

# Real-time and Embedded Systems Forum

## Agenda

23-27 July 2007

Four Seasons Hotel

Austin, Texas

Please Note: Agenda is Subject to Change.

All times listed are Central Daylight Time (Austin, Texas)

# RTES Forum High Level Agenda

## Austin, Texas - July 23-27, 2007

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- ❑ Monday 0900-1500 -- “Architecting to the Edge™” -- Open Source for High Assurance Applications
- ❑ Monday 1530 -1745 -- “Architecting to the Edge™” – AADL -- The SAE Standard used in the formal specification of software and system architecture.
- ❑ Monday 1400-1745 -- Parallel Session – **By invitation** –Integrators and MILS
- ❑ Monday Evening 1930-2100 -- RTES Forum Member Meeting
- ❑ Tuesday 0900-1730 -- High Robustness Security and High Assurance Applications
- ❑ Tuesday 1400-1730 -- Parallel Session – MILS Tutorial
- ❑ Wednesday 0900-1700 -- Research Day - Presentations on High Robustness Security, Cross Domain Solutions and “Dependability through Assuredness™”, Open Source in High Assurance Apps
- ❑ Wednesday Evening 1730-2100 -- Potential Real-time & Embedded Security Strategy Session
- ❑ Thursday 0830-1730 -- ”Dependability through Assuredness™” – Plenary – Looking at System Assurance, Certification and Software Development and Gaps
- ❑ Friday 0800-1400 -- ”Dependability through Assuredness™” – Business Scenario conducted by Dave Lounsbury.  
[http://www.opengroup.org/architecture/togaf7-doc/arch/p4/bus\\_scen/bus\\_scen.htm](http://www.opengroup.org/architecture/togaf7-doc/arch/p4/bus_scen/bus_scen.htm)

Detailed Agenda on Next Pages

**Note: The JSR 302 SC Java™ Technology Expert Group as of today will not meet in Austin. The Expert Group meeting schedule will be posted via the Expert Group mail list.**

# Architecting to the Edge™

## RTESF Agenda, Monday 23 July, 2007

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### A focus on Open Source and the Architecture Analysis & Design Language

- ❑ 0900-0915 Introduction, Glen Logan, Chair of the RTES Forum
- ❑ 0915-1000 Robert Dewar, AdaCore Technologies, The Secret is in the Licensing
- ❑ 1000-1045 John Scott, Consultant to the US Air Force, Open Technology Development and Testing
- ❑ 1045-1100 Break
- ❑ 1100-1145 Ken Peters, NASA/JPL, Open Source Software and its Role in Space Exploration
- ❑ 1145-1230 David Wheeler, Institute of Defense Analyses, What's Ahead for OSS and DoD
- ❑ 1230-1300 Victor Yodaiken, FSMLabs, OSS and High Assurance Embedded Environment
- ❑ 1300-1400 Lunch
- ❑ 1400-1500 OSS Panel discussion– Moderator Rob Walker, BEA Systems plus speakers from the morning sessions
- ❑ 1500-1530 Break
- ❑ 1530-1615 Steve Vestal, Honeywell, Fault Modeling with AADL
- ❑ 1615-1715 Oleg Sokolsky, University of Pennsylvania, The Fremont Analysis Tools for ADDL, including the Scheduling and Simulation, and OSATE/TOPCASED
- ❑ 1715-1745 Yves LaCerte, Rockwell-Collins, FPGA Architectural Modeling for Security

**Monday 1400-1745** -- Parallel Session BY **INVITATION** – Systems Integrators and MILS Planning  
– Ben Calloni et al.

### Monday Evening

- ❑ 1930-2100 RTES Forum Members Meeting, Chips and DIP etc.

