CLIF/SelfBench, a software framework for self-benchmarking

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ICAS demonstration, 22nd April 2009

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Load testing basics

Load injectors and probes control

Supervision

Workload

Load injectors
- Send a flow of requests (workload)
- Typically emulating real user sessions through "virtual users"

Probes measure consumption of computing/networking resources

System Under Test

Ramp-ups and steps, looking for performance limits
Towards self-benchmarking with self-regulated workload

feedback

automatic control

measures

load injector 1

load injector 2

load injector n

probes

System Under Test

saturation criteria
definition/choice
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

CPU < 80%

JOnAS MyStore sample application

CPU probe

CPU measures