EVENTS

2006 - 2007

Content

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18.-19.10.2007

ITEA 2 Symposium 2007

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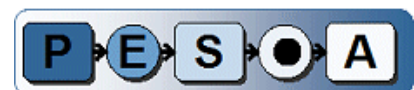
> „The core challenge of ITEA 2 is to face up to the dramatic shift to embedded SiS that is affecting all aspects of everyday life…"
> **(von der ITEA 2 Website; SiS = Software-intensive Systems)**

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.
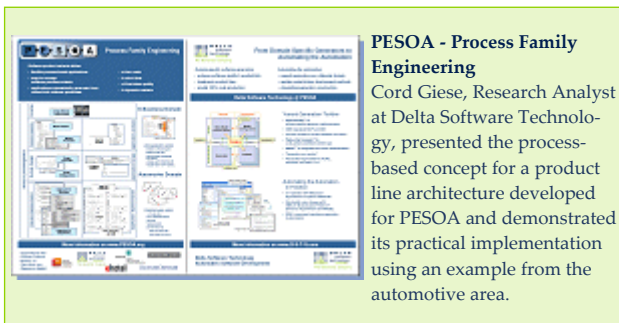
Embedded Systems and PESOA

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 gene-

rators. 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. 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.

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?

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.

24.-25.09.2007

Model-Driven Development and Product Lines 2007: Synergies and Experience

Model-Driven Development and Product Lines: Synergies and Experience

Buzzwords like model-driven software development and product lines often raise the objection: "We al-
ways 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. Klick 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

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.

> "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."
> see SABRE Website

Please find details for individual lectures in the program:

MDDPL - Program

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.

19.04.2007
Service-Oriented Architecture: On Track To The Agile Enterprise

Service-Oriented Architecture: Track To The Agile Enterprise

Gartner's analysts point out that the subject "Service-orientation" is beyond experimentation now and many enterprises now are implementing SOA. There is an increasing interest in how to handle the organisational matters, what's about financing and controlling.

- Which technologies are to be used?

- What kind of organisational consequences will arise?

- Where can you expect the utmost economical benefit?

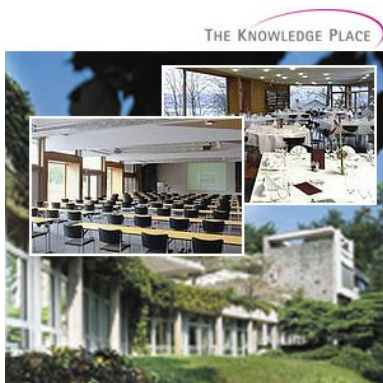On April 19, 2007, The Knowledge Place will

present the SOA expert seminar already for the third time at the renowned Gottlieb Duttweiler Institut (GDI) in Rüschlikon near Zurich. Addressing decision makers and IT technology strategists it focuses on decision-relevant subjects, presents solution approaches and provides you with successful real-world examples.

Legacy: The Service Treasure And How To (Re) Use It

At the bottom line, according to Gartner, three quarter of all SOA projects are dealing with integration aspects. With it, legacy applications are playing a vital role. For the majority of the enterprises, legacy is the principal supporting element of the IT so it is obvious to re-use it within a SOA.

- How can it be mastered?

- What are the Do's and Don'ts?

- What can be achieved through automation?

Norbert Nigg, managing director of SAXOS Informatik AG will cover these themes with his lecture at this event. He will also show you some options of re- and further usage of legacy applications within service oriented archi-tectures.

19.04.2007 – Zurich/Switzerland
Please note that the SOA expert seminar is a German-speaking event. But we will make an English version of Norbert Nigg's lecture available right after the event.

The SAXOS Informatik AG is specialized in software tools and application evolution and is the representative for Delta Software Technology for the Switzerland and Liechtenstein. Saxos Informatik AG has used legacy applications as services within several projects, modernized them and migrated them to new platforms. Norbert Nigg supported these projects – which were mainly in the banking and insurance businesses – with his expertise in analysis, conceptual design, project management and method coaching.

Further Information

For 30 years, Delta Software Technology, known as "The Generator Company", successfully provides Europe's leading companies with leading-edge generative tools for development, modernization and the integration of application software.

Make your reservation today and benefit from the experts' experiences. We are looking forward to your visit.

