NEWSLETTER

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DELTA software technology

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1 AMELIO Modernization Platform Reduces Risks and Costs of Change Projects

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 cause high costs and are a risk for the ongoing business operation.

AMELIO Modernization Platform drastically reduces the risks and costs of these modernization and change projects. AMELIO completely automates the change of large IT applications and verifiably cuts down the test expenditure by more than 90%.

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 fulfilled to the deadline, and the like.

The more extensive, complex and interconnected the applications are, the higher are the risks and costs of such projects. If thousands of modules of the productive application systems have to be changed – without endangering the ongoing business operation – 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 control over the expenditure, the costs and the time requirement for the testing?

100% Automation with AMELIO Modernization Platform

AMELIO Modernization Platform is a flexible development tool that completely automates 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 reduces the test expenditure verifiably by at least 90%.

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

- Project strategies can be verified with the entire volume.

- Other projects are no longer blocked.

- Transformation schedules can be selected at will.

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?

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 is using AMELIO successfully for a very extensive and ambitious modernization project:

- More than 10,000 modules,

- More than 10 million LOCs,

- More than 1 million individual changes.

> *"A decisive factor in selecting AMELIO was its new meta-level test concept: It allows us to save 90% and more of the test effort and costs."*
> *Gerard Doll, Director ICT,*
> *RDW, The Netherlands*

How Can You Profit from AMELIO Modernization Platform?

Due to its component-based architecture AMELIO can be used very flexibly. We are providing an overview of the possibilities of AMELIO at AMELIO Modernization Platform – Application Areas.

We will explore further aspects and application areas of AMELIO in more detail in the next newsletters. If you are not yet receiving our newsletter, subscribe now.

Would You Like to Know More?

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.

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.

2 Major Project: RDW Modernises Applications with AMELIO

The national vehicle authority of The Netherlands, RDW, modernises its entire mainframe applications with the AMELIO Modernization Platform from Delta Software Technology.

With this major project RDW wins

- Platform independence for its applications,

- An easy-to-maintain data access layer,

- Neutral front-ends, which simply can be generated for the usage of browser-based technologies.

More than 1 million of individual changes are ac-

complished for this project – without endangering the productive operation and without blocking other projects. The usage of the AMELIO Modernization Platform enables RDW to slash the costs and risks dramatically. The test expenditure for this project is reduced by more than 90%.

> Using AMELIO we are able to accomplish this demanding large project faster and with less resources",
> **says Gerard Doll, Manager ICT, RDW, The Netherlands**

RDW – The Dutch Vehicle Authority

Founded in 1949 and privatised 1996, RDW is the national vehicle authority of The Netherlands. As a service organisation, RDW is responsible for the central registration and administration of all vehicles, approvals and driving licences. Beyond that, its mission comprises technical standardisation, engineering expertises, annual vehicle inspections as well as the monitoring of safety and environmental aspects.

All public authorities, the post office, the police, insurance companies and all garages are directly connected to the central system of RDW. Therefore, the requirements for the reliability of the applications and the quality of the software development are extraordinarily high.

Modernising the IT Applications

RDW decided to make their mainframe applications platform independent, in order to be able to change more easily onto other less expensive platforms in the future. This requires extensive changes in the productive applications. RDW chose the AMELIO Modernization Platform because AMELIO completely automates the changes for the more than 10.000 modules and reduces the test effort by more than 90 %.

The current project is part of RDW's long-term strategy for the modernisation of its applications. As the base for this, RDW already integrated all devel-

opment tools and processes using the SCOUT² Development Platform in 2005. Please read more about this in our report about the Modernization of RDW's Multi-Platform Development with SCOUT². Now the modernisation of the applications follows.

Openness for New Platforms

Extensive mainframe applications with more than 10.000 modules on Unisys OS 2200 with DPS, TIP, UCOB, ECL as well as RDMS with RSA SQL build the core of RDW's enterprise IT. RDW developed the applications with Delta COBOL. For the online systems a specific framework was built using Delta macros. The batch applications are controlled using ECL and SSG.

RDW was looking for possibilities to simplify the migration of the existing applications onto new and less expensive platforms. At the same time, RDW wanted to prepare its applications for the usage of new cutting-edge technologies:

- First, the applications should be made platform independent, in order to avoid similar efforts in the future.

- The data accesses should be transferred to a separate access layer that would be easier to maintain.

- The front-ends should be enabled to use browser-based technologies in the future.

100% Change Automation

RDW decided to automate the modernisation of their applications using the AMELIO Modernization Platform from Delta Software Technology. The tool convinced RDW particularly with the following characteristics:

- AMELIO's In-Place Migration ensures that other projects are not blocked and the involved modules can be changed safely.

- All changes are reproducible at the push of a button and documented to pass even the strictest auditing processes.

- The tailor-made factory accomplishes all changes 100% automatically.

- AMELIO allows a smooth migration without disturbing the ongoing maintenance and business operation.

