CASE STUDY

iS2

Die Bayerische

An overview of all contract information in a matter of seconds thanks to Neo4j

INDUSTRY
Insurance

CHALLENGE
– Outdated management systems and different formats
– Create a standardised data framework

STRATEGY
– Provide consistent information on customers and contracts in one user interface
– Better availability and performance at the POS

SOLUTION
– Fully developed and stable database with query performance, flexibility and scalability
– New database with Neo4j which adequately reproduces the volume of products and formats

RESULT
– A high-performance database with inventory database information available at any time at all customer contact points
– Average response times for information queries: 1-2 seconds

Die Bayerische uses Neo4j for its sales system in both exclusive sales and in the service centre. This creates high-performance and near – 24/7 access to all inventory information and allows sales to make changes to inventory data without novation.

The company

Die Bayerische in Munich has been one of the most specialised, medium-sized insurers in Germany for over 150 years. Its comprehensive range of insurance and financial solutions include all products in the life and property insurance sectors.

The service provider Intelligent Solution Services AG (iS2) was founded in 1990 as a computing and hardware specialist with only 5 employees. iS2 soon had equipped a large proportion of the sales organisations of German financial service providers with "electronic price lists" and the associated software. Today, the company's main focus is the consulting, design and implementation of sales-oriented software solutions.

Together, the companies developed the "Bay4all" software solution. This solution enables insurance advisors, call centre employees and insurance brokers to access all relevant customer and contract data with good performance levels and without noteworthy downtimes.

The challenge

"Personal and fast" is Die Bayerische's brand promise to its customers. They aim to gain a competitive advantage through an increased focus on services and customers, giving them an edge over larger insurance companies. High-performance inventory database information that is nearly always available at all customer contact points is a prerequisite.

For insurance companies like Die Bayerische, this basic condition is not a trivial requirement to meet. They have a heavily heterogeneous system landscape for managing the insurance contracts. As certain types of insurance, such as pension insurance or disability insurance, can last for several decades, the different management systems have not been around for the same amount of time, operate with different formats and require a significant amount of downtime for batch runs. It is therefore a lot of effort to provide consistent information on customers and contracts in one interface.

The strategy

For this reason, Die Bayerische commissioned iS2 to develop a new, Internet-based field staff system in order to improve their availability and performance at the POS. Data

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– Thomas Wolf,
Managing Director, iS2

needed to be replicated from the different host systems and regularly synchronised. This would then ensure a standardised data framework – the solution would become a reality, the "single point of truth".

For iS2, relational databases were not the answer. The volume of different data was simply too large, the JOIN operations for queries too time-consuming. Alternative database systems were therefore required.

The solution

As the VAA model used in many insurance products is similar to a graph model, the use of a graph database was the obvious next step.

"A graph database can perfectly represent the products of an insurance company. Contracts are linked to people and these people are linked to other people with other contracts. This leads to a compact data network that, with the help of the database, can be navigated or traversed," says Thomas Wolf, Managing Director of iS2. "All related information can be retrieved from any starting point so very quickly."

After a short evaluation, developers at iS2 quickly decided on Neo4j. The open source database especially impressed them with its fast learnability, great flexibility in the data model and its "whiteboard friendliness" which significantly facilitates internal discussions between project members.

After a successful, self-contained demo system, iS2 steadily developed the new system with the support of Neo Technology. One of the challenges faced was adequately representing the quantity of products and formats in the database. The advantage of the graph model also quickly resolved this issue of volume.

The benefits

Bay4all, the new field staff solution, supports employees with its speed, availability and consistency. When querying information, response times are on average between one and two seconds. The new service has been well received by employees.

The insurance company's inventory systems synchronise smoothly with Neo4j. Data buffering means the users can access the system at any time. It can even be restarted at short notice in the event of an error. Inconvenient downtimes for the field staff have been all but eradicated.

Approximately 400 insurance employees use the new information system. As of today it is not possible for customers to inform themselves about insurance policies online, but this option is technically possible. Neo4j provides the required scalability.

"Neo4j was the right solution for us. The fully developed and stable database supports us thanks to its query performance, flexibility and scalability, which is exactly what we needed to meet our clients' requirements," Thomas Wolf concludes.

Neo4j is the leader in graph database technology. As the world's most widely deployed graph database, we help global brands – including Comcast, NASA, UBS, and Volvo Cars – to reveal and predict how people, processes and systems are interrelated.

Using this relationships-first approach, applications built with Neo4j tackle connected data challenges such as analytics and artificial intelligence, fraud detection, real-time recommendations, and knowledge graphs. Find out more at neo4j.com.

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