

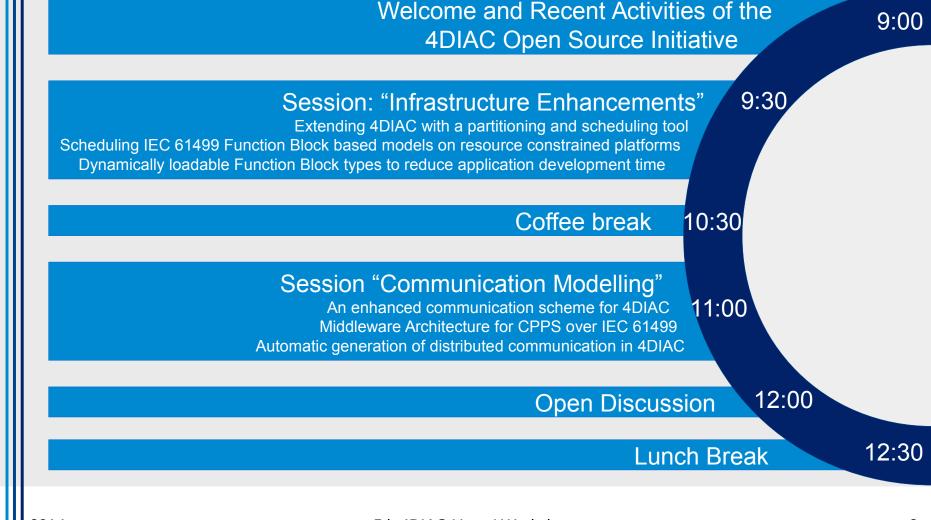
5th 4DIAC Users' Workshop

ETFA 2014, Barcelona September 16th

www.fordiac.org

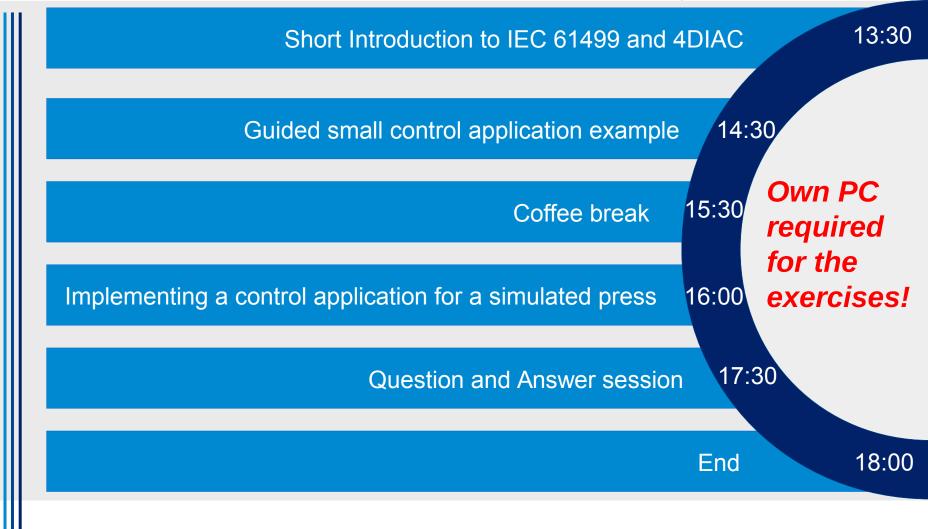
Program: Morning Session







Program: Afternoon Hands on Session





Recent Activities of the 4DIAC Open Source Initiative

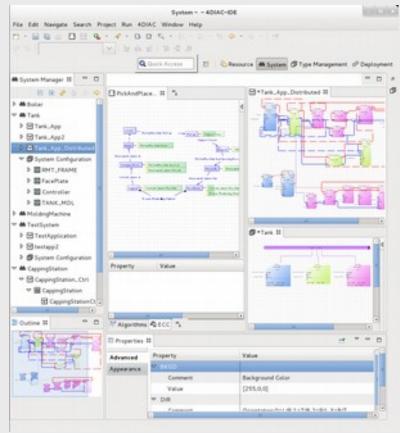
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4DIAC Overview

