

IN THIS ISSUE

1. In the Spotlight: COBOL – What next?

2. Modernisation: Outsourcing Data Accesses and Successfully Starting with SOA

3. Platform Independence: Cost Reduction at the Push of a Button

4. Leipzig University Autumn School: Automated Development of Software Generators and DSL

Get in touch with us



Delta Software Technology GmbH
 Eichenweg 16
 57392 Schmallenberg, Germany

phone +49 2972 9719-0
 fax +49 2972 9719-60
 e-mail info@delta-software.com

www.delta-software.com

1 In the Spotlight: COBOL – What next?

COBOL applications comprise huge investments, enormous business-specific know-how and decades of experience. The sophisticated applications run error-free and resource-optimized. They support the business-critical processes, they still are continually in further development in order to fulfil new requirements and to add new functions.

There are many reasons for migrating, modernising, transforming or completely replacing the COBOL or legacy applications:

- Reducing platform costs by migrating to more cost-effective platforms, COBOL compilers etc.
- Using new SQL databases or integrating with the existing databases
- Replacing old file systems and databases, e.g. Bull IDS2, IBM DL/1, IBM IMS/DB, ICL IDMS, Fujitsu UDS, Fujitsu Leasy, HP RDB, Software AG Adabas, ISAM and VSAM files, and others
- Providing business logic and data functions as services for new applications

- Increasing flexibility and security by introducing a modern application architecture
- Modernising or replacing old user interfaces to adapt them to the graphical interfaces of modern applications
- Replacing COBOL by modern languages like Java, C# and others
- Replacing self-developed or commercial generator systems, e.g. Pacbase, SWT, PowerBuilder and others
- and many more

Delta Tools Automate the Modernisation, Integration and Development of COBOL Applications

Following our motto “The Perfect Way to Better Software” and with our more than 30 years of experience, we provide solutions that automate the modernisation, integration and development of COBOL applications. All our solutions offer you the following advantages:

- Strong automation, in many areas up to 100%
- Future proof, no dead-ends
- No Vendor-lock-ins, no de-

pendencies

- Tool-based solutions instead of service / outsourcing solutions
- Stepwise proceeding with early and measurable results
- Outstanding quality

We provide productivity solutions for your COBOL applications for the following areas.

Migration

Mass changes

Modernisation

Re-use

Data integration

Language transformation

Migration of COBOL Applications

You want to change the platform for your COBOL applications? From Bull, Fujitsu, ICL, IBM, Tandem, Unisys or other mainframes to more cost-effective open systems like Unix, Linux or Microsoft Windows? You want to replace operating systems, TP monitors, old file systems and databases, for example Bull IDS2, IBM DL/I or IMS/DB, ICL IDMS, Fujitsu UDS, Fujitsu Leasy, Software AG Adabas, HP RDB, ISAM and VSAM files, and others?

We offer you a fully automated, error-free migration

that provides future-proof applications that look as if they have been developed for the new system platform.

You will find detailed information on platform migration here:

- Platform change: General information on our solutions
- AMELIO Modernization Platform: Product information
- Customer report by RDW: Practice report about the fully automated migration from mainframe to Microsoft Windows
- Directly from us: Your solution proposal

Mass Changes of COBOL Applications

Maintenance and compliance requirements, data definition changes, application remediation, introduction of Unicode, platform change and many other reasons require mass changes across the large, complex and highly interconnected productive IT applications.

Manual changes are the (main) cause for the failure of such change projects. They exacerbate the risks regarding quality, adherence to delivery dates and costs.

We offer you a production line that is exactly tailored to your requirements and 100% automates your mass changes and performs them error-free. All

impacts and dependencies will be considered across all layers. There won't be any manual changes. The process is quick, safe and repeatable. The integrity and functionality of your applications will be ensured continuously. Development and maintenance can be continued in parallel and without limitations, the changed modules will be easily integrated into the change process. Testing efforts will be reduced drastically due to the full automation.

You find detailed information on our solution for fully automated mass changes:

- [Application modernisation](#): General information on our solutions
- [AMELIO Modernization Platform](#): Product information
- [Customer report by RDW](#): Practice report about the fully automated change of large-scale applications
- Directly from us: Your solution proposal

Modernisation of COBOL Applications

Actual modernisation of COBOL applications that goes beyond a simple face-lift generally leads to a comprehensive transformation of the application architecture. This includes, for example, building a layered architecture, extracting data accesses into a separate service layer, unhinging front-ends, re-using application functions as services.

We offer you a fully automated, stepwise modernisation that is perfectly tailored to your individual

modernisation requirements and that delivers measurable results early. The targeted transformation will be performed in the way that it directly takes the future application architecture into account. You will be able to replace old techniques, development paradigms and components in a secure way. You will obtain clearly structured, stable and flexible applications. You will obtain applications that also stand the next and the next but one changes. We automate real paradigm changes, even for old or self-developed generator systems and make sure that the maintenance and development of your applications won't be blocked and the on-going business operation won't be endangered – without the dreaded vendor lock-in.

