CUSTOMER SUCCESS STORIES

GKN Powder Metallurgy Achieves Significant Cost Savings, Strategic Flexibility with EDB-Assisted Migration to PostgreSQL

CUSTOMER:
GKN POWDER METALLURGY

EDB customer since October 2023

Roman Jaeger
Database Administrator,
GKN Powder Metallurgy

CHALLENGE: Faced with the rising cost of an underwhelming legacy infrastructure, this world-leading provider of powder metal materials, components, and solutions decided to migrate its business intelligence systems to a more scalable, cost-effective solution.

EDB SOLUTIONS: EDB Postgres® Advanced Server, Barman, EDB Postgres Enterprise Manager, PGBouncer, Enterprise Failover Manager

RESULTS: By leveraging the inherent flexibility and scalability of PostgreSQL and advanced features from EnterpriseDB (EDB), GKN was able to optimize its legacy application code, improve overall system performance, and unlock new capabilities while generating significant cost savings.

OVERVIEW

As the database administrator for GKN Powder Metallurgy, Roman Jaeger was becoming increasingly aware of his organization's need to reduce costs, improve system performance, and gain greater control over its database infrastructure. In addition to necessitating a thorough cleanup after growing in complexity over time, GKN's legacy systems had simply become too expensive to maintain, while providing minimal benefits to justify the cost.

"We started this project because we were searching for the possibility of getting rid of our Oracle enterprise databases," he said. "The cost was just too much for the use that we have for these systems."

However, while Jaeger was confident that PostgreSQL would provide a superior environment for GKN's database needs, he was also acutely aware of the myriad technical challenges associated with such a complex migration. He knew he needed a provider with the right tools and services to benefit both the initial transition and the ongoing operations.

After careful consideration, GKN decided to move forward with its migration to PostgreSQL, partnering with EDB and leveraging EDB's Postgres Advanced Server (EPAS) to facilitate the transition. The team at GKN was specifically looking for a partner they could rely on for technical assistance and collaboration throughout the process, and they found that in EDB.

Overcoming challenges and learning along the way

Getting the migration started was not without its technical challenges, particularly the sheer complexity of rewriting legacy application code and optimizing database objects. "This system we're moving is our business intelligence system," said Jaeger. "It's an old system that grew with time, and we have a lot of things to rewrite and old tables that we don't need anymore."

In light of these hurdles, GKN's utilization of a suite of EDB products alongside dedicated technical support was crucial to minimizing friction throughout the migration process. Specifically, Jaeger and his team emphasized the importance of tools including Barman for backups, EDB Postgres Enterprise Manager for monitoring, and EDB Failover Manager for ensuring high availability.

Critically, the use of these tools not only facilitated a successful transition but also provided GKN with a robust infrastructure for future growth and innovation. EDB Senior Migrations Consultant Raphael Salguero has been collaborating with GKN throughout the process. He explained that being able to more readily overcome technical challenges made it easier to derive useful insights from the migration.

"Just by working on the migration, you learn a lot about the database itself, and you're able to clean it up because you decide to ignore some objects or get rid of them," Salguero said.

Ultimately, thanks to a combination of the inherent flexibility and scalability of PostgreSQL and EDB's advanced features, GKN was able to optimize its legacy application code, improve overall system performance, and leverage new capabilities to make strategic shifts and position itself for further operational enhancements and cost reductions.

EDB
Postgres for the AI Generation
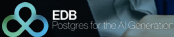
Strategic shifts and flexibility

Although the migration process was initially focused on supporting an isolated group of applications, the initiative's success helped Jaeger and his team realize the potential of EDB's features to transform their overall approach, resulting in a strategic shift in GKN's priorities. "We have more flexibility with the whole world of PostgreSQL add-ons, modules, and extensions we can use," said Jaeger. "We're even planning to move some other applications, like our quality system, to EPAS after this migration."

Cost reduction was one of the primary motivating factors behind the migration, and Jaeger anticipates that the savings generated by the project will compound significantly over time, reaching up to $400,000 after five years. Given the positive impact on GKN's budget, the organization hopes to be better positioned for further investments in technology and innovation.

Between the considerable cost savings, improved system performance, and enhancements to operational flexibility, GKN Powder Metallurgy's EDB-assisted journey from Oracle to Postgres has proved to be a transformative experience. In addition to meeting the immediate needs, the partnership has given the organization confidence in its ability to tackle emergent challenges and explore new opportunities for growth and innovation within its IT infrastructure.

"The biggest benefit is that we can see the performance is better with the new system," Jaeger concluded. "We are more flexible with the PostgreSQL features, and we hope that we will be better prepared for future challenges."

Learn more about GKN Powder Metallurgy at gknpm.com.