JMeter & Selenium

Group 1

Alban Granger,
Caroline Thoux,
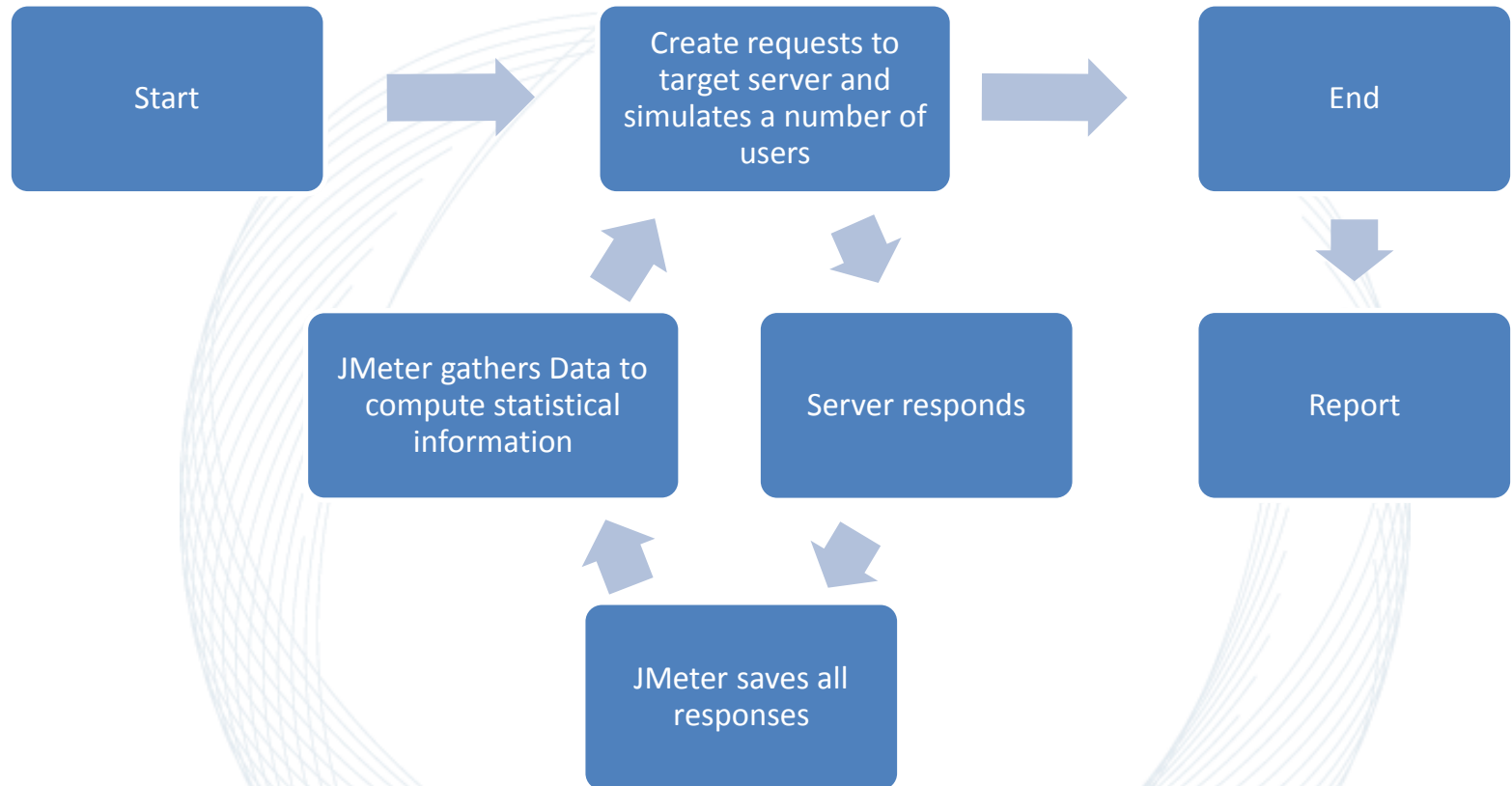Emmanuel Gilles,
Mohamed-Amine Bergaoui,
Nicolas Léger

JMeter

- Free open source software

- Apache foundation

- Java => Platform independent

- Many server types (HTTP(S), SOAP, Database, LDAP, POP3)

- Used for Automated and functional testing

  - Performance and availability testing

  - Functionality testing to make sure the application meet expectations

How JMeter works

Start → Create requests to target server and simulates a number of users → End

Create requests to target server and simulates a number of users → Server responds → JMeter saves all responses → JMeter gathers Data to compute statistical information

End → Report

Institut National des Sciences Appliquées

Features

- Test plan

- Unity group

- Controllers (random, unicity)

- Monitor servers (Database, Web Server)

- Timer (fixed, Gaussian random, synchronized)

- Assertion modes (time, size, MD5)

- Different display modes for results (graph, array, tree)

- Distributed tests on several servers

Ecosystem

- A wide JMeter community

- Trusted by the industry

- Lots of plug-ins available (utils, samplers, graphs)

- Webdrive Sampler plug-in for Selenium

Our recources

- http://jmeter.apache.org

- http://jmeter-plugins.org

- http://fr.wikipedia.org/wiki/JMeter

Demonstration

1. Test a Java application using JUnit through JMeter

2. Test a website using JUnit with Selenium through JMeter

3. Test a website using JMeter Web Driver Sampler

Feedbacks

- No driver for some browsers (Safari, IE) (-)

- Currently the best free tool for load and performance testing (+)

- Easy to add plug-ins (+)

- Some alternatives : Apache Benchmark, Grinder, Gatling, Funkload