Université de Lille

Is your software working properly ?
In this big black box called "production"

SpiTest

MASSIVE
&
DISPATCHED

Searching bugs from log files is :
- manual
- error prone
- time consuming

Objectives
- ⚙ Automatically
- ✓ Assert right behavior
- 🔍 Find wrong behavior

Motivations
- 🐍 easy to use
- 🪟 multi platform
- 💬 production software
- 🕐 In real time
- ↗ scalable

SoluTion

logstash → elasticsearch → SpiTest

1 Expected Behavior
2 Expected Behavior
3 Expected Behavior

developer

Technical implementation

Ad vitam æternam

Data Base

Core

Agents

1 expected log message

2 request all expected logs ordered by timestamp

3 results

4 log message occured or not

5 AssertFailedException

6 go to 1

standard output

Steps

> ./spitest rocketchat
A Message is sent
A notification was sent as expected ✓

A Message is sent
A notification was not sent as expected! 🔍
Test failed: 1

4 → 2 → 1 → 5 → 6

3 Push Notifications not being sent on Rocket.Chat 0.60.rc3
#9187 opened on 19 Dec 2017 by archang3l-media

Nicolas SVIRCHEVSKY
Master IAGL (2018)

github.com/nsvir/spitest

Lakhdar MEFTHA
PHD Student at INRIA Lille