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## Get in touch with us

Delta Software Technology GmbH  
Eichenweg 16  
57392 Schmallenberg  
Germany

phone +49 2972 9719-0  
fax +49 2972 9719-60  
e-mail [info@delta-software.com](mailto:info@delta-software.com)

[delta-software.com](http://delta-software.com)

## 1 New: Delta ADS 6 on Mainframe

Some time ago, we released *Delta ADS 6 on PC* as a new version of our proven generative development system for the application development on PC platforms. With this new Delta ADS, we offer many new functions that significantly improve the understanding of the applications and facilitate the development and maintenance of the extensive and complex COBOL and PL/I applications.

Many of our customers see the mainframe and the generative development of their important core applications with Delta ADS as a strategic part of their IT environment. This is why we are now making Delta ADS 6 available for mainframe environments as well.

The new Delta ADS 6 on Mainframe can be used stand-alone on the mainframe or together with Delta ADS 6 on PC.

**Delta ADS 6 on Mainframe**  
ADS With its new functions, Delta ADS 6 helps to develop, maintain and test the COBOL and PL/I applications generated with ADS and the application frameworks

created with ADS MACRO even more efficiently:

- ADS 6 improves the understanding of applications developed with ADS.
- Language extensions for ADS MACRO simplify the development and maintenance of the application frameworks.
- The Macro Optimizer makes existing macros easier to read and maintain. With its help, the new language extensions can be automatically applied to existing macros.
- Various restrictions for variables, parameters and statements have been loosened or removed.
- Support for new data types such as BLOB, CLOB, XML, etc.
- And more ...

All these functions help to better understand the applications and to train and familiarise new colleagues faster.

## The Best of Both Worlds: Delta ADS 6 on Mainframe combined with Delta ADS 6 on PC

Delta ADS 6 for the development on PC offers a number of additional functions that benefit in particular from the possibilities available

on modern Microsoft Windows platforms. We offer Delta ADS 6 for the development under [Eclipse](#), [Micro Focus EDz](#), [IBM IDz](#) and [Microsoft Visual Studio](#). The combined usage of *Delta ADS 6 on Mainframe* and *Delta ADS 6 on PC* offers you many advantages:

- Load reduction for the mainframe environment with regard to development, generation and testing through cross-generation
- The development process can be flexibly adapted while using the existing infrastructure and integrating the source management systems.
- Development, code generation and testing can be executed on PC as well as on mainframe.
- The modules are identical and therefore arbitrarily interchangeable between the environments.
- The [Post-generation Debugger](#) simplifies the understanding and testing of the generation process.
- Discovery and [application mining](#) for ADS applications help to (re-)document the applications and provide reliable information for the evaluation of the applications.
- And more ...

Now that Delta ADS 6 is available in both worlds, development, generation and testing can be transferred to the PC on demand without any loss of functionality and security.

### Release

*Delta ADS 6 on Mainframe* is currently undergoing pre-release testing at customer sites.

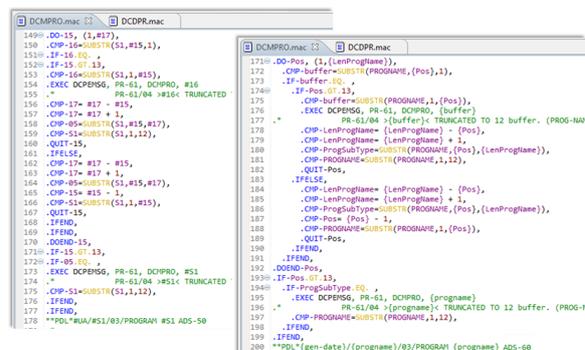
At the end of 2019, Delta ADS 6 for COBOL will be

released for IBM z/OS. This will be followed by versions for the other systems.

The response from our customers has been very positive. We are convinced that the new functions of *Delta ADS 6 on Mainframe* offer you many advantages.

*"The new ADS 6 enables us to improve the efficiency and quality of our software development and maintenance once again. For example, the new functions for the detailed documentation and description of the generation process help us to make changes and enhancements to our extensive, complex applications safely and quickly."*

