

# INFO

DELTA



software  
technology

## case study SCHORCH



**Schorch  
Headquarters in  
Mönchengladbach,  
Germany**

**Schorch quickly and easily integrate their mainframe legacy applications into their enterprise portal using SCORE Adaptive Bridges from Delta Software Technology**

Schorch, an electrical engineering manufacturer located in Mönchengladbach Germany, has made the strategic decision to deliver their legacy production management applications through their enterprise portal.

This case study presents Schorch's experience using SCORE Adaptive Bridges: strategically important business functionality was quickly and easily usable in their JSR 168-compliant enterprise portal – without making any changes to the legacy applications.

*“After only a few steps I could already imagine the structure of the complete integration project.”*

***Gerd Dietrich,  
Application  
Development  
Manager at  
Schorch***

SCORE® Adaptive Bridges™

## **SCHORCH ELEKTRISCHE MASCHINEN UND ANTRIEBE GMBH**

Schorch is an electrical engineering manufacturer and specialises in the production of modern induction machines as individual components or as propulsion systems for all industrial and municipal applications. Another focus is the delivery of electrical systems and extensive support. They are located in Mönchengladbach Germany and have 500 employees. Schorch is part of the ATB AG, a group of globally operating, leading manufacturers of propulsion systems.

The application for the production management is absolutely crucial for the successful work of the company. Schorch has invested heavily in its building over many years to adapt it exactly to the engineer's needs. The applications run on Fujitsu (formerly Siemens) mainframes with the BS2000/OSD operating system, openUTM TP monitor and SESAM SQL database. The 750 online programs in the production management application support 200 end-users.

## **THE CHALLENGE: INTEGRATION OF PROVEN LEGACY INTO MODERN PORTALS**

Schorch made the strategic decision to retain and reuse the functionality of their existing in-house developed production management applications and not to replace it by standard software from SAP. These are proven and flexible applications that are an exact match to requirements of Schorch's engineers.

The challenge for Schorch was how to integrate their existing mainframe-based production management functionality into a range of new applications and platforms, starting with their enterprise portal.

The situation was complicated because while the IT team at Schorch has vast experience with BS2000/OSD and the production management applications, they have little experience with client-side technologies such as Java, JSP, .NET or ASP.

Schorch was therefore looking for a solution that would allow to quickly and easily integrate the mission-critical legacy functionality to their enterprise portal, taking into account the available experience of their IT team.

A further issue was that Schorch wanted to move from BS2000/OSD to another platform. But it was not known what that platform would be, and certainly not what type of client technologies would be involved. Schorch could not afford to wait until these technical issues were resolved. They needed to start integrating what they had.

## **THE SOLUTION: SCORE ADAPTIVE BRIDGES**

SCORE Adaptive Bridges from Delta Software Technology enables the direct usage of legacy functionality in enterprise portals. The product quickly and simply integrates strategic legacy applications and databases into JSR 168 compliant enterprise portals as well as into other modern web technologies.

After only a few hours using SCORE Adaptive Bridges, Schorch was confidently generating “ready to run” JSR 168 Java portlets. SCORE Adaptive Bridges automatically deployed these portlets into the enterprise portal where they were run with a UPIC connection to the legacy BS2000/OSD applications.

*“Our BS2000 applications are being revived by being usable in our enterprise portal.”*

***Dr. Eckhard Otto, CIO at Schorch***

## **BUSINESS BENEFITS: PROFITABLE, FLEXIBLE, SECURE AND FUTURE-ORIENTED**

In a post-project review Schorch identified a range of business benefits from using SCORE Adaptive Bridges to deliver the functionality of their existing BS2000/OSD mainframe production management application in their enterprise portal, including:

- **No Changes to Existing Applications** – SCORE Adaptive Bridges is a totally non-invasive solution, removing the need to re-test the existing mainframe applications. No changes were needed to the existing BS2000/OSD-sided production management applications to integrate with the enterprise portal.
- **Providing Production Management Functionality to Subsidiaries** – Schorch is investing heavily in building capacity in Eastern Europe and China. Using SCORE Adaptive Bridges opens the way to making key elements of the production management applications available to these remote users via the enterprise portal. This is a more economic and reliable approach than training how to use the BS2000 terminal interface to the legacy applications and providing the supporting technical infrastructure. By reusing the existing production management functionality Schorch is maximizing their return on existing investment in the production management applications.

*“SCORE Adaptive Bridges lets us ‘build bridges’ between the old and new worlds – without detailed technical skills in the middleware or portal environments.”*

***Gerd Dietrich,  
Application  
Development  
Manager at  
Schorch***

- **Providing Customized Services to Customers and Partners** – There are many aspects of the production management applications that Schorch would like to make directly available to customers and partners, without the time, training expense and operational risk of exposing them to the “raw” application. Using SCORE Adaptive Bridges it is easy for Schorch to create custom services for each partner or customer requirement and then to make these services available through the enterprise portal. Each user gets only the data that they need. All the interfaces are maintained in the logical model and Schorch does not end up with an “interface jungle”.
- **Enabling CAD Integration** – SCORE Adaptive Bridges enables the existing production management applications to be easily integrated with the Schorch CAD system and other manufacturing processes. Such integration with the CAD system had previously not been considered feasible with the legacy BS2000 mainframe applications.
- **Decoupling of Business and Technology Decision-Making** – Schorch knew that the existing BS2000/OSD platform would be replaced in a few years. By what was not decided yet. SCORE Adaptive Bridges works at the logical level and automatically generates platform-specific adapters and proxies. This allowed Schorch to directly start integrating with the existing BS2000 mainframe, because the adapters can simply be regenerated for one or more new server and/or client platforms in the future. This separates the business and technical decision-making processes about future platforms and ensures a long-term protection of the investments.