22.-26.01.2007

OOP 2007 – Economizing Development

Process Family Engineering – Product Lines for Processes
Synergies by Automation

"Business Advantage through Software Technology" was the motto of this year's conference. This requires bespoke software that, moreover, has to be available faster. Delta offers the appropriate tools for it: our generative tools simplify and accelerate software development through more automation.

At this year's OOP in the session "Process Family Engineering – Produktlinien für Prozesse" (Wednesday, January 24, 2007, 2:30 – 3:30 pm) Cord Giese showed how you can economize your software development to a greater extend by applying product line concepts to the modeling and implementation of your business processes. The most important result is the economizing potential of this approach.

Both process modeling as well as product line concepts are established methods to make software development simpler, clearer and more efficient.

Today, process modeling has become an essential part of the development cycle in all application areas. However, application processes are still regarded as singular units: every process is modeled and implemented individually.

Software product lines provide reliable concepts for quality assurance, efficiency enhancement, and the handling of software systems. On the one hand, they help large companies in mastering their software development and, on the other hand, they provide small business companies with an excellent base for their business models.

So, let's have a look at the exciting questions:

- Which synergies can be achieved when applying product line concepts to entire families of business processes?

- In doing so, what can be automated by using model-driven approaches?

Our live demos from such different areas as e-business and automotive showed that the concepts of "Process Family Engineering" are generally applicable – irrespective of the particular domain. This obviously yields an enormous potential for improving productivity.

The information that was given in this OOP lecture primarily addresses software architects and method specialists and, furthermore, all those looking for ways to automate software development to a greater extend. Knowledge in the areas of process modeling, product lines and model-driven development is helpful, but not mandatory.

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.

OOP 2007: Business Advantage through Software Technology

In 2007 the OOP as one of the biggest software events in Europe provided a large audience with extensive information about the entire spectrum of modern software engineering. Lectures, tutorials, workshops and field reports familiarized the attendees with the latest trends as well as with proven and tested techniques.

For the first time, the OOP focused on business aspects of the IT which is emphasized by numerous management-related subjects.

OOP 2007 - 22. – 26. January in Munich

Download of Lecture

Process Family Engineering - Produktlinien für Prozesse

Download des Vortrages zur OOP 2007 Erfahren Sie mehr dazu, was Prozesse mit Produktlinien zu tun haben, was "Process Family Engineering" bedeutet, welche Rolle Codegeneratoren dabei spielen, und wie in konkreten Beispielen Prozessfamilien-Konzepte die Bauanleitung für produktive Werkzeugketten liefern

Free Article on "Model-Driven Generator Development"

Would you like to learn more about how you can simplify your software development? Cord Giese and Rüdiger Schilling explain in their article "Model-Driven Generator Development" the requirements for the development and use of code generators. The article was published in the OBJEKTspektrum magazine. The concepts presented offer practical approaches for simplifying software development through using tailor-made generators. Download this free article now – no registration required:

Further Information

If you would like to know more about how Delta can help you to improve the efficiency of your software development using automation, then please get in touch with us.
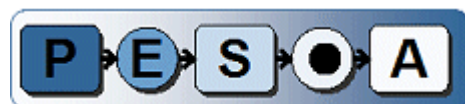
22.-26.10.2006
OOPSLA 2006, together with GPCE'06

Our Event Tip: OOPSLA 2006

Within the PESOA research project Delta and its partners have developed a process-based product line architecture. The development of process-based applications can be profoundly automated by it. The practical usability of this approach was proven by the implementation of a tool chain for the "automotive" application area. At this year's OOPSLA conference, Cord Giese, Research Analyst at Delta, presented the PESOA concepts for the automotive area, as well as the appropriate tool chain, using a detailed case study.
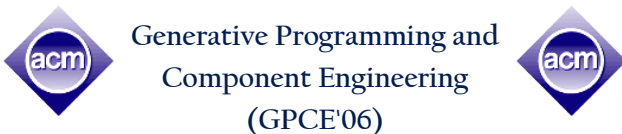

GPCE co-located with OOPSLA 2006

The OOPSLA conference is one of the most important and influential international conferences for object technologies and their offshoots. This year

the GPCE conference for "Generative Programming and Component Engineering" was co-located to OOPSLA. OOPSLA's wide range of topics – it comprised more than 30 this time – received an additional main focus by hosting the OOPSLA conference in parallel with the GPCE. GPCE tutorials, workshops, and lectures have been taking place during the whole OOPSLA and were dedicated to the state of the art in generative software development techniques.

