

A CASE STUDY OF PERFORMANCE & LOAD TESTING SOLUTION

For a leading IT Consulting & Software Development Company

SNAPSHOT

Industry

IT Consulting & Software Development

Business Challenge

To identify the bottlenecks, validate hardware architecture and simulate WAN access environment and predict response times

Omnitech Solution

- The system architecture was studied & documented.
- The critical business processes were identified in the application.
- The typical usage patterns were documented.
- The result sets were compared & analyzed to pinpoint the bottlenecks.

Business Benefits

- It was identified that the application needs to be deployed in a different architecture than what was planned to ensure acceptable response times.
- Other areas which needed optimization were also identified & documented.
- No further improvement in memory of the servers was required thereby saving the costly upgrades.

Company Overview

The client is one of the best known Information Solution providers in India, having a work force of more than 2000 IT professionals. They subscribe to TQM philosophy and a Quality Management System in line with ISO 9001.

Requirement:

The client required to run a pilot web based project for computerization of Criminal Record Management and Centralization of Crime Reporting within Mumbai police.

Since the application will be used by a Government agency, all the quality attributes of the application have to be measured and taken to acceptable levels

The Challenges

The project was in pilot phase performance and scalability is the vital aspects that had to be measured. Hence the job of identifying the bottlenecks and the root cause of them was essential and challenging.

Also, the capacity requirements of the application in terms of Hardware and Bandwidth for connectivity were essential parts of this phase of the project. The development team was experiencing response time degradation under a load of only 5-7 users.

The major challenge was to identify the bottlenecks, validate hardware architecture and simulate WAN access environment and predict response times.

Solution

- The system architecture was studied & documented.
- The critical business processes were identified in the application.
- The typical usage patterns were documented to simulate the test as close to the real life scenarios as possible.
- The application usage scenarios were recorded for a single user for the above identified transactions.
- These scenarios were used for injecting load onto the application.

- The resource profiling at the application server and the database server were done.

The following activities were performed as part of the load testing activity.

- › Captured scripts for the various activities to be used as part of the load injection and identify and enable data pooling for diverse user behavior.
- › Created suite for the load test and play back the suite for varying number of virtual users and gather the results.
- › The results gathered were analyzed for breakdown in the application response times and were seen in comparison to the resource utilization on the application server and the database server.
- After initial tests some changes were suggested into the design of the application. A second round of performance tests was then run on the application.
- The two result sets were compared & analyzed to pinpoint the bottlenecks.

About Omnitech InfoSolutions :

Omnitech InfoSolutions is an ISO 9001-2000 certified technology services and solutions provider company in the Business Availability and Business Continuity space. The Business Availability services include Infrastructure Management, Application Management and Performance Management services whereas Business Continuity services include Disaster Recovery Consulting and Management, Data Vaulting and Workplace Recovery Services.

Omnitech InfoSolutions is also a world-class provider of turnkey IT solutions like Server & Storage Consolidation, Virtualization, Network Integration Solutions and Data Center Management Solutions, Omnitech provides end-to-end support with guaranteed SLA (Service Level Agreements) in order to optimize infrastructure management and align IT with business goals.

Contact Omnitech InfoSolutions today for free consultation

Omnitech InfoSolutions Ltd - Headquarters

Omnitech House, A-13, Kondivita Road, MIDC, Andheri East, Mumbai, Maharashtra 400093

E: marketing@omnitechindia.com

T. +91 22 4095 6666