NEWSLETTER

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Get in touch with us

1 Current Product Versions: Plan Your Updates now!

We help you to update to the current product versions quickly and easily. Get information and updates right now. You'll find the list of our current product versions here:

ADS - Application Development for COBOL and PL/I

ADS Application Development for COBOL and PL/I: Platform independent development for future-proof back-end applications.

- ADS 6 for COBOL (development on workstation) — 6.1 F
- ADS for COBOL (development on open systems or mainframe) — 5.1 A
- ADS 6 for PL/I (development on workstation) — 6.1 D
- ADS for PL/I (development on open systems or mainframe) — 5.1 B

ADS on Eclipse

ADS on Eclipse: Standardize your working environments for the application development.

- ADS on Eclipse — 6.7.4
- ADS on IBM RDz — 6.7
- ADS on Micro Focus EDz — 6.7
- ADS for PL/I (development on open systems or mainframe) — 5.1 B
- ADS on SCOUT² — 6.1.2
- ADS on Microsoft Visual Studio — 6.0

AMELIO CleanUp-Factory

With the AMELIO CleanUp Factory you can quickly and securely clean up your COBOL and PL/I as well as Delta ADS applications and thus regain the flexibility and adaptability of your core applications.

- AMELIO CleanUp-Factory — V2017

AMELIO Logic Discovery

AMELIO Logic Discovery: Comprehending COBOL- and PL/I-Applications: Cut costs and risks for maintenance, modernization and re-implementation.

- AMELIO Logic Discovery for COBOL — 1.4.1
- AMELIO Logic Discovery for PL/I — 1.3.1
- AMELIO Logic Discovery for Delta ADS — 1.3.1

AMELIO Modernization Platform

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.

- AMELIO Modernization Platform   V2016

HyperSenses

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

- HyperSenses   3.0j

SCORE Adaptive Bridges

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

- SCORE Adaptive Bridges   4.9

SCORE Data Architecture Integration

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

- SCORE Data Architecture Integration   4.10

SCOUT² Development Platform

SCOUT² Development Platform: Optimized and integrated development processes across all software components, tools and platforms.

- SCOUT² Development Platform   4.6

2 Cutting Risks and Costs for Modernisation and Migration

AMELIO Modernization Platform slashes Risks and Costs for Modernization and Migration

New technical demands and legal regulations as well as new technologies and modernization projects frequently require the modification of the large productive legacy applications. The necessary mass changes in the COBOL and PL/I applications that have grown over decades cause high costs and are a risk for the ongoing business operation.

If you have large legacy applications in your organisation, you certainly should know about the possibilities of AMELIO.

AMELIO Modernization Platform drastically reduces the risks and costs of platform changes, application modernisations and database migrations because AMELIO completely automates the changes.

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Mass Changes in Productive Systems

Changes across all existing applications belong to the permanent tasks of the IT departments in large enterprises. They are initiated by new IT strategies, changed business processes, legal regulations which must be met by given deadlines, and the like.

The more extensive, complex and interconnected the applications are, the higher are the risks and costs of such projects. If – without endangering the

ongoing business operation – thousands of modules of the productive application systems have to be changed, the answers to the following questions are essential:

- How can you ensure the consistency and quality of the changes?

- How do you avoid blocking other projects by the changes and - in reverse – how do you integrate the changes from other projects into the mass changes?

- How do you guarantee the security and stability of the productive systems?

- How do you get the expenditure under control as well as the costs and the temporal organisation for testing?

100% Automation with AMELIO Modernization Platform

AMELIO Modernization Platform is a perfectly tailored factory that completely automates extensive and complex changes of large applications – 100%.

- AMELIO changes the code consistently, reproducibly and absolutely error-free.

- AMELIO documents all decisions and changes audit proven.

- AMELIO supplies easily maintainable code for the further development.

- AMELIO enormously reduces the test expenditure.

The capabilities and the efficiency of AMELIO open up absolutely new possibilities for planning and conducting large projects.

- Project strategies can be verified with the entire volume.

- Other projects are not blocked.

- Transformation schedules can be selected at will, freeze periods are extremely short.

These are only a few of the advantages that AMELIO offers. You can learn more about the AMELIO Modernization Platform on our Web site.

What Do Our Customers Say about AMELIO?