- Goal: open source solution of the IEC 61499 standard for distributed industrial automation systems
 - Common framework for the further development of IEC 61499
 - Leveraging the use of IEC 61499 within industry
- Application domains:
 - Building automation, process industries, laboratory automation, smart grids, machine control, sequence coordination, ...
- Components of solution
 - Engineering tool
 - Small real-time capable runtime environment
 - Reusable component library
 - Example applications
- Open Source License
 - Eclipse Public License
 - Allows usage in products and proprietary add-ons





Release Cycle

- Two major releases per year
 - Feb. 28th
 - Sept. 30th
 - Feature freeze 4 weeks upfront
 - Extended by monthly minor releases
 - Bug fixes are introduced more early



Some Statistics

- Open source since July 2007
- 300 400 Page hits/ week
- >17.800 Downloads
- 384,876 lines of code
- 9 comitters from 5 companies
 - 1 new:
 Matthias Plasch

In the last year we had:

- 2 major and 5 minor releases
- 3600 downloads
- 119 closed tickets
- 723 commits from 14 contributers
- 359 forum messages



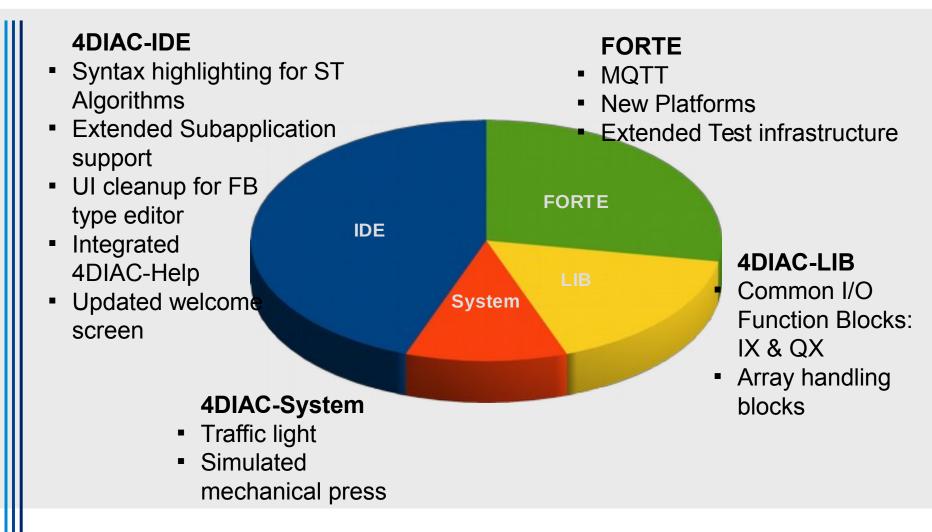
4DIAC is getting an Eclipse Project

First steps taken

- - -



Whats New



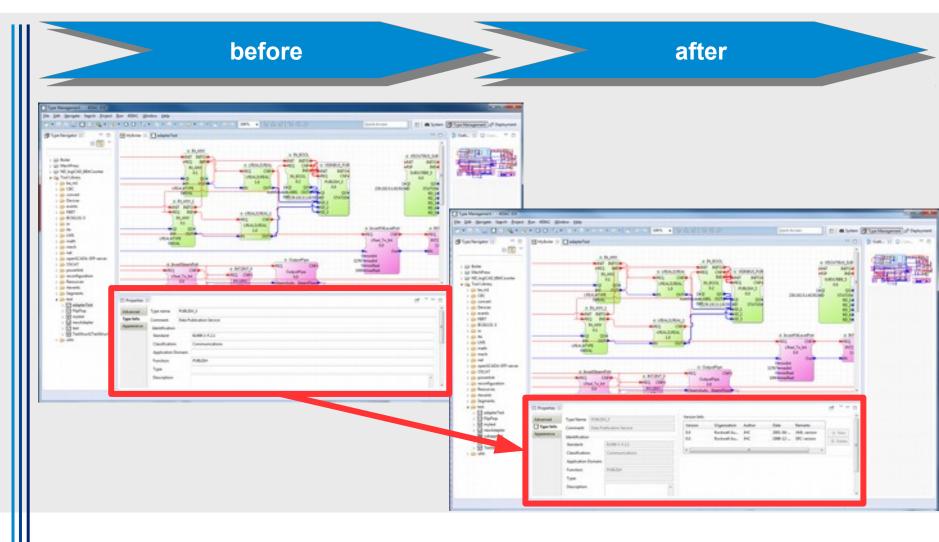


UI Cleanup for FB Type Editor

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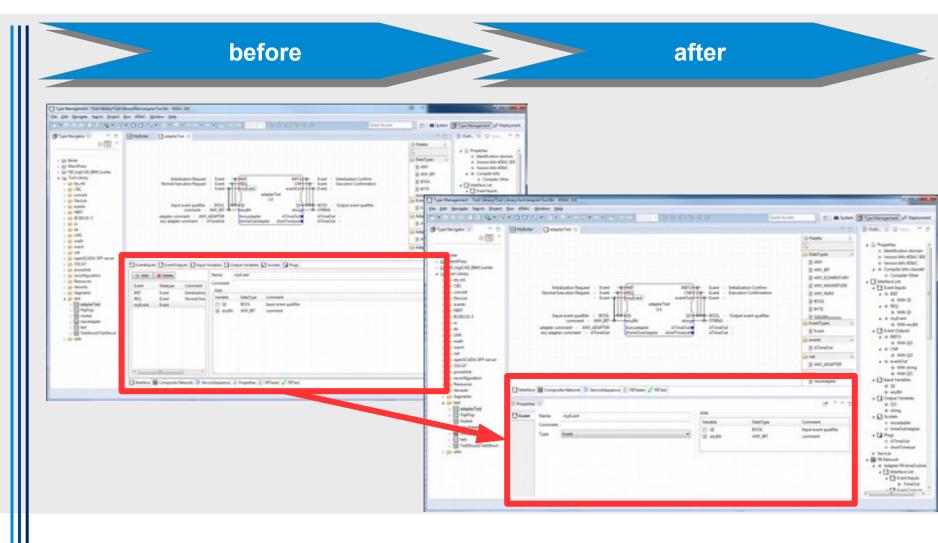


UI Cleanup for FB Type Editor





UI Cleanup for FB Type Editor





Syntax Highlighting for ST Algorithms

🔶 Add	💢 Delete		Name:	REQ	
Algorithm	Language	Comment	Comment:	Normally executed algorithm	
