DELTA
software
technology

AMELIO
Modernization Platform

The Technology

"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

When changing large, productive IT-applications, volume, complexity as well as the demands for high quality and security call for the application of automated solutions. However, every project is different! It is defined by your applications, architectures, platforms, languages, technologies and many other aspects, i.e. by the existing and future elements of your IT portfolio. There is no standard solution to master this balancing act. Well then?

*As **The Generator Company** we emphasize on automation enhancing technologies that do not delimit the flexibility. Our tools easily and flexibly adapt to most different environments and tasks.*

This Fact Sheet familiarizes you with the technical features and the functioning of AMELIO Modernization Platform.

Automate Your Changes with AMELIO

At first glance using tools and particularly using tools to automate development tasks only seems to pay out if you are dealing with general and repeatable tasks. However, each change project requires its unique implementation. The more changes you are implementing manually, the greater is your risk regarding security, completeness and accuracy.

There is a way to accomplish such projects more efficiently! Our flexible technology enables us to provide you with a perfectly tailored modernization factory that will be profitable right from your very first project.

Bespoke Automation

On the one hand, no two projects are ever the same, whereas on the other hand the volume, complexity and the demands for high quality and security call for the application of automated solutions. The effective execution of mass changes requires a selective and goal-oriented approach. It's not a question of "the more the better"; it is rather "exactly what is needed, and nothing more." Only a tailor-made solution is able to fulfill your specific requirements.

Many modernization tools promise a 95% automation whereat they deliberately exclude the sensitive issue of testing. What will happen?

Let's have a look at a quite simple example: You intend to extend customer numbers from 8 to 10 digits. After your first analysis you know that about 2000 application modules will be concerned (most of our customers are dealing with considerably larger amounts of application modules). 95%, i.e. 1900 modules can be changed automatically, 100 have to be changed manually. These 100 programs belong to different application areas and you will have to test each and every modification individually. It doesn't take clairvoyant skills to predict that the test effort for the manual changes is extraordinarily high.

AMELIO Modernization Platform – The Technology

Simply ask yourself:

- How long will it take you to change 100 programs manually?

- How can you make sure that all changes are processed consistently?

- How will you isolate these changes from other changes?

- How much test effort do you have to invest?

- How long will these changes block other projects or the ongoing maintenance?

"Our customers are not looking for standard products but call for bespoke automation: precisely defined changes are to be processed visibly and documented to pass even the strictest auditing. One of the main concerns is that the necessary test efforts might go beyond the financial scope," summarizes Rüdiger Schilling, CEO of Delta Software Technology the requirements. *"With AMELIO we provide them with a tailor-made solution for their specific change project requirements. Moreover, AMELIO reduces test efforts dramatically – we are talking about 90% and more!*

WHY CUSTOMERS CHOSE AMELIO

"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. The flexible In-place Migration ensures minimal blocking times as we can combine in production already transformed and not yet transformed components without any problem."
Gerard Doll, Director ICT, RDW, The Netherlands

"AMELIO allowed us to build a modernization factory that reduced by 70% the effort needed for a critical SQL migration project in our core Unisys OS2200 applications. Our trust in AMELIO was confirmed in other transformation projects, including Y2K and an ACOB/UCOB COBOL compiler migration project"
Dieter Zink, IT-Director, Wiener Gebietskrankenkasse (Vienna health insurance), Austria

If you would like to find out more about our customers experiences with AMELIO, please visit our Web site www.D-S-T-G.com/AMELIO or contact us directly.

Is AMELIO the Right Solution for You?

A bespoke solution that fully automates the implementation of the changes not only minimizes the effort for the changes themselves, but it also paves the way for a new approach for both the project organization and testing.

With AMELIO Modernization Platform we offer you a flexible and generative solution that is tailored to exactly meet the requirements of your specific modernization task.

- The **goal-oriented "In-Depth Discovery"** detects with absolute certainty all locations that might be concerned.

- The **information-rich analysis** provides you with reliable key metrics about the real complexity of your modernization project and the potential degree of automation. It will tell you in advance exactly which changes need to be processed where.

- **100% automation** of the changes gives absolute safety.

- The new **Meta-Level Testing** reduces your test effort dramatically.

AMELIO Modernization Platform offers a broad spectrum of prefabricated components for discovery, analysis, transformation and generation. According to requirements, these elements will be introduced into your individual and project-specific modernization factory. Each element is configurable and can be extended and enhanced individually. They will be supplemented with project-specific rules and generators.

Goal-oriented In-Depth Discovery

Many modernization tools only analyze application segments and use these results for predicting effort and costs. AMELIO's In-Depth Discovery, however, analyzes the entire source code of all applications – including all meta-level components such as macros, copybooks etc. As you know: the devil is in the details! Those changes start off initially looking so innocuous: a simple task. During the project, however, they turn out to be the starting point for a domino effect. Touching one application, even just a little, frequently triggers a chain-reaction of changes to other locations.

Using AMELIO you won't guess, but know exactly what has to be changed and how it has to be done!

