

Webmetrics Full-Service Load Testing

Webmetrics Full-Service Load Testing Overview

Introduction

Webmetrics Full-Service Load Testing is a consultative engagement that simulates end-user activity against designated websites, challenging both performance capacities and infrastructure reliability. Webmetrics couples proprietary testing technology with hands-on engineering expertise to provide an easy to use, cost effective load testing solution.



Based on the thousands of Full-Service Load Testing iterations that have been completed with customers and partners, a proven test plan and project methodology has been developed. This methodology ensures smooth and efficient delivery of web load testing services with particular emphasis on the external, end-to-end user experience. It enables customers to focus on improving their website performance rather than struggling with the implementation, configuration, maintenance and expense of internal testing tools and their related infrastructure. In addition, Webmetrics Full-Service Load Testing satisfies the concern as to whether internal testing fully replicates real world results, and provides performance validation by an independent third party.

Webmetrics Full-Service Load Testing has the additional advantage of requiring no installation of software or hardware in the customer's operational environment. This considerably reduces the burden on Development, QA and operational teams, particularly towards the end of the software development cycle.

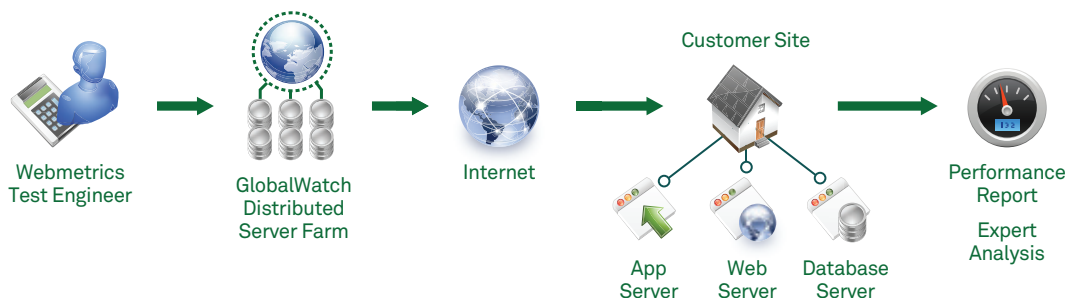
Powerful Solutions for Common Performance Problems

Webmetrics Full-Service Load Testing provides the necessary information you need to answer key business questions:

- Is your site or application ready for launch?
- How many users (traffic) can your site or application handle at acceptable page load times?
- What are the acceptable error rates at various usage levels – and what does this mean for your business?

We enable your technology teams to act quickly in resolving looming and existing performance issues of all types, including:

- Bandwidth limitations
- Error rates exceeding thresholds
- Server CPU limitations
- Misconfigured web servers, application servers, and/or database servers
- Errant load balancing configurations
- Router/firewall failure or misconfiguration



Dedicated Test Engineers: End-To-End Expertise

A dedicated Test Engineer will be assigned to your business at the beginning of your engagement – and will stay with you until the end, providing:

- Detailed performance reports and technical observations, complete with executive summaries and analyses
- Clear, comprehensive recommendations to assist you in optimizing your customers' online experiences
- One-on-one discussions as needed (scheduled or ad hoc)
- Unbiased advice from an independent expert

With Webmetrics Full-Service Load Testing, comprehensive reporting and customized analyses come standard – and making informed decisions is easier than ever.

Webmetrics Full-Service Load Testing Spotlight

- Fully managed solution
- Dedicated Load Test Engineer
- Fast turnaround time
- External load on-demand
- Concise, clear reports for fast business and technical decisions
- Expert consultative advice and recommendations

Engagement Summary

The Webmetrics Full-Service Load Testing engagement starts once a Statement of Work (SOW) has been defined and approved by the Customer and Neustar. After the signing of the SOW, a Load Test Engineer will be assigned to the Customer to handle day-to-day project management issues. The Load Test Engineer's main responsibilities are:

- Gathering appropriate information from the Customer (general requirements, script definitions, etc.)
- Orchestrating the testing cycles with the Customer
- Ensuring the results clearly indicate the overall performance and health of the site under test
- Generally ensuring overall success of the project

Reporting

The Webmetrics Full-Service best practice recommends three iterations of load testing. Each test iteration will generate a detailed performance report that will indicate the overall performance of key web enabled applications. Performance will be measured in terms of application/page response time based on user load and error rates based on load time. For a full example of the metrics reported by the service, for Sample Iteration Analysis and Sample Executive Summary, please visit www.webmetrics.com.

