

## **Case Study**

### **Abrantix**

# abrantix

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#### **About Abrantix**

Abrantix is an innovative Swiss software company specializing in payment solutions. The company develops cutting-edge terminal software for a broad range of EFTPOS devices, enabling secure and efficient credit card transactions globally. With a strong focus on quality and innovation, Abrantix has become a trusted partner in the payment software industry, providing agile, high-performance solutions tailored to meet the diverse needs of their clients.

Abrantix is committed to delivering reliable and scalable payment solutions, ensuring compliance with the latest industry standards. Their customer-centric approach and constant investment in technology allow them to stay ahead of market trends, helping businesses streamline payment processes and improve user experiences in an ever-evolving digital economy.

#### The Challenge

Before embracing automation back in 2019, Abrantix relied heavily on a manual testing process that was both labor-intensive and time-consuming. QA engineers were required to physically operate payment terminals—manually inserting test cards, entering PINs, and logging outcomes into spreadsheets. This hands-on method introduced potential for human error and lacked the scalability needed to keep pace with growing development demands.

At the time, each release cycle involved around 30 to 50 test cases across three different terminal models, taking approximately a full week to complete. The limited testing throughput meant the team could only manage two major releases annually. As the company's product offerings expanded and customer expectations increased, it became clear that manual testing was no longer sustainable. Abrantix needed a faster, more scalable, and reliable way to ensure software quality while supporting shorter release cycles and a broader range of terminal configurations.

#### **The Solution**

To overcome the limitations of manual testing, Abrantix turned to automation as the key to scaling their quality assurance processes. Embracing cutting-edge tools and technologies developed within the organization, Abrantix transitioned from manual test execution to a fully automated, scalable testing environment capable of running continuously with far greater precision. This strategic move marked a significant shift in how the company approached software testing, laying the foundation for a more efficient, responsive, and agile development cycle as part of their Continuous Integration and Continuous Deployment (CI/CD) process.



Central to this transformation was the deployment of ten PaytestRobot systems, including the high-capacity PaytestRobot T4, which allows simultaneous testing of up to four terminals. This hardware is seamlessly orchestrated through PaytestHub, PaytestLab's cloud-based test management platform. With PaytestHub, Abrantix could automate the scheduling and execution

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of hundreds of test cases per night, covering seven different terminal models and running regression tests without any human intervention. The robots would run tests overnight, and developers would arrive in the morning with full test reports, ready to act on any detected issues.

"One of the biggest benefits of introducing robots was the ability to run tests overnight. We now use 24 hours a day for testing, not just the hours someone is in the office."

- Adrian Zimmermann, Head of Payment Software Engineering, Abrantix

Additionally, the implementation of the PaytestMux Combined with its network-enabled functionality and PaytestProbe significantly enhanced test coverage and flexibility. These tools allowed Abrantix to simulate a wide range of real-world transaction scenarios across various interfaces—including EMV chip, contactless, and magnetic stripe—while sharing card simulations efficiently between multiple test setups. This helped streamline testing workflows and increased the parallelism required to support their growing CI/CD pipeline. With nightly test runs integrated into their development lifecycle, the team could now catch issues earlier, deploy updates faster, and maintain a consistent level of software quality.

#### The Result



The implementation of an automated testing platform brought immediate and measurable benefits to Abrantix. Most notably, the company saw a dramatic increase in testing efficiency and release velocity. What once took an entire week of manual effort could now be accomplished overnight, with PaytestRobots executing up to 300 test cases per night across six different terminal models. This shift enabled Abrantix to move from a cadence of two major releases per year to an impressive pace of three releases per week, including hotfixes and feature updates.

"We went from two major releases a year to three releases a week. That level of agility just wouldn't be possible without automation." - Adrian Zimmermann, Head of Payment Software Engineering, Abrantix

The ability to run regression tests continuously and detect issues early in the development cycle helped reduce production bugs and improved the overall stability of the terminal software. With CI/CD pipelines fully integrated into their development process, code changes made during the day were automatically tested overnight, ensuring rapid feedback and immediate remediation if issues were found. This level of responsiveness not only enhanced internal development workflows but also elevated customer satisfaction by ensuring faster delivery of new features and higher software reliability.

In addition, the flexibility and scalability of these automated solutions—especially the multiterminal capabilities of the PaytestRobot T4 and the centralized orchestration offered by PaytestHub—allowed Abrantix to expand their testing infrastructure without a proportional Abrantix - Case Study Zürich 14.04.2025

increase in cost or complexity. The network-enabled multiplexers further simplified resource sharing, making the entire system more efficient and easier to maintain.

#### **About PaytestLab**

PaytestLab, a joint venture between Abrantix AG and B2 Payment Solutions Inc, is dedicated to revolutionizing payment software automated testing. Our innovative solutions encapsulate all essential components, providing a seamless testing experience. With a focus on reliability, accuracy, efficiency, scalability, and flexibility, we streamline processes and adapt to businesses of all sizes. Collaborating with clients and industry partners, we prioritize continuous improvement and enhanced quality.

PaytestLab is setting the new global standard in payment software automated testing.



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