



Mastek's Performance Testing Framework

Document Version [1.0] and Date [14 Oct 2014]

By Manoj Gupta

Global Testing COE

Mastek's Performance Testing Framework



Performance Testing Overview:

There have been significant changes in software development that have forced the industry to rethink performance testing and how it is conducted.

In order to stay competitive, retain current customers, and increase customer base, executives in charge of performance testing face many challenges as applications have become increasingly large and more complex. Additionally, applications have become more customer-centric and have to serve hundreds of thousands to millions of requests per day.

This paper discusses cost effective, effort saving performance testing framework to deliver quality performance testing services.

EXISTING LANDSCAPE

Significant efforts that goes into evaluating performance criteria, many a times does not provide desired results (pin point exact pain areas) within limited timelines, plus tool and resource costing add-up to raise question - 'Was Quality Performance Testing Delivered?'

PROBLEM ASSESSMENT

Most of the time performance testing is neglected in many organizations, or is done when some performance issues arises in production which is kind of reactive approach, or even-if proactive approach is taken performance testing still ends up in a mess and confused state.

Challenges:

Performance Testing Engagements generally comes with many challenges and unwanted complexities:

- Un-organized structure, in automation testing there is definite path to pick up scripts, while in performance testing there is no such fixed path
- Generating test data required for concurrent users is another pain area, where test data is generated via overnight runs
- Result interpretation not easy

A significant effort goes into carrying out these unwanted challenges and complexities.

SOLUTION

Mastek COE has devised 'Expedite - Performance Testing Framework' which is highly configurable, reusable and offers quick turnaround for any performance testing engagement. The 'Expedite - Performance Testing Framework' offers:

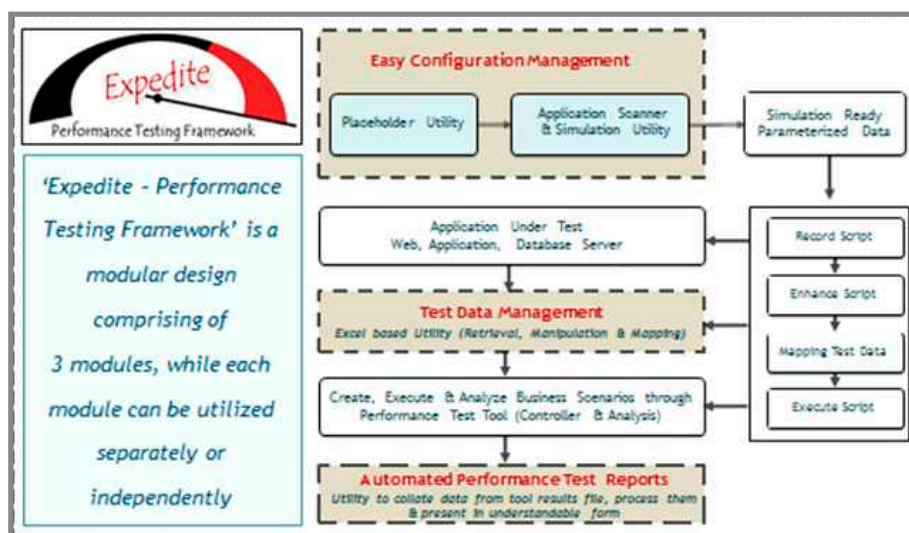
- Organized, structured and simplified performance testing process via Easy configuration management and re-usable components
- Test Data Management Utility to cater data required for Virtual / Concurrent Users
- Automated Performance Test Report

Module 1 - Easy Configuration Management:

Facilitates quick creation of relevant placeholders: for e.g.:

- Placeholders Scripting (Recorded, Developed, Final)
- Placeholder Documents (Test plans, estimates,

Expedite: Performance Testing Framework Architecture



- architectures docs. etc.)
- Placeholders for Volume Data creation, Executions, Result collation
- Placeholder mapping for New Releases

Benefits:

- Streamline Folder Structure
- Disciplined approach to access information
- Accommodate Build and Release Changes
- Maintain consistency in data storage pattern within organization

Module 2 - Test Data Management:

An Excel driven utility that helps in quick retrieval, manipulation and mapping of test data at application level to be consumed by virtual / concurrent users.

Benefits:

