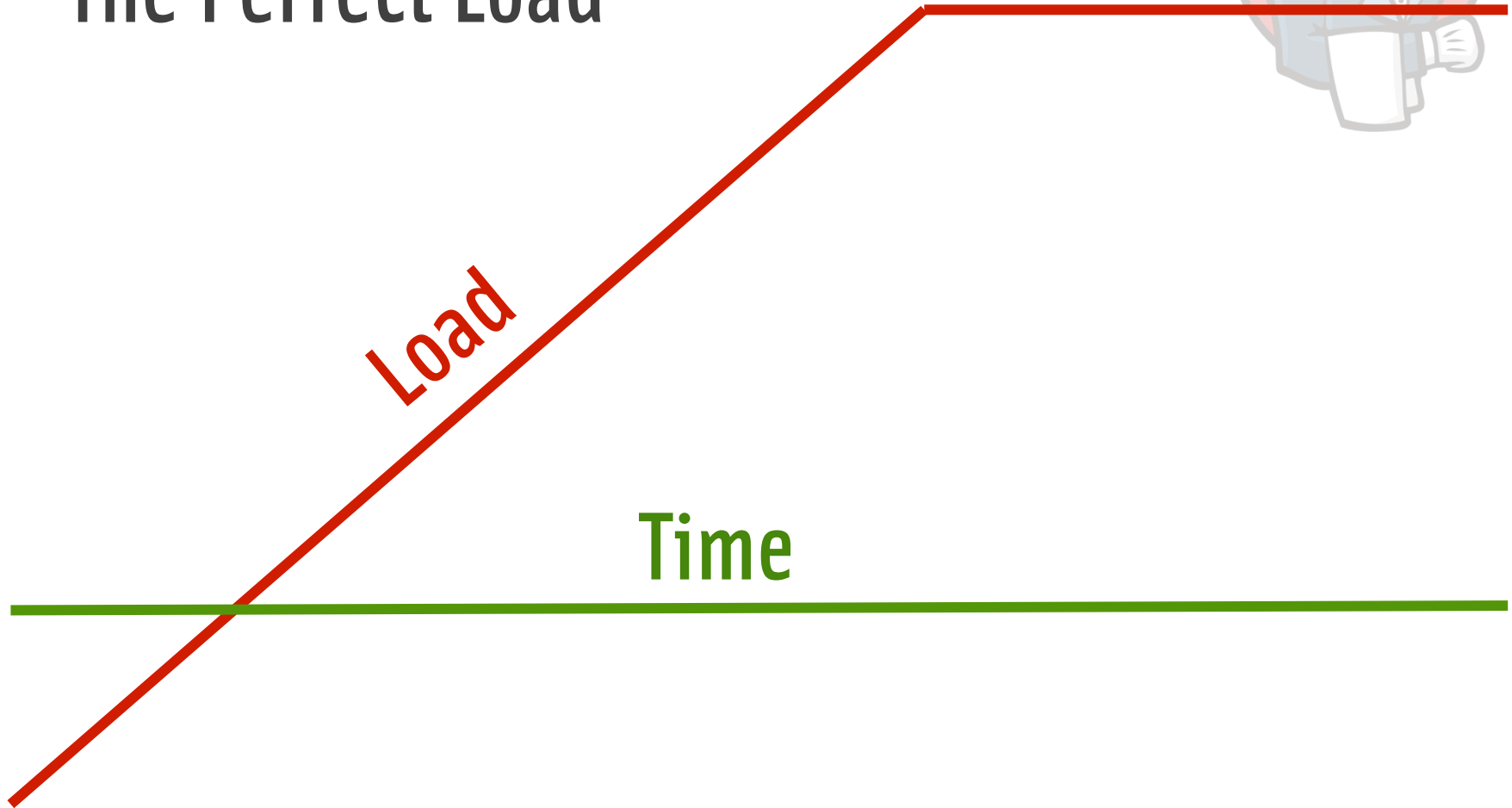
1-on-1

Load Performance Types



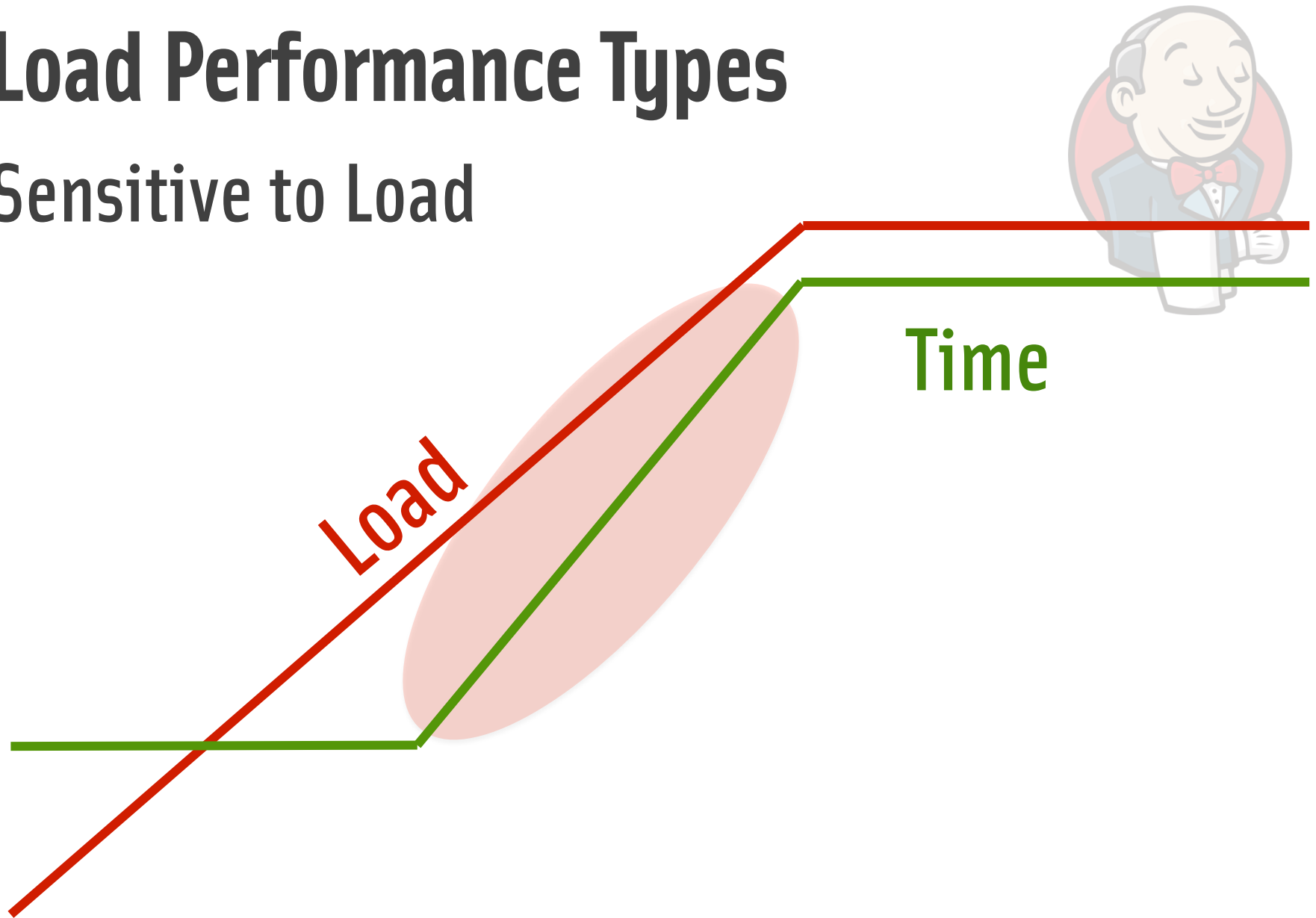
Load Performance Types

The Perfect Load



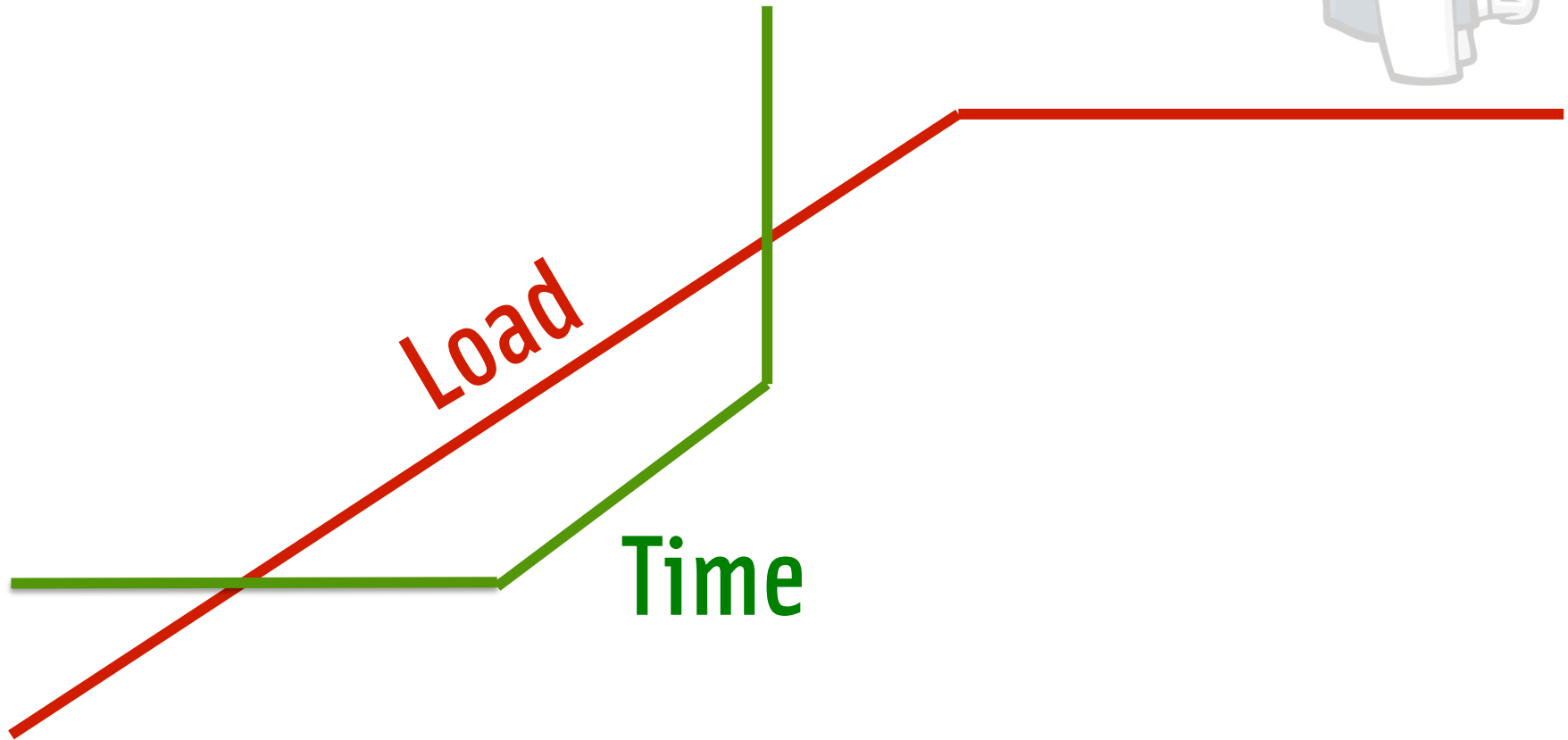
Load Performance Types

Sensitive to Load



Load Performance Types

Bad Performance



CONTINUOUS DELIVERY



Continuous Integration

Continuous Deployment

Continuous Testing

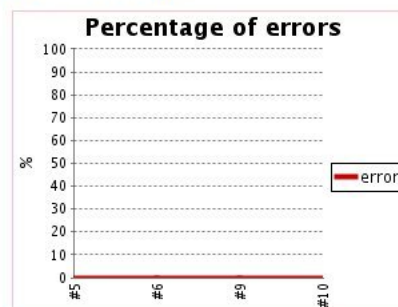
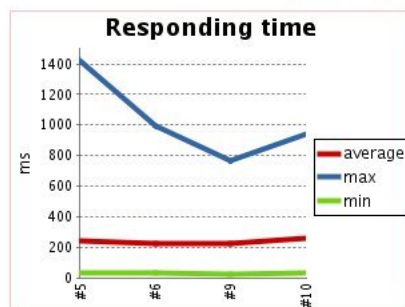
JMeter Plugin to Jenkins

