

Silk Test
Silk Performer
Silk Central

Müller

Micro Focus® Silk Suite increases test script reuse while optimizing ERP performance.

Overview

Müller is the leading drugstore chain in Germany with close to 700 locations, 185,000 products and revenue of €3.7 billion.

Challenge

As Müller's business grew rapidly, IT invested in a central enterprise resource planning (ERP) system to manage orders, purchases and inventory for Müller's more than 450 European drugstores.

This ERP application manages over 200,000 products, including seasonal products such as chocolate Easter bunnies or Halloween costumes for which Müller must ensure availability at the beginning of each holiday season. A team of 30 individuals is responsible for managing the central ERP application, with nine dedicated to quality assurance. Since there is no "downtime"

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ERIC AMMANN

Quality Assurance
Müller

in retail, this live application is always in heavy use, yet is also continuously in development as Müller's IT team creates and rolls out new functionality. Changes to the application cannot impact day-to-day business, and the application needs to perform optimally at all times—including during peak times or holiday seasons.

Because of the mission-critical nature of its ERP application—and the fact that the application must remain "live" even while the development team is adding new functionality or updating features—Müller needed to adopt a holistic approach to software quality that would ensure that its development and testing teams could have complete control over the quality of emerging software builds, become highly efficient at testing for both functionality and performance, and identify defects very early in the lifecycle.

Solution

Müller's team began its Silk implementation with functional testing, using Micro Focus Silk Test™ to automate the process of testing new functionality so that they could more quickly and confidently verify that any additions, updates and features developed for the ERP application would work as expected once rolled out. Because of Müller's seasonal business, which involves the rotation of relevant products at different times during the year, changes and developments made to the central ERP application



At a Glance

Industry

Retail

Location

Germany

Challenge

The organization needed to adopt a holistic approach to software quality.

Solution

Use Silk Test to automate the process of testing new functionality, Silk Performer to conduct performance testing and Silk Central to manage all of the critical aspects of the software testing lifecycle.

Results

- + Provided the ability to deliver accurate inventory during changing seasons
- + Optimized applications to support high volumes of transactions during peak times
- + Introduced a centralized model for test management, which enables a proactive approach to software quality

must be finalized within very stringent windows to ensure everything runs smoothly with seasonal inventory. Automating the process of testing new features to ensure proper functionality enabled Müller's ERP application team to have confidence that each new feature was not only delivered in time but also actually functioned properly against the business requirements. Müller's team uses Silk Test to run test scripts on different clients so that they can fully test the functionality of new features before they are allowed to enter the production environment. When a new build is ready to be tested, the team can automatically start running structured scripts. Silk Test runs the test process in the background so that the teams immediately benefit from the time savings of Silk Test's automation capabilities.

Müller also uses Silk Test for regression testing to validate application functionality on a broad set of platforms. Silk Test's powerful testing framework enables high reusability of test scripts across test projects, which further increases the achievable ROI. With less time spent on building and maintaining regression tests, Müller's QA team can expand test coverage and optimize application quality. Seasonal spikes in application usage and transaction volume are part of doing business in retail. Unfortunately, this means that if a key application fails in one these high volume times, the business impact—in terms of lost revenue—for Müller is exponentially greater. The company needed a way to guarantee that its ERP application would continue to function properly and efficiently under extreme usage situations.

Müller uses Micro Focus Silk Performer™ to conduct performance testing to ensure that the ERP application can stand up to the highest

volumes and greatest usage peaks. Using Silk Performer, Müller tests the application against various stress situations to accurately predict and diagnose the breaking points before it is deployed. "We have to guarantee that the system is working flawlessly—even if thousands of clients are paying at the same time and the sales clerks are simultaneously accessing the system," said Eric Ammann, Quality Assurance. "There are many applications and components that make up the ERP system, and we need to be sure that a change or upgrade in one area doesn't affect performance in another. Silk Performer can alert us to any small changes that could be having immense consequences in terms of overall application performance."

Using Silk Performer, Müller's QA team is able to test the ERP application's performance in real time from an end user's perspective. Silk Performer has the power to simulate thousands of simultaneous users working with multiple computing environments and interacting with various distributed application environments such as Web, SOA, client/server, Citrix, legacy, or ERP/CRM systems—on one or more test machines. Silk Performer emulates the most intense, high-volume situations that the application may encounter in production and ensures that it is capable of handling these situations before it is deployed. After every test run, Silk Performer produces a web-based report with the results of the stress tests. Müller receives a comprehensive overview on the application's performance during peak times that the quality team can leverage to set baseline thresholds for performance optimization.

