Julius Bär Gruppe AG

To increase the quality and performance of applications while simultaneously lowering costs, the financial services organization turned to Micro Focus® Silk Performer™.

Overview

The Julius Bär Gruppe is the leading Swiss private banking group, focusing on the demands of sophisticated private clients, family offices and independent asset managers from around the world.

Challenge

For a modern bank such as Julius Bär Gruppe AG, it is essential to have an e-banking system that allows customers to analyze their assets, collect payment and securities orders, or communicate with customer advisors electronically around the clock. The solutions need to provide fast response times and be extremely reliable—even when access rates are high. Load and performance tests are therefore essential, and it is here that Julius Bär relies on the Silk Performer solution.

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MARKUS ZAAR
Head of Test Engineering
Julius Bär

The bank has improved the performance of the e-banking system by 30% and has reduced the necessary investment in hardware from 1.5 million to 600,000 Swiss francs when introducing an archiving system; these are two prime examples that demonstrate the improvements and savings achieved by implementing a load and performance testing tool at Zurich-based Julius Bär AG, the leading Swiss private banking group. The chosen tool is Silk Performer from Micro Focus. The tool supplies test results that are used to create significant enhancements in the bank's applications.

Solution

In 2010, Julius Bär had a clear starting vision: high performance and quality should be ensured for all applications—whether in use or brand new—combined with a goal to lower costs in terms of design and operation as well as the hardware required. In September 2010, Julius Bär founded its own Test Engineering Team in Zurich as part of this campaign for quality. One of the first tasks faced by the team was to select an appropriate solution to implement load and performance testing. All employees were able to draw on their high level of expertise, gained over many years of professional experience in testing, and demonstrated their knowledge of the products available; there was no need for any special calls for proposals. Julius Bär evaluated three solutions, one of which was Silk

At a Glance

■ **Industry**
Financial Services

■ **Location**
Switzerland

■ **Challenge**
The banking group needed to increase application quality and performance while lowering costs.

■ **Solution**
Use Silk Performer for cost-effective performance and load testing for enterprise, mobile or Web 2.0 applications.

■ **Results**
+ Improved application performance significantly
+ Provided the ability to deliver applications faster
+ Reduced hardware and development costs

Performer. The solution from Micro Focus won the race pretty quickly.

During the selection process, the team of test engineers included Frank Grümmert, Josef Mayrhofer and Markus Zaar, Head of Test Engineering. "The decision to select Silk Performer was easy to make on the basis of its price, functionality and performance," Markus Zaar stresses. "The other solutions did not offer the necessary scope of services or were too expensive."

The solution was implemented immediately after a pilot project that lasted around three weeks. The existing expertise within the Julius Bär Test Engineering team meant that Micro Focus was not required to give any training sessions.

The solution is primarily used to implement load and performance testing when introducing new applications or comprehensive release changes, and involves the entire application landscape within the bank, from core banking and securities systems to the online portal and the e-banking or CRM systems. To achieve this, Silk Performer is used globally in Zurich, Singapore and Hong Kong.

Results

The Test Engineering team is adopting a risk-based approach to performance testing by clearly analyzing the risks surrounding an application's performance before every project order. Risk assessment is based on a catalog of criteria that includes aspects such as the number of people authorized to access an application or the size of the transaction volume. The team at Julius Bär can then use this risk-based approach to prioritize and minimize test cases. By implementing goal-orientated tests at different levels, a large number of applications can be examined in a short time. This can be illustrated using a recent example: A short while ago, Julius Bär took over asset management outside the USA for Merrill Lynch, a subsidiary of the Bank of America. As part of the integration process and business transferral, the Test Engineering team had only six months to test some 170 applications. According to Frank Grümmert, Test Engineer at Julius Bär, "This would have been an impossible task without our risk-based approach to performance engineering and our powerful testing solution."

Today, Silk Performer is a central component of the testing system used by Julius Bär, providing cost-effective performance and load tests for enterprise, mobile or Web 2.0 applications. As a result, realistic load tests can be carried out on applications to determine, for example, the maximum possible number of users accessing the system or its response times. Based on the powerful diagnostic tests, the Test Engineering team can quickly identify potential bottlenecks, demonstrate areas for improvement and incorporate the results directly into development. At Julius Bär, the tool is not only used for load and performance tests but it also has other uses, such as functional backend testing.

The Silk Performer solution is universally applicable as the tool supports all current interfaces and protocols, including HTTP(S)/HTML, IPv6, Ajax, Silverlight, Java over HTTP, SOAP (XML), FTP, LDAP, MAPI, IMAP, SMTP/POP, SSL, CORBA (IIOP), Oracle Call Interface (OCI) and DB2 CLI.

Julius Bär currently holds 300 Silk Performer user licenses. The Silk Performer Multi-Machine Controller (MMC) scripts and implements the tests. Further load agents are also connected via the MMC, some over the LAN in Zurich and others over the WAN in Singapore and Hong Kong. Load agents are also used to simulate virtual users. Julius Bär also employs the Server Analysis Module (SAM) from Micro Focus, which can be used to monitor server processes and identify any problems.

In addition to Micro Focus tools, the Julius Bär Test Engineering team also use the TM ART, dynaTrace, Ranorex and Tosca solutions, among others. Transaction Management Application Response Time (TM ART) from BMC is used to monitor transactions. "A key advantage for us is that the Silk Performer scripts are fully compatible with TM ART," stresses Josef Mayrhofer, another Test Engineer in the project team. To monitor the performance of applications, Julius Bär selected the dynaTrace solution from Compuware, and Silk Performer includes its own plug-in for this solution. Ranorex, an automatic testing tool from the Austrian company with the same name, is also used for technically demanding function tests, and Tosca, an automatic testing tool from Tricentis, another Austrian company, is used for function tests on a purely technical level. This comprehensive portfolio of solutions enables Julius Bär to cover the entire procedure for end-to-end testing, from load and performance to functional tests.

"Silk Performer is a comprehensive load and performance testing tool with an extensive range of functions covering all relevant technologies," says Josef Mayrhofer. "The tool is

extremely easy to use and delivers precise results very quickly. To sum it up, Silk Performer is a one-stop solution." Overall, the testing tool has led to a significant improvement in the performance and reliability of applications at Julius Bär. "Changes to software can be tested quickly and any bottlenecks in performance can be recognized early," says Zaar. "This has enabled software products to be completed more quickly and has led to a reduction in the risks inherent in the 'performance aspects' of applications during their development."

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