- **Clear Separation of Roles** – Schorch had little experience with client side technologies and was concerned about the investment needed to get up to speed in these new technologies. SCORE Adaptive Bridges handles all of the technical concerns “out of the box” and allows the Schorch IT team to concentrate on defining the business functionality to be provided to the client applications. The clear separation of roles makes staffing client-side development much easier. They do not need to know anything about the legacy applications or the middleware. SCORE Adaptive Bridges provides the shared services vocabulary for both “worlds” to understand each other.
- **No Modelling Overhead** – SCORE Adaptive Bridges takes a pragmatic approach and does not require any top-heavy modelling. The concepts of SCORE Adaptive Bridges were quickly understood and Schorch was able to start defining the Adaptive Services for their production management application. No time was lost for complex or time consuming modelling tasks.
- **Run-Time Performance** – SCORE Adaptive Bridges includes a variety of standard of optimization approaches to reduce network traffic, keeping state information on the server and not transferring to the client or middle tier application for every interaction. Schorch described the response times for the production management functionality accessed via the enterprise portal as “excellent.”
- **No Need To Write Custom Test Clients** – The developer does not need to spend any time creating or updating special test clients. SCORE Adaptive Bridges generates a complete test portlet for each service, allowing the developer to immediately check that the connection to the legacy application is working and providing the expected results. SCORE Adaptive Bridges ensures that a complete and accurate test client is always available, and that it is totally consistent with the generated client proxy and server adapter.

- **Enhanced Interface Standardization With Add-On for ADSplus**
  - The legacy COBOL production management applications on the BS2000 are not hand-written; they are generated using the ADSplus application development product from Delta Software Technology. Schorch has been an ADSplus (formerly Delta/ADS) user since 1987. As the existing applications were generated, Schorch was able to benefit from an ADSplus add-on that makes an interface available to SCORE Adaptive Bridges. This saves time and effort in discovering the interfaces to the existing applications.

Using SCORE Adaptive Bridges Schorch was able to generate a fully functional integration solution to connect their Java-based enterprise portal with the COBOL applications on BS2000/OSD.

An initial estimate from the Schorch team members was that it would have taken at least 10 times longer to create an equivalent solution by hand, and even this was an optimistic estimate given the current lack of experience with client-side technologies within the Schorch IT team.

## SUMMARY

Schorch's experience using SCORE Adaptive Bridges: strategically important business functionality was quickly and easily usable in their JSR 168-compliant enterprise portal – without making any changes to the legacy applications.

Working with Delta Software Services GmbH, Delta's distributor in Germany, Schorch was able to verify the functionality of SCORE Adaptive Bridges and to see for themselves how quick and easy the product is to use.

Schorch now has a solid basis for the detailed planning of their enterprise portal project, safe in the knowledge that using SCORE Adaptive Bridges eliminates the legacy integration risks.

*“Making infrastructure decisions is much simpler due to the platform independence of the services: we create the model only once and can then produce adapters for every portal environment and every middleware at the press of a button.”*

***Dr. Eckhard Otto, CIO at Schorch***

## DELTA SOFTWARE TECHNOLOGY

Delta Software Technology is a specialist for generative development tools that automate the modernisation, integration, development and maintenance of individual IT applications.

We understand the enterprise IT as a living organism that is continuously changing. Our automated solutions help you to quickly and safely adapt your applications to new business requirements, architectures, technologies and technical infrastructures.

### **AMELIO® Modernization Platform™**

The tailor-made factory for the modernisation of large IT applications: 100% automatically and that's why it is safe, reliable and error-free.

### **HyperSenses®**

Integrated system for model driven development of DSLs and software generators.

### **SCORE® Adaptive Bridges™**

Intelligent service enablement for the reuse of proven applications with modern technologies: flexible, profitable and non-invasive.

### **SCORE® Data Architecture Integration™**

Data as real business services: fast, easy and independent of data architectures and management systems.

### **SCOUT²® Development Platform**

Optimized and integrated development processes across all software components, tools and platforms: Stop the "fight against the infrastructure".

### **ADSplus™ Application Development**

Platform-independent development for future-proof back-end applications.

Delta has a more than 35-year track record of successfully delivering advanced software technology to Europe's leading organisations, including AMB Generali, ArcelorMittal, Deutsche Telekom, Hüttenwerke Krupp Mannesmann, Gothaer Versicherungen, La Poste, RDW, Suva and UBS.

**[www.d-s-t-g.com](http://www.d-s-t-g.com)**

Copyright © 2011 Delta Software Technology GmbH. All rights reserved.

Delta, SCORE, ObjectBridge, HyperSenses, SCOUT², AMELIO and the logo of Delta Software Technology are registered trademarks and SCORE Adaptive Bridges, Model Driven Legacy Integration, Integration in Motion, SCORE Transformation Factory, AMELIO Modernization Platform, ADSplus and ANGLE are trademarks of Delta Software Technology GmbH in Germany and/or other countries. All other registered trademarks, trademarks, trade names or service marks are the property of their respective owners.

Order number: MT 21027.03 – July 2011