Müller uses Micro Focus Silk Central™ to manage, control and execute all of the critical aspects of the software testing lifecycle from a

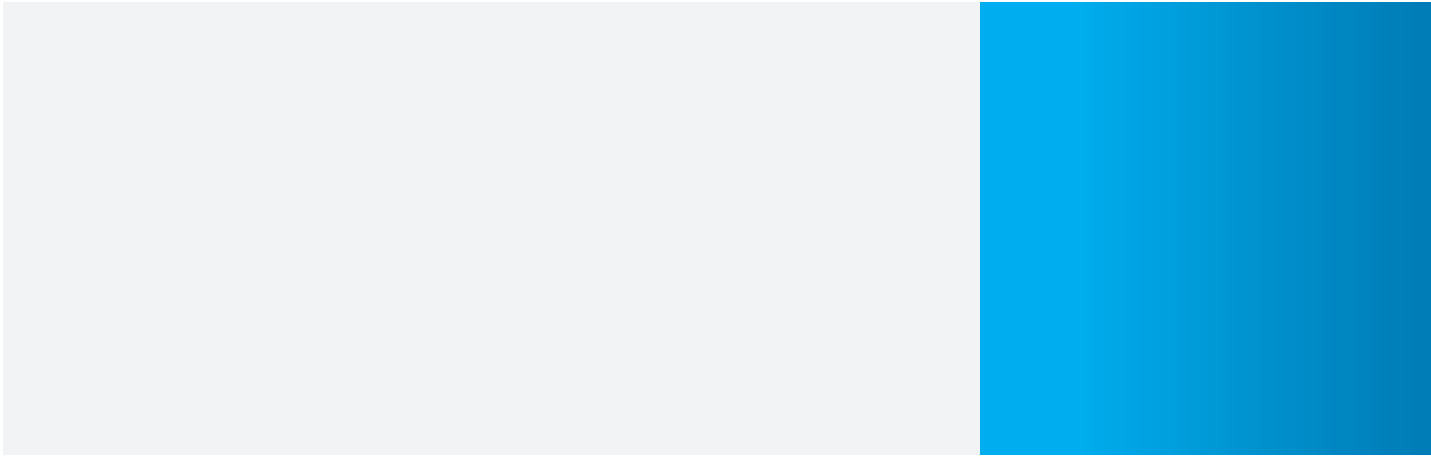
single testing environment. Seamless integration with Silk Test for automated functional and regression tests, and Silk Performer for performance tests, enables Müller to use Silk Central as a central control point for all quality efforts related to the central ERP system. "At any given time, we are working on a number of different developments, new features and enhancements to the ERP system," said Ammann. "We really needed a management console that would let us plan, document and manage each step of the software testing cycle and keep track of all the moving parts involved in the maintenance of the system." Every Müller team member involved in the development and testing process has access to the same information and reports, which are stored in a central repository. This centralized model for test management enables Müller to take a more proactive approach to software quality, infusing quality checks and measures earlier in the application lifecycle. For example, Müller has begun adopting requirements-based testing—developing test cases directly from requirements—because Silk Central can store and integrate the originally defined requirements alongside related use and test cases. "As all of our test assets, including test plans, scripts, results and quality metrics, are managed in a central repository, we can reuse the information quickly and for different projects and versions," said Ammann. "It's a huge advantage to be able to extend our quality management to other projects because the same tests do not have to be rebuilt every time." With Silk Central, all phases—including requirements management, test planning, test operation, and reporting—are managed, automated and verified. For Müller, test management is now an integrated part of the core internal process it has put in place to ensure that the ERP system continues to support Müller's business objectives.

Results

Borland Silk Test, Silk Performer and Silk Central have enabled Müller drugstores to deliver the right products to the right locations at the right time by ensuring the continued functionality and performance of its central ERP system. Content validation in Silk Test ensures that the drugstore can deliver the products that are in highest

demand each season. Stress testing with Silk Performer ensures that Müller can deliver these items to customers during times of high-volume system usage. And Silk Central enables Müller to be much more efficient at developing, testing and rolling out new functionality—without impacting the ongoing performance of the application. By using Micro Focus's complete

lifecycle approach to quality, Müller's IT department has raised its visibility as a key contributor to the business. Optimizing the ERP system for functionality and performance has a direct impact on the company's revenue as this key application is integral to Müller's ability to deliver the products and service that has helped it become one of Europe's leading drugstores.



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