

Revolutionizing Financial Operations

Achieving Efficiency and Savings
Through Next-Gen Automation

Overview

A prominent global financial services firm recognized as a leader in investment banking and financial services for consumers, small businesses, commercial banking, financial transactions processing, and asset management, operates in over 60 countries with a workforce of nearly 300,000 employees. This organization invests heavily in technology, with a particular focus on utilizing AI and automation to enhance operational efficiency and customer experience. The company's goal is to streamline processes for brokers, bankers, traders, money managers, and back-office operational teams while maintaining stringent regulatory compliance deadlines and security standards.

Challenge

This financial firm faced significant challenges in keeping up with the pace of necessary testing to ensure the security and compliance of patches, configurations, and replacements. As network speeds and online processing demands increased, as well as the number and variety of devices in their environment, the organization struggled with testing delays, resulting in a growing backlog. These delays impacted the timely application of network updates, leading to high maintenance and support costs for outdated network hardware and software. Its ability to meet regulations requiring validating code and infrastructure to be in compliance, often twice annually, was in doubt. Manual testing simply could not keep pace with the accelerating magnitude of complexity in its global siloed environments.

Key challenges included:

- Inability to test in the scope and scale needed in a reasonable timeframe, causing release delays
- Increasing testing backlog with no end in sight
- High costs for outsourced testing, totaling \$10 million annually
- Inefficient in-house efforts, automating only 10 out of 1,800 testing use cases over 12 months

Highlights

Implementing lab and test automation has helped a major financial institution:

- Prevent costly outages
- Save millions in testing costs
- Promote regulatory compliance
- Achieve high security standards
- Drastically reduce test times
- Increase productivity

Keysight Solution

The Keysight team collaborated with the financial firm to develop an 18-month ROI model, addressing the inefficiencies in their current environment to manage expenses, avert outage costs, and accelerate testing timelines. The solution leveraged Keysight's full automation portfolio, including Velocity Core, Velocity iTest, and Velocity Switches, along with engaging the Keysight Managed Services group to offer significant savings and efficiency gains.

Keysight's comprehensive solution provided:

- **End-to-end automation:** Implementing lab access (switches), test automation (iTest), and lab automation (Core)
- **24x7x365 automation and reservation management access:** Ensuring continuous testing and optimal and comprehensive lab management
- **Expanded coverage and accelerated capability:** Meeting biannual regulatory and security compliance requirements
- **Cross-department collaboration:** Sharing and standardizing test scripts to facilitate testing across departments
- **Virtualization and automation expertise:** Facilitating the rollout and management of the test and lab automation program

Projected Results

The ROI model, which was developed based on rigorous analysis and in close consultation with the customer, justified the investment, identifying significant savings and efficiency improvements:

- **Annual forecasted savings:** \$21.8 million
- **ROI achievement:** Within 18 months
- **Reduced test times:** From 18 weeks to eight hours
- **In-house testing expansion:** Generating \$8M in annual savings
- **Reduced lab queue waits and increased capacity:** Saving millions in manual labor costs
- **Performance outage reduction:** Preventing one performance outage per month, saving \$3 million annually

Key Targeted Outcomes

- Dramatic time savings through test and lab automation
- Increased test coverage and capacity, driving substantial savings
- Significant reduction in external testing costs
- Enhanced compliance and security posture through more thorough in-house testing

By implementing Keysight Velocity lab and test automation portfolio and working with Keysight's Managed Services group, the financial firm is modernizing their testing labs and streamlining processes on their path to achieving substantial cost savings while maintaining high standards of security and ensuring regulatory compliance conformance.

Manual Testing

- 1-2 test runs per year; 250 tests per run
- 3-12 months per execution run
- Manual test execution; no automated regression
- Non-analytic PDF test reports (100s of pages)



Automated Testing

- Multiple test runs per year; 250 tests per run
- Days per execution run
- Automated testing; ad-hoc automated regression
- Analytics driven, customized reporting, dashboards

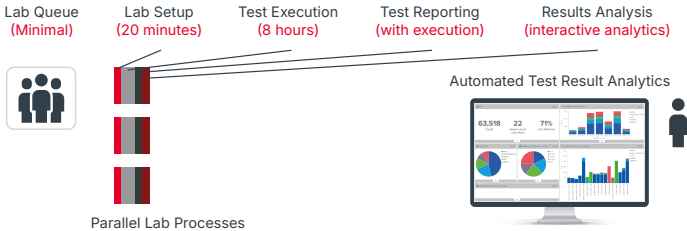


Figure 1. Manual vs. automated testing capabilities

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