HOW QF-TEST AND NEOLOAD CAN PROVIDE BETTER LOAD TESTS

In most application projects, Performance Testers face two main challenges:

Validation - Ensure Realistic Testing of End User Experience
According to several studies, 50% consumers are expecting a web page to load in 2 seconds or less. The risk of shopping cart abandonment without finalizing their order is huge. For perspective, keep in mind that according to Amazon every 100 ms of latency costs them 1% in sales.

Today's web applications work with client-side scripts, such as Javascript. As a result, the response times of a web request can be very good, but the users could be dissatisfied with the performance. This may be because received data is edited by scripts and rendered by the browser. These times, which the user notices, are best measured by a test execution tool integrated into a load testing tool.

Productivity - How to Run More Tests with Less Time
DevOps environments demand shorter development cycles and a great deal of automation. Performance testing is complex and takes time because it still requires human action. Saving time by having the ability to reuse the design work seems to be mandatory.

Projects usually begin with functional tests using test execution tools. The performance tests come at a later stage. Again and again, the question arises whether the functional test cases cannot be easily imported into the load test tool, which is usually difficult.

Both questions are answered with the integration of the two tools QF-Test and NeoLoad. From existing functional test cases, load test scripts can be obtained relatively easily, and the load test can integrate the functional test cases to measure the end user experience.

WHY NEOLOAD?

The NeoLoad performance testing platform is designed to help today's performance engineers and developers save time. With advanced capabilities such as automatic script maintenance, Selenium conversion, and one-click dashboard accessibility (where shared metrics are displayed in Dynatrace), organizations are now able to fully automate, provide visibility, and easily share with key stakeholders across Dev, QA and Ops.

To simulate heavy spikes on your application at an acceptable cost, NeoLoad allows generating the expected traffic on the protocol level. With the help of the protocol base load testing solution, you will be able to simulate more than 2 million users with fewer than 500 Machines. But Mobile applications and the latest web framework of the market requires measuring the rendering time to secure the deployment in production. That is the reason of the openness of NeoLoad, allowing you to use NeoLoad with an efficient automation testing solution such as QF-Test where:

• NeoLoad will generate heavy traffic on your infrastructure and collect the counters of the health of your solution
• QF-Test will simulate real users interacting with Mobile/Browser to report the UX to Neoload

The combination of NeoLoad QF-Test and NeoLoad will give you 360° vision of the performance of your application from:

• The network
• Your infrastructure
• Your end-users

WHY QF-TEST?

QF-Test - The GUI test tool for Java & Web. QF-Test is specialized in system testing of Java Swing, JavaFX, Eclipse/SWT/RCP applications and cross-browser web testing (support for mobile platforms to be released 2018). The customers particularly value the easy accessibility of the product for testers and developers, its stability and flexibility and the fast, competent support and the individual and anticipated service.
WHY IS AN INTEGRATED QF-TEST/NEOLOAD SOLUTION IMPORTANT?

- Exact measurement of End User Experience in load tests
- Easy reuse of the functional test scripts in the load test
- Customized actions for the calls of the functional test scripts
- Intuitive recognition of test scripts in different tools
- Strong reduction of development time for load tests
- Efficient support of agile and DevOps strategies

Reuse Test Scripts and Measure the End User Experience

The integration of QF-Test and NeoLoad provides Advanced Actions in NeoLoad that allow QF-Test to be easily invoked to execute the existing functional test scripts.

Through an extension developed for QF-Test, the user can determine with which accuracy the execution times and status messages of QF-Test should be transferred to NeoLoad.

The benefit of this integration function is that existing scripts from QF-Test can be easily integrated into a load test and the load test with the metric of the end user experience receives new possibilities for evaluation.

Import of QF-Test scripts into NeoLoad

Load testing requires a few essential business processes, which are then played in large numbers to achieve a realistic load on the test system in this way. If you have already developed these business processes for functional testing via QF-Test, then it would be an advantage if you could reuse them in NeoLoad without any significant development effort.

The integration provides a kind of remote control, implemented in QF-Test, that drives the recording in NeoLoad in parallel with the execution of a functional test script. In this way, NeoLoad creates the load test script with the User Path. The structures in the form of sequences in QF-Test and Transactions in NeoLoad leave a simple re-enactment at the end.

For later imports of changes to scripts in QF-Test, the script maintenance functionality of NeoLoad can be used. In this case, NeoLoad will re-record with the existing User Path to an updated User Path. The updated User Path contains logical actions and variables created by the performance tester after the import.

The benefit of this integration feature is a primarily automated import from QF-Test to NeoLoad. Also, the names of sequences and transactions are given recognition, and a meaningful evaluation is possible in load tests with measurement of the end user experience.

About G. Muth Partners GmbH

Muth Partners is an IT solutions provider based in Wiesbaden. Our test consultants provide test services that allow our customers to develop and operate high-quality systems. Efficient test automation and realistic performance testing are often critical factors in enabling Agile and DevOps.

About QFS

QFS (Quality First Software GmbH) is a German tool manufacturer located south of Munich and focused on quality assurance. With its product QF-Test, QFS has been firmly established in the market for GUI test automation since 2001. More than 1,000 customers in over 50 countries trust QF-Test, distributed across all industries and business sizes, from small and medium-sized enterprises (HP, Audi, Software AG) as well as academic and public institutions.

About Neotys

Neotys has nearly 15 years of development investment into NeoLoad – the performance testing platform designed to accelerate Agile and DevOps processes. It’s built by engineers who recognized that to achieve their Agile adoption objective, they needed to create a product that could facilitate superior load and performance testing continuously.

The result – up to 10x faster test creation and maintenance with NeoLoad.

Contact for More Info

G. Muth Partners GmbH
D-65205 Wiesbaden
Telefon: +49 6122 5981 0
E-Mail: info(at)muthpartners.de
Web: www.muthpartners.de