CLIF/SelfBench, a software framework for self-benchmarking

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Load testing basics

supervision

Load injectors and probes control

load injector 1

load injector 2

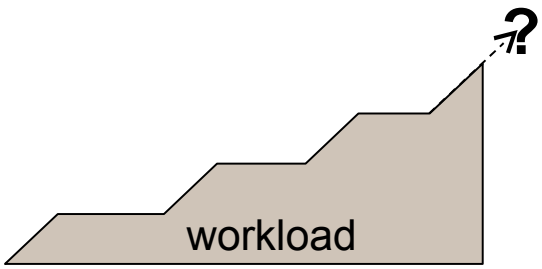
probes

load injector n

***Probes** measure consumption of computing/networking resources*

probes

System Under Test

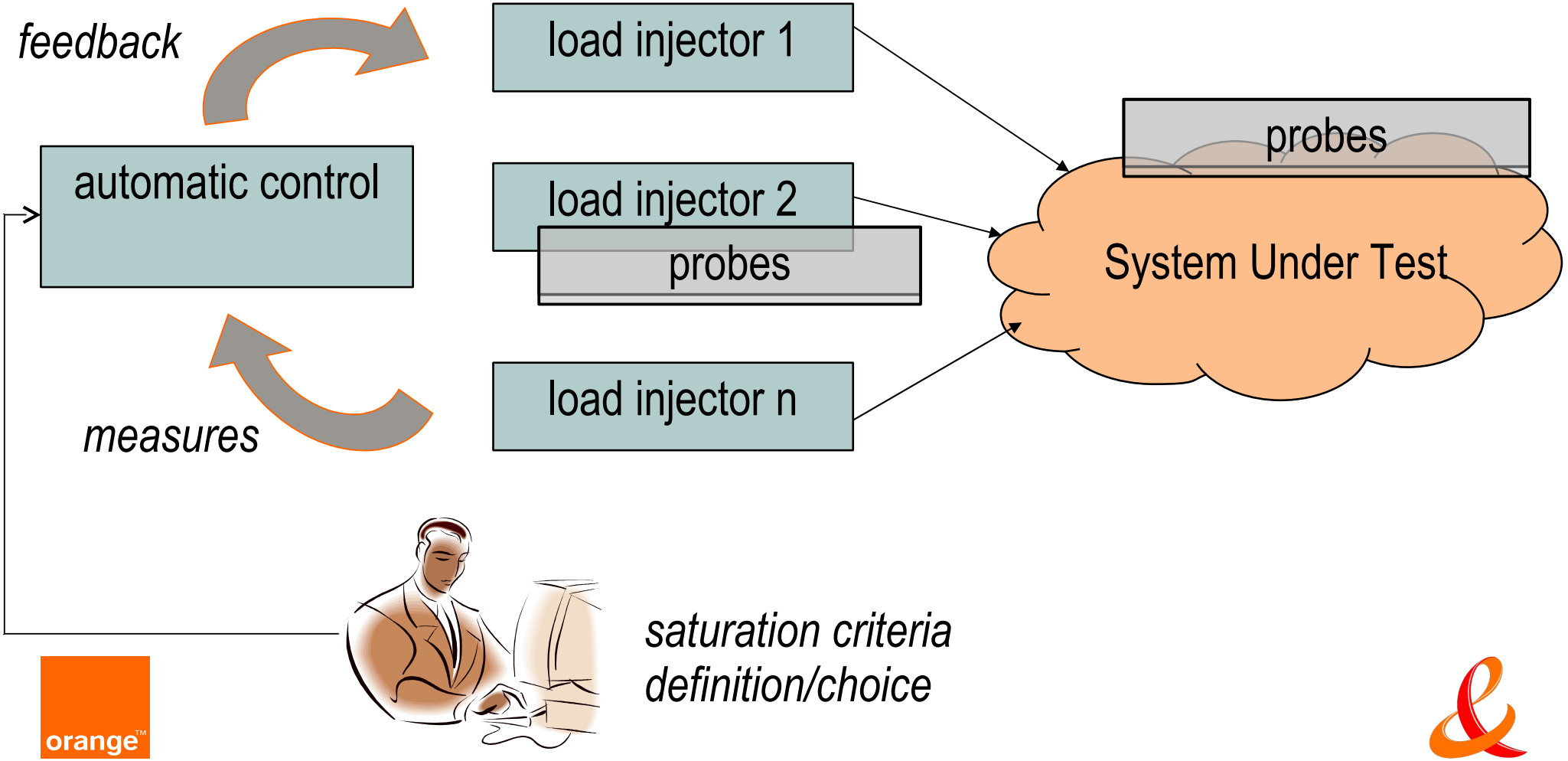


Ramp-ups and steps, looking for performance limits

Load injectors

- *send a flow of requests (workload)*
- *typically emulating real user sessions through "**virtual users**"*

