
Success story

**Shutterfly Partners
with Abstracta to
Deliver Winning
Customer Experiences
Build After Build**

Shutterfly®

Shutterfly®



CONTINUOUS PERFORMANCE TESTING SHUTTERFLY CASE STUDY

Shutterfly, Inc. is the leading manufacturer and digital retailer of high-quality personalized products and services offered through a family of lifestyle brands that enable consumers to share, print and preserve their memories by leveraging its technology-based platform and manufacturing processes. The company went public in 2006 and started to acquire several other brands. The company reached over \$1 billion in revenue for the first time in 2015.



OVERVIEW

Being an ecommerce site and due to the high level of complexity of Shutterfly's proprietary technology, system performance is a critical component of the company's success and award winning customer experience. Shutterfly has a team dedicated to testing and monitoring the performance of its site so that even on peak shopping days or after launching a new release, all runs smoothly.

Having a clear understanding of the system's behavior allows Shutterfly to apprehend when problems like crashes may occur, and take the necessary measures to uphold its reputation for reliability.





THE NEED

In order to successfully carry out its continuous testing scheme, Shutterfly needed the help of a performance engineering team with experience in Gatling, Jenkins and performance analysis who would assist with three main tasks:

› Execution of performance tests

The team executes around 300 tests daily. Someone has to review the results of these tests and determine if those that fail are false positives (problems with the test, test infrastructure, data, build, etc.) or if they really correspond to a problem. Then, based on the analysis, report the incidents.

› Consolidate tests

As time for testing is always limited and Shutterfly has different teams delivering new tests very often, it is necessary for the team to consolidate tests. One important task is to find tests that cover similar functionalities and combine them or even execute them in parallel if the levels of performance that the team tried to obtain from the beginning are maintained.

› Maintain test assertions and profile tests

It is imperative for someone to maintain the assertions of all the tests. Periodically, one has to check that the assertions are adjusted to a level that they report an error when there is degradation. This is done by profiling the tests, identifying the breaking point of the test in the testing infrastructure (the number of threads from which to begin to degrade the throughput), and adjusting the tests so that they run with that number of concurrent threads, and with the corresponding assertions being as tight as possible.





OUR SOLUTION

Over a period of five months, a highly skilled performance engineer from Abstracta aided the team with the three aforementioned tasks. Our engineer seamlessly collaborated with the Shutterfly team, attending every daily meeting via teleconferencing, providing useful suggestions for improvement (when appropriate) and consistently added value to the team.

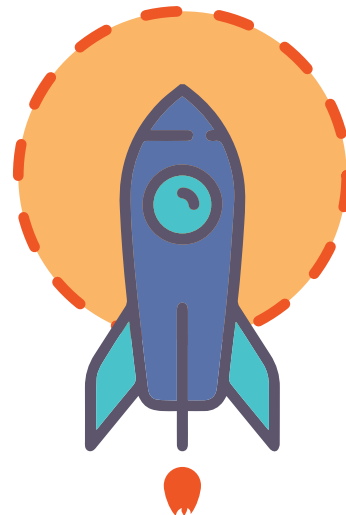
Abstracta managed to quickly gain the necessary understanding of Shutterfly's unique methodology for continuous testing and adapted to it. The Abstracta engineer made sure to record all of the detected errors with as much information as possible and diligently reviewed each test as needed.



RESULTS

Abstracta played a part in Shutterfly's performance engineering team's ability to:

- Uphold the site's competitive advantage of delivering a superior customer experience
- Maintain high traceability between tests and incidents
- Provide highly thorough information to developers about each incident
- Increase the efficiency of each test
- Maintain its CI pipeline built using Gatling and Jenkins which allowed the team to **detect when a line of code caused a degradation in performance immediately.**





Abstracta management understood our unique testing needs and matched us up with a talented engineer who was quick to get up to speed with Gatling and our test environment. He asked apt questions, gave excellent status reports, and was overall a pleasure to work with. We look forward to continuing to work with Abstracta as the need arises.

MELISSA CHAWLA

SENIOR MANAGER OF PERFORMANCE ENGINEERING AT SHUTTERFLY



TO LEARN MORE ABOUT SHUTTERFLY'S CONTINUOUS PERFORMANCE TESTING METHODOLOGY, CHECK OUT THESE FURTHER RESOURCES:

WEBINAR RECORDING

[› Learn How Shutterfly Employs Continuous Performance Testing to Deliver Winning Customer Experiences Build After Build.](#)

BLOG POSTS

[› How Shutterfly Masters Continuous Performance Testing.](#)

[› Q&A With Melissa Chawla, Senior Manager of Performance Engineering at Shutterfly.](#)



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