

Real-time and Embedded Systems Forum

Spotlight

18 October 2010

THE *Open* GROUP

Joseph I Bergmann

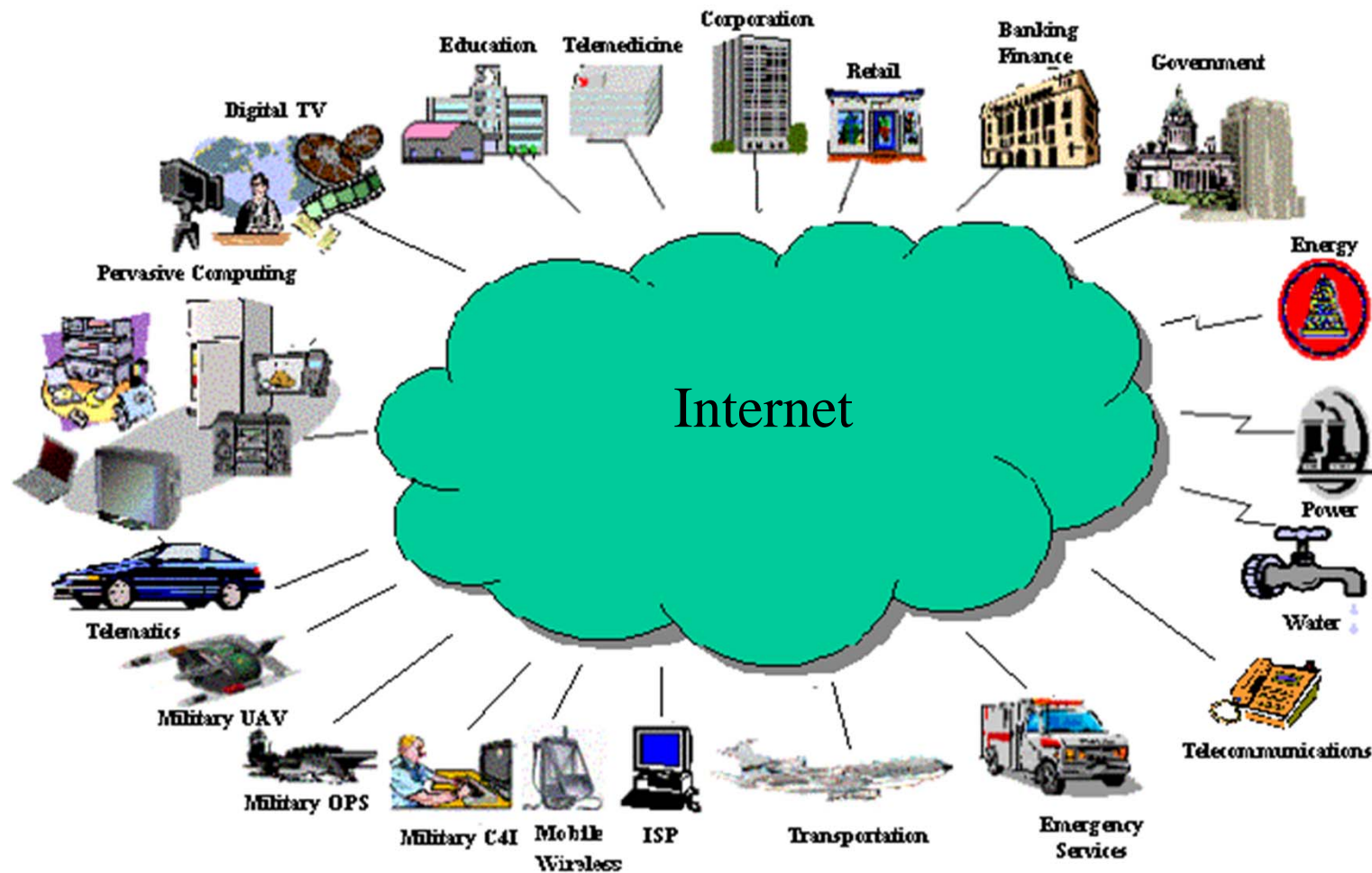
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“The Boundaryless Enterprise”



Software with Real-time and QoS features will make the Boundaryless RT Enterprise deterministic, integrated and flexible.

