SEI Bulletin

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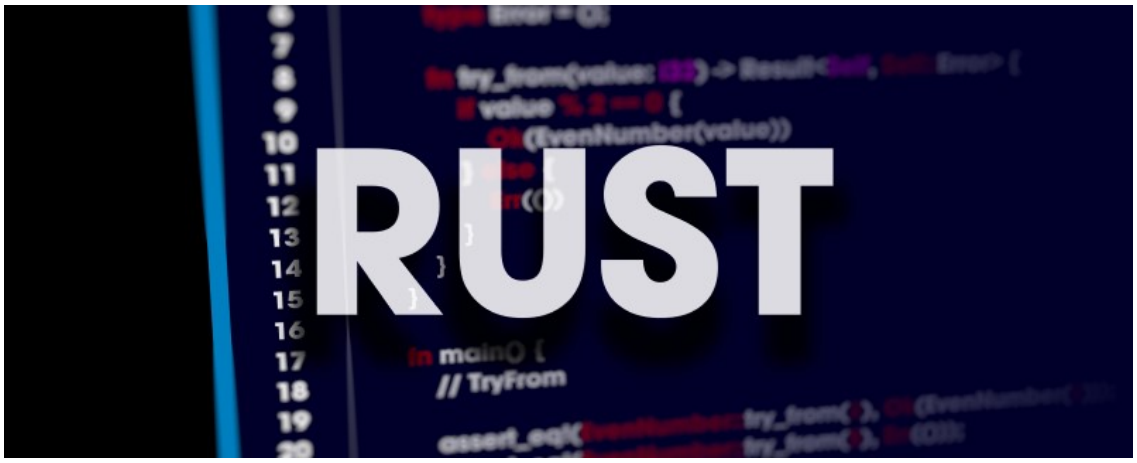

Rust Security Explored

February 1, 2023—Two recent SEI Blog posts assess the security, vulnerability, and maturity of the Rust programming language. In *Rust Software Security: A Current State Assessment* and *Rust Vulnerability Analysis and Maturity Challenges*, SEI CERT Division researchers Joseph Sible, David Svoboda, and Garret Wassermann explore the promise of this popular language.

"While the memory safety and security features of the Rust programming language can be effective in many situations, Rust's compiler is very particular on what constitutes good software design practices," write Wassermann and Svoboda in the second post. "Whenever design assumptions disagree with real-world data and assumptions, there is the possibility of security vulnerabilities—and malicious software that can take advantage of those vulnerabilities."

Read *Rust Software Security: A Current State Assessment* »

Read *Rust Vulnerability Analysis and Maturity Challenges* »

SEI News

ISHPI AIS Division to Receive IEEE CS/SEI Humphrey Software Quality Award
The group's decades of dedication to software quality earned it the 2023 award.

DevSecOps Platform-Independent Model Receives Major Update
New features bolster cybersecurity, personnel modeling, and DevSecOps flow.

See more news »

Latest Blogs

Software Modeling: What to Model and Why
John McGregor and Sholom Cohen describe modeling and analysis activities intended to achieve robust design, define the modeling chain, and effect evolution from specification to implementation.

Rust Vulnerability Analysis and Maturity Challenges
Garret Wassermann and David Svoboda explore tools for understanding vulnerabilities in the Rust programming language as well as the maturity of the Rust software ecosystem.

Mothra: Network Situational Awareness at Scale
Daniel Ruef introduces the SEI's Mothra network situational awareness and security tool and describes research on its improvements for large-scale environments and effectiveness at "cloud scale."

See more blogs »

Latest Podcasts

Securing Open Source Software in the DoD
Scott Hissam talks with Linda Parker Gates about free and open source

software (FOSS) in the DoD, building on insights from a workshop for producers and consumers of FOSS for DoD systems.

A Model-Based Tool for Designing Safety-Critical Systems
Sam Procter and Lutz Wrage discuss with Suzanne Miller the Guided Architecture Trade Space Explorer (GATSE), a new SEI-developed model-based tool to help with the design of safety-critical systems.

Managing Developer Velocity and System Security with DevSecOps
Alejandro Gomez talks with Suzanne Miller about how his team explored—and eventually resolved—the two competing forces of developer velocity and cybersecurity enforcement by implementing DevSecOps.

See more podcasts »

Latest Publications

Zero Trust Industry Day 2022: Areas of Future Research
This paper describes the future research discussed at the 2022 Zero Trust Industry Day event.

Getting Started with ACE/PoPs
This fact sheet helps your organization prepare to participate in the ACE/PoPs pilot program and set your expectations.

CERT Systems Team: Utilizing a Holistic Project Lifecycle Approach
This informational sheet describes how the CERT Systems Team uses a holistic project lifecycle approach to balance risk exposure with operational effectiveness.

See more publications »

Latest Videos

Does Your DevSecOps Pipeline Only Function as Intended?
In this webcast, Tim Chick discusses how a DevSecOps model can be built using model-based systems engineering.

Finding Your Way with Software Engineering Buzzwords
In this webcast, Hasan Yasar discusses the new technologies and buzzwords that are required to implement a complete software delivery pipeline.

Upcoming Events

Addressing Supply Chain Risk and Resilience for Software-Reliant Systems, February 21
In this webcast, Carol Woody and Charles Wallen discuss the Acquisition Security Framework (ASF) and how the ASF provides a roadmap to help organizations build security and resilience into a system.

DevSecOps Days Pittsburgh 2023, May 11
DevSecOps Days Pittsburgh 2023 will be held virtually by the Software Engineering Institute on May 11.

See more events »

Upcoming Training

Cybersecurity Oversight for the Business Executive
March 14-15, 2023 (SEI, Pittsburgh, Pa.)

Insider Threat Analyst
May 2-4, 2023 (SEI, Pittsburgh, Pa.)

See more courses »

Employment Opportunities

Associate Insider Risk Engineer

Senior Software Engineer

All current opportunities »

Carnegie Mellon University
Software Engineering Institute