Towards self-benchmarking with self-regulated workload



CLIF is a Load Injection Framework

- CLIF is a software framework for load testing
  - adaptable/extensible, independent from:
    - the System Under Test (protocols, probes/observed resources)
    - the workload definition mode
    - user interfaces (Java/Swing, Eclipse, command line...)
  - based on a component model (http://fractal.ow2.org/)
  - distributed infrastructure designed for high level workloads
  - 100% Java (+ specific or native code for system probes)

- Project launched and lead by Orange Labs

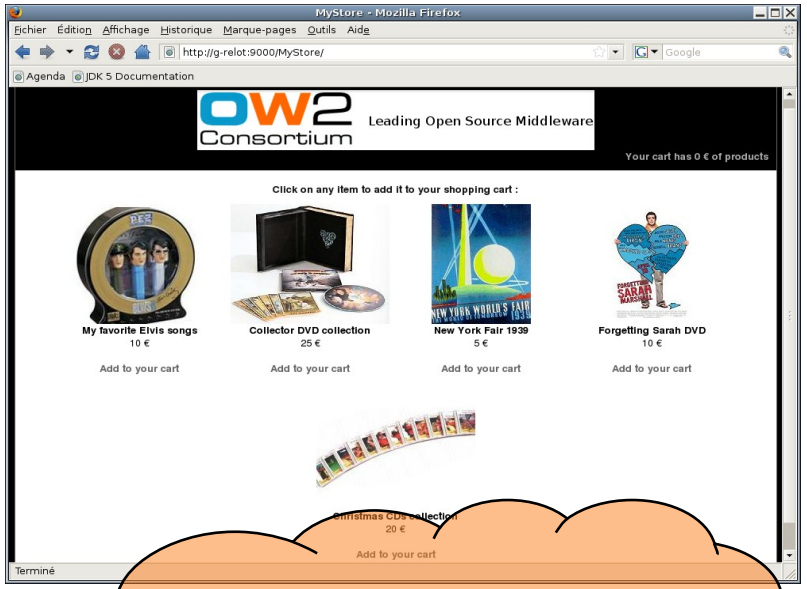
  Launched in year 2002 with INRIA, within OW2 consortium (formerly ObjectWeb)
- visit http://clif.ow2.org/

Self-benchmarking a web application with CLIF+SelfBench

adjust number of active virtual users

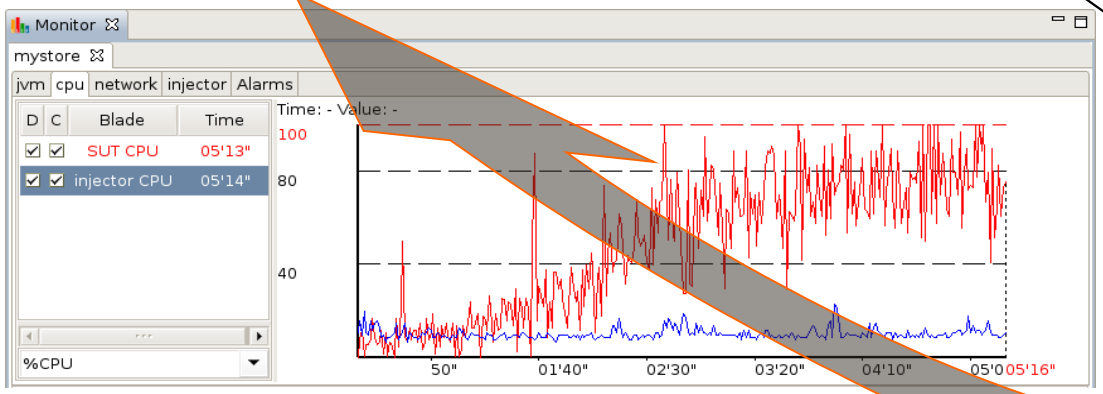
SelfBench component

HTTP injector



JOnAS MyStore sample application

CPU probe



CPU < 80%

CPU measures