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❑ **RTES Vision**

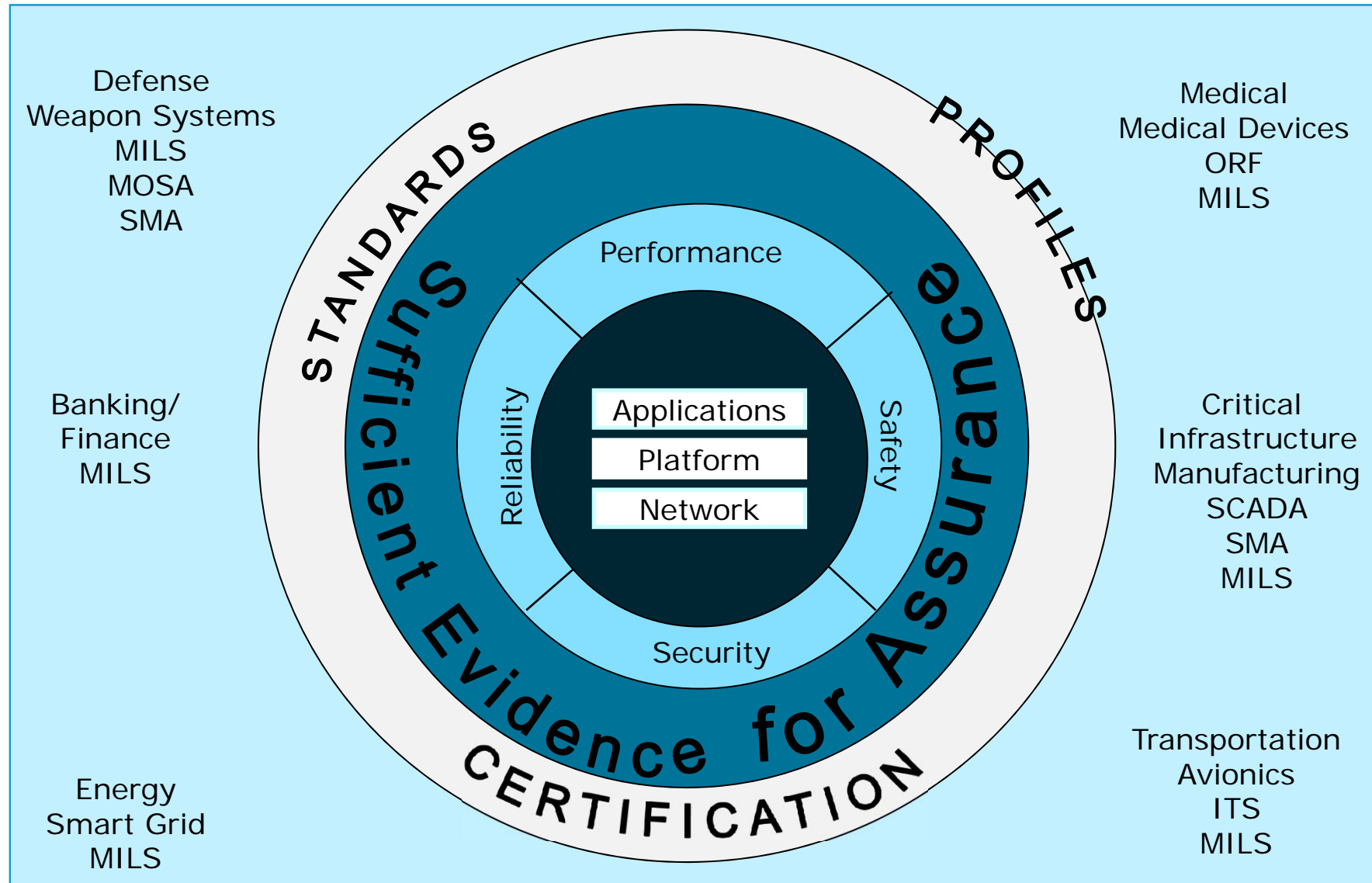
- Employ widely supported and open real-time standards and enabling technologies to deliver testable and certifiable, cost-effective, mission-capable systems.

