



### Business Challenge

Four German federal states rely on Dataport to host and manage the IT systems that run their public services. With budgets always tight, how could they deliver support to taxpayers more cost-effectively?

### Transformation

Dataport migrated critical SAP databases to IBM® Z® servers, IBM DS8886 storage and IBM Db2® for z/OS®, reducing operating costs, and improving the availability and productivity of core systems.

#### Business benefits:

**>EUR 500,000**

annual cost saving ensures better value for taxpayers

**Up to 2x**

performance improvement for some mission-critical SAP applications

**85% faster**

to provision databases, increasing agility and supporting digital transformation efforts

## Dataport

### Four German federal states rely on IBM infrastructure solutions to deliver cost-efficient services

Dataport provides IT services to municipal government organizations in six German states: Bremen, Hamburg, Mecklenburg-Western Pomerania, Lower Saxony, Saxony-Anhalt and Schleswig-Holstein. Its Customer Center of Expertise (CCoE) is certified by SAP. Dataport develops, hosts and maintains systems in its industry-leading Twin Data Center that supports a wide range of local government needs. Based in Altenholz, near Kiel, and with offices in Hamburg, Rostock, Bremen, Lüneburg, Magdeburg and Halle, the company employs 2,800 people and reports annual revenues of EUR 544 million.

*“The new IBM Z and Db2 solution is highly cost-efficient thanks to lower database license and support costs. We expect to save more than EUR 500,000 a year on average.”*

Dr. Guido Schmidt

Head of Mainframe Operations

Dataport

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## Serving state governments

A broad range of administrative bodies across six of Germany's federal states rely on Dataport to provide IT hosting, services and support for essential public services. These services include education, social care, the judiciary, property management, regional planning and taxation.

Dataport, one of Germany's leading public-sector IT services providers, offers a comprehensive portfolio of hardware, software, network and hosting solutions specifically tailored to meet the needs of municipal and state government organizations. Certified by SAP as a Customer Center of Expertise (CCoE), the company also offers a wide range of SAP services.

Like its clients, Dataport operates within tight budgets, and is always seeking better, more cost-efficient ways to deliver its services. Not only does this improve Dataport's competitive position, it also contributes to social wellbeing in Germany.

Dr. Guido Schmidt, Head of Mainframe Operations at Dataport, begins: "The services we support are critical not just in the smooth running of local government, but also in the day-to-day lives of citizens. We must therefore ensure that our clients' IT applications run reliably – and cost-effectively. As public-sector organizations, we and our clients are under pressure to deliver the best value for taxpayers' money."



Mirko Niemann, Lead IBM Z Database Administrator at Dataport, explains: "We were previously running our diverse SAP environments with Microsoft SQL Server databases on the x86 server platform. As support and operating costs were increasing, we looked for other options. We realized that moving the databases to the IBM Z platform would save money while improving security and availability."

## Making a strategic move

As an IT service provider, Dataport is committed to providing digital, cost-optimized IT operations for its clients, with stability and security as top priorities. To support these ambitions, the company runs a comprehensive portfolio of SAP software for its clients in its private cloud environment. These include SAP for Public Sector solutions, SAP Public Sector Collection and Disbursement, SAP ERP, and SAP Business Warehouse applications.

"We've seen SAP application performance for some databases increase by up to a factor of two since migrating to IBM Z. We've had positive feedback from clients that many key applications are running faster."

### Axel Herzberg

Manager System Z Infrastructure  
Dataport

Dataport has worked closely with IBM for many years, creating highly efficient, robust and high-performance infrastructure solutions. Dataport and IBM identified the SAP application landscape as a target for significant cost savings. How could it squeeze costs while keeping service levels high and improving reliability?

After evaluating its options, Dataport chose to migrate its SAP databases from Microsoft SQL Server systems on x86 servers to [IBM Db2 for z/OS](#) running on the company's trusted [IBM Z](#) mainframe platform.



More than EUR 500,000 annual cost saving delivers better value for taxpayers

Axel Herzberg, Manager System Z Infrastructure at Dataport, says: “IBM Db2 for z/OS offered a commercially attractive combination of price, reasonable performance, and reduced operational and support costs. Additionally, IBM offerings have a strong reputation for security, availability, scalability and reliability.”

To validate the move to IBM solutions, Dataport completed a proof of concept that clearly demonstrated the economic and technical advantages of migrating the SAP databases to the IBM platform.

Dr. Guido Schmidt recalls: “There were some concerns about the impact the migration would have on operations, but the IBM Z proof of concept confirmed that we could move the databases over with minimal effort and no disruption for end users.”