Project Milestones

Completion of the Statement of Work	Customer and Neustar agree to the scope, deliverables and timing of the project and sign a detailed Statement of Work (SOW) that covers the project objectives.
Script Definition Delivery and Development of Application Scripts	Upon delivery of script definitions from the Customer, Neustar is to build and validate the test application scenario(s).
Test Scheduling and Execution	Neustar will work with the Customer to schedule and execute the load test(s) in conjunction with the Customer's development and operational teams.
Analysis, Discussion and Final Deliverables	Neustar team will work closely with the Customer immediately prior to and during the execution of the test, so that the Customer is reassured that their environment is representative of a valid test environment. Neustar will analyze the results of the load test(s) and provide a document detailing the overall results and specific problem and/or areas of interest. During this analysis phase the Customer may be asked for additional information (hardware performance data, etc.) and to participate in conference calls to help further understand the load test results.

Typical Metrics Utilized

Summary Results

- Total page load attempts
- Total page load failures
- Total transaction attempts (sequence of pages)
- Total transaction failures
- Total data transferred (Mbytes)
- Average throughput
- Throughput and total transfer by interval summary
- Avg load time by page
- % of errors by page

By-Page Results

- Page load time by page
- Page load times compared to no-load benchmark

By-Interval Results

- Page load times compared to no-load benchmark
- Number of successes/failures for each step
- Error rate by interval
- Page load time by interval
- Transaction load time by interval

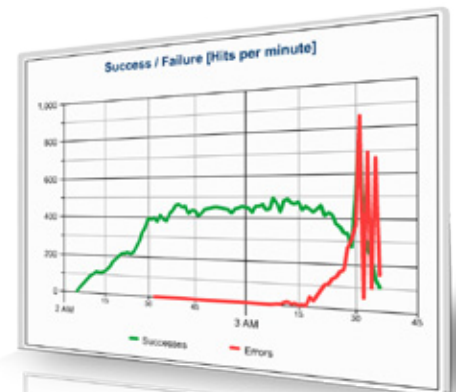
Errors

- Successes/Failures per minute (aka Errors by time)
 - Page attempts/errors by page by interval
 - % Errors by page
 - % Errors by type (Content, Timeout, Connectivity)
- (Note that content/application errors are captured and saved for later analysis.)*

Test Analysis

After each iteration of the load test, a Test Engineer will analyze the results and provide a written summary of the test. The analysis will include some relative subjective measurement of the results (i.e., to answer the question, “How did we do?”).

The analysis will highlight areas of interest in the load test report and will include as much diagnosis as can be discovered from the results gathered. The load-testing engineer will make every effort to pinpoint any problem areas to the component level (i.e. network, router, application, server) and make recommendations based on their experience as to how the customer may resolve any particular problem found.



Executive Summary Report

Customers will receive a final comprehensive report in Microsoft® Word or PDF format, which includes a comprehensive review of the testing methodology, a review of results from each iteration, final conclusions and a comparison of the results to the Customer’s goals. This report will summarize what the individual test results mean in terms of business impact. The Customer will own the reproduction rights to the report.

Testing Network

Neustar maintains a global monitoring and testing network described further at www.webmetrics.com. The overall size of the test and the Customer’s needs determine how many different POPs the load test is generated from.

Requirements Definition

A Webmetrics Full-Service Load Testing engagement is required in order to exercise the capacity and ability of the designated website to handle multiple simultaneous logins and registrations. Neustar will simulate a number of users interacting with the site as actual customers would. The tests will consist of one or more scenarios as defined by the Customer. Neustar will create test scripts based on these scenarios and simulate them with a prescribed number of users. An example is outlined below.

[EXAMPLE of sample scenario – customer will specify actual scripts]

1. Go to www.store.com
2. Search for “Shirt”
3. Click on “Kid’s Logo T-Shirt”
4. Chose a size, color, then click on “Add to Bag”
5. Click on “Check Out”
6. Fill out billing information
7. Click on “Ship to this Address”
8. Click on “Continue Checkout”
9. Fill out Credit Card information
10. Click on “Purchase”, verify an order number is returned

Security

No client performance data will ever be released to third parties. Data transmitted during load testing is not recorded except for the URLs visited during the test. Data can be transmitted securely over https.

Server and Application Health Monitoring

Throughout the period of the load test, it is useful to gather performance data from the Customer’s servers that are being tested. We recommend that the customer set up their own internal monitoring systems to gather this data, so that the backend performance data can be correlated with the load testing results.

Ready to get started? Call now for more information +1 877-524-8299

Online: www.Webmetrics.com | Email: Sales@Webmetrics.com

About Neustar® Webmetrics®

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