**Oswald Klackl; B+S Bankssysteme; Austria**  
**Head of Architecture & Quality Management**



```

149@ .DO-15, (1,#17),
150 .COP-16=SUBSTR(S1,#15,1),
151@ .IF-16.EQ,
152@ .IF-15.GT.13,
153 .COP-16=SUBSTR(S1,1,#15),
154 .EXEC DCPERSG, PR-61, DCPRO, #16
155 * PR-61/04 >#16< TRUNCATED
156 .COP-17= #17 + #15,
157 .COP-15= #17 + 1,
158 .COP-16=SUBSTR(S1, #15, #17),
159 .COP-15=SUBSTR(S1,1,12),
160 .QUIT-15,
161 .IFELSE,
162 .COP-17= #17 + #15,
163 .COP-15= #17 + 1,
164 .COP-05=SUBSTR(S1,#15,#17),
165 .COP-15= #15 - 1,
166 .COP-15=SUBSTR(S1,1,#15),
167 .QUIT-15,
168 .IFEND,
169 .IFEND,
170 .DOEND-15,
171@ .IF-15.GT.13,
172@ .IF-05.EQ,
173 .EXEC DCPERSG, PR-61, DCPRO, #51
174 * PR-61/04 >#51< TRUNCATED
175 .COP-15=SUBSTR(S1,1,12),
176 .IFEND,
177 .IFEND,
178 **POL*UJA/WS1/03/PROGRAM #51 ADS-50
...
171@ .DO-Pos, (1,LenProgram),
172 .COP-buffer=SUBSTR(PROGRAM,1,Pos),
173 .IF-buffer.EQ,
174@ .IF-Pos.GT.13,
175 .COP-buffer=SUBSTR(PROGRAM,1,Pos),
176 .EXEC DCPERSG, PR-61, DCPRO, [buffer]
177 * PR-61/04 >[buffer]< TRUNCATED TO 12 buffer. (PROG-NA)
178 .COP-LenProgram= (LenProgram) - [Pos],
179 .COP-LenProgram= (LenProgram) + 1,
180 .COP-ProgramType=SUBSTR(PROGRAM, [Pos], [LenProgram]),
181 .COP-PROGRAM=SUBSTR(PROGRAM,1,12),
182 .QUIT-Pos,
183 .IFELSE,
184 .COP-LenProgram= (LenProgram) - [Pos],
185 .COP-LenProgram= (LenProgram) + 1,
186 .COP-ProgramType=SUBSTR(PROGRAM, [Pos], [LenProgram]),
187 .COP-Pos= [Pos] + 1,
188 .COP-PROGRAM=SUBSTR(PROGRAM,1,Pos),
189 .QUIT-Pos,
190 .IFEND,
191 .IFEND,
192 .DOEND-Pos,
193@ .IF-Pos.GT.13,
194@ .IF-ProgramType.EQ,
195 .EXEC DCPERSG, PR-61, DCPRO, [program]
196 * PR-61/04 >[program]< TRUNCATED TO 12 buffer. (PROG-
197 .COP-PROGRAM=SUBSTR(PROGRAM,1,12),
198 .IFEND,
199 .IFEND,
200 **POL*[gen-date]/[program]/03/PROGRAM [program] ADS-60

```

Automatically optimized macros with new syntax, identifiers, indentation

## Develop More Efficiently and Better Understand Your Applications

[Request more information](#) now to update your ADS development system.



## 2 Mainframe Technology Workshop of T-Systems

*“The mainframe is an important component of a modern, holistic cloud strategy. At the Mainframe Technology Workshop 2019, the community will discuss real use cases and important milestones with specialists and customers.”*  
(T-Systems)



T-Systems organises a Mainframe Technology Workshop in Ludwigsburg, Germany, on November 12, 2019. At this one-day event, T-Systems brings together customers, partners, experts and industry analysts to discuss top issues of mainframe users and to present solutions. (Conference language is German).

### **16. Mainframe Technology Workshop 12th November 2019, Ludwigsburg, Germany**

In the breakout session “Application Modernisation in Parallel to Ongoing Operation - That's How It's Safe”, Delta Software Technology, as a partner of T-Systems, will report on the sticking points and pitfalls of these projects and demonstrate solutions using the example of a customer project in the mainframe area.

### **Breakout Session**

## **"Application Modernisation in Parallel to Ongoing Operation - That's How It's Safe"**

### **Contents**

The foundation of business-critical applications has often evolved over decades. During this time, the applications were changed and further developed. New technologies were introduced, partly without completely removing the old technologies.

Modernisations such as clean-up, refactoring, technology exchange and standardisation as well as platform migration are necessary to meet new requirements, improve performance and maintainability, and increase the sustainability of the back-end applications.

The documentation of the applications and the knowledge about what was implemented and why it was implemented that way has been lost over time.

So, how do you determine which parts of your application are relevant to the task? What do you do with the dependencies? What about the risks? How do you find all the sticking points? How do you organise change processes? What needs to be tested? What about parallel changes and further development?...

The solution lies in the precisely targeted analysis prior to a modernisation project, the complete automation of the changes and the flexible organisation of the project processes.