„The extent to which AMELIO automated the project was truly amazing. The tool delivered absolutely reliable results. Thanks to AMELIO this essential project was completed on time and within budget..."
Jürgen Mülders, Service Manager
T-Systems Enterprise Services, Germany

Our report on the AMELIO project at RDW, the Dutch Vehicle Authority, gives you an impression of how efficient the AMELIO Modernization Platform really is. RDW used AMELIO successfully for a very extensive and ambitious modernization project comprising not only a platform change and database migration but also an application modernisation:

- More than 10,000 modules,

- More than 10 million LOCs,

- More than 1 million individual changes.

How Can You Profit from AMELIO Modernization Platform?

Due to its flexible architecture AMELIO can be used for very different modernisation and migration projects.

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> *AMELIO Modernization Platform is the reliable solution for the systematic modernisation of our complex applications – 100% automated, tailor-made and generative. Using AMELIO we were able to accomplish this demanding large project faster and with less resource."*
> **Carine Joosse, ICT Manager Projects, RDW, The Netherlands**

You can obtain further information about the AMELIO Modernization Platform on our Web site, including a summary of typical AMELO scenarios, a list of supported platforms as well as explanations concerning the technology behind AMELIO.

You Would Like to Know More?

Please get in touch if you would like to know more about how the AMELIO Modernization Platform can help you to conduct changes to your applications securely, reliably, error-free and 100% automated. If you have large legacy applications in your organisation you certainly show know about the possibilities with AMELIO.

3 Modernisation: Consolidating Database Systems

Old database technology causes high cost and complicates the utilisation of new technology for central IT applications. Furthermore, there are less and less developers and system technicians knowing the old technology. This applies to hierarchical databases such as IBM IMS DB as well as for network and other non-relational databases such as Cincom TOTAL, ICL IDMS, Fujitsu (Siemens) UDS, Unisys DMS, Bull IDS2, CA Datacom, Software AG ADABAS and others.

We present ways that allow you to preserve the functionality of your applications while migrating to SQL databases without risk.

Heterogeneity is Fact

Large companies always needed to process large amounts of data very fast every day. For this type of "Big Data" they preferably used the extremely rapid IBM IMS databases. The large and complex applications implement the company's core-business and process reliably billions of transactions every day. In parallel, the companies have established relational databases such as ORACLE, Microsoft SQL Server, IBM DB2 and others, to respond to the needs of real-time processing and flexible ad-hoc queries. The data in the different systems usually is synchronised by using ETL processes.

Good Reasons to Migrate

A lot of companies have the replacement of IMS databases on their agenda – for good reasons:

- High cost and multiplied efforts due to the parallel usage of different databases, the additionally required (ETL-) processes and the protection of the consistency.

- IMS databases lack the flexibility and the fast unlimited access to the data offered by relational databases.

- The know-how for the applications implemented in COBOL and PL/I is dwindling as well as the necessary technical know-how for IMS.

- The introduction of new technologies (Mobile, Cloud, etc.) is difficult.

However, the hurdles for the replacement of IMS databases are extremely high: The business-critical applications are very large, very complex, very old and in most cases the existing documentation is

unsuitable for the migration projects.

Replacing IMS Databases Successfully

Being a successful provider of generative tools for more than 40 years, we rely on full automation of all changes necessary in the applications to replace the IMS databases. Our tools automate the migration and the modernisation and also support re-implementation. Depending on requirements, these solutions can freely be combined and even allow for changes in strategy during the project.

All changes to the source code will be implemented using a transformation factory that is perfectly configured for the task. This way, you achieve maximised automation, highest quality, minimal test effort, minimal freezing and you are able to eliminate the risks.

Our customers confirm that they could ensure the long-term functionality of their enterprise applications with our solutions.

The Migration

Your applications contain all the information about the actually used IMS data model, i.e. which data structures of which segments of what IMS databases are used. Our tools extract this information and derive the mapping rules for a new or an already existing relational data model. Based on these and further rules the COBOL and / or PL/I code will be transformed fully automated. All IMS database accesses will be replaced by SQL accesses with all trimmings.

The resulting applications look and operate as if they were directly implemented for a relational database system by a very sophisticated program-

mer. Hence, they are readable and maintainable. Our customers confirm that

- the completely automated transformation slashes the risks and the test effort

- during the migration project , they could develop in parallel and the modifications were integrated automatically

- the relational database system can even be changed during the project

- extremely short freeze period are to be expected

- no footprint or vendor lock-in is produced.

