SEPG Europe 2011
Global Excellence in Software and Security

A Conference Preview

7-9 June 2011
Dublin, Ireland
Welcome and Introduction

SEPG Europe 2011
Global Excellence in Software and Security
7-9 June 2011
The Burlington Hotel
Dublin, Ireland

Technical Co-Chairs
Alan Willett
Pat Kirwan
Polling Question 1

Have you attended an SEPG Europe conference in the past?

Yes
No
Polling Question 2

If you answered “yes” to the previous question, what did you like most about the conference?

Keynote Speakers
Conference Program
Networking
Location
SEPG Conference Series
From Concept to Community


SEPG Conference Series launched as workshop in 1988 - grew into SEPG North America

SEPG Europe started by ESPI in 1996

SEPG Asia-Pacific started as SEPG Australia in 2003

SEPG Latin America started by ESI in 2004

2011 marks the 16th year for the SEPG Europe conference
SEPG Europe 2011: Why Participate?

- **Excellence in learning…**
  - … from *tutorial* opportunities on leading topics in software and security
  - … from a *technical program* that will share results and business solutions to help you optimize your performance in every aspect of your organization
  - … from four renowned *keynote speakers* who are leading experts in their fields

- **Excellence in networking…**
  - … by taking advantage of the many opportunities to *share ideas* for success
  - … by meeting with our vendor partners to find *ready solutions* for your current needs

- What are the best practices being used to deliver quality software solutions that meet user needs?
- How can I improve my organization’s process to achieve high performance without sacrificing agility?
- What security threats and preventative practices should I be aware of to resist attacks on my networked systems?
- How do we limit damage and ensure continuity of critical services in spite of attacks, accidents, or failures?

- How can our organization build a software architecture that contributes to a positive development outcome?
- What are the benefits of taking the time to properly design, implement, document, and evaluate a software architecture?
Excellence in Learning: Pre-Conference Tutorial Opportunities

- Leading experts from CERT and SEI offering tutorials on Monday, 6 June at The Burlington Hotel
- Opportunity to maximize travel cost and enhance your educational experience
- The registration fee for a Monday tutorial session is $250 (separate from the SEPG Europe 2011 registration). Tutorial registration may be completed through the general SEPG Europe 2011 registration link available at sei.cmu.edu/sepg/europe/2011/register.cfm
Excellence in Learning: Pre-Conference Tutorial Opportunities

- Your choice of five cutting-edge topics
  - Cyber Response and Analysis Challenge
    - Team-based, live-fire cybersecurity exercise involving a fictitious shipping company experiencing numerous cyber-security events and anomalies
  - Forensics for Law Enforcement
    - Concentrates on four primary components: Imaging, Forensics Tools, Cryptography and Memory Analysis, and Incident Response
  - Introduction to the CMMI Accelerated Improvement Method (AIM)
    - AIM is a radical departure from the traditional methods of CMMI implementation, technology transition, and organizational change. This tutorial will provide a foundational understanding of the technologies, tools, methods, and strategies.
  - Managing Risk and Resilience: The CERT Resilience Management Model (CERT-RMM)
    - Designed for individuals who wish to learn a model-based process improvement approach to managing operational resilience using the CERT-RMM v1.1.
  - Software Engineers as Insider Threats: Actual Attacks and Their Consequences
    - Discusses the work of the CERT Insider Threat Center, which has catalogued more than 500 cases of actual insider attacks, capturing the technical details, behavioral indicators, organizational context, management issues, and legal/contractual factors.
The Technical Program: Taking a Closer Look

<table>
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<th>Rapid Process Improvement</th>
<th>Business Value, Benefits, &amp; Impact</th>
<th>People, Teams, &amp; Workforce</th>
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<tr>
<td>• How to see improvement quickly</td>
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<td>• Realizing efficiencies</td>
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<td>• Achieving speed, agility, &amp; high-quality results</td>
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<td>• Creating a value-added environment</td>
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<td>• Identifying &amp; communicating the ROI through process improvement</td>
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<td>• Aligning &amp; communicating business objectives for optimal process improvement</td>
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<td>• Improving IT outsourcing using CMMI</td>
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<tr>
<td>• Measuring &amp; communicating benefits, impacts, &amp; performance results</td>
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<td>• Benefits &amp; challenges of high-maturity organizations</td>
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<td>• Bottom line benefits of a multi-model approach</td>
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<td>• Measuring team &amp; workforce capability &amp; capacity</td>
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<td>• The role of people, process, technology, &amp; culture in process improvement</td>
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<td>• Enhancing process capability through workforce capability</td>
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<td>• Benefits of developing high-performing &amp; effective teams</td>
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<td>• The challenges of dealing with the paradigm shift from traditional hierarchically structured management approaches to open, collaborative, distributed development</td>
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The Technical Program: Taking a Closer Look

### Challenges in Global Software Development
- Outsourcing software development
- Acquisition of software
- Issues related to supply chain management
- Managing countrywide initiatives
- Software development issues spanning academic, government, & industry settings

### Security & Safety
- The critical requirements of the 21st century
- Achieving better software, better systems, & better systems management
- Identifying ways for any organization to improve the security & overall quality of software
- Minimizing potential threats & ensure secure networked computing systems

### Changing Behavior
- When does a process change or technology change also call for an organizational culture change?
- What are the key barriers to culture change?
- Understanding best practices to enable culture change that stays in place
- Establishing a culture focused on improvement
- Develop mastery of leading culture change
# The Technical Program: Taking a Closer Look