Referencing a customer project in the mainframe area, we show you how you can safely and reliably carry out a complex modernisation of your applications in parallel to ongoing operation.

### Our Speaker

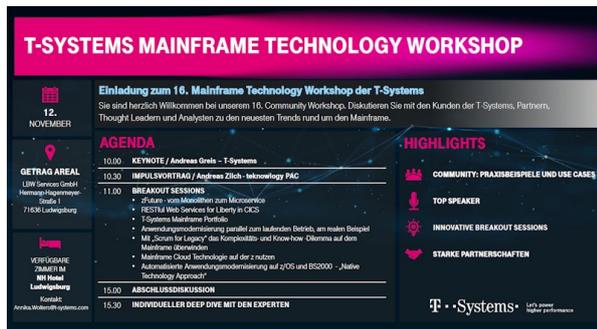
Dr. Daniela Schilling

Dr. Daniela Schilling is Managing Director of Delta Software Technology.



### Further Information

#### Agenda



**T-SYSTEMS MAINFRAME TECHNOLOGY WORKSHOP**

12. NOVEMBER

**Einladung zum 16. Mainframe Technology Workshop der T-Systems**  
Sie sind herzlich Willkommen bei unserem 16. Community Workshop. Diskutieren Sie mit den Kunden der T-Systems, Partnern, Thought Leaders und Analysten zu den neuesten Trends rund um den Mainframe.

**AGENDA**

- 10:00 KEYNOTES / Andreas Grell - T-Systems
- 10:30 IMPULSVORTRAG / Andreas Zisch - Informatik P&G
- 11:00 BREAKOUT SESSIONS
  - Zukunft - von Mainframes zum Microservice
  - RESTful Web Services für Liberty in COBOL
  - T-Systems Mainframe Portfolio
  - Anwendungsmodernisierung parallel zum laufenden Betrieb, ein reales Beispiel
  - Mit „Scrum bei Legacy“ die Longevität- und Know-how- Risiken auf dem Mainframe überwinden
  - Mainframe Cloud: Technologie auf der 2. Generation
  - Aktualisierte Anwendungsmodernisierung auf z/OS und z/OS2000 - „Native Technology Approach“
- 15:00 ABSCHLUSSDISKUSSION
- 15:30 INDIVIDUELLER DEEP DIVE MIT DEN EXPERTEN

**HIGHLIGHTS**

- COMMUNITY-PRAKTIKBEISPIELE UND USE CASES
- TOP SPEAKER
- INNOVATIVE BREAKOUT SESSIONS
- STARKE PARTNERSCHAFTEN

T-Systems | COBOL power higher performance

Please find further information and the [registration here](#) ...

You cannot attend? Then [contact us](#), we would be happy to schedule another appointment.

## 3 New Delta ADS Release Supports New Data Types

Digitisation requires not only new forms of processing, but also new data types. Examples of this are new data types such as

- BLOB - Binary Large Object
- CLOB - Character Large Object
- XML, etc.

These data types enable the storage of large unstructured binary data objects such as image, audio or multimedia files as part of the corresponding data records directly in the respective database or, in the case of CLOB, to process data in international Unicode format.

### Delta ADS 6.4.0

The now released [Delta ADS for COBOL 6.4.0](#) beta offers you additional functions for creating Data Access Servers for IBM DB2 and Oracle and supports the usage of new SQL data types such as BLOB, CLOB, XML, etc.

These data types are defined differently in the different database systems. As always, Delta ADS compensates these differences automatically, following the principle “Single Source - Multiple Target”.

In addition, the new Delta ADS 6.4.0 also includes new features that improve performance. Please refer to our Release Notes for further information.

[Contact us](#) and order your update for your Delta ADS now.

## 4 Delta ADS Plugin for Microsoft Visual Studio 2019 available

With ADS on Visual Studio you can now standardize your working environments for the application development. ADS on Visual Studio smoothly integrates all ADS tools into your development environment.



This plugin is now also available for Microsoft Visual Studio 2019.

In addition to Visual Studio, plug-ins for Eclipse-based development environments are also available such as Micro Focus Enterprise Developer for z.

Further information can be found here:  
<https://delta-software.com/link.php?en=6306>

### **Bedag: Same Development Environment for Different Programming Languages**

A uniform process control and development environment for the different programming languages is the goal of many enterprises. The Bedag Informatik AG modernizes its development environment and combines the (Viacar) development in C# and Delta ADS in a .NET framework under Microsoft Visual Studio.



Read more here:  
<https://delta-software.com/link.php?en=6291>

More newsletters and our newsletter administration can be found here:  
[www.delta-software.com/newsletter](http://www.delta-software.com/newsletter)

