SEI BULLETIN

Software Engineering Institute | Carnegie Mellon University

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The *SEI Bulletin* is a biweekly newsletter designed to keep you up to date on SEI news, events, research, and other matters of interest to the SEI community. Because of your past participation as an SEI member, you have been automatically subscribed to receive the *SEI Bulletin*. Should you not wish to continue receiving the *Bulletin*, you may unsubscribe with [SafeUnsubscribe.](#) We hope you find the *SEI Bulletin* useful and informative.

Send Us Your Story
Do you have a story about how an SEI technology has positively affected your team or organization? If so, the SEI would like to hear about it. Send a short summary of your success to info@sei.cmu.edu and you could be featured in a future issue of the *SEI Bulletin*.

In This Issue

News: SEI to Host Webinar on Architecture Analysis with AADL

The SEI will host the webinar "Architecture Analysis with AADL" on Thursday, September 11, from 1:30 - 2:30 p.m. This webinar will introduce the Architecture Analysis and Design Language (AADL), the architecture modeling language used to specify safety-critical systems. We show its use in the Open Source AADL Tool Environment (OSATE) to design and validate a generic automotive application--a speed-regulation system. In particular, this webinar will demonstrate analysis capabilities of the tool for different perspectives, including resources budgets, performance/latency, and safety.

Julien Delange, a member of the SEI technical staff, will lead the webinar. Delange's research specializes in model-based engineering and improving the development of safety-critical systems by early discovery of architecture and design issues.

Julien Delange

[Learn more and register](#).

Also in the news:

- [SEI Hosts Cybersecurity Address by DOJ's John P. Carlin](#)
- [Agile Collaboration Group Spurs Knowledge Sharing](#)
- [Insider Threat Center to Offer New Insider Threat Program Manager Certificate](#)
- [2013 SEI Year in Review Available for Download](#)
- [CERT Guide to Insider Threat Named a Must-Read Cybersecurity Book](#)

SEI Podcast Series: Applying Agile in the DoD: Seventh Principle

In this episode, the seventh in a series by Suzanne Miller and Mary Ann Lapham exploring the application of Agile principles in the Department of Defense, the two researchers discuss the application of the seventh principle: Working software is the primary measure of progress.

[Listen to the podcast](#).

Mary Ann Lapham (top)
and Suzanne Miller

SEI Blog: Evolutionary Improvements of Quality Attributes: Performance in Practice

As part of the SEI's focus on Agile software development, we have been researching ways to incorporate quality attributes into the short iterations common to Agile. We know from existing SEI work on Attribute-Driven Design, Quality Attribute Workshops, and the Architecture Tradeoff Analysis Method that a focus on quality attributes prevents costly rework. Such a long-term perspective, however, can be hard to maintain in a high-tempo, Agile delivery model, which is why the SEI continues to recommend an architecture-centric engineering approach, regardless of the software methodology chosen.

As part of our work in value-driven incremental delivery, we conducted exploratory interviews with teams in these high-tempo environments to characterize how they managed architectural quality attribute requirements (QARs). These requirements, such as performance, security, and availability, have a profound impact on system architecture and design, yet are often hard to divide,or slice, into the iteration-sized user stories common to iterative and incremental development. This difficulty typically exists because some attributes, such as performance, touch multiple parts of the system.

[In this blog post, the SEI's Neil Ernst and Stephany Bellomo summarize the results of our research on slicing (refining) performance in two production software systems. They also examine the ratcheting (periodic increase of a specific response measure) of scenario components to allocate QAR work](#).

Neil Ernst (top) and
Stephany Bellomo

Events: TSP Symposium 2014

The Team Software Process (TSP) Symposium will be held in Pittsburgh, Pennsylvania, November 3-6, 2014.

The TSP Symposium 2014 technical program will go beyond the core methodology of TSP to encompass a broader range of complementary practices that contribute to peak performance on system and software projects. The unifying theme of the conference is quality. Ultimately, a quality product and service must be delivered on time and within budget, be secure, be sustainable, and provide value to end users.

TSP Symposium 2014 will offer 40-minute experience-report presentations, 90-minute participatory sessions, and full-day and half-day tutorials.

In addition to sessions covering the core methodology of TSP, this year the symposium will also address other aspects of long-term sustainable achievement. Specific topics related to software quality may include the following:

- Overcoming obstacles in introducing TSP
- Disciplined measurement practices
- Culture change
- The executive view
- Architecture
- Agile practices
- Testing
- Security
- Personal Software Process (PSP) and TSP in academics

For more information and to register, please visit www.sei.cmu.edu/tspsymposium/2014/.

Events: FloCon 2015

FloCon 2015, the annual network security conference hosted by the SEI's CERT Division, will take place in Portland, Oregon, on January 12-15, 2015, at the Hilton Portland & Executive Tower.

Interested participants are invited to submit abstracts for presentations, posters, and demonstrations pertinent to this year's conference theme, "Formalizing the Art." Submissions should address the art of network analysis and methods for making it more formal, rigorous, reliable, well grounded, or repeatable. In particular, the FloCon committee encourages submissions related to academic advances in novel analytics, operationalization, and automation of well-known techniques.

For more information and to register, please visit www.cert.org/flocon/.

SEI Job Listings

Interested in joining the SEI? Below are a few recent employment opportunities. For more job listings and full position descriptions, check out the SEI Careers page.

Project Manager (Pittsburgh, Pa.)

Project Manager (Arlington, Va.)

Information Security Researcher

More job listings...

Training

Upcoming Classes:

October 22-23, 2014 (Pittsburgh, Pa.):
ATAM Evaluator Training

November 4-6, 2014 (Arlington, Va.):
Advanced Forensic Response and Analysis

SEI eLearning Course:

Data Rights and DoD Acquisition

New Registration Portal
SEI Training has recently upgraded to a robust registration portal. The new portal provides simple and secure online access to course registration payments, a purchase history, confirmation letters, and receipts.

To view a video demo of the new SEI Registration Portal, please visit:
http://www.sei.cmu.edu/training/registration/

More SEI training opportunities...

Software Engineering Institute, Carnegie Mellon University
1-888-201-4479

Join Our Mailing List!

The SEI is a great place to pursue your passion. Headquartered in Pittsburgh, Pa., the SEI also has offices in the Washington, DC, and Los Angeles, Calif., metropolitan areas. Interested in working for the SEI? Visit our Careers page.