

AMELIO

Modernization Platform

TYPICAL APPLICATION AREAS

"Delta Software Technology worked with us to study and understand the current situation and then define the best migration strategy. The solution presented by Delta was an ideal match to our needs."

*Alberto Moreira, Systems Development Manager,
Grupo Edson Queiroz, Brazil*

AMELIO® Modernization Platform from Delta Software Technology is a tailor-made automated development tool that enables you to accomplish comprehensive or complex changes securely and cost-effectively. AMELIO reveals its power in projects like the modernization of legacy systems, platform migrations, conversions, porting, rightsizing, off-loading as well as with reengineering and the consolidation of different application architectures.

This Fact Sheet will exemplify how AMELIO can help you to get your software modification projects done.

EVERY PROJECT IS DIFFERENT!

Changing productive large-scale IT applications is a big challenge, often blocking the really important development projects. However, every major project has to solve this task.

Modernization, migration, transformation, conversion, porting, rightsizing, off-loading, software reengineering, architecture consolidation – the list of projects is endless. However, the core activity of all software modification projects is to make a series of well-defined changes that focus on clearly identifiable aspects and implementing them consistently throughout all of existing application components – without endangering the applications' integrity or functionality.

INTRODUCING NEW SYSTEM COMPONENTS

Hardware, operating systems as well as other system components such as compilers, database systems etc. are changing. With AMELIO you can choose the best option for your project:

- You can add platform-independence to your existing applications before moving to a new platform.
- Alternatively, you can modify the platform-specific code and move directly from your old to your new platform.

PLATFORM MIGRATION

Changing your operating system from mainframe to UNIX or PCs? Maybe you need to move to the latest COBOL compiler or your TP monitor needs to be replaced? Perhaps your older file-based applications need to be updated, or your hierarchical and CODASYL databases moved to an SQL-based solution?

PLATFORM INDEPENDENCE

Sometimes your new platform is not yet defined, or you already know that your new platform is not your final platform and that you will need to move to other platforms in the future. AMELIO can help you to solve these types of problems once and for all by making your application platform-independent.

AMELIO finds the platform-dependent code in your application and replaces it with platform-independent patterns. You then generate your application layer(s) for the platform(s) you have chosen. Changing to a new platform in the future is a walk in the park – you just need to regenerate with a new target.

RIGHTSIZING & OFF-LOADING

For many organizations the on-going costs of their mainframe platforms are too high. The applications therefore need to be moved to a more economic platform. There are certainly a large number of products that emulate mainframe platforms on UNIX/LINUX and/or Microsoft Windows. The problem is that in many cases you will have to change the existing applications before they run on these new platforms.

AMELIO helps you transfer your existing mainframe applications to an emulated mainframe environment. AMELIO analyses your applications to identify and automatically change the platform-specific features that prevent your applications from being transferred to the emulated environment. Delta has supported many customers in these types of transfer projects.

AMELIO AUTOMATES YOUR PLATFORM CHANGES

Not all software change projects are strategic; often they are very specific and more of a tactical nature. These kinds of projects predominantly address short-term savings rather than long-term commitment. Even so, they must be carefully planned and executed to avoid impacting the availability or integrity of your applications. While these sorts of projects are not considered to be innovative in themselves, they often build the foundation for strategic changes.

Delta has worked with many customers to implement these types of conversion projects over the years. With AMELIO conversion, migration, rightsizing and similar projects are quickly and simply accomplished.

RENEWING APPLICATION LAYERS

Depending on the architecture of the existing application you might need to re-architecture your applications to split the presentation, business and persistence functions into clearly separated layers before starting your main software change project. This process is heavily involved with the discovery and exposure of internal application interfaces. With AMELIO you can achieve such projects in an economically justifiable timeframe – without affecting the core functionality of your applications.

DIALOG FUNCTIONEN FOR END-USERS

AMELIO can establish target-independent dialog functions for end-user interaction within the applications using Delta's ADSplus SCREEN, where a technology-independent screen definition is generated. The subsequent target-specific generation automatically implements the neutral definition for a range of different screen handlers.

DATA PERSISTENCE

AMELIO can introduce a platform independent persistence layer using the *Data Architecture Integration* component of Delta's product *SCORE Adaptive Bridges*. It automatically generates entire Data Access Servers so that your application is 100% independent of the underlying data management system(s).