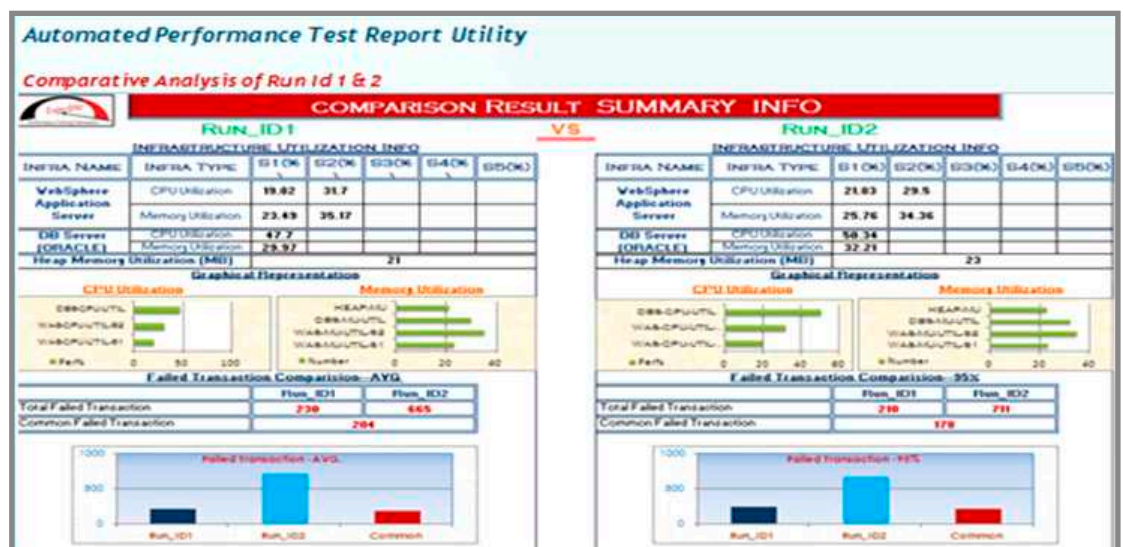
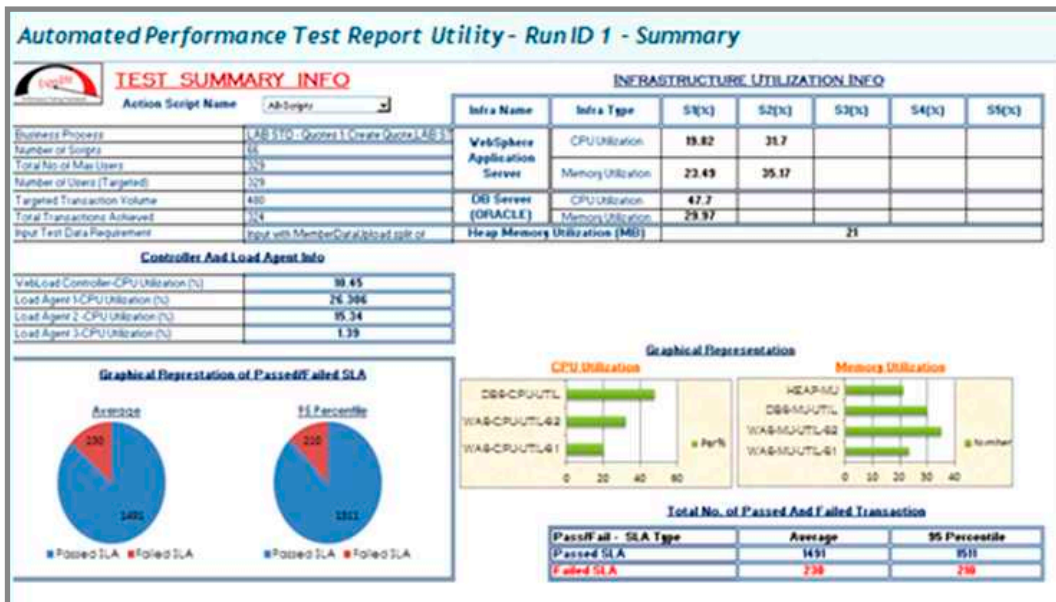
- Fast and Accurate Test Data
- Facilitate reusability through Save/Import Settings
- Application-independent (operates on data layer)

Module 3 - Automated Performance Test Reports:

Facilitates in collating data from Performance Testing Tool (like Web Load, WAPT, VSTS etc) results raw file, process them & present in statistical and graphical understandable form

Benefits:

- Easy report interpretation
- Test Results Comparison
- Re-usability for multiple performance execution
- Save Time and Efforts
- Cost Effective
- Quality and Compliance



CONCLUSION

The cost of Performance Testing averages ~ 2.5% of the total cost of development.
Fixing poorly performing applications after they are released into production averages
~ 25% of the total cost of development... If they can be fixed at all!!

Not conducting Quality Performance Testing is more expensive

Mastek's Expedite - Performance Testing Framework utilities not only helps in delivering quality performance test results (statically and graphical representation) while also saves 20-30% performance testing efforts

Mastek's Expedite - Performance Testing Framework utilities does not replace performance testing tools, while helps to expedite performance testing activities with low cost performance testing solutions

For any queries / Expedite performance testing demo please contact:

Manoj Gupta - manoj.gupta@mastek.com

Harpreet Kahai - harpreet.kahai@mastek.com

Tanaji Padwal - Tanaji.padwal@mastek.com

ABOUT MASTEK

Mastek is a publicly held (NSE: MASTEK; BSE: 523704) leading IT player with global operations providing enterprise solutions to government, insurance and financial services organizations worldwide.

Headquartered in India, Mastek has offices across North America, Europe and Asia Pacific regions. With over 20 years of in-depth Government/ Public Sector domain experience, Mastek collaboratively works with the Central, State and Public Sector Units on large-scale and complex projects in multivendor environments. We offer e-Governance solutions and services in the areas of Social Welfare, Tax Administration, Urban Local Bodies and Public Distribution.

Our Credentials



Mastek is ranked in the Leader category in the 'The 2014 Global Outsourcing 100® service providers' list by The International Association of Outsourcing Professional (IAOP)

CELENT

Mastek's Elixir Distribution Management (EDM) solution received the Celent's XCelent Service Award, 2013

CELENT

Mastek's client Apollo Munich Health Insurance won Celent Model Insurer Asia 2011 Award for the solution developed by Mastek

Gartner

Mastek rated "Positive" by Gartner's incentive Compensation Management Marketscope, 2010

For further information please contact: email: info@mastek.com

Mastek Ltd.

#106, SDF IV,
Seepz, Andheri (East),
Mumbai - 400 096
Tel : +91 22 6695 2222 / 2824 7999
Fax: +91 22 6695 1331

Mastek Ltd.

315, World Trade Centre
Barakhamba Avenue,
Connaught Place
New Delhi - 110 001
Tel : +91 11 4368 0404 / 0303
Fax: +91 11 4368 0303