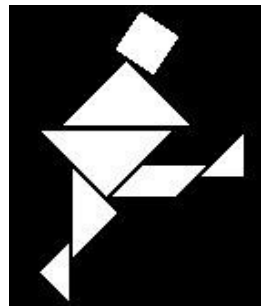**Generative Programming and Component Engineering (GPCE'06)**

Within the OOPSLA conference (which is especially well-known for the large number of tutorials that are available) the GPCE establishes a solid reference to the real world. Whereas many conferences tend to have a very academic nature, being filled with a lot of high-level lectures, the GPCE provides a more technical viewpoint – and is therefore aimed more at practical issue. This becomes clearer by looking at some of the workshops dedicated to key topics of Generative Programming.

Delta at OOPSLA – Code Generation in the Automotive Area

The process-based product line architecture developed in PESOA provides an enormous potential for the automation of application development. This architecture can be implemented within very different application areas. One example is the automotive area, where technical processes provide the specifications for the applications to be developed.

The configuration data belonging to these processes are the input to a code generator that generates source code for the programming of various control systems. The HyperSenses tools from Delta support the implementation as well as the usage of the code generator. At the GPCE4QoS workshop Cord Giese has given a live demonstration of the end-to-end tool chain that was implemented by several project partners.

Generative Programming and Component Engineering for QoS Provisioning in Distributed Systems
GPCE4QoS
October 23, 2006
Portland, Oregon USA

The QoS (Quality of Service) workshop was about generative techniques for the implementation of QoS features. In the context of Delta's automotive case study, QoS concerns two levels: The produced application and the tool chain itself. If you would like to join a discussion with us on this topic, learn more about generative techniques in the automotive area, or just get more information about the newest status of HyperSenses – then get in contact with us here.

Process Family Engineering in Automotive Control Systems - A Case Study

Download the documents of Cord Giese's presentation for free:

Process Family Engineering in Automotive Control Systems – A Case Study

Generative tools for automated software development and modernization

You will find further information about the event and the programme on the workshop's homepage:

http://www.cis.uab.edu/gpce-qos.

Event Links

http://www.oopsla.org/2006

http://www.gpce.org/06

http://www.cis.uab.edu/gpce-qos

19. - 20.10.2006

Model-Driven Development and Product Lines: Synergies and Experiences

Model-Driven Development and Product Lines: Synergies and Experiences

Model-driven software development (MDSD), system families and product lines are still new methods in software engineering. What can these new development methods do for you? What is the current status, and what experiences have others already made?

Internationally recognized experts presented and discussed the complete spectrum of model-driven software development and software product lines. They provided orientation guidelines for decision makers on a range of topics, including:

- Impact on the organization's IT of the introduction of MDSD and software product lines.

- Advantages of the conversion or introduction.

- Availably and maturity of the corresponding methods and tools.

- Required organizational changes and management tasks.

- Size of the necessary investment and the duration of the return on investment.

The presentations covered proven methods, approaches, tools and tool chains, along with real-world experience on the use of the technologies and the related organizational measures.

Rüdiger Schilling, Founder and Chief Technology Officer at Delta Software Technology reported on the opportunities and risks associated with the development of project-specific generators and led the discussion for the Management theme.

OBJEKTspektrum: The Experts' Opinion

Prior to the event, the German specialist magazine for software engineering and management OBJEKTspektrum asked some of the contributing experts for their assessments. The answers to the different aspects help with decisions on whether and how model-driven development methods and software system families should be introduced.

Read more in the "bit-fabrik" section on pages 80 to

87 of the July/August 2006 edition of OBJEKTspektrum.

> *„I can imagine that Model-Driven Development and Product Lines can bring a quantum leap in innovation similar to that we achieved for our platform-independent product development using Delta ADSplus and SCORE."*
> *Oswald Klackl, Software Engineering Manager, B+S Banksysteme*

What, When and Where?

Model-Driven Development and Product Lines: Synergies and Experiences

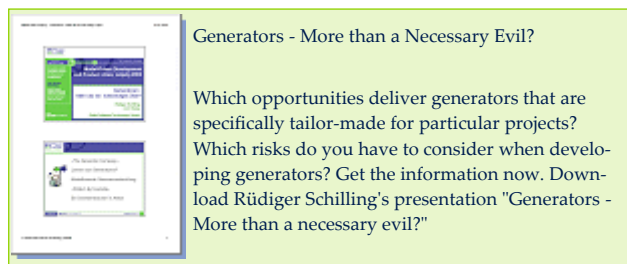**19 - 20 October 2006 in Leipzig, Germany**

The conference has been organized by the Institute for Industrial Software Techniques e.V. in cooperation with the Institute for Information Systems at the University of Leipzig. It was particularly aimed at the senior technical level and middle management from small to medium sized software development companies, as well as at the software development departments of larger organizations.

