Leading Financial Market Institution

A leading financial market institution has established an efficient application testing platform with Micro Focus® LeanFT.

Overview
One of the world’s leading financial market institutions offers a full suite of capital market services.

With a highly-skilled team of people, the company works with a broad range of B2B and B2C customers. Operating in a highly-regulated environment, the company helps clients build wealth and manage investment and operating risk.

Challenge
Driving Speed in the Supply Chain
The company’s network and data center are connected to leading financial hubs. Speed, reliability and state-of-the-art technology are fundamental to its success.

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SPokesPERSON
Leading Financial Market Institution Australia

Running a combination of 200+ in-house, acquired and modified applications, the company is focused on delivering quality software to meet the needs of its users. A few years ago, it began to embrace Agile methodologies to improve quality and speed-to-market. Having outgrown its use of Unified Functional Testing (UFT), the company decided to look for a testing solution that provided automation across Application Program Interface (API) and Graphical User Interface (GUI) components.

“We wanted to align test automation to development practices to feed into continuous integration,” says a spokesperson for the company. “But, we didn’t want to add complexity to our testing ecosystem by having another toolset—we wanted a single application that would satisfy our requirements.”

Solution
Successful Pilot Leads to Deployment
After investigating potential testing applications, the company selected LeanFT, a powerful functional testing solution built specifically for continuous testing and continuous integration.

The spokesperson says, “We chose LeanFT due to its functionality, particularly with respect to cross-platform, cross-browser and desktop applications support, as well as its integration capabilities with API and GUI components.”

“Creating a company-wide foundation for testing integration from development through production with end-to-end traceability, and standardized functional testing on one platform has enabled greater collaboration between testing and development. LeanFT has also enabled rapid software development and deployment to enhance quality.”

At a Glance
- **Industry**: Financial Services
- **Location**: Australia
- **Challenge**: The company is focused on delivering quality software to meet the needs of its users.
- **Products and Services**: Micro Focus LeanFT
- **Results**:
  + Created a company-wide foundation for testing integration from development through production with end-to-end traceability
  + Standardized functional testing on one platform
  + Facilitated greater collaboration between testing and development
  + Enabled rapid software development and deployment to enhance quality
capabilities with API and GUI components. Its support for the most common Applications Under Test (AUT) technologies was important to us as we needed a solution that could handle both desktop and web applications. Having a solution that works inside a standard Integrated Development Environment (IDE) using modern scripting languages was also a deciding factor. The solution’s Object Identification Center (OIC) meant that we could model AUTs and objects with ease as we create robust scripts.”

To test the suitability of LeanFT, the company ran a pilot on a live project.

“We took the opportunity to investigate the functionality of LeanFT by testing one of our web browser-based applications,” explains the spokesperson. “After a few months of using the solution, we realized it was the right tool for us. We gained a good understanding of how to use application models, share code resources, integrate with Continuous Integration (CI) / Continuous Development (CD) tools, and support common AUT technologies including Java, .NET and AngularJS.

Using LeanFT on this project gave us a roadmap for how we could leverage the solution’s functionality more broadly. It showed us what it would take to create a companywide foundation for integration from development through to production with end-to-end traceability.

Following the success of this pilot, the company rolled out LeanFT across its testing environment. It is now being used to test seven core applications.

**Results**

**Integration Facilitates Collaboration**

Having the ability in LeanFT to create application models that serve as a shared object repository, and to easily identify objects via the OIC feature, so that the objects will not break from one build to the other, are two key benefits the company is realizing from the solution.

The spokesperson explains, "We can now create abstractions of our AUTs, and in turn provide our tests with an interface to the applications and their objects. This allows us to maintain our test objects in a single location for use across our testing suite, which in turn helps our developers to write code more quickly, without the need to write manual programmatic descriptions for each object.

"In addition, we now have access to multiple visual relational identifiers to discover fields in our AUTs based on neighboring objects. This feature alone has helped us many times when objects were changing depending on options set in the application."

The LeanFT integration capabilities facilitate greater collaboration between testing and development teams, the spokesperson continues, "This allows for robust software testing that easily accommodates changes to applications.

"Our investment in LeanFT is for the long-term. We want to reduce our automation toolkit to a common AUT like Java and handle a myriad of third-party plug-ins. In due time, we’ll be able to hook into all the tools our development teams use, and write test scripts in the same language. This will significantly reduce the time between development and testing, and enhance the quality of our applications, not to mention speed-to-market.

"We’re currently leveraging the interoperability of LeanFT to create closer alignment with the CI/CD process."

**Improving Efficiency of Testing**

While the company is still in the infancy stage of using LeanFT, it has recognized the potential for improving the efficiency of its testing.

The spokesperson says, “LeanFT is a powerful solution that provides openness and allows us to use our object-oriented programming knowledge and advanced coding techniques, such as polymorphism and inheritance. This has opened up so many options for us to make our test scripts more efficient."

"Once we mature our testing processes and get more familiar with LeanFT, we will become more productive. Certainly, as we migrate more and more of our 700+ UFT test scripts—automate them, store them in a central repository, and reuse them—we will see dramatic improvements in speed and efficiency.

"In the long-run, having a single tool for test automation will make it easier for us to move our resources to different projects as required.”
Future Plans
Looking ahead, the company is focused on getting up to speed with LeanFT and evolving its approach to functional testing as part of a broader commitment to quality assurance.

“To maximize the return on our investment, we’re working towards getting the most out of the functionality of LeanFT,” says the spokesperson. “Our progress is a little slow because this is a brand new way of handling testing for us, particularly as we have amassed more than 10 years of experience with UFT, but we are becoming quicker and more confident every day.”

The company has a lot of systems, including legacy applications, that use different technologies. The priority is to automate test cases for both API and GUI across multiple programming languages, and leverage modern industry standards. Centralization and standardization of test scripts will also help drive further efficiency and productivity gains. “We want to get the basics right first in terms of test creation and automation,” concludes the spokesperson. “Once we’ve achieved that, we’ll look at leveraging other functionality such as analytics.

“We’re playing the long game with LeanFT and have chosen to implement the solution as we recognize the potential to achieve closer alignment between testing and development. We know this will ultimately help us release applications rapidly and confidently.”