INIT	ST	Initialization algorithm	Language:	ST	
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Whats New: FORTE

- New Platforms
 - Raspberry PI
 - Beagle Bone Black

- MQTT
 - IoT connectivity
 - Using Eclipse Paho



Whats New: 4DIAC-LIB

 Common I/O Function Blocks: IX & QX

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Sample implementation for RaspberryPI and BeagleBone Black

- Array handling blocks
 - GET_AT_INDEX
 - SET_AT_INDEX
 - ARRAY2ARRAY_2
 - ARRAY2VALUES_2
 - VALUES2ARRAY_2



Whats New: Systems

Traffic light



 Simulated mechanical press

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2
PressFit
Transport



The 4DIAC Team likes to say thank you!

Many thanks to all bug reporters, feature requesters, patch submitters, and discussions in the forum



Getting Involved

- Bug-list / feature-requests as starting point for involvement
- Source code provided in distributed version control system "Mercurial"
 - 4DIAC-IDE: http://sourceforge.net/p/fordiac/fordiac-ide/
 - FORTE: http://sourceforge.net/p/fordiac/forte/
 - 4DIAC-LIB: http://sourceforge.net/p/fordiac/fordiac-lib/
 - 4DIAC-Systems: http://sourceforge.net/p/fordiac/fordiacsystems/
- Patches of collaborators will be reviewed and applied



Recent Activities of the 4DIAC Open Source Initiative

Contact

Gerhard Ebenhofer Profactor GmbH Im Stadtgut A2 4407 Steyr-Gleink, Austria +43 7252 885 314 gerhard.ebenhofer@profactor.at http://www.profactor.at Alois Zoitl fortiss GmbH Guerickestrasse 25 80805 Muenchen, Germany +49 89 360 35 22 535 alois.zoitl@fortiss.org http://www.fortiss.org

