

**Layered
Assurance
Workshop**

PROGRAM

8th Layered Assurance Workshop

December 8-9, 2014

Hyatt French Quarter, New Orleans, Louisiana, USA

**Affiliated workshop of the
30th Annual Computer Security Applications Conference (ACSAC)**

Monday, December 8th 2014

7:30-8:30	BREAKFAST
8:30-8:45	Welcome and Opening Remarks –Rance J. DeLong, Gabriela F. Ciocarlie, Peter G. Neumann
8:45-10:00	Keynote Talk <i>Modular Construction of Systems and Layered System Architectures by Rich Subsystem Specs</i> Manfred Broy, Institut für Informatik, Technische Universität München (DE)
10:00-10:30	BREAK
10:30-12:00	Contributed Paper: Assurance for Defense-in-Depth via Retrofitting Vinod Ganapathy, Rutgers University, Trent Jaeger, The Pennsylvania State University, Gang Tan, Lehigh University, Christian Skalka, University of Vermont Contributed Paper: Towards High Assurance Platforms for Securing the Cloud with Disparate Domains Sujay Doshi and Roger Schell, Department of Informatics, University of Southern California Contributed Paper: A Cost Effective High Assurance Layered Solution for MLS Test Training and LVC James A. Marek, Rockwell Collins
12:00-13:30	LUNCH
13:30-15:00	Panel: Trustworthy Systems This panel will provide an up-to-date view of achieving total-system trustworthiness from the perspective of system architecture and implementation. Moderated by Peter G. Neumann, SRI International Manfred Broy, Technische Universität München Virgil Gligor, Carnegie Mellon University Earl Boebert, Consultant, Author Gabriela F. Ciocarlie, SRI International
15:00-15:30	BREAK
15:30-16:45	Invited Talk <i>Designing for Assurance in High-Consequence Systems</i> Earl Boebert, Author and Consultant
16:45-18:00	Invited Talk <i>Commercial Solutions for Classified (CSfC) Overview</i> Jeffrey Watkins, National Security Agency

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Tuesday, December 9th 2014

7:30-8:30	BREAKFAST
8:30-8:45	Day 2 Opening Remarks
8:45-10:00	Keynote Talk <i>Dancing with the Adversary: a Tale of Wimps and Giants</i> Virgil Gligor, Carnegie Mellon University
10:00-10:30	BREAK
10:30-12:00	Panel: <i>Formal Methods for Composition-Based Assurance</i> This panel will explore advances in the application of formal methods to realistic systems to enable effective assured total-system trustworthiness, and what might still be needed. Moderated by Peter G. Neumann, SRI International Virgil Gligor, Carnegie Mellon University Natarajan Shankar, SRI International Nirav Dave, SRI International Rance J. DeLong, Consultant
12:00-13:30	LUNCH
13:30-15:00	Contributed Paper: <i>Integrated Framework for Multi-layer Certification-based Assurance</i> Rajesh Harjani, Antonio Maña, Marcos Arjona, Antonio Muñoz, Javier Espinar, Hristo Koshutanski, University of Malaga (ES) Work in Progress: <i>Layered Assurance of Security Policies for an Embedded OS</i> (15 min) Jia Song and Jim Alves-Foss, Center for Secure and Dependable Systems, University of Idaho Short Talk: <i>Towards a Highly Secure PLC Architecture for CPS</i> (15 min) Nikhil Mahesh, Student, Department of Informatics, University of Southern California Work in Progress: <i>Mapping Security Policies to Implementations</i> (15 min) Jim Alves-Foss, Center for Secure and Dependable Systems, University of Idaho Work in Progress: <i>Empirical Evaluation of API Usability and Security</i> (15 min) Sam Weber, Robert Seacord, Forrest Shull, David Keaton, Software Engineering Institute; Brad Myers, Michael Coblenz, Carnegie Mellon University
15:00-15:30	BREAK
15:30-16:45	Invited Talk <i>High Assurance Cyber-Physical Systems</i> Natarajan Shankar, SRI International Computer Science Laboratory
16:45-17:45	Invited Talk <i>A Layered-Assurance Retrospective</i> Olin Sibert, Oxford Systems, Inc.
17:45	Workshop Closing
18:00-20:00	Reception