External Webservice Monitoring

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Agenda

Introduction
COCUS & Me

Our Approach
Technologies & Implementation

The Challenge
What’s the problem and why is it important?

Next Generation
New Stuff
Q&A
Introduction

COCUS AG
Martin Senebald
Unit Manager Data Analytics & Cloud, COCUS AG

▶ Senior IT Consultant
  • Strong technical background
  • Architect for data and cloud solutions

▶ Strategic Management for Data Analytics & Cloud @ COCUS
• Strong experiences in the telecommunications, IT, Media & Entertainment (TIME) and Automotive sector

• Extensive telecommunications and connectivity know-how as basis for the new connected world, especially the Internet of Things

• Strategic Partnerships with Technology Leaders
The Challenge

What’s the problem and why is it important?
Most companies provide online services to their customers
A lot of us are heavily reliant on it
A few of us provide the service “alone”
The service is likely to change
Sometimes customer behaviour is hard to predict
“Focus on Customer Experience Delivers Profit”

Anna Farmery, The Engaging Brand
(http://bit.ly/gYMaEU)
The Challenge

To provide best Customer Experience

1. for Business Critical Services
2. in highly Distributed Environment
3. with fast Evolving Products
Our Approach

Technologies & Implementation
Solution Focus

Getting Insights

► our own System & Services
  • In-depth Monitoring of Services and Processes using Splunk

► External Services & Partners
  • Monitoring Integration of 3rd party Providers

► Customers Experience Measurements
  • Like GA, Omniture
Monitoring Limits
Why that might not be enough

▶ Internal Monitoring
• Restricted in resolution and granularity to own systems
• Not covering complete process flows (as the Customer experience it)

▶ Partner & external Services
• Usually limited influence what KPIs are to be delivered
• Realtime? Usually not
• Integrating this information can be tricky

▶ Customer Experience Measurements
• Issues hard to track
• Realtime? Various a lot
• Feedback might not be related to your service
• Depending on Customer usage
External Service Monitoring
What would we like to have

- Independent of Customer usage to know if services are as they should be
- Make sure all critical processes are working as expected and see how a customer would experience them
- In case of errors and problems we want to see what went wrong where
- Under certain load we want to know how that affects the experience

> Simulate regularly Customer Journeys <
External Service Monitoring
How do we do it?

- **Leverage Cloud Providers**
  - To simulate customers where they are
  - To scale and simulate as many as we want
  - For reliability (failover, backup, exclude local problems)

- **Use JMeter as Test framework**
  - To generate Testcases with Journeys
  - To run the Testcases
  - To capture metrics

- **Use Splunk**
  - To distribute the Testcases
  - To schedule the tests
  - To gather all information and get the insights
Integration
Splunk + AWS

Region 1

AWS

Region 2

Services

Splunk Environment

Service Requests
Splunk Deployment
Splunk Data
Service Tests

How to test?

► JMeter Framework
  • Open Source Platform
  • For Load and Performance Testing
  • For various Protocols/Applications

► Testcases
  • Uses Testplans, Steps, Modules

► Information
  • Save all responses
Scenario in a App

Splunk Apps as Container

▶ Test Instance
  • Jmeter is locally installed
  • Splunk Heavy Forwarder is installed
  • Configured via Deploymentserver

* is provided by a custom module
A JMeter Testcase is bundled in a Splunk App

- Including the Scheduling information
- Including Testscenario from Jmeter
- Using a JMeter Stanza
- Facilitates Modular Input for Jmeter
- Converts Jmeter Scenarios in an App

Splunk Apps as Container
Outcome
Outcome
Outcome
Benefits

- Near Real-time feedback if Services & Processes running as expected
- Independent and Adaptable Solution
- End to End View for Business Critical Services
- Internal & External View together
- Enables for faster time to resolve problems (immediate insights)
A Powerful Solution

1. Independent Tests
2. Adaptable Solution
3. End to End View
Next Generation

What is on the Horizon
Next Generation

► New features
  • Using PhantomJS for Javascript Applications (like Angular)
  • Replace Scheduling with Rundeck

► New Use Cases
  • Investigation Tests
  • Individual Tests (Chains of Testflows)
  • Ad-hoc Loadtest
Q&A

Martin Senebald | Unit Manager Data Analytics & Cloud, COCUS AG
Thank You

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