You find detailed information on automated application modernisation here:

- [Application modernisation](#): General information on our solutions
- [AMELIO Modernization Platform](#): Product information
- [Customer report by RDW](#): Complete IT modernisation in 3 steps with optimization of the development processes and off-loading from mainframe to PC, removing all platform dependencies and modernising the application architecture, error-free platform and database change.
- Directly from us: Your solution proposal

Re-use of COBOL Applications

Why re-write everything? Faster success can often

be achieved by re-using COBOL applications and application functions as services. Back-end applications and functions are particularly suitable for this.

We offer you the opportunity to build flexible and highly performant bridges between different architectures, paradigms, languages and platforms - of course fully automatically. We offer you automatic service enablement for business and data functions. We automatically generate the bridges (adapters) to ensure that you can use your existing COBOL applications as services quickly, securely and flexibly.

You find detailed information on our automatic service enablement here:

- [Service Enablement](#): General information on our solutions
- [SCRORE Adaptive Bridges](#): Product information
- [Customer report by Suva](#): Re-use of the existing applications and functions (more than 5 million lines of COBOL) as flexible services within a SOA
- Directly from us: Your solution proposal

Integration of File Systems and Databases

COBOL applications often process data that is distributed over different file systems or over hierarchic, network and SQL databases. That is why the development is complex, time-consuming and inflexible. New information requirements cannot be met fast enough.

We offer you the automated data integration for your COBOL applications. Automatically generated data services deliver their information, i.e. data or data supplemented with functionality, independently of the underlying databases and other file or data management systems. You can quickly provide data and information for your applications as flexible services. Furthermore, our solution ensures that platform-specific details are cleanly encapsulated and all access code is generated automatically.

You find detailed information on our automatic data integration here:

- [Data integration](#): General information on our solution
- [SCORE Data Architecture Integration](#): Product information
- [Customer report by HKM](#): Generated data access servers deliver customized, high-performance services
- Directly from us: Your solution proposal

Language Transformation

Of course there are reasons that speak for the replacement of COBOL. Experienced COBOL developers are harder to find, the support for classic platforms becomes more expensive or will be stopped.

The language transformation from COBOL to Java or from COBOL to C# is complex, elaborated and risky. An automatic language transformation can help you to quickly and securely provide the application logic and flow of your legacy COBOL applications in Java or C#.

We offer you an automatic COBOL migration that drastically reduces the risks and the effort for a language transformation from COBOL to Java or from COBOL to C#.

You find further information on the automatic language transformation here

- Modernisation: General information on our solutions
- AMELIO Modernization Platform: Product information
- Directly from us: Your solution proposal

2 Modernisation: Out-sourcing Data Accesses and Successfully Starting with SOA

Outsourcing data accesses from the existing applications into a separate data service layer is one of the most effective ways to make the application functions more flexible. Here, RDW itself reports about their proceeding and experiences:

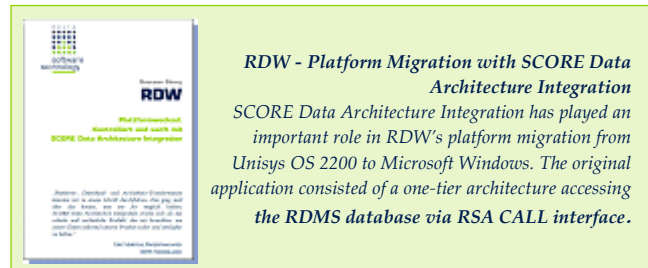
It all began with a complex, highly interconnected one-tier architecture of the applications on a Unisys mainframe with embedded database accesses via a call interface. A stepwise migration without a time-consuming double maintenance for the old and the new system seemed impossible, the risk for the reliable 24/7 applications seemed to be too high.

SCORE Data Architecture Integration was a key factor for the secure, stepwise database migration:

- **Single Source – Multiple Targets**: Automatic generation for different platforms and databases ensures independence, decisions can be revised at any time
- **Extensive configurability** makes it possible to tailor the services exactly to the requirements
- **Absolute quality and consistency** by automati-

on and change control

The result was a clean, extremely flexible layer architecture with automatically generated, high-performance data services on a cost-effective Microsoft Windows platform. Read on



[RDW: Modernisation – Step by Step to Sure Success](#)

SCORE Data Architecture Integration

SCORE Data Architecture Integration automates the creation of data services. Automatic derivation from data models and service definitions provide platform independence of the services. That is why you can change platforms more easily and develop data services more quickly by using SCORE Data Architecture Integration. Further information can be found here: [SCORE Data Architecture Integration](#)

Do You Want to Automate Your Start into SOA?

The transformation of the applications into a layer architecture with a separate data accesses layer is one of the most effective ways to make the application functions flexible. It ensures you a successful start in building a service-oriented architecture to better support your business processes with flexible application functions.

Our customers confirm that the cooperation with Delta leads the projects surely to the goal.

„We were able to perform platform, database and architecture transformation in one step. That was far more than we suspected. SCORE Data Architecture Integration proved to be the robust and reliable tool that we needed to keep our data safe and available.“
Eric Martens, Project manager, RDW, The Netherlands“

Get in touch with us if you want to automate the development of services or if you want to successfully start building your SOA.