The SAP operations team at Dataport migrated a total of 82 SAP databases, ranging from 100 GB to 2 TB in size, from Microsoft SQL Server to IBM Db2 for z/OS. In total, the company migrated 30 TB to the IBM Z and [IBM DS8886](#) platform.

Mirko Niemann remarks: “We were pleasantly surprised by the seamless process when migrating to the new IBM Z mainframe and IBM Db2 for z/OS. We planned on having IBM and SAP support teams on site to help us, but we ended doing just fine on our own. We did have a few questions throughout the process, and the guidance we received from the IBM and SAP experts was much appreciated.”

Today, the SAP databases run on two [IBM z14®](#) servers, located 15 km apart and configured as an active/active cluster with [IBM Parallel Sysplex®](#) technology for seamless recovery of workloads in the event of unplanned downtime at one site. This offers Dataport a whole new level of availability compared to its previous database infrastructure. Being able to choose specific performance levels with the option to seamlessly upgrade and increase processing performance as required, Dataport gained all the flexibility it needs for the future.

To support the migration, Dataport also upgraded its IBM Z storage environment and deployed two high-performance IBM DS8886 hybrid storage systems. The new IBM storage solution offers full integration with IBM Z servers, in combination with high-performance Flash technology and self-tuning features to simplify storage management. The new solutions have improved performance by up to 20 percent, and provide a stable, totally reliable storage environment.

## Driving down costs

By migrating SAP databases to IBM Db2 running on IBM Z servers with IBM DS8886 storage, Dataport has reduced operating costs and improved availability. Dr. Guido Schmidt comments: “The new IBM Z with DS8886 and Db2 solution is highly cost-efficient. By consolidating workload to a smaller number of more-powerful processor cores, we have cut database license and support costs. We expect to save more than EUR 500,000 a year on average – an outstanding achievement. This ensures cost-efficient IBM Z operations for all our clients.”

Axel Herzberg notes: “We’ve seen SAP application performance for some databases increase by up to a factor of two since migrating to IBM Z. We’ve had positive feedback from clients that many key applications are running faster.”

## Benefits in detail

- More than EUR 500,000 annual cost saving delivers better value for taxpayers
- Up to 2x performance improvement for some of its clients' mission-critical SAP applications
- 85% faster to provision new databases, boosting business agility and supporting digital transformation processes
- Seamless migration of 82 SAP databases with a total data volume of 30 TB from x86-based servers to the IBM Z platform utilizing IBM DS8886 storage
- Up to 20% faster performance with IBM DS8886 hybrid storage systems, fully integrated with IBM Z environment

## Key components

**Applications:** SAP® Business Warehouse, SAP ERP, SAP Public Sector Collection and Disbursement

**Software:** IBM® Db2® for z/OS®, IBM Parallel Sysplex®

**Hardware:** IBM DS8886, IBM z14®



Crucially for Dataport, running the SAP databases on IBM Z and IBM Db2 has dramatically reduced maintenance and management workloads. Previously, provisioning a new SAP database for a client required installation of new servers – virtual or real – an expensive and time-consuming process.

Mirko Niemann explains: “It took ages to sort out basic configuration settings for a new virtual server and even longer if we had to order new physical hardware: it could take several weeks to provision new SAP databases. Now we can create new database instances in just a couple of days, some 85 percent faster than before, for better business agility. These new capabilities reduce our workload, particularly when managing operating system or database updates, and the SAP Basis team is less stressed and able to devote more time to value-added tasks.”

The migration of the SAP databases to the mainframe is the latest development in Dataport’s long commitment to the IBM Z platform. The company and its predecessors have worked with IBM since the 1960s and have relied on the IBM Z platform to support operations for over 50 years.



After successfully moving the databases to IBM Z, the team is now looking at migrating the SAP application servers to the IBM Z infrastructure using Linux on IBM Z. This will help Dataport to consolidate its SAP operations, unlocking additional efficiency improvements and cost savings.

Dataport plans to expand its use of IBM Z technology even further with the introduction of **IBM Cloud™ Private**, which will enable the company to run its own state-of-the-art private cloud on Linux on the mainframe. This enterprise-grade container and application management solution will help the team to support its clients’ digital transformation efforts. Bringing the latest DevOps best practices to IBM Z, such as Kubernetes and Cloud Foundry, will allow Dataport to offer new cutting-edge services on the IBM Z platform and demonstrate to clients the unique advantages of this infrastructure solution.

Dr. Guido Schmidt states: “Migrating the SAP databases to IBM Db2 on IBM Z with DS8886 has cut operating costs, enabling us to deliver the best service to clients even more cost-effectively. Dataport is committed to investing in IBM Z, as we believe it is the ideal platform for growing public-sector workloads, such as artificial intelligence and big data. We’re excited to see what the future brings.”

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