



SYMPOSIUM'16

AMERICA – EUROPE – ASIA

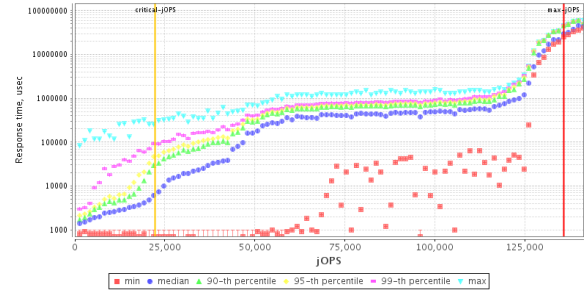


THE ASIAN SPEC SYMPOSIUM ON SERVER EFFICIENCY

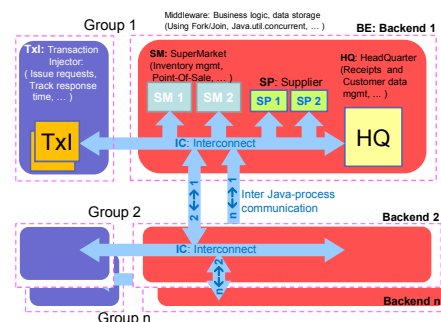
Evaluating Java Server Business Performance

SPECjbb2015 - Purpose & Goals

- Evaluates Java server business performance
- Measures both response time and throughput
- Exercises the system in gradual increments up to maximum sustained capacity
- Shows response time behavior across gradual load increments
- Reflects the need of modern production environments where response time is critical
- Supports distributed deployment using the latest data formats
- Employs compression and messaging with security as well as the latest Java features
- Run-time around 3 hours



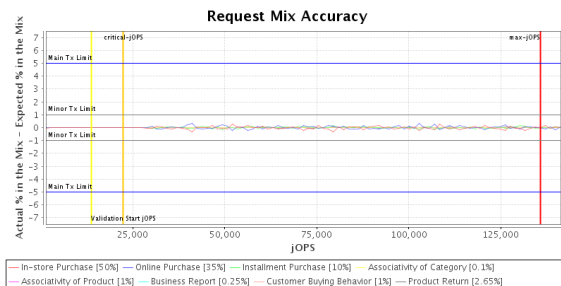
Overall Throughput Response Time Curve



SPECjbb2015 Architecture

Benchmark Metrics

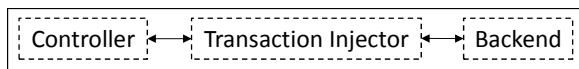
- Max-jOPS – indicates the sustainable full system throughput without any response time constraints
- Critical-jOPS – indicates the maximum level of performance that a system can achieve while meeting specific response time constraints



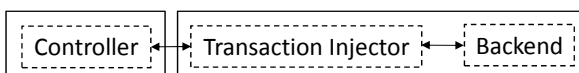
Request Mix Accuracy

Benchmark Configuration

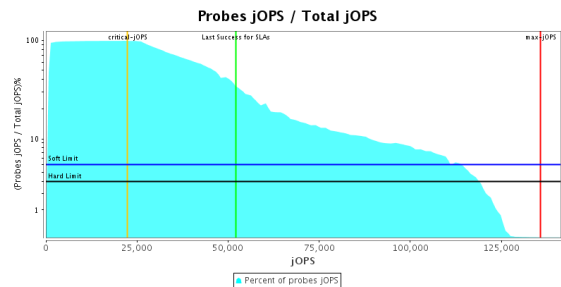
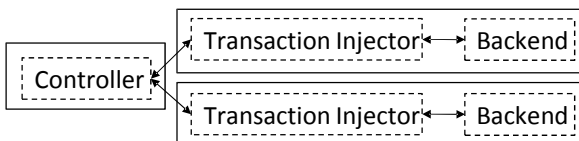
- Three main components of the benchmark
 - Controller – directs the execution of the benchmark
 - Transaction Injector – issues requests to the backend and measures the end-to-end response time
 - Backend – contains the business logic
- Three categories, supporting multiple configurations
 - Composite / Single Host



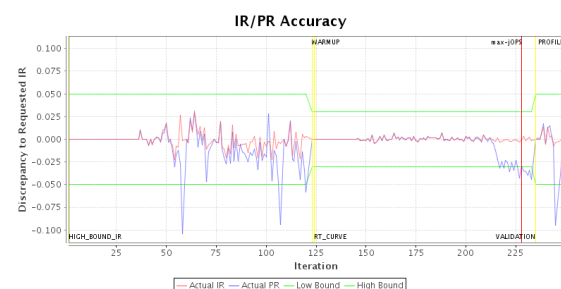
- Distributed / Single or Multi-Host



- MultiJVMs / Single Host



Probes jOPS / Total jOPS



IR/PR Accuracy