❑ **RTES Mission**

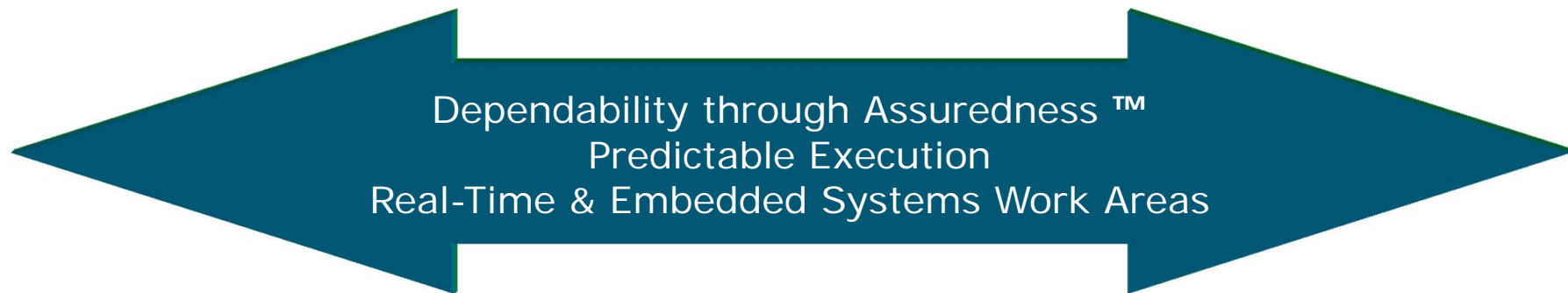
- Improve the time and cost to market adoption of real-time and embedded solutions by providing a forum where we can share knowledge and integrate open initiatives, and certify approved products and processes.

Real-time & Embedded Systems Forum

“Dependability through Assuredness™”



Real-time & Embedded Systems Forum Coverage



Open Architecture for RTES	IEEE POSIX® RT Standards, Profiles & Certification	RT (Security & Safety) Critical Systems	Safety Critical RT Java/ JSR302	Secure Mobile Architecture
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Real-time & Embedded Systems Forum

Structure & Leadership

□ Forum Chairs

- Chair - Glen Logan, US Army
- Vice Chair – Edwin Lee, Raytheon

□ Working Groups/Chairs

- **Open Architecture for RTES – Glen Logan/Edwin Lee**
 - **Architecting to the Edge™ – Edwin Lee/Ed Roberts**
 - **TOGAF to the Platform – Ed Roberts/Edwin Lee**
 - **Modular Open Systems Approach (MOSA) for Architecture – Glen Logan/Ed Roberts**
- **IEEE POSIX RT Standards, Profiles, & Certification - Joe Gwinn, Raytheon**
 - IEEE POSIX 1003.13 – Joe Gwinn et al.
 - IEEE POSIX 1003.26 – Joe Gwinn et al.
- **RT (Security & Safety) - Critical Systems - Michael McEvilley, MITRE/ Rance DeLong, LynuxWorks/ Edwin Lee, Raytheon**
 - MILS Demos – Carolyn Boettcher, Raytheon Ben Calloni, Lockheed Martin
 - MILS Business Case – Ben Calloni/Glen Logan
 - Lexicon – Michael McEvilley et al.
 - **MILS API Standardization – Rance DeLong/Joe Wlad**
 - Protection Profiles – Joe Wlad/Michael McEvilley
 - MILS Integration – Rance DeLong/john Rushby. SRI
 - Compositional Certification – John Rushby/Rance DeLong
 - Cyber-Physical Systems – Rance DeLong/Joe Bergmann
 - **Commercial approach to Evaluation, and Certification – Rance DeLong**
 - **International Mutual Recognition – Joe Bergmann/Rance DeLong**
- **Safety Critical RT Java/JSR 302 – Doug Locke, LLC**
 - Specification Release, Pending JSP legal Approval
- **Secure Mobile Architecture - Steve Venema, Boeing**
 - SCADA/Medical Devices /Intelligent Transportation Systems

