



OAK

SYSTEMS PVT. LTD.

Quality Software Solutions

Case Study

Performance Profiling

Background

- A Web based Financial product
- High response time was expected due to Global reach of services offered

General Performance Profiling

- Concurrency : Concurrency testing seeks to validate the performance of an application with a given number of concurrent interactive users
- Stress : Stress testing seeks to validate performance when certain aspects of application are stretched to their maximum limits
- Throughput : Throughput testing seeks to validate number of transactions to be processed during a given period of time.

Client's Project Goals

- Fast response time
- Marginal degradation in performance with increasing loads

Test environment (Designed by OAKSYS)

- » A server with Application S/w Loaded, up and running in simulated production environment
- » An Application Server
- » A Web server
- » A Server with database installed and connected to the application
- » A separate server with Performance testing tool
- » A PC (client) with typical client setting for simulating all the 'X' no. of Virtual Users (VU) hitting the server from that client

Sample test cases

- Measuring the Response time (at different transmission rates) with load varying from 100 - 1000 Virtual Users (VU) in increments of 100 VU
- Measuring VU load for performance degradation in response time
- Scalability test for peak and off-peak response time with incremental Virtual user simulation and incremental volume of Database size

Metrics Collected

- Hits Per Second
- Hit Time
- Response Time
- Throughput
 - And many more...

Our Value Add

- Determining test cases for testing the project goals
- Usage of an appropriate Load testing tool for measuring the performance characteristics
- Designing Test environment
- Useful metrics collection
- Ownership of performance tests