The Modernisation

COBOL and PL/I are still excellent for the implementation of business logic in the back end. But, for the presentation layer as well as for the data access layer there are more modern techniques and environments available today like .NET, Java, etc. These layers can be connected smoothly and with excellent performance using automatically generated interfaces and intelligent adapters.
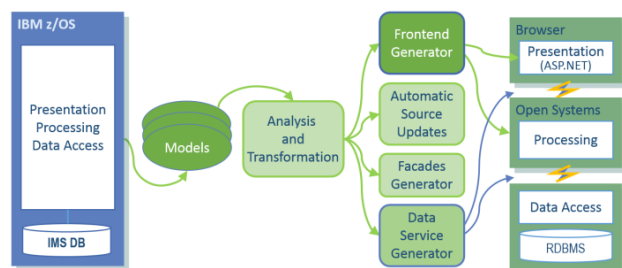
Using our solutions, this type of modernisation can be automated. As explained above regarding the migration, the data model used by the applications as well as the rules for the automated transformati-

on into a relational model will be determined. The entire code associated with to the data accesses can be extracted into a separate data access layer. Clearly readable and therefore really maintainable data access modules will be produced fully automatically in modern language like C#, Java, etc.

Our clients confirm that their confidence in our technology was justified and that the use of Delta's tools reduced the test effort by 90%.

The Re-implementation
You would like to implement the functionality of your IMS applications with new databases and new languages but the experts with IMS know-how have already retired and documentation serves maintenance and not re-development purposes?

Unlike other solution providers, we believe that there are limits to automation. Namely, when it comes to real paradigm change like it is inevitable for the re-implementation with modern languages. We promote easily maintainable and legible code, but not the transformation of COBOL into a kind of "J(ava)obol".

With our solutions for Application Knowledge Extraction, we help you to understand and to assess your existing applications in detail and to derive the specifications for the re-implementation from the applications' analysis. In addition, we can generatively produce the layers for the data accesses and the presentation as described above. You will obtain clearly readable and therefore really maintainable modules in modern language like C#, Java, etc.

And What About the Transaction Environment?
Within the frame of the replacement of IMS DB you also will think about the future design of the online applications. Depending on the new target environment – may it be classic TP monitor or a browser based environment with Java or .NET Application Server or micro services – the applications' code for IMS TM (formerly IMS DC) or IBM CICS has to be transformed, too. With our solutions you can automate such transformations as well. This way, you are also able to automate the construction of a modern service-oriented application architecture (SOA).

Modernization Project at BSQ Bauspar AG

CGI Germany selects Delta Software Technology as partner for the modernization project at BSQ Bauspar AG.

BSQ Bauspar AG plans to migrate its core application package. The project includes also the migration of the complete infrastructure. Particular attention will be paid to the transformation of the database management system IMS/DB to a relational database management system. CGI Germany was chosen as general contractor for this modernization project. Delta will provide the technology for the automated migration.

Read more

Let's work together
The possibilities described above show principle directions. They are flexible and can be combined and implemented gradually or at once. Since both the starting points as well as the objectives are different for each customer, we offer customized and perfectly tailored solutions.

How do you want to replace your IMS databases? Migrating or modernising or re-implementing the applications? We will be pleased to present our so-

NEWSLETTER
ISSUE JANUARY 2017

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lutions and we look forward to discuss your rquire-ments and objectives.

More information can be found here:
"Automatically replacing IBM IMS/DB"

4 Modernisation: Replacing Generative Development Systems

MoMaG - Modernisation of Macro-based Generators

The modernisation of legacy applications, offloading or downsizing are on every IT department's agenda. Enormous costs can be saved for example by migrating the applications from host to a Unix or Windows cluster; the transformation to current languages can again secure and prolongate the maintainability.

Meanwhile, there are many promising modernisation solutions for "normal" legacy application systems – for example realised in COBOL or PL/I. All of them claim to save the already made investments into the future.

But, whoever has used software generators for the application development, expects more than a simple language transformation. Generative development profits from a higher level of abstraction, the code to be maintained as well as the effort for the application tests are thus been significantly reduced. Nobody wants to waive these advantages after the modernisation.

Research results or even tools for the modernisation of generative development systems did not exist yet. But, should the huge advantage for the software development now prove as obstacle to the modernisation?

Saving the Advantages of Generative Development

It quickly became clear for the experts from Delta Software Technology and the researchers from the University of Leipzig: We have to start the modernisation on a higher level, let's start with the generators. If we transfer them into a modern world first, the generated systems will follow ... automatically.

The concept convinced the experts of the Bundesministerum für Bildung und Forschung (BMBF, Federal Ministry of Education and Research):

As part of the funding measure for innovative small and medium-sized companies "KMU Innovativ – IKT" the ministry supports the project "MoMaG – Modernisation of Macro-based Generats" that we conduct in cooperation with the University of Leipzig.

Read more: MoMaG Project

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