## Combining Models
- How to implement process improvement in multi-model environments (i.e., CMMI and Agile, CMMI and ISO, CMMI and Malcolm Baldrige, CMMI and People CMM)
- Benefits and lessons learned from combining maturity models, frameworks, & standard approaches
- Synergies between models, frameworks, & standard approaches

## Quality Systems from Quality Architecture
- Using architecture to ensure acceptable system characteristics
- Architecture as the key to system understanding, maintenance, & mining efforts
- Architecture implications of large distributed systems
- Architecture support for stakeholder communication

## CMMI: Taking It Up A Level
- Improvements the product team has made to the three CMMI constellations
- Key improvements in the revisions to the SCAMPI appraisal method
- Opportunities offered by the three models used across the enterprise, along with other models & standards
- Take the required upgrade training for SCAMPI V1.3 (for SEI-Certified SCAMPI Lead Appraisers only)
Keynote: Martin Curley

• Director of Intel Labs Europe and a senior principal engineer at Intel Corporation.

• Most recently, Curley was global director of IT Innovation at Intel Corporation. Previously, he has held a number of senior IT management positions for Intel and held management and research positions at General Electric and Philips.

• Curley is an author or co-author of three books on technology management for value, innovation, and entrepreneurship.

• He is professor of technology and business innovation at the National University of Ireland, Maynooth, and co-founder and director of the Innovation Value Institute, helping lead a unique industry-academic open innovation consortium to advance IT management and innovation.

• Curley is a fellow of the Institution of Engineers of Ireland, the British Computer Society, and the Irish Computer Society, and has been a visiting scholar at MIT Sloan.
Bill Curtis is vice president and chief scientist with CAST, a leader in providing technology for measuring and evaluating application software quality.

He co-authored the Capability Maturity Model (CMM), the People CMM, and the Business Process MM.

Until its acquisition by Borland, he was co-founder and chief scientist of TeraQuest. He is a former director of the Software Process Program in the Software Engineering Institute at Carnegie Mellon University.

Prior to joining the SEI, Curtis worked for Microelectronics and Computer Technology Corporation (MCC), ITT’s Programming Technology Center, GE Space Division, and taught statistics at the University of Washington.

He has published four books, more than 150 articles, and was elected a Fellow of the IEEE for his contributions to software process improvement and measurement.
James W. Over, who has been with the SEI since 1987, is manager of the TSP Initiative and is a senior member of the technical staff for the Software Engineering Process Management Program.

- Over has led SEI’s TSP Initiative since its inception, transitioning the TSP into organizations in the United States and abroad.
- He has received the SEI Director’s Award for Excellence, the SEPM Director’s Award for Quality Innovation, and an award from Boeing Corporation for innovation and leadership in software process improvement.
- Over has more than 35 years of technical and management experience in the software engineering industry.
- He is the co-author of *Leadership, Teamwork, & Trust* (2011) and several SEI publications on software process definition and improvement.
Keynote: Alexander Springer

- Alexander Springer is the director of Global Software Platform Development at Robert Bosch GmbH.
- Springer is responsible for the worldwide development processes to align with customer demands and the requirements which arise out of several process models, norms, and the need to be an efficient and successful organization.
- Springer began his career at Bosch as a software project manager and section manager for Vehicle Dynamics Systems. He handled cross-functional process development for new product generation.
- Springer later joined the Bosch corporate initiative for Software Driven Systems where he rolled out the Product Line Approach (PLA). Just two years later, Springer took over as director for the software development of the Passive Safety Systems, where the PLA was successfully piloted in the latest airbag product generation.
- Springer has played a role in helping Bosch in its journey to increased efficiency and maturity. In 2008, the organization achieved CMMI Maturity Level 3.
Excellence in Networking

- **Making excellent connections:** SEPG Europe 2011 facilitates connections among experts, peers, and solution-providers
  - **First-Timers’ Orientation:** Tuesday, 7 June
    - Complimentary orientation at 08.15–08.45 at The Burlington Hotel.
    - Hear tips and ideas on making the most of your SEPG Europe experience while connecting you with other first-timers.
  - **Exhibits Grand Opening:** Tuesday, 7 June
    - Enjoy light hors d’oeuvres, beer, and wine and network with solutions-providers and fellow delegates.
  - **Gala Reception:** Wednesday, 8 June
    - Get a true taste of Dublin at the Guinness Storehouse. Enjoy dinner, drinks, socializing, and a special Guinness pint-pulling activity
Excellent Solutions: Visit the Exhibits Area

• Consult with solutions-providers
  • Visit with elite and innovative exhibiting companies who are ready to present you with solutions

• Become an exhibitor
  • Email Una Kilberg to inquire about exhibiting opportunities: ukilberg@sei.cmu.edu
Excellence in Student Research: Hear From Up-and-Coming Professionals

- Undergraduate and graduate students will be presenting their research in the exhibits area
  - Tuesday: Exhibits Opening Reception, 17.30–19.00
  - Wednesday: Afternoon Break, 15.30–16.00
  - Thursday: Afternoon Break, 15.30–16.00
Networking: SEPG Social Media

- **The power of ongoing networking:** making connections with the SEI and fellow delegates begins **now**
- **Ways to connect**
  - LinkedIn: SEPG Conference Series group
  - Twitter: @SEPGConferences (hash tag: #SEPGEU)
    - Comment on blog posts
    - Serve as a guest blogger
    - Email **bao@sei.cmu.edu** to indicate interest in guest blogging
  - YouTube
    - Share your thoughts on SEPG Europe 2011 in a short, relaxed video interview
    - [http://www.youtube.com/SEICMU](http://www.youtube.com/SEICMU)
For More Information

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