LeanIX Ships New Product Releases up to 10x more often by Using BrowserStack Automate

When LeanIX began to experience rapid growth in 2016, BrowserStack relieved tedious manual testing processes and helped speed up release schedules.

THE CHALLENGE

LeanIX's modern Microservices architecture required test coverage of numerous individual services during final acceptance testing of the user interface.

Enterprise architecture (EA) management company LeanIX is a web-based information platform that helps organizations make data-driven decisions faster using an inventory of applications and IT components, servers, and frameworks.

In 2017 LeanIX migrated all customers to a state-of-the art Single Page Application (SPA) based on Angular in the Frontend and Java Microservices with REST APIs in the backend. To ensure the best customer experience for every user, a high manual testing effort was needed across all different browsers.

"Because our software was built on a mixture of technologies and styles of programming, we had the risk of a lot of bugs being released into production," says software engineer Patrick Surrey. "The situation to run extensive manual tests was not ideal."

Surrey decided his team of 15 engineers needed to run more manual tests in an effort to avoid customer bug reports. Organized into four cross-functional scrum teams, the front and back-end developers began working in two-week sprints to issue a new code release every other Friday.

"Every other Thursday, three or four developers would spend the whole day manually testing new code. It was very tedious and, still, very error-prone. We were losing a lot of time that would be better spent developing new features for our customers. Once we realized how much time manual testing was taking, we started to look into automated testing."

Though the team had adopted Protractor—a automated testing tool specifically for Angular applications—to run automated tests on Chrome and Firefox, they still couldn't automatically test Internet Explorer, the bulk of their usage scenarios.



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ROI

Went from releasing once a week to once a day—a 14x increase.



"As a company, we don't take long to make decisions. We analyzed the market and found BrowserStack on our shortlist because it integrates well with Protractor and our automated build toolchain. Our CTO decided to start with BrowserStack, run some tests with it, and see how it goes," says Surrey.

LeanIX has been using BrowserStack ever since.

THE SOLUTION

LeanIX is continually testing their software every three hours with BrowserStack Automate.

Finding it easy to switch from running tests on local browsers to running tests using BrowserStack Automate, Surrey says the development team was quick to adopt BrowserStack into their workflow.

"New developers could easily start developing tests. They didn't have to set up the local environment; they just run the test in BrowserStack. It's easy to get started, and it's a big plus that our CI server uses the same environment."

Rather than creating a whole infrastructure to capture test results—something the team was working on before BrowserStack—they got one out-of-the-box.

"Without BrowserStack, when a test failed, it was hard to see what issue caused the failure. Now, we get a link to view the test run with the logs, the video, and the debugging tool. The video functionality provides a lot of value for us."

THE RESULTS

Increased product quality, release speed, debug rate, system stability, and overall customer experience

Where, previously, four engineers were spending an entire day to run 80-100 tests every two weeks, Surrey's team hesitated to add new test cases that would increase their manual testing load.

But today, using BrowserStack Automate, the team runs more than 400 tests every day—in just 20 minutes.

Deadlines now come from customers requests, rather than the testing process itself. When a new feature is ready, Surrey's team releases it the next day.

"Since everything is automated now, we are getting more quality and stability into our product. We aren't stuck with this two-week release cycle," says Surrey.

"Our ultimate goal is continuous delivery. BrowserStack is one major part in developing that capability."



Patrick Surrey Software Engineer LeanIX



With significantly fewer bugs and greater coverage than they ever had with manual tests, the LeanIX engineering team happily adds new tests daily. Collectively, they're working toward new releases two to three times a day.

"Our ultimate goal is continuous delivery. BrowserStack is one major part in developing that capability," Surrey says. Find out how **BrowserStack** can help your dev team test faster!

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