3 Platform Independence: Cost Reduction at the Push of a Button

Platform-independent development of applications pays off – again and again. The advantages are most obvious at the platform change. If the applications are platform-independent, they can easily be migrated. But the platform-independence is also a valuable advantage at the modernisation and integration of applications.

The use of new technologies can be implemented more easily and even automated when platform-specific details are not embedded in the programs. It is much easier to integrate applications if they are independent of technical aspects like operating system, TP monitor and database system. You can easily develop platform independently when automating application development with our generative tools.


Future Proof Due to Platform-independent Development

Schorch is a specialist for electrical drive engineering for all industrial and local application areas. In the development of their business-critical applications for the production management, Schorch relies on platform-independence and automation with software tools from Delta.

In the course of time, Schorch has profited several times from the sustainability of platform-neutral development with Delta products.

- The migration of the production management from Fujitsu BS2000/OSD mainframe to Microsoft Windows took place “at the push of a button”.
- Simple application modernisation by automatic service enablement: Strategically important business functions can be portalised without changing the existing legacy applications.

Read on and download the detailed project information:



Schorch - Platform Change at the Push of a Button with ADSplus and SCOUT²
 Schorch transferred their production management system quickly, easily and securely from Fujitsu BS2000/OSD mainframe to a Microsoft Windows environment – using ADSplus Legacy Platform Development and SCOUT² Development Platform from Delta Software Technology.

Schorch: Future Reliability Due to Platform-neutral Development

What Would You Like to migrate?

Platform-change is a way of quickly reducing the IT costs: From mainframe to PC or Unix/Linux, from old databases to SQL systems, from old front-end technologies to browsers and portals.

Our tools can migrate your applications onto a new platform fully automatically – even if they are not platform-independent yet.

Get in touch with us if you want to migrate your applications with full automation. You want to have references? Of course, we establish the contact.

Our customers confirm the value of our products.

„This project showed us that with ADSplus from Delta Software we truly have a piece of gold. Basically, the platform change was a push of a button.“
Gerd Dietrich, Application Development Manager, Schorch, Germany

4 Leipzig University Autumn School: Automated Development of Software Generators and DSL


Software generator development as separate domain of the model-driven software development provides an extremely high potential to automate the software development. As a specialist for generative development tools, Delta Software Technology provides with HyperSenses a model-driven software development environment for the efficient modelling and generation of domain-specific languages and software generators.

From 04. to 05. October 2011 Delta Software Technology offers in cooperation with the Institute for Business Information Systems of the Leipzig University a 2-day workshop as part of the Autumn School.

The focus will be on the use of HyperSenses to model and construct generators for the production of multi-platform and variant-rich applications. With HyperSenses, model-driven generative development already pays off for small projects.

Simply generate your generators yourself: Economic – specific – first-class. How? Find it out at the Autumn School in Leipzig. External attendees are welcome.

**Autumn School: HyperSenses
Automated Development of Software Generators and DSLs
04.-05. October 2011, Leipzig**



Uni Leipzig Herbstschule: Automatisierte Entwicklung von Software-Generatoren und DSLs
Die Verwendung von HyperSenses zur Modellierung und zum Bau von Generatoren für die Fabrikation von multiplattform- und variantenreichen Anwendungen wird vom 4. - 5. Oktober 2011 am Institut für Wirtschaftsinformatik der Universität Leipzig in Zusammenarbeit mit Delta Software Technology im Rahmen der Herbstschule vorgestellt und erlebbar gemacht.

The Autumn School flyer is only available in German! Please notice that this event will be held in German language!

For our English-speaking customers and interested people, we will host a similar workshop in Cardiff on 11.-12. October 2011. Further information on that event will follow soon!

Registration

The participation in this event is free of charge for our customers and interested visitors. Bring along your notebook with a current Eclipse installation (Microsoft Windows; version 3.6 or higher 32bit) and JDK 1.6 32bit for the practical exercises.

HyperSenses for You

All workshop attendees will get the latest version of HyperSenses for free. You can use it...

- to learn more about the tool,
- to further develop the exercises or
- to realise own ideas and practical applications.

More about DSLs and Generator Development

Variant-rich development and therefore application areas for domain-specific languages and software generators exist everywhere in the software development. Some examples are embedded systems, customer-specific variants of software products and currently mobile apps, of course. Visit our website for further information

- Software Generators Prevent Application Backlog Generate your software by yourself: economic – specific – first-class.
- HyperSenses, the model-driven development system for DSLs and software generators.

NEWSLETTER

ISSUE JULY 2011



Please get in touch if you would like to develop domain-specific languages and software generators efficiently and economically.

We offer workshops specifically for your development domain and your requirements also in-house at your location.

Our customers confirm: the automation of software development by a model-driven development of DSLs and generators increases the quality and efficiency of the software development.

„HyperSenses has enabled HT Applications the support of a manifold of platform and customer variants of our smartphone apps without the burden of implementing the same functionality over and over again.“
Hessel van Tuinen, CEO, HT Applications, The Netherlands

More newsletters and our newsletter administration can be found here:
www.delta-software.com/newsletter

