



ZKB Gains End-to-end Visibility into Their Online Applications Using CA Wily

Headquarters:	Zurich, Switzerland
Industry:	Financial Services
IT Environment:	IBM WebSphere®, Linux, J2EE web applications, Open Source applications
CA Wily Products:	CA Wily Introscope®

ORGANISATION

Zürcher Kantonalbank (ZKB), established in 1870, has 105 branch offices, approximately 4,400 employees and total assets of CHF 100 billion, making it a key player among Swiss financial institutes. Switzerland's third largest bank offers classic mortgage and credit services and since 1995 has become increasingly involved in investment and pension services for the consumer market. The hub of this business segment is the Java- and HTML-based online platform known as "ZKB Onlinebank" (ONBA).

CHALLENGE

What began as the first-ever Swiss online banking system more than ten years ago has now become the leader in Swiss paper-free payments. ZKB's ONBA has 160,000 registered users, one login every second and around 180 payment orders every minute. Private and business customers alike place their trust in the stability and 24-hour availability of ZKB's e-banking system. This applies in particular to customers who are looking for typical financial services, such as accessing account information, processing payments and debits or stock exchange transactions.

In 2006, ZKB undertook a technical reengineering of the highly frequented e-banking platform. The ultimate goal of the project was to overhaul the HTML and Java clients to create a more user-friendly GUI and to optimise the underlying server topology and web applications based on J2EE software specifications. At the same time the AIX-based environment was to be replaced with efficient Linux machines. All this change had to occur without any interruptions or loss of performance on the e-banking platform. There was no room for surprises in terms of performance.

It was a highly demanding project for ZKB's Ingo Adler and his IT team, and adhoc PES AG, a specialist in CA Wily Technology implementations who was chosen as the partner of choice for this project. ONBA was considered an essential business enabler for ZKB and there was no room for error. Makram Hanin, adhoc's General Manager added: "As ONBA consists

“Without a suitable tool you're just sitting in front of a black box. You never know which screw needs to be turned to improve performance.

Ingo Adler
Online Banking Architect
ZKB

of nearly 100,000 components, each individual component performance is a critical factor for quality of service.” This relevance led Adler to make a clear decision: The new online banking platform would be subject to a stringent stress test within a test environment before the system went live and became part of the bank's operating business. The first key decision was to find a suitable monitoring tool to gain visibility into all transactions in real time.

SOLUTION

Three monitoring products were lined up for testing by the bank's IT strategists. Within a very short space of time the decision was made in favour of the CA Wily Introscope enterprise application management tool, as it had already received positive feedback from other departments of the bank during previous performance tests. The evaluators noted in particular Introscope's depth of functionality and its short implementation time.

Introscope is a monitoring tool that provides ZKB with in-depth insight into the complex processes and structures of its heterogeneous web



ABOUT ADHOC PES AG

adhoc PES AG specialises in performance engineering solutions for complex applications through all stages of its lifecycle—definition, validation and analysis of performance. adhoc was created in 2002 in Basel and count numerous customers from Switzerland and Germany.

applications via a central console. Introscope is largely used at ZKB to identify compatibility and performance problems in terms of response times of applications, and transaction volume and load distribution of the individual e-banking servers. A dashboard provides ZKB's IT specialists with the latest system performance status of individual components and keeps them constantly informed of any bottlenecks or other performance issues before end users are affected.

After using Introscope for ten days, Adler's team was confronted with the first performance issues on the new online banking platform. Initial login attempts were at times troubled by significant performance fluctuations. However, using Introscope, the reason for the fluctuations was quickly found: Measurements with Introscope showed that a relatively insignificant message field transmitted along with the account overview and currency lists during user login was insufficiently programmed and led to an unacceptable performance level. Using Introscope, ZKB started to measure the process of the message field and updated the code so the application component ran without any performance problems.

This experience encouraged Adler and his team to use the application performance management tool to look at the flow of all relevant web components in more detail in order to gain general transparency in terms of all ONBA processes. Introscope also monitors the quality of user transactions from the user's viewpoint and draws upon authentic transaction data. This means that the team is always in a position to record problems with linked contexts and subroutines in relation to other application performance levels.

“With CA Wily Introscope, we save ourselves a lot of time and money in terms of the smooth operation of our online banking system. CA Wily's tool exceeded our expectations. I wouldn't do without it.

Ingo Adler
Online Banking Architect
ZKB

RESULTS

The introduction of Introscope at ZKB resulted in end-to-end transparency throughout the development period of numerous web-based online banking applications. Introscope dashboards provide the bank's IT professionals with precise optimisation results, contrasting with the past where load tests were carried out "imprecisely, based on vague assumptions." Building on these results in testing, ZKB's managers decided to permanently implement the monitoring tool in production as well.

Real results include:

- Performance of individual critical applications can now be fine-tuned.
- Customer satisfaction has measurably increased due to higher application availability.
- Time to identify and resolve problems has significantly decreased
- Performance monitoring has no negative performance impact: overhead is less than 3%.

Based on this success, the bank is already planning to use Introscope in the next reengineering approach, the eighth ONBA release.