Last year Delta proved in an extensive practical test that AMELIO completely fulfils the high demands of RDW. None of the programs had to be changed manually; the entire analysis and transformation were performed fully automatically. Now it is scaled up to the major project. The numbers are impressive – even for us.

Find out more about this captivating project in our project overview:

AMELIO Modernization Platform - RDW Achieves Platform Independence
"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

Largest Profit: Dramatically Reduced Test Effort

From the experience with previous transformation projects RDW already knew that generator-based changes need fewer tests. AMELIO accomplishes all changes automatically – 100%. Therefore, RDW could reduce the test effort by more than 90 %.

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3 Model-Driven Development & Product Lines 2007 on 24. – 25. September in Leipzig, Germany

Model-Driven Development and Product Lines: Synergies and Experience

Buzzwords like model-driven software development and product lines often raise the objection: "We always have worked this way, haven't we?" In fact, not every software development process using models is model-driven, and not every code generator creates a product line. The mentioned concepts require a concretion – and this happens best by means of experiences and examples from practice.

This year's MDD & PL event in Leipzig set its main focus on the business aspects of the application of MDD and PL:

- Long-term experiences with MDD,
- Appliance of MDD in particularly large projects,
- Pricing in the context of product lines,
- Advantages and disadvantages of various automation strategies.

Automation of Automation

Delta's contribution to the series of conference lectures discussed different aspects of automation concepts in software development and gave an answer to the question how to reduce development and maintenance costs by using the right automation strategies.

Starting from the essential question, if and when automation is worthwhile, its efficient realisation becomes an own, outstanding task. To this end, automation can reasonably be applied in turn, and the automation of automation becomes reality.

Experiences from commercial as well as non-commercial projects substantiated the presented concepts.

Our Speaker: Cord Giese

Cord Giese is responsible for research and development in the area of generative base technologies at Delta Software Technology GmbH. He regularly presents research results at conferences and in publications. Currently his work is focused on new methods and technologies for the automation of software development.

Download

See if and how you can reduce your development and maintenance costs using the right automation strategies. Click here to download our conference presentation "Automation of Automation":
MDD & PL 2007:

„Automation of Automation"

MDD & PL as Part of the SABRE Conference

24. – 25. September 2007 in Leipzig, Germany

"In 2007 Leipzig will be the location for a major event in which a number of well established as well as new conferences and workshops will join forces in order to conduct the probably biggest and most influential event in this area in Europe for 2007."
(from the SABRE homepage)

This time the MDD & PL was organised as a sub conference of the general conference on "Software, Agents and Services for Business, Research and E-Sciences" (SABRE). SABRE bundled a whole series of new conferences and workshops, which made the event even more attractive.
Please find details for individual lectures in the program:

MDDPL - Program

Free Newsletter

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Would You Like to Know More?

Please get in touch with us if you would like to know more about how Delta Software Technology can help you to improve the efficiency of your software development using automation.

4 **ITEA 2 Symposium 2007 on 18. – 19. October in Berlin**

ITEA 2 Symposium: European Leadership in Software-intensive Systems
Concerning science and research, Europe plays a leading role – but not in transforming research results into concrete products. This paradox, together with deficits at the interfaces between science and business, is an essential motivation for the European research programme "Information Technology for European Advancement" (ITEA). The elimination of these drawbacks – which are quite evident in the global comparison – has a strategic relevance for the European economy, especially for the industrial sector.

IITEA supports the European industry in taking the leading role in the area of Software-intensive Systems. These are systems in which software covers a significant part of the functionality, of the development costs and the development time. Their wide spreading turns them into a key technology across all business branches – a trend that gains additional momentum because of the rapid progression in the area of embedded systems.

The core challenge of ITEA 2 is to face up to the dramatic shift to embedded SiS that is affecting all aspects of everyday life…"
(from ITEA 2 Website; SiS = Software-intensive Systems)

After the success of ITEA the research initiative now is continued as ITEA 2 with new projects. ITEA 2 focuses especially on the development of embedded systems and their application.

ITEA 2 Symposium

The ITEA 2 Symposium took place on the **18th and 19th of October 2007 in the Berliner Congress Center** (bcc) in Berlin, Germany. Numerous projects from both economy and science presented their results and several hundred interested visitors got information about the latest developments in various technical areas.

Embedded Systems and PESOA

Embedded systems require high flexibility and quality of the associated software development processes. They are well-suited for a model-based approach and for the automated implementation using generators. Delta Software Technology has proven within the research project "Process Family Engineering in Service-Oriented Applications" (PESOA) that generative tools are able to boost the efficiency of the development processes significantly.

PESOA - Process Family Engineering
Cord Giese, Research Analyst at Delta Software Technology, presented the process-based concept for a product line architecture developed for PESOA and demonstrated its practical implementation using an example from the automotive area.

Would You Like to Know More?

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Free Newsletter

Our regular newsletter delivers information on upcoming events, current projects, case studies, new product announcements and general news that we think will be of interest to you. Subscribe to our free newsletter today.

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www.delta-software.com/newsletter