# Security for Real-time and High Assurance RTESF Agenda, Tuesday 24 July 2007

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- ❑ 0900-0945 System High Robustness Certification, John Rushby, SRI
- ❑ 0945-1030 MILS Integration Protection Profile, Rance DeLong, LynuxWorks
- ❑ 1030-1100 Break
- ❑ 1100-1115 Update secure Communications Stack, Paul Ray, Wind River
- ❑ 1115-1230 High Assurance Platform (HAP) Program Brief, Michael McEvilley, MITRE
- ❑ 1230-1300 Remote collaboration 1 - Architecting an Online Technical Library, Edwin Lee, Raytheon
- ❑ 1300-1400 Lunch
- ❑ 1400-1600 “Precision and Accuracy in Uniform Definitions of Security Concepts and Terms”, Rob Hoffman, Wind River/ Michael McEvilley, MITRE/Jami Carroll, Mitre
- ❑ 1600-1700 Remote collaboration 2 - The Managers/Developers Guide for High Assurance, Robustness and Security, Michael McEvilley/Edwin Lee
  
- ❑ **Tuesday Parallel Session MILS Tutorial**  
1400-1730 Gordon Uchenick, Objective Interface Systems

# Research Day Presentations

## RTESF Wednesday, 25 July 2007

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- 0900-1730 – Research “Short Talks” – chaired by Rance DeLong, LynuxWorks/Michael McEvilly, MITRE
  - "Presentations of varying length, depending upon the scope and maturity of the work, will be presented throughout the day from 0900 until 1730. **The final schedule of these presentations will be posted prior to July 24.**"
  - Presentations should cover High Robustness Security, Cross Domain Solutions and “Dependability through Assuredness™”, Open Source Software in High Assurance Applications.
  
- Wednesday Evening 1900-2100, Potential Real-time & Embedded Security Strategy Session

# Dependability Through Assuredness™

## RTESF Plenary Agenda

### Thursday July 26, 2007

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0830-0845 Introduction, John Anton, Kestrel Technology

0845-0930 Reducing Risk Exposure through Software Assurance, Joe Jarzombek, Department of Homeland Security

0930-1000 Compositional Certification, John Rushby, SRI/Rance DeLong LynuxWorks

1000-1030 Assurance for Off-the-Shelf Software Applications, Victor Yodaiken, FSMLabs

1030-1100 Break

1100-1145 A Global View of Formal Methods, Dr James Hunt, Aicas

1145-1230 The Value of Certification, Michael Brown, IBM

1230-1330 Lunch

1330-1415 Software for Dependable Systems-Sufficient Evidence?, Dr Daniel Jackson, MIT and Chair of the National Academies Study on Certifiably Dependable Software Systems

1415-1500 Perspective for Safety Assuredness to systems with Social Influence, Dr. Shuichiro Yamamoto, Senior Executive Manager of the Research Institute for System Science, Selected as First Fellow – NTT Data Corporation,

1500-1545 The Case for Certification of High Assurance Software Developers, Panel Discussion, Facilitator “Jack” Fujieda, President & CEO, Research Environment for Global Information Society Inc (ReGIS Inc) and Rob Walker, BEA Systems

1545-1600 Break

1600-1630 A Primer on “Dependability through Assuredness” Requirements Definition – The Business Scenario, David Lounsbury, The Open Group

1630-1730 Making the Case for a Cross Architecture ADL – ADML to AADL, Bruce Lewis, SAE/AADL, Jorgen Hansson- SEI/CMU, Ed Roberts- The Open Group, Joyce Tokar- Pyrrhus Software, Doug Locke – Locke Consulting LLC, John Anton – Kestrel Technology

# Dependability Through Assuredness™

## RTESF Agenda Friday July 27, 2007

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**0800 – 1400** Defining requirements for the “Dependability Through Assuredness” activity through the use of a Business Scenario, the facilitator will be David Lounsbury, The Open Group.

The "Business Scenario" will be used determine the goals and road map for the "Dependability through Assuredness" (including the software gap coverage) Working Group

A business scenario is a description of a business problem, which enables requirements to be viewed in relation to one another in the context of the overall problem. Without such a description to serve as context, the business value of solving the problem is unclear; the relevance of potential solutions is unclear and there is a danger of the solution being based on an inadequate set of requirements. A key factor in the success of any other major project is the extent to which it is linked to business requirements, and demonstrably supporting and enabling the enterprise to achieve its business objectives. Business scenarios are an important technique to help identify and understand business needs. I have attached The Open Group's "Managers Guide to Business Scenarios" which is a free download for members of The Open Group.

[www.opengroup.org/architecture/togaf7-doc/arch/p4/bus\\_scen/bus\\_scen.htm](http://www.opengroup.org/architecture/togaf7-doc/arch/p4/bus_scen/bus_scen.htm)