

# AVG Technologies



## About AVG Technologies

Headquartered in Amsterdam, Netherlands AVG Technologies provides antivirus software and internet security services. AVG Technologies is best known for its AVG Antivirus product. Over 200 million active users used AVG's software products and services, which include internet security, performance optimization and personal privacy and identity protection applications.

### Company

AVG Technologies

[www.avg.com](http://www.avg.com)

### Environment & Challenges

- Ensure response time of business-critical web pages
- Validate performance of new products
- Adobe CQ CMS, legacy PHP platform, Bamboo
- Akamai (web caching functionality)

### Results

- Efficient performance testing process
- Generation of massive load, exactly simulating website traffic
- Easy generation of complex testing scenarios
- Automation of performance testing

## Challenge

Considering the popularity of its AVG Antivirus and the volume of traffic and downloads on its website, AVG cannot afford a slow performing website. Critical web pages affecting revenue are therefore tested on an ongoing basis for performance.

“We have a dedicated load testing environment which simulates the production environment, and we design load tests based on actual production logs, to ensure we run realistic simulations” says Tomas Mica, Test Automation Engineer at AVG.

In addition to recurrent performance tests, AVG Technologies runs ad-hoc ‘Proof of Concept’ Tests. “We typically run performance testing and ramp-up tests for new projects at their proof of concept stage and compare the results with our existing solutions.”

---

***“WebLOAD is easy to use and at the same time offers excellent scripting capabilities. Test execution and analysis is also simple and user friendly.”***

Tomas Mica,  
Test Automation Engineer

---

## Solution

AVG Technologies standardized their load testing on WebLOAD. “We migrated our load testing to WebLOAD in 2012 and have continued to use it since.” The team generate the same load as was measured using production logs and measures performance using hits per second, HTTP errors as well as other parameters.

Taking advantage of the integration between WebLOAD and Bamboo, the test team can automatically trigger WebLOAD tests from within Bamboo.

“Typically, we use hundreds of virtual users, but we also ramp-up testing reaching 2500 virtual users,” says Mica. The team also uses WebLOAD together with Dynatrace, Firefox Firebug and Selenium to automate performance tests and identify the root cause of issues. “We are able to quickly report bugs whenever the response time is higher compared to a previous release or when HTTP errors or server exceptions are detected.”

---

## Results

Using WebLOAD, AVG Technologies can consistently maintain the high performance of its business-critical website. Specifically, the testing team is able to:

- Verify transaction response time and identify errors.
- Validate the stability of each build, including HTTP response statuses and other values.
- Measure server-side statistics using dedicated Dynatrace agents.

According to Mica, “it is easy and simple to build even complex performance testing scenarios. We usually edit the recorded scripts to add some additional functionality like if/switch cases, random number generators or regex expressions.”