[Back to Dashboard](#)[Status](#)[Changes](#)[Workspace](#)[Build Now](#)[Delete Project](#)[Configure](#)[Performance Trend](#)**Build History** [\(trend\)](#)#10 [Mar 22, 2010 10:36:48 AM](#)#9 [Mar 22, 2010 9:59:28 AM](#)#8 [Mar 22, 2010 9:46:45 AM](#)#7 [Mar 22, 2010 9:38:15 AM](#)#6 [Mar 9, 2010 1:22:57 PM](#)#5 [Mar 9, 2010 12:09:36 PM](#)#3 [Mar 9, 2010 11:06:32 AM](#)#2 [Mar 9, 2010 10:47:59 AM](#)#1 [Mar 9, 2010 10:38:19 AM](#)[for all](#) [for failures](#)

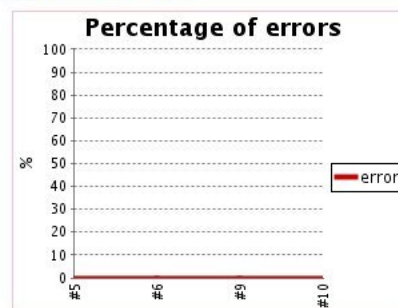
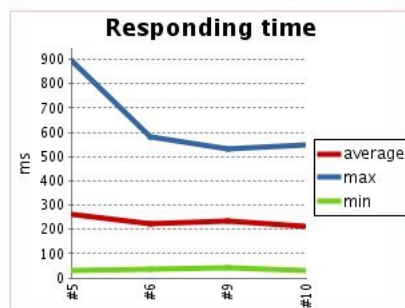
Performance Trend

[Last Report](#)
[Filter trend data](#)

Test file: myTests1.jtl

[Trend report](#)

Test file: myTests2.jtl



Agile Performance Testing

Conclusions

- Cloud Computing + Open Source = Agile
- Any Protocol, Any Scenario, Any Scale
- Self-Service, On-Demand, TTS < 10m
- For Dev, Devop, Performance Engineer and Ops
- Test Driven Development
- VBetter Quality + Faster = Competitive !



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