


Packt Mein Shop das?

Oxid Commons 2016

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Hi, I'm Kore (@koredn)





Simulate Real Load

London Travel Information

Simulate Real Load

- ▶ We did this several times
- ▶ No shop had performance issues when going live

How?

ab / siege





jMeter



Do Not Guess – Measure!

Outline

How To

Common Problems

Why Is It Complex?

Awesome Shop

 2 articles
42.32 €

Smartphone

Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.



1337,-- €
5 items in stock

Comments



5

Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor.

Analyze Scenarios

- ▶ What happens in your shop?
 - ▶ Random browser
 - ▶ User registration
 - ▶ Logged in browser
 - ▶ Checkout process

Crunch The Numbers

- ▶ How many checkouts per day?
- ▶ How many page impressions per day?
- ▶ How many checkouts / PIs during peak time?
 - ▶ 240.000 page impressions per day → $10.000PI/h$?
 - ▶ Are you .de? → $30.000PI/h$
 - ▶ Peak business hours? → $60.000PI/h$ → $20req/s$



- base-frontend-tests
 - HTTP Request Default Einstellungen
 - HTTP Header Manager
 - Random Traffic (Unknown users)
 - Initial Url Extractor
 - Frontpage
 - Initial Path Extractor
 - Loop Controller
 - Deep Link
 - Path Extractor
 - Gauss'scher Zufalls-Zeitgeber
 - Debug PostProcessor
 - View Results Tree
 - Filter View
 - Frontpage
 - Extract Category Link
 - Category
 - Extract Form Link
 - Find Filter
 - Find Filter Name
 - Find Filter Value
 - Filtered Category
 - Find Article Links
 - ForEach Controller
 - Article
 - Gaussian Random Timer
 - Debug PostProcessor
 - View Results Tree
 - WorkBench

Test Plan

Name: base-frontend-tests

Comments:

User Defined Variables

Name:	Value
projectDir	\${_P(projectDir, /)}
projectHost	\${_P(projectHost, [http://www.localhost:8080])}
projectRuntime	\${_P(projectRuntime, 60)}
projectRampUpTime	\${_P(projectRampUpTime, 120)}
randomTrafficUnknownUsers	\${_P(randomTrafficUnknownUsers, 1)}
randomTrafficPathLength	\${_P(randomTrafficPathLength, 5)}
hrefRegexp	\${_P(hrefRegexp, href="http://[a-z0-9]+/[a-z0-9]+")}
filterViewUsers	\${_P(filterViewUsers, 1)}
categoryLinkSelector	\${_P(categoryLinkSelector, a.smtest-category)}
filterFormSelector	\${_P(filterFormSelector, form.smtest-form-filter)}
articleLinkSelector	\${_P(articleLinkSelector, a.smtest-product-link)}

Write jMeter tests

- Run Thread Groups consecutively (i.e. run groups one at a time)
- Run tearDown Thread Groups after shutdown of main threads
- Functional Test Mode (i.e. save Response Data and Sampler Data)

Selecting Functional Test Mode may adversely affect performance.

Add directory or jar to classpath

Library

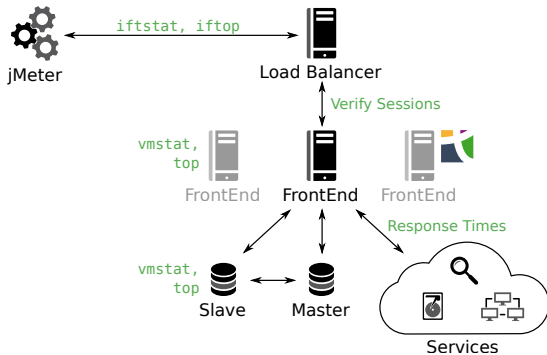
- ▶ User types / execution plans
 - ▶ Thread groups
- ▶ Action timing
 - ▶ Timers
- ▶ Organize and combine logic (loops, etc.)
 - ▶ Controllers
- ▶ Example data, cookie manager, ...
 - ▶ Configuration elements
- ▶ Actual work (HTTP, SOAP, ... requests)
 - ▶ Samplers

How to setup a load-test?

1. Provision server
2. Reset server
3. Prime server
4. *Run test*
5. Analyze data

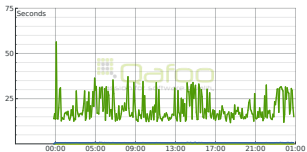
Reproducible automated tests on real-world
servers

Collect Data



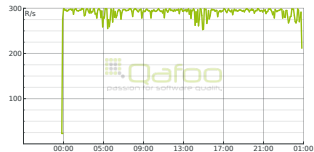
Analyze Data

Response time



Minimum Average Maximum

Requests per second



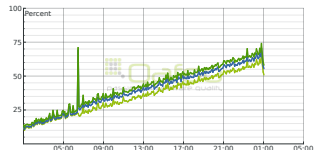
Average

CPU usage



System User

Memory usage



Used Memory Shared Cached

Outline

How To

Common Problems



Varnish / Edge Side Includes

NFS



Server Configuration

STOP

A photograph of a person walking on a sidewalk. In the foreground, a large, rectangular, light-brown sign with the word "STOP" printed in bold, dark blue letters is visible. The person is walking from right to left, wearing dark pants and brown shoes. The background is a blurred blue surface, possibly a road or a large wall.

Opcode Caches



Summary

Test Before

- ▶ Investment
- ▶ Sleep well
- ▶ Tests can be run again – requires servers

Test Live

- ▶ Pray...

Simulate Real Load

- ▶ We did this several times
- ▶ No shop had performance issues when going live
- ▶ Hardware proved almost everytime sufficient after problems with the stack were fixed
- ▶ No shop would have made it without the improvements



THANK YOU

Rent a quality expert
qafoo.com