Note: The majority of the conference sessions was held in the German language.

Generators - More than a Necessary Evil?

Which opportunities deliver generators that are specifically tailor-made for particular projects?

Which risks do you have to consider when developing generators? Get the information now. Download Rüdiger Schilling's presentation "Generators - More than a necessary evil?"

Generators - More than a Necessary Evil?

Which opportunities deliver generators that are specifically tailor-made for particular projects? Which risks do you have to consider when developing generators? Get the information now. Download Rüdiger Schilling's presentation "Generators - More than a necessary evil?"

You will find further information on the conference programme on the conference Web site:

http://www.software-families.org

Note: The conference Web site and the presentation is currently only available in the German language.

Free Article on "Model-Driven Generator Development"

Would you like to learn more about this topic? Cord Giese and Rüdiger Schilling explain in their article "Model-Driven Generator Development" the requirements for the development and use of code generators. The concepts presented offer a practical approach for the automation of software development. Download this free article now – no registration required:

Further Information

If you would like to know more about how Delta can help you to improve the efficiency of your software development using automation, then please get in touch with us.

DELTA
software
technology

08.05.2006

Service-Oriented Architecture: Moving from Hype to Implementation and Usage

Service Oriented Architecture: Moving from Hype to Implementation and Usage

The highest level of flexibility for the adaptation of the business processes on the continually changing market conditions is now decisive for the success of an enterprise. IT must now model new processes in ever shorter cycles and reconfigure the application portfolio as the enterprise structure evolves and grows.

The Service-Oriented Architecture approach promises to resolve the dilemma between time and budget pressures. Even so, the introduction of a SOA presents software engineering with completely new challenges.
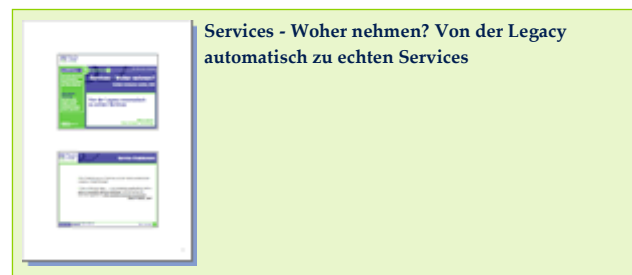
At the SOA Expert Seminar that took place on 8th May 2006 at the Gottlieb Duttweiler Institut (GDI) in Ruschlikon near Zurich, Switzerland, a range of respected speakers from academia and industry addressed the relevant aspects and showed potential solutions and examples from the real world.

Services – Where to get them? From the Legacy Automatically to Real Service

Good experience has been gained over the past few years with Model-Driven Architecture (MDA) to partially or fully automatically generate software from models and thereby improve the quality,

security and speed of software development.

Martin Herbst, Chief Architect at Delta Software Technology with responsibility for the development of SCORE Adaptive Bridges, explained the problems that in particular can occur with the different application architectures from new and existing applications, and showed how by using generative tools you can automatically obtain real services from the existing applications.

Services - Woher nehmen? Von der Legacy automatisch zu echten Services

Free Article on Automating Service Development

Would you like more information? Then read Rüdiger Schilling's article in OBJEKTspektrum "Services – Where To Get Them? Generating Is Better Than Programming". Download this free article now – no registration required.

Further Information

SAXOS Informatik AG, Delta's distributor in Switzerland and Liechtenstein, was represented with a stand in the exhibition area at the SOA Expert Seminar.

"The seminar offered our prospects a very good insight into leading strategies and practical approaches for the implementation of service-oriented architectures. It was a good mixture of end user and vendor information"
Norbert Nigg, CEO of SAXOS Informatik, on the seminar

The seminar, which was awarded top marks by the delegates, will be repeated in Autumn 2006.

If you are also planning the implementation of a SOA, then please contact your local sales representative. Explain a little about your objectives and specific requirements and profit from our experience. Learn more about how our products and services can help you in building a Service-Oriented Architecture – using generative tools for real service-enablement, seamless integration and reliable modernization of your legacy applications.