Based on the Object Management Group's (OMG) concepts for Architecture-Driven Modernization (ADM), all information, as well as all derived results, is stored in platform-neutral repositories. AMELIO transfers all existing software artifacts – programs, DB schemas, macros, file descriptions etc. – as syntax-free models into Abstract Syntax Trees (AST) and Knowledge Models (KM). The information can thus be flexibly and automatically evaluated. It also can be accessed by other tools or be provided by them.

AMELIO's In-Depth Discovery is exactly tailored to the particular task at hand and will discover with absolute certainty all locations that are potentially relevant for subsequent analysis and/or transformation. It detects all impacts and dependencies for data, functions, code elements etc across all levels.

MEANINGFUL ANALYSIS

In addition to the basic analyses and associated metrics, AMELIO uses project-specific analysis rules to ascertain whether and how the detected locations really are impacted. If in specific cases a decision cannot be made automatically then you will be asked to decide individually.

The analysis is an incremental process. A single decision may lead to other, dependent, decisions now being open to automatic decision-making and resolution. AMELIO gets to know your applications gradually and, the better it knows them, the more it can change automatically. All decisions, automatically made ones as well as manually ones will be stored and taken into account for further proceeding, refinements and reiterations.

The extensive analysis provides you with reliable key metrics about the complexity of your modernization project and the potential degree of automation. The analysis will tell you exactly which changes need to be processed where. All results and decisions are consistently documented. The results can be evaluated and processed further.

SECURE TRANSFORMATION THROUGH 100% AUTOMATION

The stored information is automatically transformed by means of the project-specific rules derived from the analysis phase. All aspects of the transformation are fully documented and can be repeated at any time at the click of a button. You can easily trace back all modifications to see where they came from, allowing even complex changes to pass the strictest auditing.

In the final production phase the target artifacts are generated completely automatically. Depending on the individual modernization task, this can involve the modification of the original sources, the generation of new sources, the creation of documents and reports, or even the creation of totally new models for the further development using Delta's service enablement tool SCORE Adaptive Bridges.

AMELIO META-LEVEL TESTING SLASHES TEST EFFORT

If you change something, you have to test every component concerned, right?

Wrong! Not if you work with AMELIO! AMELIO's Meta-Level Testing reduces your test effort to testing only very few modules. Our customers report on saving 90% and more.

Every change that is to be processed for your source code, is defined by rules and algorithms. These rules are based on the previous analysis of the source code, the data definitions, the program logic and the identified impacts and dependencies.

These rules and algorithms can be tested separately and in advance using exemplary programs. As you test the data processing instructions within your application programs, with AMELIO you will test the instructions for changing your programs. AMELIO's Coverage Analysis will tell you exactly which components are to be tested to cover all test cases.

AMELIO will process the actual software changes 100% automated. You know: a software algorithm that works once, works every time! Clearly, using AMELIO's Meta-Level Testing, testing your changes will only take a fraction of the time and effort you would otherwise need.

CHALLENGE US!

A bespoke modernization factory with generative tools gives you the opportunity to take a safe, manageable and stepwise approach. The stability of your applications is guaranteed at all times. Further development and on-going maintenance are never blocked. With the AMELIO Modernization Platform you can economically and reliably modernize your mission-critical legacy applications.

AMELIO totally automates the modification of your application software. The process is fast, secure and repeatable. 100% automation gives you the guarantee that each and every change is complete and absolutely error-free.

Every project is different! Tell us about your requirements and we will provide you with a tailor-made tool for your modernization projects.

FURTHER INFORMATION

Please visit our AMELIO Web site www.D-S-T-G.com/AMELIO for more information about the AMELIO Modernization Platform.

- Our product flyer provides you with an overview of the AMELIO Modernization Platform and explains the benefits concisely:
  "Scared of Large Changes? – MT 21'036".

- For more information about the tasks you can solve with the AMELIO Modernization Platform please refer to our Fact Sheet
  "Typical Application Areas – MT 11040".

You can also contact our local sales partners to get these and more information or simply visit our Web site www.D-S-T-G.com/AMELIO.

DELTA SOFTWARE TECHNOLOGY

Delta Software Technology is a leader in advanced software generators for the integration and modernization of COBOL applications
.
As "The Generator Company", we deliver outstanding generative solutions that bridge the gap between legacy applications and modern architectures and technologies, creating value from an ever-changing world by building applications that quickly and securely adapt to changing business requirements, technical infrastructure and available resources.

- **SCORE® Adaptive Bridges™ –** Make your mission-critical COBOL applications quickly and securely available as real services for new applications.

- **AMELIO® Modernization Platform™ –** Change your large IT applications with a bespoke factory: securely, reliably, error-free and 100% automated.

- **SCOUT²™ Development Platform –** Increase the productivity and reliability of your development processes with an integrated view of all software components, tools, processes and platforms.

- **ADSplus™ Classic Development –** Increase the value of your existing applications. Add new functionality to your applications using your existing technologies and platforms.

Delta has a 30-year track record of successfully delivering advanced software generator technology to Europe's leading organizations, including AMB Generali, AXA, Deutsche Telekom, IDG, La Poste, RDW, Schorch, Suva and UBS.

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