

GDIS AND BOI CARRYING ON THE SUCCESS



CUSTOMER PROFILE

- GDIS is the IT full-service provider of Generali Germany, the second largest primary insurance group on the German market.
- Employees: 760 (2018) Turnover: EUR 340 million (2017)
- GDIS provides a network for 40,000 people daily.
- At the locations in Aachen and Hamburg, GDIS provides the IT service for all Generali Group companies.
- GDIS is one of the leading developers of information systems in Germany. GDIS' core competencies are: stable and cost-effective operation of multi-platform infrastructure and development of high-performance, sustainable IT applications.

GDIS AND BOI

More than 25 years of TABEX: A successful project for generations.

Generali Deutschland Informatik Services GmbH (GDIS) - the IT full-service provider of the Generali Group - puts great value on the efficient and controlled use of master data and control data in all business processes. For decades, GDIS has relied on the mainframe. For more than 25 years TABEX4, the table management system from BOI Software GmbH, has provided revision-proof, high- performance productive master data and control data.

In order to make this data also available for Java applications in the decentralized world, a uniform and company-wide table infrastructure for Java was implemented with TABEX4 JTC - a highly efficient connection between mainframe and decentralized Java applications.

In GDIS application programming, the productive control data and master data are now available both on the mainframe and in Java for the world's fastest read access: Access speed with TABEX4 JTC is up to 550 times faster compared to access on RDBs.

This allows GDIS to implement its business applications either on the mainframe or via Java in the decentralized world and modernize them step by step as required. Complete control of all business-critical data and processes is always maintained.



BRIDGING THE GAP BETWEEN MAINFRAME AND DECENTRALIZED JAVA APPLICATIONS

Company-wide use of centrally maintained master data and control data in all important business processes

IN GDI'S DAILY BUSINESS TABEX4 has become indispensable:

5000

Tables are used daily with TABEX4.

150

Users in different departments maintain these tables.

STARTING POINT

More than 25 years of success and trust are proven again.

Since May 1992, GDIS - formerly Aachener und Münchener Informatik Service AG - has been using TABEX4, the leading system for the management of master data and control data. TABEX4 is used on the mainframe in z/OS and enables 150 users from different departments to maintain master data and control data in a revision-proof manner. With TABEX4 guidance and support, data is provided across all test stages until production.

GDIS has more than 5,000 tables with master data and control data in productive use and several billion TABEX4 accesses per day. The high TABEX4 access speed and the subsequent reduced CPU-demand save time and money in daily use.

THE CHALLENGE

Bridging the gap between mainframe and decentralized world.

GDIS relies on the mainframe for its IT development strategy. The connection to the decentralized Java world plays an increasingly important role. New applications are implemented either on the mainframe in COBOL or decentral in Java, but both must access identical productive data. For decentralized Java applications this access has so far only been realized with high costs via IMS transactions on the mainframe.

Therefore, GDIS was looking for an innovative solution to provide productive data in a simple, secure and automatic way for fast decentralized Java access. The central administration of all businesscritical master data and control data with TABEX4 was to be maintained. Likewise, the revision-proof maintenance of the master data and control data hosted on the mainframe by the 150 skilled employees of the Generali Group via the TABEX4 web interface was expected to remain unchanged.



CENTRAL AND FAST DATA ACCESS

An important success factor for GDIS is a middleware to centrally provide fast access to master data and control data.

Brigitte Steindor System architect at GDIS

TABEX4 JTC TECHNOLOGY

- TABEX4 JTC Publisher generates customized, consistent JTC Snapshots of the master data and control data. Data can come from practically any conceivable data source or a combination of different data sources.
- 2. An enterprise caching solution serves as a replication system.
- **3.** For Java business applications, the JTC Client offers revisionproof, ultra-fast and thread-safe in-memory access to the replicated JTC Snapshots.

Together, the three components of the JTC system enable data access that is scalable, convenient, ultra-fast, secure and characterized by low latency.

The deployment of TABEX4 JTC ensures full control over all aspects of data management. Brigitte Steindor, system architect at GDIS, confirms:

"An important success factor for GDIS is a middleware to centrally provide fast access to master data and control data. The use of exactly the same data and procedures for the mainframe (IMS/COBOL) and decentralized (Java) application programs is essential. Also, control of central data and access in all runtime environments is vital. Another important point for future developments is the continuation and connection of the mainframe concept to the decentralized world in Java".

SOLUTION WITH TABEX4 JTC

Java interface for the world's fastest table access.

In close cooperation, the TABEX4 Java Table Cache (TABEX4 JTC) was adapted specifically to the requirements of GDIS. GDIS now uses TABEX4 JTC as a separate middleware in Linux with a single data source, the Common Data Space on z/OS. (Shown in the figure on page 5 "Bridging the gap between Mainframe and Java".)

In the first extension, the productive Common Data Space on z/OS, which is used for TABEX4 access in the mainframe, was selected as the data source for TABEX4 JTC. When the Common Data Space is changed, the TABEX4 JTC Publisher is automatically started to prepare the changed data and all resulting views and indices, merges them into a JTC Snapshot, and transfers them to the replication system. The replication system, a Hazelcast® installation at GDIS, takes over the distribution to all connected access nodes where data from all decentralized business applications is available for Java access. For all applications that must be implemented in a revision-proof manner, a TABEX4 JTC snapshot ID can be requested during access. This ID allows the unique assignment of data used by the program to the TABEX4 JTC Snapshot archive.



