

hepsiburada.com

- LOADIUM CASE STUDY -

GENERAL OUTLOOK

Hepsiburada is Turkey's largest e-commerce platform. Hepsiburada works with about 190 engineers and consists of 19 product teams. On a monthly basis, over 100 million visits take place. Additionally, Hepsiburada receives orders between 35 thousand and 40 thousand daily. The company took 350 thousand orders only for the last Black Friday campaign period.

CHALLENGES

Before Black Friday, a central load testing platform was needed.

All test scenarios needed to be brought together to create a real Black Friday simulation test.

In order to facilitate account management and test management, project control was required.

Since the test runs took place in a lively environment, the requirements were as the following:

- Measuring service times under normal conditions
- Determining the breakdown of environment and tools over a period of time with increasing number of loads
- Determining the specific limits of each team and enabling them to take network actions by sending them more load than they can handle

COMPANY

Hepsiburada

INDUSTRY

E-Commerce

LOCATION

Istanbul, Turkey

SIZE OF FIRM

1000-5000

“In 2017, our expectation on black Friday was ten times the traffic compared to a normal day. In 2018, this year's black Friday is expected to be 30 times higher.”

Alper Hankendi

Software Development Manager,
Hepsiburada

“There’s no begin time for getting ready for Black Friday. We have been preparing 365 days straight only for this one specific day.”

Alper Hankendi

SOLUTION

Due to the work done, once all teams had their own tests up and running, an average of 200-300 engines and 40/60 thousand thread users were removed from each separate account of each team on Loadium.

During the Black Friday preparation process, the software team at Hepsiburada had the chance to observe their own limits, including 100 engine 800 threads (80 thousand threads) and 130 engine 800 threads (104 thousand threads). During testing of these limits, Loadium product was used and a successful and trouble-free test experience took place.

JMeter 5.0 and Gatling compatibility were then applied to be activated for any future load test needs if required.

Previously, all teams could never perform the load test when each product worked with each other but because of Loadium, all teams’ load tests were gathered in a single central location and a load test could be carried out in such a scale that could simulate a true Black Friday day across Hepsiburada in general. While the need for hardware for a simulation on the scale of a very serious load such as Black Friday would normally cause a very high cost, these costs were prevented by the user simulation offered by Loadium platform over the cloud.



“By collecting all teams’ load tests in one central location, we have been able to do a load test in such a scale that can simulate one true fit for Black Friday across Hepsiburada.”

Alper Hankendi

RESULTS

Loadium enabled the Hepsiburada.com team to see possible errors that they could not normally see during the BlackFriday preparation period. Significant improvements have been made and actions have been taken especially on the network and system side under the intensive load that was sent. For example, both teams' servers being on the same host was posing a risk. While working without any problems at normal levels of load, it could give errors while working under heavy loads, once a team's throughput is increased, it would consume the entire process speed of the server to which it was connected and leave no machine to the other team's server to be fed.

Black Friday simulation has been created by turning all tests into a single test with end-to-end logic and thus provided the surfacing of such problems and their solutions.

Throughput, response times and their visual graphs on the platform offered by Loadium provided important information to the team. For example, with the help of this visualization, it could be told if there was a problem with installation because of network or whether there was an issue that occurred at pre-installation. Thanks to the reports and graphs presented by Loadium, Hepsiburada was able to obtain insights that would be very useful in defining strategies within the scope of the test.

“Load testing was not included in software development processes in our lives. After integrating Loadium into our lives, load test has become a part of the software development process. It is now in our teams' DNAs.”

Alper Hankendi

ABOUT LOADIUM

Loadium started its journey in 2009 as an IT company, later specialized in software test automation solutions for mobile, web and desktop applications to ensure great digital experiences with the highest quality. Testinium is our flagship software test automation product offered on cloud and on-premises deployment. Loadium is our load testing solution which is based on Apache's Jmeter and SBox is our image transmission automation solution which helps automating tests for set-top boxes including any image media player.

Learn more at: www.loadium.com