Delta has more than 30 years experience of platform-independent software development. Delta is your ideal partner to make your applications platform independent using AMELIO.

MODERNIZING THE APPLICATION ARCHITECTURE

The useful lifetime of the business functionality embedded in your applications is often measured in terms of decades. The technology used to implement the applications, however, has a much shorter lifetime. This imbalance is the reason that re-architecting legacy applications, moving them to modern technologies while retaining the essence of the business functionality became an almost everyday software change project.

SERVICE-ORIENTED ARCHITECTURE (SOA)

To be able to react flexibly to changing business workflows and requirements, existing business functionality is nowadays made available as reusable services within a service-oriented architecture. However, when building a SOA you have to reconcile many different factors. Off-the-shelf products, demanding certain application architectures or proceedings can hardly be the silver-bullet you are looking for. Your IT landscape, grown for many years, is far too specific.

With the AMELIO Modernization Platform for application transformations and SCORE Adaptive Bridges for the service enablement, Delta provides you with two powerful products. On the one hand, both tools can be adapted to any individual specific situation and, on the other hand, both use generative techniques to enforce your enterprises' rules and standards automatically and permanently. The generative elements make these individually built and customized tools exceptionally flexible and applicable for every architecture and infrastructure.

GRAPHICAL USER INTERFACES (TEXT TO GUI)

A typical example of a classic legacy modernization project is to update the user interface of the application to use current technologies. Such a change was seen in the 1970s with a move from batch to online systems. In the late 1980s this process was repeated with a move from character-mode to graphical user interfaces (GUI) with the first PCs. 10 years later the third generation of user interface changes started with the move from 'fat-client' GUIs to server-based Web interfaces.

Delta has in-depth experience with these types of user-interface projects, experience which is reflected in the ability of AMELIO to automatically perform the changes required for user-interface modernization projects.

INTERNATIONALIZATION AND LOCALIZATION (I18N / L10N)

Even if you are not planning at the moment to change the user-interface technology of your application there are a range of other changes in the user interface area that AMELIO can help you to master.

For example, at one extreme this could mean enhancing an application to make it multi-lingual. In the same area, but much more complicated, is adding Unicode support to an application.

All such projects can be quickly, securely and reliably achieved using the AMELIO automated software change tool. Legacy application and architecture modernization projects are ideal areas for using AMELIO.

CHANGING BUSINESS FUNCTIONALITY

The more complicated software change projects involve deeper changes to the business functionality of existing applications.

To make data-related changes in your applications you need to find all locations where the data is used, and also where a change in the size or format of that data might have an impact.

This requires a detailed data flow analysis throughout the applications. Making these deep updates is potentially a high-risk and expensive activity. The utmost care needs to be taken to ensure that the integrity and stability of the applications are not disrupted. This is almost impossible to achieve when making such changes by hand.

AMELIO allows you to accomplish such projects successfully. AMELIO reliably finds out how and where key data elements and procedural logic are defined and used. You define your new code once and then let AMELIO automatically add exactly the right code at precisely the right locations.

NEW LEGAL REQUIREMENTS

New legal requirements such as Sarbanes-Oxley and Basel II require new measurements. Comprehensive logging and security functions must be integrated into all applications working with financial data.

This requires finding all references related to financial data and checking how, where and why they are currently used. New program routines implementing logging and auditing functions for all data changes are to be added to the existing applications – without endangering their functionalities.

DATA MODIFICATION

Many software change projects require making changes to the existing data formats. This might be a change in length such as was the case with the ISBN/UPC codes and to a certain extent also with the Y2K conversion. More complicated changes include removing embedded semantic information such as “responsible branch number” from a customer number, or merging different policy numbering schemes when two insurance companies merge.

SUMMARY

AMELIO proved its worth in many Y2K and Euro-conversion projects and has also been used in other customer projects to automate data-related changes. AMELIO automatically finds 100% of all potentially affected locations in your applications and can then make the changes required to move to the new format.

AMELIO reliably 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.

Interested? We look forward to learning about your specific requirements. Please give us a call or send us an e-mail!

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 concisely the benefits:
"Scared of Large Changes?" – MT 21'036
- The technique and functions are described in our Fact Sheet
"AMELIO Modernization Platform – The Technology" – MT 21'043"

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 organisations, including AMB Generali, AXA, Deutsche Telekom, IDG, La Poste, RDW, Schorch, Suva and UBS.

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Order Number: MT 21'040.01 – February 2007