TABEX4 JTC AT GDIS

The constant system change requires flexible, high-performance solutions. Today more than ever. We rely on TABEX4 JTC, which enables us to take advantage of the proven benefits of TABEX4 on the mainframe that can now also be used in the decentralized world.

Nicole Schröder Responsible for TABEX4 JTC at GDIS



GENERALI Germany Headquarters in Munich, Bavaria

Nicole Schröder, responsible for TABEX4 JTC at GDIS, explains:

"The constant system change requires flexible, high-performance solutions. Today more than ever. We rely on TABEX4 JTC, which enables us to take advantage of the proven benefits of TABEX4 on the mainframe that can now also be used in the decentralized world. The change was accompanied and supported very professionally by BOI. The first applications are running productively and show us that we are on the right track. The long-standing, good cooperation with BOI has proven itself again."

With the implementation of TABEX4 JTC, GDIS now provides the productive master data and control data for the world's fastest Java table access. The productive introduction of TABEX4 JTC fulfilled all requirements of GDIS.

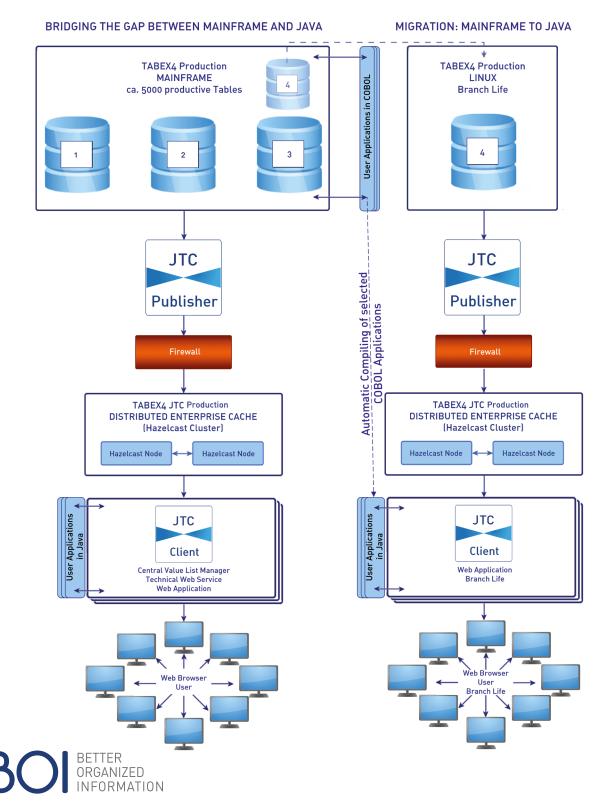
However, the potential of TABEX4 JTC has not yet been exhausted at GDIS. As a next step, GDIS will migrate the existing computing core of the life insurance business from COBOL to Java. A proof of concept was carried out in collaboration with BOI: a TABEX4 JTC adapter had been the ideal solution. It implements the TABEX4 APIs for the automatic compilation of the existing COBOL source code to Java and subsequently allows the migration of the entire mainframe application to Java.

BOI developed this adapter for GDIS - and thus enables the realization of a large saving potential for the company. (Shown on the next page



TABEX4 JTC - THE WORLD'S FASTEST TABLE ACCESS

With TABEX4 JTC, GDIS uses the Java interface for the world's fastest table access to master data and control data. Data that is hosted and maintained on the mainframe can thus be used in all application programs throughout the company.



BENEFIT

The cooperation with BOI was very successful.

Werner Kopsch and Dietrich Busso Project lead for Proof of Concept

ADVANTAGES FOR GDIS

- Fastest Java table access and great savings by switching from mainframe to decentralized platforms
- Uniform, company-wide and revision-proof Java interface for ultra-fast table access
- Low-maintenance Java middleware as an interconnection between mainframe and decentralized world

"Migration: Mainframe to Java".)

Werner Kopsch and Dietrich Busso, project lead of Proof of Concept for the software porting of the computing core "life insurance" from COBOL to Java, confirm:

"During the proof of concept and the preparation of the preliminary study the cooperation with BOI was very successful. The supply by BOI took place promptly and requirements were met flexibly. In our software porting project we benefit from the fact that the TABEX Tables are available through JTC in a decentralized environment and in particular that a cloud solution can be used".

RESULTS

Scalable, convenient, ultra-fast and secure data access

With the successful implementation of TABEX4 JTC at GDIS, all project goals were achieved:

- A Java middleware is now available that ensures control of data and access, including revision security, even in Java.
- The mainframe continues to be the leading system. All existing maintenance and release processes on the mainframe remained unchanged. Changes are automatically updated for Java access.
- The productive master data and control data is available both on the mainframe and in the decentralized world for the world's fastest Java table access, and data is used in application development.
- New applications can thus be implemented either on the mainframe or decentralized in Java.

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