

Swiss Mobiliar accelerates 50 percent of queries by a factor of 100

Deploying a cost-effective platform to deliver actionable insights to business users

Overview

The need

Swiss Mobiliar wanted to maximize profitability as its business grew. This meant meeting transaction processing and analytics needs for a larger customer base while keeping processor resources flat.

The solution

The company deployed IBM® DB2® Analytics Accelerator for z/OS® alongside its IBM zEnterprise® 196 server—bringing together transaction processing and analytics workloads in a cost-effective solution.

The benefit

Delivers rapid processing of reporting queries with no increase in active server cores; accelerates 50 percent of queries by a factor of 100; and reduces transaction response times by 20 percent.

“DB2 Analytics Accelerator makes it possible for us to execute 90 percent of our queries 25 times faster, and 50 percent of them 100 times faster,” says Thomas Baumann, IT Performance Architect at Swiss Mobiliar.

“Queries that used to take five hours to complete are now processed in just 20 seconds in the optimized mainframe environment—and we can run them any time, day or night, with no interruption to our production systems on the mainframe.”

By implementing an optimized computing solution, Swiss Mobiliar has achieved its objective of running its growing transaction processing and analytics workloads side by side without increasing compute requirements.

Founded in 1826 in Bern, Switzerland and with 4,100 employees and more than 300 trainees, Swiss Mobiliar is one of the country’s leading insurers. Organized as a co-operative with a decentralized structure, the company offers its insurance products through 80 general agencies across Switzerland. In 2012, Swiss Mobiliar had 1.6 million policy holders, and generated annual profits equivalent to USD 251 million.



“IBM DB2 Analytics Accelerator enables us to support the additional workloads that come with business growth without activating more cores on the mainframe.”

—Thomas Baumann, IT Performance Architect,
Swiss Mobiliar

Cost-effective capacity for growth

With its business growing rapidly, and the number of variables involved in calculating the eligibility and excess requirements for its insurance products steadily increasing, Swiss Mobiliar wanted a cost-effective way to deliver the additional compute resources required to maximize its profitability.

Baumann explains: “Over the last three years, we’ve successfully driven ten percent growth in new policies. At the same time, our products have become more complex; for example, a car insurance policy now varies in price according to a range of risk factors, including age, location and years of no-claims bonuses accrued. Processing thousands of quotations against these criteria each day is a complex process, which has caused our workloads to grow steadily.”

Like many of Europe’s leading insurers, Swiss Mobiliar relies on IBM System z® technology and IBM DB2 for z/OS database software to provide the essential combination of availability, performance and rock-solid reliability to manage its extensive business operations.

“Our online transaction processing systems contain 10 TB of data and run on an IBM zEnterprise 196 server, which IBM manages as a service,” says Baumann. “With both our transaction data and analytics workloads growing by around 20 percent per year, we calculated that we would have to increase our capacity if we wanted to continue to run both of these workloads on the mainframe.”

Solution components

Hardware

- IBM® zEnterprise® 196 (z196)

Software

- IBM DB2® Analytics Accelerator for z/OS®
- IBM DB2 for z/OS
- IBM z/OS

Services

- IBM Global Technology Services® Strategic Outsourcing: Data Center High-end Server Outsourcing
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Deploying IBM DB2 Analytics Accelerator

To enable faster, more cost-efficient reporting, Swiss Mobiliar shared a sample of its typical IBM DB2 queries with IBM for analysis. The aim was to calculate how many queries could take advantage of the IBM DB2 Analytics Accelerator solution—a workload-optimized appliance designed to enable complex analytics queries to run seamlessly alongside transaction processes.

“IBM’s assessment of our workloads was very helpful,” says Baumann. “Although it was only possible to accelerate a fraction of a percentage of queries with the IBM DB2 Analytics Accelerator, we discovered that this relatively small number of queries was using 20 percent of the mainframe’s CPU resources.”

Based on the results of the IBM analysis, Swiss Mobiliar deployed IBM DB2 Analytics Accelerator for z/OS alongside its IBM zEnterprise 196 server. Today, IBM delivers the management of both the mainframe and the Accelerator appliance as a service.

“The implementation process was very straightforward,” says Baumann. “Thanks to the responsiveness and expertise of the IBM team, we were able to start accelerating queries with the solution rapidly. What’s more, by outsourcing the management of the DB2 Analytics Accelerator to IBM, we experience all the benefits of a private cloud—especially reduced maintenance cost and complexity.”

With the optimized environment in production, Swiss Mobiliar has reduced transaction response times by 20 percent—helping to deliver a better service for business users.

“Using DB2 Analytics Accelerator, we can produce sales reports in just one day—an improvement of 80 percent.”

—Thomas Baumann, IT Performance Architect,
Swiss Mobiliar

Baumann comments: “IBM DB2 Analytics Accelerator enables us to support the additional workloads that come with business growth without activating more cores on the mainframe. Because we’re using our existing infrastructure more effectively, we can defer investment in additional compute resources—helping us to maximize our profitability.”

Faster, more accurate reporting

Previously, Swiss Mobiliar’s sales reports for the general agencies took one week to generate, meaning that they could only be distributed on the third week of the month.

“Using DB2 Analytics Accelerator, we can produce sales reports in just one day—an improvement of 80 percent,” says Baumann.

“These reports can now be sent out to our agents a week earlier, which helps them get the visibility they need to meet their sales targets. Since we’ve implemented the solution, our reporting teams have more time to develop new reports requested by our agencies—giving them the additional insights they need to work more effectively.”

The speed with which Swiss Mobiliar is able to complete its reporting tasks has also led to improvements in the veracity of its data.

Baumann says: “In the past, our reporting was a ‘fire and forget’ process. For example, if we generated a query for 1.9 million records, but the system returned a report for 2 million records many hours later, it was difficult to notice the error. Because we can now send a query and get the answer within seconds, these sorts of record duplication errors are simple to identify—and as a result the quality assurance of our reporting is much stronger.”

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Planning for the future

Based on the success of the IBM DB2 Analytics Accelerator solution, Swiss Mobiliar is now considering the possibility of developing more advanced risk and fraud calculations for the appliance.

“We see great potential in IBM DB2 Analytics Accelerator, especially its ability to execute complex pattern-recognition queries at lightning speed,” says Baumann. “For example, if we had a request from an agent asking if they could sell a car insurance policy for a high-performance sports car registered at an address in a rural area, we could run a query to see if we’d offered any similar policies, and give an answer to the agent within seconds.”

He continues: “We are also investigating the possibility of developing a more advanced after-pay analysis for fraud detection. This could involve processing the social network between two individuals involved in a car accident to detect any hidden relationships between them that may be indicative of fraud, or checking to see if there were any extreme weather conditions before a home insurance flood claim was made. Without the speed of IBM DB2 Analytics Accelerator, it would not be economically viable to add these additional checks to our process.”

Baumann concludes: “IBM DB2 Analytics Accelerator enables us to grow our business while deferring investment in additional compute resources. Looking to the future, we’re keen to use our optimized solution to augment our risk and fraud calculations—which could help us to deliver even lower premiums, win new customers and accelerate our business growth.”

For more information

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