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Progress

Item	Munich	San Diego	London	Toronto	Hong Kong Washington		POC
	2008	2009	2009	2009	2009	2010	
Work In-process							
Standards for the MILS Architecture							Rance DeLong
Requirements	Review	Finalize					Carolyn Boettcher
APIs	Initial	Review	Review	Review	Review	Finalize	Joe Wlad
Evaluation & Certification Program			Initial	Review	Review	Finalize	
Composability business scenario		Finalize					John Rushby
Component level specification			Initial	Review	Review	Finalize	Rance DeLong
High Assurance Procurement							
Managers Guide – what it is, how to use it		Initial	Review	Review	Review	Finalize	Michael McEvilley Edwin Lee
Procurement Guide – what should be in RFI		Initial	Review	Review	Finalize		Glen Logan
Dependability through Assuredness							
Requirements		Finalize					Edwin Lee Glen Logan
Dependability Guide			Initial	Review	Review	Finalize	
Architecting to the Edge							
OSA Guide – Requirements	Initial	Finalize					Edwin Lee Glen Logan
OSA Pocket Guide			Initial	Review	Review	Finalize	Edwin Lee
Safety Critical Java – JSR 302							
Specification	On-going	On-going	On-going	Finalize	Finalize	Release	Doug Locke

Dependability through Assuredness™

Amsterdam Track Agenda sponsored by the RTES Forum

19-21 October, 2010

Tuesday 19 October 0900-1700

- ❑ 0900 – 0930 Introduction to the RTES Forum and Activities
- ❑ 0930 – 1000 Dependability through Assuredness - a perspective from Japan
- ❑ 1000 – 1030 AADL – Overview
- ❑ 1030 – 1100 Break
- ❑ 1130 – 1230 AADL Implementation
- ❑ 1230 – 1400 Lunch
- ❑ 1400 – 1445 AADL Tools
- ❑ 1445 – 1530 Extending The Open Group Architecture Framework (TOGAF) for High Assurance Environments at the Platform Level (ADL and AADL)
- ❑ 1530 – 1600 Break
- ❑ 1600 – 1700 Draft TOGAF-RTES/High Assurance Reference Model
- ❑ 1700 – 1730 Open Systems Architecture Handbook

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Wednesday 20 October 0900-1700

- ❑ 0900 – 0945 European High Assurance Requirements for Medical Systems
- ❑ 0945 – 1030 European High Assurance Requirements for Smart Grid
- ❑ 1030 – 1100 Break
- ❑ 1100 – 1145 European High Assurance Requirements for SCADA
- ❑ 1145 – 1230 European High Assurance Requirements Automotive/ITS
- ❑ 1230 – 1400 Lunch
- ❑ 1400 – 1445 European High Assurance Wrap-Up
- ❑ 1445 – 1700 Via Teleconference RTES Forum Members Meeting

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Thursday 21 October 0900-1700

- ❑ 0900 – 0945 Report from CC International
- ❑ 0945 – 1030 High Assurance Architecture using a Separation Kernel
- ❑ 1030 – 1100 Break
- ❑ 1100 – 1230 SMA Joint Session with Security Forum
- ❑ 1230 – 1400 Lunch
- ❑ 1400 – 1445 MILS API Standardization Overview/Roadmap
- ❑ 1445 – 1530 MILS API Standardization Discussion
- ❑ 1530 – 1600 Break
- ❑ 1600 – 1645 Commercial Approach to Evaluation and Certification of High Robustness Commercial Security Components/Systems
- ❑ 1645 – 1730 International Mutual Recognition
- ❑ 1730 – 1800 Wrap up and the way forward

QUESTIONS?

www.opengroup.org/sandiego2011

www.opengroup.org/rtforum