

CASE STUDY

Streamlining Test Automation Workflows with Rainforest



Industry: Healthcare
Location: Miami, Florida
Size: 101-250 employees

Benefits and Results

- ✓ 180 hours saved on manual testing/sprint
- ✓ Streamlined test automation scripting workflow
- ✓ "Automation Fallback" for continuous test coverage

"Instead of having someone to manually go in and triage what's failing, using Rainforest helps us save about an hour every day for the automation team."

Zachory Strike
 QA Automation Engineer

Carecloud leverages Rainforest to bridge the gap between manual and automated testing for a faster, more efficient software testing workflow.

Test automation and manual testing each have their own benefits to teams looking to ensure that they ship the highest quality software. CareCloud's QA team takes a hybrid approach to their testing strategy to gain both the speed of automation and the flexibility of manual QA.

Maintaining a High Bar for Software Quality

CareCloud's development team builds and maintains a range of cloud-based web applications for the healthcare industry, from EHR software to medical building management tools. Their customers have high expectations for product quality, but the complexity of CareCloud applications leads to an inherent risk of new bugs every time the team ships a new or updated feature.

To ensure that the quality of CareCloud's suite of products meets their high standards, CareCloud has both a manual testing and a testing automation team in-house. The teams collaborate closely, and use Rainforest as part of their mutual workflow to streamline test execution and automation.

Accelerating Manual Test Execution Cycles

QA Engineer Ryan von Rosenberg leads the implementation of Rainforest for CareCloud on the manual testing team, which is largely responsible for finding new bugs and improving the user experience. Ryan's team uses Rainforest to optimize test execution, which has reduced their functional testing ahead of releases from a full week of manual happy path testing to a 30-minute run of their Rainforest suite and a day and a half of manual edge case checking per sprint.

How CareCloud Uses Rainforest QA

Faster Regression Test Execution

CareCloud can execute their entire regression testing suite in about 30 minutes, recovering time for other tasks.

A Safety Net for Automated Tests

When automated tests fail, Rainforest tests run as a fallback, ensuring that key product areas are never without coverage.

Clear Insight into Test Failures

Rainforest gives CareCloud a faster workflow for understanding failed test runs, so the automation team spends less time on triage and more time fixing issues.

As new features prepare for launch and potential regressions are discovered, test cases are added into Rainforest. Maintaining a test suite in Rainforest lets the CareCloud team quickly execute and re-execute test cases during staging and early production, freeing up the manual testing team to focus on finding unknown issues and work with the developers on UX improvements.

Streamlining the Test Automation Workflow with Rainforest Test Cases

With a large and continually growing test database, CareCloud also uses test automation to ensure that stable features have appropriate test coverage. The automation team leverages Rainforest tests as an essential part of their workflow for scripting automated tests.

Rainforest provides automation engineers with context on the feature needed to script tests effectively, as well as the confidence that each test case has been verified by humans before it reaches their team. This information reduces the time required for the automation team to interpret manual test scripts and determine whether a feature is stable enough for automation. "Having the Rainforest test run green before they hand it off to the automation team ensures that anyone on the team can come in and run the test. It's a verification that the issue is reproducible," says Zachory Strike, who leads the test automation team at CareCloud.

Improving Bug Triage Workflow

"Getting to the confidence that something is failing as fast as possible is key," Zachory says. "If a test fails in automation and we kick it off as a Rainforest test, we can be pretty confident that it's not our automated test that's broken, but an actual bug. If the automated test fails but the Rainforest test passes, we know that we probably need to refactor the automated test."

“With Rainforest we save 1-3 hours just on happy path testing for each user story. In total, my team has about 40 to 60 test cases per release. This is up to 180 hours per sprint saved for my team by Rainforest.”

Ryan von Rosenberg
QA Engineer

Rainforest provides CareCloud with a “safety net” against any issue with automation test cases. Every automated script is paired with a Rainforest test script. Therefore, if an automated test fails, the Rainforest test case is immediately triggered. This frees up the time the automation team would have spent validating whether the failure was a result of a broken automation script or a real bug. “Instead of having someone to manually go in and triage what’s failing, using Rainforest helps us save about an hour every day for the automation team,” says Zachory.

Additionally, if an automated test breaks, the team can easily revert to the Rainforest test until the team has time to update the automation script, ensuring that a brittle automated test doesn’t impact QA coverage for any given test run.

Learn More about How CareCloud Uses Rainforest

Rainforest has streamlined CareCloud’s QA workflow and helped both manual QA and automation engineers to recover hours from test maintenance and execution every week.

To learn more about how CareCloud’s manual testing team uses Rainforest QA to streamline their workflow, read our interview with Ryan on [“What QA Teams Need to Know about Rainforest.”](#)

About Rainforest QA

Rainforest QA helps agile and continuous delivery engineering teams move faster with the industry’s only AI-powered crowdtesting platform. Our platform leverages 60,000 qualified testers to deliver on-demand, comprehensive and machine learning-verified regression test results. Rainforest customers spend less time and money testing so they can ship better applications faster. For more information on Rainforest, visit <https://www.rainforestqa.com>.