Mär/Apr 2006
OMG Information Days 2006

SOA and MDA: Service-Oriented and Model-Driven Strategies After The Hype – The Reality

More than 300 delegates attended the successful OMG Information Days 2006 events in Dusseldorf, Frankfurt and Munich to learn what SOA means for their software development and how the concrete implementation might look. Remember:

Services do not just appear out of thin air

They have to be developed and maintained! To close the gap between business processes and "IT" different architectures, development paradigms, platforms etc must be united.

OMG Information Days

The most significant challenges that have to be mastered with the help of Service-Oriented Architectures are related to:

- the increasing speed at which business processes are developed,

- the scope of the existing productive core applications,

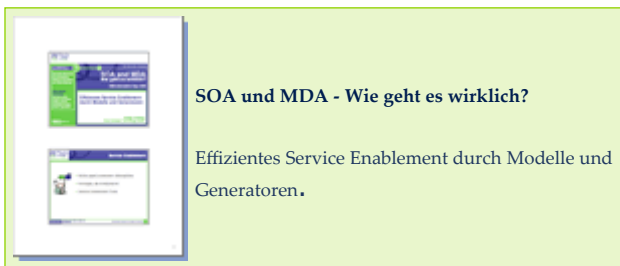- the quality requirements,

- the demands of security.

A range of interesting presentations, in particular on the subject of the practical implementation of SOA, were given at the OMG Information Days 2006. The OMG keynote speakers judged that models, standards and software generators are imperative to keep up with change driven by agile business processes.

The keynote presentation by independent consultant Nicolai Josuttis "SOA – Between aspirations and reality" gave useful insights into what it really means to introduce SOA into a large organisation. In fact, "Services do not just appear out of thin air".

Efficient Service Enablement Using Models and Generators

Rüdiger Schilling, CTO at Delta Software Technology, presented model-based concepts and generative tools for service enablement that really work. You can download his presentation (currently only available in German) here – for free – no registration required.

SOA und MDA - Wie geht es wirklich?

Effizientes Service Enablement durch Modelle und Generatoren.

Free Article on Automating Service Development

Would you like more information? Then read Rüdiger Schilling's latest article in OBJEKTspektrum "Services – Where To Get Them? Generating Is Better Than Programming". Download this free article now – no registration required.

Further Information

If you would like to know more about how Delta can help you to service enable your legacy applications then please contact your local sales representative.

16. - 20.01.2006
OOP 2006 Architecture-Driven Modernization

Goals, Concepts and Benefits of Architecture-Driven Modernization

"Scalable Software Systems and Solutions" was the motto of the most recent OOP, which took place from the 16th to 20th January 2006 in Munich, Germany. The conference offered a broad selection of presentations, user reports and workshops for technically-oriented software developers, method-oriented software architects and for business-oriented strategic decision makers.

Business success requires continual modernization of the existing application systems. The appropriate software architectures, standards and tools are prerequisites for this and so played a central role at the event.

Architecture-Driven Modernization – What is it?

The continuous modernization of the existing application systems in all of modernization's different facets – language and architecture transformation, platform migration, service-oriented integration etc. – is increasingly recognised as a decisive success factor. Modernization has now reached a level of acceptance that is at least as high as new development.

The OMG (Object Management Group) is building on MDA (Model-Driven Architecture) to create new standards for "Architecture-Driven Modernization" that address the interoperability of tools and support the analysis, transformation and generation

12

tasks within modernization projects.

Rüdiger Schilling, Chief Technology Officer at Delta Software Technology reported on the goals, concepts and benefits of Architecture-Driven Modernization. He regularly represents Delta Software Technology at international conferences and is an active participant in the OMG "Architecture-Driven Modernization" Task Force.

- What is the content and current status of the new standards?

- How are custom "production lines" created on this basis for software modernization?

- To what extent is it possible to automate custom software modernization projects?

- What is it possible to achieve, and where are the limits?

The presentation provided planning assistance for modernization projects and was built around scenarios taken from the real-world. The presentation was aimed at IT decision makers, project managers,

software architects and others who already have some experience with software architectures.

Architecture-Driven Modernization - Goals - Concepts - Benefits

Further Information

To see what else happened at OOP 2006 please consult the programme overview.

If you would like to learn more about how Delta can help companies like yours use Architecture Driven Modernization to profit from your proven IT applications then please contact your local sales representative.

Free Delta-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.
www.delta-software.com/newsletter