

CUSTOMER SUCCESS STORY

Barracuda partners with mabl to deliver high-quality security solutions

Barracuda believes that every business deserves access to cloudfirst, enterprise-grade security solutions that are easy to buy, deploy, and use. Their products protect email, networks, data, and applications with innovative solutions that grow and adapt with their customers' journey. More than 200,000 organizations worldwide trust Barracuda to protect them — in ways they may not even know they are at risk — so they can focus on taking their business to the next level.

Mabl is the leading intelligent low-code test automation solution built for agile teams. It's the only SaaS solution that tightly integrates automated end-to-end testing into the entire DevOps lifecycle. With mabl, it's easy to create, execute, and maintain reliable tests, allowing software teams to increase test coverage, accelerate development, and improve application quality.

CHALLENGE

Manual sanity and deployment testing were labor-intensive processes for Barracuda's data protection QA team.

Barracuda

OUTCOMES

85% reduction in time spent sanity testing

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QA team saves 4+ hours spent on manual testing every week

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More time dedicated to increasing test coverage and building new features



Bringing Sanity to Security

Cybercrime is predicted to inflict \$6 trillion USD in damage in 2021, which would make it the world's third largest economy. From increases in ransomware, phishing, and DDoS attacks, every organization is prioritizing improving their security posture to protect themselves, their employees, and their customers. These urgent threats drive Barracuda to continuously innovate and evolve in order to ensure that their global community of customers is protected against a growing range of threats.

Gayathri Krishnan is a Senior QA Manager at Barracuda focusing on their data protection products. She leads a global team of quality professionals to ensure every new release meets their users' high standards. Her team includes Quality Assurance Engineer Adham Hamade, who played a key role in adopting mabl into Barracuda's pipeline. Their team is distributed worldwide, with members in India, the United Kingdom, and the United States. Gayathri and Adham's main focus is performing sanity testing, which ensures that new code works as expected and that updates will go smoothly. Though testing from the user perspective is increasingly important for every software company, it's absolutely essential for a leading security provider like Barracuda. An analysis of security breaches by IBM found that human error was a major contributing factor in 95% of incidents, meaning that 19 of every 20 attacks could have been prevented by more human-centered security. With the user experience this core to a successful product, Gayathri and Adham's work needs to be as reliable and accurate as possible.

The data protection QA team performs intensive endto-end testing and sanity testing prior to each release. Generally, developers will perform API and other integration testing as well as unit testing, giving Gayathri and Adham time to focus on high-level testing that verifies the entire user experience. Prior to adopting mabl, Gayathri and Adham's team primarily relied on manual sanity and deployment testing, a hefty task even for smaller companies. Given Barracuda's global reach, each deployment to production is divided across seven regions, all of which need to be tested and approved separately. With each deployment run requiring around 30 minutes, manual deployment tests for all seven regions easily took up to six hours. Though effective, this approach was difficult to scale as more testing required more hours from their small team.

Now that Gayathri and Adham have a deployment testing plan in mabl that's integrated in their DevOps pipeline, they've been able to reduce the time spent on prerelease sanity testing by approximately 85%, with the manual six-hour timeframe cut to just less than an hour using the mabl platform. The data protection team is now able to be totally hands-off for deployment testing, saving the team a minimum of four hours every week.

This translates to Gayathri's entire team being able to shift focus toward automating more tests, working more closely with engineering teams, and continuously improving their quality strategy. Adham notes that while he used to spend most of his time working on manual testing, the majority of his time and effort is now spent automating tests to increase test coverage as well as develop testing plans for new features.

Test Automation that Works for the Entire Team

Due to the high standards demanded by cybersecurity customers as well as the complexity and scale of Barracuda's products, the data protection QA team worked with several test automation tools to discover the solution that fit their unique needs. Initially, they adopted a script-based test automation tool, building out a large framework to support automated testing within that platform. Unfortunately, maintaining these fragile tests quickly proved to be a drain on the team's finite resources, even requiring one team member to be solely focused on test maintenance.

The test automation tool's coding-heavy framework also proved to be a challenge because even though the team is fairly technical and familiar with Python and JavaScript, they aren't full-time developers. Instead, they had to rely on outside support just to maintain the scripted tests.



Yet without routine updates, the data protection QA team frequently saw failure rates as high as 70%, compared to a 5% failure rate when the same tests were run manually. In the end, test automation with the script-based tool simply wasn't the most effective or efficient option.

As Barracuda adopted a new cloud-based microservices architecture, Gayathri and Adham found themselves with the opportunity to implement an entirely new test automation strategy. Based on the recommendation of the engineering team, they began working with yet another Java-based tool. But like their previous experience, the new script-based test automation tool was simply too code-centric to fit the skills and expertise of the data protection QA team. Everyone's time was limited, and dedicating a single team member to test maintenance was simply not a viable option.

Since starting with mabl in January this year, Gayathri's team has been able to work with a low-code test automation solution that adapts to their range of skills. Adham was the key early adopter of the mabl platform, creating a library of customized tests and JavaScript snippets that were accessible to the rest of the data protection QA team. As the rest of their group began using mabl, even those with less programming experience are able to perform complex tests with reusable flows. The testing framework model that caused so many maintenance issues with the script-based tools has disappeared with mabl's auto-healing capabilities, and the library of JavaScript resources creates a database of knowledge that enables everyone to build their skills with very little downtime for training.

With the core team comfortable with mabl's test automation, the expanded QA team in India is now focused on adding extra layers of sanity testing using the mabl platform. They have added over 200 additional tests, and that number is rapidly growing as more quality assurance team members adopt low-code test automation.

In a world where cybersecurity threats are growing more sophisticated and more numerous by the minute, extra quality assurance measures ensure that Barracuda — and their customer community — can stay one step ahead.



Scaling Quality Across a Global Organization

Since Gayathri's team has had so much success with mabl, more Barracuda teams have adopted mabl's lowcode test automation software to support their work. Established testing practices vary throughout the product teams, but many have struggled to find test automation solutions that are adaptable and scalable as their solutions evolve. Along with the data protection QA team, eight more product teams have started migrating their tests to mabl in an effort to improve their automation practices and standardize quality on their respective products.