

# CASE STUDY FOR PERFORMANCE TESTING OF RE-ENGINEERED APPLICATION

## For one of well known life insurance company

### SNAPSHOT

**Industry**  
Insurance

#### Business Challenge

The business challenge was to simulate and capture response time under various user load i.e. 25, 50, 75 and 100.

#### Omnitech Solution

Business Availability – Performance Testing

#### Business Benefits

- The response time profile was not up to the mark for certain areas of the application. The same was notified to the Project Management. These areas were then optimized by the development.
- Key pointers were given on hardware resource utilization resulting in upgradation of the hardware.
- Viability of the application for current and forecasted business volumes was assessed and established.
- Application is still running live in the recommended hardware while the business usage has continued to grow.

### Company Overview

The client is one of the well known Life Insurance Company which offers a broad array of life insurance products to individuals, associations and businesses of all sizes, with a wide variety of additional coverage to ensure our customers can find an insurance product to meet their needs.

### Business Challenges

The application under test was a newly developed application by a vendor of our client which was to be used for New Business. It was called as NBFE (New Business Front End)

NBFE had the features for :

- Data Entry of New Business Policy Details
- Quality Check of the policy details entered
- Underwriting of the policy
- Auto Underwriting of the policy

The business challenge was to simulate and capture response time under various user loads i.e. 25, 50, 75 and 100.

### Technology Challenges

The application was a web based using Java Applet-Servlet technology. The HTTP messages used Java Serialized Objects. The information sent over HTTP was in binary format hence data parameterization and correlation were a challenge.

## Solution

A framework was defined to resolve the challenges for parameterization by applying test data management and hexadecimal value substitution in the test scripts. The test plan was adapted to real life by increasing the load on the application. The measurements were gathered and analyzed to understand the performance of the application and suitability of the infrastructure capacity for current business needs.

The scripts were planned by the testing team after the thorough analysis of the business scenarios. The scripts were modeled to reflect real life business actions, application user expertise and think times were moderated to reflect real life usage of the application.

During the execution of the tests the data preparation suites were run as part of the framework defined earlier so that parameterization could be possible via hexadecimal value substitution. Apart from response times, resource utilization statistics of the various servers involved were also monitored to capture a specific correlation of resource utilization with performance degradation. The primary objective was to validate performance and pin-point bottlenecks (if any) on the application or application infrastructure.

After the execution the response time data, script execution status, resource utilization metrics and data from the application information was collated, correlated and analyzed to deduce the application performance and hardware exhaustion statistics.

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### 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.

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